Cardno ERI

Shaping the Future

October 2, 2012
Cardno ERI 05102003.R03

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SUBJECT **Facility History and Data Summary Report**
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Mr. Roll:

Enclosed please find the *Facility History and Data Summary Report* (Report) for the Yale Oil of South Dakota CECRA Facility, Billings, Montana, prepared by Cardno ERI, of Billings, Montana. This Report has been revised to incorporate the changes requested in the Montana Department of Environmental Quality (DEQ) letter dated September 10, 2012.

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If you have any questions or comments, please contact me at geoffrey.waterhouse@cardno.com or at 707.766.2000.

Sincerely,

SCANNED IMAGE

Geoffrey V. Waterhouse
Senior Project Manager

Enclosure: *Facility History and Data Summary Report*, dated August 29, 2012

cc: Mr. Steven P. Anastos, ExxonMobil Environmental Services

Cardno ERI

Shaping the Future

Facility History and Data Summary Report

Yale Oil of South Dakota CECRA Facility
700 First Ave. North
Billings, Montana 59101

05102003.R03
August 29, 2012

Prepared for ExxonMobil Environmental Services, on behalf of Exxon Mobil Corporation and the other potentially liable persons listed in the Montana Department of Environmental Quality's *Notice of Potential Liability and Request for Remedial Action Letter and Notice of Right to Petition for Allocation*, dated June 8, 2011

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1.0 GENERAL INFORMATION

The Yale Oil of South Dakota CECRA Facility in Billings, Montana, is generally located in Section 34, Township 1 North, Range 26 East, Yellowstone County, Montana. Specifically, the Facility is comprised of property where the Montana Refining Company (MRC), the Yale Oil of South Dakota Refinery, The Carter Oil Company Refinery, and the associated tank farm operated between First Avenue North and Interstate Highway 90 (Plate 1).

In a letter dated June 8, 2011 (Appendix A), the Montana Department of Environmental Quality (DEQ) requested a Remedial Investigation Work Plan (RIWP). This Facility History and Data Summary Report is one of four volumes that comprise the RIWP; the other volumes are the Sampling and Analysis Plan (SAP), the Quality Assurance Project Plan (QAPP), and the Health and Safety Plan (HASP).

The purpose of the Facility History and Data Summary Report is to compile available information regarding the history and releases at the Facility. The main source of information for this report was the project file maintained by the DEQ. Other sources included files obtained from the EPA Region 8 Environmental Information Service Center through a Freedom of Information Act request, a report prepared by Environmental Data Resources, Inc. (EDR) (Appendix B), the files of select Potentially Liable Persons (PLPs), and geologic publications. A listing of references is included in Section 10.0.

Laboratory analytical results for soil, waste, sediment, groundwater, surface water, grab water, and domestic water are presented in Tables 1 through 7, respectively. Remediation system data is presented on Table 8. Well construction details are presented in Table 9. A Generalized Facility Site Plan is included as Plate 1. Maps showing potential source, known release, and exploration locations are included as Plates 2 through 4. An Existing Conditions Aerial Photo Map is included as Plate 5. D-sized versions of the potential source, known release, and exploration location maps on an aerial photo background are included as Plates 6 through 8.

2.0 OWNERSHIP AND FACILITY USAGE

The ownership history of the Facility and the history of the Facilities structures and uses are outlined in the following subsections. ExxonMobil's ownership history is outlined in Section 2.3. There are also numerous right-of-way agreements for pipelines and utilities not discussed in this section. The Generalized Facility Site Plan (Plate 1) shows the relevant tract boundaries.

2.1 Early History (1864 – 1921)

- July 2, 1864 – Northern Pacific Railroad Company (NP), predecessor in interest to Burlington Northern Railroad Company and the Burlington Northern and Santa Fe Railway Company and now BNSF Railway

Company (BNSF), acquired a 400-foot wide strip of land in the southeast quarter of the northwest quarter of Section 34, Township 1 North, Range 26 East in Yellowstone County, Montana (BNSF, 2000). The land was acquired by an Act of Congress, dated July 2, 1864, and by a treaty with the Crow Indian Nation dated August 22, 1881(BNSF, 2000).

- 1916 – Tracts 1-A and 5 were purchased by the Montana Realty and Loan Company from the Yegen family. The Yegen family reacquired the properties and sold them to the Montana Refining Company in 1922 (Brown, 2000; Conoco, 2000).
- October 3, 1917 – The Billings Stockyard Company purchased tracts A, B, C, and D from Gerald Panton (Conoco, 2000).
- July 16, 1920 – Charles Crosser purchased a portion of Tract 1A north of the Yegen Ditch (Brown, 2000).
- March 31, 1921 – Frank L. Clark, Ed Cardwell, and J.N. Tolman purchased tracts A, B, C, and D from the Billings Stockyard Company (Conoco, 2000).

2.2 Montana Refining Company

- 1921 – The MRC built a refinery and tank farm on the southeastern portion of Tract 1-A (southeast of the Yegen Ditch and the Crosser Meat Company). The 1923 Sanborn map shows an oil car filling rack operated south of the railroad tracks (north of the Crosser Meat Company) from the MRC refinery (EDR, 2011c; ExxonMobil, 2001). Additional details regarding the MRC refinery structures are listed in Section 3.1.
- August 1922 – Tracts 1-A (portion south of Yegen Ditch) and 5 were transferred to the MRC from the Yegen family (Brown, 2000; Conoco, 2000).
- 1923 – Operations ceased at the MRC refinery; however, the MRC refinery was not officially listed as closed until 1930 (Conoco, 2000).
- 1926 – Century Oil Company acquired the former MRC refinery and tank farm on Tracts 1-A and 5 through a purchase of the sheriff's deed (Conoco, 2000).
- July 1, 1929 – Lewiston Oil Company purchased the former MRC refinery and tank farm on Tract 1-A (portion south of Yegen Ditch) and Tract 5 (Brown, 2000; Conoco, 2000).
- April 29, 1931 - Continental Oil Company purchased the former MRC refinery and tank farm on Tracts 1-A (south of the Yegen Ditch) and Tract 5, and sold them to C.R. Crosser (Crosser Meat Company) on the same day. Continental Oil Company retained ownership of "refinery equipment" on Tract 1-A and reserved the right to enter the property at any time within three years to remove the equipment (Brown, 2000; Conoco, 2000; EDR, 2011c).
- On October 30, 1931, the Crossers sold an undivided one-half interest in their properties (portion of Tract 1A south of the Yegen Ditch and Tract 5) to George Birchenough. The Birchenoughs and Crossers sold the properties to the Yale Oil Corporation in 1933 (DEQ).
- 1948 – The MRC refinery is no longer present on Sanborn maps of the area (EDR, 2011c).

2.3 Yale Oil Corporation and Carter Oil Company

- March 28, 1929 – L.B. Hancock and Mildred Hancock purchased Tracts A, B, C, and D (Conoco, 2000).
- April 9, 1929 – Yale Oil purchased Tracts A, B, C, and D. Yale Oil began constructing a refinery on their property, northwest of the railroad right-of-way and south of Highway 87, on May 16, 1929 (Billings, 1929; Conoco, 2000). ExxonMobil has accepted responsibility for Yale Oil of South Dakota activities at the Facility (ExxonMobil, 2011).
- June 30, 1929 – The Yale Oil Refinery began operating (Billings, 1929; Conoco, 2000).
- October 21, 1929 – NP, a predecessor to BNSF, entered into an industrial track agreement with Yale Oil for the construction, maintenance, and operation of an industrial track for the benefit of Yale Oil. Under that agreement, Yale Oil was responsible for the expense of construction and maintenance of the track outside of the 130-foot clearance point (BNSF, 2000).
- December 9, 1933 – Yale Oil Corporation purchased Tract 1A south of the Yegen Ditch, Tract 5 and the tank farm, including a 5,000-barrel storage tank, pipelines, and connections (Conoco, 2000).
- July 26, 1935 – A fire ignited in Tank 59 at the Yale Oil Refinery, causing a fire and explosion (Section 3.2.3). Several tanks were “demolished” or “wrecked” (Billings, 1935). The tanks were later rebuilt (ExxonMobil, 2001).
- August 29, 1944 – Leader Oil Company owned the former Yale Oil Refinery for one day (ExxonMobil, 2001).
- August 29, 1944 – Carter Oil Company (Carter Oil), a subsidiary of Standard Oil of New Jersey, a predecessor of ExxonMobil, purchased the Yale Oil Refinery and tank farm (Tracts A, B, C, D, and 5). The industrial track agreement between Yale Oil and NP was amended and assigned to Carter Oil (BNSF, 2000; ExxonMobil, 2001).
- 1945 to 1948 – The 1945 Carter Oil map and the 1948 Sanborn map show numerous tanks and structures associated with the Yale Oil Refinery present by this time, including a tetraethyl lead (TEL) plant, a service station, a welding shop, a crude oil sump, pumps, and a pump house (ExxonMobil, 2001). The 1948 Sanborn map showing details is included in Appendix B. The 1945 Carter Oil Company map detailing Yale Oil Refinery structures is included in Appendix D.
- June 6, 1949 – Carter Oil shut down the Yale Oil Refinery (ExxonMobil, 2001).
- 1949 – Processing equipment and unusable tankage was dismantled and sold for scrap (ExxonMobil, 2001).
- 1954 – The former Yale Oil refinery was split up and sold as smaller tracts. The industrial track agreement between Yale Oil and NP, a predecessor of BNSF, was amended and assigned to Carter Oil (BNSF, 2000; ExxonMobil, 2001).
- On August 9, 1954, the industrial track agreement between Carter Oil and NP, a predecessor of BNSF, was amended and a portion was assigned to Aldrich & Company. Aldrich & Company leased the railroad right-of-way property south and east of Tract D in case they needed to unload boxcars of lumber; however, Aldrich & Company never used the property. A 10,000-barrel tank (Tank 25), the northern spur of trackage, and a small brick building were located on the property (EDR, 2011c). In the early 1970s, Aldrich &

Company ended their lease with BNSF and the MDT took over the lease and continued using the property for storage. MDT's lease with BNSF began on July 16, 1985. In that lease agreement, it is documented that MDT had been leasing the property from Aldrich & Company "for a number of years" (Aldrich, 2010; MRL, 2000).

2.4 Tract A

- 1958 – Many structures present on Tract A were removed in 1949 when the Yale Oil Refinery was dismantled (ExxonMobil, 2001). By 1958, only a grease can storage building and a gas and oil storage structure were present on Tract A; a portion of a Tract B grease plant were present on the adjacent property (EDR, 2011c).
- December 15, 1959, Carter Oil merged with Humble Oil (a predecessor to ExxonMobil).
- 1961 – By 1961, the gas and oil storage structure on the property had been removed. The other structures present in 1958 are still present on the 1969 EDR Map (EDR, 2011c); these structures are still present at the Facility and are shown on Plates 1 through 8.
- 1965 - Humble Oil and Refining Company conveyed, as a donation, Tract A to the Humble Companies Charitable Trust (Lester Moore, John B. Turner Jr., and Lee Hill).
- 1969 – Humble Companies Charitable Trust sold Tract A to Hale Trailer Sales, Inc. Hale Trailer Sales changed its name to Hale Manufacturing Company in 1972. This transaction marked the sale of the last piece of property owned by Humble Oil. Hale manufactured horse and cattle trailers and later sold trailers on the property (DEQ, Date Unknown; EDR, 2011b).
- 1982 – Hale Manufacturing Company, Inc. sold Tract A to Fred Bowen (DEQ, Date Unknown).
- 1982 – Fred Bowen quitclaimed the property to Herminio Cabrera and George Howell (DEQ, Date Unknown).
- 1985 – Herminio Cabrera and George Howell sold Tract A to Elmer J Smathers and Harry Taylor. Harry Taylor Sales Inc. operated a used-car sales lot on the property (DEQ Date Unknown; EDR, 2011b).
- 1988 – Elmer J. Smathers sold his share of Tract A to Harry Taylor (DEQ, Date Unknown).
- 1999 – Harry Taylor sold Tract A to Jim Vandeberg. Jim Vandeberg operated Metra RV Center, an RV sales and parts business on the property (Metra RV, Date Unknown).
- 2008 – Jim Vandeberg sold Tract A to Bob and Susan Young (Young, 2010).
- Present – Bob and Susan Young currently own Tract A and operate Auto Magic, a used-car sales lot on the property (EDR, 2011b; Young, 2010).

2.5 Tract B

- February 12, 1954 – Carter Oil sold Tract B to Farmers Union Central Exchange (later known as CENEX and now known as CHS, Inc.). Farmers Union Central Exchange used the property as a warehouse facility to store various petroleum products (Cenex, 2001; EDR, 2011c; ExxonMobil, 2001).

- October 26, 1953 – The industrial Track Agreement between Carter Oil and NP was amended and a portion was assigned to Farmers Union Central Exchange (BNSF, 2000).
- 1958 to 1969 – Sanborn maps show the Tract B property labelled as Farmers Union Central Exchange Warehouse with several structures on the property labelled "asphalt filling shed", "grease can storage", "grease plant", "oil grease and tire warehouse", "oil storage", "drum storage" and "gas & oil" (BNSF, 2000; Cenex, 2001; EDR, 2011c; ExxonMobil, 2001).
- October 20, 1972 – Farmers Union Central Exchange sold Tract B to Motor Power Equipment Company. Motor Power Equipment Company used the property as a warehouse and offices (Cenex, 2001; Reporter, 2000).
- 1974 – Motor Power Equipment Company sold Tract B to Reporter Printing Supply (now known as Reporter Big Sky Office) (Reporter, 2000).
- Present – Reporter Big Sky Office currently owns Tract B and uses the property as a sales office and warehouse for receiving, storing, and delivering paper, office supplies, and office furniture (Reporter, 2000).

2.6 Tract C

- 1953 to 1958 – International Harvester, a farm implement company, operated on Tract C (Wyman and Bageman, 2000).
- January 29, 1954 – Carter Oil sold Tract C to Horace and Kathryn Wyman. The industrial track agreement between Carter Oil and BNSF was amended and a portion was assigned to Horace Wyman (BNSF, 2000; ExxonMobil 2001).
- 1958 to 1969 – A tire warehouse, a truck repair structure, a recapping structure, and a reinforced concrete structure were present on the tract (EDR, 2011c).
- 1958 to 1983 – Kenworth Truck dealership operated on Tract C (Wyman and Bageman, 2000).
- February 21, 1964 – Horace and Kathryn Wyman quitclaimed Tract C to the Wyman Trust with Karen W Bageman (Yellowstone, 1964).
- July 16, 1964 – The Wyman Trust, predecessor to Wyman Properties, was given permission by NP, predecessor to BNSF, to construct, operate, and maintain a 4-inch steam drain pipeline that travelled from their warehouse building on Tract C to the "ponds" south of Tract D (MRL, 2000). The permission granted by NP was contingent upon Wyman's obtaining permission from Aldrich & Company, an adjoining landowner, and Wyman's assumption of all costs associated with "construction, reconstruction, repair, operation, maintenance, and removal of said facilities." The pipeline was intended "to drain condensation of steam from the cleaning of machine parts" until the settling pond was filled (NPRC, 1964).
- 1984 – Polk's City Directory listed Auto Acres (used car sales), Rimrock Stages Inc. (bus company), and Timberline Paint and Body (auto repair) as tenants (EDR, 2011b).
- March 1, 1987 – Big Sky Haul Away (garbage collection) became a tenant of Building B on Tract C (LathropGage, 2010).

- August 15, 1988 - June 1, 1989 – BFI Waste Systems of North America, LLC acquired Big Sky Haul Away and took over the lease of Building B (LathropGage, 2010).
- 1989 – Polk's City Directory listed Denver Business College and BFI as tenants of Tract C (EDR, 2011b).
- 1995 – Polk's City Directory listed Superior Welding Supplies and Tana Industries (trailer building) as tenants of Tract C (EDR, 2011b). Tana Industries vacated the premises in 1995. There were two unlabelled 55-gallon drums, which were believed to contain used oil, and a sump filled with oil left on/near Tract C (DEQ, 2000b; EDR, 2011a).
- March 1996 – Goldstar (vehicle detailing) became a tenant of Tract C (Goldstar, 2000).
- September 1, 1997 - Northern Broadcasting System, Inc. became a tenant of Tract C and began operating a radio station on the property (NBS, 2000).
- 2000 – A DEQ inspector noted that there were three business operating out of two buildings on the property owned by The Wyman Trust and Karen W Bageman: Northern Broadcasting System was operating an agriculture reporting radio station out of the north building; Goldstar was operating an automotive, boat, and RV detail shop where employees washed, vacuumed, and waxed vehicles out of the west end of the southern building; and Mountain Rovers was operating out of the east end of the southern building. Goldstar was generating used oil on the property and had four unlabelled drums (two containing used oil and two reportedly containing a mixture of water and used oil); inside and outside sumps, including an inside floor sump that drained to the POTW; several 55-gallon drums believed to contain thinner and oil; and soil containing used oils on their portion of the property (DEQ, 2000b).
- 2001 – Polk's City Directory listed Mountain Rovers, Goldstar, and Northern Broadcasting System as tenants of Tract C (EDR, 2011b).
- 2006 – Polk's City Directory listed Car Guys Towing Auto & Truck and Northern Broadcasting System as tenants of Tract C (EDR, 2011b).
- 2011 – EDR reports list The Wyman Trust with Karen W Bageman as the owners of Tract C, and Northern Broadcasting System as a tenant of Tract C (EDR, 2011b).
- Present - Reporter Big Sky Printing currently leases both warehouses on Tract C from The Wyman Trust with Karen W Bagemen (Reporter, 2012).

2.7 Tract D

- March 31, 1954 – Carter Oil sold Tract D to Yellowstone Pipeline Company (YPL). YPL built a pump station and three pipelines bringing refined product to the pump station (ExxonMobil, 2001; Conoco, 2000). The pipeline system consisted of one 10-inch mainline and two 6-inch spurs (Conoco, 1999). The 10-inch mainline extended 531 miles to Spokane, Washington and delivered refined product to terminals in Bozeman, Montana; Helena, Montana; Missoula, Montana; and Spokane, Washington (Conoco, 1999).
- 1958 to 1969 – Sanborn maps show a fuel oil line pumping station on the property. A 10,000-barrel steel crude-oil tank (Tank 25 of former Yale Oil Refinery) located south of Tract D is present on Sanborn maps from 1958 and 1961, but is no longer present on the Sanborn map from 1968 (EDR, 2011c).

- July 31, 1961 – Glacier Pipeline System bought 1.05 acres of Tract D from YPL. Glacier built an office building and storage warehouse with associated amenities such as fences, sidewalks, a parking lot, sewer lines, and water lines as well as 10-inch and 12-inch crude oil pipelines (Conoco, 2000; Conoco, 2001). The 12-inch mainline extended approximately 334 miles to the Canadian border; deliveries from it were made to pipeline tankage, to the Conoco refinery in Billings, Montana, or bypassed to an 8-inch line delivering product to a Cenex refinery in Laurel, Montana (Conoco, 1999). The 10-inch line extended approximately 54 miles to Roundup, Montana; deliveries from the line were made to pipeline tankage, the Conoco refinery in Billings, Montana, to the Exxon refinery in Billings, Montana, or tight lined to an 8-inch line delivering product to a Cenex refinery in Laurel, Montana (Conoco, 1999). At an unknown time, welding activities were performed in the warehouse (Conoco, 2001). Infrequent oil changes were performed on the Glacier Pipeline System with proper containment and disposal, and paint was stored on Glacier Pipeline System property for short-term projects (Conoco, 2001).
- October 4, 1963 – Continental Pipeline Company bought 0.357 acre of Tract D from YPL. Continental built a Seminoe Pipeline System pipeline pump station and two pipelines that brought refined product to the pump station (Conoco, 2000). The system connected to an 8-inch refined product pipeline south of Tract 1-A that extended 335 miles to Sinclair, Wyoming, and whose operation was divided into two segments. The Billings Seminoe Pipeline System was the origination pump station on the first segment (Conoco, 1999).
- January 5, 1982 – The State of Montana bought 0.35 acre of Tract D from YPL to widen Highway 87 (Conoco, 2000).
- ConocoPhillips replaced valves on a Seminoe pipeline (DEQ, 1994).
- 1999 – YPL removed a 1,370-gallon pump station sump vessel and ConocoPhillips removed a 500-gallon pump station sump vessel to prepare for the installation of new double-wall sumps. The removed sumps were relocated to the manifold area of the YPL pump station. The new sumps were located adjacent to the original sump locations (Conoco, 2001).
- 1999/2000 – ConocoPhillips and YPL suction lines were replaced (Conoco, 2001).
- Present – YPL and ConocoPhillips currently own Tract D and continue to operate two pump stations and several pipelines on the property (Conoco, 2000).

2.8 Tract 1-A

- 1923 – Crosser Meat Company building and pens were present on the northern portion of Tract 1-A by 1923. The company operated the facilities as a slaughter house and sausage manufacturing business (EDR, 2011c).
- April 29, 1931 – C.R. Crosser purchased Tract 1-A and Tract 5 from the Continental Oil Company (a predecessor of ConocoPhillips Pipe Line Company) and continued operating the Crosser Meat Company on the northwestern portion of Tract 1-A (Brown, 2000; Conoco, 2000; EDR, 2011c). Continental Oil Company retained ownership of refinery equipment on Tract 1-A and reserved the right to enter the property at any time within three years to remove the equipment (Brown, 2000; Conoco, 2000).

- October 30, 1931 – The Crossers sold an undivided one-half interest in their properties (portion of Tract 1A south of the Yegen Ditch and Tract 5) to George Birchenough (DEQ, Date Unknown).
- 1933 – The Birchenoughs and Crossers sold the properties to the Yale Oil Corporation (DEQ, Date Unknown).
- December 9, 1933 – Yale Oil Corporation purchased Tract 1A (south of Yegen Ditch) (Conoco, 2000).
- 1934 – The Midland Empire Packing Company purchased the portion of Tract 1-A north of the Yegen Ditch and took over operation of the slaughterhouse on the northwestern portion of the property (Brown, 2000).
- 1937 – The Midland Empire Packing Company acquired the portion of Tract 1-A south of the Yegen Ditch, creating the present day Tract 1-A (Brown, 2000). Details of the previous ownership of this portion of Tract 1-A are included in Section 2.2. Midland Empire Packing Company owned the property until 1978 (Brown, 2000).
- 1948 - The Midland Empire Packing Company operated the slaughter house and sausage factory on the premises. Many structural additions to the former Crosser Meat Company facilities, most notably an expanded factory complex, can be seen on the 1948 Sanborn map. Fuel and gas were kept on the property. Refinery facilities had been removed from Tract 1-A by 1948 (EDR, 2011c).
- 1958 to 1969 – The Midland Empire Packing Company continued to operate a slaughterhouse and sausage factory and expand the factory complex on the property. Structures are not visible on maps of the southern portion of Tract 1-A during this time (EDR, 2011c).
- 1978 – The City of Billings became the owner of Tract 1-A and leased the property to Midland Foods, Inc. (Brown, 2000).
- 1988 – First Bank (now known as U.S. Bank) purchased Tract 1-A in a foreclosure sale (Brown, 2000).
- October 5, 1988 – Rolf Schwenninger, a trustee and International Leather Manufacturers purchased Tract 1-A from First Bank (Brown, 2000).
- 1992 – Richard Popelka purchased Tract 1-A. He leased the scales located at the former Midland Empire Packing Company slaughter house to Lean Pork, Inc. to weigh hogs. He leased a portion of the property to Mr. Thornrock for the storage of rags. A residence located on the property was also leased to various individuals (Brown, 2000). The residence is no longer present.
- July 1, 2008 – Agri-Systems (now known as ASI Industrial) purchased Tract 1-A from Richard Popelka (Agri-Systems, 2010).
- 2011 – Few structures remained on the tract by 2011. A portion of a large warehouse structure was located on the northwest boundary of the tract. Stockpiled earthen material was kept on the north-northeast portion of the tract, and there were areas of concrete and brick rubble (Portage, 2011).
- Present – ASI Industrial currently owns Tract 1-A (Agri-Systems, 2010).

2.9 Tract 5

- 1923 – Most of Tract 5 is not visible on the 1923 Sanborn map of the Facility; however, a 5,000-barrel crude oil tank and a structure housing 400 barrels of gasoline are visible on the corner of the property (EDR, 2011c).
- December 9, 1933 – Yale Oil Corporation purchased Tract 5 and the tank farm, including a 5,000-barrel storage tank, pipelines, and connections (Conoco, 2000).
- 1945 – The 5,000-barrel storage tank is not shown on the 1945 Carter Oil map. There are, however, numerous tanks present on the property storing gasoline, fuel, road oil, diesel, burner fuel, distillate, crude oil, kerosene, tractor fuel, and casting head gas (ExxonMobil, 2001). A map showing the number and size of the tanks and the layout of the tank farm in 1945 is included in Appendix D.
- March 23, 1955 – Carter Oil sold Tract 5 and the tank farm, including one 10,000-barrel, one 19,000-barrel, one 34,000-barrel, one 55-barrel, and two 80,000-barrel petroleum storage tanks to Farmers Union Central Exchange (CHS) (Cenex, 2000).
- Present – CHS currently owns Tract 5 and continues to use the tank farm on the property to store gasoline and distillate fuels (Cenex, 2000). There are currently five storage tanks (Tanks 280 through 284), two control buildings, a power pole, several pipelines, a YPL overflow sump and booster pump, ground beds, and a pump station present on the property (TetraTech, 2007).

2.10 Railway Property West of Tracts A and B

2.10.1 Within Current Facility Boundary

- Prior to closing the refinery, portions of property west of Tract A and B, located within the Facility boundary, held refinery equipment.
- 1923 – Cattle feeding pens are shown in maps of the area (EDR, 2011c).
- 1941 – Three structures were constructed on the property (EDR, 2011c).
- 1945 – The 1945 Carter Oil map lists NP, a predecessor to BNSF, as the leaseholder of the property. There are three structures on the property: one is unidentified, one is listed as a paint manufacturing building with an unidentified connected structure, and one is listed as a marketing department repair shop. Pipe racks are also visible on the property (ExxonMobil, 2001; Appendix D).
- 1948 – The 1948 Sanborn map lists this area as a dewaxing plant consisting of a sulphur storage building (the previously unidentified structure), a filter press tile liner building (the marketing department repair shop), which includes a pump house, and an additional building (the paint manufacturing building) whose markings are illegible. The unidentified structure next to the paint manufacturing building in the 1945 map is listed as a concrete platform. The buildings are listed as fire proof with reinforced concrete (EDR, 2011c).

- 1958 to 1969 – The three structures and the platform are still shown on maps; however, the paint manufacturing building is now identified as an oil storage building, the sulphur storage building as a drum storage building, and the filter press tile liner building as a "VAC." building (EDR, 2011c).
- On July 21, 1987, BNSF entered into a lease-purchase agreement with Montana Rail Link, Inc. (MRL) for MRL to provide transportation services on and over the leased property (BNSF, 2000).
- 1996 – A MRL map shows two unidentified structures, including the former paint manufacturing building (MRL, 1996).

2.10.2 900 First Avenue North

- 1963 to 1969 – J&R Cattle Co and TC Cattle co-operated a livestock business on the property (EDR, 2011b).
- 1977 – A proposed lease map based on a 1977 survey of the Facility shows three buildings, including a maintenance shop; a septic tank; a drain field; concrete slabs; and a gravel drive (CTA, 1988). The survey shows boring locations and includes borings showing "contaminates" in soil. The boring logs are included in Appendix C.
- July 5, 1988 – Don Stanaway proposed leasing a portion of the property from MRL (CTA, 1988).
- August 1988 – A survey shows A&I Distributors (A&I) as the leaseholder of the property, which includes at least one building, an asphalt and concrete parking lot, and a septic tank (SSGE, 1988).
- November 9, 1993 – A&I was issued a permit for the removal of two 10,000-gallon tanks present on the property (DEQ, 2012).
- Present – A&I currently operates a lubricating/whole oils packaging and distribution business out of three buildings on the property (A&I, 2012; EDR, 2011b).

2.11 Tract 2-B

- August 20, 1881 – The United States Government issued a Homestead Certificate to John Alderman for the property (Chicago Title, 2012).
- 1881 to 1907 – Documents pertaining to the ownership of the property after John Alderman and before its purchase by the Yegen Family were not able to be located.
- June 29, 1907 – Christian Yegen and Laura B. Yegen transferred their interest in the property to Peter Yegen (Chicago Title, 2012).
- Mary 31, 1916 - Christian Yegen, Laura B Yegen, Peter Yegen, and Margaret Yegen, sold the property to the Montana Realty & Loan Company (Chicago Title, 2012).
- February 28, 1920 – The Montana Realty & Loan Company sold the property to Yegen Bros. Bankers (Chicago Title, 2012).
- April 17, 1929 – Yegen Bros. Bankers sold the property to Robert B. Brubeck and George F. Shea (Chicago Title, 2012).

- May 8, 1929 - Robert B. Brubeck and George F. Shea sold the property to F. C. Pierce (Chicago Title, 2012).
- November 10, 1931 – F.C. Pierce and his wife sold the property to Pierce Packing Co. (Chicago Title, 2012).
- 1945 to 2009 – Multiple right-of-way contracts and easements were issued. Right-of-way contracts were issued to Yale Oil Pipelines, Inc., Interstate Oil Pipe Line Company, Fred Goodstein, The Montana Power Company, Oil Basin Pipeline Company, Continental Pipe Line Company, Farmers Union Central Exchange, Glacier Pipeline Company, The City of Billings, Agri Systems, Northwestern Corporation, and Signal Peak Energy, LLC and Fergus Electric Cooperative, Inc. (Chicago Title, 2012).
- December 12, 1976 – The property is transferred from Pierce Packing Company to Security Bank, N.A. (Chicago Title, 2012).
- January 4, 1978 – Security Bank N.A. sells the property to Patrick K. Goggins and a portion of the property to the City of Billings (Chicago Title, 2012).
- September 6, 1990 – Patrick K. Goggins begins leasing the property to Conoco, Inc. (Chicago Title, 2012).
- July 12, 2005 – Patrick K. Goggins sold the property to ConocoPhillips Pipe Line Company (Chicago Title, 2012).

3.0 HISTORY OF OPERATIONS AND KNOWN RELEASES

Concentrations of constituents of concern in soil and groundwater at the subject Facility result from the operations of various industrial facilities and known releases. Plates 2 and 6 show the locations of potential sources at the Facility. Known releases are summarized on Table 10; Plates 3 and 7 show the locations of known releases.

Industrial operations have included:

- The operation of the former MRC Refinery.
- The operation of the former Yale Oil and Carter Oil Refinery.
- The operation of the YPL and ConocoPhillips Pump Stations and pipelines.
- The operation of the CHS Tank Farm and pipelines.
- The operation of USTs on the Department of Military Affairs (DMA) property.
- The mixing of asphalt on Montana Department of Transportation (MDT) property.

The following subsections describe the known releases and the removal of hazardous and deleterious substances associated with operations conducted at the Facility. Further details on remedial actions to remove hazardous and deleterious substances are provided in Section 6.

3.1 Former Montana Refining Company Refinery

The MRC refinery operated from 1921 through 1923 on the southeastern portion of Tract 1-A, and a tank farm was located on Tract 5. There are no documented releases from the MRC refinery. The 1923 Sanborn map shows the refinery contained one 5,000-barrel crude oil AST, one 1,000-barrel AST, five 500-barrel ASTs, eleven 250-barrel ASTs, two 400-barrel gasoline ASTs, one 1,700-gallon AST labeled "High Test", one AST labeled "Fuel Tank", one 231-barrel agitator, three in-ground cooling tanks, two settling tanks, and two sumps. An oil car filling rack was located south of the railroad tracks (north of the Crosser Meat Company), and was used by the MRC refinery (Conoco, 2000; EDR, 2011c; ExxonMobil, 2001). Refining facilities were removed by 1948 (EDR, 2011c).

3.2 Former Yale Oil and Carter Oil Refinery

The Yale Oil Refinery began operation on June 30, 1929 (Billings, 1929). Carter Oil purchased the Facility on August 29, 1944, and operated the refinery until June 6, 1949 (ExxonMobil, 2001). The refinery operated for a total of approximately 20 years. On the 1945 Carter Oil map of the facility (ExxonMobil, 2001), a TEL plant is shown near the southeastern end of the refinery (northwest of the railroad tracks on the railroad right-of-way) (Plates 2 and 6). This building likely was not a place where TEL was manufactured; it is more likely that this is where TEL was received by rail and stored and/or blended with refined products (DEQ, 2011c). A paint manufacturing building and a paint shop are shown near the western boundary of the refinery; and a service station is shown in the northwest corner of the refinery (Plates 2 and 6). Past reports indicate that refinery wastes may have been buried on the Facility (Ecology, 1989a).

In 1946, the refinery produced 10,000 barrels of hydrocarbon product per day and had a storage capacity of 416,300 barrels (The Link, 1946). The refinery produced gasoline, refined oils, distillate fuels, residual fuels, asphalt, and road oil; in addition, the refinery produced 1,000 gallons of paint per day (The Link, 1946).

In 1946, Carter Oil began operating an oil recovery system to respond to a release of oil (ExxonMobil, 2001). Four seepage wells were located on the refinery property and two seepage wells were located on Tract 1-A, north of the Midland Empire Packing Company building (Plates 3 and 7). The last recorded weekly recovery from this system, in 1949, was approximately 350 barrels of oil and the total recorded accumulation was over 30,000 barrels of oil (ExxonMobil, 2001; DEQ, 2011b). It is unknown when system operations ceased.

In April 1950, 31 test holes were drilled on the Carter Oil Refinery main property and tank farm (Tract 5) (ExxonMobil, 2001). The test hole locations were classified as "Oil Present", "Trace of Oil", and "No Oil", and are shown on Plates 4 and 8).

In late 1949, the processing equipment and unusable tankage were dismantled and sold for scrap and the property was left idle (ExxonMobil, 2001). Beginning in 1953, the former refinery property was split up and sold as smaller tracts.

3.2.1 Overturned Vat

In 1934, a vat of unknown contents and location overturned at the Yale Oil Refinery (Ecology, 1989a). It is unknown what clean-up activities took place after the release.

3.2.2 Tank 59 Fire and Explosion

On July 26, 1935, a welder's torch ignited vapors in Tank 59, which was "partly filled with road oil," and caused a major fire and explosion. The 1945 Carter Oil map (ExxonMobil, 2001; Appendix D) shows a rebuilt Tank 59 having a capacity of 1,200 barrels. *The Billings Gazette* reported,

> The north string of tanks [this may refer to Tanks 30, 33, 37, and 38, shown on the 1945 Carter Oil map and Plates 3 and 7] were empty but were turned into twisted masses of metal by the heat. The south tanks [this may refer to Tanks 57, 58, and 60, shown on the 1945 Carter Oil map and Plates 3 and 7] were partly filled with road oil. No. 59 was demolished and the others were wrecked almost as completely. The oil warehouse and an adjoining grease warehouse were obliterated. … an asbestos-covered tank of high-test gasoline … burst after being emptied [through pump lines] of its lethal cargo. … Fire adjustors and company officials explained that the entire loss would be less than $100,000. … Operations were resumed at the plant Saturday morning [July 27, 1935] by using the undamaged tanks (Billings, 1935).

It is unknown how much oil was released during the fire and what clean-up activities took place after the release.

3.2.3 Hydrocarbons and Lead in Former Tetraethyl Lead Plant Soil

In December 1999, the DEQ conducted a soil investigation in the vicinity of the former TEL plant located on the railroad right-of-way. Lead concentrations were present, as shown on the following table, at levels exceeding the then current EPA Region IX [sic] Preliminary Remediation Goal (now the U.S. EPA's Regional Screening Levels [RSLs]) for organic and inorganic lead concentrations in industrial soil, organic lead concentrations in water, and the Montana Water Quality Board-7 Water Quality Standards (now the Circular DEQ-7 Montana Numeric Water Quality Standards [DEQ-7 Standards]) for Human Health for inorganic lead concentrations in water. The DEQ determined the area posed a direct and imminent threat to the environment, public health, safety, and welfare, and directed the MRL to construct a fence around the area (DEQ, 2000a). The lead concentrations are compared to current screening levels in the following table.

Lead Concentrations in Former Tetraethyl Lead Plant (DEQ, 2000a)

	Soil Concentrations (mg/kg)		Water Concentrations (mg/L)	
	Organic Lead	Inorganic Lead	Organic Lead	Inorganic Lead
Current Screening Level	---	400	---	0.015
Sample Result	2.9	7,000	96	170

3.2.4 Hydrocarbons and Lead in Trench near Former Tetraethyl Lead Plant

In August 2004, ConocoPhillips dug trenches in the vicinity of the former TEL plant as part of pipeline maintenance work. Soil samples collected from the trenches indicated lead concentrations between 935 mg/kg and 2,890 mg/kg and TPH concentrations between 13,000 mg/kg and 47,000 mg/kg (DEQ, 2011a). In September 2004, the DEQ conducted a visit to the Facility and observed a 2-foot by 2-foot concrete trench about 250 to 300 feet long in a publically accessible area that possibly drained into a basin or tank. The DEQ noted “oil sludge (waste oil)” from surface to 5 inches in depth in the trench, “oily sludge” about 3 feet in depth in an access hole for the basin or tank, several 55-gallon drums, and an 8,000-gallon to 10,000-gallon fuel storage tank in the vicinity (DEQ, 2005b). The DEQ scheduled a follow-up visit (DEQ, 2005b).

On May 24, 2005, the DEQ inspected the Facility and found a sump full of oil, assorted debris, rusted drums, and an AST. On June 13, 2005, the DEQ instructed MRL to erect a fence around the area of the trench and sump, post warning signs, and remove the oil from the trench and sump. On July 8, 2005, Olympus submitted a work plan to the DEQ outlining the proposed characterization and disposal of the oil waste in the trench and sump, an estimated 3,000 gallons of oily water in the 12,000-gallon AST, seven drums of an unknown liquid, and 42 empty drums at the property. On July 20, 2005, a fence and warning signs were installed. On September 19, 2005, the DEQ conditionally approved the work plan. Following characterization of oily waste in a trench and sump, AST, and drums, on November 7, 2006, 2,500 gallons of oil, 350 gallons of oil/water mixture and 52 empty steel drums were disposed of at Emerald Recycling in Helena, Montana (DEQ, 2005c, 2005d and 2005e, Emerald, 2006, DEQ, 2006, Olympus, 2005a; Olympus, 2005b).

3.2.5 Midland Empire Packing Company

In April 1944, Midland Empire Packing Company filed a lawsuit against Yale Oil Company seeking damages for crude oil permeating the soil under its property and entering through the floors and walls of buildings of its packing plant, making it unfit to be used as a slaughter house, and for impacting a well on its property. The lawsuit was later amended to include Carter Oil as a defendant after it purchased the Yale Oil Refinery in 1944 (*Midland v. Yale*, 1946).

3.3 Yellowstone Pipeline Company and ConocoPhillips Pump Stations and Pipelines

3.3.1 Yellowstone Pipeline Company Pumping Station Releases

On March 10, 1955, YPL reported a release of five barrels of premium gasoline from a pump station manifold on Tract D. The release was caused by a gasket failure. It is unknown how the release was cleaned up (Conoco, 2000).

On December 28, 1993, YPL reported a release of one barrel of #2 diesel from their pump station yard booster. The release occurred when a seal drain backed up. It was cleaned up with a vacuum truck and absorbents and soil was put on plastic for disposal (Conoco, 2000).

On February 2, 1994, YPL reported a release of 2 gallons of regular unleaded gasoline from their pump station sample shack. The release occurred when a seal drain backed up. It was cleaned up using absorbents and soil was put on plastic for disposal (Conoco, 2000).

On May 13, 1994, YPL reported a release of 2 gallons of regular unleaded gasoline from their pump station manifold. The release occurred when a pressure gauge failed. It was cleaned up using absorbents and soil was put on plastic for disposal (Conoco, 2000).

On December 4, 1997, YPL reported a release of two barrels of #2 diesel from their pump station sump. The release occurred when overflow protection failed. It was cleaned up with a vacuum truck and absorbents, and soil was put on plastic for disposal (Conoco, 2000).

On August 4, 1998, YPL reported a release of 5 gallons of regular unleaded gasoline from a four-way valve. The release occurred when an employee left a bleeder open on a four-way valve. Reportedly, no soil was impacted, wet piping was reported, and product evaporated (Conoco, 2000).

On October 29, 1998, YPL reported a release of one barrel of #2 diesel from their pump station sump. The release occurred when over flow protection failed. It was cleaned up with a vacuum truck and absorbents, and soil was put on plastic for disposal (Conoco, 2000).

On April 6, 1999, YPL reported a release of 3 gallons of #2 diesel from their pump station manifold area. The release occurred when a drain line was mistakenly cut during maintenance. It was cleaned up using absorbents, and soil was out on plastic for disposal (Conoco, 2000).

On June 26, 2000, YPL reported a release of 2 gallons of gasoline from their pump station manifold area. The release occurred when a gasket on tapping saddle failed. It was cleaned up using absorbents, and soil was put on plastic for disposal (Conoco, 2000).

3.3.2 ConocoPhillips Company Pump Station Releases

On February 3, 1992, Continental Pipeline Company reported a release of one barrel of #2 diesel from the Seminoe pipeline pump station unit #3 pump drain line on Tract D. The release occurred when a drain line was left open during maintenance. It was cleaned up using absorbents, and soil was put on plastic for treatment and disposal (Conoco, 2000).

On January 5, 1995, Continental Pipeline Company reported a release of 5 gallons of #2 diesel from the Seminoe pipeline pump station unit #3 pump seal drain basin on Tract D. The release occurred when a drain line backed up. It occurred on a concrete and steel pump skid and was cleaned up using rags and absorbent pads (Conoco, 2000).

3.3.3 ConocoPhillips/YPL Removal Activities

In 1999, debris including bricks, junk metal, and wood were recovered and disposed of during ConocoPhillips/YPL sump relocation and replacement activities (Conoco, 2001).

In 1999 and 2000, during ConocoPhillips/YPL suction line replacement activities, an unknown amount of piping and more than 20 truckloads of concrete foundations were removed and stockpiled on the Facility at the direction of the DEQ. A portion of what appeared to be concrete conveyance leading to an existing vault was also removed. The oil/water mixture removed from the pipes was disposed of in accordance with DEQ directions. Abandoned piping that did not contain petroleum hydrocarbons was taken to a local scrap dealer (Conoco, 2001).

3.4 Department of Military Affairs

In approximately 1973 or 1974, a 1,000-gallon UST was pulled from the DMA Organizational Maintenance Shop #6 (sometimes referred to as Montana Army National Guard) property, located in the MDT property. The tank was removed due to structural failure indicated by water intrusion; however, it was not known if any product leaked from the tank (Ecology, 1989b).

3.5 Montana Department of Transportation

3.5.1 Petroleum Material in MDU Pipeline Relocation Trench

On November 15, 1991, the DEQ inspected the MDT property after receiving reports of petroleum material leaking from the sidewall of a trench. The trench measured 30 feet by 30 feet by 15 feet deep and was dug by Montana-Dakota Utilities Company (MDU) on the MDT property to relocate a natural gas pipeline. Oil staining was observed 12 feet below the surface on the northwest sidewall of the trench and the water that seeped into the trench had an oily sheen. It was determined that a ConocoPhillips pipeline was near the trench and ConocoPhillips had noticed similar product discharges in trenches they had dug, but a pressure test of the pipeline revealed no leaks. The DEQ inspector noted that the trench was east of the National Guard's (DMA) property fence and that MDT might have had old tanks (DEQ, 1991).

3.5.2 Hydrocarbons and Lead Identified Under US Highway 87

On March 27, 1992, Braun Intertec conducted a subsurface investigation of US Highway 87 for the MDT. The investigation consisted of the excavation of six test pits (maximum depth 5 feet bgs). Soil encountered during the investigation was sandy lean clay, silty clay, sand, and silty sand with gravel. Soil samples were analyzed for TPH, VOCs, and metals (including arsenic, barium, chromium, lead, mercury, and selenium). TPH was reported at 1,270 mg/kg in the sample collected from Station 12; TPH was not detected in the other samples. Concentrations of VOCs were not detected in the samples. Barium, chromium, and lead were detected in each sample collected during the investigation with maximum concentrations of 310 mg/kg, 28 mg/kg, and 190 mg/kg, respectively (Braun, 1992). The TPH concentration reported in the sample collected from Station 12 exceeds current risk-based screening levels (RBSLs) in the Montana DEQ's Tier 1 Risk-Based Corrective Action (RBCA) for Petroleum Releases (DEQ, 2009). Metals concentrations reported during the investigation are below current RSLs (EPA, 2012).

3.6 CHS Tank Farm

3.6.1 10-inch Diameter Suction Line Leak from Tank 282

On June 10, 1991, a release of regular leaded gasoline was discovered from an underground 10-inch diameter suction line from Tank 282, near the Yellowstone Pipeline booster pump located on the CHS tank farm (Tract 5). The initial clean up consisted of placement of absorbent booms and pads at two downstream locations of the Yegen Ditch. Vacuum trucks were later used to remove NAPL and an emergency trench was dug to slow the flow of product into the Yegen Ditch. On June 20, 1991, the 10-inch suction line from Tank 282 (regular leaded gasoline) to the Yellowstone Pipeline booster was pressure tested with nitrogen. The gasket in a buried flange located at the manifold was determined to be the source of the petroleum release. Based on the free product

total lead content of 28 ug/g (0.07 grams/gallon), it appeared that the gasoline portion of the hydrocarbon was regular gasoline." This release is being addressed under the DEQ Water Quality Act (WQA) program (LSE, 1992).

Remediation activities later identified diesel fuel constituents near Tank 280. The floor of Tank 280 was later replaced and the remediation system was expanded to include areas containing hydrocarbon concentrations. As of May 1992, approximately 25,500 gallons of NAPL had been recovered (Cenex, 2000; LSE, 1992). Quarterly groundwater monitoring and remediation activities, including operation of a groundwater extraction system, an air stripper tower treatment system, and a groundwater injection system were conducted until 1998. In 1998, the WQA site went to monitored natural attenuation and annual groundwater monitoring. The July 2008, groundwater monitoring results indicated concentrations were either below laboratory reporting limits or at concentrations below DEQ risk-based screening levels (Cenex, 2000; LSE, 2000; TetraTech, 2008). It was noted that if future sampling events indicated the same results as the July 2008 groundwater monitoring results then closure of the WQA site would be recommended (TetraTech, 2008).

3.6.2 8-inch Diameter Seminoe Pipeline Leak

On February 1, 1993, a leak was discovered in an 8-inch diameter Seminoe pipeline passing through the CHS tank farm on Tract 5 when NAPL was observed on the surface above the pipeline. The Seminoe Pipeline was owned by Continental Pipeline Company. This release was addressed under the DEQ WQA program. Approximately 1,500 cubic yards of soil (primarily from the eastern release area) were stockpiled at the WQA site as part of the initial response and were disposed of on October 26, 1993. Trenches were excavated to determine the extent of the release, and gasoline and diesel were detected in the trenches. Approximately 200 barrels of product were recovered from the trenches using vacuum trucks, and an estimated 85 barrels of NAPL were removed through excavation of hydrocarbon-containing soil. As of 1996, an additional 20 barrels of NAPL had been recovered (Olympus, 1994; Conoco, 2007; DEQ, 2008). Groundwater monitoring and remediation activities (including operation of a pump and treat system under general discharge permit No. MGWPCS-G1000) were conducted from 1993 to 2007. In May 2004, a former product recovery trench was excavated and additional hydrocarbon-containing soil was removed. Results of the May 2006 and January 2007 groundwater monitoring events indicated all petroleum hydrocarbon concentrations were below the DEQ's risk-based screening levels. On April 3, 2007, ConocoPhillips requested that the DEQ grant No Further Action status On April 25, 2007, DEQ issued a no further action letter for this release.

3.7 BNSF / Montana Rail Link

3.7.1 Petroleum in ConocoPhillips Pipeline Maintenance Trenches

On July 29, 1994, the DEQ received a report of oil seeping into excavations dug by ConocoPhillips during routine maintenance to replace valves on a ConocoPhillips Seminoe pipeline. The two excavations had been dug south of the YPL pump station (Tract D) on railroad right-of-way property. A DEQ inspector sampled groundwater in one of the excavations and benzene was measured at a concentration of 30.8 µg/L (DEQ, 1994). DEQ determined ConocoPhillips was responsible for the disposal of soil and water containing hydrocarbons that was removed from the excavations. The DEQ suggested ConocoPhillips remove the soil to ConocoPhillips landfarm, the city landfill, or some other acceptable facility; documentation of the soil removal is unavailable. Groundwater was removed and treated at the ConocoPhillips refinery (DEQ, 1994).

3.7.2 Trench/Sump, Drums, Buckets, AST Investigation

From July 29 to August 29, 1994, Olympus Environmental, Inc. conducted an investigation for BNSF of the railroad right-of-way, southeast of Tract D and northwest of the railroad tracks, after alleged illegal dumping was discovered. Olympus inspected the property and found 40 abandoned 55-gallon drums (12 contained used oil or oily water); fifty 5-gallon buckets labeled as enamel, lacquer reducer, jet seal, and xylenes; an empty 10,000-gallon AST with tar beneath it; and a portable tar distributor. Fifteen of the 5-gallon buckets “appeared to be purposely set to empty” into an open oil trench. Tana Industries, Inc. claimed responsibility for the 5-gallon buckets and removed them from the property. The AST may be associated with former refinery activities. A 300-foot-long, two-foot wide and two-foot deep open oil trench (drain) running west to east, and leading to an open 10-foot by 10-foot sump, was also found on BNSF property. The drain and sump contained black oily material that resembled waste-oil. It was surmised that the sump was used to catch product or rinsate drained from tank cars at the former Yale Oil Refinery north of the main railroad tracks (Olympus, 1994).

3.7.3 Montana Power Company Transformer Leak

In late 1998, a Montana Power Company (MPC) transformer on BNSF property, north of the former Midland Packing Company building, was vandalized, releasing 160 gallons of transformer oil containing PCBs. On December 16, 1998, 40 cubic yards of soil containing hydrocarbons were excavated and transported off of the Facility for disposal. The maximum depth of the excavation was 10 feet bgs. Groundwater was encountered between 8 and 10 feet bgs. Crude oil staining was visible on the surface of the groundwater. Soil samples were collected from the excavation side walls and a groundwater sample was collected from the bottom of the excavation. The maximum PCB concentrations in soil and groundwater were 533 mg/kg and 110 µg/L, respectively (MPC, 1999; MPC, 2000; Olympus, 1999). This release was addressed under the DEQ WQA

program. On October 12, 1999, DEQ notified MPC that further remedial actions were not necessary at that time.

3.7.4 Petroleum in ConocoPhillips Pipeline Replacement Trench

In 2000, petroleum-containing soil was observed in a trench dug by ConocoPhillips for replacement of a pipeline segment. The trench was dug on railroad right-of-way property and ran south from Tract D to the northern portion of the former Midland Empire Packing plant on Tract 1-A (DEQ, 2011a).

3.7.5 Oil-Filled Trench, Sump, AST, and Drums

In 2004, the DEQ received a complaint of a trench filled with oil adjacent to the railroad tracks (same area inspected in 1994). On May 24, 2005, the DEQ inspected the Facility and found a sump full of oil, assorted debris, rusted drums, and an AST. On June 13, 2005, the DEQ instructed the MRL to erect a fence around the area of the trench and sump, post warning signs, and remove the oil from the trench and sump. On July 8, 2005 Olympus submitted a work plan to the DEQ for the outlining the proposed characterization and disposal of the oil waste in the trench and sump, an estimated 3,000 gallons of oily water in the 12,000-gallon AST, seven drums of an unknown liquid, and 42 empty drums at the property. On July 20, 2005, a fence and warning signs were installed. On September 19, 2005, the DEQ conditionally approved the work plan. On October 26, 2005, Olympus collected oil samples from the trench/sump, AST and from seven drums. Lead was detected in all nine samples, but the maximum concentration of 131 mg/L was from the sump/trench sample. Arsenic, barium, cadmium, and chromium were also detected in the trench/sump sample at concentrations of 0.9 mg/L, 29 mg/L, 0.1 mg/L, and 4.7 mg/L, respectively. TCE was detected at 78 mg/L in the AST sample; no other VOCs, PAHs, or PCBs were detected above the detection limit in the sample. The concentrations of total halogens ranged from 50 to 360 mg/kg; the maximum concentration was found in the sump/trench sample. On November 30, 2005, a water sample was collected from the AST and analyzed for lead and TCE. Lead was not detected in the sample. TCE was detected at a concentration of 1.4 mg/L. Olympus proposed disposing of the oil waste in the trench, sump, AST, and drums with a used oil recycler and of the empty drums at the Billings Landfill and of delaying the work until spring when the weather improved. On October 2, 2006, Denise Martin of the DEQ approved of the disposal of the oil waste and drums as proposed by Olympus (DEQ, 2005c, 2005d and 2005e, Emerald, 2006, DEQ, 2006, Olympus, 2005a and 2005b).

3.8 Tract A

On March 29, 1995, the Montana Department of Health and Environmental Sciences (MDHES, later the DEQ) conducted an investigation of the Tract A property. The investigation consisted of digging a test pit using a backhoe and collecting two samples from the bottom of the excavation at 8 feet bgs. NAPL was observed in the excavation and the DEQ inspector noted “the product is highly weathered gasoline, [and] probably contains jet

fuel, kerosene, or #1 diesel." Laboratory results indicated a maximum TPHg concentration of 3,500 mg/kg and TPHd concentration of 11,000 mg/kg. The DEQ inspector stated that "the contamination discovered during this investigation may be from the refinery or from a release that apparently occurred during 1988" (DEQ, 1995). It is unknown what clean-up activities took place after the discovery of the NAPL.

3.9 Tract C

3.9.1 Gasoline in Manhole

A DEQ Inspection report stated that "[g]asoline that appeared to be fresh was discovered in a water main manhole at Big Sky Haulaway during 1988" on Tract C (DEQ, 1995). It is unknown what clean-up activities took place following this inspection.

3.9.2 Goldstar

On June 14, 2000, a DEQ inspector visited the Goldstar facility on Tract C to perform a compliance inspection after receiving a complaint/spill report of a sump full of used-oil and two swollen-to-bursting 55-gallon drums of oil. The DEQ inspector noted that the sump was located behind the Goldstar building (formerly occupied by Tana Industries) and that it was full to the brim with an oil/water mixture. The inspector spoke with Ron Shaw, the property manager for Tract C, who said he attempted to drain the sump in 1995 after Tana Industries vacated the building, and that he stored the oil/water mixture he pumped out of the sump in the two unlabeled 55-gallon drums outside the building. Mr. Shaw was unable to drain the sump because it continued to refill as he pumped out liquid. Tana Industries also left two unlabeled 55-gallon drums behind, and the inspector stated he believed the drums contained used oil. The inspector stated that the drums had frozen, swelled, and drained after melting in warm weather and that used-oil-contaminated soil was observed around and under the used-oil drums. The DEQ inspector concluded that he had observed used-oil violations of 40 CFR 279.22(d) and 40 CFR 279 Subpart C, and directed Mr. Shaw to properly label the four drums and that all used-oil containing soils to be picked up, managed, and disposed of properly. The Goldstar facility is listed in the RCRA-CESQG database as a used-oil generator (DEQ, 2000b; EDR, 2011a).

3.10 Tract D

In the 1960s, the owner of Aldrich & Company reported visiting the leased property (the railroad right-of-way property east of Tract D) and observing a pond containing oil, which was surmised to be old refinery settling ponds (shown as a Sludge Pond on Figure 1). Aldrich & Company subleased the railroad right-of-way property east of Tract D to the Montana Department of Transportation (MDT) for the storage of road gravel. The MDT also created asphalt by a windrowing process that involved mixing petroleum products and gravel piles on the property's soil (Aldrich, 2010; DEQ, 1991).

A 10,000-barrel steel crude-oil tank (Tank 25 of former Yale Oil Refinery) located south of Tract D is present on Sanborn maps from 1958 and 1961, but is no longer present on the Sanborn map from 1968 (EDR, 2011c).

3.11 Tract 1-A Residence

On June 29, 2000, the DEQ collected water samples from a residence located on Tract 1-A after receiving complaints from the resident that drinking water from the home's tap smelled of petroleum. The PVC city water line that supplied the house ran through an area known to contain petroleum-containing soil in the area of a ConocoPhillips pipeline. Laboratory results indicated that the water samples did not contain VOCs associated with petroleum products. ConocoPhillips later provided an alternative water supply to the residence (DEQ, 2000c; DEQ, 2011a). The residence is no longer present.

3.12 900 First Avenue North

Boring logs shown on a proposed lease map of the area list "contaminants" in the soil. Parts of the map are based on 1977 data and parts are based on 1988 data. It is unclear when the borings were drilled on the property (CTA, 1988). Details regarding this investigation are unknown.

4.0 DATA SUMMARY

Numerous investigations of the Facility have been conducted from 1950 to the present. Releases at the Facility are described in Section 3.0, summarized in Table 10, and shown on Plates 3 and 7. Exploration locations are shown on Plates 4 and 8. A description of Facility investigations is located in Section 6.0; data from these investigations is summarized in Tables 1 through 9. Select historical data has been validated (Ecology, 1989a; Portage, 2011); the remainder has not. Although not all of this data has been validated, it is useful for the guidance of further investigations of the Facility. Boring logs are included in Appendix C. A map showing the Facility as it stood in 1945 is included in Appendix D.

5.0 REGULATORY INVOLVEMENT

In May 1986, the EPA added the Yale Oil of South Dakota Facility to the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) superfund database (CERCLIS No. MTD980960660) on the recommendation of the Montana Department of Health and Environmental Sciences (MDHES) (EPA, 1986).

In December 1987, the MDHES visited the Facility and on December 18, 1987, the EPA prepared a Potential Hazardous Waste Site Preliminary Assessment report documenting asphalt and oil waste pits, debris, and contaminated soil apparently left from the refinery operation (EPA, 1987).

On June 28, 1988, the EPA prepared a Preliminary Assessment Decision Sheet and classified the Facility as a high priority for a screening site inspection (hSSI) (EPA, 1988).

On April 25, 1989, the EPA issued Technical Directive Document (TDD) No. F08-8904-07 to Ecology and Environment, Inc. to prepare a sampling plan, perform a site inspection, and prepare a sampling activities report for the Yale Oil Facility (EPA, 1989).

Ecology and Environment, Inc. conducted sampling activities at the Yale Oil of South Dakota Facility from July 10, 1989 through July 13, 1989. Soil and water samples were collected from the property, including from an unlined waste pit, a pond observed with a “bluish colored oily sheen”, and a concrete storage tank which was partially buried and contained unknown petroleum product (determined to be 2.3% pure hydrocarbons; chlorinated hydrocarbons were also detected) all located on the western portion of the property (shown as a Sludge Pond on Figure 1). Samples were also collected from one abandoned drum at the confluence of the Yegen Ditch and the Yellowstone River. Results of the investigation indicated arsenic, chromium, and lead concentrations of 27 µg/L, 9.30 µg/L, and 35 µg/L, respectively, in water samples from the pond, and arsenic, chromium, and lead concentrations of 13.60 mg/kg, 21.20 mg/kg, and 1,070 mg/kg, respectively, in sediment samples from the pond. Sediment results for Yegen Ditch indicated organic concentrations at the upgradient location and lesser concentrations downgradient and at its entry point (Ecology, 1989a).

On February 15, 1990, Mr. Ron Bertram of the EPA prepared a Site Inspection Decision Sheet, based on the review of Ecology and Environment, Inc.’s Analytical Results Report dated November 1, 1989. Mr. Bertram recommended the Facility be designated No Further Remedial Action Planned (NFRAP), but on March 19, 1990 Carol Fox of the MDHES prepared a Site Inspection Decision Sheet and disagreed with Mr. Bertram’s recommendation. Ms. Fox recommended a straw Hazard Ranking System (HRS) to determine the need for a Listing Site Inspection (LSI) (EPA, 1990a; 1990b).

On June 10, 1991, the DEQ, EPA, MDT, and the U.S. Coast Guard were notified of a release of regular leaded gasoline to the Yegen Ditch from the CHS tank farm. The Water Quality Bureau (WQB) visited the release location on June 15, 1991 and approved the discharge of separated frac tank underflow to an infiltration trench (Trench No. 1) on a temporary and emergency basis. DEQ letters dated August 7, 1991 and February 10, 1992 stated that air quality and groundwater pollution control system permits were not required from the state for operation of an emergency remediation system and air stripper.

On November 15, 1991, the DEQ inspected the MDT property after receiving reports of petroleum material leaking from the sidewall of a trench (DEQ, 1991).

On February 4, 1992, Mr. Bill Potts of the Solid and Hazardous Waste Bureau (SWHB) stated that a RCRA Part A permit was not required as long as operations and discharge effluent were permitted and reported to the WQB. The Underground Injection Control (UIC) program was contacted on February 28, 1992, regarding permitting an injection gallery. On May 1, 1992, the DEQ issued surface water discharge permit No. MT-002955 for treatment system discharge to the Yegen Ditch (LSE, 1992).

In early 1993, the DEQ was notified of a release of petroleum product from an 8-inch diameter Seminoe pipeline passing through the CHS tank farm. On April 11, 1994, the DEQ issued general discharge permit No. MGWPCS-G1000 for treated wastewater from groundwater remediation or dewatering. On April 3, 2007, ConocoPhillips requested the DEQ grant No Further Action status. On April 25, 2007, the DEQ issued a No Further Action letter (Conoco, 2007; DEQ, 2008).

On October 13, 1993, the DEQ inspected the MDT property and collected a soil sample from the sludge pit on the western portion of the property (same location sampled in 1989) (shown as a Sludge Pond on Figure 1) (DEQ, 1993). The DEQ inspector noted the soil in the pit had a strong petroleum odor and that the bottom of the pit was covered by a crust of old petroleum products. The sample was collected from 0 to 8 inches in the eastern portion of the pit. Analytical results indicated a TPH concentration of 41,500 mg/kg (DEQ, 1993).

On July 29, 1994, the DEQ received a report of oil seeping into excavations dug by ConocoPhillips during routine maintenance to replace valves on a ConocoPhillips Seminoe pipeline.

On March 29, 1995, the DEQ conducted an investigation of the Tract A property (DEQ, 1995).

In late 1998, the MPC notified the DEQ that a transformer on BNSF property, north of the former Midland Packing Company building was vandalized, releasing 160 gallons of transformer oil containing PCBs. On October 12, 1999, the MDEQ issued a letter indicating that no further action was necessary (MPC, 1999; MPC, 2000; Olympus, 1999).

In 2000, the DEQ received laboratory results from a soil investigation in the vicinity of a former TEL plant located on the railroad right-of-way. The DEQ determined the area posed a direct and imminent threat to the environment, public health, safety, and welfare, and directed the MRL to construct a fence around the area (DEQ, 2000a).

In 2000, the DEQ oversaw trenching activities by ConocoPhillips for replacement of a pipeline segment on railroad right-of-way property (DEQ, 2011a).

On June 14, 2000, a DEQ inspector visited the Goldstar facility on Tract C to perform a compliance inspection after receiving a complaint/spill report of a sump full of used-oil and two swollen to bursting 55-gallon drums of motor oil. The DEQ inspector concluded that he had observed used-oil violations of 40 CFR 279.22(d) and 40 CFR 279 Subpart C, and directed Mr. Shaw to properly label the four used-oil drums and that all used-oil containing soils be picked up, managed, and disposed of properly. The Goldstar facility is listed in the RCRA-CESQG database as a used-oil generator (DEQ, 2000b; EDR, 2011a).

On June 29, 2000, the DEQ collected water samples from a residence located on Tract 1-A after receiving complaints from the resident that drinking water from the home's tap smelled of petroleum. The sampling indicated that the home's tap water and groundwater well did not contain any VOCs that were associated with petroleum products (DEQ, 2000c; DEQ, 2011a).

In 2004, the DEQ received a complaint of a trench filled with oil adjacent to the railroad tracks (same area inspected in 1994). On May 24, 2005, the DEQ inspected the Facility and found a sump full of oil, assorted debris, rusted drums, and an AST. On June 13, 2005, the DEQ instructed MRL to erect a fence around the area of the trench and sump, post warning signs, and remove the oil from the trench and sump. On July 8, 2005 Olympus submitted a work plan to the DEQ outlining the proposed characterization and disposal of the oil waste in the trench and sump, an estimated 3,000 gallons of oily water in the 12,000-gallon AST, seven drums of an unknown liquid, and 42 empty drums at the property. On July 20, 2005, a fence and warning signs were installed. On September 19, 2005, the DEQ conditionally approved the work plan. Olympus proposed disposing of the oil waste in the trench, sump, AST, and drums with a used oil recycler and of the empty drums at the Billings Landfill and of delaying the work until spring when the weather improved. On October 2, 2006, DEQ approved of the disposal of the oil waste and drums as proposed by Olympus (DEQ, 2005c; DEQ, 2005d; DEQ, 2005e; DEQ, 2006; Olympus, 2005a; Olympus, 2005b).

From 2000 to 2010, the DEQ requested information from current and previous landowners and tenants within or near the Yale Oil Corporation Refinery pursuant to the provisions of the CECRA.

On October 17, 2011, the Army Corp of Engineers (ACOE) issued a notice of violation to ASI Industrial for the unauthorized filling of the Yegen Drain. ASI Industrial installed 1,500 linear feet of 6-foot buried culvert during the summer of 2010 without obtaining the proper permits or authority. In May 2011, according to the ACOE report, this culvert could not convey expected flows and water backed up onto adjacent properties (ACOE, 2011).

Cardno ERI contacted the DEQ Permitting and Compliance Division, Waste & Underground Tank Management Bureau, Hazardous Waste Section (PCD) to verify if there are active regulatory permits for the Facility. DEQ Natural Resource Information Database Query System did not reveal any current regulatory permits for the

Facility. The DEQ PCD identified the following Hazardous Waste Generator permit holders within the Facility boundary:

- Goldstar, 600 1st Ave. N, West End, current Conditionally Exempt Small Quantity Generator (CESQG), MT0000873083, issue date: 06/14/2000.
- A&I, 900 1st Ave.; Tank Removal Permit: 94-0540, Permit Date: 11/09/1993 (2 10,000 gallon tanks removed in 1993 with site assessment).
- A&I, 900 1st Ave. N, current CESQG (has been a Small Quantity Generator in the past), MT0000929042, issue date: 10/26/1994.
- ConocoPhillips Co. Glacier District Office, 338 HWY 87 E, current CESQG (has been a Large Quantity Generator in the past), MTD081128589, issue date: 12/29/1988.

The DEQ PCD stated that they had no further permitting information related to the Facility (DEQ, 2012).

6.0 SUMMARY OF ENVIRONMENTAL WORK

6.1 UST Removal Activities

In approximately 1973 or 1974, a 1,000-gallon UST was pulled from the DMA Organizational Maintenance Shop #6 (sometimes referred to as Montana Army National Guard) property, located in the MDT property. The tank was removed due to structural failure indicated by water intrusion; however, it was not known if any product leaked from the tank (Ecology, 1989b).

On April 16, 1991, one 2,000-gallon unleaded gasoline UST and one 2,000-gallon diesel UST were removed from the DMA Organizational Maintenance Shop #6 property. Leaks and/or spills were not observed during the tank removal. A water sample collected from the former tank cavity indicated TPH at 327,000 µg/L. Soil samples were collected from the bottom of the tank cavity. The samples collected from under the diesel UST indicated TPH at <10 mg/kg, and the samples collected from under the gasoline UST indicated TPH at up to 115 mg/kg. The presence of hydrocarbons at the property was attributed to the oil refining activities and pipelines on neighboring properties (DMA, 1991).

On November 9, 1993, a permit was issued to A&I for the removal of two 10,000-gallon tanks at 900 First Avenue North (DEQ, 2012).

6.2 Facility Assessment Activities

Multiple assessments have been conducted from 1950 to present. A summarized history of assessment activities is outlined in the following subsections. Exploration locations are shown on Plates 4 and 8.

6.2.1 Yale Oil Refinery

In April 1950, 31 test holes were drilled on the Carter Oil Refinery main property and tank farm (Tract 5) (ExxonMobil, 2001). The test hole locations were classified as “Oil Present”, “Trace of Oil”, and “No Oil”, and are shown on Plates 4 and 8. Two test holes were classified as “Oil Present”, six test holes were classified as “Trace of Oil”, and 23 test holes were classified as “No Oil”.

6.2.2 Tract A

In March 1995, two samples were collected from the bottom of a test pit on Tract A (DEQ, 1995).

6.2.3 Tract C

On August 3, 1988, Northern Engineering and Testing, Inc. drilled and sampled two borings outside the Big Sky Haul Away building on Tract C. Borings DH1 and DH2 were drilled to total depths of 11 and 12 feet bgs, respectively. Benzene was detected at a maximum concentration of 11,000 ppb in boring DH1 from 9.5 to 11 feet bgs (NET, 1988).

6.2.4 Tract 1-A

In June and July 2000, tap water samples were collected from the residence (800 Minnesota Avenue) on Tract 1-A (DEQ, 2000c).

In September 2011, monitoring wells MW01 through MW03 were installed and 18 test pits were dug and sampled on Tract 1-A (Portage, 2011).

6.2.5 Tract 5 - CHS Tank Farm

In response to a release at the CHS tank farm in 1991, groundwater monitoring wells MW1 through MW10 and sump wells S-1 through S-8 were installed and water and sediment samples were collected from the Yegen Ditch and Yellowstone River (TetraTech, 2008).

In response to a release at the CHS tank farm in 1993, piezometer wells PZ1 and PZ2, groundwater monitoring wells M1 through M9, and recovery groundwater monitoring wells RW1 through RW5 were installed (Cenex, 1992; ConocoPhillips, 2007).

6.2.6 Montana Department of Transportation

In July 1989, soil, water, and sediment samples were collected from the MDT property and other properties within the Facility boundary (Ecology, 1989c). In October 1993, a composite soil sample was collected from a sludge pit on the MDT property (MDEQ, 1993).

6.2.7 Department of Military Affairs

In April 1991, soil and water samples were collected during DMA UST removals (DMA, 1991).

6.2.8 ConocoPhillips Trench

In August 1994, water samples were collected from the ConocoPhillips trench (DEQ, 1994). In 2004, soil samples were collected from the ConocoPhillips trenches in the vicinity of the former TEL plant (DEQ, 2011a).

6.2.9 US Highway 87

In March 1992, soil samples were collected from six test pits on US Highway 87 (Braun, 1992). The samples were analyzed for total petroleum hydrocarbons (TPH), BTEX, VOCs, and select metals. Concentrations of petroleum hydrocarbons were below reporting limits with the exception of TPH at 1,270 mg/kg in Station 12 at 3.5 feet bgs. Concentrations of barium, chromium, and lead were reported in each of the six samples at concentrations ranging up to 310 mg/kg, 28 mg/kg, and 190 mg/kg, respectively.

6.2.10 Former Midland Empire Packing Company Property

On March 2, 1999, MPC advanced four Hydropunch®-type drill holes from 11 to 14.5 feet bgs, downgradient of the transformer. PCB compounds were not detected in the Hydropunch® groundwater samples. On June 17, 1999, groundwater monitoring well M1 was installed in the vicinity of the transformer release. Groundwater monitoring well M1 was drilled to 15 feet bgs. Soil samples were not collected. On June 1, 1999, a groundwater sample was collected from well M1. PCB compounds were not detected in the sample. On October 12, 1999, the DEQ issued a letter indicating that no further action was necessary (MPC, 1999 and 2000; Olympus, 1999).

6.2.11 Montana Rail Link Lease Property

In July 1989, soil, water, and sediment samples were collected from the railroad right-of-way and Yegen Ditch area (Ecology, 1989c).

Boring logs shown on a proposed lease map of 900 First Avenue North, list "contaminants" in the soil. Parts of the map are based on 1977 data and parts are based on 1988 data. It is unclear when the borings were drilled on the property (CTA, 1988). Details regarding this investigation are unknown.

In 1994, there was an investigation of the railroad right-of-way property (Olympus, 1994). In 2000, soil and water samples were collected during an investigation in the vicinity of the former TEL plant located on the railroad right-of-way (DEQ, 2000a). In October 2005, waste oil on the railroad right-of-way property was investigated and profiled (Energy, 2005).

6.3 Remediation Activities

6.3.1 Yale Oil Refinery

In 1946, Carter Oil began operation of an oil recovery system (ExxonMobil, 2001). Four seepage wells were located on the refinery property and two seepage wells were located on Tract 1-A, north of the Midland Empire Packing Company building (Plates 3 and 7). The last recorded weekly recovery, in 1949, from this system was approximately 350 barrels of oil and the total recorded accumulation was over 30,000 barrels of oil (ExxonMobil, 2001; DEQ, 2011b). It is unknown when system operations ceased.

6.3.2 ConocoPhillips Pump Stations

From 1955 to 2000, various releases of gasoline and diesel occurred at the YPL and ConocoPhillips pump stations (Section 3.3.1). Records indicate impacted soil was placed on plastic and disposed (Conoco, 2000).

6.3.3 CHS Tank Farm

Following the June 10, 1991, release of regular leaded gasoline suction line from Tank 282, near the YPL booster pump located on the CHS tank farm (Section 3.6.1), remediation activities, including a groundwater extraction system, an air stripper tower treatment system, and a groundwater injection system were conducted until 1998. As of May 1992, approximately 25,500 gallons of NAPL had been recovered (Cenex, 2000; LSE, 1992; TetraTech, 2008).

Following the February 1, 1993, leak discovered in an 8-inch diameter Seminoe pipeline passing through the CHS tank farm (Section 3.6.2), approximately 200 barrels of product were recovered from trenches using vacuum trucks, and an estimated 85 barrels of NAPL were removed through excavation of impacted soil. As of 1996, an additional 20 barrels of NAPL had been recovered. Approximately 1,500 cubic yards of soil (primarily from the eastern release area) were stockpiled at the Facility as part of the initial response and were disposed of on October 26, 1993. Remediation activities (including operation of a pump and treat system) were conducted

from 1993 to 2007. In May 2004, a former product recovery trench was excavated and additional impacted soil was removed (Conoco, 2007; DEQ, 2008).

6.3.4 BNSF / Montana Rail Link

Following the July 29, 1994, report of oil seeping into excavations dug by ConocoPhillips during routine maintenance (Section 3.7.1), DEQ determined ConocoPhillips was responsible for the disposal of soil and water containing hydrocarbons that was removed from the excavations. A DEQ inspector sampled groundwater in one of the excavations and benzene was measured at a concentration of 30.8 µg/L. The DEQ suggested ConocoPhillips remove the soil to ConocoPhillips landfarm, the city landfill, or some other acceptable facility; documentation of the soil removal is unavailable. Groundwater was removed and treated at the ConocoPhillips refinery (DEQ, 1994).

Following the 1994 Olympus Environmental, Inc. investigation of the railroad right-of-way southeast of Tract D (Section 3.7.2), Tana Industries, Inc. claimed responsibility for the fifty 5-gallon buckets and removed them from the property (Olympus, 1994).

On December 16, 1998, following the 1998 MPC transformer oil release on BNSF property, north of the former Midland Packing Company building (Section 3.7.3), 40 cubic yards of soil containing hydrocarbons were excavated and transported off of the Facility for disposal. The maximum depth of the excavation was 10 feet bgs. Groundwater was encountered between 8 and 10 feet bgs. Crude oil staining was visible on the surface of the groundwater. Soil samples were collected from the excavation side walls and a groundwater sample was collected from the bottom of the excavation. The maximum PCB concentrations in soil and groundwater were 533 mg/kg and 110 µg/L, respectively (MPC, 1999; MPC, 2000; Olympus, 1999).

Following characterization of oily waste in a trench and sump, AST, and drums, on November 7, 2006, 2,500 gallons of oil, 350 gallons of oil/water mixture and 52 empty steel drums were disposed of at Emerald Recycling in Helena, Montana (DEQ, 2005c, 2005d and 2005e, Emerald, 2006, DEQ, 2006, Olympus, 2005a; Olympus, 2005b).

6.4 Groundwater Monitoring Activities

6.4.1 CHS Tank Farm

Groundwater monitoring was implemented on the eastern portion of the CHS tank farm in 1991 after a release on June 10, 1991, near the YPL booster pump (Section 3.6.1). Groundwater monitoring wells MW1 through MW10 were installed on the eastern portion of the property. In 1998, the WQA site went to monitored natural attenuation and annual groundwater monitoring, managed under the DEQ WQA program. The July 2008,

groundwater monitoring results indicated that concentrations were either below laboratory reporting limits or below DEQ risk-based screening levels, if future sampling events indicated the same results, closure of the WQA site would be recommended (Cenex, 2000; LSE, 1992; TetraTech, 2008).

Groundwater monitoring was implemented on the western portion of the CHS tank farm in 1993 after a release of product was discovered on February 1, 1993, from an 8-inch diameter Seminoe pipeline (Section 3.6.2). Groundwater monitoring wells M1 through M9, piezometer wells PZ1 and PZ2, and recovery wells RW1 through RW5 were installed on the western portion of the property. Results of the May 2006 and January 2007 groundwater monitoring events indicated that petroleum hydrocarbon concentrations were below the DEQ's risk-based screening levels. On April 3, 2007, ConocoPhillips requested the DEQ grant No Further Action status. On April 25, 2007, the DEQ issued a No Further Action letter (Conoco, 2007; DEQ, 2008).

6.4.2 ASI Industrial

In September 2011, Portage, Inc. conducted an investigation of Tract 1-A for ASI Industrial. Portage installed groundwater monitoring wells MW01 through MW03 on Tract 1-A. The maximum concentration of total extractable hydrocarbons in groundwater was 5,850 µg/L in well MW03. The investigation was conducted for ASI Industrial and not done under the direction of the DEQ or CECRA program requirements (Portage, 2011).

7.0 NATURAL FEATURES

7.1 Geological Setting

7.1.1 Regional Geology

The facility is located on the northwestern bank of the Yellowstone River that flows northeast from Yellowstone National Park in Wyoming towards North Dakota. Soil in the Facility vicinity consists of Quaternary deposits made up of Holocene-aged alluvium with Pleistocene and Holocene-aged alluvial terrace gravels (Lopez, 2000). Bedrock in the area is Upper Cretaceous-aged shales and sandstones (Lopez, 2000).

7.1.2 Local Geology

7.1.2.1 Soil and Alluvial Gravel

The majority of soil at the facility consists of Haverson loam and Haverson-Hysham loams that have 0 to 1 percent slopes (Web Soil Survey). The Holocene-aged alluvium along the Yellowstone River consists of coarse, well-rounded gravel with sand, silt, and clay. Sediment in the tributary drainages is sand, silt, and clay derived from local Cretaceous sandstone and shale bedrock (Hutchinson, 1983; Lopez, 2000).

The area south of the BNSF railroad tracks is mapped as Alluvial gravel, terrace level 1, of Holocene and Pleistocene age. The gravel underlies terraces about 10 to 20 feet above the present elevation of Yellowstone River and consists mostly of cobbles and pebbles, with minor amounts of sand and silt. Clasts are mainly granitic igneous rocks, granitic gneiss schist, schist, and quartzite, with much less limestone and sandstone. Thickness is from 20 to 40 feet (Lopez, 2000; Gosling and Pashley, 1973).

The area north of the BNSF railroad tracks is mapped as Alluvial gravel, terrace level 2, of Pleistocene age. The gravel underlies terraces about 20 to 40 feet above the present elevation of the Yellowstone River and is similar in makeup to the terrace level 1 gravel. Thickness ranges from 40 to 60 feet (Lopez, 2000; Gosling and Pashley, 1973).

7.1.2.2 Bedrock

The local bedrock underlying the alluvial gravel deposits is the Telegraph Creek Formation or underlying Niobrara Shale. The Telegraph Creek Formation is mapped in the bluffs north of the facility (Lopez, 2000) and consists of shale and sandy shale, brownish-gray to medium dark-gray, with thin, inter-bedded sandstone. Dusky-red concretions are common near the base. The maximum thickness is about 150 feet (Lopez, 2000).

The unit underneath the Telegraph Creek Formation is the Niobrara Shale. This shale is olive-gray and dark brownish-gray, fissile, and contains abundant thin bentonite beds. The upper half is calcareous, containing few very thin bentonite beds, and near the top containing thin beds of very calcareous, laminated sandstone, siltstone, and sandy limestone. Medium light gray to pale yellowish-brown concretions from a few inches to 1 or 2 feet in diameter are commonly present. The upper contact is placed at the change from calcareous shales to the non-calcareous shales of the Telegraph Creek Formation. In the Billings area, the Niobrara Shale is about 700 feet thick (Lopez, 2000).

Monitoring wells MW1 through MW6 were installed in the CHS tank farm in September 1991. Boring logs for these wells (Appendix C) indicate the subsurface in this area to be comprised of gray, brown, and dark brown sandy gravel and sand, silt, and gravel mixtures from ground surface to approximately 17 to 20 feet bgs. Boring logs for wells MW3, MW5, and MW6 indicate gray shale bedrock at approximately 17.5 to 20 feet bgs.

7.2 Hydrogeologic Setting

The Eagle aquifer is a single hydrogeologic unit and is an important source of stock and domestic water in west-central Yellowstone County and provides water to about 660 wells. Most of these wells have been completed where the Eagle Sandstone crops out north of the city of Billings. The Eagle aquifer is comprised of water-saturated sandstone layers in the Eagle Sandstone and the underlying Telegraphic Creek Formation. The

Eagle Sandstone forms prominent cliffs north and east of the city of Billings and crops out along an east- to west-trending, one- to 8-mile-wide band in eastern Yellowstone County. South of the outcrop area, the formation has been removed by erosion (Olson and Reiten, 2003).

The Yellowstone River and riverbank areas are underlain by Quaternary-age alluvium consisting of coarse well-rounded gravel, sand, silt, and clay. Upper Cretaceous sedimentary rocks underlie the alluvium (Lopez, 2009; Lopez, 2000). The Yellowstone River Valley aquifer is a single hydrogeologic unit which consists of seven Quaternary-age terrace surfaces or alluvial aquifers which have been mapped and characterized as Terrace 1, Terrace 2a, Terrace 2b, Terrace 3, Terrace 4a, Terrace 4b, and Terrace 5. These alluvial aquifers are the most utilized sources of groundwater in Yellowstone and Treasure Counties and provide water to about 5,300 wells. Most of these wells are located in the Yellowstone River valley in or near the cities of Billings and Laurel. The primary uses of the wells are for domestic potable water (Olson, 2005).

The alluvial aquifers consist of water-saturated sand and gravel in alluvial deposits of the Yellowstone River and its tributaries. The alluvium has been deposited over older bedrock units, and the thicknesses ranges from 0 to 100-feet. The coarse-grained alluvium consists of sand and gravel, and is the primary water-bearing unit in the Yellowstone River valley. In some locations underlying sandstone aquifers are available as alternative water sources, however much of the area is underlain by non-water bearing shale, making the alluvium the sole source of groundwater (Olson, 2005).

Stratigraphic and potentiometric data indicate that distinct aquifers are formed under Terraces 2, 2a, 3, and 4a. These aquifers are either separated by discontinuities between the sand and gravel deposits or thinning of the saturated thickness at the terrace scarp. Direct flow between terraces is either limited or absent (Olson, 2005). The Yellowstone River Valley alluvial aquifer, specifically Terrace 2a is the principle groundwater unit underlying the facility. The largest area of Terrace 2a is near Billings and Laurel and is approximately 20 to 40-feet above the Yellowstone River (Olson, 2005). Groundwater flows from west/northwest to east/southeast and discharges into the Yellowstone River (Hutchinson, 1983). The alluvial aquifer is bounded laterally by bedrock bluffs and vertically by relatively impermeable shale of the Telegraph Creek Formation and Niobrara Shale (Lopez, 2000).

7.3 Groundwater and Surface Water Conditions

7.3.1 Summary of Available Groundwater and Surface Water Quality Data

Concentrations of select constituents of concern exceed current RBSLs in the Montana DEQ's Tier 1 RBCA for Petroleum Releases or DEQ-7 Standards in groundwater samples collected from select wells at the Facility. A summary of historical groundwater monitoring and sampling data is presented in Table 4. Additional water analytical results are presented in Table 6.

Concentrations of dissolved-phase petroleum hydrocarbons in surface water samples collected from the Yellowstone River and Yegen Ditch have been below reporting limits. A summary of historical surface water sampling data is presented in Table 5.

7.3.2 Current Uses of Groundwater and Surface Water

There are 117 active and seven abandoned groundwater wells located approximately within a ½-mile radius of the property boundary. The Montana Bureau of Mines and Geology Groundwater Information Center (GWIC) database reported 118 groundwater wells within ½-mile radius of the property; EDR reported six additional groundwater wells not registered in the GWIC database. The types of wells include domestic, public water supply, irrigation, industrial, monitoring, and test. A map showing the wells located by the EDR database search is included as the first page of Appendix B. Tables 11 and 12 list the wells on and off the Facility discovered by the GWIC and EDR searches. Boring logs are provided in Appendix C and are divided into wells on and off the Facility.

The city of Lockwood uses the Yellowstone River as a domestic water supply and the municipal diversion point is located approximately 1,000 feet downgradient of the facility on the east bank of the river.

7.3.3 Groundwater and Surface Water Flow Rates and Directions

The main hydrologic feature associated with the Facility is the Yellowstone River. The Yellowstone River flows from the Yellowstone National Park in Wyoming to the Missouri River near Williston, North Dakota. The Yellowstone River flows to the north-northeast immediately downgradient of the Facility. The Yellowstone River has a drainage area of approximately 11,805 square miles of which 397 square miles is noncontributing (USGS, 2011). Discharge records for time periods between 1929 and 2011 indicate that the river flows at an average of 6,942 cubic feet per second (cfs) with an average runoff of 5,029,000 acre-feet (USGS, 2011). A maximum discharge of 80,100 cfs was recorded on June 12, 1997. From May through July, the flow at Billings is 10 times greater than the low flow as a result of runoff from rain and snowmelt at higher altitudes in the Yellowstone Park area (Gosling and Pashley, 1973). Low flow periods occur in the winter, usually January or February when subzero temperatures cause freezing of the river (EPA, 1989).

During peak river stage in May to July, groundwater flows away from the river in riverbank areas. From August to April, groundwater generally flows towards the river or in a more down-river direction. In December 1994, groundwater flow in the western portion of the CHS tank farm was to the east-southeast at hydraulic gradients of approximately 0.008 to 0.02 (Olympus, 1995). In January 2007, groundwater flow in the western portion of the CHS tank farm was to the southeast at a hydraulic gradient of approximately 0.01 (TetraTech, 2007). In July 2008, groundwater flow in the eastern portion of the CHS tank farm was to the east-northeast at hydraulic gradients of approximately 0.007 to 0.025 (TetraTech, 2008).

7.3.4 Surface Water Locations up to 1 Mile

Surface water within a 1-mile radius includes the Yellowstone River, Alkali Creek, Yegen Ditch, Billings Bench Water Association (BBWA) Ditch (Bench Ditch), and Coulson Water Users Association Ditch (Coulson Ditch).

7.3.5 Groundwater Discharge/Recharge

Groundwater in the area discharges into the Yellowstone River. Groundwater recharge into the surficial aquifers is from precipitation infiltrating the ground. The annual precipitation for Billings from 1906 to 1968 averages 14 inches per year and ranges from 8 to 21 inches with 40% falling between April and June (Gosling and Pashley, 1973).

7.3.6 Surface Water Drainage Patterns

The Yegen Ditch bisects the facility and discharges to the Yellowstone River. Surface water runoff migrates off of the Facility via percolation, infiltration, and overland flow. In the CHS tank farm, surface water is contained by berms and dikes that allow infiltration or evaporation (EPA, 1989). On January 16, 1947, NP permitted a lease with the City of Billings to re-route the Yegen Ditch (MRL, 2000). The ditch, prior to this agreement, did not bisect the Facility. North of Tract 5, the ditch historically turned north, flowed under a railway bridge/culvert, crossed the southeast corner of the MDT property, and departed the Facility flowing across the Yellowstone Fairgrounds property to the north of US Highway 87 East. The ditch was re-routed to stay on the south side of the mainline of the railway before discharging in the Yellowstone River.

Alkali Creek is a tributary of the Yellowstone River and flows to the east where it discharges into the Yellowstone River within ½-mile north of the Facility.

The main head gate for the Bench Ditch is located at Laurel. The Bench Ditch enters Billings near Shiloh and Hesper Road and runs northeast through the City of Billings within 1-mile northwest of the Facility. The Bench Ditch continues into the Billings Heights area.

The head gate for the Coulson Ditch is located within ¼-mile east-northeast of the facility near the Lockwood Water Yellowstone River intake. Coulson Ditch runs northeast parallel to Coulson road into the Lockwood area where it discharges back into the Yellowstone River.

7.3.7 Groundwater and Surface Water Classification

The Yellowstone River drainage from Laurel water supply intake to the Billings water supply intake outlined in the Administrative Rules of Montana (ARM) 17.30.611(1)(b) is classified as B-2. The Yellowstone River

drainage from the Billings water supply intake to the North Dakota state line and including the Big Horn River drainage and the Yellowstone River main-stem outlined in the ARM 17.30.611(1)(c)(i) is classified as B-3. These Classification Standards are to be maintained suitable for drinking, culinary, and food processing purposes, after conventional treatment; bathing, swimming, and recreation; growth and marginal propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply as per ARM 17.30.624 and ARM 17.30.625.

Historic specific conductance measurements have ranged from 1,188 to 4,507 microSiemens (TetraTech, 2008; Cenex, 1992, Olympus, 1995, ConocoPhillips, 2007; Portage, 2011). Based on these historical measurements, groundwater beneath the Facility is classified as Class II ground waters as per ARM 17.30.1006(2), groundwater with a natural specific conductance that is greater than 2,500 and less than or equal to 15,000 microSiemens/com at 25°C.

7.4 Meteorologic Settings

7.4.1 Temperature

Temperatures in Billings in January range from 17.8 degrees Fahrenheit (F) to 36.4 degrees F and average 27.1 degrees F. Temperatures in July range from 58.8 degrees F to 86.8 degrees F and average 72.8 degrees F. Spring, summer, fall, and winter temperatures average 46.3 degrees F, 69.7 degrees F, 48.2 degrees F, and 28.0 degrees F, respectively (NOAA, 2012).

7.4.2 Wind

The average wind speed during the year in Billings is 10.7 miles per hour. January winds average 13.2 miles per hour, while the average July wind speed is 8.9 miles per hour (NOAA, 2012).

7.4.3 Precipitation and Snowfall

Annually, Billings averages 13.63 inches of precipitation and 55.1 inches of snowfall. Precipitation averages decrease in the winter months (averaging 1.46 inches) and are at their peak during the spring (averaging 4.90 inches). Snowfall is at its peak during the winter and spring months, averaging 22.8 and 20.5 inches, respectively (NOAA, 2012).

7.5 Ecologic Settings

The plains grassland and plains forest ecotype includes 43,918,691 acres and represents 46.7% of Montana, including the Billings area. Two major rivers, the Missouri and the Yellowstone, cross the entire ecotype. The

plains grassland ecotype encompasses the largest area in Montana. Vegetation found throughout the ecotype includes wheatgrass, needle-and-thread, bluebunch wheatgrass, blue grama, prairie jundgrass, green needlegrass, thickspike wheatgrass, fringed sage and dense clubmoss. Other widespread species common in certain conditions include little bluestem, prairie sandreed, silver sage, sun-sedge and threadleaf sedge. Most other grasses and grass-like plants are only minor community components or are dominant in restricted areas (Montana Fish, Wildlife & Parks, 2005).

The Yellowstone River above Billings is rated a moderate habitat for highly valued aquatic species and a substantial habitat for less highly valued aquatic species. From Billings downstream to the confluence of the Bighorn River, the Yellowstone River is rated as a substantial resource for valued aquatic species and a priority habitat for less highly valued aquatic species. There are no critical habitats located within a 15-mile downstream stretch of the Yellowstone River from Billings; however, the area is utilized by the bald eagle but is listed mostly as a migratory pathway with no specific nesting area noted along the 15-mile stretch of river (EPA, 1989).

The Yellowstone River near Billings is characterized by minor rapids with motor boating, canoeing, rafting, fishing, and picnicking being primary activities near the Billings area. Secondary activities include tubing, swimming, and camping (EPA, 1989; Montana Fish, Wildlife & Parks, 2005).

7.6 Demographic Settings

7.6.1 Facility Settings

The Facility is located in an industrial area of the city of Billings (see Section 8.1). It is surrounded by commercial and residential areas. Midland Empire Fair Grounds are located north of the Facility. A railroad bisects the Facility (southwest to northeast). The Yegen Ditch also bisects the Facility and discharges to the Yellowstone River, located just east of the Facility. Interstate 90 borders the Facility to the south. Coulson Park lies on the other side of Interstate 90.

7.6.2 Facility Features

A used-car sales lot and warehouse, sales, packaging, distribution, fabrication, and broadcasting businesses are located on the Facility property. Several pipelines, both active and inactive, two pump stations, and an active petroleum tank farm are present within the Facility boundary. MDT stores equipment and materials at the Facility. Further details regarding the structures at the Facility and their uses can be found in Section 2.

7.6.3 Population

Evidence of a transient population frequenting the vicinity of the former TEL plant located on the railroad right-of-way was noted by the DEQ in 2000 and 2005 (DEQ, 2000a; DEQ, 2005c; DEQ, 2011a).

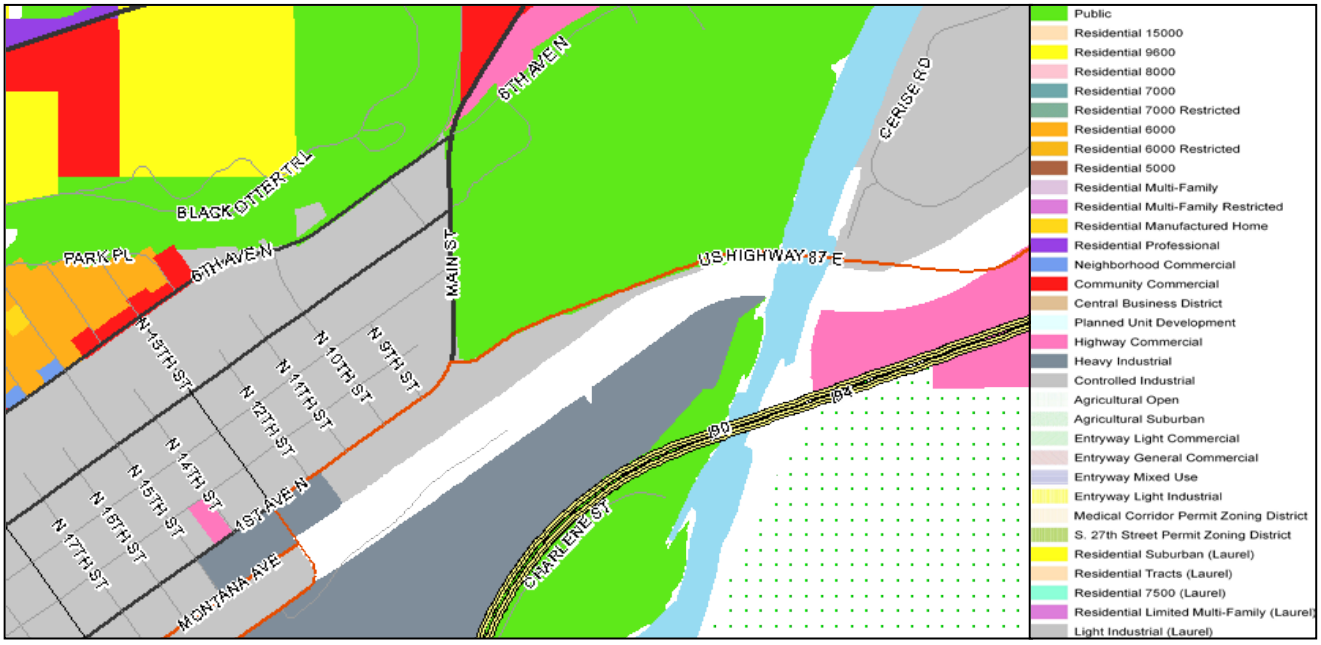
8.0 CURRENT AND ANTICIPATED FUTURE LAND USE

8.1 Zoning

The city of Billings has classified the Facility into three different city zones, as shown on the following map. The area south of the railroad tracks is classified as *heavy industrial zone*. Heavy industrial zoning is intended to accommodate manufacturing, processing, fabrication, and assembly of materials and products with access to two or more major transportation routes and adjacent space for parking and loading facilities. There is a zone 200 feet wide on each side of the railroad tracks that is considered a buffer zone with no city zoning laws. The area north of the railroad tracks is considered a *controlled industrial zone*. The controlled industrial zone is intended to accommodate businesses; warehouses with light industrial that relate to wholesale; businesses and light industry that don't categorize into other commercial zones, but which do not need restrictions in industrial or general commercial zones; with access to arterial and other transportation systems (Unified Zoning Regulations).

Most of the Facility is outside of the city limits and classified as county parcels, shown in the following map as shaded areas. The areas classified within the city of Billings limits are shown as non-shaded. The green shaded areas are public park areas while the blue represents the Yellowstone River.

The County of Yellowstone has zoned select areas of the Facility and vicinity as shown on the following map. Areas in the Facility and vicinity are zoned as public, heavy industrial, controlled industrial, and highway commercial.



8.2 Existing Conditions Map

An Existing Conditions Map is included as Plate 5. Historical and current land use is discussed in Section 2.0.

8.3 Current and Historical Aerial Photographs and Sanborn Fire Insurance Maps

Historical aerial photographs, EDR Radius Map, Sanborn Fire Insurance maps, and topographic maps are included in the EDR report included in Appendix B.

9.0 REGULATED SITES

EDR conducted a review of federal, state, and local environmental databases to identify sites or facilities with known environmental conditions, which could have an adverse impact on the property. The EDR environmental data are summarized in *The EDR Radius Map with GeoCheck* report provided in Appendix B.

9.1 Standard Federal and State Environmental Record Sources

The standard federal and state environmental record sources and minimum search distances are listed in the following table.

Standard Federal and State Environmental Record Sources

Record Source	Date of Active List	Approximate Minimum Search Distance (miles)
NPL Site List	03/31/11	1.0
Delisted NPL Site List	03/31/11	0.5
CERCLIS List	02/25/11	0.5
CERC-NFRAP Site List	02/25/11	0.5
RCRA CORRACTS List	03/09/11	1.0
RCRA Non-CORRACTS TSD Facilities List	06/15/11	0.5
RCRA Generators List	06/15/11	property and adjoining properties
Federal Institutional Control/ Engineering Control Registries	03/16/11	property only
ERNS List	04/05/11	property only
SHWS List	08/15/11	0.5
LUST List	07/19/11	0.5
UST List	06/30/11	property and adjoining properties
Institutional Controls	08/15/11	property only
Brownfields	07/18/11	0.5
VCP Registry	08/22/11	0.5
WQA List	06/22/11	0.5

Notes: The "Date of Active List" is the date the data referenced in the applicable federal or state database was made active and available by EDR. See the EDR report in Appendix B for further details. Montana Enforcement Division (ENFD) enforcement activities are listed under the relevant enforcement record database.

CAT	=	Category List
CERCLA	=	Comprehensive Environmental Response, Compensation, and Liability Act.
CERCLIS	=	Comprehensive Environmental Response, Compensation and Liability Information System.
CORRACTS	=	Resource Conservation and Recovery Information System – Corrective Action Sites.
ERNS	=	Emergency Response Notification System.
EPA	=	Environmental Protection Agency
LUST	=	Leaking Underground Storage Tank for Montana.
NFRAP	=	No Further Remedial Action Planned.
NPL	=	National Priority List.
RCRA	=	Resource Conservation and Recovery Act.
SHWS	=	State Hazardous Waste Sites (includes CECRA sites).
TSD	=	Treatment, Storage and Disposal Facilities (RCRA).
UST	=	Underground Storage Tank
VCP	=	Voluntary Cleanup & Redevelopment Act (includes VCP Registry sites).
VRP	=	Voluntary Remediation Program.
WQA	=	Montana Water Quality Act (includes CECRA sites).

The sites identified in these sources are summarized in the following table. A map showing LUST sites within a ½-mile radius of the facility is provided as the second page of Appendix B.

Sites Identified from Standard Federal and State Environmental Record Sources (see Appendix B)

Facility or Site Name	Address	Direction	Database Source(s)
0 to ⅛ mile from the Facility			
Zip Trip 55	236 Main Street	Northwest	› LUST, UST
Billings Truck Center	827 2nd Avenue North	Northwest	› UST
ISTATE Truck Center	827 2nd Avenue North	Northwest	› RCRA-CESQG
Advantage Machine & Tool	923 2nd Avenue North	West-Northwest	› RCRA-CESQG
Billings Machine & Welding Shop	115 North 9th Street	West	› RCRA-CESQG
Goldstar	600 1st Avenue North West End	West-Southwest	› RCRA-CESQG

Facility or Site Name	Address	Direction	Database Source(s)
A & I Distributors of Billings	900 1st Avenue North	West-Southwest	› RCRA-CESQG, UST
International Harvester	917 1st Avenue North	West-Southwest	› LUST, UST
Reliable Distributing Inc.	811 2nd Avenue North	Northwest	› RCRA-CESQG
Highball Trucking	2348 Lockwood Drive	Northwest	› UST
Lockwood Solvent Site Lockwood Groundwater Plume	Lockwood Road	Northeast	› CECRA
Cenex Yale Tank Farm Cenex Pipeline Terminal	¼ - mile East of Billings	East	› WQA
Conoco Seminoe Pipeline Terminal Yale Tank Farm	¼ - mile East of Billings	East	› WQA
Coulson Park Dump Site	Charlene Street	North	› WQA
⅛ to ¼ mile from the Facility			
Lockwood Water Users Association #4420	736 Cerise Road	Northeast	› LUST, RCRA-CESQG
The Bighorn Oil & Refining Co	4th Avenue North	North-Northwest	› CERC-NFRAP, CERCLA
ConocoPhillips Co Glacier Dist. Office	338 HWY 87 East	North-Northwest	› RCRA-CESQG,
Keenan & Associates	711 4th Avenue North	Northwest	› LUST, UST
Pacific Hide & Fur Pacific Recycling	777 4th Avenue North	Northwest	› CERC-NFRAP, CECRA › RCRA-CESQG
Conway Freight Western Express	901 4th Avenue North	Northwest	› RCRA CESQG
GM Petroleum Dist. Inc. CARDTROL Site 3	1004 4th Avenue North	West-Northwest	› LUST, UST
Consolidated Freightways	1002 3rd Avenue North	West-Northwest	› LUST, UST
Northwest Truck & Trailer Sales Inc.	1110 3rd Avenue North	West	› RCRA-CESQG
Northwest Peterbilt Co.	320 North 11th Street	West	› UST
Valley Welders Supply Inc.	320 North 11th Street	West	› RCRA-CESQG
Jack Yurko	1002 2nd Avenue North	West	› LUST, UST
Former Gas Station at Virdon Property	1018 2nd Avenue North	West	› UST
Federal Express Billings	1148 1st Avenue North	West-Northwest	› RCRA-CESQG
Automatic Transmission Co.	1313 1st Avenue North	West	› RCRA-CESQG
O Reilly Auto Parts	119 North 13th Street	West-Northwest	› RCRA-CESQG
Phoenix Ind.	1400 Montana Avenue	West-Southwest	› UST
Global NEXXT	1400 Montana Avenue	West-Southwest	› RCRA-CESQG
Coulson Park	East Frontage Road	South	› US Brownfields
Montana Drum Company	1310 Montana Avenue	West-Southwest	› RCRA-NonGen
Bairs Truck Stop	1st Avenue North & North 13th Street	West-Northwest	› LUST, UST
¼ to ½ mile from the Facility			
East Parkway Cenex Truckstop	501 Main Street	North-Northwest	› LUST, UST
Metra Park Billings #1156	308 6th Avenue North	North-Northwest	› LUST
Lindsey Lumber & Hardware Co.	548 Main Street	North-Northwest	› LUST, UST
AT&T Communications Billings Radio	US Highway 87	North-Northwest	› LUST, UST
Barry O Leary Inc.	1141 4th Avenue North	West-Northwest	› LUST, UST
Energy One Stop	1305 4th Avenue North	West-Northwest	› LUST
E.R. Young Co. Realtors	1411 4th Avenue North	West-Northwest	› LUST
Stockton Oil Co	1607 4th Avenue North	West-Northwest	› WQA
Griffin Automotive Enterprises #2849	1501 2nd Avenue North	West	› LUST
Showroom Auto Body #4476	1415 1st Avenue North	West	› LUST
Norms Service Former	1724 1st Avenue North	West-Southwest	› LUST, UST

Facility or Site Name	Address	Direction	Database Source(s)
MDOT Maintenance Shop #2569	924 US HWY 87 East	East-Northeast	› LUST
G.D. Eastlick Trucking	4811 King Avenue E	Southwest	› WQA

9.2 Supplemental Federal, State, and Local Environmental Record Sources

The supplemental sources reviewed are summarized in the following table.

Supplemental Federal, State, and Local Environmental Database Sources (see Appendix B)

Record Source	Date of Active List	Approximate Minimum Search Distance (miles)
Supplemental Federal Database Sources		
CONSENT List	12/31/10	1.0
DOD List	12/31/05	1.0
FINDS List	04/14/10	property only
FTTS List	04/09/09	property only
FUDS List	12/31/09	1.0
HMIRS List	12/3109	property only
MINES List	02/08/11	0.25
MLTS List	03/18/10	property only
NPL LIENS List	10/15/91	property only
ODI List	06/30/85	0.50
PADS List	11/01/10	property only
RAATS List	04/17/95	property only
ROD List	02/25/11	1.0
SSTS List	12/31/09	property only
TSCA List	12/31/06	property only
TRIS List	12/31/09	property only
UMTRA List	09/14/10	0.50
Supplemental State Database Sources		
AIRS List	12/31/10	property only
SPILLS List	05/19/11	property only
DRYCLEANERS List	01/26/06	0.25
Local/Other Database Sources		
COAL ASH	01/20/09	1.00

Notes: The "Date of Active List" refers to the date the data referenced in the applicable federal or state database was made active and available by EDR. See the EDR report in Appendix B for further details.

AIRS = Air emissions.
AST = Aboveground Storage Tank.
CBS = Chemical Bulk Storage Tank.
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act.
COAL GAS = Former Manufactured Gas (Coal Gas) Sites.
CONSENT = Superfund (CERCLA) Consent Decrees.
DOD = Department of Defense Sites.
DOT = Department of Transportation.
FIFRA = Federal Insecticide, Fungicide and Rodenticide Act.
FINDS = Facility Index System/Facility Identification Initiative Program Summary Report.
FTTS = FIFRA/TSCA Tracking System.
FUDS = Formerly Used Defense Sites.
HMIRS = Hazardous Materials Information Reporting System for Spills Reported to the DOT.
MINES = Mines Master Index File for Active Mine Sites.
MLTS = Material Licensing Tracking System for Sites that Possess/Use Radioactive Material.
MOSF = Major Oil Storage Facilities.
NPL = National Priority List.
ODI = Open Dump Inventory.
PADS = PCB Activity Database System for tracking PCB generators and TSD facilities.

PCB	=	Polychlorinated biphenyls.
RAATS	=	RCRA Administrative Action Tracking System.
RCRA	=	Resource Conservation and Recovery Act.
ROD	=	Records of Decision.
SPILLS	=	A listing of incidents reported to the Office of Emergency Response
SPDES	=	State Pollution Discharge Elimination System.
SSTS	=	Section 7 (of FIFRA) Tracking Systems for Registered Pesticide-Producing Facilities.
TSCA	=	Toxic Substance Control Act.
TRIS	=	Toxic Chemical Release Inventory System.
UMTRA	=	Uranium Mill Tailings Sites.
VCP	=	Voluntary Cleanup Agreement Sites (includes federal and state voluntary cleanup sites).

The sites identified in these sources are summarized in the following table.

Sites Identified from Supplemental Federal, State, and Local Environmental Record Sources (see Appendix B)

Facility or Site Name	Address	Direction	Database Source(s)
0 to ⅛ mile from the site			
Billings Truck Center	827 2nd Avenue North	Northwest	› FINDS
Reliable Distributing Inc.	811 2nd Avenue North	Northwest	› FINDS
A & I Distributors of Billings	900 1st Avenue North	West-Southwest	› FINDS
International Harvester	917 1st Avenue North	West-Southwest	› FINDS
Lockwood Solvent Site	½ - mile Northeast of Billings (Lockwood Road)	Northeast	› SHWS
Cenex Yale Tank Farm Cenex Pipeline Terminal	¼ - mile East of Billings	East	› FINDS, REM RPROGRAM
Conoco Seminoe Pipeline Terminal Yale Tank Farm	¼ - mile East of Billings	East	› FINDS
2005 Billings Crude Oil Tank	T1N R26E S34 SW	West-Southwest	› FINDS
⅛ to ¼ mile from the site			
Lockwood Water Users Association #4420	736 Cerise Road	Northeast	› FINDS
Keenan & Associates	711 4th Avenue North	Northwest	› FINDS
Pacific Hide & Fur	777 4th Avenue North	Northwest	› SHWS, VCP, REM RPROGRAM
Pacific Recycling	777 4th Avenue North	Northwest	› SWRCY
Big Horn Oil & Refining CO	4th Avenue North	North-Northwest	› REM RPROGRAM, FINDS
ConocoPhillips Co Glacier Dist. Office	338 HWY 87 East	North-Northwest	› FINDS
Consolidated Freightways	1002 3rd Avenue North	West-Northwest	› FINDS
Federal Express Billings	1148 1st Avenue North	West-Northwest	› FINDS
Bairs Truck Stop	1st Avenue North & North 13th Street	West-Northwest	› FINDS
Northwest Truck & Trailer Sales Inc.	1110 3rd Avenue North	West	› FINDS, HWAR
Jack Yurko	1002 2nd Avenue North	West	› FINDS
Automatic Transmission Co.	1313 1st Avenue North	West	› FINDS
¼ to ½ mile from the site			
Golden Recycling	1100 6th Avenue North	West-Northwest	› SWRCY
Barry O Leary Inc.	1141 4th Avenue North	West-Northwest	› FINDS

E.R. Young Co. Realtors	1411 4th Avenue North	West-Northwest	› FINDS
Stockton Oil Co	1607 4th Avenue North	West-Northwest	› FINDS

Notes:

REM RPROGRAM = Remediation Response Site Database.
SWRCY = Solid Waste Recycling, a listing of recycling center locations.
HWAR = Hazardous Waste Annual Report

10.0 DATA GAP EVALUATION

10.1 Facility History Data Gaps

10.1.1 Hazardous or Deleterious Substances

There are gaps in the historical record regarding the presence, removal, or treatment of hazardous or deleterious substances at the Facility. Early records indicate that refinery wastes may have been buried at the Facility, and in 1978 the DEQ noted the presence of "unlined oil waste pits" at the Facility (Ecology, 1989a); however, the exact methods and locations of waste disposal activities are unknown. Housekeeping operations, including the protocol for addressing small releases, are unknown for both refineries formerly located within the Facility.

In 1934, a vat of unknown contents and location overturned at the Yale Oil Refinery (Ecology, 1989a). In 1935, a welder's torch ignited vapors in Yale Oil Refinery Tank 59, which contained road oil, and caused a major fire, explosion, and the release of an unknown amount of product (Billings, 1935). It is unknown what clean-up activities took place after these releases.

In 1946, Carter Oil began operation of an oil recovery system (ExxonMobil, 2001). The last recorded weekly recovery was in 1949. It is unknown when the oil recovery system was shut down and at what rates free product was collected after 1949. Further documentation of oil recovery system operations could not be located.

Details of a 1955 YPL station release, the earliest record in ConocoPhillips files and the only one prior to 1993, are incomplete. The nature of the release (i.e., leaded or regular gas) and the clean-up activities associated with the release are unknown.

In approximately 1973 or 1974, a 1,000-gallon UST was pulled from the DMA Organizational Maintenance Shop #6 due to structural failure indicated by water intrusion; however, it was not known if any product leaked from the tank (Ecology, 1989b).

A DEQ inspection report stated that "[g]asoline that appeared to be fresh was discovered in a water main manhole at Big Sky Haulaway during 1988" on Tract C (DEQ, 1995). It is unknown if clean-up activities took place after this release.

Boring logs shown on a proposed lease map of 900 First Avenue North, list "contaminants" in the soil. Parts of the map are based on 1977 data and parts are based on 1988 data. It is unclear when the borings were drilled on the property (CTA, 1988). Details regarding this investigation and possible clean-up activities are unknown.

10.1.2 Operational History

10.1.2.1 Interstate Oil Pipeline Company

Notations in documents indicate that Interstate Oil Pipeline Company held easements in 1949 to cross the Facility with an 8-inch crude oil pipeline and a 12-inch pipeline (ExxonMobil, 2001; Chicago Title, 2012). Information regarding potential Interstate Oil Pipeline Company activities is unknown.

10.1.2.2 Facility Operations

The operational history of several structures at the Facility is unknown or is only partially understood. There are not details in the known records for the Facility of the operational history of the TEL plant, the paint factory, or the MRC oil loading rack; information about these structures comes mainly from maps of the area.

Buildings on Tract C had drains that led to the refinery ponds. It is unknown if other buildings operated similarly at the refinery.

10.1.2.3 Storage Tanks

Several storage tanks have been present across the tracts of the Facility since before 1923; however, little about their installation and removal has been documented. Of the tanks associated with the Facility, the only documented removals are the 1973/1974 and the 1991 removal of USTs from DMA property. In 1949, "unusable tankage was dismantled" when the Yale Oil Company shut down operations at their refinery (ExxonMobil, 2001), but the details of which tanks and materials were considered "unusable" are unknown.

10.2 Facility Conditions Data Gaps

10.2.1 Distribution and Delineation of Constituents of Concern

The distribution and delineation of constituents of concern across the Facility have not been adequately

characterized. The chemicals of concern include petroleum hydrocarbons and metals in soil, groundwater, surface water, sediment, and soil vapor. These gaps are addressed in the *Remedial Investigation Field Sampling and Analysis Plan* volume of this submittal.

10.2.2 Ecologic Settings

Select ecologic settings data are over 20 years old. Review of recent Montana Natural Heritage Programs data and updated threatened and endangered species, sensitive species, and critical habitats data have not been conducted.

11.0 REFERENCES

Note: Listed reference numbers indicate Montana DEQ file (folder) numbers (e.g., 39-03-01-31) and individual Adobe Acrobat PDF document numbers (e.g., 6311392033).

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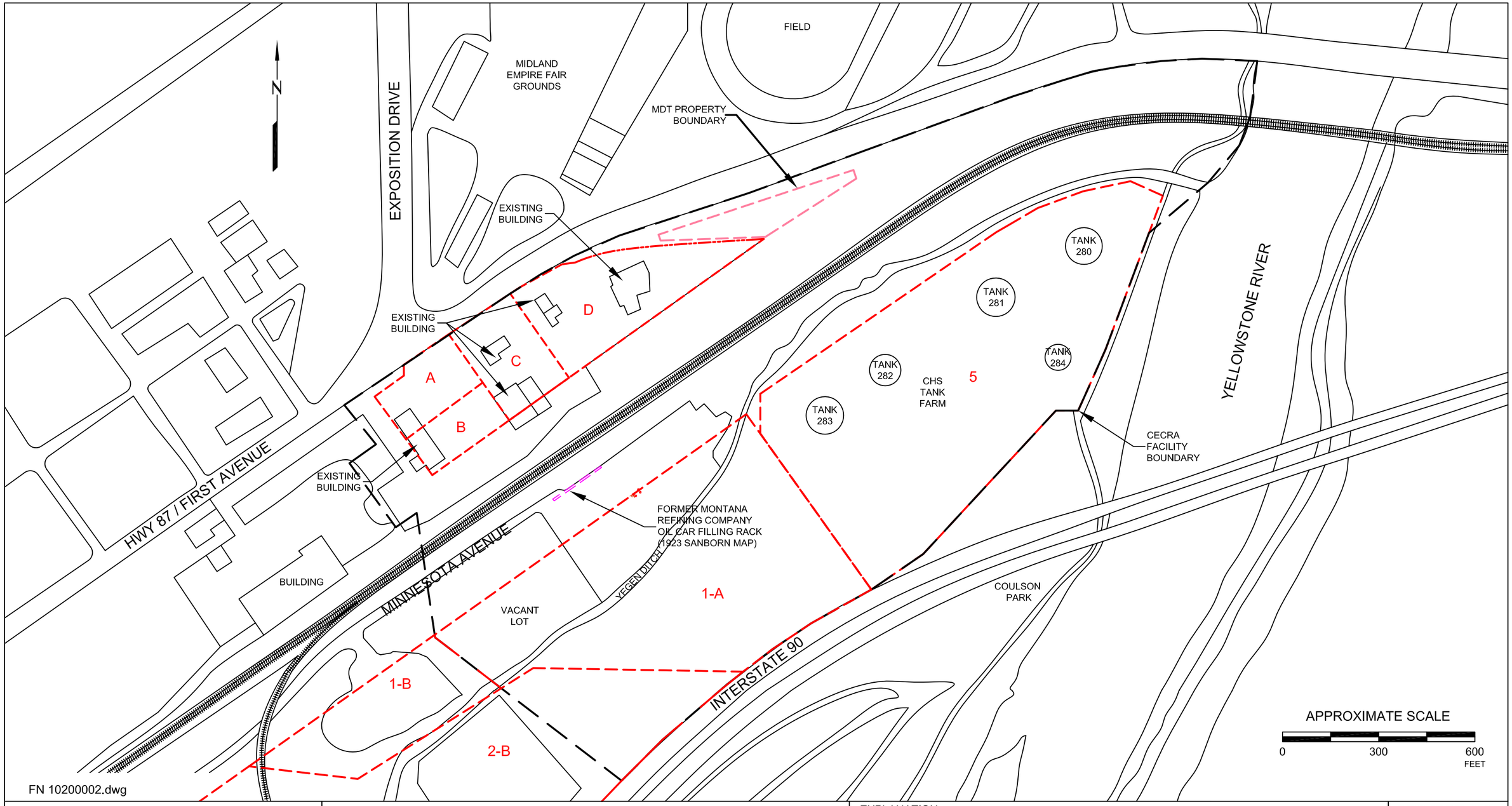
12.0 ACRONYM LIST

µg/L	Micrograms per liter
µs	Microsiemens
1,2-DCA	1,2-dichloroethane
acfm	Actual cubic feet per minute
AS	Air sparge
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CECRA	Comprehensive Environmental Cleanup and Responsibility Act
cfm	Cubic feet per minute
COC	Chain of Custody
CPT	Cone Penetration (Penetrometer) Test
DIPE	Di-isopropyl ether
DO	Dissolved oxygen
DOT	Department of Transportation
DPE	Dual-phase extraction
DTW	Depth to water
EDB	1,2-dibromoethane
EPA	Environmental Protection Agency
EPH	Extractable petroleum hydrocarbons
ESL	Environmental screening level
ETBE	Ethyl tertiary butyl ether
FID	Flame-ionization detector
fpm	Feet per minute
GAC	Granular activated carbon
gpd	Gallons per day
gpm	Gallons per minute
GRO	Gasoline-range organics
GWPTS	Groundwater pump and treat system
HVOC	Halogenated volatile organic compound
J	Estimated value between MDL and PQL (RL)
LEL	Lower explosive limit
LPC	Liquid-phase carbon
LRP	Liquid-ring pump
LUFT	Leaking underground fuel tank
LUST	Leaking underground storage tank
MCL	Maximum contaminant level
MDL	Method detection limit
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
mg/m^3	Milligrams per cubic meter
MPE	Multi-phase extraction
MRL	Method reporting limit
msl	Mean sea level
MTBE	Methyl tertiary butyl ether
MTCA	Model Toxics Control Act
NAI	Natural attenuation indicators
NAPL	Non-aqueous phase liquid
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
ORP	Oxidation-reduction potential
OSHA	Occupational Safety and Health Administration
OVA	Organic vapor analyzer
P&ID	Process & Instrumentation Diagram
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene or perchloroethylene
PID	Photo-ionization detector
PLC	Programmable logic control
POTW	Publicly owned treatment works
ppmv	Parts per million by volume
PQL	Practical quantitation limit
psi	Pounds per square inch
PVC	Polyvinyl chloride
QA/QC	Quality assurance/quality control
RBSL	Risk-based screening levels
RCRA	Resource Conservation and Recovery Act
RL	Reporting limit
scfm	Standard cubic feet per minute
SSTL	Site-specific target level
STLC	Soluble threshold limit concentration
SVE	Soil vapor extraction
SVOC	Semivolatile organic compound
TAME	Tertiary amyl methyl ether
TBA	Tertiary butyl alcohol
TCE	Trichloroethene
TOC	Top of well casing elevation; datum is msl
TOG	Total oil and grease
TPHd	Total petroleum hydrocarbons as diesel
TPHg	Total petroleum hydrocarbons as gasoline
TPHmo	Total petroleum hydrocarbons as motor oil
TPHs	Total petroleum hydrocarbons as stoddard solvent
TRPH	Total recoverable petroleum hydrocarbons
UCL	Upper confidence level
USCS	Unified Soil Classification System
USGS	United States Geologic Survey
UST	Underground storage tank
VCP	Voluntary Cleanup Program
VOC	Volatile organic compound
VPC	Vapor-phase carbon



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Shaping the Future

GENERALIZED SITE PLAN

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

- Railroad Tracks
- Existing building
- A — Tract ID
- CECRA facility boundary
- MDT property boundary
- Tract boundary
- Existing tank

NOTE: The facility includes any site or area where a hazardous or deleterious substance has been deposited, stored, disposed of, placed, or otherwise come to be located. This will be further refined through completion of a remedial investigation (RI).

PROJECT NO.
1020

PLATE
1

DATE: 12/01/11

LUST SITE
236 MAIN STREET

N

EXPOSITION DRIVE

MIDLAND
EMPIRE FAIR
GROUNDS

YELLOWSTONE
PETROLEUM
PIPELINE 8"

FIELD

YELLOWSTONE
PETROLEUM
PIPELINE 8"

TO EXXONMOBIL
REFINERY

COP
PETROLEUM
PIPELINE 8"

STAINED SOIL
AND SLUDGE PIT
(LOCATIONS APPROXIMATE)

COP PETROLEUM
PIPELINE 12"

FORMER
EXISTING
BUILDING

MDT
PROPERTY
BOUNDARY

FORMER
POND

(1945 CARTER
OIL BILLINGS
REFINERY)

BUILDING

BUILDING

FORMER
GAS STATION

EXISTING
BUILDING

FORMER
PONDS

DRUMS

FORMER
TEL PLANT

OIL
SUMP

BARRELS

AST 10,000
GALLON

LUST SITE
1002 2ND AVENUE NORTH

LUST SITE
917 FIRST AVENUE NORTH

HWY 87 / FIRST AVENUE

FORMER
SERVICE
STATION

EXISTING
BUILDING

FORMER PAINT
MANUFACTURING
BUILDING

OIL FILLED
TRENCH

FORMER MONTANA
REFINING COMPANY
OIL CAR FILLING RACK
(1923 SANBORN MAP)

CONOCO
PIPELINE

YELLOWSTONE
PIPELINE 12"

FORMER
PAINT
SHOP

MINNESOTA AVENUE

FORMER MIDLAND
EMPIRE PACKING
COMPANY

YEGEN DITCH

VACANT
LOT

BUILDING

SEMINOE
PIPELINE 10"

FORMER MONTANA
REFINING COMPANY
REFINERY
(1923 SANBORN MAP)

INACTIVE
CHS
PIPELINE

INTERSTATE 90

TO COP
REFINERY

A

B

C

D

1-A

1-B

2-B

5

TANK
280

TANK
281

TANK
282

TANK
283

TANK
284

CHS
PIPELINE

CHS
TANK
FARM

YELLOWSTONE
PIPELINE

SEMINOE
PIPELINE

CENEX 8"
PIPELINE

EXXON
PIPELINE

YELLOWSTONE RIVER

CECRA
FACILITY
BOUNDARY

INACTIVE
CHS
PIPELINE

COULSON
PARK

CONOCO
PIPELINE
SPL 8"

SEMINOE
PIPELINE
SPL 8"

ABANDONED
SEMINOE
PIPELINE

NOTE: The facility includes any site or area where a hazardous or deleterious substance has been deposited, stored, disposed of, placed, or otherwise come to be located. This will be further refined through completion of a remedial investigation (RI).

APPROXIMATE SCALE

0 300 600
FEET

FN 10200002.dwg

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POTENTIAL SOURCE MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

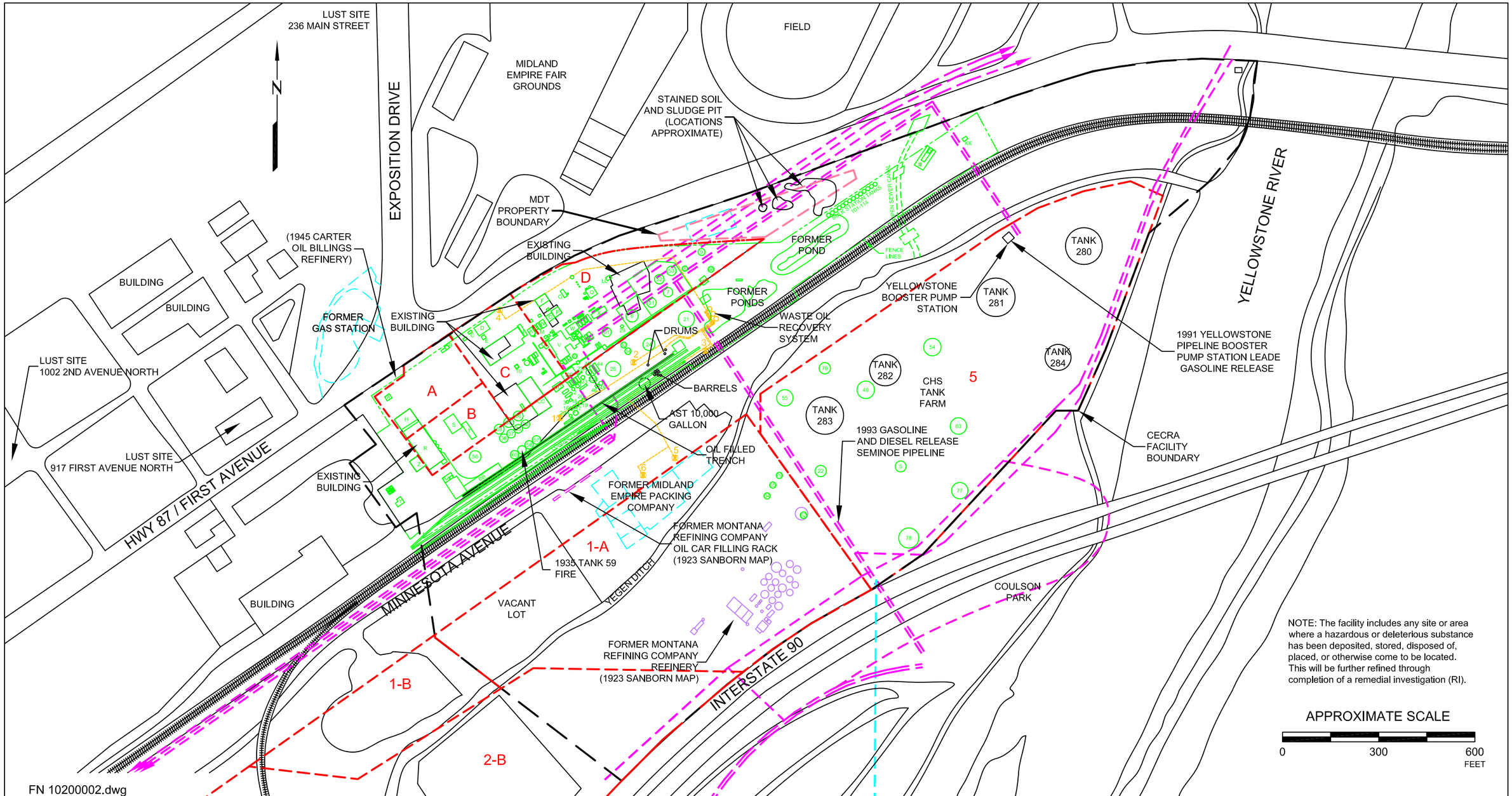
EXPLANATION

- Railroad Tracks
- 1945 Carter Oil Billings Refinery
- Existing building
- CECRA facility boundary
- MDT property boundary
- Tract boundary
- A — Tract ID
- A — Building (see 1945 Carter Oil Refinery Map in Appendix D for key to letter IDs)
- 1 — Former tank (see 1945 Carter Oil Refinery Map in Appendix D for key to tank contents)
- Existing tank

PROJECT NO.
1020

PLATE
2

DATE: 12/01/11



NOTE: The facility includes any site or area where a hazardous or deleterious substance has been deposited, stored, disposed of, placed, or otherwise come to be located. This will be further refined through completion of a remedial investigation (RI).

APPROXIMATE SCALE

0 300 600 FEET

Cardno ERI
Shaping the Future

KNOWN RELEASE MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

- Railroad Tracks
- 1945 Carter Oil Billings Refinery
- 6 Oil seepage well
- Existing building
- CECRA facility boundary
- MDT property boundary
- Tract boundary
- A Tract ID
- A Building (see 1945 Carter Oil Refinery Map in Appendix D for key to letter IDs)
- 1 Former tank (see 1945 Carter Oil Refinery Map in Appendix D for key to tank contents)
- Existing tank

PROJECT NO. 1020

PLATE 3

DATE: 12/01/11

NOTE: The facility includes any site or area where a hazardous or deleterious substance has been deposited, stored, disposed of, placed, or otherwise come to be located. This will be further refined through completion of a remedial investigation (RI).

APPROXIMATE SCALE
0 300 600 FEET

N

EXPOSITION DRIVE
HWY 87 / FIRST AVENUE
MINNESOTA AVENUE
INTERSTATE 90
YELLOWSTONE RIVER
MIDLAND EMPIRE FAIR GROUNDS
FIELD
BUILDING
BUILDING
PETROLEUM LEAK SITE
EXISTING BUILDING
MDT PROPERTY BOUNDARY
CONOCO POND#2 08/15/94
CONOCO PIPELINE PIT#1 08/15/94
2004 CONOCO TRENCH SAMPLES (EXACT LOCATION UNKNOWN)
BARRELS
DRUMS
OIL FILLED TRENCH
FORMER MONTANA REFINING COMPANY OIL CAR FILLING TRACK (1923 SANBORN MAP)
Excavation Area "A"
Excavation Area "B"
YEGEN DITCH
FORMER MIDLAND EMPIRE PACKING COMPANY
VACANT LOT
FORMER MONTANA REFINING COMPANY REFINERY (1923 SANBORN MAP)
CHS TANK FARM
TANK 280
TANK 281
TANK 282
TANK 283
TANK 284
CINDER PILE
EQUIPMENT SHED
CINDER PILE
DEQ 1995 TEST PIT (EXACT LOCATION UNKNOWN)
CECRA FACILITY BOUNDARY
COULSON PARK
A
B
C
D
1-A
1-B
2-B
5

TEST HOLES
31 No oil
23 Trace of oil
26 Oil present
Drilled April 1950

DH1 Boring
TP18 Test pit
13 Pit
AUGER#2 Hand-auger boring
YO-SE-9 Sediment sample (locations approximate)
YO-SO-4 Soil sample (locations approximate)
Railroad Tracks
A Tract ID
Existing building
CECRA facility boundary
MDT property boundary
Tract boundary
Existing tank

FN 10200002.dwg

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EXPLORATION LOCATION MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

MW-10	Monitoring well	PZ2	Piezometer groundwater
M9	Monitoring well-January 2007	MW-3	Abandoned monitoring well
OSB1	Cenex Monitoring well-December 1994	S-6	Abandoned recovery sump
MW03	Monitoring well-ASI	Y-5	Surface water monitor location (locations approximate)
6	Oil seepage well	YR-SS-1	Surface water and sediment sampling station (locations approximate)
RW5	Recovery groundwater monitoring well	HP4	Hydropunch™ boring location

PROJECT NO.
1020

PLATE
4

DATE: 12/01/11

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EXISTING CONDITIONS AERIAL PHOTO MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

- Railroad Tracks
- A — Tract ID
- Existing building
- CECRA facility boundary
- MDT property boundary
- Tract boundary
- Existing tank

NOTE: The facility includes any site or area where a hazardous or deleterious substance has been deposited, stored, disposed of, placed, or otherwise come to be located. This will be further refined through completion of a remedial investigation (RI).

PROJECT NO. 1020

PLATE 5

DATE: 12/01/11

Cardno ERI
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POTENTIAL SOURCE AERIAL PHOTO MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

	Railroad Tracks	A	Tract ID
	1945 Carter Oil Billings Refinery	A	Building (see 1945 Carter Oil Refinery Map in Appendix D for key to letter IDs)
	Existing building	1	Former tank (see 1945 Carter Oil Refinery Map in Appendix D for key to tank contents)
	CECRA facility boundary	TANK 280	Existing tank
	MDT property boundary		
	Tract boundary		

PROJECT NO.
1020

PLATE
6

DATE: 12/01/11

Cardno ERI
Shaping the Future

KNOWN RELEASE AERIAL PHOTO MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

- Railroad Tracks
- 1945 Carter Oil Billings Refinery
- 6 Oil seepage well
- Existing building
- CECRA facility boundary
- MDT property boundary
- Tract boundary
- A Tract ID
- A Building (see 1945 Carter Oil Refinery Map in Appendix D for key to letter IDs)
- 1 Former tank (see 1945 Carter Oil Refinery Map in Appendix D for key to tank contents)
- TANK 284 Existing tank

PROJECT NO.
1020

PLATE
7

DATE: 12/01/11

Cardno ERI
Shaping the Future

EXPLORATION LOCATION AERIAL PHOTO MAP

FORMER YALE OIL OF SOUTH DAKOTA CECRA FACILITY
700 First Avenue North
Billings, Montana

EXPLANATION

MW-10	Monitoring well	PZ2	Piezometer groundwater
M9	Monitoring well-January 2007	MW-3	Abandoned monitoring well
OSB1	Cenex Monitoring well-December 1994	S-6	Abandoned recovery sump
MW03	Monitoring well-ASI	Y-5	Surface water monitor location (locations approximate)
6	Oil seepage well	YR-SS-1	Surface water and sediment sampling station (locations approximate)
RW5	Recovery groundwater monitoring well	HP4	Hydropunch™ boring location

PROJECT NO. 1020

PLATE 8

DATE: 12/01/11

TABLE 1A
SOIL ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Oil & Grease (%)	TPHd (mg/kg)	DRO (mg/kg)	TEH (mg/kg)	EPH (mg/kg)	C9-C18 Aliphatics (mg/kg)	C19-C36 Aliphatics (mg/kg)	C11-C22 Aromatics (mg/kg)	TPH (mg/kg)	TPHg (mg/kg)	GRO (mg/kg)	C5-C8 Aliphatics (mg/kg)	C9-C12 Aliphatics (mg/kg)	C9-C10 Aromatics (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	m,p-xylene (mg/kg)	o-xylene (mg/kg)	Total X (mg/kg)	Naph-thalene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)																								
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	200	200	20,000	400	---	---	---	60	100	100	0.08	0.04	10	6	---	---	70	4
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	200	200	20,000	500	---	---	---	60	100	100	0.2	0.1	40	6	---	---	70	4
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	200	1,000	100,000	400	---	---	---	200	700	100	0.08	0.04	10	10	---	---	200	9
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	200	1,000	100,000	1,000	---	---	---	300	700	500	0.2	0.1	40	30	---	---	300	20
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	200	2,000	100,000	400	---	---	---	200	1,000	100	0.08	0.04	10	10	---	---	200	9
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	200	2,000	100,000	1,000	---	---	---	500	1,000	500	0.2	0.1	40	40	---	---	600	30
Soil Samples (NET, 1988)																								
Outside the Big Sky Haul Away Building on Tract C																								
DH1 (3.5-5.0)	08/03/88	3.5-5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DH1 (8.0-9.5)	08/03/88	8.0-9.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DH1 (9.5-11.0)	08/03/88	9.5-11.0	0.72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**11**	4	**28**	128	48	176	---
DH2 (3.5-5.0)	08/03/88	3.5-5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DH2 (7.5-9.0	08/03/88	7.5-9.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DH2 (9.0-10.5)	08/03/88	9.0-10.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DH2 (10.5-12.0)	08/03/88	10.5-12.0	0.74	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**<0.5**	0.5	3.9	6.2	1.7	7.9	---
Soil Samples (Ecology, 1989c)																								
Field Investigation Team (FIT) Samples for Region 8 EPA																								
YO-SO-1	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.015	0.011j	<0.015	---	---	<0.015	---
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.014	0.017	<0.014	---	---	<0.014	---
YO-SO-2	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**<0.670**	<0.670	3.100	---	---	14.000	---
YO-SO-3	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**<0.780**	<0.780	5.600	---	---	12.000	---
YO-SO-4	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.006	<0.006	<0.006	---	---	<0.006	---
YO-SO-5	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.005	<0.005	<0.005	---	---	<0.005	---
Soil Samples (DMA, 1991)																								
Department of Military Affairs Organizational Maintenance Shop #6 Property																								
Diesel South	04/15/91	---	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	---	---	---	---	---	---	---
Diesel North	04/15/91	---	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	---	---	---	---	---	---	---
UNL South	04/15/91	---	---	---	---	---	---	---	---	---	115	---	---	---	---	---	---	**<0.20**	<0.20	<1.0	---	---	<1.0	---
UNL North	04/15/91	---	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	**<0.20**	<0.20	<0.20	---	---	<0.20	---
Soil Samples (Energy, 1991)																								
Between Building Located on Montana Department of Transportation Property and Tract D																								
YO-SO-1 (1991)	01/19/91	---	---	---	---	---	---	---	---	---	2,850	---	---	---	---	---	---	---	---	---	---	---	---	---
Test Pit Samples (Braun, 1992)																								
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)																								
St. 10 + 94	03/27/92	1	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	**<0.20**	<0.20	<0.20	---	---	<0.20	---
St. 10 + 94 Dup	03/27/92	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Highway 87, Station 12, 88.6 feet lest of center line (3.6 feet bgs)																								
St. 12 + 88	03/27/92	3.6	---	---	---	---	---	---	---	---	1,270	---	---	---	---	---	---	**<0.20**	<0.20	<0.20	---	---	<0.20	---

TABLE 1A
SOIL ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Oil & Grease (%)	TPHd (mg/kg)	DRO (mg/kg)	TEH (mg/kg)	EPH (mg/kg)	C9-C18 Aliphatics (mg/kg)	C19-C36 Aliphatics (mg/kg)	C11-C22 Aromatics (mg/kg)	TPH (mg/kg)	TPHg (mg/kg)	GRO (mg/kg)	C5-C8 Aliphatics (mg/kg)	C9-C12 Aliphatics (mg/kg)	C9-C10 Aromatics (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	m,p-xylene (mg/kg)	o-xylene (mg/kg)	Total X (mg/kg)	Naph-thalene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)																								
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	200	200	20,000	400	---	---	---	60	100	100	0.08	0.04	10	6	---	---	70	4
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	200	200	20,000	500	---	---	---	60	100	100	0.2	0.1	40	6	---	---	70	4
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	200	1,000	100,000	400	---	---	---	200	700	100	0.08	0.04	10	10	---	---	200	9
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	200	1,000	100,000	1,000	---	---	---	300	700	500	0.2	0.1	40	30	---	---	300	20
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	200	2,000	100,000	400	---	---	---	200	1,000	100	0.08	0.04	10	10	---	---	200	9
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	200	2,000	100,000	1,000	---	---	---	500	1,000	500	0.2	0.1	40	40	---	---	600	30
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)																								
St. 16 + 45	03/27/92	3.5	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	**<0.20**	<0.20	<0.20	---	---	<0.20	---
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)																								
St. 20 + 20	03/27/92	2.5	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	**<0.20**	<0.20	<0.20	---	---	<0.20	---
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)																								
St. 25 + 00	03/27/92	4	---	---	---	---	---	---	---	---	<10	---	---	---	---	---	---	**<0.20**	<0.20	<0.20	---	---	<0.20	---
Soil Samples (Quanterra, 1994)																								
Conoco Seminoe Pipeline, North 1st Avenue																								
Bil-Pump Sta. Exc.	08/17/94	---	---	---	---	---	---	---	---	---	590	---	---	---	---	---	---	**<0.050**	<0.050	<0.050	---	---	<0.050	---
Soil Samples (MDEQ, 1995)																								
Tract A																								
161536	03/29/95	8	---	19,000	11,000	---	---	---	---	---	---	5,800	3,500	---	---	---	---	**<0.500**	13	**77**	---	---	120	---
Soil Samples (Maxim, 2004)																								
CHS Tank Farm																								
M-9	04/24/04	8.0-9.0	---	---	---	22	---	---	---	---	<11	---	---	<6	<6	<1	<0.03	<0.03	<0.06	<0.06	---	---	<0.17	<0.28
Excavation Samples (Maxim, 2004)																								
CHS Tank Farm																								
North Wall	05/12/04	8.0	---	---	---	46	---	---	---	---	<12	---	---	<6	<6	<1	<0.03	<0.03	<0.06	<0.06	---	---	<0.17	<0.29
South Wall	05/12/04	8.0	---	---	---	1,200	---	**560j**	75	**440**	120	---	---	34	56	**140**	**<0.29**	**0.76**	<0.58	<0.85	---	---	<1.1	<2.9
East Wall	05/12/04	8.0	---	---	---	27	---	---	---	---	<11	---	---	<5	<5	<1	<0.03	<0.03	<0.05	<0.05	---	---	<0.16	<0.27
West Wall	05/12/04	8.0	---	---	---	160	---	61j	21j	13j	12	---	---	<5	<6	<1	<0.03	**0.07**	0.15	0.08	---	---	0.33	<0.29
Floor	05/12/04	9.5	---	---	---	180	---	66j	12j	70	26	---	---	<6	7.4	4.3	0.06	<0.03	<0.06	0.10	---	---	0.37	<0.29
Trench Samples (Northern, 2004; DEQ, 2011a)																								
Former Tetraethyl Plant Vicinity																								
East Side Bottom	08/30/04	8	---	---	---	13,000	---	---	---	---	170	---	---	---	---	---	**<0.500**	**<0.500**	<0.500	0.870	---	---	<1.500	<0.500
North Side 1.5' Deep	08/30/04	1.5	---	---	---	16,000	---	---	---	---	<10	---	---	---	---	---	<0.050	**<0.050**	<0.050	<0.050	---	---	<0.150	<0.050
West Side 4' Deep	08/30/04	4	---	---	---	47,000	---	---	---	---	40	---	---	---	---	---	**<0.080**	**<0.080**	<0.080	<0.080	---	---	<0.250	0.340
East Side 4' Deep	08/30/04	4	---	---	---	23,000	---	---	---	---	<10	---	---	---	---	---	<0.050	**<0.050**	<0.050	<0.050	---	---	<0.150	<0.050

TABLE 1A
SOIL ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Oil & Grease (%)	TPHd (mg/kg)	DRO (mg/kg)	TEH (mg/kg)	EPH (mg/kg)	C9-C18 Aliphatics (mg/kg)	C19-C36 Aliphatics (mg/kg)	C11-C22 Aromatics (mg/kg)	TPH (mg/kg)	TPHg (mg/kg)	GRO (mg/kg)	C5-C8 Aliphatics (mg/kg)	C9-C12 Aliphatics (mg/kg)	C9-C10 Aromatics (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	m,p-xylene (mg/kg)	o-xylene (mg/kg)	Total X (mg/kg)	Naph-thalene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)																								
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	200	200	20,000	400	---	---	---	60	100	100	0.08	0.04	10	6	---	---	70	4
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	200	200	20,000	500	---	---	---	60	100	100	0.2	0.1	40	6	---	---	70	4
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	200	1,000	100,000	400	---	---	---	200	700	100	0.08	0.04	10	10	---	---	200	9
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	200	1,000	100,000	1,000	---	---	---	300	700	500	0.2	0.1	40	30	---	---	300	20
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	200	2,000	100,000	400	---	---	---	200	1,000	100	0.08	0.04	10	10	---	---	200	9
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	200	2,000	100,000	1,000	---	---	---	500	1,000	500	0.2	0.1	40	40	---	---	600	30
Soil Samples (Portage, 2011)																								
Tract 1-A																								
ASI-TP02-001	09/07/11	---	---	---	---	---	<11.2	---	---	---	<11.4	---	---	<5.7	<5.7	<1.1	<0.057	<0.029	<0.057	<0.057	<0.11	<0.057	<0.17	<0.69
ASI-TP06-001	09/07/11	---	---	---	---	384	**530**	**213**	95.8	75.2	58.3	---	---	<28.2	<28.2	39.9	**<0.28**	**<0.14**	<0.28	0.30	<0.56	<0.28	<0.84	<3.4
ASI-TP05-001	09/07/11	---	---	---	---	---	158	---	---	---	57.2	---	---	<28.6	<28.6	<5.7	**<0.29**	**<0.14**	<0.29	<0.29	<0.57	<0.29	<0.86	<3.4
ASI-TP08-001	09/07/11	---	---	---	---	8,750	**7,740**	**7,700**	208	**840**	262	---	---	<52.1	<52.1	**371**	**<0.52**	**<0.26**	0.84	5.7	2.5	<0.52	2.5	**27.7/8.0**

TABLE 1A
SOIL ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1B
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Acetone (mg/kg)	Bromo-benzene (mg/kg)	Bromodichloro-methane (mg/kg)	Bromodi-chloromethane (mg/kg)	Bromo-form (mg/kg)	Bromo-methane (mg/kg)	2-butanone (mg/kg)	n-Butyl-benzene (mg/kg)	sec-Butyl-benzene (mg/kg)	t-Butyl-benzene (mg/kg)	Carbon disulfide (mg/kg)	Carbon tetrachloride (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)			---	---	---	---	---	---	---	---	---	---	---	---
Soil Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SO-1	07/26/89	<1	0.460	---	---	<0.015	<0.015	<0.030	0.110	---	---	---	0.005j	<0.015
YO-SO-1RE	07/26/89	<1	0.540	---	---	<0.014	<0.014	<0.027	0.180	---	---	---	0.006j	<0.014
YO-SO-2	07/26/89	<1	<1.400	---	---	<0.670	<0.670	<1.400	<1.400	---	---	---	<0.670	<0.670
YO-SO-3	07/26/89	<1	2.700j	---	---	<0.780	<0.780	<1.600	<1.600	---	---	---	<0.780	<0.780
YO-SO-4	07/26/89	<1	<0.012	---	---	<0.006	<0.006	<0.012	<0.006	---	---	---	<0.006	<0.006
YO-SO-5	07/26/89	<1	<0.011	---	---	<0.005	<0.005	<0.011	<0.005	---	---	---	<0.005	<0.005
Test Pit Samples (Braun, 1992)														
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)														
St. 10 + 94	03/27/92	1	---	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 12, 88.6 feet lest of center line (3.6 feet bgs)														
St. 12 + 88	03/27/92	3.6	---	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)														
St. 16 + 45	03/27/92	3.5	---	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)														
St. 20 + 20	03/27/92	2.5	---	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)														
St. 25 + 00	03/27/92	4	---	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	---	<0.20
Trench Samples (Northern, 2004; DEQ, 2011a)														
Former Tetraethyl Plant Vicinity														
East Side Bottom	08/30/04	8	---	<0.500	<0.500	<0.500	<0.500	<0.500	---	<0.500	0.720	<0.500	---	<0.500
North Side 1.5' Deep	08/30/04	1.5	---	<0.050	<0.050	<0.050	<0.050	<0.050	---	<0.050	<0.050	<0.050	---	<0.050
West Side 4' Deep	08/30/04	4	---	<0.080	<0.080	<0.080	<0.080	<0.080	---	<0.080	<0.080	<0.080	---	<0.080
East Side 4' Deep	08/30/04	4	---	<0.050	<0.050	<0.050	<0.050	<0.050	---	<0.050	<0.050	<0.050	---	<0.050

TABLE 1B
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1C
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Chloro-benzene (mg/kg)	Chloro-ethane (mg/kg)	Chloro-form (mg/kg)	2-Chloro-toluene (mg/kg)	4-Chloro-toluene (mg/kg)	2-Chloroethyl-vinyl Ether (mg/kg)	Chloro-methane (mg/kg)	Dibromo-chloromethane (mg/kg)	1,2-Dibromo-3-chloropropane (mg/kg)	1,2-Dibromo-ethane	Dibromo-ethane (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)															
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	0.00002	---	---	---
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	---	---	---	---	0.00004	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	0.00002	---	---	---
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	---	---	---	---	0.00004	---	---	---
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	0.00002	---	---	---
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	---	---	---	---	---	0.00004	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart															
Residential Soils			29	1,500	0.29	160	160	---	12	0.68	0.0054	0.034	---	190	---
Industrial Soils			140	6,100	1.5	2,000	2,000	---	50	3.3	0.069	0.17	---	980	---
Soil Samples (Ecology, 1989c)															
Field Investigation Team (FIT) Samples for Region 8 EPA															
YO-SO-1	07/26/89	<1	<0.015	<0.030	<0.015	---	---	---	<0.030	<0.015	---	---	---	---	---
YO-SO-1RE	07/26/89	<1	<0.027	<0.027	<0.014	---	---	---	<0.027	<0.014	---	---	---	---	---
YO-SO-2	07/26/89	<1	<0.670	<1.400	<0.670	---	---	---	<1.400	<0.670	---	---	---	---	---
YO-SO-3	07/26/89	<1	<0.780	<1.600	<0.780	---	---	---	<1.600	<0.780	---	---	---	---	---
YO-SO-4	07/26/89	<1	<0.006	<0.012	<0.006	---	---	---	<0.012	<0.006	---	---	---	---	---
YO-SO-5	07/26/89	<1	<0.005	<0.011	<0.005	---	---	---	<0.011	<0.005	---	---	---	---	---
Test Pit Samples (Braun, 1992)															
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)															
St. 10 + 94	03/27/92	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**<0.20**	<0.20	---	---
Highway 87, Station 12, 88.6 feet left of center line (3.6 feet bgs)															
St. 12 + 88	03/27/92	3.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**<0.20**	<0.20	---	---
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)															
St. 16 + 45	03/27/92	3.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**<0.20**	<0.20	---	---
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)															
St. 20 + 20	03/27/92	2.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**<0.20**	<0.20	---	---

TABLE 1C
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Chloro-benzene (mg/kg)	Chloro-ethane (mg/kg)	Chloro-form (mg/kg)	2-Chloro-toluene (mg/kg)	4-Chloro-toluene (mg/kg)	2-Chloroethyl-vinyl Ether (mg/kg)	Chloro-methane (mg/kg)	Dibromo-chloromethane (mg/kg)	1,2-Dibromo-3-chloropropane (mg/kg)	1,2-Dibromo-ethane	Dibromo-ethane (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)															
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	0.00002	---	---	---
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	---	---	---	---	0.00004	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	0.00002	---	---	---
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	---	---	---	---	0.00004	---	---	---
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	0.00002	---	---	---
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	---	---	---	---	---	0.00004	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart															
Residential Soils			29	1,500	0.29	160	160	---	12	0.68	0.0054	0.034	---	190	---
Industrial Soils			140	6,100	1.5	2,000	2,000	---	50	3.3	0.069	0.17	---	980	---
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)															
St. 25 + 00	03/27/92	4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	**<0.20**	<0.20	---	---
Trench Samples (Northern, 2004; DEQ, 2011a)															
Former Tetraethyl Plant Vicinity															
East Side Bottom	08/30/04	8	<0.500	<1.00	<0.500	<0.500	<0.500	---	<1.000	<0.500	<2.000	**<0.500**	<0.500	<0.500	<0.500
North Side 1.5' Deep	08/30/04	1.5	<0.050	<0.100	<0.050	<0.050	<0.050	---	<0.100	<0.050	<0.200	**<0.050**	<0.050	<0.050	<0.050
West Side 4' Deep	08/30/04	4	<0.080	<0.170	<0.080	<0.080	<0.080	---	<0.170	<0.080	<0.330	**<0.080**	<0.080	<0.080	<0.080
East Side 4' Deep	08/30/04	4	<0.050	<0.100	<0.050	<0.050	<0.050	---	<0.100	<0.050	<0.200	**<0.050**	<0.050	<0.050	<0.050

TABLE 1C
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1D
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	1,4-dichloro-benzene (mg/kg)	c-1,2-dichloro-ethene (mg/kg)	Dichlorodi-fluoro-methane (mg/kg)	t-1,2-dichloro-ethene (mg/kg)	1,1-dichloro-ethane (mg/kg)	1,2-dichloro-ethane (mg/kg)	1,2-dichloro-ethene (mg/kg)	1,1-dichloro-ethene (mg/kg)	1,2-dichloro-propane (mg/kg)	1,3-dichloro-propane (mg/kg)	2,2-dichloro-propane (mg/kg)	1,1-Dichloro-propene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)														
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	0.03	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	0.03	---	---	---	---	---	---
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
Soil Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SO-1	07/26/89	<1	---	---	---	---	<0.015	**<0.015**	<0.015	<0.015	<0.015	---	---	---
YO-SO-1RE	07/26/89	<1	---	---	---	---	<0.014	**<0.014**	<0.014	<0.014	<0.014	---	---	---
YO-SO-2	07/26/89	<1	---	---	---	---	<0.670	**<0.670**	<0.670	<0.670	<0.670	---	---	---
YO-SO-3	07/26/89	<1	---	---	---	---	<0.780	**<0.780**	<0.780	<0.780	<0.780	---	---	---
YO-SO-4	07/26/89	<1	---	---	---	---	<0.006	<0.006	<0.006	<0.006	<0.006	---	---	---
YO-SO-5	07/26/89	<1	---	---	---	---	<0.005	<0.005	<0.005	<0.005	<0.005	---	---	---
Test Pit Samples (Braun, 1992)														
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)														
St. 10 + 94	03/27/92	1	<0.20	---	<0.20	<0.20	<0.20	**<0.20**	<0.20	<0.20	<0.20	---	<0.20	<0.20
Highway 87, Station 12, 88.6 feet lest of center line (3.6 feet bgs)														
St. 12 + 88	03/27/92	3.6	<0.20	---	<0.20	<0.20	<0.20	**<0.20**	<0.20	<0.20	<0.20	---	<0.20	<0.20
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)														
St. 16 + 45	03/27/92	3.5	<0.20	---	<0.20	<0.20	<0.20	**<0.20**	<0.20	<0.20	<0.20	---	<0.20	<0.20
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)														
St. 20 + 20	03/27/92	2.5	<0.20	---	<0.20	<0.20	<0.20	**<0.20**	<0.20	<0.20	<0.20	---	<0.20	<0.20
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)														
St. 25 + 00	03/27/92	4	<0.20	---	<0.20	<0.20	<0.20	**<0.20**	<0.20	<0.20	<0.20	---	<0.20	<0.20

TABLE 1D
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	1,4-dichloro-benzene (mg/kg)	c-1,2-dichloro-ethene (mg/kg)	Dichlorodi-fluoro-methane (mg/kg)	t-1,2-dichloro-ethene (mg/kg)	1,1-dichloro-ethane (mg/kg)	1,2-dichloro-ethane (mg/kg)	1,2-dichloro-ethene (mg/kg)	1,1-dichloro-ethene (mg/kg)	1,2-dichloro-propane (mg/kg)	1,3-dichloro-propane (mg/kg)	2,2-dichloro-propane (mg/kg)	1,1-Dichloro-propene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)														
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
Residential RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	0.03	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; 10-20 feet to GW			---	---	---	---	---	0.03	---	---	---	---	---	---
RBSL for Soil >2 feet; <10 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
RBSL for Soil >2 feet; 10-20 feet to GW			---	---	---	---	---	0.01	---	---	---	---	---	---
Trench Samples (Northern, 2004; DEQ, 2011a)														
Former Tetraethyl Plant Vicinity														
East Side Bottom	08/30/04	8	<0.500	<0.500	<1.000	<0.500	<0.500	**<0.500**	---	<0.500	<2.000	<0.500	<0.500	<0.500
North Side 1.5' Deep	08/30/04	1.5	<0.050	<0.050	<0.100	<0.050	<0.050	**<0.050**	---	<0.050	<0.200	<0.050	<0.050	<0.050
West Side 4' Deep	08/30/04	4	<0.080	<0.080	<0.170	<0.080	<0.080	**<0.080**	---	<0.080	<0.330	<0.080	<0.080	<0.080
East Side 4' Deep	08/30/04	4	<0.050	<0.050	<0.100	<0.050	<0.050	**<0.050**	---	<0.050	<0.200	<0.050	<0.050	<0.050

TABLE 1D
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1E
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	c-1,3-dichloro-propene (mg/kg)	t-1,3-dichloro-propene (mg/kg)	Hexachloro-butadiene (mg/kg)	2-hexa-none (mg/kg)	Isopropyl-toluene (mg/kg)	Isopropyl-benzene (mg/kg)	Methylene chloride (mg/kg)	Methyl Ethyl Ketone (mg/kg)	4-methyl-2-pentanone (mg/kg)	n-Propyl-benzene (mg/kg)	Styrene (mg/kg)	Tetrachloro-ethene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)			---	---	---	---	---	---	---	---	---	---	---	---
Soil Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SO-1	07/26/89	<1	<0.015	<0.015	---	<0.030	---	---	0.011j	---	0.200	---	<0.015	<0.015
YO-SO-1RE	07/26/89	<1	<0.014	<0.014	---	<0.027	---	---	0.011j	---	0.360	---	<0.014	<0.014
YO-SO-2	07/26/89	<1	<0.670	<0.670	---	<1.400	---	---	<0.670	---	<1.400	---	<0.670	<0.670
YO-SO-3	07/26/89	<1	<0.780	<0.780	---	<1.600	---	---	<0.780	---	<1.600	---	<0.780	<0.780
YO-SO-4	07/26/89	<1	<0.006	<0.006	---	<0.012	---	---	0.003b,j	---	<0.012	---	<0.006	<0.006
YO-SO-5	07/26/89	<1	<0.005	<0.005	---	<0.011	---	---	0.003b,j	---	<0.011	---	<0.005	<0.005
Test Pit Samples (Braun, 1992)														
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)														
St. 10 + 94	03/27/92	1	<0.20	<0.20	---	---	<0.20	<0.20	<0.20	<4.0	---	<0.20	<0.20	<0.20
Highway 87, Station 12, 88.6 feet lest of center line (3.6 feet bgs)														
St. 12 + 88	03/27/92	3.6	<0.20	<0.20	---	---	<0.20	<0.20	<0.20	<4.0	---	<0.20	<0.20	<0.20
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)														
St. 16 + 45	03/27/92	3.5	<0.20	<0.20	---	---	<0.20	<0.20	<0.20	<4.0	---	<0.20	<0.20	<0.20
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)														
St. 20 + 20	03/27/92	2.5	<0.20	<0.20	---	---	<0.20	<0.20	<0.20	<4.0	---	<0.20	<0.20	<0.20
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)														
St. 25 + 00	03/27/92	4	<0.20	<0.20	---	---	<0.20	<0.20	<0.20	<4.0	---	<0.20	<0.20	<0.20
Trench Samples (Northern, 2004; DEQ, 2011a)														
Former Tetraethyl Plant Vicinity														
East Side Bottom	08/30/04	8	---	---	<0.500	---	<0.500	1.100	<2.000	---	---	1.900	<0.500	<0.500
North Side 1.5' Deep	08/30/04	1.5	---	---	<0.050	---	<0.050	<0.050	<0.200	---	---	<0.050	<0.050	<0.050
West Side 4' Deep	08/30/04	4	---	---	<0.080	---	<0.080	<0.080	<0.330	---	---	<0.080	<0.080	<0.080

TABLE 1E
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	c-1,3-dichloro-propene (mg/kg)	t-1,3-dichloro-propene (mg/kg)	Hexachloro-butadiene (mg/kg)	2-hexa-none (mg/kg)	Isopropyl-toluene (mg/kg)	Isopropyl-benzene (mg/kg)	Methylene chloride (mg/kg)	Methyl Ethyl Ketone (mg/kg)	4-methyl-2-pentanone (mg/kg)	n-Propyl-benzene (mg/kg)	Styrene (mg/kg)	Tetrachloro-ethene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)			---	---	---	---	---	---	---	---	---	---	---	---
East Side 4' Deep	08/30/04	4	---	---	<0.050	---	<0.050	<0.050	<0.200	---	---	<0.050	<0.050	<0.050

TABLE 1E
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1F
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	1,1,1,2-Tetra-chloroethane (mg/kg)	1,1,2,2-Tetra-chloroethane (mg/kg)	1,2,3-Trichloro-benzene (mg/kg)	1,2,4-Trichloro-benzene (mg/kg)	1,1,2-Trichloro-ethane (mg/kg)	Trichloro-ethene (mg/kg)	1,1,1-trichloro-ethane (mg/kg)	1,1,2-trichloro-ethane (mg/kg)	Trichloro-fluoro-methane (mg/kg)	1,2,4-Trimethyl-benzene (mg/kg)	1,2,3-Trichloro-propane (mg/kg)	1,3,5-Trimethyl-benzene (mg/kg)	Vinyl acetate (mg/kg)	Vinyl chloride (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)			---	---	---	---	---	---	---	---	---	---	---	---	---	---
Soil Samples (Ecology, 1989c)																
Field Investigation Team (FIT) Samples for Region 8 EPA																
YO-SO-1	07/26/89	<1	---	<0.015	---	---	<0.015	<0.015	<0.015	<0.015	---	---	---	---	<0.030	<0.030
YO-SO-1RE	07/26/89	<1	---	<0.014	---	---	<0.014	<0.014	<0.014	<0.014	---	---	---	---	<0.027	<0.027
YO-SO-2	07/26/89	<1	---	<0.670	---	---	<0.670	<0.670	<0.670	<0.670	---	---	---	---	<1.400	<1.400
YO-SO-3	07/26/89	<1	---	<0.780	---	---	<0.780	<0.780	<0.780	<0.780	---	---	---	---	<1.600	<1.600
YO-SO-4	07/26/89	<1	---	<0.006	---	---	<0.006	<0.006	<0.006	<0.006	---	---	---	---	<0.012	<0.012
YO-SO-5	07/26/89	<1	---	<0.005	---	---	<0.005	<0.005	<0.005	<0.005	---	---	---	---	<0.011	<0.011
Test Pit Samples (Braun, 1992)																
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)																
St. 10 + 94	03/27/92	1	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 12, 88.6 feet lest of center line (3.6 feet bgs)																
St. 12 + 88	03/27/92	3.6	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)																
St. 16 + 45	03/27/92	3.5	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)																
St. 20 + 20	03/27/92	2.5	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)																
St. 25 + 00	03/27/92	4	<0.20	<0.20	<0.20	---	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	---	<0.20
Trench Samples (Northern, 2004; DEQ, 2011a)																
Former Tetraethyl Plant Vicinity																
East Side Bottom	08/30/04	8	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.000	<0.500	---	<0.500
North Side 1.5' Deep	08/30/04	1.5	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050	---	<0.050
West Side 4' Deep	08/30/04	4	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	0.410	<0.170	<0.080	---	<0.080
East Side 4' Deep	08/30/04	4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050	---	<0.050

TABLE 1F
ADDITIONAL SOIL ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1G
ADDITIONAL SOIL ANALYTICAL RESULTS - TCLP VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	B (mg/L)	2-buta-none (mg/L)	Carbon tetrachloride (mg/L)	Chloro-benzene (mg/L)	Chloro-form (mg/L)	1,2-Dichloro-ethane (mg/L)	1,1-Dichloro-ethene (mg/L)	Tetrachloro-ethene (mg/L)	Trichloro-ethene (mg/L)	Vinyl Chloride (mg/L)	1,4-Dichloro-benzene (mg/L)
TCLP Regulatory Levels (January 2000)			0.5	200	0.5	100	6.0	0.5	0.7	0.7	0.5	0.2	7.5
Soil Samples (Portage, 2011)													
Tract 1-A													
ASI-TP02-001	09/07/11	---	<0.0500	<0.200	<0.200	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0200	<0.0500
ASI-TP06-001	09/07/11	---	<0.0500	<0.200	<0.200	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0200	<0.0500
ASI-TP05-001	09/07/11	---	<0.0500	<0.200	<0.200	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0200	<0.0500
ASI-TP08-001	09/07/11	---	<0.0500	<0.200	<0.200	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0200	<0.0500

TABLE 1G
ADDITIONAL SOIL ANALYTICAL RESULTS - TCLP VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1H
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Acenaphthene (mg/kg)	Acenapthylene (mg/kg)	Anthracene (mg/kg)	Benzyl alcohol (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzoic acid (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)												
Residential RBSL for Soil <2 feet; <10 feet to GW			200	---	2,000	---	0.2	0.02	0.2	---	2	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			200		4,000		2	0.2	2	---	20	---
Soil Samples (Ecology, 1989c)												
Field Investigation Team (FIT) Samples for Region 8 EPA												
YO-SO-1	07/26/89	<1	<120.000	<120.000	<120.000	<120.000	**<120.000**	**<120.000**	**<120.000**	<120.000	**<120.000**	<580.000
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	<96.000	<96.000	<96.000	<96.000	**<96.000**	**<96.000**	**<96.000**	<96.000	**<96.000**	<460.000
YO-SO-3	07/26/89	<1	**<240.000**	<240.000	<240.000	<240.000	**<240.000**	**<240.000**	**<240.000**	<240.000	**<240.000**	<1,200.000
YO-SO-4	07/26/89	<1	<0.760	<0.760	<0.760	<0.760	**<0.760**	**<0.760**	**<0.760**	<0.760	<0.760	<3.700
YO-SO-5	07/26/89	<1	<1.400	<1.400	<1.400	<1.400	**<1.400**	**<1.400**	**<1.400**	<1.400	<1.400	<6.800

TABLE 1H
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1I
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Bis(2-chloro-ethyl)ether (mg/kg)	Bis(2-chloro-ethoxy)methane (mg/kg)	Bis(2-Chloro-isopropyl)ether (mg/kg)	Bis(2-Ethyl-hexyl) Phthalate (mg/kg)	4-Bromopheynl-phenylether (mg/kg)	Butylbenzyl-phthalate (mg/kg)	4-Chloroaniline (mg/kg)	2-Chloro-naphthalene (mg/kg)	2-Chloro-phenol (mg/kg)
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart											
Residential Soils			0.21	18	4.6	35	---	260	2.4	630	39
Industrial Soils			1.0	180	22	120	---	910	8.6	8,200	510
Soil Samples (Ecology, 1989c)											
Field Investigation Team (FIT) Samples for Region 8 EPA											
YO-SO-1	07/26/89	<1	**<120.000**	**<120.000**	**<120.000**	**<120.000**	<120.000	<120.000	**<120.000**	<120.000	**<120.000**
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	**<96.000**	**<96.000**	**<96.000**	**<96.000**	<96.000	<96.000	**<96.000**	<96.000	**<96.000**
YO-SO-3	07/26/89	<1	**<240.000**	**<240.000**	**<240.000**	**<240.000**	<240.000	<240.000	**<240.000**	<240.000	**<240.000**
YO-SO-4	07/26/89	<1	**<0.760**	<0.760	<0.760	<0.760	<0.760	<0.760	<0.760	<0.760	<0.760
YO-SO-5	07/26/89	<1	**<1.400**	<1.400	<1.400	<1.400	<1.400	<1.400	<1.400	<1.400	<1.400

TABLE 1I
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1J
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	4-Chloro-3-methylphenol (mg/kg)	4-Chlorophenyl-phenylether (mg/kg)	Chrysene (mg/kg)	Dibenzo-furan (mg/kg)	Dibenz(a,h) Anthracene (mg/kg)	3,3'-Dichloro-benzidine (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	2,4-Dichloro-phenol (mg/kg)	Diethyl-phthalate (mg/kg)	2,4-Dimethyl-phenol (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)														
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	20	---	0.02	---	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	200	---	0.2	---	---	---	---	---	---	---
Soil Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SO-1	07/26/89	<1	<120.000	<120.000	**<120.000**	<580.000	**<120.000**	<240.000	<120.000	<120.000	<120.000	<120.000	<120.000	<120.000
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	<96.000	<96.000	**<96.000**	<96.000	**<96.000**	<190.000	<96.000	<96.000	<96.000	<96.000	<96.000	<96.000
YO-SO-3	07/26/89	<1	<240.000	<240.000	**<240.000**	<240.000	**<240.000**	<490.000	<240.000	<240.000	<240.000	<240.000	<240.000	<240.000
YO-SO-4	07/26/89	<1	<0.760	<0.760	<0.760	<0.760	**<0.760**	<1.500	<0.760	<0.760	<0.760	<0.760	<0.760	<0.760
YO-SO-5	07/26/89	<1	<1.400	<1.400	<1.400	<1.400	**<1.400**	<2.800	<1.400	<1.400	<1.400	<1.400	<1.400	<1.400

TABLE 1J
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1K
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Dimethyl phthalate (mg/kg)	Di-n-Butyl-pthalate (mg/kg)	2,4-dinitro-phenol (mg/kg)	4,6-Dinitro-2-Methylphenol (mg/kg)	Di-n-Octyl Phthalate	2,4-dinitro-toluene (mg/kg)	2,6-Dinitro-toluene (mg/kg)	Fluro-anthene (mg/kg)	Fluorene (mg/kg)	Hexachloro-benzene (mg/kg)	Hexachloro-butadiene (mg/kg)	Hexachloro-ethane (mg/kg)	Hexachloro-cyclopentadiene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)															
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	300	300	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	500	600	---	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart															
Residential Soils			---	610	12	0.49	---	1.6	6.1	230	230	0.30	6.2	12	37
Industrial Soils			---	6,200	120	4.9	---	5.5	62	2,200	2,200	1.1	22	43	370
Soil Samples (Ecology, 1989c)															
Field Investigation Team (FIT) Samples for Region 8 EPA															
YO-SO-1	07/26/89	<1	<120.000	<120.000	**<580.000**	**<580.000**	<120.000	**<120.000**	**<120.000**	<120.000	<120.000	**<120.000**	**<120.000**	**<120.000**	**<120.000**
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	<96.000	<96.000	**<460.000**	**<460.000**	<96.000	**<96.000**	**<96.000**	<96.000	<96.000	**<96.000**	**<96.000**	**<96.000**	**<96.000**
YO-SO-3	07/26/89	<1	<240.000	<240.000	**<1,200.000**	**<1,200.000**	<240.000	**<240.000**	**<240.000**	**<240.000**	**<240.000**	**<240.000**	**<240.000**	**<240.000**	**<240.000**
YO-SO-4	07/26/89	<1	<0.760	<0.760	<3.700	**<3.700**	<0.760	<0.760	<0.760	<0.760	<0.760	**<0.760**	<0.760	<0.760	<0.760
YO-SO-5	07/26/89	<1	<1.400	<1.400	<6.800	**<6.800**	<1.400	<1.400	<1.400	0.200j	<1.400	**<1.400**	<1.400	<1.400	<1.400

TABLE 1K
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1L
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Ideno (1,2,3-cd) pyrene (mg/kg)	Isophorone (mg/kg)	2-Methyl-naphthalene (mg/kg)	2-Methyl-phenol (mg/kg)	4-Methyl-phenol (mg/kg)	Naphthalene (mg/kg)	2-Nitro-aniline (mg/kg)	3-Nitro-aniline (mg/kg)	4-Nitro-analine (mg/kg)	Nitro-benzene (mg/kg)	2-Nitro-phenol (mg/kg)	4-Nitro-phenol (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)														
Residential RBSL for Soil <2 feet; <10 feet to GW			0.2	---	---	---	---	4	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			2	---	---	---	---	9	---	---	---	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart														
Residential Soils			0.15	510	23	310	610	3.6	61	---	24	4.8	---	---
Industrial Soils			2.1	1,800	220	3,100	6,200	18	600	---	86	24	---	---
Soil Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SO-1	07/26/89	<1	**<120.000**	<120.000	**<120.000**	<120.000	<120.000	**<120.000**	**<580.000**	<580.000	**<580.000**	**<120.000**	<120.000	<580.000
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	**<96.000**	<96.000	**<96.000**	<96.000	<96.000	**<96.000**	**<460.000**	<460.000	**<460.000**	**<96.000**	<96.000	<460.000
YO-SO-3	07/26/89	<1	**<240.000**	<240.000	**51.000j**	<240.000	<240.000	**<240.000**	**<1,200.000**	<1,200.000	**<1,200.000**	**<240.000**	<240.000	<1,200.000
YO-SO-4	07/26/89	<1	**<0.760**	<0.760	<0.760	<0.760	<0.760	<0.760	<3.700	<3.700	<3.700	<0.760	<0.760	<3.700
YO-SO-5	07/26/89	<1	**<1.400**	<1.400	<1.400	<1.400	<1.400	<1.400	<6.800	<6.800	<6.800	<1.400	<1.400	<6.800

TABLE 1L
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1M
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	n-Nitrosodi-phenylamine (mg/kg)	N-Nitroso-Di-n-Propylamine (mg/kg)	Pentachloro-phenol (mg/kg)	Phenathrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	2,4,5-trichloro-phenol (mg/kg)	2,4,6-trichloro-phenol (mg/kg)	1,2,4-Trichloro-benzene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)											
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	200	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	2,000	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart											
Residential Soils			99	0.069	0.89	---	1,800	170	610	44	22
Industrial Soils			350	0.25	2.7	---	18,000	1,700	6,200	160	99
Soil Samples (Ecology, 1989c)											
Field Investigation Team (FIT) Samples for Region 8 EPA											
YO-SO-1	07/26/89	<1	**<120.000**	**<120.000**	**<580.000**	<120.000	<120.000	<120.000	<580.000	**<120.000**	**<120.000**
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	<96.000	**<96.000**	**<460.000**	<96.000	<96.000	<96.000	<460.000	**<96.000**	**<96.000**
YO-SO-3	07/26/89	<1	**<240.000**	**<240.000**	**<1,200.000**	<240.000	<240.000	**<240.000**	**<1,200.000**	**<240.000**	**<240.000**
YO-SO-4	07/26/89	<1	<0.760	**<0.760**	**<3.700**	<0.760	<0.760	<0.760	<0.760	<0.760	<0.760
YO-SO-5	07/26/89	<1	<1.400	**<1.400**	**<6.800**	<1.400	<1.400	0.170j	<1.400	<1.400	<1.400

TABLE 1M
ADDITIONAL SOIL ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1N
ADDITIONAL SOIL ANALYTICAL RESULTS - PESTICIDES AND PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	alpha-BHC (mg/kg)	beta-BHC (mg/kg)	delta-BHC (mg/kg)	gamma-BHC (mg/kg)	Hepta-chlor (mg/kg)	Aldrin (mg/kg)	Heptachlor Epoxide (mg/kg)	Endo-sulfan I (mg/kg)	Dieldrin (mg/kg)	4,4'-DDE (mg/kg)	Endrin (mg/kg)	Endo-sulfan II (mg/kg)	4,4'-DDD (mg/kg)	Endosulfan Sulfate (mg/kg)	4,4'-DDT (mg/kg)	Methoxy-chlor (mg/kg)	Endrin Ketone (mg/kg)	alpha-Chlordane (mg/kg)	gamma-Chlordane (mg/kg)	Toxa-phene (mg/kg)	Aroclor-1016 (mg/kg)	Aroclor-1221 (mg/kg)	Aroclor-1232 (mg/kg)	Aroclor-1242 (mg/kg)	Aroclor-1248 (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)	Aroclor-1262 (mg/kg)	Aroclor-1268 (mg/kg)
RSLs (November 2011), Adjusted Using DEQ Soil Screening Flowchart																															
Residential Soils			0.077	0.27	0.52	0.52	0.11	0.029	0.053	37	0.03	1.4	1.8	---	2.0	---	1.7	31	---	---	---	0.44	0.39	0.14	0.14	0.22	0.22	0.22	0.22	---	---
Industrial Soils			0.27	0.96	2.1	2.1	0.38	0.10	0.19	370	0.11	5.1	18	---	7.2	---	7	310	---	---	---	1.6	21	0.54	0.54	0.74	0.74	0.74	0.74	---	---
Soil Samples (Ecology, 1989c)																															
Field Investigation Team (FIT) Samples for Region 8 EPA																															
YO-SO-1	07/26/89	<1	<0.140	<0.140	<0.140	<0.140	**<0.140**	**<0.140**	**<0.140**	<0.140	**<0.290**	<0.290	<0.290	<0.290	<0.290	<0.290	<0.290	<1.400	<0.290	<1.400	<1.400	**<2.900**	<1.400	**<1.400**	**<1.400**	**<1.400**	**<1.400**	**<2.900**	**<2.900**	---	---
YO-SO-1RE	07/26/89	<1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
YO-SO-2	07/26/89	<1	<0.130	<0.130	<0.130	<0.130	**<0.130**	**<0.130**	**<0.130**	<0.130	**<0.260**	<0.260	<0.260	<0.260	<0.260	<0.260	<0.260	<1.300	<0.260	<1.300	<1.300	**<2.600**	<1.300	**<1.300**	**<1.300**	**<1.300**	**<1.300**	**<2.600**	**<2.600**	---	---
YO-SO-3	07/26/89	<1	<0.150	<0.150	<0.150	<0.150	**<0.150**	**<0.150**	**<0.150**	<0.150	**<0.300**	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<1.500	<0.300	<1.500	<1.500	**<3.000**	<1.500	**<1.500**	**<1.500**	**<1.500**	**<1.500**	**<3.000**	**<3.000**	---	---
YO-SO-4	07/26/89	<1	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	**<0.038**	<0.038	<0.038	<0.038	<0.038	<0.038	<0.038	<0.190	<0.038	<0.190	<0.190	<0.380	<0.190	**<0.190**	**<0.190**	<0.190	<0.190	**<0.380**	**<0.380**	---	---
YO-SO-5	07/26/89	<1	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	**<0.034**	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.170	<0.034	<0.170	<0.170	<0.340	<0.170	**<0.170**	**<0.170**	<0.170	<0.170	**<0.340**	**<0.340**	---	---

TABLE 1N
ADDITIONAL SOIL ANALYTICAL RESULTS - PESTICIDES AND PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
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g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1O
ADDITIONAL SOIL ANALYTICAL RESULTS - METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Organic Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Zinc (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Sodium (mg/kg)	Silver (mg/kg)
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart																										
Residential Soils			7,700	3.1	40	1,500	160	7	---	1,800g	2.3	310	5,500	400	---	---	180	1.0	150	---	39	2,300	0.078	39	---	39
Industrial Soils			99,000	41	40	19,000	2,000	80	---	1,800g	30	4,100	72,000	800	---	---	2,300	4.3	2,000	---	510	31,000	1.0	520	---	510
Soil Samples (Ecology, 1989c)																										
Field Investigation Team (FIT) Samples for Region 8 EPA																										
YO-SO-1	07/26/89	<1	7,880.00	5.00b,f	**6.00d,f**	440.00	<0.09	1.10	16,700.00	19.50	5.40b	177.00	12,900.00	**1,860.00**	---	5,260.00	219.00e,f	<0.10a,c,f	16.80	1,600.00	<0.40a,f	528.00d,e	**<0.44d,f**	40.70	703.00b	<0.69f,d
YO-SO-2	07/26/89	<1	5,910.00	28.50d,f	**14.90d,f**	258.00	0.31b	0.70b	116,000.00	16.40	4.30b	1,500.00	10,500.00	**18,900.00**	---	12,300.00	326.00d,e,f	0.25c,d,f	13.10	1,240.00	<4.00a,f	85.10d,e	**<0.44d,f**	23.40	1,400.00	<0.69d,f
YO-SO-3	07/26/89	<1	8,460.00	24.40d,f	**22.50d,f**	269.00	0.12b	0.47b	137,000.00	15.60	5.70b	**6,090.00**	12,900.00	**16,400.00**	---	13,100.00	414.00d,e,f	0.30c,d,f	16.30	1,700.00	<4.00a,f	87.10d,e	**<0.44d,f**	25.90	1,220.00	<0.69d,f
YO-SO-4	07/26/89	<1	12,700.00	<5.60a,f	**87.50d,f**	259.00	2.90	0.74b	14,800.00	28.50	10.80b	53.00	20,700.00	34.00	---	8,170.00	413.00d,e,f	<0.12a,c,f	23.40	2,180.00	<0.48a,f	65.20d,e	**<0.53d,f**	50.40	1,690.00	<0.82d,f
YO-SO-5	07/26/89	<1	7,400.00	4.80b,d,f	**3.60b,d,f**	198.00	4.80	1.20	10,700.00	16.70	6.40b	33.20	12,900.00	57.60	---	4,810.00	271.00d,e,f	<0.10a,c,f	15.20	2,400.00	<0.40a,f	457.00d,e	**<0.44d,f**	29.00	759.00b	<0.69d,f
Test Pit Samples (Braun, 1992)																										
Highway 87, Station 10, 94.5 feet left of center line (bottom of test pit)																										
St. 10 + 94	03/27/92	1	---	---	**<5**	310	---	---	---	28	---	---	---	16	---	---	---	**<1**	---	---	<5	---	---	---	---	---
St. 10 + 94 Dup	03/27/92	1	---	---	**<5**	270	---	---	---	24	---	---	---	15	---	---	---	**<1**	---	---	<5	---	---	---	---	---
Highway 87, Station 12, 88.6 feet left of center line (3.6 feet bgs)																										
St. 12 + 88	03/27/92	3.6	---	---	**<5**	250	---	---	---	16	---	---	---	190	---	---	---	**<1**	---	---	<5	---	---	---	---	---
Highway 87, Station 16, 45.6 feel left of center line (3.5 feet bgs)																										
St. 16 + 45	03/27/92	3.5	---	---	**<5**	270	---	---	---	12	---	---	---	10	---	---	---	**<1**	---	---	<5	---	---	---	---	---
Highway 87, Station 20, 20.6 feet left of center line (2.5 feet bgs)																										
St. 20 + 20	03/27/92	2.5	---	---	**<5**	230	---	---	---	14	---	---	---	16	---	---	---	**<1**	---	---	<5	---	---	---	---	---
Highway 87, Station 25, 75 feet of left ROW line (4 feet below center line grade)																										
St. 25 + 00	03/27/92	4	---	---	**<5**	250	---	---	---	13	---	---	---	5	---	---	---	**<1**	---	---	<5	---	---	---	---	---
Soil Samples (DEQ, 2000a; ToxScan, 2000)																										
Former Tetraethyl Plant Vicinity																										
YSDB-SO-1299	12/17/99	---	---	---	---	---	---	---	---	---	---	---	---	**7,000**	2.9	---	---	---	---	---	---	---	---	---	---	---
Trench Samples (Northern, 2004; DEQ, 2011a)																										
Former Tetraethyl Plant Vicinity																										
East Side Bottom	08/30/04	8	---	---	**<10**	192	---	<2	---	24	---	---	---	**1,070**	---	---	---	0.7	---	---	<10	---	---	---	---	<5
East Side Bottom Dup	08/30/04	8	---	---	**<10**	206	---	<2	---	26	---	---	---	**1,050**	---	---	---	0.6	---	---	<10	---	---	---	---	<5
West Side 4' Deep	08/30/04	4	---	---	**<10**	205	---	<2	---	31	---	---	---	**1,900**	---	---	---	0.2	---	---	<10	---	---	---	---	<5
East Side 4' Deep	08/30/04	4	---	---	**<10**	205	---	<2	---	24	---	---	---	**2,890**	---	---	---	0.2	---	---	<10	---	---	---	---	<5
Soil Samples (Portage, 2011)																										
Tract 1-A																										
ASI-TP02-001	09/07/11	---	---	<0.46	**4.5**	133	---	<0.046	---	20.0	---	10.5	15,500	14.8	---	6,060	---	<0.022	15.0	---	2.7	33.8	---	---	---	<0.46
ASI-TP06-001	09/07/11	---	---	<0.48	**3.3**	47.2	---	<0.048	---	10	---	5.5	8,730	167	---	2,200	---	<0.020	6.6	---	2.7	25.7	---	---	---	<0.48
ASI-TP05-001	09/07/11	---	---	<0.46	**4.6**	107	---	<0.046	---	21.0	---	12.6	17,000	18.2	---	5,210	---	<0.021	16.0	---	4.3	37.3	---	---	---	<0.46
ASI-TP08-001	09/07/11	---	---	<0.42	**5.4**	69.9	---	<0.042	---	11.1	---	7.9	11,300	13.4	---	2,530	---	<0.019	8.8	---	3.0	26.2	---	---	---	<0.42

TABLE 1O
ADDITIONAL SOIL ANALYTICAL RESULTS - METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 1P
ADDITIONAL SOIL ANALYTICAL RESULTS - PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Ignitability (Degrees Fahrenheit)	pH (su)
Tier 1 Surface Soil RBSLs (September 2009)		---	---	---
Product Samples (Quanterra, 1994)				
Conoco Seminoe Pipeline, North 1st Avenue				
Bil-Pit-Product	08/04/94	---	149	5.4
Bil-Source	08/04/94	---	147	5.9
Oil Samples (Energy, 2005)				
Montana Rail Link Lease Property				
Sump/Trench	10/26/05	---	---	---
AST	10/26/05	---	---	---
Drum 9	10/26/05	---	---	---
Drum 12	10/26/05	---	---	---
Drum 14	10/26/05	---	---	---
Drum 17	10/26/05	---	---	---
Drum 18	10/26/05	---	---	---
Drum 23	10/26/05	---	---	---
Drum 37	10/26/05	---	---	---

TABLE 1P
ADDITIONAL SOIL ANALYTICAL RESULTS - PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2A
WASTE CHARACTERIZATION ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Oil & Grease (%)	TPHd (mg/kg)	DRO (mg/kg)	TEH (mg/kg)	EPH (mg/kg)	C9-C18 Aliphatics (mg/kg)	C19-C36 Aliphatics (mg/kg)	C11-C22 Aromatics (mg/kg)	TPH (mg/kg)	TPHg (mg/kg)	GRO (mg/kg)	C5-C8 Aliphatics (mg/kg)	C9-C12 Aliphatics (mg/kg)	C9-C10 Aromatics (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	m,p-xylene (mg/kg)	o-xylene (mg/kg)	Total X (mg/kg)	Naph-thalene (mg/kg)
Waste Samples (Ecology, 1989c)																								
Field Investigation Team (FIT) Samples for Region 8 EPA																								
YO-WS-1	07/26/89	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4.200	0.660	---	---	2.000	---
Composite Sample (MDEQ, 1993)																								
Composite Sample from Sludge Pit in the Eastern Portion of the Refinery																								
YO-SS-01	10/14/93	0-8	---	---	---	---	---	---	---	---	41,500	---	---	---	---	---	---	---	---	---	---	---	---	---
Product Samples (Quanterra, 1994)																								
Conoco Seminoe Pipeline, North 1st Avenue																								
Bil-Pit-Product	08/04/94	---	---	3,700	---	---	---	---	---	---	---	140	---	---	---	---	---	---	---	---	---	---	---	---
Bil-Source	08/04/94	---	---	3,800	---	---	---	---	---	---	---	54	---	---	---	---	---	---	---	---	---	---	---	---
Composite Samples (Maxim, 2004)																								
CHS Tank Farm																								
Stockpile	05/12/04	---	---	---	---	590	---	210j	36j	280	69	---	---	6.9	14	24	0.09	0.05	0.06	0.68	---	---	1.2	0.29

TABLE 2A
WASTE CHARACTERIZATION ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
TCLP VOCs and SVOCs	=	Analyzed using EPA Method 8270C in 1994 and EPA Method 8260B in 2005.
SVOCs	=	Semi-volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds analyzed using EPA Method 8270C in 2005.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 8082 in 2005.
Pesticides	=	Toxicity Characteristic Leaching Procedure pesticides analyzed using EPA Method 8080.
Herbicides	=	Toxicity Characteristic Leaching Procedure herbicides analyzed using EPA Method 8150.
TCLP Metals	=	Toxicity Characteristic Leaching Procedure metals analyzed using EPA Method 6010B/6010.
Arsenic	=	Toxicity Characteristic Leaching Procedure arsenic analyzed using EPA Method 6020; analyzed using EPA Method 6010 in 1994.
Mercury	=	Toxicity Characteristic Leaching Procedure mercury analyzed using EPA Method 7470A/7470.
Selenium	=	Toxicity Characteristic Leaching Procedure selenium analyzed using EPA Method 6020; analyzed using EPA Method 7740 in 1994.
TPH IR	=	Total recoverable petroleum hydrocarbons (infrared spectrophotometric analysis) analyzed using EPA Method 418.1.
Reactive Cyanide	=	Reactive cyanide analyzed using Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed using Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
pH	=	pH analyzed using EPA Method 150.1.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2B
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - CARBON RANGE
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	C1-C5 (%)	C5-C6 (%)	C6-C7 (%)	C7-C8 (%)	C8-C9 (%)	C9-C10 (%)	C10-C11 (%)	C11-C12 (%)	C12-C13 (%)	C13-C14 (%)	C14-C15 (%)	C15-C16 (%)	C16-C17 (%)	C17-C18 (%)	C18-C19 (%)	C19-C20 (%)	C20-C21 (%)	C21-C22 (%)	C22-C23 (%)	C23-C24 (%)	C24-C25 (%)	C25-C26 (%)	C26-C27 (%)	C27-C28 (%)	C28-C29 (%)	C29-C30 (%)	C30+ (%)
Excavation Product Samples (Olympus, 1994)																												
Eastern Portion of Conoco Excavation																												
Valve Pit	07/29/94	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	2.6	4.3	6.2	5.7	5.7	6.8	5.9	5.9	4.9	6.2	4.3	4.2	3.6	3.5	3.3	3.0	1.6	2.6	18.9

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
TCLP VOCs and SVOCs	=	Analyzed using EPA Method 8270C in 1994 and EPA Method 8260B in 2005.
SVOCs	=	Semi-volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds analyzed using EPA Method 8270C in 2005.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 8082 in 2005.
Pesticides	=	Toxicity Characteristic Leaching Procedure pesticides analyzed using EPA Method 8080.
Herbicides	=	Toxicity Characteristic Leaching Procedure herbicides analyzed using EPA Method 8150.
TCLP Metals	=	Toxicity Characteristic Leaching Procedure metals analyzed using EPA Method 6010B/6010.
Arsenic	=	Toxicity Characteristic Leaching Procedure arsenic analyzed using EPA Method 6020; analyzed using EPA Method 6010 in 1994.
Mercury	=	Toxicity Characteristic Leaching Procedure mercury analyzed using EPA Method 7470A/7470.
Selenium	=	Toxicity Characteristic Leaching Procedure selenium analyzed using EPA Method 6020; analyzed using EPA Method 7740 in 1994.
TPH IR	=	Total recoverable petroleum hydrocarbons (infrared spectrophotometric analysis) analyzed using EPA Method 418.1.
Reactive Cyanide	=	Reactive cyanide analyzed using Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed using Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
pH	=	pH analyzed using EPA Method 150.1.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2C
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	t-1,2-dichloro-ethene (mg/kg)	1,2-dichloro-ethene (mg/kg)	Methylene chloride (mg/kg)	4-methyl-2-pentanone (mg/kg)	Tetrachloro-ethene (mg/kg)	Trichloro-ethene (mg/kg)
Waste Samples (Ecology, 1989c)								
Field Investigation Team (FIT) Samples for Region 8 EPA								
YO-WS-1	07/26/89	---	0.100j	0.100j	0.450b	2.300	0.076j,f	0.069j,f

TABLE 2C
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2D
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP VOCs AND SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	B (mg/L)	2-buta-none (mg/L)	Carbon tetrachloride (mg/L)	Chloro-benzene (mg/L)	Chloro-form (mg/L)	1,2-Dichloro-ethane (mg/L)	1,1-Dichloro-ethene (mg/L)	Methyl Ethyl Ketone (mg/L)	Tetrachloro-ethene (mg/L)	Trichloro-ethene (mg/L)	Vinyl Chloride (mg/L)	1,4-Dichloro-benzene (mg/L)	Hexachloro-ethane (mg/L)	Nitro-benzene (mg/L)	Total Cresols (mg/L)	Hexachloro-butadiene (mg/L)	Pyridine (mg/L)	2,4,5-Trichloro-phenol (mg/L)	2,4,6-Trichloro-phenol (mg/L)	Hexachloro-benzene (mg/L)	Pentachloro-phenol (mg/L)
Product Samples (Quanterra, 1994)																							
Conoco Seminoe Pipeline, North 1st Avenue																							
Bil-Pit-Product		---	<25	<500	<25	<25	<25	<25	<25	---	<25	<25	<50	<100	<100	<100	<100	<100	<500	<100	<100	<100	<500
Bil-Source		---	<0.025	<0.50	<0.025	<0.025	<0.025	<0.025	<0.025	---	<0.025	<0.025	<0.050	---	<0.040	<0.040	<0.040	<0.040	<0.20	<0.040	<0.040	<0.040	<0.20
Oil Samples (Energy, 2005)																							
Montana Rail Link Lease Property																							
Sump/Trench	10/26/05	---	<1.9	---	<1.9	<1.9	<1.9	<1.9	<1.9	<38	<1.9	<1.9	<1.9	<1.9	---	---	---	---	---	---	---	---	---
AST	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	78	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 9	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 12	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 14	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 17	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 18	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 23	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---
Drum 37	10/26/05	---	<1.8	---	<1.8	<1.8	<1.8	<1.8	<1.8	<36	<1.8	<1.8	<1.8	<1.8	---	---	---	---	---	---	---	---	---

TABLE 2D
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP VOCs AND SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2E
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Acenaphthene (mg/kg)	Acenapthylene (mg/kg)	Anthracene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Bis(2-Ethyl-hexyl) Phthalate (mg/kg)	Chrysene (mg/kg)
Waste Samples (Ecology, 1989c)												
Field Investigation Team (FIT) Samples for Region 8 EPA												
YO-WS-1	07/26/89	---	4.400j	---	---	---	---	---	---	---	12.000j	---
Oil Samples (Energy, 2005)												
Montana Rail Link Lease Property												
Sump/Trench	10/26/05	---	<979	<979	<979	<979	<979	<979	<979	<979	---	<979
AST	10/26/05	---	<971	<971	<971	<971	<971	<971	<971	<971	---	<971
Drum 9	10/26/05	---	<981	<981	<981	<981	<981	<981	<981	<981	---	<981
Drum 12	10/26/05	---	<922	<922	<922	<922	<922	<922	<922	<922	---	<922
Drum 14	10/26/05	---	<946	<946	<946	<946	<946	<946	<946	<946	---	<946
Drum 17	10/26/05	---	<968	<968	<968	<968	<968	<968	<968	<968	---	<968
Drum 18	10/26/05	---	<977	<977	<977	<977	<977	<977	<977	<977	---	<977
Drum 23	10/26/05	---	<993	<993	<993	<993	<993	<993	<993	<993	---	<993
Drum 37	10/26/05	---	<993	<993	<993	<993	<993	<993	<993	<993	---	<993

TABLE 2E
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2F
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Dibenz(a,h) Anthracene (mg/kg)	Fluro-anthene (mg/kg)	Fluorene (mg/kg)	Ideno (1,2,3-cd) pyrene (mg/kg)	2-Methyl-naphthalene (mg/kg)	Naphthalene (mg/kg)	Phenathrene (mg/kg)	Pyrene (mg/kg)
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart										
Residential Soils			0.015	230	230	0.15	23	3.6	---	170
Industrial Soils			0.21	2,200	2,200	2.1	220	18	---	1,700
Waste Samples (Ecology, 1989c)										
Field Investigation Team (FIT) Samples for Region 8 EPA										
YO-WS-1	07/26/89	---	**---**	**---**	**7.100j**	**---**	**25.000j**	**---**	9.000j	**---**
Oil Samples (Energy, 2005)										
Montana Rail Link Lease Property										
Sump/Trench	10/26/05	---	**<979**	**<979**	**<979**	**<979**	**---**	**<979**	<979	**<979**
AST	10/26/05	---	**<971**	**<971**	**<971**	**<971**	**---**	**<971**	<971	**<971**
Drum 9	10/26/05	---	**<981**	**<981**	**<981**	**<981**	**---**	**<981**	<981	**<981**
Drum 12	10/26/05	---	**<922**	**<922**	**<922**	**<922**	**---**	**<922**	<922	**<922**
Drum 14	10/26/05	---	**<946**	**<946**	**<946**	**<946**	**---**	**<946**	<946	**<946**
Drum 17	10/26/05	---	**<968**	**<968**	**<968**	**<968**	**---**	**<968**	<968	**<968**
Drum 18	10/26/05	---	**<977**	**<977**	**<977**	**<977**	**---**	**<977**	<977	**<977**
Drum 23	10/26/05	---	**<993**	**<993**	**<993**	**<993**	**---**	**<993**	<993	**<993**
Drum 37	10/26/05	---	**<993**	**<993**	**<993**	**<993**	**---**	**<993**	<993	**<993**

TABLE 2F
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2G
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Aroclor-1016 (mg/kg)	Aroclor-1221 (mg/kg)	Aroclor-1232 (mg/kg)	Aroclor-1242 (mg/kg)	Aroclor-1248 (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)	Aroclor-1262 (mg/kg)	Aroclor-1268 (mg/kg)
RSLs (November 2011), Adjusted Using DEQ Soil Screening Flowchart											
Residential Soils			0.39	0.14	0.14	0.22	0.22	0.22	0.22	---	---
Industrial Soils			21	0.54	0.54	0.74	0.74	0.74	0.74	---	---
Product Samples (Quanterra, 1994)											
Conoco Seminoe Pipeline, North 1st Avenue											
Bil-Pit-Product	08/04/94	---	**<500**	**<500**	**<500**	**<500**	**<500**	**<500**	**<500**	---	<500
Composite Pit Samples (MDEQ, 1998)											
Midland Packing Company Property											
98-78586	12/16/98	approx. 7.5	**<33**	**<67**	**<33**	**287**	**<33**	**<33**	**<33**	<33	<33
98-78587	12/16/98	approx. 7.5	**<33**	**<67**	**<33**	**328**	**<33**	**<33**	**<33**	<33	<33
98-78588	12/16/98	approx. 7.5	**<33**	**<67**	**<33**	**533**	**<33**	**<33**	**<33**	<33	<33
98-78589	12/16/98	approx. 7.5	**<33**	**<67**	**<33**	**233**	**<33**	**<33**	**<33**	<33	<33
Oil Samples (Energy, 2005)											
Montana Rail Link Lease Property											
Sump/Trench	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
AST	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 9	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 12	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 14	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 17	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 18	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 23	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0
Drum 37	10/26/05	---	<2.0	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	<2.0	<2.0

TABLE 2G
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2H
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP PESTICIDES AND HERBICIDES
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Chlordane (mg/L)	Endrin (mg/L)	Heptachlor (mg/L)	Heptachlor Epoxide (mg/L)	Methyoxychlor (mg/L)	Toxaphene (mg/L)	Lindane (mg/L)	2,4-D (mg/L)	2,4,5-TP (mg/L)
Product Samples (Quanterra, 1994)											
Conoco Seminoe Pipeline, North 1st Avenue											
Bil-Pit-Product	08/04/94	---	<5.0	<1.0	<0.5	<0.5	<5.0	<10	<0.5	<10	<10
Bil-Source	08/04/94	---	<0.005	<0.001	<0.0005	<0.0005	<0.005	<0.01	<0.0005	<50	<50

TABLE 2H
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP PESTICIDES AND HERBICIDES
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
TCLP VOCs and SVOCs	=	Analyzed using EPA Method 8270C in 1994 and EPA Method 8260B in 2005.
SVOCs	=	Semi-volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds analyzed using EPA Method 8270C in 2005.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 8082 in 2005.
Pesticides	=	Toxicity Characteristic Leaching Procedure pesticides analyzed using EPA Method 8080.
Herbicides	=	Toxicity Characteristic Leaching Procedure herbicides analyzed using EPA Method 8150.
TCLP Metals	=	Toxicity Characteristic Leaching Procedure metals analyzed using EPA Method 6010B/6010.
Arsenic	=	Toxicity Characteristic Leaching Procedure arsenic analyzed using EPA Method 6020; analyzed using EPA Method 6010 in 1994.
Mercury	=	Toxicity Characteristic Leaching Procedure mercury analyzed using EPA Method 7470A/7470.
Selenium	=	Toxicity Characteristic Leaching Procedure selenium analyzed using EPA Method 6020; analyzed using EPA Method 7740 in 1994.
TPH IR	=	Total recoverable petroleum hydrocarbons (infrared spectrophotometric analysis) analyzed using EPA Method 418.1.
Reactive Cyanide	=	Reactive cyanide analyzed using Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed using Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
pH	=	pH analyzed using EPA Method 150.1.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2I
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
Waste Samples (Ecology, 1989c)																								
Field Investigation Team (FIT) Samples for Region 8 EPA																								
YO-WS-1	07/26/89	---	3,920d,e	3.0	4.9	294e	0.23b	0.79b,d	7,800e	12.1d	3.0b	150d,e,f	7,190d,e	1,130d,e	2,740e	108d,f	10.5	786b	<5.3	<0.62	161b	13.9d	20.1	592d,e

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2J
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
TCLP Regulatory Levels (January 2000)			5.0	100	1.0	5.0	5.0	0.2	1.0	5.0
Product Samples (Quanterra, 1994)										
Conoco Seminoe Pipeline, North 1st Avenue										
Bil-Pit-Product	---	---	<5.0	<10	<0.25	<0.50	<2.5	<0.10	<0.50	<0.50
Bil-Source	---	---	<0.50	1.3	<0.025	<0.050	0.35	<0.0050	<0.50	<0.050
Oil Samples (Energy, 2005)										
Montana Rail Link Lease Property										
Sump/Trench	10/26/05	---	0.9	29	0.1	4.7	**131**	<0.02	<0.1	<0.5
AST	10/26/05	---	<0.5	<10	<0.1	<0.5	**7.9**	<0.02	<0.1	<0.5
Drum 9	10/26/05	---	<0.5	<10	<0.1	<0.5	**24.0**	<0.02	<0.1	<0.5
Drum 12	10/26/05	---	<0.5	<10	<0.1	<0.5	**10.9**	<0.02	<0.1	<0.5
Drum 14	10/26/05	---	<0.5	<10	<0.1	<0.5	**14.2**	<0.02	<0.1	<0.5
Drum 17	10/26/05	---	<0.5	<10	<0.1	<0.5	**13.0**	<0.02	<0.1	<0.5
Drum 18	10/26/05	---	<0.5	<10	<0.1	<0.5	**15.6**	<0.02	<0.1	<0.5
Drum 23	10/26/05	---	<0.5	<10	<0.1	<0.5	4.6	<0.02	<0.1	<0.5
Drum 37	10/26/05	---	<0.5	<10	<0.1	<0.5	**21.0**	<0.02	<0.1	<0.5

TABLE 2J
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
TCLP VOCs and SVOCs	=	Analyzed using EPA Method 8270C in 1994 and EPA Method 8260B in 2005.
SVOCs	=	Semi-volatile organic compounds analyzed using EPA Method 8270C in 2005.
SVOCs	=	Semi-volatile organic compounds.
Pesticides	=	Toxicity Characteristic Leaching Procedure pesticides analyzed using EPA Method 8080.
Herbicides	=	Toxicity Characteristic Leaching Procedure herbicides analyzed using EPA Method 8150.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 8082 in 2005.
TCLP Metals	=	Toxicity Characteristic Leaching Procedure metals analyzed using EPA Method 6010B/6010.
Arsenic	=	Toxicity Characteristic Leaching Procedure arsenic analyzed using EPA Method 6020; analyzed using EPA Method 6010 in 1994.
Mercury	=	Toxicity Characteristic Leaching Procedure mercury analyzed using EPA Method 7470A/7470.
Selenium	=	Toxicity Characteristic Leaching Procedure selenium analyzed using EPA Method 6020; analyzed using EPA Method 7740 in 1994.
TPH IR	=	Total recoverable petroleum hydrocarbons (infrared spectrophotometric analysis) analyzed using EPA Method 418.1.
Reactive Cyanide	=	Reactive cyanide analyzed using Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed using Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
pH	=	pH analyzed using EPA Method 150.1.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 2K
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - PHYSICAL PROPERTY AND GENERAL CHEMISTRY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	Halogens (mg/kg)	TPH IR (mg/kg)	Reactive Cyanide (mg/kg)	Reactive Sulfide (mg/kg)	Ignitability (Degrees Fahrenheit)	pH (su)
Product Samples (Quanterra, 1994)								
Conoco Seminoe Pipeline, North 1st Avenue								
Bil-Pit-Product	08/04/94	---	---	780,000	<0.56	30	149	5.4
Bil-Source	08/04/94	---	---	1,100,000	<0.51	<12	147	5.9
Oil Samples (Energy, 2005)								
Montana Rail Link Lease Property								
Sump/Trench	10/26/05	---	360	---	---	---	---	---
AST	10/26/05	---	200	---	---	---	---	---
Drum 9	10/26/05	---	<47	---	---	---	---	---
Drum 12	10/26/05	---	<50	---	---	---	---	---
Drum 14	10/26/05	---	56	---	---	---	---	---
Drum 17	10/26/05	---	120	---	---	---	---	---
Drum 18	10/26/05	---	140	---	---	---	---	---
Drum 23	10/26/05	---	<47	---	---	---	---	---
Drum 37	10/26/05	---	120	---	---	---	---	---

TABLE 2K
ADDITIONAL WASTE CHARACTERIZATION ANALYTICAL RESULTS - PHYSICAL PROPERTY AND GENERAL CHEMISTRY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
TCLP VOCs and SVOCs	=	Analyzed using EPA Method 8270C in 1994 and EPA Method 8260B in 2005.
SVOCs	=	Semi-volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds analyzed using EPA Method 8270C in 2005.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 8082 in 2005.
Pesticides	=	Toxicity Characteristic Leaching Procedure pesticides analyzed using EPA Method 8080.
Herbicides	=	Toxicity Characteristic Leaching Procedure herbicides analyzed using EPA Method 8150.
TCLP Metals	=	Toxicity Characteristic Leaching Procedure metals analyzed using EPA Method 6010B/6010.
Arsenic	=	Toxicity Characteristic Leaching Procedure arsenic analyzed using EPA Method 6020; analyzed using EPA Method 6010 in 1994.
Mercury	=	Toxicity Characteristic Leaching Procedure mercury analyzed using EPA Method 7470A/7470.
Selenium	=	Toxicity Characteristic Leaching Procedure selenium analyzed using EPA Method 6020; analyzed using EPA Method 7740 in 1994.
TPH IR	=	Total recoverable petroleum hydrocarbons (infrared spectrophotometric analysis) analyzed using EPA Method 418.1.
Reactive Cyanide	=	Reactive cyanide analyzed using Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed using Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
pH	=	pH analyzed using EPA Method 150.1.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3A
SEDIMENT ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	B (mg/kg)	T (mg/kg)	E (mg/kg)	Total X (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)						
Residential RBSL for Soil <2 feet; <10 feet to GW			0.04	10	6	70
Commercial RBSL for Soil <2 feet; <10 feet to GW			0.04	10	10	200
Sediment Samples (Ecology, 1989c)						
Field Investigation Team (FIT) Samples for Region 8 EPA						
YO-SE-1	07/26/89	---	<0.006	<0.006	<0.006	<0.006
YO-SE-2	07/26/89	---	<0.006	<0.006	<0.006	<0.006
YO-SE-3	07/26/89	---	<0.006	<0.006	<0.006	<0.006
YO-SE-4	07/26/89	---	<0.006	<0.006	<0.006	<0.006
YO-SE-5	07/26/89	---	<0.007	0.260	<0.007	<0.007
YO-SE-7	07/26/89	---	<0.007	<0.007	<0.007	<0.007
YO-SE-9	07/26/89	---	<0.006	0.013	<0.006	<0.006

TABLE 3A
SEDIMENT ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
mg/kg	=	Milligrams per kilogram.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3B
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Acetone (mg/kg)	Bromodi-chloro-methane (mg/kg)	Bromo-form (mg/kg)	Bromo-methane (mg/kg)	2-butanone (mg/kg)	Carbon disulfide (mg/kg)	Carbon tetra-chloride (mg/kg)	Chloro-benzene (mg/kg)	Chloro-ethane (mg/kg)	Chloro-form (mg/kg)	Chloro-methane (mg/kg)	Dibromo-chloro-methane (mg/kg)	1,1-dichloro-ethane (mg/kg)	1,2-dichloro-ethane (mg/kg)	1,2-dichloro-ethene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)																	
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart																	
Residential Soils			6,100	0.27	62	0.73	2,800	82	0.61	29	1,500	0.29	12	0.68	3.3	0.43	70
Industrial Soils			63,000	1.4	220	3.2	20,000	370	3.0	140	6,100	1.5	50	3.3	17	2.2	920
<u>Sediment Samples (Ecology, 1989c)</u>																	
Field Investigation Team (FIT) Samples for Region 8 EPA																	
YO-SE-1	07/26/89	---	0.040	<0.006	<0.006	<0.013	0.008j	<0.006	<0.006	<0.006	<0.013	<0.006	<0.013	<0.006	<0.006	<0.006	<0.006
YO-SE-2	07/26/89	---	0.029	<0.006	<0.006	<0.013	<0.006	<0.006	<0.006	<0.006	<0.013	<0.006	<0.013	<0.006	<0.006	<0.006	<0.006
YO-SE-3	07/26/89	---	<0.012	<0.006	<0.006	<0.012	<0.006	<0.006	<0.006	<0.006	<0.012	<0.006	<0.012	<0.006	<0.006	<0.006	<0.006
YO-SE-4	07/26/89	---	0.010j	<0.006	<0.006	<0.013	<0.006	<0.006	<0.006	<0.006	<0.013	<0.006	<0.013	<0.006	<0.006	<0.006	<0.006
YO-SE-5	07/26/89	---	0.009j	<0.007	<0.007	<0.014	<0.007	<0.007	<0.007	<0.007	<0.014	<0.007	<0.014	<0.007	<0.007	<0.007	<0.007
YO-SE-7	07/26/89	---	0.067	<0.007	<0.007	<0.015	<0.007	<0.007	<0.007	<0.007	<0.015	<0.007	<0.015	<0.007	<0.007	<0.007	<0.007
YO-SE-9	07/26/89	---	0.038	<0.006	<0.006	<0.012	0.014	<0.006	<0.006	<0.006	<0.012	<0.006	<0.012	<0.006	<0.006	<0.006	<0.006

TABLE 3B
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3C
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	1,1-dichloro-ethene (mg/kg)	1,2-dichloro-propane (mg/kg)	c-1,3-dichloro-propene (mg/kg)	t-1,3-dichloro-propene (mg/kg)	2-hexa-none (mg/kg)	Methylene chloride (mg/kg)	4-methyl-2-pentanone (mg/kg)	Styrene (mg/kg)	Tetra-chloro-ethene (mg/kg)	1,1,2,2-Tetra-chloroethane (mg/kg)	1,1,2-Trichloro-ethane (mg/kg)	Trichloro-ethene (mg/kg)	1,1,1-trichloro-ethane (mg/kg)	1,1,2-trichloro-ethane (mg/kg)	Vinyl acetate (mg/kg)	Vinyl chloride (mg/kg)
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart																		
Residential Soils			---	0.94	---	---	21	56	530	630	22	0.56	1.1	0.91	870	1.1	97	0.060
Industrial Soils			---	4.7	---	---	140	960	5,300	3,600	110	2.8	5.3	6.4	3,800	5.3	410	1.7
Sediment Samples (Ecology, 1989c)																		
Field Investigation Team (FIT) Samples for Region 8 EPA																		
YO-SE-1	07/26/89	---	<0.006	<0.006	<0.006	<0.006	<0.013	0.007b	<0.013	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.013	<0.013
YO-SE-2	07/26/89	---	<0.006	<0.006	<0.006	<0.006	<0.013	0.005b,j	<0.013	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.013	<0.013
YO-SE-3	07/26/89	---	<0.006	<0.006	<0.006	<0.006	<0.012	0.004b,j	<0.012	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012	<0.012
YO-SE-4	07/26/89	---	<0.006	<0.006	<0.006	<0.006	<0.013	0.004b,j	<0.013	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.013	<0.013
YO-SE-5	07/26/89	---	<0.007	<0.007	<0.007	<0.007	<0.014	0.006b,j	<0.014	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.014	<0.014
YO-SE-7	07/26/89	---	<0.007	<0.007	<0.007	<0.007	<0.015	0.004b,j	0.002j	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.015	<0.015
YO-SE-9	07/26/89	---	<0.006	<0.006	<0.006	<0.006	<0.012	0.003b,j	<0.012	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012	<0.012

TABLE 3C
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3D
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Acenaphthene (mg/kg)	Acenapthylene (mg/kg)	Anthracene (mg/kg)	Benzyl alcohol (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (a) pyrene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzoic acid (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)												
Residential RBSL for Soil <2 feet; <10 feet to GW			200	---	2,000	---	0.2	0.02	0.2	---	2	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			200	---	4,000	---	2	0.2	2	---	20	---
Sediment Samples (Ecology, 1989c)												
Field Investigation Team (FIT) Samples for Region 8 EPA												
YO-SE-1	07/26/89	---	<0.830	<0.830	<0.830	<0.830	**<0.830**	**<0.830**	**<0.830**	<0.830	<0.830	<4.000
YO-SE-2	07/26/89	---	<0.840	<0.840	<0.840	<0.840	**<0.840**	**<0.840**	**<0.840**	<0.840	<0.840	<4.100
YO-SE-3	07/26/89	---	<0.750	<0.750	<0.750	<0.750	**<0.750**	**<0.750**	**<0.750**	<0.750	<0.750	<3.600
YO-SE-4	07/26/89	---	<1.700	<1.700	0.420j	<1.700	**0.760j**	**0.740j**	**1.300j**	<1.700	<1.700	<8.100
YO-SE-5	07/26/89	---	<0.850	<0.850	<0.850	<0.850	0.110j	**<0.850**	0.190j	<0.850	<0.850	<4.100
YO-SE-7	07/26/89	---	<9.700	<9.700	<9.700	<9.700	**<9.700**	**<9.700**	**<9.700**	<9.700	**<9.700**	<47.000
YO-SE-9	07/26/89	---	<0.740	<0.740	<0.740	<0.740	**<0.740**	**<0.740**	**<0.740**	<0.740	<0.740	<3.600

TABLE 3D
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3E
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Bis(2-chloro-ethyl)ether (mg/kg)	Bis(2-chloro-ethoxy)methane (mg/kg)	Bis(2-Chloro-isopropyl)ether (mg/kg)	Bis(2-Ethyl-hexyl) Phthalate (mg/kg)	4-Bromopheynl-phenylether (mg/kg)	Butylbenzyl-phthalate (mg/kg)	4-Chloroaniline (mg/kg)	2-Chloro-naphthalene (mg/kg)	2-Chloro-phenol (mg/kg)
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart											
Residential Soils			0.21	18	4.6	35	---	260	2.4	630	39
Industrial Soils			1.0	180	22	120	---	910	8.6	8,200	510
Sediment Samples (Ecology, 1989c)											
Field Investigation Team (FIT) Samples for Region 8 EPA											
YO-SE-1	07/26/89	---	**<0.830**	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830
YO-SE-2	07/26/89	---	**<0.840**	<0.840	<0.840	0.150j	<0.840	<0.840	<0.840	<0.840	<0.840
YO-SE-3	07/26/89	---	**<0.750**	<0.750	<0.750	<0.750	<0.750	<0.750	<0.750	<0.750	<0.750
YO-SE-4	07/26/89	---	**<1.700**	<1.700	<1.700	0.910b,j	<1.700	<1.700	<1.700	<1.700	<1.700
YO-SE-5	07/26/89	---	**<0.850**	<0.850	<0.850	0.200j	<0.850	<0.850	<0.850	<0.850	<0.850
YO-SE-7	07/26/89	---	**<9.700**	<9.700	**<9.700**	<9.700	<9.700	<9.700	**<9.700**	<9.700	<9.700
YO-SE-9	07/26/89	---	**<0.740**	<0.740	<0.740	<0.740	<0.740	<0.740	<0.740	<0.740	<0.740

TABLE 3E
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
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b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3F
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	4-Chloro-3-methylphenol (mg/kg)	4-Chlorophenyl-phenylether (mg/kg)	Chrysene (mg/kg)	Dibenzo-furan (mg/kg)	Dibenz(a,h) Anthracene (mg/kg)	3,3'-Dichloro-benzidine (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	2,4-Dichloro-phenol (mg/kg)	Diethyl-phthalate (mg/kg)	2,4-Dimethyl-phenol (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)														
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	20	---	0.02	---	---	---	---	---	---	---
Commercrial RBSL for Soil <2 feet; <10 feet to GW			---	---	200	---	0.2	---	---	---	---	---	---	---
Sediment Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SE-1	07/26/89	---	<0.830	<0.830	<0.830	<0.830	**<0.830**	<1.700	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830
YO-SE-2	07/26/89	---	<0.840	<0.840	<0.840	<0.840	**<0.840**	<1.700	<0.840	<0.840	<0.840	<0.840	<0.840	<0.840
YO-SE-3	07/26/89	---	<0.750	<0.750	<0.750	<0.750	**<0.750**	<1.500	<0.750	<0.750	<0.750	<0.750	<0.750	<0.750
YO-SE-4	07/26/89	---	<1.700	<1.700	0.950j	<1.700	**<1.700**	<3.400	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700
YO-SE-5	07/26/89	---	<0.850	<0.850	0.140j	<0.850	**<0.850**	<1.700	<0.850	<0.850	<0.850	<0.850	<0.850	<0.850
YO-SE-7	07/26/89	---	<9.700	<9.700	<9.700	<9.700	**<9.700**	<19.000	<9.700	<9.700	<9.700	<9.700	<9.700	<9.700
YO-SE-9	07/26/89	---	<0.740	<0.740	<0.740	<0.740	**<0.740**	<1.500	<0.740	<0.740	<0.740	<0.740	<0.740	<0.740

TABLE 3F
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3G
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Dimethyl phthalate (mg/kg)	Di-n-Butyl-pthalate (mg/kg)	2,4-dinitro-phenol (mg/kg)	4,6-Dinitro-2-Methylphenol (mg/kg)	Di-n-Octyl Phthalate	2,4-dinitro-toluene (mg/kg)	2,6-Dinitro-toluene (mg/kg)	Fluro-anthene (mg/kg)	Fluorene (mg/kg)	Hexachloro-benzene (mg/kg)	Hexachloro-butadiene (mg/kg)	Hexachloro-ethane (mg/kg)	Hexachloro-cyclopentadiene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)															
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	300	300	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	---	---	500	600	---	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart															
Residential Soils			---	610	12	0.49	---	1.6	6.1	230	230	0.30	6.2	12	37
Industrial Soils			---	6,200	120	4.9	---	5.5	62	2,200	2,200	1.1	22	43	370
Sediment Samples (Ecology, 1989c)															
Field Investigation Team (FIT) Samples for Region 8 EPA															
YO-SE-1	07/26/89	---	<0.830	<0.830	<4.000	**<4.000**	<0.830	<0.830	<0.830	<0.830	<0.830	**<0.830**	<0.830	<0.830	<0.830
YO-SE-2	07/26/89	---	<0.840	<0.840	<4.100	**<4.100**	<0.840	<0.840	<0.840	0.130j	<0.840	**<0.840**	<0.840	<0.840	<0.840
YO-SE-3	07/26/89	---	<0.750	<0.750	<3.600	**<3.600**	<0.750	<0.750	<0.750	<0.750	<0.750	**<0.750**	<0.750	<0.750	<0.750
YO-SE-4	07/26/89	---	<1.700	<1.700	<8.100	**<8.100**	<1.700	**<1.700**	<1.700	1.800j	<1.700	**<1.700**	<1.700	<1.700	<1.700
YO-SE-5	07/26/89	---	<0.850	<0.850	<4.100	**<4.100**	<0.850	<0.850	<0.850	0.260j	<0.850	**<0.850**	<0.850	<0.850	<0.850
YO-SE-7	07/26/89	---	<9.700	<9.700	**<47.000**	**<47.000**	<9.700	**<9.700**	**<9.700**	<9.700	<9.700	**<9.700**	**<9.700**	<9.700	<9.700
YO-SE-9	07/26/89	---	<3.600	<0.740	<3.600	**<3.600**	<0.740	<0.740	<0.740	<0.740	<0.740	**<0.740**	<0.740	<0.740	<0.740

TABLE 3G
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
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g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3H
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Ideno (1,2,3-cd) pyrene (mg/kg)	Isophorone (mg/kg)	2-Methyl-naphthalene (mg/kg)	2-Methyl-phenol (mg/kg)	4-Methyl-phenol (mg/kg)	Naphthalene (mg/kg)	2-Nitro-aniline (mg/kg)	3-Nitro-aniline (mg/kg)	4-Nitro-analine (mg/kg)	Nitro-benzene (mg/kg)	2-Nitro-phenol (mg/kg)	4-Nitro-phenol (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)														
Residential RBSL for Soil <2 feet; <10 feet to GW			0.2	---	---	---	---	4	---	---	---	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			2	---	---	---	---	9	---	---	---	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart														
Residential Soils			0.15	510	23	310	610	3.6	61	---	24	4.8	---	---
Industrial Soils			2.1	1,800	220	3,100	6,200	18	600	---	86	24	---	---
Sediment Samples (Ecology, 1989c)														
Field Investigation Team (FIT) Samples for Region 8 EPA														
YO-SE-1	07/26/89	---	**<0.830**	<0.830	<0.830	<0.830	<0.830	<0.830	<4.000	<4.000	<4.000	**<0.830**	<0.830	<4.000
YO-SE-2	07/26/89	---	**<0.840**	<0.840	<0.840	<0.840	<0.840	<0.840	<4.100	<4.100	<4.100	**<0.840**	<0.840	<4.100
YO-SE-3	07/26/89	---	**<0.750**	<0.750	<0.750	<0.750	<0.750	<0.750	<3.600	<3.600	<3.600	**<0.750**	<0.750	<3.600
YO-SE-4	07/26/89	---	**<1.700**	<1.700	<1.700	<1.700	<1.700	<1.700	<8.100	<8.100	<8.100	**<1.700**	<1.700	<8.100
YO-SE-5	07/26/89	---	**<0.850**	<0.850	<0.850	<0.850	<0.850	<0.850	<4.100	<4.100	<4.100	**<0.850**	<0.850	<4.100
YO-SE-7	07/26/89	---	**<9.700**	<9.700	<9.700	<9.700	<9.700	**<9.700**	<47.000	<47.000	**<47.000**	**<9.700**	<9.700	<47.000
YO-SE-9	07/26/89	---	**<0.740**	<0.740	<0.740	<0.740	<0.740	<0.740	<3.600	<3.600	<3.600	**<0.740**	<0.740	<3.600

TABLE 3H
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3I
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	n-Nitrosodi-phenylamine (mg/kg)	N-Nitroso-Di-n-Propylamine (mg/kg)	Pentachloro-phenol (mg/kg)	Phenathrene (mg/kg)	Phenol (mg/kg)	Pyrene (mg/kg)	2,4,5-trichloro-phenol (mg/kg)	2,4,6-trichloro-phenol (mg/kg)	1,2,4-Trichloro-benzene (mg/kg)
Tier 1 Surface Soil RBSLs (September 2009)											
Residential RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	200	---	---	---
Commercial RBSL for Soil <2 feet; <10 feet to GW			---	---	---	---	---	2,000	---	---	---
RSLs (April 2012), Adjusted Using DEQ Soil Screening Flowchart											
Residential Soils			99	0.069	0.89	---	1,800	170	610	44	22
Industrial Soils			350	0.25	2.7	---	18,000	1,700	6,200	160	99
Sediment Samples (Ecology, 1989c)											
Field Investigation Team (FIT) Samples for Region 8 EPA											
YO-SE-1	07/26/89	---	<0.830	**<0.830**	**<4.000**	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830
YO-SE-2	07/26/89	---	<0.840	**<0.840**	**<4.100**	<0.840	<0.840	0.110j	<0.840	<0.840	<0.840
YO-SE-3	07/26/89	---	<0.750	**<0.750**	**<3.600**	<0.750	<0.750	<0.750	<0.750	<0.750	<0.750
YO-SE-4	07/26/89	---	<1.700	**<1.700**	**<8.100**	1.300j	<1.700	1.800j	<1.700	<1.700	<1.700
YO-SE-5	07/26/89	---	<0.850	**<0.850**	**<4.100**	0.120j	<0.850	0.270j	<0.850	<0.850	<0.850
YO-SE-7	07/26/89	---	<9.700	**<9.700**	**<47.000**	<9.700	<9.700	<9.700	<9.700	<9.700	**<9.700**
YO-SE-9	07/26/89	---	<0.740	**<0.740**	**<3.600**	<0.740	<0.740	<0.740	<0.740	<0.740	<0.740

TABLE 3I
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - SVOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3J
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - PESTICIDES AND PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Depth (feet)	alpha-BHC (mg/kg)	beta-BHC (mg/kg)	delta-BHC (mg/kg)	gamma-BHC (mg/kg)	Hepta-chlor (mg/kg)	Aldrin (mg/kg)	Heptachlor Epoxide (mg/kg)	Endo-sulfan I (mg/kg)	Dieldrin (mg/kg)	4,4'-DDE (mg/kg)	Endrin (mg/kg)	Endo-sulfan II (mg/kg)	4,4'-DDD (mg/kg)	Endosulfan Sulfate (mg/kg)	4,4'-DDT (mg/kg)	Methoxy-chlor (mg/kg)	Endrin Ketone (mg/kg)	alpha-Chlordane (mg/kg)	gamma-Chlordane (mg/kg)	Toxa-phene (mg/kg)	Aroclor-1016 (mg/kg)	Aroclor-1221 (mg/kg)	Aroclor-1232 (mg/kg)	Aroclor-1242 (mg/kg)	Aroclor-1248 (mg/kg)	Aroclor-1254 (mg/kg)	Aroclor-1260 (mg/kg)	Aroclor-1262 (mg/kg)	Aroclor-1268 (mg/kg)
RSLs (November 2011), Adjusted Using DEQ Soil Screening Flowchart																															
Residential Soils			0.077	0.27	0.52	0.52	0.11	0.029	0.053	37	0.03	1.4	1.8	---	2.0	---	1.7	31	---	---	---	0.44	0.39	0.14	0.14	0.22	0.22	0.22	0.22	---	---
Industrial Soils			0.27	0.96	2.1	2.1	0.38	0.10	0.19	370	0.11	5.1	18	---	7.2	---	7.0	310	---	---	---	1.6	21	0.54	0.54	0.74	0.74	0.74	0.74	---	---
Sediment Samples (Ecology, 1989c)																															
Field Investigation Team (FIT) Samples for Region 8 EPA																															
YO-SE-1	07/26/89	---	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	**<0.041**	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.210	<0.041	<0.210	<0.210	<0.410	<0.210	**<0.210**	**<0.210**	<0.210	<0.210	**<0.410**	**<0.410**	---	---
YO-SE-2	07/26/89	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**<0.041**	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.200	<0.041	<0.200	<0.200	<0.410	<0.200	**<0.200**	**<0.200**	<0.200	<0.200	**<0.410**	**<0.410**	---	---
YO-SE-3	07/26/89	---	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	**<0.036**	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.180	<0.036	<0.180	<0.180	<0.360	<0.180	**<0.180**	**<0.180**	<0.180	<0.180	**<0.360**	**<0.360**	---	---
YO-SE-4	07/26/89	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**<0.041**	<0.041	<0.041	<0.041	<0.041	<0.041	<0.041	<0.200	<0.041	<0.200	<0.200	<0.410	<0.200	**<0.200**	**<0.200**	<0.200	<0.200	**<0.410**	**<0.410**	---	---
YO-SE-5	07/26/89	---	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	**<0.042**	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042	<0.210	<0.042	<0.210	<0.210	<0.420	<0.210	**<0.210**	**<0.210**	<0.210	<0.210	**<0.420**	**<0.420**	---	---
YO-SE-7	07/26/89	---	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	**<0.047**	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.230	<0.047	<0.230	<0.230	**<0.470**	<0.230	**<0.230**	**<0.230**	**<0.230**	**<0.230**	**<0.470**	**<0.470**	---	---
YO-SE-9	07/26/89	---	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	**<0.036**	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.180	<0.036	<0.180	<0.180	<0.360	<0.180	**<0.180**	**<0.180**	<0.180	<0.180	**<0.360**	**<0.360**	---	---

TABLE 3J
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - PESTICIDES AND PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015B/8015M.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B/8015M.
DRO	=	Diesel-range organic compounds analyzed using Method DRO.
EPH	=	Extractable petroleum hydrocarbons analyzed using EPA Method 8015B Montana Screen.
TEH	=	Total extractable hydrocarbons analyzed using EPA Method 8015B in 2004 and Method MADEP EPH in 2011.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using Method MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using Method MADEP EPH.
C11-C22 Aliphatics	=	C11-C22 Aliphatics analyzed using Method MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B/8015M.
TPH	=	Total petroleum/purgeable hydrocarbons analyzed using EPA Method 418.1M; analyzed using EPA Method 8015B in 2004 and MADEP VPH in 2011.
GRO	=	Gasoline-range organic compounds analyzed using Method GRO.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aliphatics	=	C9-C10 Aliphatics analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene analyzed using Method MADEP VPH; prior to 1992 analyzed using EPA Method 8260 or 8020.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8260B in 2004.
TCLP VOCs	=	Analyzed using EPA Method 8260.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
Metals	=	Metals analyzed using EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992.
Lead	=	Lead analyzed by EPA Method 6010/6010B; analyzed using EPA Method 3050 during 1992 and EPA Method 6020 in 2000.
Organic Lead	=	Organic lead analyzed by LUFT Method.
Mercury	=	Mercury analyzed using EPA Method 7471 in 2011.
mg/kg	=	Milligrams per kilogram.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
g	=	Protection of groundwater soil screening level (toxic, non-carcinogen).
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 3K
ADDITIONAL SEDIMENT ANALYTICAL RESULTS - METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Depth (feet bgs)	Aluminum (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)	Magnesium (mg/kg)	Manganese (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Potassium (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
RSLs (November 2011)																									
Residential Soils			77,000	31	0.39	15,000	160	---	---	---	23	3,100	55,000	400	---	1,800	10	---	---	390	390	---	0.78	390	23,000
Industrial Soils			990,000	410	1.6	190,000	200	---	---	---	300	41,000	720,000	800	---	23,000	43	---	---	5,100	5,100	---	10	5,200	310,000
Sediment Samples (Ecology, 1989c)																									
Field Investigation Team (FIT) Samples for Region 8 EPA																									
YO-SE-1	07/26/89	---	6,830.00	5.10b,d,f	9.30d,f	136.00	1.40	0.64b	8,980.00	17.30	7.70b	59.10	20,400.00	59.50	5,300.00	276.00d,e,f	<0.10a,c,f	17.70	1,070.00	<0.40a,f	<0.69d,f	880.00b	<0.44d,f	29.80	80.60d,e
YO-SE-2	07/26/89	---	8,700.00	<4.70a,f	8.10d,f	153.00	1.00	0.52b	11,300.00	21.20	7.80b	36.20	14,400.00	24.10	6,620.00	205.00d,e,f	<0.10a,c,f	16.50	1,420.00	<0.40a,f	<0.69d,f	996.00b	<0.44d,f	33.50	57.80d,e
YO-SE-3	07/26/89	---	6,450.00	<4.80a,f	7.10d,f	174.00	1.60	0.50b	9,430.00	16.40	7.20b	19.50	13,300.00	14.70	5,070.00	243.00d,e,f	<0.10a,c,f	14.70	995.00b	<0.41a,f	<0.71d,f	870.00b	<0.45d,f	31.20	38.00d,e
YO-SE-4	07/26/89	---	5,150.00	6.30b,d,f	3.70d,f	114.00	<0.09	0.87b	7,900.00	20.00	5.60b	44.60	8,580.00	73.60	4,100.00	95.30d,e,f	<0.10a,c,f	10.70	990.00	1.70d,f	<0.69d,f	802.00b	<0.44d,f	17.30	130.00d,e
YO-SE-5	07/26/89	---	3,820.00	5.40b,d,f	13.60d,f	84.80	<0.90	0.48b	12,300.00	15.30	4.60b	15.40	19,800.00	35.90	4,110.00	162.00d,e,f	<0.10a,c,f	8.20	804.00b	3.00d,f	<0.69d,f	882.00b	<0.44d,f	14.90	55.30d,e
YO-SE-7	07/26/89	---	10,900.00	6.50b,d,f	7.10d,f+	286.00	<0.09	0.31b	28,300.00	17.00	7.00b	80.20	16,400.00	**1,070.00**	8,440.00	293.00d,e,f	<0.10a,c,f	17.00	2,170.00	<0.40a,f	<0.69d,f	1,250.00	<0.44d,f	33.80	69.10d,e
YO-SE-9	07/26/89	---	8,950.00	<4.70a,f	9.00d,f	187.00	<0.09	0.28b	14,000.00	17.60	9.00b	14.50	17,000.00	15.00	8,100.00	335.00d,e,f	<0.10a,c,f	20.40	1,440.00	<0.40a,f	<0.69d,f	1,190.00	<0.44d,f	33.20	50.50d,e

Notes:

BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
PCBs	=	Polychlorinated biphenyls.
mg/kg	=	Milligrams per kilogram.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Ecology and Environment, Inc. qualified data as unusable due to laboratory quality control issues. Material may or may not be present.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues. Presence of material deemed reliable.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
Monitoring Wells																									
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (Cenex, 1992)																									
M1	04/23/93	999.67	5.81	993.86	No	13,000	---	---	---	---	---	---	---	---	---	---	---	---	0.52	62	43	---	---	190	---
M1	08/19/93	999.67	4.85	994.82	No	2,900	---	---	---	---	---	---	---	---	---	---	---	---	3.0	16.0	18.0	---	---	39.0	---
M1	10/25/93	999.67	5.05	994.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	11/29/93	999.67	5.49	994.18	No	18,000	---	---	---	---	---	---	---	---	---	---	---	---	<2.0	14.0	24.0	---	---	21.0	---
M1	03/10/94	999.67	5.98	993.69	No	2,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	18.0	19.0	---	---	4.0	---
M1	06/14/94	999.67	4.90	994.77	No	900	---	---	---	---	---	---	---	---	---	---	---	---	**54**	290	160	---	---	570	---
M1	09/16/94	999.67	5.30	994.37	No	7,000	---	---	---	---	---	---	---	---	---	---	---	---	**<25**	<25	<25	---	---	<25	---
M1	12/13/94	999.67	5.81	993.86	No	3,000	---	---	---	---	---	---	---	---	---	---	---	---	1	<1	1	---	---	<1	---
M1	03/10/95	999.67	6.21	993.46	No	---	---	---	---	---	---	---	---	3,000	---	---	---	---	<1	<1	19	---	---	3.0	---
M1	06/07/95	999.67	4.71	994.96	No	---	---	---	---	---	---	---	---	---	---	---	---	---	3.0	57	170	---	---	240	---
M1	09/27/95	999.67	5.35	994.32	i	---	---	---	---	---	---	---	---	8,100	---	---	---	---	<0.5	<0.5	17	---	---	<0.5	---
M1	12/12/95	999.67	5.73	993.94	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	12/14/95	999.67	---	---	---	---	---	---	---	---	---	---	---	6,600	---	---	---	---	1.9	<0.5	2.2	---	---	<0.5	---
M1	03/18/96	999.67	5.85	993.82	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	07/15/96	999.67	4.80	994.87	i	---	---	---	---	---	---	---	---	7,600	---	---	---	---	2.0	<0.5	29	---	---	98	---
M1	11/19/96	999.67	5.85	993.82	i	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<1	---
M1	01/29/97	999.67	5.89	993.78	i	---	---	---	---	---	---	---	---	---	---	---	---	---	<2.5	<2.5	<2.5	---	---	<2.5	---
M1	04/23/97	999.67	5.86	993.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	1.3	<0.5	<0.5	---	---	<0.5	---
M1	07/31/97	999.67	5.11	994.56	i	---	---	---	---	---	---	---	---	---	---	---	---	---	<1.2	<1.2	<1.2	---	---	<1.2	---
M1	10/31/97	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	<1	23	---	---	<1	---
M1	11/01/97	999.67	5.91	993.76	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/22/98	999.67	5.11	994.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/26/98	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1.2	<1.2	<1.2	---	---	<1.2	---
M1	11/30/98	999.67	5.64	994.03	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	6.1	---	---	<1.0	---
M1	05/26/99	999.67	5.52	994.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	11/12/99	999.67	6.03	993.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/18/00	999.67	5.81	993.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	11/02/00	999.67	6.33	993.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/14/01	999.67	7.55	992.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/09/02	3,101.07	6.58	3,094.49	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	06/28/02	3,101.07	5.91	3,095.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/22/03	3,101.07	6.43	3,094.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/04/04	3,101.07	6.51	3,094.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/31/05	3,101.07	5.94	3,095.13	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	05/31/06	3,101.07	6.14	3,094.93	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M1	01/18/07	3,101.07	6.83	3,094.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)																									
MW1	09/19/91	97.96	7.42	90.54	No	---	---	---	---	---	---	---	---	<1,000	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW1	10/04/91	97.96	7.36	90.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	11/13/91	97.96	7.56	90.40	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW1	12/16/91	97.96	7.92	90.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	01/10/92	97.96	8.03	89.93	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW1	03/06/92	97.96	8.00	89.96	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	04/02/92	97.96	8.28	89.68	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW1	04/24/92	97.96	7.90	90.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW1	05/15/92	97.96	7.24	90.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/01/92	97.96	6.25	91.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/29/92	97.96	7.05	90.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	09/11/92	97.96	7.56	90.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	10/12/92	97.96	7.52	90.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	11/30/92	97.96	7.66	90.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	01/29/93	97.96	8.10	89.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	04/28/93	97.96	8.44	89.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	05/06/93	97.96	8.32	89.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	05/18/93	97.96	7.46	90.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	06/22/93	97.96	6.50	91.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/27/93	97.96	6.66	91.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	08/17/93	97.96	7.06	90.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	09/27/93	97.96	7.26	90.70	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	10/14/93	97.96	7.04	90.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	01/11/94	97.96	8.06	89.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	04/18/94	97.96	8.68	89.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/08/94	97.96	7.14	90.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	10/31/94	97.96	7.71	90.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	01/23/95	97.96	8.18	89.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	04/13/95	97.96	7.92	90.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/27/95	97.96	6.67	91.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	10/30/95	97.96	7.86	90.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	01/29/96	97.96	8.30	89.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	04/30/96	97.96	8.08	89.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/22/96	97.96	6.91	91.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	10/31/96	97.96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	01/07/97	97.96	7.86	90.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	04/23/97	97.96	7.18	90.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW1	07/22/97	97.96	6.09	91.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	09/19/91	97.80	7.37	90.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW2	10/04/91	97.80	7.33	90.47	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	11/13/91	97.80	7.53	90.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	12/16/91	97.80	7.89	89.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	01/10/92	97.80	8.02	89.78	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW2	03/06/92	97.80	7.98	89.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	04/02/92	97.80	8.26	89.54	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW2	04/24/92	97.80	7.82	89.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	05/15/92	97.80	7.14	90.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/01/92	97.80	6.13	91.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/29/92	97.80	6.92	90.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	09/11/92	97.80	7.51	90.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	10/12/92	97.80	7.50	90.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	11/30/92	97.80	7.64	90.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	01/29/93	97.80	8.09	89.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	04/28/93	97.80	8.42	89.38	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	05/06/93	97.80	8.28	89.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	05/18/93	97.80	7.34	90.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	06/22/93	97.80	6.38	91.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/27/93	97.80	6.56	91.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	08/17/93	97.80	7.00	90.80	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW2	09/27/93	97.80	7.24	90.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	10/14/93	97.80	7.02	90.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	01/11/94	97.80	8.03	89.77	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	04/18/94	97.80	8.85	88.95	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/08/94	97.80	7.09	90.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	10/31/94	97.80	6.69	91.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	01/23/95	97.80	8.19	89.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	04/13/95	97.80	7.90	89.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/27/95	97.80	6.56	91.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	10/30/95	97.80	7.82	89.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	01/29/96	97.80	8.29	89.51	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	04/30/96	97.80	8.02	89.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/22/96	97.80	6.78	91.02	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	10/31/96	97.80	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	01/07/97	97.80	8.38	89.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	04/23/97	97.80	7.16	90.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	07/22/97	97.80	6.00	91.80	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	09/19/91	97.55	8.94	88.61	No	---	---	---	---	---	---	---	---	600	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW3	10/04/91	97.55	8.25	89.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	11/13/91	97.55	---	---	---	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW3	11/14/91	97.55	9.20	88.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	12/16/91	97.55	8.88	88.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/10/92	97.55	10.11	87.44	No	670	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW3	03/06/92	97.55	10.40	87.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	03/11/92	97.55	10.01	87.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/02/92	97.55	10.38	87.17	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	**7.6**	1.2	1.5	---	---	3.2	---
MW3	04/24/92	97.55	9.22	88.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	05/15/92	97.55	7.94	89.61	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/01/92	97.55	5.93	91.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/02/92	97.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**5.3**	<0.50	0.53	---	---	1.3	---
MW3	07/27/92	97.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW3	07/29/92	97.55	8.40	89.15	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	09/11/92	97.55	9.76	87.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/12/92	97.55	10.84	86.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW3	10/22/92	97.55	9.76	87.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	11/30/92	97.55	9.48	88.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/04/93	97.55	9.82	87.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/19/93	97.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**76**	123	1.4	---	---	166	---
MW3	01/29/93	97.55	9.76	87.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	02/22/93	97.55	9.87	87.68	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/28/93	97.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	0.77	---	---	<1.0	---
MW3	04/29/93	97.55	9.65	87.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	05/06/93	97.55	9.22	88.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	05/18/93	97.55	6.12	91.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	06/22/93	97.55	5.13	92.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/23/93	97.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW3 Dup	07/23/93	97.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	---	---
MW3	07/27/93	97.55	6.62	90.93	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	08/17/93	97.55	7.74	89.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	09/27/93	97.55	8.79	88.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/14/93	97.55	8.38	89.17	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW3	01/11/94	97.55	8.84	88.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/18/94	97.55	9.90	87.65	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/08/94	97.55	8.14	89.41	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/31/94	97.55	9.15	88.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/23/95	97.55	9.37	88.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/13/95	97.55	9.19	88.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/30/95	97.55	8.68	88.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/27/95	97.55	6.67	90.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/30/95	97.55	9.36	88.19	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/29/96	97.55	9.39	88.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/22/96	97.55	6.30	91.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/31/96	97.55	9.37	88.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/07/97	97.55	8.55	89.00	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/23/97	97.55	9.37	88.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/22/97	97.55	6.57	90.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/24/97	97.55	9.45	88.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/30/98	97.55	10.65	86.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/29/98	97.55	9.74	87.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/31/98	97.55	8.33	89.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	10/30/98	97.55	9.71	87.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/30/99	97.55	10.38	87.17	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	04/29/99	97.55	9.94	87.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/26/99	97.55	8.26	89.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/25/00	97.55	10.70	86.85	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/10/00	97.55	9.46	88.09	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/23/01	97.55	11.01	86.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/25/01	97.55	9.55	88.00	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/07/02	97.55	10.92	86.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/25/02	97.55	9.17	88.38	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/15/03	97.55	8.66	88.89	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/22/04	97.55	8.84	88.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	07/27/05	97.55	9.10	88.45	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	Oct-05	Well abandoned.																							
MW4	09/19/91	99.88	13.01	86.87	No	---	---	---	---	---	---	---	---	<1,000	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW4	10/04/91	99.88	13.20	86.68	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	11/13/91	99.88	13.41	86.47	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW4	12/16/91	99.88	13.86	86.02	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/10/92	99.88	14.05	85.83	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW4	03/06/92	99.88	14.00	85.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	03/11/92	99.88	14.72	85.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/02/92	99.88	14.14	85.74	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW4	04/24/92	99.88	12.98	86.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	05/15/92	99.88	11.71	88.17	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/01/92	99.88	9.22	90.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/02/92	99.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**662**	<0.50	0.71	---	---	5.8	---
MW4	07/27/92	99.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,200**	18	1	---	---	139	---
MW4 Dup	07/27/92	99.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,200**	17	1.2	---	---	141	---
MW4	07/29/92	99.88	11.98	87.90	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	09/11/92	99.88	13.33	86.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/12/92	99.88	13.36	86.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	2.0	<0.50	<0.50	---	---	<1.0	---
MW4	11/30/92	99.88	13.94	85.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW4	01/04/93	99.88	13.89	85.99	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/19/93	99.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**85**	<0.50	<0.50	---	---	<1.0	---
MW4	01/29/93	99.88	14.35	85.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	02/22/93	99.88	14.61	85.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/28/93	99.88	10.80	89.08	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/29/93	99.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW4	05/06/93	99.88	13.70	86.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	05/18/93	99.88	8.64	91.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	06/27/93	99.88	8.68	91.20	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/27/93	99.88	11.01	88.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	1.4	<0.50	<0.50	---	---	<1.0	---
MW4	08/17/93	99.88	12.16	87.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	09/27/93	99.88	13.26	86.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/14/93	99.88	13.06	86.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/11/94	99.88	14.52	85.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/18/94	99.88	14.40	85.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/08/94	99.88	12.32	87.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/31/94	99.88	14.06	85.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/23/95	99.88	14.88	85.00	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/13/95	99.88	14.46	85.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/30/95	99.88	13.67	86.21	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/27/95	99.88	11.44	88.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/30/95	99.88	13.73	86.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/29/96	99.88	15.19	84.69	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/22/96	99.88	11.54	88.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/31/96	99.88	14.05	85.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/07/97	99.88	14.05	85.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/23/97	99.88	13.77	86.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/22/97	99.88	11.11	88.77	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/24/97	99.88	13.45	86.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/30/98	99.88	15.10	84.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/29/98	99.88	14.44	85.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/31/98	99.88	12.48	87.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	10/30/98	99.88	13.24	86.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/30/99	99.88	14.06	85.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	04/29/99	99.88	13.86	86.02	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/26/99	99.88	12.35	87.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/25/00	99.88	14.94	84.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/10/00	99.88	12.45	87.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/23/01	99.88	15.23	84.65	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/25/01	99.88	13.76	86.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/07/02	99.88	15.04	84.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/25/02	99.88	13.25	86.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	01/07/03	99.88	14.98	84.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/15/03	99.88	12.79	87.09	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/22/04	99.88	12.94	86.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/27/05	99.88	10.12	89.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/26/06	99.88	13.78	86.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/03/07	99.88	12.71	87.17	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW4	07/22/08	99.88	11.28	88.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	09/19/91	99.55	11.66	87.89	No	---	---	---	---	---	---	---	---	600	---	---	---	---	**118**	36	5.9	---	---	347	---
MW5 Dup	09/19/91	99.55	---	---	---	---	---	---	---	---	---	---	---	900	---	---	---	---	**250**	118	6.7	---	---	400	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW5	10/04/91	99.55	11.68	87.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	11/13/91	99.55	12.00	87.55	No	1,470	---	---	---	---	---	---	---	---	---	---	---	---	**856**	516	<10	---	---	1,190	---
MW5 Dup	11/13/91	99.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2,000**	**2,200**	18	---	---	1,900	---
MW5	12/16/91	99.55	12.49	87.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/10/92	99.55	12.64	86.91	No	660	---	---	---	---	---	800	---	---	---	---	---	---	3.7	<0.50	<0.50	---	---	<1.0	---
MW5	03/06/92	99.55	12.34	87.21	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	03/11/92	99.55	14.00	85.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/02/92	99.55	12.59	86.96	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	**400**	64	41	---	---	94	---
MW5	04/24/92	99.55	11.88	87.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	05/15/92	99.55	10.72	88.83	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/01/92	99.55	8.83	90.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/02/92	99.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**199**	25	69	---	---	126	---
MW5	07/27/92	99.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,770**	**1,900**	523	---	---	2,010	---
MW5	07/29/92	99.55	10.53	89.02	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	09/11/92	99.55	11.67	87.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/12/92	99.55	11.74	87.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**35**	470	304	---	---	808	---
MW5	11/30/92	99.55	13.24	86.31	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/04/93	99.55	12.24	87.32	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/19/93	99.55	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**6**	104	181	---	---	295	---
MW5	01/29/93	99.55	12.80	86.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	02/22/93	99.55	13.09	86.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/28/93	99.55	13.04	86.51	No	---	---	---	---	---	---	---	---	---	---	---	---	---	3.8	6.7	35	---	---	47	---
MW5	05/06/93	99.55	12.45	87.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	05/18/93	99.55	8.68	90.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	06/22/93	99.55	8.36	91.19	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/27/93	99.55	9.96	89.59	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**<5**	17	57	---	---	1,370	---
MW5	08/17/93	99.55	10.54	89.01	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	09/27/93	99.55	10.84	88.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/14/93	99.55	10.54	89.01	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/11/94	99.55	12.58	86.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/18/94	99.55	13.58	85.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/08/94	99.55	11.00	88.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/31/94	99.55	12.25	87.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/23/95	99.55	12.64	86.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/13/95	99.55	12.72	86.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/30/95	99.55	12.31	87.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/27/95	99.55	10.09	89.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/30/95	99.55	11.21	88.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/29/96	99.55	13.53	86.02	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/22/96	99.55	10.41	89.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/31/96	99.55	12.84	86.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/07/97	99.55	12.41	87.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/23/97	99.55	12.32	87.23	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/22/97	99.55	9.85	89.70	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/24/97	99.55	12.22	87.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/30/98	99.55	14.18	85.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/29/98	99.55	12.95	86.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/31/98	99.55	11.23	88.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	10/30/98	99.55	12.13	87.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/30/99	99.55	12.34	87.21	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	04/29/99	99.55	12.88	86.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/26/99	99.55	10.74	88.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW5	01/25/00	99.55	13.49	86.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/10/00	99.55	11.22	88.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/23/01	99.55	13.82	85.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/25/01	99.55	12.16	87.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/07/02	99.55	13.82	85.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/25/02	99.55	11.79	87.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	01/07/03	99.55	13.68	85.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/15/03	99.55	12.42	87.13	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/22/04	99.55	11.63	87.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/27/05	99.55	11.77	87.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/26/06	99.55	12.42	87.13	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/03/07	99.55	11.32	88.23	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	07/22/08	99.55	10.15	89.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	09/19/91	98.11	10.33	87.78	No	---	---	---	---	---	---	---	---	12,700	---	---	---	---	**138**	2.9	<10	---	---	<2.0	---
MW6	10/04/91	98.11	10.58	87.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	11/13/91	98.11	10.60	87.51	No	3,800	---	---	---	---	---	---	---	---	---	---	---	---	**259**	15	<0.50	---	---	3.0	---
MW6 Dup	11/13/91	98.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2,680e**	109	<5	---	---	<10	---
MW6	01/10/92	98.11	12.05	86.46	0.50	232,000	---	---	---	---	---	**32,000**	---	---	---	---	---	---	**2,270**	**2,730**	23	---	---	2,450	---
MW6	03/06/92	98.11	12.38	85.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	03/09/92	98.11	14.10	84.57	0.70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	03/10/92	98.11	14.00	84.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	04/02/92	98.11	12.09	86.03	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	04/24/92	98.11	10.40	87.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	05/15/92	98.11	9.25	88.96	0.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	07/01/92	98.11	8.43	89.69	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	07/02/92	98.11	10.60	87.51	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**167**	60	72	---	---	126	---
MW6	07/29/92	98.11	9.44	88.77	0.13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	09/11/92	98.11	10.93	87.20	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	10/12/92	98.11	11.00	87.15	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	11/30/92	98.11	11.49	86.70	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	01/04/93	98.11	11.17	86.96	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	01/19/93	98.11	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	01/29/93	98.11	12.92	85.19	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	03/11/93	98.11	14.62	83.61	0.15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	04/28/93	98.11	12.98	85.13	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**65**	650	320	---	---	1,400	---
MW6	05/06/93	98.11	15.53	82.58	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	05/18/93	98.11	8.64	89.49	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	06/22/93	98.11	7.79	90.70	0.48	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	07/27/93	98.11	9.38	88.75	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	**71**	29	29	---	---	60	---
MW6	08/17/93	98.11	9.13	88.99	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	09/27/93	98.11	10.30	87.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	10/14/93	98.11	9.86	88.25	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**260**	380	180	---	---	430	---
MW6	01/11/94	98.11	14.36	83.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**400**	90	50	---	---	160	---
MW6	04/18/94	98.11	22.85	80.20	6.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	07/07/94	98.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**323**	144	61	---	---	145	---
MW6	07/08/94	98.11	13.07	85.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	10/31/94	98.11	14.33	83.79	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	01/10/95	98.11	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	01/23/95	98.11	20.90	81.61	5.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	04/13/95	98.11	15.80	83.33	1.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	07/27/95	98.11	15.60	87.27	5.95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW6	07/28/95	98.11	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	10/30/95	98.11	15.32	82.81	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	12/04/95	98.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**110**	4	30	---	---	15	---
MW6	01/29/96	98.11	17.77	80.36	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	04/30/96	98.11	23.36	74.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**89**	2	18	---	---	7	---
MW6	07/16/96	98.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**66**	<17	93	---	---	360	---
MW6	07/22/96	98.11	11.90	86.21	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	10/31/96	98.11	12.89	85.22	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**170**	<17	20	---	---	<33	---
MW6	01/07/97	98.11	12.16	85.98	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	**5**	1	5	---	---	5	---
MW6	04/21/97	98.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**752**	5	17	---	---	9	---
MW6	04/23/97	98.11	16.32	81.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW6	07/22/97	98.11	10.06	88.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**440**	<17	19	---	---	<50	---
MW6	10/24/97	98.11	11.04	87.08	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,600**	<17	<17	---	---	<50	---
MW6	01/30/98	98.11	11.69	86.42	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**4,200**	<5	10	---	---	<15	---
MW6	04/29/98	98.11	11.44	86.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**36**	11	29	---	---	120	---
MW6	07/31/98	98.11	9.70	88.41	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**19**	5	12	---	---	45	---
MW6	10/30/98	98.11	11.08	87.03	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**230**	<17	31	---	---	<50	---
MW6	01/30/99	98.11	11.76	86.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**100**	5	8	---	---	11	---
MW6	04/29/99	98.11	11.24	86.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**82**	15	36	---	---	78	---
MW6	07/26/99	98.11	10.96	87.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**7**	2	7	---	---	18	---
MW6	01/25/00	98.11	12.32	85.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**14**	1	2	---	---	3	---
MW6	07/10/00	98.11	9.81	88.30	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**13**	5	23	---	---	45	---
MW6	01/23/01	98.11	12.40	85.71	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**35**	2	3	---	---	4	---
MW6	07/25/01	98.11	11.04	87.07	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**74**	5	31	---	---	64	---
MW6	01/07/02	98.11	12.43	85.70	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	**110**	8	22	---	---	25	---
MW6	07/25/02	98.11	10.47	87.64	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**25**	10	11	---	---	27	---
MW6	01/07/03	98.11	13.68	84.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**55**	3	8	---	---	11	---
MW6	07/15/03	98.11	10.01	88.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**5**	<1	4	---	---	14	---
MW6	07/22/04	98.11	10.20	87.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	3	<1	5	---	---	15	---
MW6	07/27/05	98.11	10.53	87.58	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**47**	<1	2	---	---	11	---
MW6	07/26/06	98.11	11.12	86.99	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**180**	2	4	---	---	<3	---
MW6	07/03/07	98.11	9.92	88.19	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	3	---
MW6	07/22/08	98.11	8.38	89.73	No	---	---	---	---	---	---	---	---	295	144	<20	67	<2	<0.5	<0.5	<0.5	---	---	<1.5	<5
MW7	09/11/92	96.12	9.12	87.00	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	10/12/92	96.12	9.74	86.46	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	11/30/92	96.12	11.08	85.06	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	01/04/93	96.12	10.06	86.06	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	01/19/93	96.12	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	01/29/93	96.12	11.33	84.80	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	02/22/93	96.12	10.99	85.24	0.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	03/11/93	96.12	10.99	85.14	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	04/28/93	96.12	10.62	85.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,000**	43	86	---	---	93	---
MW7	05/06/93	96.12	11.14	84.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	05/18/93	96.12	4.98	91.14	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	06/22/93	96.12	5.33	90.81	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	07/27/93	96.12	7.78	88.36	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	**120**	25	20	---	---	56	---
MW7 Dup	07/27/93	96.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**151**	35	24	---	---	77	---
MW7	08/17/93	96.12	8.40	87.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	09/27/93	96.12	11.90	85.18	1.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	10/14/93	96.12	9.70	86.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**320**	10	22	---	---	54	---
MW7	01/11/94	96.12	13.64	84.19	2.14	---	---	---	---	---	---	---	---	---	---	---	---	---	**380**	180	170	---	---	280	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW7	04/18/94	96.12	14.95	83.93	3.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	07/07/94	96.12	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	07/08/94	96.12	8.60	87.52	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	10/31/94	96.12	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	01/10/95	96.12	12.90	84.02	1.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	01/23/95	96.12	13.27	83.35	0.62	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	04/13/95	96.12	12.78	83.37	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	07/16/95	96.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**430**	6	32	---	---	<15	---
MW7	07/27/95	96.12	8.65	87.47	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	07/28/95	96.12	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	10/30/95	96.12	11.21	84.92	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	12/04/95	96.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**18**	2	4	---	---	<3	---
MW7	01/29/96	96.12	13.35	82.78	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	**12**	<1	2	---	---	<3	---
MW7	04/30/96	96.12	11.05	85.09	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	**340**	<17	<17	---	---	<50	---
MW7	07/22/96	96.12	8.90	87.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	10/31/96	96.12	12.43	83.69	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,400**	<17	17	---	---	<33	---
MW7	01/07/97	96.12	11.73	84.52	0.16	---	---	---	---	---	---	---	---	---	---	---	---	---	**730**	<17	<17	---	---	<50	---
MW7	04/21/97	96.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**626**	<2	10	---	---	<2	---
MW7	04/23/97	96.12	11.85	85.59	1.65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW7	07/22/97	96.12	8.99	87.13	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**2,100**	<50	54	---	---	<150	---
MW7	10/24/97	96.12	11.36	84.90	0.18	---	---	---	---	---	---	---	---	---	---	---	---	---	**3,000**	<50	<50	---	---	<150	---
MW7	01/30/98	96.12	10.82	85.31	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	**3,400**	80	68	---	---	<150	---
MW7	04/29/98	96.12	11.89	85.24	1.26	---	---	---	---	---	---	---	---	---	---	---	---	---	**430**	<17	<17	---	---	140	---
MW7	07/31/98	96.12	8.70	87.61	0.24	---	---	---	---	---	---	---	---	---	---	---	---	---	**19**	<5	<5	---	---	<5	---
MW7	10/30/98	96.12	9.60	86.54	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	**86**	<17	<17	---	---	<50	---
MW7	01/30/99	96.12	10.32	85.80	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**62**	1	4	---	---	<3	---
MW7	04/29/99	96.12	9.97	86.15	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**111**	<5	<5	---	---	<5	---
MW7	07/26/99	96.12	8.43	87.69	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**160**	4	12	---	---	<3	---
MW7	01/25/00	96.12	11.27	84.85	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**8**	<1	1	---	---	<3	---
MW7	07/10/00	96.12	7.52	88.60	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**310**	9	14	---	---	4	---
MW7	01/23/01	96.12	11.27	84.85	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	2	<1	1	---	---	<3	---
MW7	07/25/01	96.12	9.89	86.23	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**120**	2	5	---	---	3	---
MW7	01/07/02	96.12	11.14	84.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**12**	<1	<1	---	---	<3	---
MW7	07/25/02	96.12	9.27	86.85	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**66**	3	6	---	---	8	---
MW7	01/07/03	96.12	11.17	84.95	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**7**	2	<1	---	---	<3	---
MW7	07/15/03	96.12	8.81	87.31	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**23**	<5	<5	---	---	<15	---
MW7	07/22/04	96.12	8.94	87.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**8**	1	<1	---	---	<3	---
MW7	07/27/05	96.12	9.24	86.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**30**	<1	<1	---	---	4	---
MW7	07/26/06	96.12	9.80	86.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	2	<1	<1	---	---	<3	---
MW7	07/03/07	96.12	8.72	87.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	4	<1	<1	---	---	<3	---
MW7	07/22/08	96.12	7.25	88.87	No	---	---	---	---	---	---	---	---	254	48	<20	70	<2	0.9	0.5	<0.5	---	---	<1.5	20
MW8	09/11/92	96.34	9.68	86.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	10/12/92	96.34	9.70	86.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**335**	2.2	69	---	---	5.7	---
MW8 Dup	10/12/92	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**385**	2.1	56	---	---	5.2	---
MW8	11/30/92	96.34	10.50	85.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	01/04/93	96.34	10.13	86.21	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	01/19/93	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**263**	5.3	58	---	---	5.4	---
MW8	01/29/93	96.34	10.73	85.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	02/22/93	96.34	11.09	85.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	03/11/93	96.34	12.64	83.70	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	04/28/93	96.34	10.46	85.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**14**	1.4	1.5	---	---	1.3	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW8	05/06/93	96.34	10.58	85.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	05/18/93	96.34	5.42	90.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	06/22/93	96.34	4.98	91.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/27/93	96.34	7.26	89.08	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**8.8**	1.5	15	---	---	3.8	---
MW8	08/17/93	96.34	8.42	87.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	09/27/93	96.34	12.34	84.00	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	10/14/93	96.34	12.04	84.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**610**	6.6	67	---	---	10	---
MW8	01/11/94	96.34	12.98	83.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**260**	5.3	54	---	---	6.3	---
MW8	04/18/94	96.34	13.20	83.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**43**	1.3	16	---	---	2.8	---
MW8	07/07/94	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3	<0.50	<0.50	---	---	<1.0	---
MW8	07/08/94	96.34	8.80	87.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	10/31/94	96.34	12.72	83.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**53**	<1	1	---	---	<3	---
MW8	01/10/95	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**530**	<1	8	---	---	<3	---
MW8	01/23/95	96.34	13.90	82.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	04/13/95	96.34	14.92	81.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**410**	8	38	---	---	24	---
MW8	07/27/95	96.34	9.85	86.49	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/28/95	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**23**	4	3	---	---	<3	---
MW8 Dup	07/28/95	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**24**	4	3	---	---	<3	---
MW8	10/30/95	96.34	13.12	83.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**9**	<1	<1	---	---	<3	---
MW8	12/04/95	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**690**	<17	32	---	---	<50	---
MW8	01/29/96	96.34	15.02	81.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**360**	<50	<50	---	---	<150	---
MW8	04/30/96	96.34	10.22	86.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	07/16/96	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**10**	<1	1	---	---	<3	---
MW8	07/22/96	96.34	7.59	88.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	10/31/96	96.34	10.81	85.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	01/07/97	96.34	10.20	86.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	04/21/97	96.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	04/23/97	96.34	10.20	86.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/22/97	96.34	7.29	89.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	10/24/97	96.34	10.08	86.26	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	01/30/98	96.34	10.79	85.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,200**	<5	<5	---	---	<15	---
MW8	04/29/98	96.34	10.63	85.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/31/98	96.34	8.55	87.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	10/30/98	96.34	9.90	86.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	01/30/99	96.34	10.55	85.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	1	1	<1	---	---	<3	---
MW8	04/29/99	96.34	10.04	86.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/26/99	96.34	8.41	87.93	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	01/25/00	96.34	11.27	85.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	07/10/00	96.34	7.55	88.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	01/23/01	96.34	11.27	85.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	07/25/01	96.34	9.92	86.42	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	01/07/02	96.34	11.20	85.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	07/25/02	96.34	9.30	87.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	01/07/03	96.34	11.11	85.23	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW8	07/15/03	96.34	8.79	87.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/22/04	96.34	8.99	87.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/27/05	96.34	9.30	87.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/26/06	96.34	9.84	86.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/03/07	96.34	8.71	87.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW8	07/22/08	96.34	7.22	89.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	03/11/92	95.92	9.52	86.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW9	09/11/92	95.92	9.02	86.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	10/12/92	95.92	9.20	86.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**87**	<0.50	1.2	---	---	<1.0	---
MW9	11/30/92	95.92	9.48	86.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/04/93	95.92	9.20	86.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/19/93	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**73**	45	2.2	---	---	14	---
MW9	01/29/93	95.92	9.68	86.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	02/22/93	95.92	10.08	85.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	04/28/93	95.92	9.38	86.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	3.4	0.94	1.2	---	---	11	---
MW9	05/06/93	95.92	9.16	86.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	05/18/93	95.92	4.88	91.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	06/22/93	95.92	3.96	91.96	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/27/93	95.92	6.16	89.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	1.1	<0.50	<0.50	---	---	<1.0	---
MW9	08/17/93	95.92	7.26	88.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	09/27/93	95.92	8.40	87.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	10/14/93	95.92	8.06	87.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	1.1	<0.50	<0.50	---	---	<1.0	---
MW9	01/11/94	95.92	9.49	86.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW9	04/18/94	95.92	9.46	86.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW9 Dup	04/18/94	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW9	07/07/94	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW9	07/08/94	95.92	7.98	87.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	10/31/94	95.92	9.34	86.58	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	01/10/95	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9 Dup	01/10/95	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	01/23/95	95.92	9.71	86.21	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	04/13/95	95.92	9.34	86.58	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9 Dup	04/13/95	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	04/30/95	95.92	8.67	87.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/27/95	95.92	6.58	89.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/28/95	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	10/30/95	95.92	9.09	86.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9 Dup	10/30/95	95.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	01/29/96	95.92	9.95	85.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	07/22/96	95.92	6.20	89.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	10/31/96	95.92	9.39	86.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/07/97	95.92	8.68	87.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	04/23/97	95.92	8.99	86.93	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/22/97	95.92	6.40	89.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
MW9	10/24/97	95.92	9.06	86.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/30/98	95.92	9.87	86.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	04/29/98	95.92	9.40	86.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/31/98	95.92	7.74	88.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	10/30/98	95.92	9.25	86.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/30/99	95.92	9.85	86.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	04/29/99	95.92	9.28	86.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/26/99	95.92	7.66	88.26	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/25/00	95.92	10.17	85.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/10/00	95.92	7.84	88.08	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/23/01	95.92	10.44	85.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/25/01	95.92	8.20	87.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/07/02	95.92	10.47	85.45	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/25/02	95.92	8.59	87.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	01/07/03	95.92	10.31	85.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW9	07/15/03	95.92	8.08	87.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/22/04	95.92	8.29	87.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/27/05	95.92	8.68	87.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/26/06	95.92	9.19	86.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/03/07	95.92	8.05	87.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW9	07/22/08	95.92	6.45	89.47	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	03/11/92	95.34	7.64	87.70	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	09/11/92	95.34	7.93	87.41	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/12/92	95.34	7.95	87.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	---	---	<1.0	---
MW10	11/30/92	95.34	7.90	87.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/04/93	95.34	7.99	87.35	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/19/93	95.34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**11**	12	0.75	---	---	6.6	---
MW10	01/29/93	95.34	8.16	87.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	02/22/93	95.34	8.42	86.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/28/93	95.34	7.88	87.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	3.6	2.4	<0.50	---	---	8.7	---
MW10	05/06/93	95.34	7.50	87.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	05/18/93	95.34	3.86	91.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	06/22/93	95.34	3.04	92.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/27/93	95.34	4.88	90.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	0.69	<0.50	<0.50	---	---	<1.0	---
MW10	08/17/93	95.34	6.00	89.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	09/27/93	95.34	7.14	88.20	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/14/93	95.34	6.84	88.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/11/94	95.34	7.60	87.74	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/18/94	95.34	7.78	87.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/08/94	95.34	6.56	88.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/31/94	95.34	7.65	87.69	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/23/95	95.34	7.95	87.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/13/95	95.34	7.75	87.59	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/30/95	95.34	7.75	87.59	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/27/95	95.34	5.19	90.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/30/95	95.34	7.75	87.59	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/29/96	95.34	8.17	87.17	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/22/96	95.34	4.71	90.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/31/96	95.34	9.84	85.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/07/97	95.34	7.17	88.17	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/23/97	95.34	7.70	87.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/22/97	95.34	5.07	90.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/24/97	95.34	7.82	87.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/30/98	95.34	8.47	86.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/29/98	95.34	8.10	87.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/31/98	95.34	6.61	88.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	10/30/98	95.34	8.06	87.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/30/99	95.34	8.67	86.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	04/29/99	95.34	8.20	87.14	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/26/99	95.34	6.53	88.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/25/00	95.34	8.99	86.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/10/00	95.34	7.73	87.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/23/01	95.34	9.27	86.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/25/01	95.34	8.01	87.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	01/07/02	95.34	9.33	86.01	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/25/02	95.34	7.50	87.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
MW10	01/07/03	95.34	9.19	86.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/15/03	95.34	7.00	88.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/22/04	95.34	7.19	88.15	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/27/05	95.34	7.54	87.80	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/26/06	95.34	8.04	87.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/03/07	95.34	6.92	88.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW10	07/22/08	95.34	5.35	89.99	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)																									
M3	04/23/93	998.82	9.43	989.39	No	820	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	1.2	---	---	2.5	---
M3	08/19/93	998.82	7.71	991.11	No	500	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M3	10/25/93	998.82	8.77	990.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	11/29/93	998.82	9.35	989.47	No	700	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M3	03/10/94	998.82	9.53	989.29	No	600	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	1.0	---	---	<3.0	---
M3	06/14/94	998.82	7.46	991.36	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M3	09/16/94	998.82	9.52	989.30	No	1,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<1.0	---
M3	12/13/94	998.82	9.64	989.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	03/10/95	998.82	9.63	989.19	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	06/07/95	998.82	5.29	993.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
M3	09/27/95	998.82	8.76	990.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	12/12/95	998.82	9.50	989.32	f	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	12/14/95	998.82	---	---	---	---	---	---	---	---	---	---	---	1,300	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M3	03/18/96	998.82	9.12	989.70	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	07/15/96	998.82	5.54	993.28	No	---	---	---	---	---	---	---	---	890	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M3	11/19/96	998.82	9.15	989.67	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	01/29/97	998.82	9.22	989.60	i	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M3	04/23/97	998.82	8.93	989.89	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	07/31/97	998.82	6.99	991.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M3	11/01/97	998.82	9.25	989.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/22/98	998.82	7.54	991.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	11/30/98	998.82	9.85	988.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/26/99	998.82	6.55	992.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	11/12/99	998.82	10.03	988.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/18/00	998.82	9.18	989.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	11/02/00	998.82	10.07	988.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/14/01	998.82	11.50	987.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/09/02	3,099.94	10.12	3,089.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	06/28/02	3,099.94	6.75	3,093.19	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/22/03	3,099.94	9.11	3,090.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/04/04	3,099.94	10.31	3,089.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/31/05	3,099.94	7.05	3,092.89	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M3	05/31/06	3,099.94	6.84	3,093.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	04/23/93	998.04	7.65	990.39	No	15,000	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	0.74	1.1	---	---	3.8	---
M4	08/19/93	998.04	5.55	992.49	No	1,000	---	---	---	---	---	---	---	---	---	---	---	---	0.5	<0.5	<0.5	---	---	<0.5	---
M4	10/25/93	998.04	6.75	991.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	11/29/93	998.04	7.34	990.70	No	7,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M4	03/10/94	998.04	8.05	989.99	No	2,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M4	06/14/94	998.04	5.58	992.46	No	600	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M4	09/16/94	998.04	7.64	990.40	No	1,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<1.0	---
M4	12/13/94	998.04	7.95	990.09	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
M4	03/10/95	998.04	8.19	989.85	No	---	---	---	---	---	---	---	---	1,000	---	---	---	---	<1	<1	<1	---	---	<3	---
M4	06/07/95	998.04	6.72	991.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	2.0	1.0	---	---	<3	---
M4	09/27/95	998.04	6.90	991.14	f	---	---	---	---	---	---	---	---	1,800	---	---	---	---	<0.5	<0.5	1.1	---	---	<0.5	---
M4	12/12/95	998.04	7.84	990.20	f	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	12/14/95	998.28	---	---	---	---	---	---	---	---	---	---	---	1,600	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M4	03/18/96	998.04	7.77	990.27	f	---	---	---	---	---	---	---	---	1,100	---	---	---	---	<0.5	<0.5	<0.5	---	---	0.6	---
M4	07/15/96	998.04	4.03	994.01	f	---	---	---	---	---	---	---	---	1,600	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M4	11/19/96	998.04	7.39	990.65	i	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M4	01/29/97	998.04	7.21	990.83	i,f	---	---	---	---	---	---	---	---	---	---	---	---	---	1.0	<0.5	<0.5	---	---	<0.5	---
M4	04/23/97	998.04	6.99	991.05	f	---	---	---	---	---	---	---	---	---	---	---	---	---	**41**	<0.5	<0.5	---	---	<0.5	---
M4	07/31/97	998.04	4.65	993.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	2.2	<0.5	<0.5	---	---	<0.5	---
M4	11/01/97	998.04	7.21	990.83	f	---	---	---	---	---	---	---	---	---	---	---	---	---	2	<0.5	<0.5	---	---	<0.5	---
M4	05/22/98	998.04	6.54	991.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	05/26/98	998.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.4	<0.5	<0.5	---	---	<0.5	---
M4	11/30/98	998.04	7.77	990.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<1.0	---
M4	05/26/99	998.04	5.51	992.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	06/10/99	998.28	---	---	---	---	---	---	<50	200	---	---	---	---	<4,000	<50	48	<2	<1	<1	<1	---	---	<3	6
M4	11/12/99	998.04	7.97	990.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	02/11/00	998.28	8.45	989.83	No	---	890	---	<210	<420	<260	---	---	890	<240	<210	54	<2	<1	<1	2	---	---	<3	<2
M4	05/18/00	998.28	7.23	991.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	11/02/00	998.28	8.16	990.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	05/14/01	998.28	9.62	988.66	No	---	520	---	---	---	---	---	---	52	<20	<20	<20	<2	<0.5	<0.5	0.65	---	---	<0.5	1.3
M4 Dup	05/14/01	998.28	---	---	---	---	520	---	---	---	---	---	---	67	<20	<20	23	<2	<0.5	<0.5	0.65	---	---	<0.5	1.3
M4	05/09/02	3,099.18	8.30	3,090.88	No	---	<520	---	---	---	---	---	---	45	<20	<20	<20	<2	<0.5	<0.5	0.68	---	---	<0.5	1.3
M4	06/28/02	3,099.18	5.46	3,093.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M4	05/22/03	3,099.18	7.36	3,091.82	No	---	900	---	---	---	---	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	<2
M4	05/04/04	3,099.18	8.33	3,090.85	No	---	710	---	<190	<190	<190	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	<2
M4	05/31/05	3,099.18	5.78	3,093.40	No	---	1,500	**2,200**	<60	<100	1,500	---	---	41.5j	<50	23.6j	<20	<2	<0.5	<0.5	<0.5	---	---	<1	1.18j
M4	05/31/06	3,099.18	8.77	3,090.41	No	---	84	**1,500**	34	<48	50	---	---	46.4j	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	1.38j	1.61j
M5	04/23/93	999.67	8.17	991.50	No	13,000	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<1.0	---
M5	08/19/93	999.67	6.23	993.44	Sheen	35,000	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M5	10/25/93	999.67	7.23	992.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M5	11/29/93	999.67	7.75	991.92	0.005	21,000	---	---	---	---	---	---	---	---	---	---	---	---	**12**	<1.0	<1.0	---	---	<3.0	---
M5	03/10/94	999.67	8.21g	992.26	1.00	120,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	4.0	---
M5	03/17/94	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3.0	---
M5	06/14/94	999.67	8.21g	992.60	1.42	2,400	---	---	---	---	---	---	---	---	---	---	---	---	**55**	<1.0	3.0	---	---	22	---
M5 Dup	06/14/94	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**56**	<1	4	---	---	23	---
M5	09/16/94	999.67	10.40g	993.47	5.25	2,000	---	---	---	---	---	---	---	---	---	---	---	---	**87**	<1.0	6.0	---	---	17.0	---
M5 Dup	09/16/94	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**91**	1.0	9	---	---	16	---
M5	12/13/94	999.67	10.02g	990.05	0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	**15**	<1.0	2.0	---	---	<3.0	---
M5	01/04/95	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**131**	<1	2	---	---	<3.0	---
M5	03/10/95	999.67	10.25	992.08	3.33	---	---	---	---	---	---	---	---	---	---	---	---	---	**130**	68	19	---	---	61	---
M5	06/07/95	999.67	5.43	995.18	1.17	---	---	---	---	---	---	---	---	---	---	---	---	---	**28**	<1	3	---	---	5	---
M5	09/27/95	999.67	9.68	990.71	0.90	---	---	---	---	---	---	---	---	---	---	---	---	---	**54**	1.2	4.8	---	---	6.5	---
M5	11/27/95	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**30**	2.0	<1	---	---	<3	---
M5	12/12/95	999.67	13.09	986.59	0.01f	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M5	12/14/95	999.67	---	---	---	---	---	---	---	---	---	---	---	2,700	---	---	---	---	---	---	---	---	---	---	---
M5	02/02/96	999.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**560**	34	23	---	---	47	---
M5	03/18/96	999.67	14.41	985.26	Sheen,f	---	---	---	---	---	---	---	---	1,900	---	---	---	---	**570**	12	72	---	---	110	---
M5	07/15/96	995.97	7.44	988.53	Sheen,f	---	---	---	---	---	---	---	---	11,000	---	---	---	---	**220**	<0.5	39	---	---	20	---
M5	11/19/96	995.97	7.80	988.17	Sheen,i	---	---	---	---	---	---	---	---	---	---	---	---	---	**190**	<2.5	<2.5	---	---	3.1	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
M5	01/29/97	995.97	7.44	988.53	Sheen,i,f	---	---	---	---	---	---	---	---	---	---	---	---	---	**230**	<5.0	32	---	---	<5.0	---
M5	04/23/97	995.97	5.27	990.71	0.01f	---	---	---	---	---	---	---	---	---	---	---	---	---	**100**	<1.2	13	---	---	<1.2	---
M5	07/31/97	995.97	5.51	990.47	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	**71**	<1.2	2.7	---	---	<1.2	---
M5	11/01/97	995.97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**94**	<2.5	<2.5	---	---	<2.5	---
M5	05/22/98	995.97	5.04	990.93	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M5	05/26/98	995.97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**6.6**	<0.5	<0.5	---	---	<0.5	---
M5	11/30/98	995.97	5.94	990.03	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	2.4	<1.0	<1.0	---	---	<1.0	---
M5	05/26/99	995.97	4.52	991.45	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M5	06/10/99	995.97	---	---	---	---	---	---	230	<50	---	---	---	---	<240	<60	59	<2	<1	<1	<1	---	---	<3	<2
M5 Dup	06/10/99	995.97	---	---	---	---	---	---	---	---	---	---	---	---	<240	<60	70	<2	<1	<1	<1	---	---	<3	6
M5	11/12/99	995.97	6.15	989.82	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M5	02/11/00	995.97	6.50	990.98	Sheen	---	4,500	---	<210	<420	<260	---	---	1,500	<240	<100	90	<2	<1	<1	1	---	---	<3	5
M5 Dup	02/11/00	995.97	---	---	---	---	3,900	---	<210	<420	<260	---	---	3,900	<240	<100	73	<2	<1	<1	<1	---	---	<3	5
M5	05/18/00	997.48	5.70	991.78	Sheen	---	14,000	---	<204	<407	320	---	---	14,000	<240	<100	87	<2	<1	<1	1	---	---	<3	6
M5	11/02/00	997.48	6.35	991.13	---	---	<500	---	<500	<500	<500	---	---	85	<20	<20	20	<2	<0.5	<0.5	<0.5	---	---	<0.5	4.2
M5	05/14/01	997.48	6.86	990.62	k	---	2,300	---	<510	<510	<510	---	---	79	<20	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<0.5	4
M5	05/09/02	3,098.61	6.57	3,092.04	k	---	1,100	---	<520	<520	<520	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M5	06/28/02	3,098.61	4.38	3,094.23	k	---	---	---	---	---	---	---	---	67	<20	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<0.5	3.2
M5	05/22/03	3,098.61	5.82	3,092.79	k	---	3,800	---	<220	<220	<220	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	7
M5	05/04/04	3,098.61	6.51	3,092.10	k	---	2,200	---	<200	<200	<200	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	9
M5	05/31/05	3,098.61	4.65	3,093.96	No	---	<50	**1,800**	41	<50	<40	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M5	05/31/06	3,098.61	4.79	3,093.82	k	---	270	**2,200**	160	<48	110	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	2.28j
M5	09/27/11	3,098.61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**54**	1.2	4.8	---	---	6.5	---
M6	04/23/93	1,000.08	8.19	991.89	No	1,100	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<1.0	---
M6	08/19/93	1,000.08	6.30	993.78	No	500	---	---	---	---	---	---	---	---	---	---	---	---	**140**	0.7	0.7	---	---	<0.5	---
M6	10/25/93	1,000.08	7.29	992.79	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	11/29/93	1,000.08	7.76	992.32	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M6	03/10/94	1,000.08	8.48	991.60	No	1,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M6	06/14/94	1,000.08	6.92	993.16	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	**580**	<1.0	3.0	---	---	<3.0	---
M6	09/16/94	1,000.08	8.38	991.70	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	**93**	<1.0	1.0	---	---	<1.0	---
M6	12/13/94	1,000.08	8.42	991.66	No	1,000	---	---	---	---	---	---	---	---	---	---	---	---	**131**	<1.0	<1.0	---	---	<3.0	---
M6	01/04/95	1,000.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	03/10/95	1,000.08	8.76	991.32	No	---	---	---	---	---	---	---	---	1,000	---	---	---	---	**160**	<1	<1	---	---	<3	---
M6	06/07/95	1,000.08	6.27	993.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**360**	<1	1	---	---	<3	---
M6	09/27/95	1,000.08	7.60	992.48	f	---	---	---	---	---	---	---	---	740	---	---	---	---	**28**	<0.5	<0.5	---	---	<0.5	---
M6	12/12/95	1,000.08	8.53	991.55	f	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	12/14/95	1,000.08	---	---	---	---	---	---	---	---	---	---	---	1,400	---	---	---	---	**210**	590	<0.5	---	---	<0.5	---
M6	03/18/96	1,000.08	8.58	991.50	f	---	---	---	---	---	---	---	---	2,000	---	---	---	---	**190**	65	**850**	---	---	1,900	---
M6	07/15/96	1,000.08	5.02	995.06	f	---	---	---	---	---	---	---	---	950	---	---	---	---	**64**	<0.5	8.3	---	---	3.8	---
M6	11/19/96	1,000.08	7.88	992.20	i	---	---	---	---	---	---	---	---	---	---	---	---	---	**570**	20	100	---	---	<12	---
M6	01/29/97	1,000.08	7.53	992.55	i	---	---	---	---	---	---	---	---	---	---	---	---	---	**890**	<25	130	---	---	<25	---
M6	04/23/97	1,000.08	7.47	992.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,100**	<1.2	90	---	---	<1.2	---
M6	07/31/97	1,000.08	5.44	994.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	4.9	<0.5	<0.5	---	---	<0.5	---
M6	10/31/97	1,000.08	7.72	992.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	11/01/97	1,000.08	Well obstructed; unable to gauge and/or sample.																						
M6	05/22/98	1,000.08	Mud and silt in well; unable to gauge and/or sample.																						
M6	11/30/98	1,000.08	Mud and silt in well; unable to gauge and/or sample.																						
M6	05/26/99	1,000.08	Mud and silt in well; unable to gauge and/or sample.																						
M6	06/10/99	1,000.08	Well obstructed; unable to gauge and/or sample.																						
M6	11/02/99	1,000.08	8.27	991.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	02/11/00	1,000.08	8.54	991.54	No	---	<540	---	<240	<430	<250	---	---	<540	<240	<100	<50	<2	<1	<1	<1	---	---	<3	<2

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
M6	05/18/00	1,000.08	8.02	992.06	No	---	690	---	<200	<400	<270	---	---	690	<240	<100	<50	<2	<1	<1	<1	---	---	<3	<2
M6	11/02/00	1,000.08	8.60	991.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	11/03/00	1,000.08	---	---	---	---	<500	---	---	---	---	---	---	39	35	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<0.5	<1
M6	05/14/01	1,000.08	8.81	991.27	No	---	<510	---	---	---	---	---	---	38	39	<20	<20	<2	1.1	<0.5	<0.5	---	---	<0.5	<1
M6	05/09/02	3,101.20	8.71	3,092.49	No	---	<520	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	06/28/02	3,101.20	6.82	3,094.38	No	---	---	---	---	---	---	---	---	32	27	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<0.5	<1
M6	05/22/03	3,101.20	8.90	3,092.30	No	---	600	---	---	---	---	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	<2
M6	05/04/04	3,101.20	Dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	05/31/05	3,101.20	Dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M6	05/31/06	3,101.20	Dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	04/23/93	1,001.45	7.69	993.76	No	56,000	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	1.6	---	---	9.8	---
M7	08/19/93	1,001.45	6.33	995.12	Sheen	500	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	10/25/93	1,001.45	6.97	994.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	11/29/93	1,001.45	7.27	994.18	No	33,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M7	03/10/94	1,001.45	7.88	993.57	No	8,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	8	---
M7	06/14/94	1,001.45	6.44	995.01	No	4,800	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M7	09/16/94	1,001.45	7.12	994.33	No	3,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M7	12/13/94	1,001.45	7.76	993.69	No	2,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<1.0	---
M7	03/10/95	1,001.45	8.08	993.37	No	---	---	---	---	---	---	---	---	3,000	---	---	---	---	<1	<1	<1	---	---	<3	---
M7	06/07/95	1,001.45	6.33	995.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
M7	09/27/95	1,001.45	7.06	994.39	No	---	---	---	---	---	---	---	---	10,000	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	12/12/95	1,001.45	7.31	994.14	f	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	12/14/95	1,001.45	---	---	---	---	---	---	---	---	---	---	---	11,000	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	03/18/96	1,001.45	7.18	994.27	f	---	---	---	---	---	---	---	---	4,900	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	07/15/96	1,001.45	5.67	995.78	f	---	---	---	---	---	---	---	---	3,000	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	10/11/96	1,001.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	11/19/96	1,001.45	7.60	993.85	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	01/29/97	1,001.45	7.45	994.00	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	04/23/97	1,001.45	7.21	994.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	07/31/97	1,001.45	5.81	995.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	11/01/97	1,001.45	7.39	994.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	05/22/98	1,001.45	7.01	994.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	05/26/98	1,001.45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M7	11/30/98	1,001.45	7.52	993.93	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<1.0	---
M7	05/26/99	1,001.45	7.14	994.31	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	06/10/99	1,001.45	---	---	---	---	---	---	<50	<50	---	---	---	---	<240	<60	40	<2	<1	<1	<1	---	---	<3	<2
M7	11/12/99	1,001.45	7.69	993.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	02/11/00	1,001.45	7.81	993.64	No	---	<530	---	<210	<420	<260	---	---	<530	<240	<100	<50	<2	<1	<1	<1	---	---	<3	<2
M7	05/18/00	1,001.45	7.62	993.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	11/02/00	1,001.45	8.01	993.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	05/14/01	1,001.45	9.25	992.20	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	05/09/02	3,102.58	8.28	3,094.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M7	06/28/02	3,102.58	7.31	3,095.27	No	---	---	---	---	---	---	---	---	23	<20	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<0.5	<1
M7	05/22/03	3,102.58	7.94	3,094.64	No	---	1,100	---	<200	<200	<200	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	<2
M7	05/04/04	3,102.58	8.23	3,094.35	No	---	800	---	<190	<190	48j	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	<5
M7	05/31/05	3,102.58	7.41	3,095.17	No	---	140	**4,300**	55	<50	81	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M7	05/31/06	3,102.58	7.52	3,095.06	No	---	35	**1,900**	35	<48	<38	---	---	25	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M8	05/09/02	3,103.13	10.00	3,093.13	No	---	<520	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M8 Dup	05/09/02	3,103.13	---	---	---	---	<510	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M8	06/28/02	3,103.13	8.51	3,094.62	No	---	---	---	---	---	---	---	---	110	49	<20	34	<2.0	3.7	<0.5	4.0	---	---	4.7	1.0

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
M8 Dup	06/28/02	3,103.13	---	---	---	---	---	---	---	---	---	---	---	100	49	<20	23	<2.0	3.5	<0.5	3.8	---	---	4.5	1.1
M8	05/22/03	3,103.13	9.46	3,093.67	No	---	<480	---	---	---	---	---	---	<200	<100	<100	<20	<2	2	<1	<1	---	---	<3	<2
M8 Dup	05/22/03	3,103.13	---	---	---	---	<480	---	---	---	---	---	---	<200	<100	<100	<20	<2	3	<1	2	---	---	<3	<2
M8	05/04/04	3,103.13	9.88	3,093.25	No	---	280	---	---	---	---	---	---	<200	<100	<100	<20	<2	1	<1	<1	---	---	<3	<5
M8 Dup	05/04/04	3,103.13	---	---	---	---	220	---	---	---	---	---	---	<200	<100	<100	<20	<2	2	<1	<1	---	---	<3	<5
M8	05/31/05	3,103.13	8.70	3,094.43	No	---	<50	980	<30	<50	<40	---	---	<20	<50	<20	<20	<2	0.8j	<0.5	<0.5	---	---	<1	<1
M8 Dup	05/31/05	3,103.13	---	---	---	---	<50	780	<30	<50	<40	---	---	<20	<50	<20	<20	<2	1.0j	<0.5	<0.5	---	---	<1	<1
M8	05/31/06	3,103.13	8.86	3,094.27	No	---	35	860	35	<48	<38	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M9	05/04/04	3,101.87	8.99	3,092.88	k	---	220	---	---	---	---	---	---	<200	<100	<100	<20	<2	<1	<1	<1	---	---	<3	<5
M9	05/31/05	3,101.87	7.65	3,094.22	No	---	<50	940	<30	<50	<40	---	---	22j	<50	<20	<20	<2	**8.5**	<0.5	<0.5	---	---	<1	<1
M9	05/31/06	3,101.87	7.80	3,094.07	No	---	34	930	34	<48	<38	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M9 Dup	05/31/06	3,101.87	---	---	---	---	29	890	29	<48	<38	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M9	01/18/07	3,101.87	9.21	3,092.66	No	---	<30	880	<31	<52	<42	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
M9 Dup	01/18/07	3,101.87	---	---	---	---	<30	800	<29	<49	<39	---	---	<20	<50	<20	<20	<2	<0.5	<0.5	<0.5	---	---	<1	<1
South CHS Tank Farm, 1993 Yale Tank Farm Seminoe Pipeline Release (Cenex, 1992; ConocoPhillips, 2007)																									
M2	04/23/93	999.21	8.96	990.25	No	1,500	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<1.0	---
M2	08/19/93	999.21	7.33	991.88	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M2	10/25/93	999.21	8.47	990.74	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	11/29/93	999.21	8.64	990.57	No	<500	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	3.0	---	---	<3.0	---
M2	03/10/94	999.21	8.97	990.24	No	800	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	1.0	---	---	<3.0	---
M2	06/14/94	999.21	7.12	992.09	No	700	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<3.0	---
M2	09/16/94	999.21	8.72	990.49	No	2,000	---	---	---	---	---	---	---	---	---	---	---	---	<1.0	<1.0	<1.0	---	---	<1.0	---
M2	12/13/94	999.21	9.03	990.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	03/10/95	999.21	9.11	990.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	06/07/95	999.21	5.88	993.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
M2	09/27/95	999.21	8.10	991.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	12/12/95	999.21	8.84	990.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	12/14/95	999.21	---	---	---	---	---	---	---	---	---	---	---	2,800	---	---	---	---	**22.0**	<0.5	<0.5	---	---	<0.5	---
M2	03/18/96	999.21	8.69	990.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	07/15/96	999.21	5.56	993.65	f	---	---	---	---	---	---	---	---	610	---	---	---	---	<1	<1	<1	---	---	<3	---
M2	11/19/96	999.21	8.76	990.45	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	01/29/97	999.21	8.63	990.58	i,f	---	---	---	---	---	---	---	---	---	---	---	---	---	**26.0**	<0.5	<0.5	---	---	<.5	---
M2	04/23/97	999.21	8.54	990.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	07/31/97	999.21	6.71	992.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.5	<0.5	<0.5	---	---	<0.5	---
M2	11/01/97	999.21	8.80	990.41	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/22/98	999.21	7.98	991.23	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	11/30/98	999.21	9.24	989.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/26/99	999.21	6.83	992.38	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	11/12/99	999.21	9.48	989.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/18/00	999.21	8.80	990.41	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	11/02/00	999.21	9.60	989.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/14/01	999.21	10.87	988.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/09/02	3,100.33	9.72	3,090.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	06/28/02	3,100.33	6.97	3,093.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/22/03	3,100.33	8.84	3,091.49	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/04/04	3,100.33	9.82	3,090.51	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/31/05	3,100.33	7.20	3,093.13	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	05/31/06	3,100.33	7.09	3,093.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M2	01/18/07	3,100.33	10.28	3,090.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
Tract 1-A, ASI Industrial Investigation (Portage, 2011)																									
MW01	09/08/11	---	8.43	---	No	---	<4,050	---	---	---	---	---	---	<20.0	<20.0	<20.0	<20.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.5	<5.0
MW02	09/08/11	---	6.79	---	No	---	891	---	---	---	---	---	---	<20.0	<20.0	<20.0	<20.0	<0.50	0.53	3.8	<0.50	<1.0	<0.50	<1.5	<5.0
MW03	09/08/11	---	7.25	---	No	---	5,850	---	1,310	<206	<206	---	---	230	<100	<100	172	<2.5	<2.5	<2.5	15.7	<5.0	<2.5	<7.5	<25
Piezometer Wells																									
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; ConocoPhillips, 2007)																									
PZ1	11/29/93	999.21	---	---	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	03/10/94	999.21	6.62	992.59	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	06/14/94	999.21	5.54	993.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	09/16/94	999.21	6.38	992.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	12/13/94	999.21	6.69	992.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	03/10/95	999.21	7.09	992.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	06/07/95	999.21	4.96	994.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	09/27/95	999.21	6.03	993.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	12/12/95	999.21	6.63	992.58	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	03/18/96	999.21	6.43	992.78	Sheen,k	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	07/15/96	999.21	3.73	995.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	11/19/96	999.21	6.57	992.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	01/29/97	999.21	6.22	992.99	k,i	---	---	---	---	---	---	---	---	---	---	---	---	---	**6,700**	590	560	---	---	410	---
PZ1	04/23/97	999.21	6.11	993.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**5,700**	580	480	---	---	820	---
PZ1	07/31/97	999.21	4.40	994.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**350**	74	51	---	---	130	---
PZ1	10/31/97	999.21	6.34	992.87	k	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	11/01/97	999.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**5,700**	880	600	---	---	1,400	---
PZ1	05/22/98	999.21	5.99	993.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	05/26/98	999.21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2,800**	390	320	---	---	560	---
PZ1	11/30/98	999.21	6.63	992.58	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**1,700**	140	380	---	---	450	---
PZ1	05/26/99	999.21	5.87	993.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	06/10/99	999.21	---	---	---	---	---	---	---	---	---	---	---	---	**2,940**	100	**1,300**	**<30**	**2,500**	160	540	---	---	360	<30
PZ1	11/12/99	999.21	6.97	992.24	k	---	---	---	390	<50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	02/11/00	999.21	6.98	992.23	k	---	3,800	---	<210	<420	<260	---	---	3,800	**2,800**	<100	**1,000**	<10	**2,200**	140	350	---	---	230	32
PZ1	05/18/00	999.21	6.58	992.63	No	---	3,800	---	<200	<410	<250	---	---	3,500	**1,100**	<100	650	<10	**2,100**	35	340	---	---	91	<10
PZ1 Dup	05/18/00	999.21	---	---	---	---	3,500	---	<210	<410	<260	---	---	3,500	**1,100**	<100	650	<10	**2,100**	65	340	---	---	91	<10
PZ1	11/02/00	999.21	7.02	992.19	No	---	740	---	610	<500	<500	---	---	4,400	**1,800**	210	490	<20	**1,600**	93	290	---	---	110	22
PZ1	05/14/01	999.21	8.23	990.98	No	---	3,900	---	940	<500	<500	---	---	3,800	**2,100**	380	300	<2	**1,100**	31	170	---	---	52	14
PZ1	05/09/02	3,100.34	7.30	3,093.04	No	---	1,900	---	<520	<520	<520	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ1	06/28/02	3,100.34	5.81	3,094.53	No	---	---	---	---	---	---	---	---	840	450	<50	97	<5	**220**	<1.2	18	---	---	3.6	7.1
PZ1	05/22/03	3,100.34	6.42	3,093.92	No	---	3,700	---	<200	<200	<200	---	---	1,800	**860**	<100	140	<2	**680**	25	42	---	---	93	11
PZ1	05/04/04	3,100.34	7.20	3,093.14	No	---	2,300	---	<190	<190	48j	---	---	1,300	**850**	<100	110	<2	**260**	5	73	---	---	30	4
PZ1	Well abandoned.																								
PZ2	11/29/93	998.07	---	---	0.010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	03/10/94	998.07	7.58	990.50	0.010	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	06/14/94	998.07	5.28	992.79	0.005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	09/16/94	998.07	6.98	991.09	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
PZ2	12/13/94	998.07	7.26	990.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	03/10/95	998.07	7.53	990.54	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	06/07/95	998.07	5.83	992.24	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	09/27/95	998.07	6.27	991.80	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	12/12/95	998.07	7.50	990.58	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	03/18/96	998.07	7.43	990.64	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	07/15/96	998.07	4.16	993.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	11/19/96	998.07	6.78	991.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	01/29/97	998.07	6.22	991.85	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	04/23/97	998.07	6.25	991.83	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	07/31/97	998.07	7.30	990.77	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	11/01/97	998.07	6.47	991.60	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	05/22/98	998.07	5.73	992.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	11/30/98	998.07	6.77	991.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	05/26/99	998.07	5.40	992.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	06/10/99	998.07	---	---	---	---	---	---	---	---	---	---	---	---	<240	80	200	<2	<1	<1	2	---	---	<3	15
PZ2	11/12/99	998.07	7.09	990.98	Sheen	---	---	---	4,600	940	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	02/11/00	998.07	7.44	990.63	Sheen	---	1,900	---	700	<420	<260	---	---	1,900	<240	<100	230	<2	<1	<1	2	---	---	<3	15
PZ2	05/18/00	998.07	6.36	991.71	Sheen,k	---	8,000	---	<200	<410	<410	---	---	800	<240	<100	200	<2	<1	<1	2	---	---	<3	15
PZ2	11/02/00	998.07	7.29	990.78	k	---	10,000	---	7,400	1,100	1,800	---	---	1,800	30	320	610	<2	<0.5	<0.5	2.3	---	---	4.6	59
PZ2	05/14/01	998.07	8.44	989.63	k	---	1,900	---	<510	<510	<510	---	---	340	32	62	110	<2	<0.5	<0.5	1.6	---	---	1.4	14
PZ2	05/09/02	3,099.39	7.53	3,091.86	No	---	5,300	---	2,600	<520	<520	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	06/28/02	3,099.39	5.38	3,094.01	No	---	---	---	---	---	---	---	---	480	<20	76	140	<2	<0.5	<0.5	1.0	---	---	1.9	16
PZ2	05/22/03	3,099.39	6.77	3,092.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	05/04/04	3,099.39	7.49	3,091.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	05/31/05	3,099.39	5.68	3,093.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PZ2	05/31/06	3,099.39	5.76	3,093.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Observation Wells																									
East CHS Tank Farm (Cenex, 1992)																									
OBS-1	10/04/91	99.01	9.76	89.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-1	11/13/91	99.01	9.72	89.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-1	12/16/91	99.01	10.39	88.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-1	01/10/92	99.01	11.09	87.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-1	03/06/92	99.01	10.64	88.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-1	04/02/92	99.01	10.93	88.08	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-1	04/24/92	99.01	9.94	89.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-2	10/04/91	98.93	8.15	90.78	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-2	11/13/91	98.93	6.72	92.21	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-2	12/16/91	98.93	4.36	94.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OBS-2	01/10/92	98.93	4.07	94.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Recovery Wells																									
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)																									
RW1	04/23/93	1,000.00	7.00	993.00	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1	08/19/93	1,000.00	5.82	994.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1	03/10/94	1,000.00	7.15	992.85	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
RW1	06/14/94	1,000.00	5.08	994.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1	09/16/94	1,000.00	6.01	993.99	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1	12/13/94	1,000.00	6.65	993.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	11/19/96	1,001.88	8.82	993.06	i	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	3	35	---	---	38	---
RW1A	01/29/97	1,001.88	8.48	993.40	i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	04/23/97	1,001.88	8.45	993.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	07/31/97	1,001.88	6.87	995.01	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	10/31/97	1,001.88	8.62	993.26	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	05/22/98	1,001.88	8.25	993.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	11/30/98	1,001.88	8.96	992.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	05/26/99	1,001.88	8.26	993.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	11/12/99	1,001.88	9.01	992.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	05/18/00	1,001.88	8.85	993.03	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	05/31/06	3,103.02	8.61	3,094.41	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	04/23/93	1,000.00	7.50	992.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	08/19/93	1,000.00	5.97	994.03	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	11/29/93	1,000.00	---	---	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	03/10/94	1,000.00	7.94	992.06	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	06/14/94	1,000.00	6.35	993.65	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	09/16/94	1,000.00	7.14	992.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW2	12/13/94	1,000.00	7.35	992.65	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW3	04/23/93	1,000.00	7.70	992.30	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW3	11/29/93	1,000.00	---	---	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW3	03/10/94	1,000.00	8.04	991.96	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW3	06/14/94	1,000.00	6.49	993.51	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW3	09/16/94	1,000.00	7.44	992.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW3	12/13/94	1,000.00	7.65	992.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW4	04/23/93	999.68	5.38	994.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW4	11/29/93	999.68	---	---	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW4	03/10/94	999.68	9.67	990.21	0.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW4	03/14/94	999.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	90	---
RW4	06/14/94	999.68	7.71	992.14	0.208	---	---	---	---	---	---	---	---	---	---	---	---	---	**360**	380	51	---	---	340	---
RW4	09/16/94	999.68	6.44	993.24	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**540**	110	81	---	---	146	---
RW4	12/13/94	999.68	6.79	992.89	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**4,290**	**1,200**	420	---	---	650	---
RW4	03/10/95	999.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**480**	310	62	---	---	320	---
RW4	06/07/95	999.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**360**	380	51	---	---	340	---
RW4	09/27/95	999.68	---	---	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW5	11/29/93	999.04	---	---	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW5	03/10/94	999.04	9.29	989.75	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW5	05/12/94	999.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
RW5	05/31/94	999.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
RW5	06/14/94	999.04	6.47	992.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
RW5	09/16/94	999.04	8.31	990.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	1	<1	<1	---	---	1	---
RW5	12/13/94	999.04	8.76	990.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	2	<1	<1	---	---	<1	---
RW5	03/10/95	999.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
RW5	09/27/95	999.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.6	<0.5	0.6	---	---	<0.5	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
Sump Wells																									
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)																									
S-1	06/19/91	98.96	---	93.58	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/10/91	98.96	5.74	93.24	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/17/91	98.96	5.83	93.14	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/26/91	98.96	6.01	92.96	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	08/02/91	98.96	5.85	93.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	08/14/91	98.96	9.08	89.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	09/03/91	98.96	9.32	89.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	09/06/91	98.96	---	---	---	---	---	---	---	---	---	---	---	1,090,000	---	---	---	---	**17,000**	**53,000**	**4,400**	---	---	**56,000**	---
S-1	09/10/91	98.96	11.21	87.76	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	09/19/91	98.96	9.77	89.83	0.80	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/04/91	98.96	10.48	88.98	0.63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	11/13/91	98.96	10.01	89.06	0.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	12/16/91	98.96	8.10	91.10	0.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/10/92	98.96	8.30	90.66	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	03/06/92	98.96	10.54	88.50	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/02/92	98.96	8.41	90.56	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/24/92	98.96	6.05	92.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	05/15/92	98.96	7.40	91.56	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/01/92	98.96	7.32	91.65	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/29/92	98.96	9.65	89.31	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	09/11/92	98.96	10.45	88.51	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/12/92	98.96	10.48	88.48	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	11/30/92	98.96	9.18	89.80	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/04/93	98.96	9.18	89.80	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/29/93	98.96	9.69	89.36	0.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	02/22/93	98.96	9.73	89.23	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	03/11/93	98.96	9.76	89.22	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/28/93	98.96	9.99	88.99	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	05/06/93	98.96	9.89	89.07	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	05/18/93	98.96	11.20	87.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	06/22/93	98.96	8.67	90.29	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/27/93	98.96	10.48	88.48	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	08/17/93	98.96	8.02	90.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	09/27/93	98.96	8.43	90.53	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/14/93	98.96	7.83	91.13	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/11/94	98.96	9.17	89.80	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/18/94	98.96	9.37	89.59	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/08/94	98.96	7.99	90.99	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/31/94	98.96	8.66	90.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/23/95	98.96	9.24	89.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/13/95	98.96	0.14	98.82	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/27/95	98.96	9.32	89.70	0.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/30/95	98.96	9.28	89.69	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/29/96	98.96	9.48	89.49	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/30/96	98.96	8.87	90.11	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/22/96	98.96	9.42	89.54	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/31/96	98.96	9.74	89.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-1	01/07/97	98.96	9.98	88.98	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/23/97	98.96	5.52	93.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/22/97	98.96	5.40	93.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/24/97	98.96	5.50	93.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/30/98	98.96	10.12	88.84	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/29/98	98.96	10.33	88.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/31/98	98.96	10.48	88.48	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	10/30/98	98.96	9.20	89.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/30/99	98.96	9.73	89.23	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	04/29/99	98.96	9.77	89.19	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**421**	92	47	---	---	247	---
S-1	07/26/99	98.96	8.51	90.45	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**230**	12	20	---	---	62	---
S-1	01/25/00	98.96	10.25	88.71	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/10/00	98.96	7.68	91.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/23/01	98.96	10.72	88.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/25/01	98.96	9.28	89.68	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/07/02	98.96	10.93	88.03	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/25/02	98.96	9.20	89.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	01/07/03	98.96	10.71	88.25	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/15/03	98.96	8.85	90.12	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/22/04	98.96	8.54	90.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	07/27/05	98.96	9.02	89.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-1	Oct-05	Well abandoned.																							
S-2	06/19/91	99.17	---	92.87	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/10/91	99.17	8.60	90.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/17/91	100.87	10.83	90.14	0.13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/26/91	100.87	10.22	90.73	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	08/02/91	100.87	12.46	88.67	0.33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	08/14/91	100.87	10.51	90.42	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	09/03/91	100.87	10.96	90.13	0.28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	09/10/91	100.87	10.88	90.22	0.29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	09/19/91	100.87	10.64	90.37	0.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/04/91	100.87	10.51	90.44	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	11/13/91	100.87	10.90	90.00	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	12/16/91	100.87	12.10	88.86	0.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/10/92	100.87	11.80	89.13	0.08	1,004,000	---	---	---	---	---	**131,000**	---	---	---	---	---	---	**6,860**	**15,220**	**1,500**	---	---	**13,600**	---
S-2	03/06/92	100.87	11.78	89.17	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/02/92	100.87	12.60	88.45	0.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/24/92	100.87	12.67	88.44	0.30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	05/15/92	100.87	10.04	90.84	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/01/92	100.87	9.15	91.72	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/29/92	100.87	10.73	90.14	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	09/11/92	100.87	12.20	88.67	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/12/92	100.87	12.42	88.45	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	11/30/92	100.87	10.73	90.14	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/04/93	100.87	10.73	90.14	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/29/93	100.87	11.10	89.77	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	02/22/93	100.87	11.28	89.59	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	03/11/93	100.87	11.40	89.47	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/28/93	100.87	11.50	89.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	05/06/93	100.87	11.38	89.49	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	05/18/93	100.87	12.24	88.63	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-2	06/22/93	100.87	9.56	91.32	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/27/93	100.87	10.61	90.26	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	08/17/93	100.87	9.97	90.90	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	09/27/93	100.87	10.12	90.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/14/93	100.87	9.69	91.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/11/94	100.87	10.89	89.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/18/94	100.87	11.20	89.67	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/08/94	100.87	9.97	90.90	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/31/94	100.87	10.60	90.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/23/95	100.87	11.07	89.80	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/13/95	100.87	11.23	89.64	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/27/95	100.87	11.51	89.37	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/30/95	100.87	11.53	89.34	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/29/96	100.87	11.19	89.68	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/30/96	100.87	11.38	89.49	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/22/96	100.87	11.52	89.35	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/31/96	100.87	11.61	89.26	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/07/97	100.87	11.43	89.44	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/23/97	100.87	7.77	93.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/22/97	100.87	7.53	93.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/24/97	100.87	11.45	89.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/30/98	100.87	11.45	89.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/29/98	100.87	10.67	90.20	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/31/98	100.87	10.30	90.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	10/30/98	100.87	10.93	89.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/30/99	100.87	11.45	89.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	04/29/99	100.87	11.48	89.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/26/99	100.87	10.42	90.45	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	01/25/00	100.87	11.89	88.98	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
S-2	07/10/00	100.87	10.52	90.35	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	**9**	3	4	---	---	10	---
S-2	01/23/01	100.87	12.54	88.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
S-2	07/25/01	100.87	11.02	89.85	No	---	---	---	---	---	---	---	---	---	---	---	---	---	**44**	7	3	---	---	17	---
S-2	01/07/02	100.87	12.44	88.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
S-2	07/25/02	100.87	10.94	89.93	No	---	---	---	---	---	---	---	---	---	---	---	---	---	2	<1	<1	---	---	<3	---
S-2	01/07/03	100.87	12.28	88.59	No	---	---	---	---	---	---	---	---	---	---	---	---	---	<1	<1	<1	---	---	<3	---
S-2	07/15/03	100.87	10.60	90.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/22/04	100.87	10.76	90.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	07/27/05	100.87	10.71	90.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-2	Oct-05	Well abandoned.																							
S-3	06/19/91	97.46	---	92.59	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/10/91	97.46	6.06	91.59	0.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/17/91	100.00	8.54	91.53	0.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/26/91	100.00	8.86	91.25	0.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	08/02/91	100.00	8.90	91.24	0.17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	08/14/91	100.00	9.31	90.77	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	09/03/91	100.00	9.54	90.48	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	09/10/91	100.00	9.46	90.56	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	09/19/91	100.00	9.34	90.68	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/04/91	100.00	9.26	90.77	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	11/13/91	100.00	9.50	90.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	12/16/91	100.00	9.83	90.18	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-3	01/10/92	100.00	9.89	90.11	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	03/06/92	100.00	9.86	90.19	0.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/02/92	100.00	10.17	89.84	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/24/92	100.00	9.76	90.24	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	05/15/92	100.00	9.50	90.50	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/01/92	100.00	8.17	91.83	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/02/92	100.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3,990**	**1,460**	43	---	---	6,570	---
S-3	07/29/92	100.00	9.19	90.81	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	09/11/92	100.00	9.50	90.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/12/92	100.00	9.45	90.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	11/30/92	100.00	9.53	90.47	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/04/93	100.00	9.53	90.47	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/19/93	100.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2,590**	**4,100**	456	---	---	4,670	---
S-3	01/29/93	100.00	9.88	90.12	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	02/22/93	100.00	9.98	90.02	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	03/11/93	100.00	10.18	89.82	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/28/93	100.00	10.23	89.77	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	05/06/93	100.00	10.15	89.85	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	05/18/93	100.00	9.38	90.62	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	06/22/93	100.00	8.53	91.47	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/27/93	100.00	8.59	91.41	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	08/17/93	100.00	8.89	91.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	09/27/93	100.00	9.06	90.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/14/93	100.00	8.76	91.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/11/94	100.00	9.78	90.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/18/94	100.00	10.06	89.94	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/06/94	100.00	8.82	91.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/31/94	100.00	9.50	90.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/23/95	100.00	9.96	90.04	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/13/95	100.00	9.71	90.29	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/27/95	100.00	8.67	91.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/30/95	100.00	9.73	90.27	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/29/96	100.00	9.99	90.01	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/30/96	100.00	8.68	91.32	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/22/96	100.00	8.92	91.08	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/31/96	100.00	9.76	90.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/07/97	100.00	9.70	90.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/23/97	100.00	7.05	92.95	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/22/97	100.00	6.68	93.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/24/97	100.00	7.45	92.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/30/98	100.00	9.63	90.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/29/98	100.00	9.65	90.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/31/98	100.00	9.14	90.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	10/30/98	100.00	9.73	90.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/30/99	100.00	10.25	89.75	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	04/29/99	100.00	10.30	89.70	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/26/99	100.00	9.34	90.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/25/00	100.00	10.72	89.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/10/00	100.00	9.46	90.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/23/01	100.00	11.17	88.83	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/25/01	100.00	9.84	90.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/07/02	100.00	10.28	89.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-3	07/25/02	100.00	9.76	90.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	01/07/03	100.00	11.11	88.89	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/15/03	100.00	9.56	90.44	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/22/04	100.00	9.75	90.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	07/27/05	100.00	9.65	90.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-3	Oct-05	Well abandoned.																							
S-4	06/19/91	96.17	---	90.92	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/10/91	96.17	5.07	91.16	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/17/91	98.69	7.77	90.97	0.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/26/91	98.69	8.01	90.69	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	08/02/91	98.69	8.05	90.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	08/14/91	98.69	9.19	89.51	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	09/03/91	98.69	10.23	88.46	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	09/10/91	98.69	9.24	89.46	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	09/19/91	98.69	9.81	88.89	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/04/91	98.69	9.79	88.91	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	11/13/91	98.69	9.32	89.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	12/16/91	98.69	10.46	88.23	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/10/92	98.69	10.79	87.90	Sheen	62,700	---	---	---	---	---	**20,700**	---	---	---	---	---	---	**330**	116	12	---	---	1,780	---
S-4	03/06/92	98.69	10.76	88.00	0.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/02/92	98.69	10.50	88.20	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/24/92	98.69	10.95	87.76	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	05/15/92	98.69	8.37	90.32	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/01/92	98.69	7.20	91.49	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/29/92	98.69	10.33	89.38	1.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	09/11/92	98.69	8.84	89.85	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/12/92	98.69	10.54	88.15	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	11/30/92	98.69	8.78	89.91	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/04/93	98.69	8.82	89.87	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/29/93	98.69	9.21	89.48	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	02/22/93	98.69	9.37	89.32	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	03/11/93	98.69	9.46	89.23	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/28/93	98.69	9.64	89.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	05/06/93	98.69	9.52	89.17	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	05/18/93	98.69	8.59	90.10	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	06/22/93	98.69	7.36	91.33	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/27/93	98.69	7.66	91.03	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	08/17/93	98.69	8.03	90.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	09/27/93	98.69	8.05	90.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/14/93	98.69	7.48	91.21	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/11/94	98.69	8.97	89.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/18/94	98.69	9.26	89.43	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/08/94	98.69	8.05	90.64	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/31/94	98.69	8.74	89.95	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/23/95	98.69	9.09	89.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/13/95	98.69	8.98	89.71	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/27/95	98.69	7.63	91.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/30/95	98.69	8.96	89.73	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/29/96	98.69	9.36	89.33	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/30/96	98.69	9.08	89.61	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/22/96	98.69	8.05	90.64	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-4	10/31/96	98.69	9.13	89.56	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/07/97	98.69	8.97	89.72	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/23/97	98.69	3.80	94.89	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/22/97	98.69	1.85	96.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/24/97	98.69	3.22	95.47	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/30/98	98.69	9.63	89.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/29/98	98.69	3.17	95.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/31/98	98.69	8.45	90.24	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	10/30/98	98.69	9.00	89.69	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/30/99	98.69	9.44	89.25	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	04/29/99	98.69	9.59	89.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/26/99	98.69	8.36	90.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/25/00	98.69	10.04	88.65	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/10/00	98.69	8.57	90.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/23/01	98.69	10.47	88.22	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/25/01	98.69	9.01	89.68	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/07/02	98.69	10.66	88.03	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/25/02	98.69	8.93	89.76	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	01/07/03	98.69	10.41	88.28	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/15/03	98.69	8.64	90.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/22/04	98.69	8.82	89.87	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	07/27/05	98.69	8.81	89.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-4	Oct-05	Well abandoned.																							
S-5	06/19/91	96.89	---	91.78	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/10/91	96.89	6.43	90.64	0.23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/17/91	99.42	9.17	90.44	0.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/26/91	99.42	9.51	90.07	0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	08/02/91	99.42	9.59	89.93	0.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	08/14/91	99.42	10.31	89.22	0.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	09/03/91	99.42	10.46	88.98	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	09/10/91	99.42	10.42	89.01	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	09/19/91	99.42	10.29	89.14	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/04/91	99.42	10.11	89.33	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	11/13/91	99.42	10.16	89.27	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	12/16/91	99.42	---	88.81	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/10/92	99.42	10.65	88.78	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	03/06/92	99.42	10.68	88.78	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/02/92	99.42	10.90	88.54	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/24/92	99.42	10.42	89.00	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	05/15/92	99.42	9.63	89.79	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/01/92	99.42	8.11	91.31	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/29/92	99.42	9.33	90.13	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	09/11/92	99.42	9.85	89.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/12/92	99.42	9.91	89.51	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	11/30/92	99.42	9.86	89.56	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/04/93	99.42	9.91	89.51	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/29/93	99.42	10.31	89.11	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	02/22/93	99.42	10.51	88.92	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	03/11/93	99.42	10.55	88.87	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/28/93	99.42	10.85	88.57	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	05/05/93	99.42	10.68	88.74	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-5	05/18/93	99.42	9.73	89.69	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	06/22/93	99.42	8.22	91.20	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/27/93	99.42	8.62	90.80	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	08/17/93	99.42	9.03	90.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	09/27/93	99.42	8.92	90.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/14/93	99.42	8.03	91.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/11/94	99.42	9.93	89.49	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/18/94	99.42	10.31	89.11	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/08/94	99.42	9.15	90.27	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/31/94	99.42	9.81	89.61	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/23/95	99.42	10.03	89.39	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/13/95	99.42	10.38	89.04	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/27/95	99.42	8.56	90.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/30/95	99.42	10.02	89.40	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/29/96	99.42	10.52	88.90	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/30/96	99.42	10.13	89.29	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/22/96	99.42	9.12	90.30	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/31/96	99.42	10.45	88.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/07/97	99.42	10.08	89.34	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/23/97	99.42	4.32	95.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/22/97	99.42	5.31	94.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/24/97	99.42	2.82	96.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/30/98	99.42	10.06	89.36	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/29/98	99.42	9.36	90.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/31/98	99.42	9.48	89.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	10/30/98	99.42	10.00	89.42	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/30/99	99.42	10.42	89.00	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	04/29/99	99.42	10.62	88.80	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/26/99	99.42	9.31	90.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/25/00	99.42	11.11	88.31	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/10/00	99.42	9.45	89.97	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/23/01	99.42	11.54	87.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/25/01	99.42	10.02	89.40	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/07/02	99.42	11.69	87.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	07/25/02	99.42	9.88	89.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	01/07/03	99.42	11.48	87.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-5	Oct-05	Well abandoned.																							
S-6	06/19/91	99.01	---	90.39	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/10/91	99.01	10.50	88.63	0.15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/17/91	99.01	12.35	86.68	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/26/91	99.01	12.10	86.92	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	08/02/91	99.01	12.53	86.49	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	08/14/91	99.01	13.07	85.95	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	09/03/91	99.01	12.91	86.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	09/10/91	99.01	13.16	85.85	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/04/91	99.01	11.68	87.40	0.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	11/13/91	99.01	11.89	87.14	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/01/92	99.01	8.28	90.73	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/29/92	99.01	9.43	89.64	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	09/11/92	99.01	10.01	89.01	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/12/92	99.01	10.01	89.01	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-6	11/30/92	99.01	10.00	89.01	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/04/93	99.01	10.10	88.91	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/29/93	99.01	10.47	88.54	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	02/22/93	99.01	10.72	88.29	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	03/11/93	99.01	10.68	88.33	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/28/93	99.01	11.43	87.59	0.01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	05/06/93	99.01	13.06	85.95	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	05/18/93	99.01	13.25	85.87	0.14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	06/22/93	99.01	8.96	90.07	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/27/93	99.01	9.13	89.90	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	08/17/93	99.01	9.43	89.60	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	09/27/93	99.01	8.22	90.79	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/14/93	99.01	5.90	93.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/11/94	99.01	8.96	90.05	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/18/94	99.01	10.56	88.45	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/08/94	99.01	9.64	89.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/31/94	99.01	10.13	88.88	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/23/95	99.01	9.90	89.11	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/13/95	99.01	10.38	88.63	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/27/95	99.01	8.89	90.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/30/95	99.01	10.21	88.80	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/29/96	99.01	10.80	88.21	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/30/96	99.01	10.36	88.65	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/22/96	99.01	11.75	87.26	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/31/96	99.01	12.35	86.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/07/97	99.01	11.24	87.77	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/23/97	99.01	11.35	87.66	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/22/97	99.01	12.50	86.51	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/24/97	99.01	12.38	86.63	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/30/98	99.01	12.01	87.00	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/29/98	99.01	11.68	87.33	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/31/98	99.01	11.41	87.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	10/30/98	99.01	9.92	89.09	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/30/99	99.01	10.41	88.60	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	04/29/99	99.01	10.49	88.52	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/26/99	99.01	9.17	89.84	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/25/00	99.01	11.09	87.92	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/10/00	99.01	9.33	89.68	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/23/01	99.01	11.58	87.43	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/25/01	99.01	10.02	88.99	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/07/02	99.01	11.64	87.37	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/25/02	99.01	9.83	89.18	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	01/07/03	99.01	11.51	87.50	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/15/03	99.01	9.46	89.55	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/22/04	99.01	9.70	89.31	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	07/27/05	99.01	9.74	89.27	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-6	Oct-05	Well abandoned.																							
S-7	06/19/91	97.33	---	90.45	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	07/10/91	97.33	7.51	89.88	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	07/26/91	97.33	8.88	88.49	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	08/02/91	97.33	8.97	88.41	0.06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TEH (µg/L)	EPH (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)	C11-C22 Aromatics (µg/L)	TPHg (µg/L)	GRO (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs						---	---	1,000	---	---	---	1,000	1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	---	---	---	---	---	---	---	---	---	---	30	5	1,000	700	---	---	10,000	100
S-7	08/14/91	97.33	9.67	87.84	0.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	09/03/91	97.33	10.37	87.39	0.54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	09/10/91	97.33	10.10	87.33	0.12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	09/19/91	97.33	10.08	87.31	0.08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	10/04/91	97.33	9.63	87.77	0.09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	11/13/91	97.33	9.85	87.52	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	12/16/91	97.33	---	86.75	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	01/10/92	97.33	11.56	86.02	0.31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	03/06/92	97.33	9.16	88.26	0.11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	03/09/92	97.33	---	88.35	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	03/10/92	97.33	---	88.03	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	03/11/92	97.33	---	88.50	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	04/02/92	97.33	9.31	88.02	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-7	04/24/92	97.33	9.46	87.87	Sheen	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	06/19/91	95.65	---	91.02	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	07/10/91	95.65	5.81	89.86	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	07/26/91	95.65	8.30	87.43	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	08/02/91	95.65	7.77	88.09	0.26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	08/14/91	95.65	8.58	87.41	0.43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	09/03/91	95.65	8.62	87.06	0.04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	09/10/91	95.65	8.64	87.14	0.16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	09/19/91	95.65	8.02	87.81	0.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	10/04/91	95.65	8.06	87.61	0.02	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	11/13/91	95.65	8.52	87.51	0.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	12/16/91	95.65	8.73	87.00	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	01/10/92	95.65	9.57	86.14	0.07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	03/06/92	95.65	9.36	86.44	0.19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	03/09/92	95.65	9.11	86.69	0.19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	03/10/92	95.65	---	86.57	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	03/11/92	95.65	---	86.61	Product	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	04/02/92	95.65	9.37	86.54	0.32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-8	04/24/92	95.65	8.18	87.69	0.27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Infiltration Trench																									
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (Cenex, 1992)																									
N	11/13/91	98.36	2.42	95.94	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N	12/16/91	98.36	2.30	96.06	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N	01/10/92	98.36	2.04	96.32	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N	03/06/92	98.36	2.50	95.86	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N	04/02/92	98.36	2.20	96.16	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N	04/24/92	98.36	2.74	95.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M	04/02/92	98.45	2.35	96.10	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M	04/24/92	98.45	2.83	95.62	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S	11/13/91	98.79	2.84	95.95	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S	04/02/92	98.79	2.67	96.12	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S	04/24/92	98.79	3.19	95.60	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 4A
GROUNDWATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPHd	=	Total petroleum hydrocarbons as diesel.
TEH	=	Total extractable hydrocarbons analyzed using MADEP-EPH in 2011.
EPH	=	Extractable petroleum hydrocarbons analyzed using MADEP EPH.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using MADEP EPH.
C11-C22 Aromatics	=	C11-C22 Aromatics analyzed using MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline.
GRO	=	Gasoline-range organic compounds.
TPH	=	Total purgeable/petroleum hydrocarbons.
MTBE	=	Methyl tertiary butyl ether.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
Pesticides	=	Pesticides analyzed using EPA Method 505.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 505.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT.
DO	=	Dissolved oxygen measured in field.
ORP	=	Oxidation reduction potential measured in field.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 4B
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA - PAHs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Acenaph-thene (µg/L)	Anthra-cene (µg/L)	Benzo (a) Anthracene (µg/L)	Benzo (a) Pyrene (µg/L)	Benzo (b) Fluoranthene (µg/L)	Dibenze (a,h) Anthracene (µg/L)	Benzo (k) Fluoranthene (µg/L)	Chrysene (µg/L)	Fluor-anthene (µg/L)	Fluorene (µg/L)	Indeno (1,2,3-CD) Pyrene (µg/L)	Naph-thalene (µg/L)	Pyrene (µg/L)
RBSLs		670	2,100	0.5	0.05	0.5	0.05	5	50	130	1,100	0.5	100	830
DEQ-7 Stds. - Human Health Groundwater		670	2,100	0.5	0.05	0.5	0.05	5	50	130	1,100	0.5	100	830
Monitoring Wells														
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)														
M4	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M4	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M5	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M5 Dup	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M5	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	11/02/00	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	05/14/01	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	05/09/02	72	72	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	05/22/03	<16	<16	**<16**	**<16**	**<16**	**<16**	**<16**	<16	<16	<16	**<16**	<16	<16
M6	06/10/99	Well obstructed; unable to sample.												
M6	02/11/00	<21	<21	**<11**	**<11**	**<21**	**<11**	**<21**	<21	<11	<21	**<21**	<21	<21
M6	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
M6	05/04/04	Well dry.												
M6	05/31/05	Well dry.												
M6	05/31/06	Well dry.												
M7	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M7	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M7	05/22/03	<15	<15	**<15**	**<15**	**<15**	**<15**	**<15**	<15	<15	<15	**<15**	<15	<15
Piezometer Wells														
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; ConocoPhillips, 2007)														
PZ1	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	26	<10
PZ1	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
PZ1	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10

TABLE 4B
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA - PAHs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Acenaph-thene (µg/L)	Anthra-cene (µg/L)	Benzo (a) Anthracene (µg/L)	Benzo (a) Pyrene (µg/L)	Benzo (b) Fluoranthene (µg/L)	Dibenze (a,h) Anthracene (µg/L)	Benzo (k) Fluoranthene (µg/L)	Chrysene (µg/L)	Fluor-anthene (µg/L)	Fluorene (µg/L)	Indeno (1,2,3-CD) Pyrene (µg/L)	Naph-thalene (µg/L)	Pyrene (µg/L)
RBSLs		670	2,100	0.5	0.05	0.5	0.05	5	50	130	1,100	0.5	100	830
DEQ-7 Stds. - Human Health Groundwater		670	2,100	0.5	0.05	0.5	0.05	5	50	130	1,100	0.5	100	830
Monitoring Wells														
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)														
M4	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M4	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M5	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M5 Dup	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M5	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	11/02/00	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	05/14/01	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	05/09/02	72	72	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M5	05/22/03	<16	<16	**<16**	**<16**	**<16**	**<16**	**<16**	<16	<16	<16	**<16**	<16	<16
M6	06/10/99	Well obstructed; unable to sample.												
M6	02/11/00	<21	<21	**<11**	**<11**	**<21**	**<11**	**<21**	<21	<11	<21	**<21**	<21	<21
M6	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
M6	05/04/04	Well dry.												
M6	05/31/05	Well dry.												
M6	05/31/06	Well dry.												
M7	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
M7	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
M7	05/22/03	<15	<15	**<15**	**<15**	**<15**	**<15**	**<15**	<15	<15	<15	**<15**	<15	<15
Piezometer Wells														
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; ConocoPhillips, 2007)														
PZ1	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	26	<10
PZ1	02/11/00	<21	<21	**<10**	**<10**	**<21**	**<10**	**<21**	<21	<10	<21	**<21**	<21	<21
PZ1	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
PZ1 Dup	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
PZ1	11/02/00	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	26	<10
PZ1	05/14/01	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	26	<10
PZ1	05/09/02	68	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	26	<10
PZ1	05/22/03	<15	<15	**<15**	**<15**	**<15**	**<15**	**<15**	<15	<15	<15	**<15**	<15	<15
PZ2	06/10/99	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	26	<10
PZ2	02/11/00	<21	<21	**<11**	**<11**	**<21**	**<11**	**<21**	<21	<11	<21	**<21**	<21	<21
PZ2	05/18/00	<10	<10	**<10**	**<20**	**<10**	**<20**	**<10**	<10	<10	<10	**<10**	<10	<10
PZ2	11/02/00	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	34	**<10**	<10	<10
PZ2	05/14/01	<10	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	<10	**<10**	<10	<10
PZ2	05/09/02	23	<10	**<10**	**<10**	**<10**	**<10**	**<10**	<10	<10	19	**<10**	<10	<10

TABLE 4B
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA - PAHs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPHd	=	Total petroleum hydrocarbons as diesel.
TEH	=	Total extractable hydrocarbons analyzed using MADEP-EPH in 2011.
EPH	=	Extractable petroleum hydrocarbons analyzed using MADEP EPH.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using MADEP EPH.
C11-C22 Aromatics	=	C11-C22 Aromatics analyzed using MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline.
GRO	=	Gasoline-range organic compounds.
TPH	=	Total purgeable/petroleum hydrocarbons.
MTBE	=	Methyl tertiary butyl ether.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
Pesticides	=	Pesticides analyzed using EPA Method 505.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 505.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT.
DO	=	Dissolved oxygen measured in field.
ORP	=	Oxidation reduction potential measured in field.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 4C
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA – PESTICIDES AND PCBS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	alpha-Chlordane (µg/L)	gamma-Chlordane (µg/L)	gamma-BHC (µg/L)	Alachlor (µg/L)	Aldrin (µg/L)	Atrazine (µg/L)	Chlordane (µg/L)	Dieldrin (µg/L)	Endrin (µg/L)	Hepta-chlor (µg/L)	Heptachlor Epoxide (µg/L)	Hexachloro-benzene (µg/L)	Hexachlorocyclo-pentadiene (µg/L)	Methoxy-chlor (µg/L)	cis-Nonachlor (µg/L)	trans-Nonachlor (µg/L)	Simazine (µg/L)	Toxa-phene (µg/L)	Trifluralin (µg/L)	Aroclor-1016 (µg/L)	Aroclor-1221 (µg/L)	Aroclor-1232 (µg/L)	Aroclor-1242 (µg/L)	Aroclor-1248 (µg/L)	Aroclor-1254 (µg/L)	Aroclor-1260 (µg/L)	Aroclor-1262 (µg/L)	Aroclor-1268 (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		1	1	0.2	2	0.02	3	---	---	2	0.08	0.04	0.2	50	40	---	1	4	0.3	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Monitoring Wells																													
Former Midland Empire Packing Company Property, 1988 Transformer Release (Olympus, 1999)																													
M1 (MPC)	06/21/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
M2 (MPC) n	06/21/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Hydropunch® Borings																													
Former Midland Empire Packing Company Property, 1988 Transformer Release (MPC, 1999)																													
B99-22071	03/02/99	<0.01	<0.01	<0.01	<0.2	<0.01	<0.15	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02	<0.05	<0.01	<0.01	<1	**<1**	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5
B99-22072	03/02/99	<0.01	<0.01	<0.01	<0.2	<0.01	<0.15	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02	<0.05	<0.01	<0.01	<1	**<1**	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5
B99-22073	03/02/99	<0.01	<0.01	<0.01	<0.2	<0.01	<0.15	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02	<0.05	<0.01	<0.01	<1	**<1**	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5
B99-22074	03/02/99	<0.01	<0.01	<0.01	<0.2	<0.01	<0.15	<0.1	<0.02	<0.01	<0.01	<0.01	<0.01	<0.02	<0.05	<0.01	<0.01	<1	**<1**	<0.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<0.5
Sump Wells																													
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)																													
S-1	03/02/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
S-2	03/02/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
S-3	03/02/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
S-3 Dup	03/02/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
S-4	03/02/99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 4C
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA – PESTICIDES AND PCBS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPHd	=	Total petroleum hydrocarbons as diesel.
TEH	=	Total extractable hydrocarbons analyzed using MADEP-EPH in 2011.
EPH	=	Extractable petroleum hydrocarbons analyzed using MADEP EPH.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using MADEP EPH.
C11-C22 Aromatics	=	C11-C22 Aromatics analyzed using MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline.
GRO	=	Gasoline-range organic compounds.
TPH	=	Total purgeable/petroleum hydrocarbons.
MTBE	=	Methyl tertiary butyl ether.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
Pesticides	=	Pesticides analyzed using EPA Method 505.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 505.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT.
DO	=	Dissolved oxygen measured in field.
ORP	=	Oxidation reduction potential measured in field.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 4D
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA - METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Lead (mg/L)
RBSLs		---
DEQ-7 Stds. - Human Health Groundwater		0.015
Monitoring Wells		
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)		
M5	03/17/94	0.008
M5	04/04/94	0.002
M5	04/26/94	0.005
M5	05/12/94	<0.001
M5	05/31/94	0.002
M5	06/14/94	0.004
M5	09/16/94	<0.001
M5	12/13/94	<0.001
Recovery Wells		
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)		
RW4	02/10/94	<0.001
RW4	02/18/94	<0.001
RW4	02/24/94	<0.001
RW4	03/03/94	<0.001
RW4	03/17/94	<0.002
RW4	04/04/94	<0.001
RW4	04/26/94	0.001
RW4	05/12/94	0.003
RW4	05/31/94	0.001
RW4	06/14/94	0.002
RW4	09/16/94	0.003
RW4	12/13/94	0.001
RW5	02/10/94	<0.001
RW5	02/18/94	<0.001
RW5	02/24/94	<0.001
RW5	03/03/94	<0.001
RW5	03/17/94	<0.002
RW5	04/04/94	0.004
RW5	04/26/94	0.003
RW5	05/12/94	<0.001
RW5	05/31/94	0.011
RW5	06/14/94	0.003
RW5	09/16/94	**0.016**
RW5	12/13/94	0.011

TABLE 4D
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA - METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPHd	=	Total petroleum hydrocarbons as diesel.
TEH	=	Total extractable hydrocarbons analyzed using MADEP-EPH in 2011.
EPH	=	Extractable petroleum hydrocarbons analyzed using MADEP EPH.
C9-C18 Aliphatics	=	C9-C18 Aliphatics analyzed using MADEP EPH.
C19-C36 Aliphatics	=	C19-C36 Aliphatics analyzed using MADEP EPH.
C11-C22 Aromatics	=	C11-C22 Aromatics analyzed using MADEP EPH.
TPHg	=	Total petroleum hydrocarbons as gasoline.
GRO	=	Gasoline-range organic compounds.
TPH	=	Total purgeable/petroleum hydrocarbons.
MTBE	=	Methyl tertiary butyl ether.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260
Pesticides	=	Pesticides analyzed using EPA Method 505.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 505.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT.
DO	=	Dissolved oxygen measured in field.
ORP	=	Oxidation reduction potential measured in field.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 4E
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA – PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	DO (mg/L)	ORP (mV)	Specific Conductance (µmhos/cm)	pH (field) (su)	Temperature (ºC)
RBSLs		---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	---	---
Monitoring Wells						
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)						
MW6	07/22/08	0.04	-233	1,188	6.54	16.6
MW7	07/22/08	0.02	-280	1,293	6.46	15.4
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)						
M9	01/18/07	0.22	-125.7	1,268	7.14	11.3
Tract 1-A, ASI Industrial Investigation (Portage, 2011)						
MW01	09/08/11	3.65	132	4,507	6.97	17.69
MW02	09/08/11	2.75	-52.7	3,131	7.69	17.37
MW03	09/08/11	3.96	116.3	4,380	6.94	17.42

Notes:
Surveyed Elevation = Elevation of measuring point; datum is mean sea level.
DTW = Depth to water.
GW Elev. = Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL = Non-aqueous phase liquid.
TPHd = Total petroleum hydrocarbons as diesel.
TEH = Total extractable hydrocarbons analyzed using MADEP-EPH in 2011.
EPH = Extractable petroleum hydrocarbons analyzed using MADEP EPH.
C9-C18 Aliphatics = C9-C18 Aliphatics analyzed using MADEP EPH.
C19-C36 Aliphatics = C19-C36 Aliphatics analyzed using MADEP EPH.
C11-C22 Aromatics = C11-C22 Aromatics analyzed using MADEP EPH.
TPHg = Total petroleum hydrocarbons as gasoline.
GRO = Gasoline-range organic compounds.
TPH = Total purgeable/petroleum hydrocarbons.
MTBE = Methyl tertiary butyl ether.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
Pesticides = Pesticides analyzed using EPA Method 505.
PCBs = Polychlorinated biphenyls analyzed using EPA Method 505.

TABLE 4E
ADDITIONAL GROUNDWATER MONITORING AND SAMPLING DATA – PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	DO (mg/L)	ORP (mV)	Specific Conductance (µmhos/cm)	pH (field) (su)	Temperature (ºC)
RBSLs		---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	---	---

Notes:

Lead	=	Lead analyzed using EPA Method 200.8 LUFT.
DO	=	Dissolved oxygen measured in field.
ORP	=	Oxidation reduction potential measured in field.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
RBSLs						1,000	1,000	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	5	1,000	530	10,000
Surface Water Points											
Yegen Ditch, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008; Unified, 1993)											
YR-SW-1	07/25/02	---	---	---	---	---	---	<1	<1	<1	<3
Y-1	11/13/91	---	---	---	---	**3,700**	---	---	---	---	---
Y-2	06/18/91	---	---	---	---	---	<100	<0.50	<0.50	<0.50	<1.0
Y-2	07/12/91	---	---	---	---	---	300	<0.50	<0.50	<0.50	<1.0
Y-2	09/19/91	---	---	---	---	---	<100	<0.50	<0.50	<0.50	<1.0
Y-2	01/10/92	---	---	---	---	<500	---	<0.50	<0.50	<0.50	<1.0
Y-2	04/02/92	---	---	---	---	<500	---	0.79	<0.50	<0.50	<1.0
Y-2	07/02/92	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
Y-3	06/18/91	96.80	---	---	---	---	<100	<0.50	<0.50	<0.50	<1.0
Y-3	07/12/91	96.80	---	---	---	---	200	<0.50	<0.50	<0.50	<1.0
Y-3	09/19/91	96.80	---	---	---	---	100	<0.50	<0.50	<0.50	<0.50
Y-3	11/13/91	96.80	5.10	91.70	No	---	---	---	---	---	---
Y-3	12/16/91	96.80	5.20	91.60	No	---	---	---	---	---	---
Y-3	01/10/92	96.80	5.30	91.50	No	<500	---	<0.50	<0.50	<0.50	<1.0
Y-3	03/06/92	96.80	5.20	91.60	No	---	---	---	---	---	---
Y-3	04/02/92	96.80	5.50	91.30	No	---	---	---	---	---	---
Y-3	04/24/92	96.80	5.50	91.30	No	---	---	---	---	---	---
Y-3	05/15/92	96.80	5.24	91.56	No	---	---	---	---	---	---
Y-3	07/01/92	96.80	4.96	91.84	No	---	---	---	---	---	---
Y-3	07/29/92	96.80	5.32	91.48	No	---	---	---	---	---	---
Y-3	09/11/92	96.80	5.10	91.70	No	---	---	---	---	---	---
Y-3	10/12/92	96.80	5.15	91.65	No	---	---	---	---	---	---
Y-3	11/30/92	96.80	4.28	92.52	No	---	---	---	---	---	---
Y-3	01/29/93	96.80	5.26	91.54	No	---	---	---	---	---	---
Y-3	04/28/93	96.80	I	---	---	---	---	---	---	---	---
Y-3	05/06/93	96.80	4.56	92.24	No	---	---	---	---	---	---
Y-3	05/18/93	96.80	3.46	93.34	No	---	---	---	---	---	---

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
RBSLs						1,000	1,000	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	5	1,000	530	10,000
Y-3	06/22/93	96.80	4.92	91.88	No	---	---	---	---	---	---
Y-3	07/27/93	96.80	5.02	91.78	No	---	---	---	---	---	---
Y-3	08/17/93	96.80	5.08	91.72	No	---	---	---	---	---	---
Y-3	09/27/93	96.80	4.12	92.68	No	---	---	---	---	---	---
Y-3	10/14/93	96.80	5.16	91.64	No	---	---	---	---	---	---
Y-3	01/11/94	96.80	5.25	91.55	No	---	---	---	---	---	---
Y-3	04/18/94	96.80	5.57	91.23	No	---	---	---	---	---	---
Y-3	07/08/94	96.80	5.28	91.52	No	---	---	---	---	---	---
Y-3	10/31/94	96.80	5.32	91.48	No	---	---	---	---	---	---
Y-3	01/23/95	96.80	5.17	91.63	No	---	---	---	---	---	---
Y-3	04/13/95	96.80	5.50	91.30	No	---	---	---	---	---	---
Y-3	07/27/95	96.80	5.20	91.60	No	---	---	---	---	---	---
Y-3	10/30/95	96.80	5.30	91.50	No	---	---	---	---	---	---
Y-3	01/29/96	96.80	5.25	91.55	No	---	---	---	---	---	---
Y-3	04/30/96	96.80	5.32	91.48	No	---	---	---	---	---	---
Y-3	07/22/96	96.80	---	---	---	---	---	---	---	---	---
Y-3	10/31/96	96.80	5.40	91.40	No	---	---	---	---	---	---
Y-3	01/07/97	96.80	5.18	91.62	No	---	---	---	---	---	---
Y-3	04/23/97	96.80	9.42	87.38	No	---	---	---	---	---	---
Y-3	07/22/97	96.80	5.11	91.69	No	---	---	---	---	---	---
Y-3	10/24/97	96.80	5.31	91.49	No	---	---	---	---	---	---
Y-3	01/30/98	96.80	5.22	91.58	No	---	---	---	---	---	---
Y-3	04/29/98	96.80	4.50	92.30	No	---	---	---	---	---	---
Y-3	07/31/98	96.80	5.70	91.10	No	---	---	---	---	---	---
Y-3	10/30/98	96.80	4.10	92.70	No	---	---	---	---	---	---
Y-4	11/13/91	94.98	4.24	90.74	No	---	---	---	---	---	---
Y-4	12/16/91	94.98	4.30	90.68	No	---	---	---	---	---	---
Y-4	01/10/92	94.98	4.30	90.68	No	---	---	---	---	---	---
Y-4	03/06/92	94.98	4.30	90.68	No	---	---	---	---	---	---
Y-4	04/02/92	94.98	4.45	90.53	No	---	---	---	---	---	---
Y-4	04/24/92	94.98	4.52	90.46	No	---	---	---	---	---	---
Y-4	05/15/92	94.98	4.22	90.76	No	---	---	---	---	---	---
Y-4	07/01/92	94.98	4.07	90.91	No	---	---	---	---	---	---
Y-4	07/29/92	94.98	4.42	90.56	No	---	---	---	---	---	---
Y-4	09/11/92	94.98	4.15	90.83	No	---	---	---	---	---	---

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
RBSLs						1,000	1,000	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	5	1,000	530	10,000
Y-4	10/12/92	94.98	4.27	90.71	No	---	---	---	---	---	---
Y-4	11/30/92	94.98	5.24	89.74	No	---	---	---	---	---	---
Y-4	01/29/93	94.98	4.36	90.62	No	---	---	---	---	---	---
Y-4	04/28/93	94.98	I	---	---	---	---	---	---	---	---
Y-4	05/06/93	94.98	I	---	---	---	---	---	---	---	---
Y-4	05/18/93	94.98	I	---	---	---	---	---	---	---	---
Y-4	06/22/93	94.98	3.52	91.46	No	---	---	---	---	---	---
Y-4	07/27/93	94.98	4.32	90.66	No	---	---	---	---	---	---
Y-4	08/17/93	94.98	4.38	90.60	No	---	---	---	---	---	---
Y-4	09/27/93	94.98	4.34	90.64	No	---	---	---	---	---	---
Y-4	10/14/93	94.98	4.42	90.56	No	---	---	---	---	---	---
Y-4	01/11/94	94.98	4.54	90.44	No	---	---	---	---	---	---
Y-4	04/18/94	94.98	4.87	90.11	No	---	---	---	---	---	---
Y-4	07/08/94	94.98	4.51	90.47	No	---	---	---	---	---	---
Y-4	10/31/94	94.98	4.56	90.42	No	---	---	---	---	---	---
Y-4	01/23/95	94.98	4.60	90.38	No	---	---	---	---	---	---
Y-4	04/13/95	94.98	I	---	No	---	---	---	---	---	---
Y-4	07/27/95	94.98	4.44	90.54	No	---	---	---	---	---	---
Y-4	10/30/95	94.98	4.76	90.22	No	---	---	---	---	---	---
Y-4	01/29/96	94.98	4.76	90.22	No	---	---	---	---	---	---
Y-4	04/30/96	94.98	4.78	90.20	No	---	---	---	---	---	---
Y-4	07/22/96	94.98	---	---	---	---	---	---	---	---	---
Y-4	10/31/96	94.98	4.60	90.38	No	---	---	---	---	---	---
Y-4	01/07/97	94.98	4.51	90.47	No	---	---	---	---	---	---
Y-4	04/23/97	94.98	4.77	90.21	No	---	---	---	---	---	---
Y-4	07/22/97	94.98	4.30	90.68	No	---	---	---	---	---	---
Y-5	06/18/91	97.39	---	---	---	---	<100	<0.50	<0.50	<0.50	<1.0
Y-5	07/12/91	97.39	---	---	---	---	200	<0.50	<0.50	<0.50	<1.0
Y-5	09/19/91	97.39	---	---	---	---	200	<0.50	<0.50	<0.50	<0.50
Y-5	11/13/91	97.39	9.05	88.34	No	<500	---	---	---	---	---
Y-5	12/16/91	97.39	9.10	88.29	No	---	---	---	---	---	---
Y-5	01/10/92	97.39	9.10	88.29	No	---	---	---	---	---	---
Y-5	03/06/92	97.39	9.10	88.29	No	---	---	---	---	---	---
Y-5	04/02/92	97.39	---	---	---	<500	---	0.53	<0.50	<0.50	<1.0
Y-5	04/24/92	97.39	9.20	88.19	No	---	---	---	---	---	---

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
RBSLs						1,000	1,000	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	5	1,000	530	10,000
Y-5	05/15/92	97.39	9.02	88.37	No	---	---	---	---	---	---
Y-5	07/01/92	97.39	6.70	90.69	No	---	---	---	---	---	---
Y-5	07/02/92	97.39	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
Y-5	07/29/92	97.39	9.04	88.35	No	---	---	---	---	---	---
Y-5	09/11/92	97.39	8.70	88.69	No	---	---	---	---	---	---
Y-5	10/12/92	97.39	8.90	88.49	No	---	---	---	---	---	---
Y-5	11/30/92	97.39	9.03	88.36	No	---	---	---	---	---	---
Y-5	01/29/93	97.39	9.06	88.33	No	---	---	---	---	---	---
Y-5	04/28/93	97.39	I	---	---	---	---	---	---	---	---
Y-5	05/06/93	97.39	9.15	88.24	No	---	---	---	---	---	---
Y-5	05/18/93	97.39	5.75	91.64	No	---	---	---	---	---	---
Y-5	06/22/93	97.39	5.84	91.55	No	---	---	---	---	---	---
Y-5	07/27/93	97.39	8.40	88.99	No	---	---	---	---	---	---
Y-5	08/17/93	97.39	8.80	88.59	No	---	---	---	---	---	---
Y-5	09/27/93	97.39	8.72	88.67	No	---	---	---	---	---	---
Y-5	10/14/93	97.39	8.78	88.61	No	---	---	---	---	---	---
Y-5	01/11/94	97.39	8.92	88.47	No	---	---	---	---	---	---
Y-5	04/18/94	97.39	9.24	88.15	No	---	---	---	---	---	---
Y-5	07/08/94	97.39	8.82	88.57	No	---	---	---	---	---	---
Y-5	10/31/94	97.39	8.89	88.50	No	---	---	---	---	---	---
Y-5	01/23/95	97.39	9.02	88.37	No	---	---	---	---	---	---
Y-5	04/13/95	97.39	9.06	88.33	No	---	---	---	---	---	---
Y-5	07/27/95	97.39	8.90	88.49	No	---	---	---	---	---	---
Y-5	10/30/95	97.39	9.00	88.39	No	---	---	---	---	---	---
Y-5	01/29/96	97.39	9.17	88.22	No	---	---	---	---	---	---
Y-5	04/30/96	97.39	9.15	88.24	No	---	---	---	---	---	---
Y-5	07/22/96	97.39	---	---	---	---	---	---	---	---	---
Y-5	10/31/96	97.39	8.90	88.49	No	---	---	---	---	---	---
Y-5	01/07/97	97.39	9.03	88.36	No	---	---	---	---	---	---
Y-5	04/23/97	97.39	5.51	91.88	No	---	---	---	---	---	---
Y-5	07/22/97	97.39	8.75	88.64	No	---	---	---	---	---	---

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
RBSLs						1,000	1,000	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	5	1,000	530	10,000
1989 Surface Water Points (Ecology, 1989c)											
Lockwood Water User's District Intake on the Yellowstone River											
Y0-SW-9	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Lockwood Water User's District Treatment Building											
Y0-SW-10	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Montana Department of Transportation Pond											
Y0-SW-7	07/10/89	---	---	---	Oily Sheen	---	---	<5	<5	<5	<5
Yegen Ditch											
Y0-SW-4	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Y0-SW-5	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Yellowstone River											
Y0-SW-1	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Y0-SW-3	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Yellowstone River and Yegen Ditch											
Y0-SW-2	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5
Y0-SW-6 a	07/10/89	---	---	---	---	---	---	<5	<5	<5	<5

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Surveyed Elevation (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
RBSLs						1,000	1,000	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater						---	---	5	1,000	530	10,000
River Samples											
Yellowstone River, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)											
R-1	07/02/91	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
R-1	10/12/92	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
R-1	01/19/93	Unable to sample; location frozen.									
R-2	07/02/91	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
R-2	10/12/92	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
R-2	01/19/93	Unable to sample; location frozen.									
R-2	04/28/93	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0
R-2	07/27/93	---	---	---	---	---	---	<0.50	<0.50	<0.50	<1.0

TABLE 5A
SURFACE WATER MONITORING AND SAMPLING DATA
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5B
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – VOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Ace-tone (µg/L)	Bromodi-chloro-methane (µg/L)	Bromo-form (µg/L)	Bromo-methane (µg/L)	2-butanone (µg/L)	c-1,3-dichloro-propene (µg/L)	Carbon disulfide (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloro-form (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)	1,1-Dichloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	5.5	43	47	---	3.4	---	2.3	100	---	57	30	4	0.57	3.8
1989 Surface Water Points (Ecology, 1989c)																
Lockwood Water User's District Intake on the Yellowstone River																
Y0-SW-9	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Lockwood Water User's District Treatment Building																
Y0-SW-10	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Montana Department of Transportation Pond																
Y0-SW-7	07/10/89	28	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Yegen Ditch																
Y0-SW-4	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Y0-SW-5	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Yellowstone River																
Y0-SW-1	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Y0-SW-3	07/10/89	19	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Yellowstone River and Yegen Ditch																
Y0-SW-2	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**
Y0-SW-6 a	07/10/89	<10	<5	<5	<10	<10	**<5**	<5	**<5**	<5	<10	<5	<10	**<5**	**<5**	**<5**

TABLE 5B
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – VOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5C
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – VOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	1,2-dichloro-propane (µg/L)	t-1,3-dichloro-propene (µg/L)	2-hexanone (µg/L)	Methylene chloride (µg/L)	4-Methyl-2-pentanone (µg/L)	Styrene (µg/L)	Tetra-chloro-ethene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	Tri-chloro-ethene (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	Vinyl Acetate (µg/L)	Vinyl Chloride (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		5	2	---	5	---	100	5	1.7	5	---	---	---	0.25
1989 Surface Water Points (Ecology, 1989c)														
Lockwood Water User's District Intake on the Yellowstone River														
Y0-SW-9	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Lockwood Water User's District Treatment Building														
Y0-SW-10	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Montana Department of Transportation Pond														
Y0-SW-7	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Yegen Ditch														
Y0-SW-4	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Y0-SW-5	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Yellowstone River														
Y0-SW-1	07/10/89	<5	**<5**	<10	2j	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Y0-SW-3	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Yellowstone River and Yegen Ditch														
Y0-SW-2	07/10/89	<5	**<5**	<10	1j	<10	<5	<5	<5	<5	<5	<5	<10	**<10**
Y0-SW-6 a	07/10/89	<5	**<5**	<10	<5	<10	<5	<5	<5	<5	<5	<5	<10	**<10**

TABLE 5C
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – VOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5D
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Acenaphthene (µg/L)	Acenapthylene (µg/L)	Anthracene (µg/L)	Benzyl alcohol (µg/L)	Benzo (a) anthracene (µg/L)	Benzo (a) pyrene (µg/L)	Benzo (b) fluoranthene (µg/L)	Benzo (g,h,i) perylene (µg/L)	Benzo (k) fluoranthene (µg/L)	Benzoic acid (µg/L)
RBSLs		670	---	2,100	---	0.5	0.05	0.5	---	5	---
DEQ-7 Stds. - Human Health Groundwater		670	---	8,300	---	0.038	0.038	0.038	---	0.038	---
1989 Surface Water Points (Ecology, 1989c)											
Lockwood Water User's District Intake on the Yellowstone River											
Y0-SW-9	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Lockwood Water User's District Treatment Building											
Y0-SW-10	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Montana Department of Transportation Pond											
Y0-SW-7	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Yegen Ditch											
Y0-SW-4	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Y0-SW-5	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Yellowstone River											
Y0-SW-1	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Y0-SW-3	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Yellowstone River and Yegen Ditch											
Y0-SW-2	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50
Y0-SW-6 a	07/10/89	<10	<10	<10	<10	**<10**	**<10**	**<10**	<10	**<10**	<50

TABLE 5D
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5E
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Bis(2-chloro-ethyl)ether (µg/L)	Bis(2-chloro-ethoxy)methane (µg/L)	Bis(2-Chloro-isopropyl)ether (µg/L)	Bis(2-Ethyl-hexyl) Phthalate (µg/L)	4-Bromopheynl-phenylether (µg/L)	Butylbenzyl-phthalate (µg/L)	4-Chloroaniline (µg/L))	2-Chloro-naphthalene (µg/L)	2-Chloro-phenol (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		0.30	---	1,400	---	---	1,500	---	1,000	81
1989 Surface Water Points (Ecology, 1989c)										
Lockwood Water User's District Intake on the Yellowstone River										
Y0-SW-9	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Lockwood Water User's District Treatment Building										
Y0-SW-10	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Montana Department of Transportation Pond										
Y0-SW-7	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Yegen Ditch										
Y0-SW-4	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Y0-SW-5	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Yellowstone River										
Y0-SW-1	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Y0-SW-3	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Yellowstone River and Yegen Ditch										
Y0-SW-2	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10
Y0-SW-6 a	07/10/89	**<10**	<10	<10	<10	<10	<10	<10	<10	<10

TABLE 5E
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5F
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	4-Chloro-3-methylphenol (µg/L)	4-Chlorophenyl-phenylether (µg/L)	Chrysene (µg/L)	Dibenzo-furan (µg/L)	Dibenz(a,h) Anthracene (µg/L)	3,3'-Dichloro-benzidine (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	2,4-Dichloro-phenol (µg/L)	Diethyl-phthalate (µg/L)	2,4-Dimethyl-phenol (µg/L)	Dimethyl phthalate (µg/L)
RBSLs		---	---	50	---	0.05	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		3,000	---	0.038	---	0.038	0.21	420	320	75	77	17,000	380	270,000
1989 Surface Water Points (Ecology, 1989c)														
Lockwood Water User's District Intake on the Yellowstone River														
Y0-SW-9	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Lockwood Water User's District Treatment Building														
Y0-SW-10	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Montana Department of Transportation Pond														
Y0-SW-7	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Yegen Ditch														
Y0-SW-4	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Y0-SW-5	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Yellowstone River														
Y0-SW-1	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Y0-SW-3	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Yellowstone River and Yegen Ditch														
Y0-SW-2	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10
Y0-SW-6 a	07/10/89	<10	<10	**<10**	<10	**<10**	**<20**	<10	<10	<10	<10	<10	<10	<10

TABLE 5F
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5G
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Di-n-Butyl-pthalate (µg/L)	2,4-dinitro-phenol (µg/L)	4,6-Dinitro-2-Methylphenol (µg/L)	Di-n-Octyl Phthalate	2,4-dinitro-toluene (µg/L)	2,6-dinitro-toluene (µg/L)	Fluro-anthene (µg/L)	Fluorene (µg/L)	Hexachloro-benzene (µg/L)	Hexachloro-butadiene (µg/L)	Hexachloro-ethane (µg/L)	Hexachloro-cyclopentadiene (µg/L)	Ideno (1,2,3-cd) pyrene (µg/L)
RBSLs		---	---	---	---	---	---	130	1,100	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	13	---	---	---	130	1,100	0.0028	4.4	14	40	0.038
1989 Surface Water Points (Ecology, 1989c)														
Lockwood Water User's District Intake on the Yellowstone River														
Y0-SW-9	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Lockwood Water User's District Treatment Building														
Y0-SW-10	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Montana Department of Transportation Pond														
Y0-SW-7	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Yegen Ditch														
Y0-SW-4	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Y0-SW-5	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Yellowstone River														
Y0-SW-1	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Y0-SW-3	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Yellowstone River and Yegen Ditch														
Y0-SW-2	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**
Y0-SW-6 a	07/10/89	<10	<50	**<50**	<10	<50	<10	<10	<10	**<10**	**<10**	<10	<10	**<10**

TABLE 5G
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5H
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Isophrone (µg/L)	2-Methyl-naphthalene (µg/L)	2-Methyl-phenol (µg/L)	4-Methyl-phenol (µg/L)	Naphthalene (µg/L)	2-Nitro-aniline (µg/L)	3-Nitro-aniline (µg/L)	4-Nitro-analine (µg/L)	Nitro-benzene (µg/L)	2-Nitro-phenol (µg/L)	4-Nitro-phenol (µg/L)	n-Nitrosodi-diphenylamine (µg/L)
RBSLs		---	---	---	---	100	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	---	100	---	---	---	---	---	---	33
1989 Surface Water Points (Ecology, 1989c)													
Lockwood Water User's District Intake on the Yellowstone River													
Y0-SW-9	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Lockwood Water User's District Treatment Building													
Y0-SW-10	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Montana Department of Transportation Pond													
Y0-SW-7	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Yegen Ditch													
Y0-SW-4	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Y0-SW-5	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Yellowstone River													
Y0-SW-1	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Y0-SW-3	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Yellowstone River and Yegen Ditch													
Y0-SW-2	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10
Y0-SW-6 a	07/10/89	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<50	<10

TABLE 5H
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5I
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	N-Nitroso-Di-n-Propylamine (µg/L)	Pentachloro-phenol (µg/L)	Phenathrene (µg/L)	Phenol (µg/L)	Pyrene (µg/L)	2,4,5-trichloro-phenol (µg/L)	2,4,6-trichloro-phenol (µg/L)	1,2,4-Trichloro-benzene (µg/L)
RBSLs		---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		0.05	1	---	300	830	1,800	14	35
1989 Surface Water Points (Ecology, 1989c)									
Lockwood Water User's District Intake on the Yellowstone River									
Y0-SW-9	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Lockwood Water User's District Treatment Building									
Y0-SW-10	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Montana Department of Transportation Pond									
Y0-SW-7	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Yegen Ditch									
Y0-SW-4	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Y0-SW-5	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Yellowstone River									
Y0-SW-1	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Y0-SW-3	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Yellowstone River and Yegen Ditch									
Y0-SW-2	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10
Y0-SW-6 a	07/10/89	**<10**	**<50**	<10	<10	<10	<50	<10	<10

TABLE 5I
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – SVOCS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5J
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Aluminum (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Organic Lead (mg/L)	Sodium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
DEQ-7 Surface Water Standards		0.087	0.0056	0.010	1.0	0.004	0.005	---	0.1	---	1.3	0.3	0.015	---	---	---	0.05	0.05	0.1	---	0.050	0.1	0.00024	---	2
Surface Water Points																									
Former Tetraethyl Plant Vicinity																									
YSDB-SW-1299	03/04/00-04/21/00	---	---	---	---	---	---	---	---	---	---	---	**170**	96	---	---	---	---	---	---	---	---	---	---	---
Yegen Ditch, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008; Unified, 1993)																									
Y-2	06/19/91	---	---	---	---	---	---	---	---	---	---	---	**0.03**	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	10/12/91	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	05/18/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	05/26/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	06/09/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	07/24/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	08/07/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	08/14/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	08/19/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	08/28/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	09/03/92	---	---	---	---	---	---	---	---	---	---	---	0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	09/10/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	09/18/92	---	---	---	---	---	---	---	---	---	---	---	**0.04**	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	09/25/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	10/02/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	10/09/92	---	---	---	---	---	---	---	---	---	---	---	<0.01	---	---	---	---	---	---	---	---	---	---	---	---
1989 Surface Water Points (Ecology, 1989c)																									
Lockwood Water User's District Intake on the Yellowstone River																									
Y0-SW-9	07/10/89	**1.81d,m**	**<0.235**	**<0.0538m**	0.108b	<0.00047	<0.0014	20.6	<0.0018	<0.004	<0.0023	**1.81d**	0.002b,d,m	---	12.2d,e	6.41	0.0386	<0.0002c	<0.0186	2.12b	<0.002	<0.0035m	**<0.0022m**	0.0042b	0.0076b,d
Lockwood Water User's District Treatment Building																									
Y0-SW-10	07/10/89	**1.83d,m**	**<0.235**	0.0061b,m	0.108b	<0.00047	<0.0014	20.7	0.0021b	<0.004	0.0026b	**1.89d**	0.002b,m	---	12.3d,e	6.55	0.0443	<0.0002c	<0.0186	2.2b	<0.002	<0.0035m	**<0.0022m**	0.0046b	0.0092b,d
Montana Department of Transportation Pond																									
Y0-SW-7	07/10/89	0.0466b,d,m	**<0.235**	**0.027d,m**	0.132b	<0.00047	<0.0014	238	0.003b	<0.004	0.0063b	**510**	**0.035d,m**	---	277d,e	165	**1.03**	<0.0002c	<0.0186	30.4	<0.002	<0.0035m	**<0.0222m**	<0.003	0.0095b,d
Yegen Ditch																									
Y0-SW-4	07/10/89	**2.21m**	**<0.235**	<0.0054m	0.129b	<0.00047	<0.0014	45.2	0.0023b	<0.004	0.0052b	**2.33**	0.004b,m	---	45.1d,e	19.8	0.0499	<0.0002c	<0.0186	4.77b	<0.00068d	<0.0035m	**<0.0222m**	0.0063b	0.0187b,d
Y0-SW-5	07/10/89	**2.38d,m**	**<0.235**	<0.0054m	0.131b	<0.00047	<0.0014	45.6	<0.0018	<0.004	0.005b	**2.6**	0.005d,m	---	44.8d,e	19.7	**0.0539**	<0.0002c	<0.0186	4.75b	<0.004d	<0.0035m	**<0.0222m**	0.0066b	0.0241d
Yellowstone River																									
Y0-SW-1	07/10/89	**1.89d,m**	**<0.235**	<0.0054m	0.107b,d	<0.00047	<0.0014	20.2	<0.0018	<0.004	0.0059b,d	**1.64d**	0.002b,d	---	12.5d,e	6.58	0.0351	<0.0002c	<0.0186	2.25b	<0.002	<0.0035m	**<0.0022m**	0.0042b,d	0.0092b,d
Y0-SW-3	07/10/89	**2.53d,m**	**<0.235**	<0.0054m	0.116b	<0.00047	<0.0014	23.5	0.002b	<0.004	0.0026b	**2.37**	0.003b,d,m	---	16.4d,e	8.36	0.0459	<0.0002c	<0.0186	2.64b	0.0026b,d	<0.0035m	**<0.0022m**	0.0056b	0.0126b,d

TABLE 5J
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	Aluminum (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Organic Lead (mg/L)	Sodium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
DEQ-7 Surface Water Standards		0.087	0.0056	0.010	1.0	0.004	0.005	---	0.1	---	1.3	0.3	0.015	---	---	---	0.05	0.05	0.1	---	0.050	0.1	0.00024	---	2
Yellowstone River and Yegen Ditch																									
Y0-SW-2	07/10/89	**5.65d,m**	**<0.0235**	**0.0172b,d,m**	0.168b	<0.00047	<0.0014	45.4	0.0093b	<0.004	0.016b	**6.28**	**0.016b,d,m**	---	37.1d,e	19.6	**0.115**	<0.0002c	<0.0186	4.81b	0.003b,d	<0.0035m	**<0.0222m**	0.0133b,d	0.048b,d
Y0-SW-6 a	07/10/89	**4.45m**	**<0.235**	0.0064b,m	0.154b	<0.00047	<0.0014	46.2	0.0091b	<0.004	0.0093b	**4.88**	0.013m	---	43.4d,e	20.4	**0.0883**	<0.0002c	<0.0186	4.92b	0.0034b	<0.0035m	**<0.0222m**	0.0122b	0.0428d

TABLE 5J
ADDITIONAL SURFACE WATER MONITORING AND SAMPLING DATA – METALS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 8260 or 8020.
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 5K
ADDITIONAL SURFACE WATER ANALYTICAL RESULTS – PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Specific Conductance (µmhos/cm)	pH (field) (su)	Temperature (ºC)
RBSLs		---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---
1989 Surface Water Points (Ecology, 1989c)				
Lockwood Water User's District Intake on the Yellowstone River				
Y0-SW-9	07/10/89	170	7.65	25
Lockwood Water User's District Treatment Building				
Y0-SW-10	07/10/89	180	8.24	28
Montana Department of Transportation Pond				
Y0-SW-7	07/10/89	2,800	8.13	21
Yegen Ditch				
Y0-SW-4	07/10/89	540	6.37	25
Y0-SW-5	07/10/89	540	6.55	28
Yellowstone River				
Y0-SW-1	07/10/89	180	6.47	24
Y0-SW-3	07/10/89	240	6.49	24
Yellowstone River and Yegen Ditch				
Y0-SW-2	07/10/89	400	6.33	23
Y0-SW-6 a	07/10/89	400	6.33	23

TABLE 5K
ADDITIONAL SURFACE WATER ANALYTICAL RESULTS – PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

Surveyed Elevation	=	Elevation of measuring point; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level. Surveyed Elevation - DTW + (product thickness x 0.8).
NAPL	=	Non-aqueous phase liquid.
TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH; prior to 1992, analyzed using EPA Method 826
VOCs	=	Volatile organic compounds.
SVOCs	=	Semi-volatile organic compounds.
Lead	=	Lead analyzed using EPA Method 200.8 LUFT in 2000.
Organic Lead	=	Organic lead analyzed using EPA Method 200.8 LUFT.
SC	=	Standard conductance measured in field.
pH (field)	=	pH measured in the field.
Temperature	=	Water temperature measured in field.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6A
WATER ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	NAPL (feet)	TPH (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs			---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater			---	5	1,000	700	---	---	10,000	100
1991 Water Samples Collected from Underneath Tanks (DMA, 1991)										
Department of Military Affairs Property, Pipeline Relocation Trench										
91-13258 (West Tank)	04/17/91	---	327,000	---	---	---	---	---	---	---
91-13259 (East Tank)	04/17/91	---	28,000	---	---	---	---	---	---	---
1991 Trench Investigation (Energy, 1991)										
Between Building on Montana Department of Transportation Property and Tract D										
YO-SO-1	11/19/91	---	---	2.5	<2.5	3.5	---	---	18	---
YO-SO-1 Dup	11/19/91	---	---	3.0	<2.5	2.9	---	---	26	---
1994 Excavation Water Samples (DEQ, 1994)										
Conoco Seminoe Pipeline, North 1st Avenue										
Conoco Pipeline Pit #1	08/15/94	Oil	---	**30.8**	1.2	0.6	4.7	2.1	6.8	<0.5
Conoco Pond #2	08/15/94	Oily Material	---	2.1	<0.5	0.6	0.5	0.8	0.13	0.5

TABLE 6A
WATER ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6B
ADDITIONAL WATER ANALYTICAL RESULTS - CARBON RANGE
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	C1-C5 (%)	C5-C6 (%)	C6-C7 (%)	C7-C8 (%)	C8-C9 (%)	C9-C10 (%)	C10-C11 (%)	C11-C12 (%)	C12-C13 (%)	C13-C14 (%)	C14-C15 (%)	C15-C16 (%)	C16-C17 (%)	C17-C18 (%)	C18-C19 (%)	C19-C20 (%)	C20-C21 (%)	C21-C22 (%)	C22-C23 (%)	C23-C24 (%)	C24-C25 (%)	C25-C26 (%)	C26-C27 (%)	C27-C28 (%)	C28-C29 (%)	C29-C30 (%)	C30-C32 (%)	C32-C34 (%)	C34-C36 (%)	C36-C38 (%)	C38-C40 (%)	C40+ (%)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1998 Midland Packing Transformer Spill Water Samples (DEQ, 1998)																																	
Former Midland Empire Packing Company Property, 1988 Transformer Release																																	
Top Oil Phase 1A & 1B	12/16/98	0.0	0.0	0.0	0.0	0.1	0.4	0.9	1.6	2.4	2.2	3.7	5.3	7.1	11.0	12.3	14.4	10.9	9.7	7.0	4.5	2.0	2.0	0.3	0.4	0.3	0.5	0.5	0.3	0.2	0.0	0.0	0.0
Reference Oil from Spill Site	12/17/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	2.0	5.2	7.2	12.2	14.4	16.5	12.8	11.1	7.3	5.3	3.0	1.5	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6C
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Bromo-benzene (µg/L)	Bromo-chloro-methane (µg/L)	Bromodi-chloro-methane (µg/L)	Bromo-form (µg/L)	Bromo-methane (µg/L)	N-Butyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	c-1,3-dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloro-form (µg/L)	Chloro-methane (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	80	10	---	---	4	3	100	---	70	30
1994 Excavation Water Samples (DEQ, 1994)														
Conoco Seminoe Pipeline, North 1st Avenue														
Conoco Pipeline Pit #1	08/15/94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Conoco Pond #2	08/15/94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 6C
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6D
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	2-Chloro-toluene (µg/L)	4-Chloro-toluene (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2-Dibromo-ethane (µg/L)	Dibromo-methane (µg/L)	Dichloro-difluoro-methane (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	1,1-Dichloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	t-1,2-Dichloro-ethene (µg/L)
RBSLs		---	---	---	---	0.004	---	---	---	---	---	---	4	---
DEQ-7 Stds. - Human Health Groundwater		---	---	4	0.2	---	---	1,000	600	600	75	---	4	100
1994 Excavation Water Samples (DEQ, 1994)														
Conoco Seminoe Pipeline, North 1st Avenue														
Conoco Pipeline Pit #1	08/15/94	<0.5	<0.5	<0.5	**<1.0**	**<0.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Conoco Pond #2	08/15/94	<0.5	<0.5	<0.5	**<1.0**	**<0.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 6D
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6E
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	1,2-dichloro-propane (µg/L)	1,3-dichloro-propane (µg/L)	2,2-dichloro-propane (µg/L)	1,1-dichloro-propene (µg/L)	t-1,3-dichloro-propene (µg/L)	Hexachloro-butadiene (µg/L)	Isopropyl-benzene (µg/L)	4-Isopropyl-toluene (µg/L)	Methylene chloride (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		5	4	---	---	2	5	---	---	5
1994 Excavation Water Samples (DEQ, 1994)										
Conoco Seminoe Pipeline, North 1st Avenue										
Conoco Pipeline Pit #1	08/15/94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	1.2	<0.5
Conoco Pond #2	08/15/94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 6E
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6F
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	N-propyl-benzene (µg/L)	Sty-rene (µg/L)	Tetra-chloro-ethene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	Tri-chloro-ethene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	1,2,4-Trichloro-benzene (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	Trichloro-fluoro-methane (µg/L)	1,2,3-Trichloro-propane (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	Vinyl Chloride (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health		---	100	5	---	2	5	---	70	200	3	10,000	---	---	---	0.2
1994 Excavation Water Samples (DEQ, 1994)																
Conoco Seminoe Pipeline, North 1st Avenue																
Conoco Pipeline Pit #1	08/15/94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Conoco Pond #2	08/15/94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	**<0.5**

TABLE 6F
ADDITIONAL WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6G
ADDITIONAL WATER ANALYTICAL RESULTS - PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	Aroclor-1016 (µg/L)	Aroclor-1221 (µg/L)	Aroclor-1232 (µg/L)	Aroclor-1242 (µg/L)	Aroclor-1248 (µg/L)	Aroclor-1254 (µg/L)	Aroclor-1260 (µg/L)	Aroclor-1262 (µg/L)	Aroclor-1268 (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1998 Midland Packing Transformer Spill Water Samples (DEQ, 1998)										
Former Midland Empire Packing Company Property, 1988 Transformer Release										
Top Oil Phase 1A & 1B	12/12/98	**<5.7**	**<11**	**<5.7**	**110**	**<5.7**	**<5.7**	**<5.7**	**<5.7**	**<5.7**

TABLE 6G
ADDITIONAL WATER ANALYTICAL RESULTS - PCBs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 6H
ADDITIONAL WATER ANALYTICAL RESULTS - PHYSICAL PROPERTY AND GENERAL CHEMISTRY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	pH (lab) (su)	TPH IR (mg/L)	Reactive Cyanide (mg/L)	Reactive Sulfide (mg/L)	Ignitability (ºF)
RBSLs		---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	---	---
1994 Excavation Water Samples (Quanterra, 1994)						
Conoco Seminoe Pipeline, North 1st Avenue						
Bil-Pit-Water	08/04/94	7.3c	700	<0.020	<1.0	144

TABLE 6H
ADDITIONAL WATER ANALYTICAL RESULTS - PHYSICAL PROPERTY AND GENERAL CHEMISTRY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
Naphthalene	=	Naphthalene analyzed using EPA Method 524.2.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
TCLP VOCs	=	Toxicity Characteristic Leaching Procedure volatile organic compounds analyzed using EPA Method 8240.
PCBs	=	Polychlorinated biphenyls analyzed using EPA Method 3510 in 1998.
pH (lab)	=	pH analyzed using EPA Method 150.1.
TPH IR	=	Total recoverable petroleum hydrocarbon analyzed using infrared spectrophotometric method.
Reactive Cyanide	=	Reactive cyandide analyzed according to EPA Section 7.3.3.2.
Reactive Sulfide	=	Reactive sulfide analyzed according to EPA Section 7.3.4.2.
Ignitability	=	Ignitability analyzed using EPA Method 1010.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.
%	=	Percent by volume.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 7A
DOMESTIC WATER ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Sampling Date	EPH (µg/L)	TPH (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	m,p-xylene (µg/L)	o-xylene (µg/L)	X (µg/L)	Naph-thalene (µg/L)
RBSLs		1,000	---	700	1,000	1,000	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health		---	---	---	---	---	30	5	1,000	---	700	---	10,000	100
Domestic Wells														
800 Minnesota Avenue (DEQ, 200c)														
800 MINNESOTA AVE-WELL	06/29/00	---	<20	<20	<20	<20	<1.0/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<1.0/<0.50h
800 MINNESOTA AVE-TAP	06/29/00	---	<20	<20	<20	<20	<1.0/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<1.0/<0.50h
800 MINNESOTA AVE-TAP	07/05/00	---	<20	<20	<20	<20	<1.0/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<0.50/<0.50h	<1.0/<0.50h
Lloyd Richard's Family Trust Property (Crowley, 2000)														
LRT Well	04/22/10	<312	<20	<20	<20	<20	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0

TABLE 7A
DOMESTIC WATER ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons analyzed using Method MADEP VPH.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aromatics	=	C9-C10 Aromatics analyzed using Method MADEP VPH .
MTBE	=	Methyl tertiary butyl ether analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
pH (lab)	=	pH analyzed using EPA Method 150.1.
µg/L	=	Micrograms per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 7B
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	Bromo-benzene (µg/L)	Bromo-chloro-methane (µg/L)	Bromodi-chloro-methane (µg/L)	Bromo-form (µg/L)	Bromo-methane (µg/L)	N-Butyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	c-1,3-dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloro-form (µg/L)	Chloro-methane (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		---	---	---	80	10	---	---	4	3	100	---	70	30
Domestic Wells														
800 Minnesota Avenue (DEQ, 200c)														
800 MINNESOTA AVE-WELL	06/29/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
800 MINNESOTA AVE-TAP	06/29/00	<0.50	<0.50	5.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	56e	<0.50
800 MINNESOTA AVE-TAP	07/05/00	<0.50	<0.50	7.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	47e	<0.50

TABLE 7B
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons analyzed using Method MADEP VPH.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aromatics	=	C9-C10 Aromatics analyzed using Method MADEP VPH .
MTBE	=	Methyl tertiary butyl ether analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
pH (lab)	=	pH analyzed using EPA Method 150.1.
µg/L	=	Micrograms per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 7C
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	2-Chloro-toluene (µg/L)	4-Chloro-toluene (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2-Dibromo-ethane (µg/L)	Dibromo-methane (µg/L)	Dichloro-difluoro-methane (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	1,1-Dichloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	t-1,2-Dichloro-ethene (µg/L)
RBSLs		---	---	---	---	0.004	---	---	---	---	---	---	4	---
DEQ-7 Stds. - Human Health Groundwater		---	---	4	0.2	---	---	1,000	600	600	75	---	4	100
Domestic Wells														
800 Minnesota Avenue (DEQ, 200c)														
800 MINNESOTA AVE-WELL	06/29/00	<0.50	<0.50	<0.50	**<0.50**	**<0.50**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
800 MINNESOTA AVE-TAP	06/29/00	<0.50	<0.50	0.60	**<0.50**	**<0.50**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
800 MINNESOTA AVE-TAP	07/05/00	<0.50	<0.50	0.71	**<0.50**	**<0.50**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 7C
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons analyzed using Method MADEP VPH.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aromatics	=	C9-C10 Aromatics analyzed using Method MADEP VPH .
MTBE	=	Methyl tertiary butyl ether analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
pH (lab)	=	pH analyzed using EPA Method 150.1.
µg/L	=	Micrograms per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 7D
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	1,2-dichloro-propane (µg/L)	1,3-dichloro-propane (µg/L)	2,2-dichloro-propane (µg/L)	1,1-dichloro-propene (µg/L)	t-1,3-dichloro-propene (µg/L)	Hexachloro-butadiene (µg/L)	Isopropyl-benzene (µg/L)	p-Isopropyl-toluene (µg/L)	Methylene chloride (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health Groundwater		5	4	---	---	2	5	---	---	5
Domestic Wells										
800 Minnesota Avenue (DEQ, 200c)										
800 MINNESOTA AVE-WELL	06/29/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
800 MINNESOTA AVE-TAP	06/29/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
800 MINNESOTA AVE-TAP	07/05/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 7D
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons analyzed using Method MADEP VPH.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aromatics	=	C9-C10 Aromatics analyzed using Method MADEP VPH .
MTBE	=	Methyl tertiary butyl ether analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
pH (lab)	=	pH analyzed using EPA Method 150.1.
µg/L	=	Micrograms per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 7E
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling ID	Sampling Date	N-propyl-benzene (µg/L)	Sty-rene (µg/L)	Tetra-chloro-ethene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	Tri-chloro-ethene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	1,2,4-Trichloro-benzene (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	Trichloro-fluoro-methane (µg/L)	1,2,3-Trichloro-propane (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	Vinyl Chloride (µg/L)
RBSLs		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DEQ-7 Stds. - Human Health		---	100	5	---	2	5	---	70	200	3	10,000	---	---	---	0.2
Domestic Wells																
800 Minnesota Avenue (DEQ, 200c)																
800 MINNESOTA AVE-WELL	06/29/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**<0.50**
800 MINNESOTA AVE-TAP	06/29/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**<0.50**
800 MINNESOTA AVE-TAP	07/05/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**<0.50**

TABLE 7E
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - VOCs
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons analyzed using Method MADEP VPH.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aromatics	=	C9-C10 Aromatics analyzed using Method MADEP VPH .
MTBE	=	Methyl tertiary butyl ether analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
pH (lab)	=	pH analyzed using EPA Method 150.1.
µg/L	=	Micrograms per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 7F
ADDITIONAL DOMESTIC WATER ANALYTICAL RESULTS - PHYSICAL PROPERTY PARAMETERS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sample ID	Sampling Date	pH (lab) (su)
RBSLs		---
DEQ-7 Stds. - Human Health Groundwater		---
Domestic Wells		
800 Minnesota Avenue (DEQ, 200c)		
800 MINNESOTA AVE-WELL	06/29/00	<2
800 MINNESOTA AVE-TAP	06/29/00	<2
800 MINNESOTA AVE-TAP	07/05/00	<2

Notes:

TPH	=	Total purgeable/petroleum hydrocarbons analyzed using Method MADEP VPH.
C5-C8 Aliphatics	=	C5-C8 Aliphatics analyzed using Method MADEP VPH.
C9-C12 Aliphatics	=	C9-C12 Aliphatics analyzed using Method MADEP VPH.
C9-C10 Aromatics	=	C9-C10 Aromatics analyzed using Method MADEP VPH .
MTBE	=	Methyl tertiary butyl ether analyzed using Method MADEP VPH.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using Method MADEP VPH.
Naphthalene	=	Naphthalene analyzed using Method MADEP VPH.
VOCs	=	Volatile organic compounds analyzed using EPA Method 524.2
pH (lab)	=	pH analyzed using EPA Method 150.1.
µg/L	=	Micrograms per liter.
su	=	Standard units.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not analyzed/Not sampled.
a	=	Duplicate of Y0-SW-2.
b	=	Analyte reported in the laboratory method blank.
c	=	Analyzed beyond the recommended holding time.
d	=	Ecology and Environment, Inc. qualified data as estimated value due to laboratory quality control issues.
e	=	Concentration exceeded the calibration range of the instrument.
f	=	Yellow or orange tinted iron suspended in water.
g	=	Aquifer pumping for product recovery.
h	=	Analyzed using EPA Method 524.2.
i	=	Suspended or emulsified product.
j	=	Estimated value greater than the method detection limit but below the laboratory reporting limit.
k	=	Black sulfide precipate and/or hydrocarbon sulfide odor.
l	=	Depth to groundwater greater than the measuring point.
m	=	Presumptive evidence of presence of material (tentative identification). Matrix spike data not reliable or not run.
n	=	Duplicate of M1 (MPC).

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	Groundwater Recovered (gallons) (cumulative)	Free Product Recovered (gallons) (period)	Free Product Recovered (gallons) (cumulative)
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (Maxim, 1997)					
Pumps and Sumps	Jun-91	20,080	20,080	---	---
Pumps and Sumps	Jul-91	2,139	22,219	---	---
Pumps and Sumps	Aug-91	2,448	24,667	---	---
Pumps and Sumps	Sep-91	357	25,024	---	---
Pumps and Sumps	Oct-91	369	25,393	---	---
Pumps and Sumps	Nov-91	943	26,336	---	---
Pumps and Sumps	Dec-91	0	26,336	---	---
Pumps and Sumps	Jan-92	0	26,336	---	---
Pumps and Sumps	Feb-92	0	26,336	---	---
Pumps and Sumps	Mar-92	0	26,336	---	---
Pumps and Sumps	Apr-92	0	26,336	---	---
Pumps and Sumps	May-92	0	26,336	---	---
Pumps and Sumps	Jun-92	0	26,336	---	---
Pumps and Sumps	Jul-92	0	26,336	---	---
Pumps and Sumps	Aug-92	0	26,336	---	---
Pumps and Sumps	Sep-92	0	26,336	---	---
Pumps and Sumps	Oct-92	0	26,336	---	---
Pumps and Sumps	Nov-92	0	26,336	---	---
Pumps and Sumps	Dec-92	0	26,336	---	---
Pumps and Sumps	Jan-93	0	26,336	---	---
Pumps and Sumps	Feb-93	0	26,336	---	---
Pumps and Sumps	Mar-93	0	26,336	---	---
Pumps and Sumps	Apr-93	0	26,336	---	---
Pumps and Sumps	May-93	0	26,336	---	---
Pumps and Sumps	Jun-93	0	26,336	---	---
Pumps and Sumps	Jul-93	0	26,336	---	---
Pumps and Sumps	Aug-93	0	26,336	---	---
Pumps and Sumps	Sep-93	0	26,336	---	---
Pumps and Sumps	Oct-93	0	26,336	---	---
Pumps and Sumps	Nov-93	0	26,336	---	---
Pumps and Sumps	Dec-93	0	26,336	---	---
Pumps and Sumps	Jan-94	0	26,336	---	---
Pumps and Sumps	Feb-94	0	26,336	---	---
Pumps and Sumps	Mar-94	0	26,336	---	---
Pumps and Sumps	Apr-94	0	26,336	---	---
Pumps and Sumps	May-94	0	26,336	---	---
Pumps and Sumps	Jun-94	0	26,336	---	---
Pumps and Sumps	Jul-94	0	26,336	---	---
Pumps and Sumps	Aug-94	0	26,336	---	---
Pumps and Sumps	Sep-94	0	26,336	---	---
Pumps and Sumps	Oct-94	0	26,336	---	---
Pumps and Sumps	Nov-94	0	26,336	---	---
Pumps and Sumps	Dec-94	0	26,336	---	---
Pumps and Sumps	Jan-95	0	26,336	---	---
Pumps and Sumps	Feb-95	0	26,336	---	---
Pumps and Sumps	Mar-95	0	26,336	---	---
Pumps and Sumps	Apr-95	0	26,336	---	---
Pumps and Sumps	May-95	0	26,336	---	---
Pumps and Sumps	Jun-95	0	26,336	---	---
Pumps and Sumps	Jul-95	0	26,336	---	---
Pumps and Sumps	Aug-95	0	26,336	---	---
Pumps and Sumps	Sep-95	0	26,336	---	---
Pumps and Sumps	Oct-95	0	26,336	---	---

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	Groundwater Recovered (gallons) (cumulative)	Free Product Recovered (gallons) (period)	Free Product Recovered (gallons) (cumulative)
Pumps and Sumps	Nov-95	0	26,336	---	---
Pumps and Sumps	Dec-95	0	26,336	---	---
Pumps and Sumps	Jan-96	0	26,336	---	---
Pumps and Sumps	Feb-96	0	26,336	---	---
Pumps and Sumps	Mar-96	0	26,336	---	---
Pumps and Sumps	Apr-96	0	26,336	---	---
Pumps and Sumps	May-96	0	26,336	---	---
Pumps and Sumps	Jun-96	0	26,336	---	---
Pumps and Sumps	Jul-96	0	26,336	---	---
Pumps and Sumps	Aug-96	0	26,336	---	---
Pumps and Sumps	Sep-96	0	26,336	---	---
Pumps and Sumps	Oct-96	0	26,336	---	---
Pumps and Sumps	Nov-96	0	26,336	---	---
Pumps and Sumps	Dec-96	0	26,336	---	---
Pumps and Sumps	Jan-97	0	26,336	---	---
Pumps and Sumps	Feb-97	0	26,336	---	---
Pumps and Sumps	Mar-97	0	26,336	---	---
Pumps and Sumps	Apr-97	0	26,336	---	---
Pumps and Sumps	May-97	0	26,336	---	---
Trench	Jun-91	0	0	---	---
Trench	Jul-91	0	0	---	---
Trench	Aug-91	0	0	---	---
Trench	Sep-91	0	0	---	---
Trench	Oct-91	0	0	---	---
Trench	Nov-91	0	0	---	---
Trench	Dec-91	0	0	---	---
Trench	Jan-92	0	0	---	---
Trench	Feb-92	0	0	---	---
Trench	Mar-92	0	0	---	---
Trench	Apr-92	120	120	---	---
Trench	May-92	0	120	---	---
Trench	Jun-92	0	120	---	---
Trench	Jul-92	5	125	---	---
Trench	Aug-92	5	130	---	---
Trench	Sep-92	10	140	---	---
Trench	Oct-92	10	150	---	---
Trench	Nov-92	0	150	---	---
Trench	Dec-92	0	150	---	---
Trench	Jan-93	0	150	---	---
Trench	Feb-93	0	150	---	---
Trench	Mar-93	15	165	---	---
Trench	Apr-93	387	552	---	---
Trench	May-93	73	625	---	---
Trench	Jun-93	147	772	---	---
Trench	Jul-93	12	784	---	---
Trench	Aug-93	5	789	---	---
Trench	Sep-93	5	794	---	---
Trench	Oct-93	5	799	---	---
Trench	Nov-93	0	799	---	---
Trench	Dec-93	0	799	---	---
Trench	Jan-94	0	799	---	---
Trench	Feb-94	0	799	---	---
Trench	Mar-94	2	801	---	---
Trench	Apr-94	0	801	---	---

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	Groundwater Recovered (gallons) (cumulative)	Free Product Recovered (gallons) (period)	Free Product Recovered (gallons) (cumulative)
Trench	May-94	0	801	---	---
Trench	Jun-94	33	834	---	---
Trench	Jul-94	10	844	---	---
Trench	Aug-94	0	844	---	---
Trench	Sep-94	0	844	---	---
Trench	Oct-94	0	844	---	---
Trench	Nov-94	0	844	---	---
Trench	Dec-94	0	844	---	---
Trench	Jan-95	0	844	---	---
Trench	Feb-95	0	844	---	---
Trench	Mar-95	0	844	---	---
Trench	Apr-95	0	844	---	---
Trench	May-95	0	844	---	---
Trench	Jun-95	0	844	---	---
Trench	Jul-95	0	844	---	---
Trench	Aug-95	0	844	---	---
Trench	Sep-95	0	844	---	---
Trench	Oct-95	0	844	---	---
Trench	Nov-95	0	844	---	---
Trench	Dec-95	0	844	---	---
Trench	Jan-96	0	844	---	---
Trench	Feb-96	0	844	---	---
Trench	Mar-96	0	844	---	---
Trench	Apr-96	0	844	---	---
Trench	May-96	0	844	---	---
Trench	Jun-96	0	844	---	---
Trench	Jul-96	0	844	---	---
Trench	Aug-96	0	844	---	---
Trench	Sep-96	0	844	---	---
Trench	Oct-96	0	844	---	---
Trench	Nov-96	0	844	---	---
Trench	Dec-96	0	844	---	---
Trench	Jan-97	0	844	---	---
Trench	Feb-97	0	844	---	---
Trench	Mar-97	0	844	---	---
Trench	Apr-97	0	844	---	---
Trench	May-97	0	844	---	---
MW6	Jun-91	0	0	---	---
MW6	Jul-91	0	0	---	---
MW6	Aug-91	0	0	---	---
MW6	Sep-91	0	0	---	---
MW6	Oct-91	0	0	---	---
MW6	Nov-91	0	0	---	---
MW6	Dec-91	0	0	---	---
MW6	Jan-92	0	0	---	---
MW6	Feb-92	0	0	---	---
MW6	Mar-92	25	25	---	---
MW6	Apr-92	0	25	---	---
MW6	May-92	0	25	---	---
MW6	Jun-92	0	25	---	---
MW6	Jul-92	0	25	---	---
MW6	Aug-92	0	25	---	---
MW6	Sep-92	0	25	---	---
MW6	Oct-92	0	25	---	---

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	Groundwater Recovered (gallons) (cumulative)	Free Product Recovered (gallons) (period)	Free Product Recovered (gallons) (cumulative)
MW6	Nov-92	0	25	---	---
MW6	Dec-92	0	25	---	---
MW6	Jan-93	0	25	---	---
MW6	Feb-93	0	25	---	---
MW6	Mar-93	0	25	---	---
MW6	Apr-93	0	25	---	---
MW6	May-93	0	25	---	---
MW6	Jun-93	0	25	---	---
MW6	Jul-93	0	25	---	---
MW6	Aug-93	0	25	---	---
MW6	Sep-93	0	25	---	---
MW6	Oct-93	0	25	---	---
MW6	Nov-93	0	25	---	---
MW6	Dec-93	0	25	---	---
MW6	Jan-94	0	25	---	---
MW6	Feb-94	0	25	---	---
MW6	Mar-94	0	25	---	---
MW6	Apr-94	0	25	---	---
MW6	May-94	0	25	---	---
MW6	Jun-94	0	25	---	---
MW6	Jul-94	0	25	---	---
MW6	Aug-94	0	25	---	---
MW6	Sep-94	0	25	---	---
MW6	Oct-94	0	25	---	---
MW6	Nov-94	0	25	---	---
MW6	Dec-94	0	25	---	---
MW6	Jan-95	8	33	---	---
MW6	Feb-95	2	35	---	---
MW6	Mar-95	10	45	---	---
MW6	Apr-95	13	58	---	---
MW6	May-95	4	62	---	---
MW6	Jun-95	5	66	---	---
MW6	Jul-95	5	71	---	---
MW6	Aug-95	0	71	---	---
MW6	Sep-95	0	71	---	---
MW6	Oct-95	0	71	---	---
MW6	Nov-95	0	71	---	---
MW6	Dec-95	0	71	---	---
MW6	Jan-96	0	71	---	---
MW6	Feb-96	0	71	---	---
MW6	Mar-96	0	71	---	---
MW6	Apr-96	0	71	---	---
MW6	May-96	0	71	---	---
MW6	Jun-96	0	71	---	---
MW6	Jul-96	0	71	---	---
MW6	Aug-96	0	71	---	---
MW6	Sep-96	0	71	---	---
MW6	Oct-96	0	71	---	---
MW6	Nov-96	0	71	---	---
MW6	Dec-96	0	71	---	---
MW6	Jan-97	0	71	---	---
MW6	Feb-97	0	71	---	---
MW6	Mar-97	0	71	---	---
MW6	Apr-97	0	71	---	---
MW6	May-97	0	71	---	---

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	Groundwater Recovered (gallons) (cumulative)	Free Product Recovered (gallons) (period)	Free Product Recovered (gallons) (cumulative)
MW7	Jun-91	0	0	---	---
MW7	Jul-91	0	0	---	---
MW7	Aug-91	0	0	---	---
MW7	Sep-91	0	0	---	---
MW7	Oct-91	0	0	---	---
MW7	Nov-91	0	0	---	---
MW7	Dec-91	0	0	---	---
MW7	Jan-92	0	0	---	---
MW7	Feb-92	0	0	---	---
MW7	Mar-92	0	0	---	---
MW7	Apr-92	0	0	---	---
MW7	May-92	0	0	---	---
MW7	Jun-92	0	0	---	---
MW7	Jul-92	0	0	---	---
MW7	Aug-92	0	0	---	---
MW7	Sep-92	0	0	---	---
MW7	Oct-92	0	0	---	---
MW7	Nov-92	0	0	---	---
MW7	Dec-92	0	0	---	---
MW7	Jan-93	0	0	---	---
MW7	Feb-93	0	0	---	---
MW7	Mar-93	0	0	---	---
MW7	Apr-93	0	0	---	---
MW7	May-93	0	0	---	---
MW7	Jun-93	0	0	---	---
MW7	Jul-93	0	0	---	---
MW7	Aug-93	0	0	---	---
MW7	Sep-93	0	0	---	---
MW7	Oct-93	0	0	---	---
MW7	Nov-93	0	0	---	---
MW7	Dec-93	0	0	---	---
MW7	Jan-94	0	0	---	---
MW7	Feb-94	0	0	---	---
MW7	Mar-94	0	0	---	---
MW7	Apr-94	49	49	---	---
MW7	May-94	98	147	---	---
MW7	Jun-94	0	147	---	---
MW7	Jul-94	0	147	---	---
MW7	Aug-94	0	147	---	---
MW7	Sep-94	0	147	---	---
MW7	Oct-94	0	147	---	---
MW7	Nov-94	10	157	---	---
MW7	Dec-94	12	169	---	---
MW7	Jan-95	29	198	---	---
MW7	Feb-95	5	203	---	---
MW7	Mar-95	20	222	---	---
MW7	Apr-95	33	255	---	---
MW7	May-95	23	277	---	---
MW7	Jun-95	9	286	---	---
MW7	Jul-95	9	295	---	---
MW7	Aug-95	1	296	---	---
MW7	Sep-95	2	298	---	---
MW7	Oct-95	3	301	---	---
MW7	Nov-95	1	302	---	---

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	(cumulative)	Free Product Recovered (gallons) (period)	(cumulative)
MW7	Dec-95	3	305	---	---
MW7	Jan-96	6	311	---	---
MW7	Feb-96	6	317	---	---
MW7	Mar-96	3	320	---	---
MW7	Apr-96	2	322	---	---
MW7	May-96	3	324	---	---
MW7	Jun-96	0	324	---	---
MW7	Jul-96	0	324	---	---
MW7	Aug-96	0	324	---	---
MW7	Sep-96	0	324	---	---
MW7	Oct-96	0	324	---	---
MW7	Nov-96	0	324	---	---
MW7	Dec-96	0	324	---	---
MW7	Jan-97	0	324	---	---
MW7	Feb-97	0	324	---	---
MW7	Mar-97	0	324	---	---
MW7	Apr-97	2	326	---	---
MW7	May-97	6	332	---	---
		Total Volume	27,582	**Total Volume**	---
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Olympus, 1995; Conoco, 2007)					
RW4	Feb-94	148,201	148,201	14	14
RW4	Mar-94	179,879	328,080	31	45
RW4	Apr-94	179,630	507,710	29	74
RW4	May-94	171,970	679,680	42	116
RW4	Jun-94	188,848	868,528	34	150
RW4	Jul-94	140,262	1,008,790	11	161
RW4	Aug-94	135,610	1,144,400	3	164
RW5	Feb-94	56,010	56,010	0	0
RW5	Mar-94	32,785	88,795	0	0
RW5	Apr-94	52,390	141,185	0	0
M5	Mar-94	98,355	98,355	32	32
M5	Apr-94	157,170	255,525	52	84
M5	May-94	139,610	395,135	129	213
M5	Jun-94	248,090	643,225	46	259
M5	Jul-94	344,110	987,335	35	294
M5	Aug-94	264,985	1,252,320	57	351
M5	Sep-94	318,080	1,570,400	88	439
M5	Oct-94	225,950	1,796,350	0	439
M5	Nov-94	143,760	1,940,110	14	453
M5	Dec-94	132,890	2,073,000	12	465
O/W Separator	Feb-94	---	---	0	0
O/W Separator	Mar-94	---	---	15	15
O/W Separator	Apr-94	---	---	10	25
O/W Separator	May-94	---	---	35	60
O/W Separator	Jun-94	---	---	0	60
O/W Separator	Jul-94	---	---	20	80
O/W Separator	Aug-94	---	---	0	80

TABLE 8A
GROUNDWATER REMEDIATION SYSTEM DATA - RECOVERED GROUNDWATER AND FREE PRODUCT
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Recovery Source	Recovery Date	Groundwater Recovered (gallons) (period)	(cumulative)	Free Product Recovered (gallons) (period)	(cumulative)
O/W Separator	Sep-94	---	---	0	80
O/W Separator	Oct-94	---	---	21	101
O/W Separator	Nov-94	---	---	1	102
O/W Separator	Dec-94	---	---	0	102
		Total Volume	3,358,585	**Total Volume**	731

Notes:

TPHd	=	Total petroleum hydrocarbons as diesel.
TPH	=	Total petroleum hydrocarbons.
TPHg	=	Total petroleum hydrocarbons as gasoline.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using MADEP VPH; prior to February 2000, analyzed using EPA Method 602 or 8020.
Total Lead	=	Total lead analyzed using EPA Method 239.2.
µg/L	=	Micrograms per liter.
mg/L	=	Milligrams per liter.

TABLE 8B
GROUNDWATER REMEDIATION SYSTEM DATA - ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling Date	TPHd (µg/L)	TPH (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Lead (mg/L)
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (Cenex, 1992; Unified, 1993)								
STRIPPER INFLUENT (S-1 and S-2 Influent)								
09/06/91	---	---	---	4,700	4,200	4,200	7,100	---
02/18/92	---	---	---	1,900	2,480	542	7,120	---
04/02/92	7,700	---	---	710	799	104	1,720	---
04/24/92	---	---	---	3,240	6,860	691	5,110	---
05/05/92	---	680,000	---	3,400	6,200	890	5,700	---
05/18/92	---	---	---	2,500	2,840	402	2,900	---
05/26/92	---	---	---	2,460	3,120	242	5,470	---
06/09/92	---	---	---	1,240	1,010	214	1,920	---
06/19/92	---	---	---	1,400	930	110	1,400	---
09/03/92	---	---	---	956	409	80	465	---
10/13/92	---	---	---	1,380	1,300	320	2,400	---
10/31/94	---	---	---	1,200	1,600	190	760	---
10/30/95	---	---	---	630	240	79	210	---
04/30/96	---	---	---	604	62	25	82	---
07/16/96	---	---	---	940	360	93	450	---
01/30/98	---	---	---	48	170	100	410	---
04/29/98	---	---	---	110	210	110	490	---
07/31/98	---	---	---	<5	<5	6	116	---
10/30/98	---	---	---	300	160	25	180	---
01/30/99	---	---	---	100	64	20	160	---
STRIPPER EFFLUENT								
08/12/91	---	---	---	2.4	3.5	0.80	114	---
09/06/91	---	---	---	<13	<25	250	550	---
09/20/91	---	---	---	<2.5	<2.5	<2.5	20	---
11/25/91	---	122,000	---	<10	10	8.4	39	---
01/10/92	414,000	---	31,300	76	430	60	2,400	---
02/18/92	---	---	---	9.2	14	5.8	90	---
04/02/92	1,900	---	---	5.6	10	2.2	34	---
04/24/92	---	---	---	16	86	57	478	---
GAC EFFLUENT								
05/05/92	---	1,000	---	<5.0	<0.50	0.72	1.0	0.02
05/18/92	---	200	---	<0.50	<0.50	<0.50	<1.0	<0.01
05/26/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
06/09/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
06/19/92	---	43,000	---	60	40	20	250	0.03
07/24/92	---	1,300	---	1.10	0.91	0.21	2.50	<0.01
07/30/92	---	800	---	<0.50	<0.50	<0.50	<1.0	---
08/07/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
08/14/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
08/19/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
08/28/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	0.02
09/03/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	0.02
09/10/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
09/18/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
09/25/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
10/02/92	---	<1,000	---	<0.50	<0.50	<0.50	<1.0	<0.01
10/09/92	---	200	---	0.59	<0.50	<0.50	<1.0	<0.01
10/13/92	---	1,000	---	<0.50	<0.50	<0.50	<1.0	---
10/20/92	---	4,500	---	185	114	8	41	0.02
INFILTRATION GALLERY (North Standpipe)								
09/06/91	---	---	---	<13	<25	<25	150.00	---

TABLE 8B
GROUNDWATER REMEDIATION SYSTEM DATA - ANALYTICAL RESULTS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Sampling Date	TPHd (µg/L)	TPH (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Lead (mg/L)
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Olympus, 1995; Conoco, 2007)								
S-6 (Influent)								
10/31/96	---	---	---	2,100	500	260	1,200	---
01/07/97	---	---	---	1,000	310	59	220	---
04/21/97	---	---	---	1,430	1,620	360	1,930	---
07/22/97	---	---	---	5,700	1,500	270	1,500	---
10/24/97	---	---	---	600	720	230	960	---
01/20/98	---	---	---	290	390	270	1,400	---
04/29/98	---	---	---	120	200	99	490	---
07/31/98	---	---	---	150	38	57	51	---
S-6								
10/30/98	---	---	---	21	21	53	39	---
01/30/99	---	---	---	32	10	100	55	---
04/29/99	---	---	---	7	2	31	31	---
07/26/99	---	---	---	23	7	41	9	---
01/25/00	---	---	---	<1	<1	<1	<3	---
07/10/00	---	---	---	6	<1	1	<3	---
01/23/01	---	---	---	<1	<1	8	<3	---
07/25/01	---	---	---	6	3	2	3	---
01/07/02	---	---	---	<1	<1	2	<3	---
07/25/02	---	---	---	1	<1	<1	<3	---
01/07/03	---	---	---	<1	<1	<1	<3	---
Effluent								
02/10/94	---	---	---	<0.5	<1	<1	<1	<0.001
02/18/94	---	---	---	<0.5	<1	<1	<1	0.011
02/24/94	---	---	---	<0.5	<1	<1	<1	0.010
03/03/94	---	---	---	<1	<1	<1	<1	<0.001
03/17/94	---	---	---	<1	<1	<1	<3	<0.002
04/04/94	---	---	---	<1	<1	<1	<3	0.011
04/26/94	---	---	---	<1	<1	4	3	<0.001
05/12/94	---	---	---	<1	<1	<1	<3	0.002
05/31/94	---	---	---	<1	<1	<1	<3	0.002
06/14/94	---	---	---	<1	<1	<1	<3	0.004
09/16/94	---	---	---	<1	<1	<1	<3	<0.001
12/13/94	---	---	---	<1	<1	<1	<3	0.001
03/10/95	---	---	---	<1	<1	8.0	9.0	---
06/07/95	---	---	---	11.0	<1	4.0	6.0	---
09/27/95	---	---	---	6.5	<1	1.3	0.9	---
11/27/95	---	---	---	<1	<1	<1	<3	---
02/02/96	---	---	---	22	2.0	2.3	2.0	---
03/18/96	---	---	---	7.6	<0.5	1.1	2.4	---
07/15/96	---	---	---	0.8	<0.5	<0.5	<0.5	---

Notes:
TPHd = Total petroleum hydrocarbons as diesel.
TPH = Total petroleum hydrocarbons.
TPHg = Total petroleum hydrocarbons as gasoline.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using MADEP VPH; prior to February 2000, analyzed using EPA Method 602 or 8020.
Total Lead = Total lead analyzed using EPA Method 239.2.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.

TABLE 9
WELL CONSTRUCTION DETAILS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Well Installation Date	Well Destruction Date	Surveyed Elevation (feet)	Total Depth (feet bgs)	Casing Diameter (inches)	Well Casing Material	Screened Interval (feet bgs)	Borehole Diameter (inches)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material	Installation Consultant	Installation Driller
Monitoring Wells													
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (Cenex, 1992)													
M1	1993	---	3,101.07	---	---	---	---	---	---	---	---	---	---
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)													
MW1	09/03/91	---	97.96	17.2	2	Sch. 40 PVC	2.2-17.2	0.55	0.020	2-17.2	Granusil #8 Silica Sand	LSE	ADT/Pro Pump
MW2	09/03/91	---	97.80	17.4	2	Sch. 40 PVC	2.4-17.4	0.55	0.020	2.2-17.4	Granusil #8 Silica Sand	LSE	ADT/Pro Pump
MW3	09/03/91	Oct-05	97.55	17.85	4	Sch. 40 PVC	2.85-17.85	0.55	0.020	2.25-17.85	Granusil #8 Silica Sand	LSE	ADT/Pro Pump
MW4	09/04/91	---	99.88	17.5	4	Sch. 40 PVC	2.5-17.5	0.55	0.020	2.3-17.5	Granusil #8 Silica Sand	LSE	ADT/Pro Pump
MW5	09/04/91	---	99.55	17.4	4	Sch. 40 PVC	7.4-17.4	0.55	0.020	6.0-17.4	Granusil #8 Silica Sand	LSE	ADT/Pro Pump
MW6	09/05/91	---	98.11	24.65	6	Sch. 40 PVC	5.0-22.5	0.55	0.020	4.0-22.25	Granusil #8 Silica Sand	LSE	ADT/Pro Pump
MW7	1991	---	96.12	14.91	6	PVC	---	---	---	---	---	---	---
MW8	1991	---	96.34	---	---	PVC	---	---	---	---	---	---	---
MW9	1991	---	95.92	---	---	PVC	---	---	---	---	---	---	---
MW10	1991	---	95.34	---	---	PVC	---	---	---	---	---	---	---
Former Midland Empire Packing Company Property, 1988 Transformer Release (Olympus, 1999)													
M1 (MPC)	06/18/99	---	---	15	2	PVC	5-14.75	15	0.010	4-15	Sand Pack 10/20 CSS	Olympus	---
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)													
M3	1993	---	3,099.94	---	---	---	---	---	---	---	---	---	---
M4	1993	---	3,099.18	---	---	---	---	---	---	---	---	---	---
M5	1993	---	3,098.61	---	---	---	---	---	---	---	---	---	---
M6	1993	---	3,101.20	---	---	---	---	---	---	---	---	---	---
M7	1993	---	3,102.58	---	---	---	---	---	---	---	---	---	---
M8	1993	---	3,103.13	---	---	---	---	---	---	---	---	---	---
M9	1993	---	3,101.87	22.63	2	PVC	---	---	---	---	---	---	---
South CHS Tank Farm, 1993 Yale Tank Farm Seminoe Pipeline Release (Cenex, 1992; ConocoPhillips, 2007)													
M2	1993	---	3,100.33	---	---	---	---	---	---	---	---	---	---
Tract 1-A, ASI Industrial Investigation (Portage, 2011)													
MW01	Sept-11	---	---	15.55	2	PVC	~5.55-15.55	---	---	---	Silica Sand	Portage	---
MW02	Sept-11	---	---	19.38	2	PVC	~9.38-19.38	---	---	---	Silica Sand	Portage	---
MW03	Sept-11	---	---	16.03	2	PVC	~6.03-16.03	---	---	---	Silica Sand	Portage	---
Piezometer Wells													
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; ConocoPhillips, 2007)													
PZ1	1993	Approx. April 2007	3,100.34	---	---	---	---	---	---	---	---	---	---
PZ2	1993	---	3,099.39	---	---	---	---	---	---	---	---	---	---
Observation Wells													
East CHS Tank Farm (Cenex, 1992)													
OBS-1	1991	---	99.05	---	---	---	---	---	---	---	---	---	---
OBS-2	1991	---	98.93	---	---	---	---	---	---	---	---	---	---

TABLE 9
WELL CONSTRUCTION DETAILS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Well ID	Well Installation Date	Well Destruction Date	Surveyed Elevation (feet)	Total Depth (feet bgs)	Casing Diameter (inches)	Well Casing Material	Screened Interval (feet bgs)	Borehole Diameter (inches)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material	Installation Consultant	Installation Driller
Recovery Wells													
South CHS Tank Farm, 1993 CHS Tank Farm Seminoe Pipeline Release (Cenex, 1992; Olympus, 1995; ConocoPhillips, 2007)													
RW1	1993	---	---	---	---	---	---	---	---	---	---	---	---
RW1A	1993	---	3,103.02	---	---	---	---	---	---	---	---	---	---
RW2	1993	---	---	---	---	---	---	---	---	---	---	---	---
RW3	1993	---	---	---	---	---	---	---	---	---	---	---	---
RW4	1993	---	---	---	---	---	---	---	---	---	---	---	---
RW5	1993	---	---	---	---	---	---	---	---	---	---	---	---
Sump Wells													
East CHS Tank Farm, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008)													
S-1	Jun-91	Oct-05	98.96	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-2	Jun-91	Oct-05	100.87	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-3	Jun-91	Oct-05	100.00	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-4	Jun-91	Oct-05	98.69	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-5	Jun-91	Oct-05	99.42	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-6	Jun-91	Oct-05	99.01	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-7	Jun-91	---	97.33	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
S-8	Jun-91	---	95.65	10.5-12a	3	Steel	---	---	0.375	---	---	LSE	---
Surface Water Points													
Yegen Ditch, 1991 Suction Line Leak from Tank 282 (TetraTech, 2008; Unified, 1993)													
Y-1	1991	---	---	---	---	---	---	---	---	---	---	---	---
Y-2	1991	---	---	---	---	---	---	---	---	---	---	---	---
Y-3	1991	---	96.80	---	---	---	---	---	---	---	---	---	---
Y-4	1991	---	94.98	---	---	---	---	---	---	---	---	---	---
Y-5	1991	---	97.39	---	---	---	---	---	---	---	---	---	---
Domestic Wells													
Lloyd Richard's Family Trust Property (Crowley, 2000)													
LRT Well	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

LSE	=	LSE, Inc.
Olympus	=	Olympus Technical Services, Inc.
Portage	=	Portage, Inc.
feet bgs	=	Feet below ground surface.
PVC	=	Polyvinyl chloride.
NA	=	Data not available.
a	=	Exact depth unknown. Depth range for the eight sump wells found in Cenex/Billings Tank Farm Groundwater Remediation Status Report, dated June 1, 1992 (Cenex, 1992).

TABLE 10
POTENTIAL SOURCES AND KNOWN RELEASES
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Date	Designation	Location	Product or Contaminants of Concern	Analytical Results	Investigation	Description	Source
10/19/29	Gas AST Leak	Yale Oil Refinery: Gas AST	5,055 gallons of gasoline	None	None	Hole drilled in gasoline AST to steal gas; tank leaked gasoline onto ground until it was empty.	*Billings Gazette* , October 20, 1929
1934	Overturned Vat	Yale Oil Refinery: Vat	Unknown	None	None		Conoco, 2000
07/27/35	Tank 59 Fire	Yale Oil Refinery: Tank 59	<1,200 barrels of road oil	None	None	Tank 59 exploded during welding. Adjacent oil and grease warehouses also burned.	*Billings Gazette* , July 28, 1935.
April 1944	Midland Seepage	Midland Empire Packing Company	Crude oil	None	None	Midland filed a lawsuit claiming crude oil was seeping through the floors and walls of its property.	*Midland v. Yale* , 1936
1946 - 1949	Waste-Oil Recovery System	Yale Oil Refinery & Midland Empire Packing Company	Crude oil	None	None	A waste-oil recovery system operated from 1946 to 1949 at the Yale Oil Refinery. Four seepage wells were located at the Yale Oil Refinery and 2 seepage wells were located at the Midland Empire Packing Company.	ExxonMobil, 2001
03/10/55	YPL Pump Station	Yellowstone Pipeline: Leak	5 barrels premium gasoline	None	None	Gasket failure caused a release from a pump station manifold.	Conoco, 2000
1973	DMA UST Leak	Department of Military Affairs	<1,000 gallons gasoline	None	None	DMA removed a gasoline UST due to structural failure indicated by water intrusion.	Ecology, 1989b
06/10/91	Tank 282 Leak	CHS Inc. Tank Farm: Tank 282	Gasoline and diesel	Maximum Concentrations Benzene: 17,000 µg/L TPH: 1,090,000 µg/L	Trenches were excavated to determine the extent of contamination. Groundwater monitoring wells and sumps were installed.	An underground 10-inch diameter suction line from Tank 282, near the YPL booster pump leaked gasoline and diesel into groundwater and the Yegen Ditch.	Cenex, 2000; DEQ, 2005; LSE, 1992
11/15/91	MDU Trench	MTDT: MDU pipeline relocation	Petroleum material	None	COP pressure tested a nearby pipeline. No leaks were found.	MDU excavated a trench on MTDT property to relocate a natural gas pipeline and observed oil staining and oily water seeping into the excavation.	DEQ, 1991
02/03/92	SPL Pump Station	Seminoe Pipeline: Leak	1 barrel of #2 diesel	None	None	A drain line was left open during maintenance of the pump station unit #3 pump drain line.	Conoco, 2000
03/27/92	HWY 87 Trenches	MTDT: HWY 87 North of MTDT	Hydrocarbons and lead	Maximum Concentrations TPH :1,270 mg/kg Barium :310 mg/kg Chromium: 28 mg/kg Lead :190 mg/kg	Text pits were excavated to a maximum depth of 5 feet bgs.	Braun Intertec conducted a subsurface investigation of Highway 87 for the MTDT, consisting of the excavation of five test pits .	Braun, 1992
02/01/93	Seminoe Pipeline	CHS Inc. Tank Farm: SPL	200 barrels of product (diesel and gasoline)	Maximum Concentrations TPH: 56,000 µg/L Benzene: 140 µg/L	Trenches were excavated to determine the extent of contamination. Groundwater monitoring wells were installed.	An underground 8-inch diameter Seminoe pipeline leaked gasoline and diesel on the western portion of the CHS Inc. tank farm	Conoco, 2007 DEQ, 2008
12/28/93	YPL Pump Station	Yellowstone Pipeline: Leak	1 barrel of #2 diesel	None	None	Seal drain backed up and caused a release from a pump station yard booster.	Conoco, 2000
02/02/94	YPL Pump Station	Yellowstone Pipeline: Leak	2 gallons of regular unleaded gasoline	None	None	Seal drain backed up and caused a release from a pump station sample shack.	Conoco, 2000
05/13/94	YPL Pump Station	Yellowstone Pipeline: Leak	2 gallons of regular unleaded gasoline	None	None	Pressure gauge failed and caused a release from a pump station manifold.	Conoco, 2000
07/29/94	COP Trenches	BNSF: Seminoe Pipeline	Crude oil	Maximum Concentrations Benzene: 30.8 µg/L	DEQ sampled water from one of the trenches.	COP excavated two trenches on BNSF property to perform routine maintenance and replace valves on a Seminoe Pipeline. Oil was observed seeping into the trenches. Soil and water containing oil was removed.	DEQ, 1994
07/29/94	BNSF Illegal Dumping Investigation	BNSF: Olympus Investigation	Crude oil, used oil, tar, enamel, lacquer reducer, jet seal, and xylenes	None	Tana Industries claimed and removed the buckets. The trench and sump appear to be remnants of the Yale Oil Refinery.	Olympus Environmental, Inc. investigated illegal dumping on BNSF property and found 40 abandoned 55-gallon drums (12 had used oil or oily water), an AST with tar beneath it and portable tar distributor, an oil filled trench and sump and fifty 5-gallon buckets labeled enamel, lacquer reducer, jet seal, and xylenes; 15 buckets appeared to be set to empty into the oil trench.	Olympus, 1994
01/05/95	SPL Pump Station	Seminoe Pipeline: Leak	5 gallons of #2 diesel	None	None	A drain line backed up and caused a release from a pump station unit #3 pump seal drain basin.	Conoco, 2000
03/29/95	DEQ Test Pit	Tract A: DEQ Investigation	Petroleum material	Maximum Concentrations GRO: 3,500 mg/kg DRO: 11,000 mg/kg	DEQ dug a test pit using a backhoe and collected soil samples at 8 feet bgs.	NAPL was observed in the excavation and the DEQ noted "the product is highly weathered gasoline, [and] probably contains jet fuel, kerosene, or #1 diesel."	DEQ, 1995
12/04/97	YPL Pump Station	Yellowstone Pipeline: Leak	2 barrels of #2 diesel	None	None	Overflow protection failed and caused a release from a pump station sump.	Conoco, 2000
08/04/98	YPL Pump Station	Yellowstone Pipeline: Leak	5 gallons of regular unleaded gasoline	None	None	Employee left a bleeder open on a four-way valve and caused a release from a pump station meter prover four-way valve.	Conoco, 2000
10/29/98	YPL Pump Station	Yellowstone Pipeline: Leak	1 barrel of #2 diesel	None	None	Overflow protection failed and caused a release from a pump station sump.	Conoco, 2000

TABLE 10
POTENTIAL SOURCES AND KNOWN RELEASES
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

Date	Designation	Location	Product or Contaminants of Concern	Analytical Results	Investigation	Description	Source
December 1998	MPC transformer	BNSF: Transformer Oil Leak	160 gallons 90 ppm PCB transformer oil	Maximum Concentrations PCB in soil: 533 mg/kg PCB in groundwater: 110 µg/L	Soil with petroleum hydrocarbons was excavated and removed. Hydropunch borings were drilled. A groundwater monitoring well was installed.	An MPC transformer on BNSF property was vandalized and released PCB transformer oil.	MPC, 1999; MPC, 2000; Olympus, 1999
04/06/99	YPL Pump Station	Yellowstone Pipeline: Leak	3 gallons of #2 diesel	None	None	Drain line was mistakenly cut during maintenance and caused a release from a pump station manifold area.	Conoco, 2000
December 1999	Yale Oil Refinery TEL Plant	BNSF: TEL Plant Investigation	Organic and inorganic lead	Maximum Concentrations Inorganic lead: 7,000 mg/kg Organic lead: 2.9 mg/kg Inorganic lead: 170 µg/L Organic lead: 96 µg/L	DEQ collected surface water and soil samples from the vicinity of the former TEL Plant.	DEQ investigation found lead concentrations at levels exceeding both federal and state standards in soil and water samples.	DEQ, 2000a
2000	COP Trench	BNSF: pipeline trench	Petroleum material	None	None	COP excavated a trench for replacement of a pipeline segment on BNSF property and observed soil containing petroleum.	DEQ, 2011
06/14/00	Goldstar	Tract C: Goldstar investigation	Waste oil, motor oil	None	Sump and drums were left behind by former tenant Tana Industries.	DEQ found a sump full of an oil/water mixture, two drums of the oil/water mixture, and two drums of used-oil that burst and leaked after freezing and thawing, impacting soil around the drums with used oil.	DEQ, 2000b; EDR, 2011a
06/26/00	YPL Pump Station	Yellowstone Pipeline: Leak	2 gallons of gasoline	None	None	Gasket on tapping saddle failed and caused a release from a pump station manifold area	Conoco, 2000
06/29/00	Drinking Water	Tract 1-A: Tap Water	Petroleum material	No VOCs associated with petroleum products were detected.	DEQ collected water samples from tap water.	A resident of a home on Tract 1-A complained of tap water smelling of petroleum; the PVC water line supplying the house ran through an area known to contain petroleum-impacted soil in the area of a COP pipeline.	DEQ, 2000c; DEQ, 2011
2004	COP Trenches	BNSF: pipeline trenches	Lead and hydrocarbons	Lead concentrations between 935 mg/kg and 2,890 mg/kg and TPH concentrations between 13,000 mg/kg and 47,000 mg/kg.	Soil samples collected from trenches.	COP dug trenches in the vicinity of the former TEL plant as part of pipeline maintenance work.	DEQ, 2011

Notes:

µg/g	=	Micrograms per gram.
µg/L	=	Micrograms per liter.
AST	=	Aboveground storage tank.
BNSF	=	Burlington Northern Santa Fe.
COP	=	ConocoPhillips.
DEQ	=	Montana Department of Environmental Quality.
DMA	=	Department of Military Affairs.
feet bgs	=	Feet below ground surface.
HWY	=	Highway.
MDU	=	Montana-Dakota Utilities Company.
mg/kg	=	Milligrams per kilogram.
MPC	=	Montana Power Company.
MTDT	=	Montana Department of Transportation.
NAPL	=	Non-aqueous phase liquid.
PCB	=	Polychlorinated biphenyls.
ppm	=	Parts per million.
PVC	=	Polyvinyl chloride.
SPL	=	Seminoe Pipeline.
TEL	=	Tetra ethyl lead.
TPH	=	Total petroleum hydrocarbons.
TPHd	=	Total petroleum hydrocarbons as diesel.
TPHg	=	Total petroleum hydrocarbons as gasoline.
GRO	=	Gasoline-range organics.
DRO	=	Diesel-range organics.
UST	=	Underground storage tank.
VOCs	=	Volatile organic compounds.
YPL	=	Yellowstone Pipeline.

TABLE 11
ON-SITE WELLS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

GWIC ID	Site Name	Latitude	Longitude			Township	Range	Section			TD	Swl	Pwl	Yield	Type	Test Time		Rtime	Driller	Date							
11512	AGRI SYSTEMS	45.79103266	-108.4761929	TRS-SEC	NAD83	01N	26E	34		WELL	111ALVM	26	11	24	20	PUMP	1			DIGGER DRILLING	11/26/80	INDUSTRIAL		24	24	26	SCREEN-CONTINUOUS-STAINLESS
11513	MIDLAND FOODS INC.	45.79103266	-108.4761929	TRS-SEC	NAD83	01N	26E	34		WELL	111ALVM	27	11	19	23	PUMP	4			BILLINGS DRILLING	10/02/80	PUBLIC WATER SUPPLY		19	19	23	SAW SLOTS
147380	STATE OF MONTANA, DOT, HIGHWAYS DIVISION	45.79103266	-108.4761929	TRS-SEC	NAD83	01N	26E	34		WELL	111ALVM	35	16.8	31.5	7	AIR	7.5	34		PRO PUMP & EQUIPMENT INC	07/14/94	TEST WELL	NEW WELL	16	16	26	SCREEN-CONTINUOUS-STAINLESS
195369	CONOCO INC	45.79283866	-108.473579	TRS-SEC	NAD83	01N	26E	34	AC	WELL		20.5	10			OTHER				MAXIM TECHNOLOGIES	04/26/02	MONITORING	NEW WELL	5	5	20	SCREEN-CONTINUOUS-PVC
29647	CENEX BILLINGS TANK FARM * MW-1	45.79554766	-108.4722721	TRS-SEC	NAD83	01N	26E	34	ABD	WELL	111ALVM	17.2	4.7			OTHER				PRO PUMP & EQUIPMENT INC	09/03/91	MONITORING	ABANDONED				
29668	CENEX BILLINGS TANK FARM * MW-2	45.79554766	-108.4722721	TRS-SEC	NAD83	01N	26E	34	ABD	WELL	111ALVM	17.4				OTHER				PRO PUMP & EQUIPMENT INC	09/03/91	MONITORING	ABANDONED				
29689	CENEX BILLINGS TANK FARM * MW-3	45.79374166	-108.4722721	TRS-SEC	NAD83	01N	26E	34	ACA	WELL	111ALVM	17.9	10.5			OTHER				PRO PUMP & EQUIPMENT INC	09/04/91	MONITORING	ABANDONED				
29665	CENEX BILLINGS TANK FARM * MW-4	45.79554766	-108.4722721	TRS-SEC	NAD83	01N	26E	34	ABD	WELL	111ALVM	19.5				OTHER				PRO PUMP & EQUIPMENT INC	09/04/91	MONITORING	ABANDONED				
29688	CENEX BILLINGS TANK FARM * MW-5	45.79509616	-108.4729255	TRS-SEC	NAD83	01N	26E	34	ABD	WELL	111ALVM	17.4				OTHER				PRO PUMP & EQUIPMENT INC	09/04/91	MONITORING	ABANDONED				
29676	CENEX BILLINGS TANK FARM * MW-6	45.79554766	-108.4722721	TRS-SEC	NAD83	01N	26E	34	ABD	WELL	111ALVM	22.3				OTHER				PRO PUMP & EQUIPMENT INC	09/05/91	MONITORING	ABANDONED				

EDR ID Wells: Wells reported by EDR Report, but not reported in MBMGGWIC database.

EDR ID	Site Name	Latitude	Longitude			Township	Range	Section			TD	Swl	Pwl	Yield	Type	Test Time		Rtime	Driller	Date
11511	Weldon, Vick	45.791033	-108.476193	TRS-SEC	NAD83	01N	26E	34		Well	51	30	30	14	Bailer	2			Rock Creek Drilling	09/16/76

TABLE 12
OFF-SITE WELLS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

GWIC ID		Site Name	Latitude	Longitude			Township	Range	Section	QTR		TD	Swl	Pwl	Yield	Type	Test Time		Rtime	Driller	Date						
157222	C097555-00	HERT, DALE	45.80008224	-108.4631993	TRS-SEC	NAD83	01N	26E	26	CC	WELL 111ALVM	25	9	11	30	PUMP	3			AMERICAN DRILLING & SUPPLY	02/14/96	DOMESTIC	NEW WELL	0	0	0	OPEN BOTTOM
11351		NELSON, ROBERT C. * # 2	45.80008224	-108.4631993	TRS-SEC	NAD83	01N	26E	26	CC	WELL 111ALVM	20		14		OTHER					07/03/73	DOMESTIC	NEW WELL	20	20	20	OPEN BOTTOM
11350		NELSON, ROBERT C. * #1	45.80008224	-108.4631993	TRS-SEC	NAD83	01N	26E	26	CC	WELL 111ALVM	28		24		OTHER					04/01/70	DOMESTIC	NEW WELL	28	28	28	OPEN BOTTOM
11352		ORCHOWSKI, FRANK * WELL #1	45.80099737	-108.4645128	TRS-SEC	NAD83	01N	26E	26	CCB	WELL 111ALVM	20	18		120	OTHER					01/01/59	DOMESTIC	NEW WELL				
11353		ORCHOWSKI, FRANK * WELL #2	45.80099737	-108.4645128	TRS-SEC	NAD83	01N	26E	26	CCB	WELL 111ALVM	20	18		120	OTHER					01/01/59	DOMESTIC	NEW WELL				
11354		ORCHOWSKI, FRANK * WELL #3	45.79916712	-108.4645128	TRS-SEC	NAD83	01N	26E	26	CCC	WELL 111ALVM	20	18		120	OTHER					01/01/59	DOMESTIC	NEW WELL				
171685		FORMER EAST PARKWAY * AS-01	45.8018985	-108.4814206	TRS-SEC	NAD83	01N	26E	27	C	WELL	36				OTHER			0	AMERICAN DRILLING & SUPPLY		MONITORING		28	28	33	FACTORY SLOTTED
11387		HOLIDAY INN	45.801898	-108.470965	TRS-SEC	NAD83	01N	26E	27	D	WELL 211EGLE	75	35	67	50	BAILER	4				08/02/62	DOMESTIC	NEW WELL	40	40	75	DRILLED HOLES
174069		ANDERSON, L.E.	45.80007525	-108.473579	TRS-SEC	NAD83	01N	26E	27	DC	WELL	60	43								02/20/37	INDUSTRIAL	NEW WELL	24	24	60	OPEN HOLE
200625		METRA PARK	45.800075	-108.473579	TRS-SEC	NAD83	01N	26E	27	DC	WELL 112TRRC	25	15.1		85	AIR	8	25	15.1	0.25 AMERICAN DRILLING & SUPPLY	10/08/02	IRRIGATION	NEW WELL	20	20	25	SCREEN-CONTINUOUS-STAINLESS
200640		METRA PARK	45.800075	-108.473579	TRS-SEC	NAD83	01N	26E	27	DC	WELL 112ALVM	26	15		80	AIR	8	30	15	0.5 AMERICAN DRILLING & SUPPLY	10/05/02	IRRIGATION	NEW WELL	25	25	31	SLOTS
161487		YELLOWSTONE CO METRA PARK	45.799164	-108.474886	TRS-SEC	NAD83	01N	26E	27	DCC	WELL 112ALVM	40	9	13	85	AIR	6		9	2 AMERICAN DRILLING & SUPPLY	06/16/95	IRRIGATION	NEW WELL	30	30	40	SCREEN-OTHER
11521		ORCHOWSKI, FRANK	45.79575575	-108.4877627	TRS-SEC	NAD83	01N	26E	33	AAD	WELL 111ALVM	22	20		40	OTHER				UNKNOWN	01/01/50	DOMESTIC					
11501		PARSHALL HUGH P.	45.793026	-108.489069	TRS-SEC	NAD83	01N	26E	33	AD	WELL 111ALVM	20	12		5	OTHER				UNKNOWN	07/01/61	DOMESTIC					
122061		PETES AUTOMATIC TRANSMISSION * DH-04	45.79302594	-108.4890693	TRS-SEC	NAD83	01N	26E	33	AD	WELL 111ALVM	19	8			OTHER				BRAUN	02/05/90	MONITORING	NEW WELL	3.5	3.5	18.5	.010 SCREEN
134808		BILLINGS REFINERY * RW-112	45.79103266	-108.4761929	TRS-SEC	NAD83	3103.5 01N	26E	34		WELL 111ALVM	18.8				OTHER				ADVANCED WELL DRILLING INC	01/25/93	MONITORING		1.9	1.9	16.9	.03 PERFS
134810		BILLINGS REFINERY * RW-113	45.79103266	-108.4761929	TRS-SEC	NAD83	01N	26E	34		WELL 111ALVM	23				OTHER				ADVANCED WELL DRILLING INC	01/15/93	MONITORING		3.5	3.5	21	.03 PERFS
134846		BILLINGS REFINERY * RW-114	45.79103266	-108.4761929	TRS-SEC	NAD83	01N	26E	34		WELL 111ALVM	24.1				OTHER				ADVANCED WELL DRILLING INC	01/18/93	MONITORING		2	2	22	.03 PERFS
905677	NO LOG Available	MONARCH	45.791033	-108.476193	TRS-SEC	NAD83	01N	26E	34		PETWELL																
198254		MONTANA DEQ	45.796451	-108.468351	TRS-SEC	NAD83	01N	26E	34	AA	WELL	28	9			OTHER				MAXIM TECHNOLOGIES	07/18/02	MONITORING	NEW WELL	7.5	7.5	27.5	SCREEN-CONTINUOUS-PVC
165440	102251	LOCKWOOD IRRIGATION DISTRICT	45.797354	-108.467044	TRS-SEC	NAD83	01N	26E	34	AAA	WELL 111ALVM	40	8		25	AIR			8	0.17 AAQUA DRILLING INC	10/20/97	OTHER	NEW WELL	25	25	25	OPEN BOTTOM
11519		ORCHOWSKI, FRANK	45.79735366	-108.4670443	TRS-SEC	NAD83	01N	26E	34	AAA	WELL 111ALVM	22	18		45	OTHER				UNKNOWN	01/01/46	DOMESTIC					
11520		LOCKWOOD WATER USERS WELL * #4	45.79690216	-108.4676978	TRS-SEC	NAD83	3095 01N	26E	34	AAAC	WELL 111ALVM	32	17	23	210	PUMP	24			EAGLE DRILLING AND PUMP SERVICE	10/04/65	PUBLIC WATER SUPPLY		20	20	30	SLOTS
213271	NO LOG Available	L & J MACHINE	45.7996	-108.4619	NAV-GPS	NAD27	3275 01N	26E	34	ABAA	WELL											INDUSTRIAL					
182034		METRA PARK	45.79283866	-108.4683513	TRS-SEC	NAD83	01N	26E	34	AD	WELL	28	9	23	70	PUMP	4			AMERICAN DRILLING & SUPPLY	05/12/00	IRRIGATION	NEW WELL	14	14	24	STAINLESS STEEL SCREEN
222101		METRA PARK	45.796451	-108.478807	TRS-SEC	NAD83	01N	26E	34	BA	WELL	32	11			OTHER				AMERICAN DRILLING & SUPPLY	07/13/05	UNKNOWN	NEW WELL	26	26	32	SCREEN-CONTINUOUS-STAINLESS
11522	4552	CHARBONNEAU, R. W.	45.79645066	-108.4840345	TRS-SEC	NAD83	01N	26E	34	BB	WELL 111ALVM	130	70	80	20	PUMP	4			DIGGER DRILLING	11/20/74	DOMESTIC		119	119	130	SLOTS
146657		PACIFIC HIDE AND FUR RECYCLING * MW-1	45.79735366	-108.4827276	TRS-SEC	NAD83	01N	26E	34	BBA	WELL 111ALVM	30	25.26		5	BAILER				PRO PUMP & EQUIPMENT INC	10/15/93	MONITORING		15	15	30	FACTORY SLOTTED
248877		CON-WAY FREIGHT * MW-14	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	24	14							SK GEOTECHNICAL CO	12/02/08	MONITORING	NEW WELL	9	9	24	SCREEN-CONTINUOUS-PVC
248878		CON-WAY FREIGHT * MW-15	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	22	13.6							SK GEOTECHNICAL CO	12/03/08	MONITORING	NEW WELL	7	7	22	SCREEN-CONTINUOUS-PVC
248879		CON-WAY FREIGHT * MW-16	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	21	11.6							SK GEOTECHNICAL CO	12/03/08	MONITORING	NEW WELL	9	9	19	SCREEN-CONTINUOUS-PVC
248880		CON-WAY FREIGHT * MW-17	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	21	10							SK GEOTECHNICAL CO	12/04/08	MONITORING	NEW WELL	9	9	19	SCREEN-CONTINUOUS-PVC
248881		CON-WAY FREIGHT * MW-18	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	26	16							SK GEOTECHNICAL CO	12/05/08	MONITORING	NEW WELL	9	9	24	SCREEN-CONTINUOUS-PVC
248882		CON-WAY FREIGHT * MW-19	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	24	16.5							SK GEOTECHNICAL CO	12/04/08	MONITORING	NEW WELL	8	8	23	SCREEN-CONTINUOUS-PVC
248884		CON-WAY FREIGHT * MW-20	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	26	16.6							SK GEOTECHNICAL CO	12/05/08	MONITORING	NEW WELL	9	9	24	SCREEN-CONTINUOUS-PVC
218959		CON-WAY TRANSPORTATION CO * MW-10	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	05/11/05	MONITORING	NEW WELL	10	10	25	SCREEN-CONTINUOUS-PVC
218962		CON-WAY TRANSPORTATION CO * MW-11	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	05/11/05	MONITORING	NEW WELL	10	10	25	SCREEN-CONTINUOUS-PVC
218954		CON-WAY TRANSPORTATION CO * MW-7	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	05/10/05	MONITORING	NEW WELL	10	10	25	SCREEN-CONTINUOUS-PVC
218955		CON-WAY TRANSPORTATION CO * MW-8	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	05/10/05	MONITORING	NEW WELL	25	25	25	OPEN BOTTOM
218957		CON-WAY TRANSPORTATION CO * MW-9	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	05/11/05	MONITORING	NEW WELL	9	9	24	SCREEN-CONTINUOUS-PVC
219658		CON-WAY TRANSPORTATION CO. * MW-12	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	06/15/05	MONITORING	NEW WELL	10	10	25	SCREEN-CONTINUOUS-PVC
219659		CON-WAY TRANSPORTATION CO. * MW-13	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	25	18			OTHER				HAZ TECH DRILLING INC	06/15/05	MONITORING	NEW WELL	10	10	25	SCREEN-CONTINUOUS-PVC
256938		CONWAY FREIGHT * MW-21	45.79554766	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BBC	WELL	24	15.6		40	PUMP				CLAYTON LARSON	06/30/10	MONITORING	NEW WELL	9	9	24	PERFORATED CASING
180221		CONSOLIDATED FREIGHT WAY * CFN-#1	45.79283866	-108.4840345	TRS-SEC	NAD83	01N	26E	34	BC	WELL	16.5	7.5			OTHER			0	MAXIM TECHNOLOGIES	02/03/00	MONITORING	NEW WELL	6	6	16	SCREEN-CONTINUOUS-PVC
180220		CONSOLIDATED FREIGHT WAY * CFN-#2	45.79283866	-108.4840345	TRS-SEC	NAD83	01N	26E	34	BC	WELL	16	6.5			OTHER			0	MAXIM TECHNOLOGIES	02/03/00	MONITORING	NEW WELL	5	5	15	SCREEN-CONTINUOUS-PVC
180219		CONSOLIDATED FREIGHT WAY * CFN-#3	45.79283866	-108.4840345	TRS-SEC	NAD83	01N	26E	34	BC	WELL	16.5	7			OTHER			0	MAXIM TECHNOLOGIES	02/04/00	MONITORING	NEW WELL	6	6	16	SCREEN-CONTINUOUS-PVC
180218		CONSOLIDATED FREIGHT WAY * CFN-#4	45.79283866	-108.4840345	TRS-SEC	NAD83	01N	26E	34	BC	WELL	16.5	7			OTHER			0	MAXIM TECHNOLOGIES	02/04/00	MONITORING	NEW WELL	6	6	16	SCREEN-CONTINUOUS-PVC
180217		CONSOLIDATED FREIGHT WAY * CFN-#5	45.79283866	-108.4840345	TRS-SEC	NAD83	01N	26E	34	BC	WELL	16.5	7			OTHER			0	MAXIM TECHNOLOGIES	02/04/00	MONITORING	NEW WELL	6	6	16	SCREEN-CONTINUOUS-PVC
905591	NO LOG Available	MONARCH NO. 1	45.792839	-108.484035	TRS-SEC	NAD83	01N	26E	34	BC	PETWELL																
94216		NAVISTAR * MW-1	45.79306441	-108.4830543	TRS-SEC	NAD83	3103 01N	26E	34	BCACD	WELL 111ALVM	20	9			OTHER				BRAUN	07/06/89	MONITORING		4.8	4.8	19.8	SCREEN-CONTINUOUS-PVC
94217		NAVISTAR * MW-2	45.79306441	-108.4830543	TRS-SEC	NAD83	3104 01N	26E	34	BCACD	WELL 111ALVM	20	8			OTHER				BRAUN	07/06/89	MONITORING		5	5	20	SCREEN-CONTINUOUS-PVC
190071		YURKO PROPERTIES * MW-01	45.79374166	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCB	WELL	16	6.32		2	BAILER	0.33			SK GEOTECHNICAL CO	06/15/00	MONITORING		5.5	5.5	15.5	SCREEN-CONTINUOUS-PVC
190065		YURKO PROPERTIES * MW-02	45.79374166	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCB	WELL	16	7.93		2	BAILER	0.33			SK GEOTECHNICAL CO	06/15/00	MONITORING		5.5	5.5	16	SCREEN-CONTINUOUS-PVC
190069		YURKO PROPERTIES * MW-03	45.79374166	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCB	WELL	16	8.36		2	BAILER	0.33			SK GEOTECHNICAL CO	06/15/00	MONITORING		6	6	16	SCREEN
190070		YURKO PROPERTIES * MW-04	45.79374166	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCB	WELL	15	7.89		2	BAILER	0.33			SK GEOTECHNICAL CO	06/16/00	MONITORING		5	5	15	SCREEN-CONTINUOUS-PVC
219663		YURKO PROPERTIES * MW-05	45.79374166	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCB	WELL	15	8			OTHER				HAZ TECH DRILLING INC	06/16/05	MONITORING	NEW WELL	5	5	15	SCREEN-CONTINUOUS-PVC
219660		YURKO PROPERTIES * MW-06	45.79374166	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCB	WELL	15	8			OTHER				HAZ TECH DRILLING INC	06/16/05	MONITORING	NEW WELL	5	5	15	SCREEN-CONTINUOUS-PVC
123504		CONSOLIDATED FREIGHT WAYS * CF-1	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	19.8	6.16			OTHER				CHEN-NORTHERN, INC	04/10/90	MONITORING	NEW WELL	3.5	3.5	18.5	SCREEN-CONTINUOUS-PVC
123513		CONSOLIDATED FREIGHT WAYS * CF-10	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	19	6.3			OTHER				CHEN-NORTHERN, INC	02/06/91	MONITORING	NEW WELL	4	4	19	SCREEN-CONTINUOUS-PVC
123505		CONSOLIDATED FREIGHT WAYS * CF-2	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	18.8	6.31			OTHER				CHEN-NORTHERN, INC	04/19/90	MONITORING	NEW WELL	2.5	2.5	17.5	SCREEN-CONTINUOUS-PVC
123506		CONSOLIDATED FREIGHT WAYS * CF-3	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	18.8	6.67			OTHER				CHEN-NORTHERN, INC	04/10/90	MONITORING	NEW WELL	3.5	3.5	18.5	SCREEN-CONTINUOUS-PVC
123507		CONSOLIDATED FREIGHT WAYS * CF-4	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	20.5				OTHER				CHEN-NORTHERN, INC	04/17/90	MONITORING	NEW WELL	3.4	3.4	18.4	SCREEN-CONTINUOUS-PVC
123508		CONSOLIDATED FREIGHT WAYS * CF-5	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	21.3	5.4			OTHER				CHEN-NORTHERN, INC	02/05/91	MONITORING	NEW WELL	6.2	6.2	21.2	SCREEN-CONTINUOUS-PVC
123509		CONSOLIDATED FREIGHT WAYS * CF-6	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	19.3	6.5			OTHER				CHEN-NORTHERN, INC	02/05/91	MONITORING	NEW WELL	4	4	19	SCREEN-CONTINUOUS-PVC
123510		CONSOLIDATED FREIGHT WAYS * CF-7	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	20	6.5			OTHER				CHEN-NORTHERN, INC	02/05/91	MONITORING	NEW WELL	5	5	20	SCREEN-CONTINUOUS-PVC
123511		CONSOLIDATED FREIGHT WAYS * CF-8	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	19.5	5.6			OTHER				CHEN-NORTHERN, INC	02/05/91	MONITORING	NEW WELL	4	4	19	SCREEN-CONTINUOUS-PVC
123512		CONSOLIDATED FREIGHT WAYS * CF-9	45.79193566	-108.4853415	TRS-SEC	NAD83	01N	26E	34	BCC	WELL 111ALVM	21.7	5.5			OTHER				CHEN-NORTHERN, INC	02/04/91	MONITORING	NEW WELL	6.2	6.2	21.2	SCREEN-CONTINUOUS-PVC
126401		AGRI SYSTEMS	45.787421	-108.481421	TRS-SEC	NAD83	01N	26E	34	C	WELL 111ALVM	24	6	18	30	PUMP	4		6	1 AMERICAN DRILLING & SUPPLY	10/05/91	INDUSTRIAL	NEW WELL	19	19	24	SCREEN-CONTINUOUS-STAINLESS
179478		CONOCO INC. * CCPMW#1	45.78922666	-108.4788068	TRS-SEC	NAD83	01N	26E	34	CA	WELL	18	11			OTHER			0	MAXIM TECHNOLOGIES	03/28/00	MONITORING	NEW WELL	7.5	7.5	17.5	SCREEN-CONTINUOUS-PVC
179477		CONOCO INC. * CCPMW#2	45.78922666	-108.4788068	TRS-SEC	NAD83	01N	26E	34	CA	WELL	18	11			OTHER			0	MAXIM TECHNOLOGIES	03/29/00	MONITORING	NEW WELL	2.5	2.5	17.5	SCREEN-CONTINUOUS-PVC
179479		CONOCO INC. * CCPMW#3	45.78922666	-108.4788068	TRS-SEC	NAD83	01N	26E	34	CA	WELL	18	11.5			OTHER			0	MAXIM TECHNOLOGIES	03/29/00	MONITORING	NEW WELL	7.5	7.5	17.5	SCREEN-CONTINUOUS-PVC
179480		CONOCO INC. * CCPMW#4	45.78922666	-108.4788068	TRS-SEC	NAD83	01N	26E	34	CA	WELL	15	11			OTHER			0	MAXIM TECHNOLOGIES	03/30/00	MONITORING	NEW WELL	4.5	4.5	14.5	SCREEN-CONTINUOUS-PVC
171707		CITY OF BILLINGS	45.788324	-108.4775	TRS-SEC	NAD83	01N	26E	34	CAD	WELL	15				OTHER			0	HANSEN ENVIRONMENTAL DRILLING	02/23/99	MONITORING	NEW WELL	2	2	15	SCREEN-CONTINUOUS-PVC
11524		RICHARDS, LAURA	45.78922666	-108.4840345	TRS-SEC	NAD83	01N	26E	34	CB	WELL 111TRRC					OTHER				UNKNOWN	01/01/50	DOMESTIC					
130058		MT DEPT OF HIWYS * 13TH ST UNDERPASS	45.79012966	-108.4853415	TRS-SEC	NAD83	01N	26E	34	CBB	WELL 111ALVM	30	16.8			OTHER					08/31/92	MONITORING		10	10	25	SLOTS
130059		MT DEPT OF HIWYS * 13TH ST UNDERPASS	45.79012966	-108.4853415	TRS-SEC	NAD83	01N	26E	34	CBB	WELL 111ALVM	25.7	14.9			OTHER					09/01/92	MONITORING		8	8	23	SLOTS
130062		MT DEPT OF HIWYS * 13TH ST UNDERPASS	45.79012966	-108.4853415	TRS-SEC	NAD83	01N	26E	34	CBB	WELL 111ALVM	30	15.4			OTHER					09/02/92	MONITORING		14	14	29	SLOTS
129570		BILLINGS REFINERY * PZ-1	45.78471166	-108.4827276	TRS-SEC	NAD83	01N	26E	34	CCD	WELL 111ALVM	19.8	10			OTHER				ADVANCED WELL DRILLING INC	02/26/91	MONITORING		3	3	19.8	SCREEN-CONTINUOUS-PVC
129573		BILLINGS REFINERY * PZ-2	45.78471166	-108.4827276	TRS-SEC	NAD83	01N	26E	34	CCD	WELL 111TRRC	20.8				OTHER				ADVANCED WELL DRILLING INC	02/26/91	MONITORING		3	3	20.4	SCREEN-CONTINUOUS-PVC
129576		BILLINGS REFINERY * PZ-3	45.78471166	-108.4827276	TRS-SEC	NAD83	01N	26E	34	CCD	WELL 111TRRC	21.6				OTHER				ADVANCED WELL DRILLING INC	02/25/91	MONITORING		2.5	2.5	21.5	SCREEN-CONTINUOUS-PVC
129579		BILLINGS REFINERY * PZ-4	45.78471166	-108.4827276	TRS-SEC	NAD83	01N	26E	34	CCD	WELL 111TRRC	19.1				OTHER				ADVANCED WELL DRILLING INC	02/25/91	MONITORING		3.1	3.1	19.1	SCREEN-CONTINUOUS-PVC
185615		CONOCO INC. * P2-23	45.78471166	-108.4827276	TRS-SEC	NAD83	01N	26E	34	CCD	WELL	25	9.5			OTHER				MAXIM TECHNOLOGIES	11/20/00	MONITORING	NEW WELL	4.5	4.5	24.5	SCREEN-CONTINUOUS-PVC

TABLE 12
OFF-SITE WELLS
Yale Oil of South Dakota CECRA Facility
700 North First Ave.
Billings, Montana

GWIC ID		Site Name	Latitude	Longitude			Township	Range	Section QTR			TD	Swl	Pwl	Yield	Type	Test Time		Rtime	Driller	Date							
185614		CONOCO INC. * P2-24	45.78471166	-108.4801137	TRS-SEC	NAD83	01N	26E	34 CDC	WELL		23.5	9.5			OTHER				MAXIM TECHNOLOGIES	11/20/00	MONITORING	NEW WELL	3	3	23	SCREEN-CONTINUOUS-PVC	
140977		INTERNATIONAL LEATHER MAN.	45.789227	-108.473579	TRS-SEC	NAD83	01N	26E	34 DB	WELL	111TRRC	21	7.7		75	PUMP	4		7.7	MAYES DRILLING INC	11/02/90	INDUSTRIAL		16	16	21	SCREEN-OTHER	
208046		SCHAFNITZ JOHN	45.787872	-108.474232	TRS-SEC	NAD83	01N	26E	34 DBCD	WELL	111ALVM	29	12.2		28	AIR	2	28	12.2	0.5 A-1 DRILLING/BILLINGS DRILLING	12/11/03	DOMESTIC		29	29	34	OPEN BOTTOM	
185616		CONOCO INC. * P2-25	45.78561466	-108.473579	TRS-SEC	NAD83	01N	26E	34 DC	WELL		20	9			OTHER				MAXIM TECHNOLOGIES	11/21/00	MONITORING	NEW WELL	4.5	4.5	19.5	SCREEN-CONTINUOUS-PVC	
185617		CONOCO INC. * P2-26	45.78561466	-108.473579	TRS-SEC	NAD83	01N	26E	34 DC	WELL		15	9			OTHER				MAXIM TECHNOLOGIES	11/24/00	MONITORING	NEW WELL	4.5	4.5	14.5	SCREEN-CONTINUOUS-PVC	
11527		JOHNSON, J. DONOVAN	45.78561466	-108.473579	TRS-SEC	NAD83	01N	26E	34 DC	WELL	111TRRC	20	9	20	12	PUMP	2				08/07/73	DOMESTIC		14	14	20	6X1/4 SLOT PERF	
11542		ORCHOWSKI, FRANK * WELL-2	45.79380921	-108.464493	TRS-SEC	NAD83	01N	26E	35 BCB	WELL	111TRRC	20	18		60	OTHER					01/01/58	DOMESTIC	NEW WELL	20	20	20	OPEN BOTTOM	
129303		BILLINGS REFINERY * R-20	45.783721	-108.4829	TRS-SEC	NAD83	3104.6 01S	26E	2 BAAAB	WELL	111TRRC	19				OTHER				BRAUN	09/20/88	MONITORING		4	4	19	.01 PERFS	
129304		BILLINGS REFINERY * BW-2	45.783721	-108.4829	TRS-SEC	NAD83	3104.5 01S	26E	2 BAAAB	WELL	111TRRC	31.6				OTHER				ADVANCED WELL DRILLING INC	03/15/91	MONITORING		21.7	21.7	31.7	PERFORATED CASING	
177381		CONOCO	45.786656	-108.490376	TRS-SEC	NAD83	01N	26E	33 DDB	WELL		20.5	10.25			OTHER			0	PRO PUMP & EQUIPMENT INC	06/24/99		NEW WELL	18	18	20.5	OPEN HOLE	
181411		CONOCO INC * RW-C	45.78665638	-108.490376	TRS-SEC	NAD83	01N	26E	33 DDB	WELL						OTHER			0	PRO PUMP & EQUIPMENT INC	10/15/99		ABANDONED					
129260		BILLINGS REFINERY * R-19	45.783377	-108.481529	TRS-SEC	NAD83	3104.4 01S	26E	2 ABBBCB	WELL	111TRRC	20				OTHER				BRAUN	09/20/88	MONITORING		1.4	1.4	18.6	.010 PERFS	
204928		PELICAN CONNIE * PO-02	45.78574644	-108.4890693	TRS-SEC	NAD83	01N	26E	33 DD	WELL		20.5	12			OTHER				HAZ TECH DRILLING INC	08/26/03	MONITORING	NEW WELL	5	5	20	SCREEN-CONTINUOUS-PVC	
204929		PELICAN CONNIE * PO-03	45.78574644	-108.4890693	TRS-SEC	NAD83	01N	26E	33 DD	WELL		20.5	10			OTHER				HAZ TECH DRILLING INC	08/26/03	MONITORING	NEW WELL	5	5	20	PVC SCH 40	
204930		PELICAN CONNIE * PO-04	45.78574644	-108.4890693	TRS-SEC	NAD83	01N	26E	33 DD	WELL		20.5	12			OTHER				HAZ TECH DRILLING INC	08/25/03	MONITORING	NEW WELL	5	5	20	PVC SCH 40	
205502		PELICAN CONNIE * PO-05	45.78574644	-108.4890693	TRS-SEC	NAD83	01N	26E	33 DD	WELL		20.5	11			OTHER				HAZ TECH DRILLING INC	08/26/03	MONITORING	NEW WELL	5	5	20	SCREEN-CONTINUOUS-PVC	
129257		BILLINGS REFINERY * R-18	45.783263	-108.481333	TRS-SEC	NAD83	3104.3 01S	26E	2 ABBBC	WELL	111TRRC	23.5				OTHER				BRAUN	09/22/88	MONITORING		3.4	3.4	22.4	.010 PERFS	
147360		BILLINGS REFINERY * OR-16	45.783	-108.4825	UNKNOWN	NAD27	3104 01S	26E	2	WELL	111TRRC	15				OTHER				BRAUN	03/04/94	MONITORING		2.5	2.5	12.5	.1 SLOTS	
185122		CONOCO INC. * PZ-22	45.78303403	-108.4832922	TRS-SEC	NAD83	01S	26E	2 BAA	WELL		25	9.5							MAXIM TECHNOLOGIES	11/19/00	MONITORING	ABANDONED	4.5	4.5	24.5	SCREEN-CONTINUOUS-PVC	
185123		CONOCO INC.*P2-21	45.783034	-108.483292	TRS-SEC	NAD83	01S	26E	2 BAA	WELL		24	9.5			OTHER				MAXIM TECHNOLOGIES	11/19/00	MONITORING		3.5	3.5	23.5	PVC SCH 40 SCREEN	
200097		CONOCO INC	45.783034	-108.483292	TRS-SEC	NAD83	01S	26E	2 BAA	WELL		24.5	6.9			OTHER				MAXIM TECHNOLOGIES	11/15/02	MONITORING		4	4	24	.02 PVC SCH 40 SCREENS	
11541		ORCHOWSKI, FRANK * WELL-1	45.79562883	-108.4618552	TRS-SEC	NAD83	01N	26E	35 BBD	WELL	111TRRC	20	18		60	OTHER					01/01/58	DOMESTIC	NEW WELL	20	20	20	OPEN BOTTOM	
11537	C014721-00	OTT, V. R.	45.79471902	-108.4605364	TRS-SEC	NAD83	01N	26E	35 B	WELL	111TRRC	40	20	27	15	BAILER	3			BILLINGS DRILLING	07/27/77	DOMESTIC	NEW WELL	35	35	39	TORCH OR PLASMA CUTS	
145043		HOUGEN, RODGER	45.79471902	-108.4605364	TRS-SEC	NAD83	01N	26E	35 B	WELL	211EGLE	85	33		15	PUMP	3		33	1 AMERICAN DRILLING & SUPPLY	01/15/90	DOMESTIC	NEW WELL	55	55	84	TORCH OR PLASMA CUTS	
11517		LOCKWOOD WATER USERS ASSOCIATION * #1	45.79464466	-108.4709651	TRS-SEC	NAD83	01N	26E	34 A	WELL	111ALVM	27	15		350	OTHER					12/01/56	PUBLIC WATER SUPPLY		0	0	27		SLOTS
11514		LOCKWOOD WATER USERS ASSOCIATION * #2	45.79464466	-108.4709651	TRS-SEC	NAD83	01N	26E	34 A	WELL	111ALVM	27	15		350	OTHER					12/01/56	PUBLIC WATER SUPPLY		0	0	27		SLOTS
11515		LOCKWOOD WATER USERS ASSOCIATION * #3	45.79464466	-108.4709651	TRS-SEC	NAD83	01N	26E	34 A	WELL	111ALVM	27	15		500	OTHER					12/01/56	PUBLIC WATER SUPPLY						

EDR ID Wells: Wells reported by EDR Report, but not reported in MBMGGWIC database.

EDR ID	Site Name	Latitude	Longitude			Township	Range	Section QTR		TD	Swl	Pwl	Yield	Type	est Time	Rtime	Driller	Date
161473	Oster, Donna	45.797354	-108.485341	TRS-SEC	NAD83	01N	26E	34 BBB	Well	26	10	15	12	Pump	1		American Drilling	07/29/96
11523	Bownam, Burt	45.787421	-108.481421	TRS-SEC	NAD83	01N	26E	34 C	Well	25	12	14	20	Pump	2		Beven Drilling	10/06/80
187033	Conoco	45.7883	-108.4858	NAV-GPS	1983	01S	26E	1 BA	Well	22	7.2	9.3	85	Pump	3	0.25	Pro Pump & Equipment	06/23/00
200640	Metra Park	45.800075	-108.473579	TRS-SEC	NAD83	01N	26E	27 DC	Well	26	15	0	80	Air	8	0.5	American Drilling	10/05/02
105	Peters A.J. 2.7m east of Yellowstone Fairgrounds	45.7941	-108.4608		NAD27	01N	26E	36 B	Well	60	50	0	0	Other				06/15/57

Appendix A
Correspondence

Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

1520 East 6th Avenue • Helena, MT 59620 • (406) 444-4218 • Fax: (406) 444-5330

NOTICE OF POTENTIAL LIABILITY AND REQUEST FOR REMEDIAL ACTION LETTER AND NOTICE OF RIGHT TO PETITION FOR ALLOCATION
URGENT LEGAL MATTER
CERTIFIED MAIL JUNE 8, 2011: RETURN RECEIPT REQUESTED

June 8, 2011

ExxonMobil Corporation
Corporation Service Company, Registered Agent
PO Box 1691
26 W Sixth Ave.
Helena, MT 59624-1691

ExxonMobil Environmental Services
Jeff Bunce, Project Manager
2555 West 190th Street, NTO, Basement Level
Torrance, California 90504

Re: Yale Oil South Dakota, CECRA Facility, Billings, Montana

To whom it may concern:

Pursuant to § 75-10-711(3), MCA, of the Comprehensive Environmental Cleanup and Responsibility Act (CECRA), the Montana Department of Environmental Quality (DEQ) hereby notifies you that ExxonMobil Corporation (Exxon) has been identified as a potentially liable person for hazardous or deleterious substance contamination at the Yale Oil South Dakota CECRA Facility (Facility) in Billings, Montana. This Facility is generally located in Section 34, Township 1 North, Range 26 East, Yellowstone County, Montana. It includes the property where the Yale Oil South Dakota Refinery, The Carter Oil Company Refinery, the Montana Refining Company, and the associated tank farm operated between First Avenue North and Interstate Highway 90, as well as any area where hazardous or deleterious substances have come to be located. Since the facility includes all areas where contamination has come to be located, subsequent investigations may result in changes to the facility definition.

Based upon the investigations of DEQ, Exxon has been identified as a potentially liable person, according to § 75-10-715(1)(b), MCA, because of its status as a past owner and/or operator of the Facility at the time the disposal of a hazardous or deleterious substance occurred. Exxon may also have additional bases for liability; DEQ reserves the right to identify additional bases of liability in the future. DEQ has determined that there has been a release and/or a threat of a

release of hazardous or deleterious substances into the environment from the Facility that may present an imminent and substantial endangerment to the public health, safety, or welfare or the environment. Hazardous or deleterious substances, including but not limited to petroleum products, solvents, and metals, have been released and/or have the potential to be released into the environment at the Facility.

Exxon is hereby notified, pursuant to § 75-10-711(3)(c), MCA, that, if it is subsequently found liable pursuant to § 75-10-715(1), MCA, it may be required to reimburse DEQ for remedial action costs incurred by the State and may be subject to penalties pursuant to Title 75, Chapter 10, Part 7, MCA. DEQ also has authority to recover costs under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601, *et seq.* DEQ will bill Exxon Mobile for remedial action costs and will seek recovery of these costs.

As required by § 75-10-745(7), MCA, DEQ made a diligent good faith effort to identify potentially liable persons (PLPs) and is issuing notice letters to ExxonMobil Corporation, ConocoPhillips Pipe Line Company, CHS, Incorporated, BNSF Railway Company, Montana Rail Link, Yellowstone Pipe Line Company, Karen and James Bageman, Reporter Big Sky Office, Inc. f/k/a Reporter Printing and Supply Company, Agri-Systems, Bob and Susan Young, and the Montana Department of Transportation.

Attached to this letter please find a Scope of Work (SOW) for the Facility, which describes the required work to characterize the nature, full horizontal and vertical extent, and possible sources of all hazardous and deleterious substances at and around the Facility. This investigation is necessary to determine the need for further remedial action and to ensure protectiveness of human health and the environment. Pursuant to § 75-10-711, MCA, DEQ is offering Exxon the opportunity to properly and expeditiously perform the remedial actions described in the SOW. As stated above, DEQ has determined that Exxon is a potentially liable person under § 75-10-715(1), MCA, at the Facility. If Exxon is unable or unwilling to properly and expeditiously perform the remedial actions outlined in the SOW, DEQ may undertake the actions itself and require Exxon to reimburse all of DEQ's remedial action costs in doing so. In order to be allowed to proceed with conducting work under the SOW, Exxon must agree to conduct this work in writing within 30 days of the date of this letter. DEQ encourages the PLPs to schedule a scoping meeting with DEQ prior to submitting the schedule for remedial actions at the Facility required by the SOW and described in A.R.M. § 17.55.112(1)(b). Please note that failure to respond to this letter or complete the remedial actions required by the SOW may result in DEQ determining that Exxon Mobile is not properly and expeditiously performing the DEQ-required work.

Sections 75-10-745(3) and (8), MCA, provide that a person who receives a notice letter may, within sixty (60) days from the date of the notice letter, petition DEQ in writing to participate in an allocation process and provide DEQ with the identity of other potentially liable persons who were not noticed by DEQ. If Exxon Mobile wishes to identify additional potentially liable persons, it must provide DEQ with a statement and credible evidence showing that there is a basis in law and fact to determine that the identified person is potentially liable under § 75-10-715, MCA. A failure to petition DEQ for allocation within sixty (60) days of the date of this

notice letter results in a waiver of the right to participate in the allocation process under the Controlled Allocation of Liability Act (CALA). §§ 75-10-742 through 751, MCA.

Please direct technical questions regarding the Facility to Robert Roll at (406) 841-5025 and legal questions to Katherine Haque-Hausrath at (406) 841-5019.

Sincerely,

Sandra Olsen
Remediation Division Administrator

cc: Katherine Haque-Hausrath, DEQ Legal
Denise Martin, Site Response Section Supervisor
Robert Roll, Facility Project Officer

SCOPE OF WORK
Yale Oil of South Dakota, Billings, Montana

The Montana Department of Environmental Quality (DEQ) has determined that information is needed to:

- Identify potential sources of contamination;
- Define the nature and extent of contamination at and the facility;
- Evaluate the risks to human health and the environment (including fate and transport analysis); and
- Evaluate cleanup options.

In addition, interim actions are needed to address petroleum product and potential drums or containers of waste. DEQ will allow the interim actions to occur concurrently with the remedial investigation. Details regarding these interim actions are provided below.

The Yale Oil of South Dakota Comprehensive Environmental Cleanup and Responsibility Act Facility (the Facility) referenced in this Scope of Work (SOW) consists of the geographically contiguous areas around, but not limited to, the former Yale Oil South Dakota Refinery, the Carter Oil Company Refinery, the former Montana Refining Company Refinery, the associated tank farm for the refinery, as well as surrounding areas where hazardous or deleterious substances may have come to be located.

The potentially liable persons (PLPs) for the facility shall prepare the interim action work plans and reports, comprehensive remedial investigation work plan and report, risk assessment work plan and report, feasibility study work plan and report, , and a schedule for performing these activities. The PLPs must properly and expeditiously conduct the interim actions, remedial investigation, risk assessment and feasibility study, as outlined below. DEQ must approve and agree to the work plans and schedule in writing prior to their implementation. Preparation, submittal and performance of the comprehensive remedial investigation, risk assessment, and feasibility study work plans and reports are described below.

I. Interim Actions

The following interim actions may be conducted simultaneously with the remedial investigation:

1. Miscellaneous debris at the Facility, including any abandoned storage tanks, drums, buckets, and cans, must be characterized and disposed of in accordance with all applicable regulations.
2. A concrete trench running parallel to and north of the railroad tracks and south of Tract B and Tract C, in the vicinity of the fenced former tetraethyl lead plant, currently contains oil. The oil must be characterized for disposal, and must be removed from the trench and disposed of in accordance with all applicable regulations.

II. Remedial Investigation

A. Objectives of the Remedial Investigation

The remedial investigation serves to obtain information and data necessary to:

1. Adequately characterize the nature and extent of releases or threatened releases of hazardous or deleterious substances;
2. Allow the effective development and evaluation of alternative remedies for inclusion in the feasibility study; and
3. Allow an assessment of health and ecological risks (including fate and transport analysis) and development of cleanup levels.

B. Components of the Remedial Investigation

The remedial investigation must:

1. Include a detailed study of the nature and extent of all releases or threatened releases of hazardous or deleterious substances;
2. Identify factors likely to affect hazardous or deleterious substance migration and factors likely to affect implementation of a remedy; and
3. Include the following investigations:
    a. Investigations of surface water drainage patterns and any surface water and sediment that may be present. This assessment must be undertaken during the period of the greatest annual rainfall during which surface water (if any) would be present. This investigation must characterize any significant hydrologic features such as:
        i. The surface drainage patterns (relevant to the direction and distance traveled by former surface spills from the Facility), including storm water drainage patterns (to include any impoundments, lagoons, ponds, or basins) or other features that may accumulate or channel surface water or surface releases of hazardous or deleterious substances;
        ii. The surface drainage patterns relevant to areas of erosion and sediment deposition, and the location of floodways, floodplains, and any ephemeral (temporary) wetlands;
        iii. The relationship between surface water drainage patterns and groundwater, (i.e., discharge and recharge of groundwater to and from the underlying aquifers);
        iv. Location (mapped) of surface water within one (1) mile of the Facility, classification of surface water, and the flow rates and directions of any moving water; and
        v. Concentrations of hazardous or deleterious substances present in any surface water or sediment.
    b. Investigations of surface and subsurface soils, including: soils located in the vicinity of the sources of releases; soils that may have been impacted by hazardous or deleterious substance migration (e.g., soils located beyond the PLP

property boundaries); and soils that are potentially not impacted (confirmation sampling to demonstration clean areas). The investigations must characterize the horizontal and vertical distribution and concentrations of hazardous or deleterious substances in soil, and characterize physical, chemical, and biological properties of the soil that could affect the migration, accumulation, attenuation, and remediation of hazardous or deleterious substances. These investigations must:

i. Locate areas where hazardous and deleterious substances are present in surface and subsurface soil at and around the Facility;
ii. Characterize the chemical contaminants and the concentrations of these substances present in soil (this data should be of sufficient quality to allow a quantifiable risk assessment); and
iii. Evaluate the horizontal and vertical extent of materials/media contaminated above screening levels identified in ARM 17.55.109 (for volume estimates).

c. Investigations of geology and hydrogeology to characterize the horizontal and vertical distribution and concentrations of hazardous or deleterious substances in groundwater. These investigations must characterize any contamination that is dissolved in the groundwater, present as non-aqueous phase liquids in the groundwater, and present in the vadose zone. As appropriate, the investigations must characterize the geology and hydrogeology including, but not limited to, the following:

i. Summary of the geology (stratigraphy, structure, surficial/unconsolidated deposits, bedrock units, major aquifer boundaries, etc.).
ii. Characterization of hydrogeologic units, including lithology and hydraulic conductivity, and an interpretation of the vertical connection between hydrogeologic units (aquifer testing may be necessary if existing data is lacking for the Facility);
iii. Regional and localized groundwater flow patterns (direction, velocity, and horizontal and vertical flow components);
iv. Location of groundwater discharge and recharge areas and groundwater divides;
v. Seasonal variations in groundwater flow regime;
vi. An interpretation of the hydraulic connection between the groundwater and surface water flow;
vii. Groundwater characterization to identify contamination within the aquifers beneath and adjacent to the Facility, including the full vertical and horizontal extent of contamination. An identification should be made of past and present source areas located at and around the Facility, and any migration of contaminants (to include lateral extent of contamination in aquifers);
viii. Mapped locations, depths, static water levels, ownership, and usage of public and private wells at the Facility and within a one-half mile radius. Groundwater analytical data should be collected for all public and private wells at, and within the area of known contamination, or within areas potentially impacted by contamination from the Facility; and
ix. An interpretation of the influence of nearby water-supply or production

wells, leaking water lines/tanks, and other utility conduits on hydrogeology at the Facility.

d. Identification and delineation of areas that may be susceptible to migration in air of hazardous or deleterious substances, based on soil particle size and other relevant factors. This must include a determination of seasonal patterns of rainfall, humidity, temperature, prevailing wind direction, wind velocity and the magnitude and frequency of significant storm events and other meteorological factors that could affect air migration of hazardous or deleterious substances under current conditions and during possible remedial earth-moving activities; and possible monitoring of air and dust for hazardous or deleterious substances.
e. Investigations of the potential and known sources of past or ongoing releases, with a characterization of the concentrations and volumes of hazardous and deleterious substances associated with these sources.
f. Investigations to identify human populations exposed or potentially exposed to the releases and the pathways of the exposure or potential exposure. Include identification of present and possible future land and groundwater uses and zoning for the Facility and potentially affected areas. Relevant to this investigation are the analytical data for environmental samples collected from soil, surface water and sediment, groundwater, and air (including indoor air, if appropriate) at and adjacent to the Facility. These data need to be of sufficient accuracy and precision, and of appropriate analytical parameters to allow completion of a quantified risk assessment and comparison to site-specific cleanup levels.
g. Investigations to identify the ecological receptors, such as sensitive environments, plant and animal species, and other ecological receptors affected or potentially affected by the release(s) and the pathways of the exposure or potential exposure to ecological receptors.
h. Investigations to collect site-specific data necessary to complete a fate and transport analysis of contaminants through the vadose zone.

B. Components of the Remedial Investigation Work Plan

The requirements of the remedial investigation work plan are listed below. The work plan must define the investigations necessary to support development of a full remedial investigation and a risk assessment, including fate and transport analysis. The work plan components described in this SOW are presented in a format that is an appropriate outline for the work plan, and DEQ suggests that the PLPs use this format when writing the work plan. Each major component of the work plan may be provided as a section or a separate volume of the work plan. The remedial investigation report must document and interpret the results of the investigations and the data obtained to address the identified components.

The work plan shall include the following components:

1. A site history and data summary report that compiles available information regarding the history and releases at the Facility. This is an appropriate section to include any information (including analytical data) presented in previous reports. The site history and data summary report consists of:
    a. General information such as project title, and legal and general descriptions of the location of the Facility.
    b. A chronological listing of owners, operators, transporters, and generators.
    c. A history of operations including identification and summary of any records relating to hazardous or deleterious substances, dates of operation, a description and location (including maps) of all components (including all underground components, e.g., product pipelines) associated with any hazardous or deleterious substance, and any available historical engineering drawings of the processes for receiving, handling, and distribution of hazardous substances at the Facility.
    d. A comprehensive data summary, including maps and data tables, of *all previous investigations to date*, including available information on the physical and chemical characteristics, concentrations, and volumes of media affected by the release of hazardous or deleterious substances, and an analysis of existing data on the release with an evaluation of the precision, quality, and usability of that data and an identification of data gaps. The data summary must include related data from adjacent areas as required by DEQ. The data may be included as an attachment to the remedial investigation work plan.
    e. A complete history of regulatory involvement at the Facility including the timeframes, reasons for involvement, activities regulated by each agency, and any environmental permits. The history must also include a description of all previous remedial actions taken at the Facility, including the demolition of buildings, fuel lines, and storage tanks, and any prior or ongoing removal of hazardous or deleterious substances.
    f. A description of natural features of the Facility such as regional and local topography, geology, soil, meteorology, ecology, demography, hydrology and hydrogeology. Existing information on the characteristics to be investigated shall be incorporated. The hydrology/hydrogeology characterization must include:
        i. A summary of available groundwater and surface water quality data;
        ii. A description of current and possible future uses of surface water and groundwater at or near the Facility to include identification of area wells and well log information for wells within one-half mile of the Facility, including industrial, commercial, irrigation, stock, drinking water, and monitoring wells;
        iii. A description of groundwater aquifers and the connection between aquifers;
        iv. Surface water and groundwater flow rates and directions;
        v. Location of surface water within one mile of the Facility;
        vi. Groundwater and surface water classification;
        vii. Location of groundwater discharge/recharge; and

viii. Description of surface water drainage patterns.

g. A description of current and anticipated future land use of the Facility and surrounding areas, including zoning information.

h. An existing conditions map of the Facility illustrating relevant features such as property boundaries, surface topography, surface and subsurface structures, utility lines/easements, pipelines, well/borehole locations, general areas of known or suspected contamination, wetlands or floodplains, areas of ongoing erosion, and other pertinent information.

i. A site conceptual model identifying potential or known sources of hazardous or deleterious substances, potential hazardous or deleterious substance migration pathways, including potential release mechanisms and exposure media, and potential human and ecological receptors. The site conceptual model will evolve as more information is gathered during the remedial investigation.

j. Current and historical aerial photos, as well as Sanborn Fire Insurance maps.

k. Name and location of regulated site(s) (i.e., LUST, WQA, ENFD, spills) within ¼ mile of the Facility.

l. Any other pertinent available information.

m. Identification of gaps in information.

2. A sampling and analysis plan(s) (SAP) that details the specific investigations to be conducted and the procedures to be followed in the remedial investigation.

The SAP shall consist of:

a. A field sampling plan that presents a detailed description of all field investigation methodologies, sampling, data gathering, and analytical methods used to conduct the remedial investigation. The field sampling plan must include:

i. Objectives;

ii. Specific description of proposed sampling design for the initial groundwater, soil, surface water/sediment, and air monitoring;

iii. Schedules and task assignments;

iv. Access arrangements for sampling third party properties;

v. Field verification procedures including, but not limited to:

1. Monitoring well specifications and procedures for installation and development;
2. Survey of monitoring wells for location and elevation, with the survey tied in to a known United States Geological Survey (USGS) benchmark;
3. Methods for determination of groundwater flow direction and rate and aquifer characteristics;
4. Identification of all physical hazards; and
5. Identification of all utilities, including: plumbing, pipeways, product conveyance lines, foundations, trenches, recovery sumps, and all other related underground features at the Facility;

vi. Sampling procedures including, but not limited to:
1. Sampling methods and objectives;
2. Sample locations (both planimetric and vertical) and ID numbers (map);
3. Survey of sample locations;
4. Frequency and order of sample collection;
5. Decontamination of equipment to prevent cross-contamination;
6. Sample media (soil, groundwater, surface water, soil, air, dust, or waste);
7. Quality assurance/quality control (QA/QC) samples;
8. Sample labeling procedures, with shipping and handling arrangements;
9. Split sampling opportunities; and
10. Analytical parameters, including:
a. Justifications for choice of analyses;
b. Laboratory and analytical method identification, including detection limits;
c. Comparison of method detection limit to screening levels;
d. Sample containers, preservation and documentation methods, and holding times; and
e. Laboratory-generated QA/QC samples.

vii. Procedures (including any hazardous waste issues) for management of investigation-derived wastes (IDW) including, but not limited to, drill cuttings, purge water, wash water, and disposable equipment/clothing.

b. A quality assurance project plan (QAPP) presenting the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities designed to ensure data validity that addresses:

i. Field QA/QC methods:
1. Standard operating procedures for field sampling methods;
2. Field documentation methods;
3. Frequency of QA/QC samples (duplicates, rinsates, blanks);
4. Field instrument calibration;
5. Preventive maintenance and corrective action procedures and schedule for field equipment; and
6. Field chain of custody procedures.

ii. Laboratory analytical protocol (LAP):
1. Laboratory identification;
2. Sample custody;
3. Analytical turn-around time;
4. Calibration procedures and frequency;
5. Data reduction, validation, and reporting;
6. Internal quality control checks;
7. Laboratory chain of custody procedures;
8. Performance system and audits, including corrective action procedures; and

9. Specific procedures for routine assessment of data precision, representativeness, accuracy, and completeness.

iii. Data reduction, documentation, validation, reporting, and tracking procedures for both field and laboratory data. Please refer to the Data Validation Guidelines at http://deq.mt.gov/StateSuperfund/default.mcpx.

c. A health and safety plan describing the procedures to be employed to comply with applicable federal and state health and safety laws and regulations that addresses the following:

i. Levels of protection;
ii. Hazard evaluation;
iii. Waste characteristics;
iv. Special site considerations;
v. Medical surveillance and emergency information;
vi. Personnel responsibilities and training;
vii. Decontamination procedures, including:

1. Entry and exit controls;
2. Disposal of wastes (IDW) from sampling effort; and
3. Equipment and personnel decontamination.

3. A description of any other information collection and evaluation activities necessary for the remedial investigation.
4. A requirement to provide a remedial investigation report. The work plan must provide for the submittal of a draft remedial investigation report and a final remedial investigation report that incorporates DEQ comments on the draft remedial investigation report. The final remedial investigation report must be submitted to DEQ within a specified time period from receipt of DEQ's directions for revision and completion.

C. Components of the Remedial Investigation Report

The remedial investigation report must consist of:

1. A general introduction describing the purpose of the report and providing a summary of the site history and data summary report;
2. A summary of the investigations conducted pursuant to the remedial investigation work plan;
3. A summary of general field observations and any deviations from the remedial investigation work plan;
4. A natural features characterization incorporating the information presented in the work plan and any additional information on natural features characterization developed in the execution of the remedial investigation work plan;
5. All validated field and laboratory analytical results, which may be separately presented in an appendix;
6. A presentation and evaluation of the remedial investigation data quality and QA/QC results according to the quality assurance program plan (QAPP), including copies of the data validation reports as an appendix;
7. All field notes and borehole and monitoring well logs showing well construction details and driller's observations, which may be presented separately in an appendix;

8. A presentation and evaluation of the results of the investigations conducted pursuant to the remedial investigation work plan. This presentation must include potentiometric maps, sample locations maps, and hazardous or deleterious substance concentration maps [to include maps depicting NAPL and contaminant concentrations and the lateral and vertical extent of contamination, including a non-detect line – see the Map Guidance located at http://deq.mt.gov/StateSuperfund/default.mcpx];
9. An evaluation of the horizontal and vertical extent of contamination in each affected medium;
10. An evaluation of the fate and transport of hazardous and deleterious substances at the Facility;
11. A discussion of potential hazardous or deleterious substance migration routes and human and ecological receptors;
12. Identification of any remaining data gaps and any additional sampling or treatability studies that are needed;
13. A summary of any other pertinent information obtained during the remedial investigation; and
14. Conclusions and recommendations for further remedial actions.

II. RISK ASSESSMENT

A risk assessment is intended to estimate potential human health and environmental risks posed by current and potential future conditions assuming no further remediation of the Facility. The risk assessment work plan shall describe the approach to the risk assessment and shall facilitate discussions among all interested parties as to the appropriate ways to evaluate risks for the Facility and surrounding area. Please refer to the frequently asked questions regard risk assessment/analysis found at:
http://deq.mt.gov/StateSuperfund/FrequentlyAskedQuestions.mcpx#5.

A. Components of the Risk Assessment Work Plan

The risk assessment work plan shall address both human health and ecological impacts and the fate and transport of contaminants through soils to groundwater. The risk assessment work plan must, at a minimum, include the following information:

1. History and setting of the Facility, including demographic information
2. Data evaluation and selection of chemicals of potential concern (COPC)
    a. Data summary
    b. Data evaluation
    c. Selection of COPC(s) for each media
3. Human health risk assessment
    a. Exposure assessment
        i. Site conceptual exposure model
        ii. Potential receptors and exposure pathways
        iii. Exposure assumptions
        iv. Definitions of exposure areas and calculations of exposure point concentrations

v. Calculation of chronic daily intakes

b. Toxicity assessment
   i. Chemical carcinogens
   ii. Systemic carcinogens
   iii. Toxicity criteria
   iv. Uncertainties associated with toxicity assessment

c. Risk Characterization
   i. Cancer risk estimates
   ii. Non-carcinogen hazard estimates
   iii. Evaluation of uncertainties

4. Ecological risk assessment
5. Fate and Transport Analysis (refer to DEQ's frequently asked question located at http://deq.mt.gov/StateSuperfund/FrequentlyAskedQuestions.mcpx)
6. Development of remediation goals
   a. Human health-based remediation goals
   b. Remediation goals based on fate and transport analysis
7. Completed tables 1, 2, 4, 5, and 6 of EPA's Risk Assessment Guidance for Superfund (RAGS) Part D.
8. A requirement to provide a risk assessment report. The work plan must provide for the submittal of a draft risk assessment report and a final risk assessment report that incorporates DEQ comments on the draft risk assessment report. The final risk assessment report must be submitted to DEQ within a specified time period from receipt of DEQ's directions for revision and completion.

B. Components of the Risk Assessment Report

The risk assessment report must provide data sufficient in quantity and quality to identify potential human health and environment risks associated with current and future conditions at the Facility. Data must represent potential exposures at the Facility. The risk assessment report must be based on the risk assessment work plan and must, at a minimum, include the following information:

1. A brief summary of the background of the Facility
2. A brief summary of the data sets used in the assessment
3. A brief summary of the COPCs evaluated
4. A brief summary of the exposure areas, receptors, pathways, and assumptions evaluated
5. Calculation and discussion of the exposure point concentrations for the receptors and pathways
6. A brief summary of the toxicological criteria used
7. Calculation and discussion of the carcinogenic and non-carcinogenic risks for the receptors and pathways
8. Discussion of uncertainties
9. Ecological risk assessment
10. Fate and transport analysis (refer to DEQ's frequently asked question located at http://deq.mt.gov/StateSuperfund/FrequentlyAskedQuestions.mcpx)
11. Calculation of remediation goals based on direct contact

12. Calculation of remediation goals based on protection of groundwater
13. Completed Tables 1-10 of RAGS Part D.

III. FEASIBILITY STUDY

The feasibility study is the mechanism for the development, screening, and detailed evaluation of alternative remedial actions. The purpose of the detailed analysis of alternatives is to provide DEQ with adequate information to propose an appropriate remedy for the Facility.

A. Components of the Feasibility Study Work Plan

The feasibility study work plan must include, at a minimum, the following:

1. An identification of the areas and volume of contaminated media exceeding remediation goals developed in the risk assessment;
2. An identification of the remedial action objectives specifying contaminants and media of concern, potential exposure pathways, and preliminary remediation goals;
3. An initial alternatives screening table, which shall consist of:
    a. Identification and description of all potential remedy alternatives;
    b. Description of the evaluation criteria used in the initial screening of remedy alternatives;
    c. Initial evaluation of remedy alternatives according to criteria designed to eliminate those remedies that are clearly infeasible or inappropriate, prior to undertaking a detailed evaluation; and
    d. Documentation of the rationale for eliminating any remedies from further detailed evaluations.
4. An identification and evaluation of potentially suitable technologies, including alternative treatment technologies and resource recovery technologies. In addition to all other alternative remedies developed, the no action alternative must be developed;
5. An identification of suitable technologies assembled into alternative remedies;
6. An identification of the feasibility study tasks, including procedures for evaluation of alternative remedies;
7. An identification of any necessary treatability studies (if it is more appropriate, these may sometimes be proposed as part of remedial design). If treatability studies are necessary, a treatability study work plan must be prepared and must include:
    a. A project description and background describing the Facility and the type, concentration, and distribution of hazardous or deleterious substances;
    b. A remedial technology description describing the technology(ies) to be tested either in a bench scale or pilot scale test and the test(s) objective(s);
    c. If a bench scale test is to be conducted, a description of the specialized equipment and materials required for the test and sequential description of the experimental procedures to be performed to include identification of the variable conditions to be tested.
    d. If a pilot scale test is to be conducted, a description of pilot plant installation and start-up equipment and methods and a description of pilot plant operation and maintenance procedure to include listing the various operating conditions which

are to be tested;

8. A SAP, if sampling other than that covered in the treatability study work plan will be performed during the feasibility study;
9. A requirement that each remedy alternative comply with the requirements contained in § 75-10-721(1) and (2), Montana Code Annotated (MCA). The requirements contained in § 75-10-721(1) and (2), MCA, against which each alternative remedy must be evaluated, include the following:
    a. Attainment of a degree of cleanup of the hazardous or deleterious substance and control of a threatened release or further release of that substance that assures protection of public health, safety, and welfare and of the environment;
    b. Compliance with and cleanup consistent with applicable and relevant state or federal environmental requirements, criteria, or limitations (including a discussion of the estimated time to meet them);
    c. Consideration of present and reasonably anticipated future uses of the Facility;
    d. Demonstration of acceptable mitigation of exposure to risks to the public health, safety, and welfare and the environment;
    e. Long-term and short-term effectiveness and reliability;
    f. Technical practicability and implementability;
    g. Use of treatment technologies or resource recovery technologies, if practicable, giving due consideration to engineering controls; and
    h. Cost effectiveness.
10. A requirement to provide a feasibility study report. The feasibility study work plan shall provide for submittal of a draft and final feasibility study report, as described in SOW item III(B) below, incorporating DEQ comments.

B. Components of the Feasibility Study Report

The draft and final feasibility study must include, at a minimum, the following components:

1. An introduction describing the purpose and organization of the report and general background information;
2. A presentation and discussion of results of treatability studies including an assessment of the success of the test(s) and an evaluation of the results as they pertain to the selection of the remedy;
3. A presentation and evaluation of the results of any investigations conducted in addition to treatability study investigations pursuant to the feasibility study work plan;
4. A presentation and evaluation of the QA/QC results according to the QAPP, including all appropriate data validation information (see the Data Validation Guidelines at http://deq.mt.gov/StateSuperfund/default.mcpx);
5. All validated field and laboratory analytical results for samples collected during any treatability studies and during the feasibility study, as well as for samples collected during the remedial investigation which are discussed in the feasibility study, all of which may be separately presented in an appendix;
6. A summary of any deviations from the feasibility study work plan;
7. A presentation and discussion of results of the detailed alternatives analysis;
8. Appendices containing DEQ's analyses of environmental requirements, criteria and

limitations;

9. A discussion of estimated time to meet environmental requirements, criteria, and limitations; and
10. Other pertinent information obtained during the feasibility study.

The PLPs shall submit a final draft feasibility study report for DEQ review and comment. Concurrently, DEQ's proposed plan for final cleanup will be submitted for a minimum of thirty days for a public review and comment period. After the public review and comment period of the proposed plan and receipt of DEQ comments, the PLPs shall submit the final feasibility study report that incorporated DEQ comments on the final draft feasibility study report. DEQ will not submit the feasibility study for public comment.

IV. SCHEDULE

The PLPs must prepare a schedule providing a time deadline for each task and deliverable pursuant to ARM 17.55.112. The schedule, as well as all of the other items contained within this letter, is subject to DEQ review and approval or modification. Time frames for completion of actions by DEQ shall be estimates only and will not be binding on DEQ. An example schedule is provided below. **Please note that DEQ requires a response to this SOW request within thirty days of receipt of this request.** The response must indicate whether or not the PLPs intend to properly and expeditiously conduct the remedial actions contained within this SOW.

Example Schedule of deadlines:

Schedule Element	Deadline
Response to this request to conduct further remedial activities	**30 days after receipt of this request letter**
Attend remedial investigation scoping meeting with DEQ	
Submit draft interim action work plan to DEQ for debris characterization and disposal (Interim Action Item I.1)	30 days after remedial investigation scoping meeting
DEQ review of draft interim action work plan for debris characterization and disposal (Interim Action Item I.1)	
Submit final interim action work plan to DEQ for debris characterization and disposal (Interim Action Item I.1)	
DEQ review of final interim action work plan for debris characterization and disposal (Interim Action Item I.1)	
Conduct debris characterization and disposal interim action (Item I.1) and submit report documenting action	
Submit draft interim action work plan to DEQ for oil characterization and disposal (Interim Action Item I.2)	
DEQ review of draft interim action work plan for oil characterization and disposal (Interim Action Item I.2)	
Submit final interim action work plan to DEQ for oil characterization and disposal (Interim Action Item I.2)	
DEQ review of final interim action work plan for oil characterization and disposal (Interim Action Item I.2)	

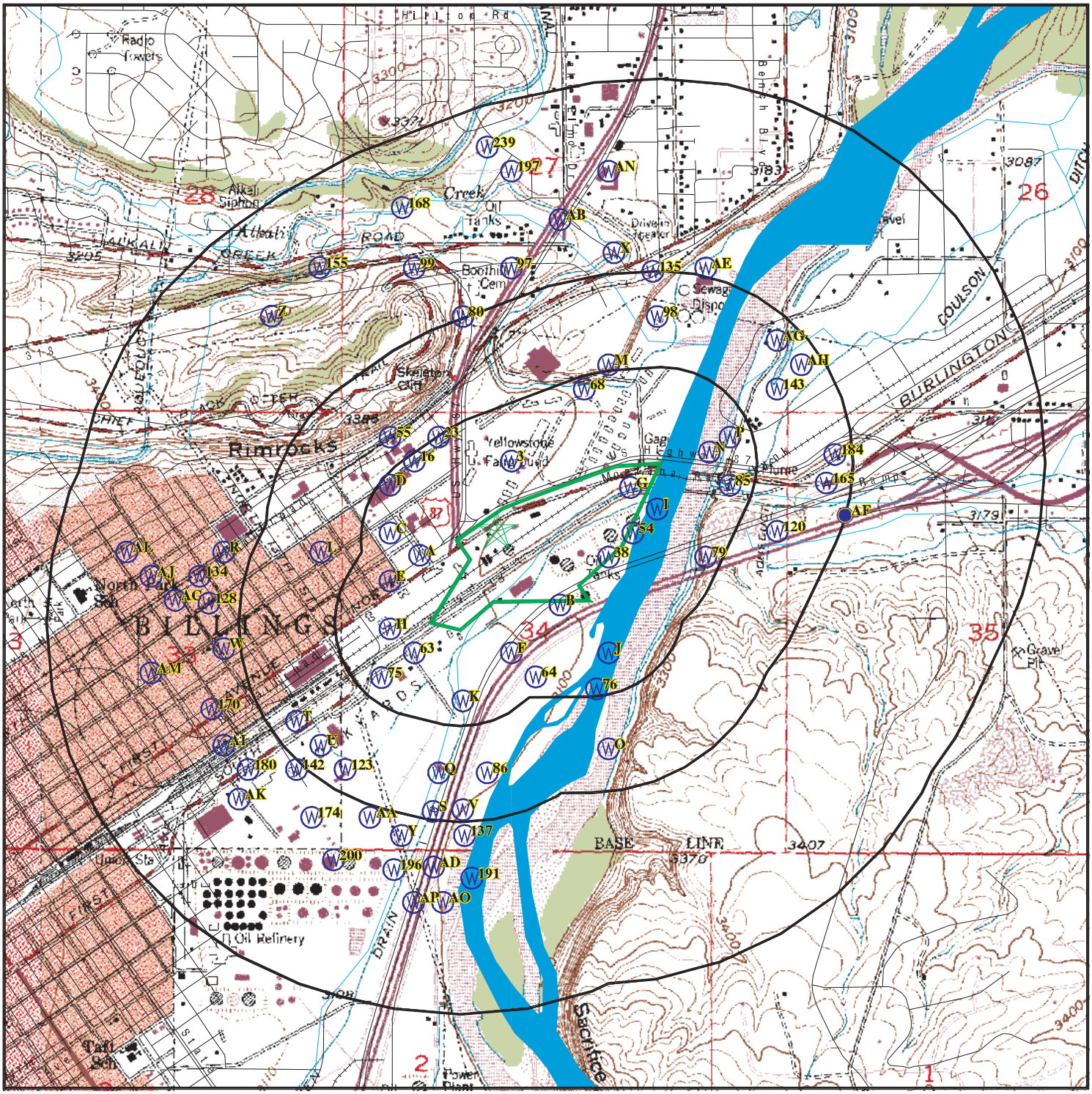
Schedule Element (continued)	Deadline
Conduct oil characterization and disposal interim action (Item I.2) and submit report documenting action	
Submit draft remedial investigation work plan to DEQ	
DEQ review of draft remedial investigation work plan	
Submit final remedial investigation work plan to DEQ incorporating all of DEQ's comments (under ARM 17.55.112, the PLP has one opportunity to address all of DEQ's required revisions on each submittal; if DEQ determines that its required revisions were not adequately addressed in the revised document, DEQ shall incorporate its required revisions electronically into the document and shall either finalize the document itself or shall provide the PLP under § 75-10-715, MCA, an opportunity to finalize the document with DEQ's revisions)	30 days after receipt of comments
DEQ review of final remedial investigation work plan incorporating all of DEQ's comments	
Conduct remedial investigation field work	
Submit draft remedial investigation report to DEQ	
DEQ review of draft remedial investigation report	
Submit draft final remedial investigation report to DEQ	30 days after receipt of comments
DEQ review of draft final remedial investigation report incorporating all of DEQ's comments	
Submit final remedial investigation report to DEQ incorporating all of DEQ's comments (under ARM 17.55.112, the PLP has one opportunity to address all of DEQ's required revisions on each submittal, if DEQ determines that its required revisions were not adequately addressed in the revised document, DEQ shall incorporate its required revisions electronically into the document and shall either finalize the document itself or shall provide the PLP under § 75-10-715, MCA, an opportunity to finalize the document with DEQ's revisions)	
Submit draft risk assessment work plan to DEQ	
DEQ review of draft risk assessment work plan	
Submit final risk assessment work plan to DEQ incorporating all of DEQ's comments	30 days after receipt of comments
DEQ review of final risk assessment work plan	
Conduct risk assessment work	
Submit draft risk assessment report to DEQ	30 days after receipt of DEQ's approval of final risk assessment work plan
DEQ review of draft risk assessment report	

Schedule Element (continued)	Deadline
Submit final risk assessment report incorporating all of DEQ's comments (under ARM 17.55.112, the PLP has one opportunity to address all of DEQ's required revisions on each submittal, if DEQ determines that its required revisions were not adequately addressed in the revised document, DEQ shall incorporate its required revisions electronically into the document and shall either finalize the document itself or shall provide the PLP under 75-10-715, MCA, an opportunity to finalize the document with DEQ's revisions)	30 days after receipt of comments
DEQ review of final risk assessment report	
DEQ provides preliminary ERCLs package to PLPs	
Submit draft feasibility study work plan to DEQ	
DEQ review of draft feasibility study work plan	
Submit final feasibility study work plan incorporating all of DEQ's comments (under ARM 17.55.112, the PLP has one opportunity to address all of DEQ's required revisions on each submittal, if DEQ determines that its required revisions were not adequately addressed in the revised document, DEQ shall incorporate its required revisions electronically into the document and shall either finalize the document itself or shall provide the PLP under § 75-10-715, MCA, an opportunity to finalize the document with DEQ's revisions)	30 days after receipt of comments
DEQ review of final feasibility study work plan	
Conduct feasibility study	
Submit draft feasibility study report to DEQ	60 days after receipt of DEQ's approval of final feasibility study work plan
DEQ preparation of proposed plan	
DEQ review of draft feasibility study report	
Public comment period for proposed plan	30 days

Schedule Element (continued)	Deadline
Submit draft final feasibility study report incorporating all of DEQ's comments (under ARM 17.55.112, the PLP has one opportunity to address all of DEQ's required revisions on each submittal, if DEQ determines that its required revisions were not adequately addressed in the revised document, DEQ shall incorporate its required revisions electronically into the document and shall either finalize the document itself or shall provide the PLP under § 75-10-715, MCA, an opportunity to finalize the document with DEQ's revisions)	30 days after receipt of comments
DEQ review of draft final feasibility study report	

Appendix B
Environmental Data Resources, Inc. Report

OVERVIEW MAP - 3156252.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Yale Oil	CLIENT: Cardno ERI
ADDRESS: 700 First Avenue North Billings MT 59101	CONTACT: Robert Serrato
LAT/LONG: 45.7939 / 108.4796	INQUIRY #: 3156252.2s
	DATE: August 26, 2011 8:11 pm

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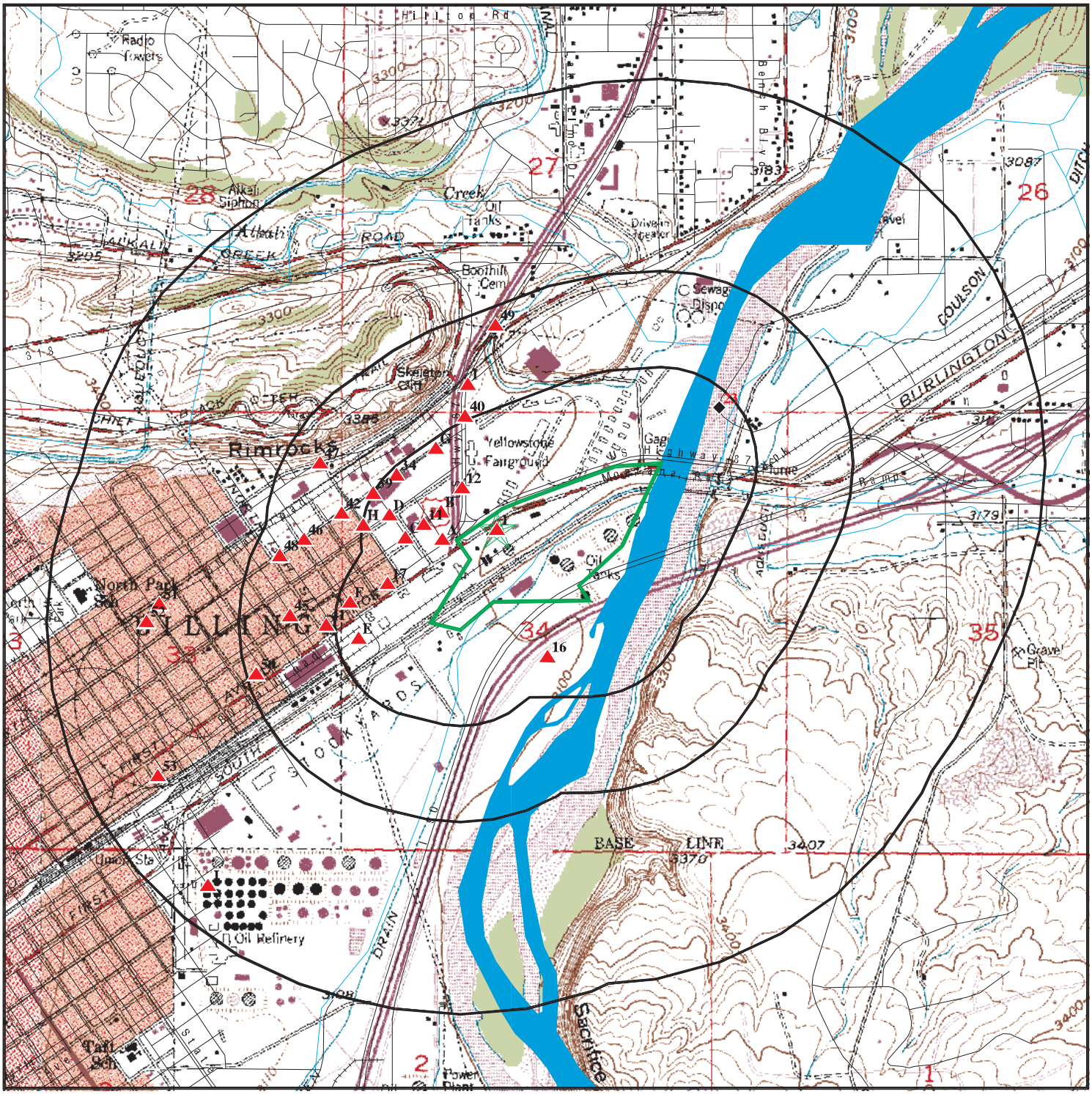
OVERVIEW MAP - 3156252.2s



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Yale Oil
700 First Avenue North
Billings, MT 59101

Inquiry Number: 3156252.2s
August 26, 2011

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

700 FIRST AVENUE NORTH
BILLINGS, MT 59101

COORDINATES

Latitude (North):	45.793900 - 45˚ 47' 38.0''
Longitude (West):	108.479600 - 108˚ 28' 46.6''
Universal Tranverse Mercator:	Zone 12
UTM X (Meters):	695887.9
UTM Y (Meters):	5074020.5
Elevation:	3102 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	45108-G4 BILLINGS EAST, MT
Most Recent Revision:	1975

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	2006, 2005
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
YALE OIL OF SOUTH DAKOTA, CARTER 700 FIRST AVE N BILLINGS, MT	SHWS REM RPROGRAM Ranking: High priority Ranking: Referred to another program **Additional key fields are available in the Map Findings section*	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Management Facilities List

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

INST CONTROL..... Response Action List

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

EXECUTIVE SUMMARY

State and tribal Brownfields sites

BROWNFIELDS ..... Brownfields Site Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
CDL ..... Clandestine Drug Labs
HIST CDL ..... Clandestine Drug Lab Listing
US HIST CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information
LUCIS ..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
SPILLS ..... Hazardous Material Spills Report

Other Ascertainable Records

DOT OPS ..... Incident and Accident Data
DOD ..... Department of Defense Sites
FUDS ..... Formerly Used Defense Sites
CONSENT ..... Superfund (CERCLA) Consent Decrees
UMTRA ..... Uranium Mill Tailings Sites
MINES ..... Mines Master Index File
TRIS ..... Toxic Chemical Release Inventory System
TSCA ..... Toxic Substances Control Act
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ..... Section 7 Tracking Systems
ICIS ..... Integrated Compliance Information System
PADS ..... PCB Activity Database System
MLTS ..... Material Licensing Tracking System
RADINFO ..... Radiation Information Database
FINDS ..... Facility Index System/Facility Registry System
RAATS ..... RCRA Administrative Action Tracking System
WQA ..... WQA Site Ranking List
DRYCLEANERS ..... Drycleaner Facility Listing
AIRS ..... Emissions Inventory Listing
INDIAN RESERV ..... Indian Reservations

EXECUTIVE SUMMARY

SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
COAL ASH..... Coal Ash Disposal Site Listing
COAL ASH DOE..... Sleam-Electric Plan Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
FINANCIAL ASSURANCE.... Financial Assurance Information Listing

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 03/31/2011 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD SOLVENT GROUND WATER	***LOCKWOOD ROAD***	***ESE 0 - 1/8 (0.039 mi.)***	***0***	***22***

Proposed NPL: Proposed NPL sites . The source of this database is the U.S. EPA.

A review of the Proposed NPL list, as provided by EDR, and dated 03/31/2011 has revealed that there is 1 Proposed NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD SOLVENT GROUND WATER	***LOCKWOOD ROAD***	***ESE 0 - 1/8 (0.039 mi.)***	***0***	***22***

EXECUTIVE SUMMARY

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 02/25/2011 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD SOLVENT GROUND WATER	***LOCKWOOD ROAD***	***ESE 0 - 1/8 (0.039 mi.)***	***0***	***22***

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/25/2011 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC HIDE & FUR	777 4TH AVENUE NORTH	NW 1/8 - 1/4 (0.229 mi.)	G30	69

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/09/2011 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CONOCOPHILLIPS CO BILLINGS RE	***401 S 23RD ST***	***SW 1/2 - 1 (0.895 mi.)***	***J54***	***95***

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 06/15/2011 has revealed that there are 14 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BILLINGS MACHINE & WELDING SHO	115 N 9TH ST	W 0 - 1/8 (0.038 mi.)	A2	35
GOLDSTAR	600 1ST AVE N WEST END	WSW 0 - 1/8 (0.047 mi.)	A3	38
A & I DISTRIBUTORS OF BILLINGS	***900 1ST AVE N***	***WSW 0 - 1/8 (0.053 mi.)***	***A4***	***41***
ISTATE TRUCK CENTER	827 2ND AVE N	NW 0 - 1/8 (0.085 mi.)	B8	45
RELIABLE DISTRIBUTING INC	***811 2ND AVE N***	***NW 0 - 1/8 (0.085 mi.)***	***B9***	***47***
ADVANTAGE MACHINE & TOOL INC	923 2ND AVE N	WNW 0 - 1/8 (0.096 mi.)	11	49
FEDERAL EXPRESS BILLINGS	***1148 1ST AVE N***	***WNW 1/8 - 1/4 (0.150 mi.)***	***17***	***55***
AUTOMATIC TRANSMISSION CO 1ST	***1313 1ST AVE N***	***W 1/8 - 1/4 (0.215 mi.)***	***F24***	***61***
OREILLY AUTO PARTS 13TH ST	119 N 13TH ST	WNW 1/8 - 1/4 (0.218 mi.)	F25	63
GLOBALNEXXT	1400 MONTANA AVE	WSW 1/8 - 1/4 (0.227 mi.)	E27	66
PACIFIC RECYCLING BILLINGS	777 4TH AVE N	NW 1/8 - 1/4 (0.229 mi.)	G31	69
CON WAY FREIGHT WESTERN EXPRES	901 4TH AVE N	NW 1/8 - 1/4 (0.232 mi.)	34	75
NORTHWEST TRUCK AND TRAILER SA	***1110 3RD AVE N***	***W 1/8 - 1/4 (0.241 mi.)***	***H35***	***77***
VALLEY WELDERS SUPPLY INC BILL	320 N 11TH ST	W 1/8 - 1/4 (0.247 mi.)	H38	85

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 03/16/2011 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD SOLVENT GROUND WATER	***LOCKWOOD ROAD***	***ESE 0 - 1/8 (0.039 mi.)***	***0***	***22***

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 03/16/2011 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD SOLVENT GROUND WATER	***LOCKWOOD ROAD***	***ESE 0 - 1/8 (0.039 mi.)***	***0***	***22***

State- and tribal - equivalent NPL

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Quality's Non-NPL Sites for Montana.

A review of the SHWS list, as provided by EDR, and dated 08/15/2011 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC HIDE & FUR BILLINGS 4T	***777 4TH AVE N***	***NW 1/8 - 1/4 (0.229 mi.)***	***G33***	***72***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's Leaking Underground Storage Tank List for Montana.

A review of the LUST list, as provided by EDR, and dated 07/19/2011 has revealed that there are 18 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTERNATIONAL HARVESTER Active Sites: No	***917 1ST AVE N***	***WSW 0 - 1/8 (0.056 mi.)***	***A5***	***44***
ZIP TRIP 55 Active Sites: Yes	***236 MAIN ST***	***NW 0 - 1/8 (0.106 mi.)***	***12***	***51***
JACK YURKO Active Sites: Yes	***1002 2ND AVE N***	***W 1/8 - 1/4 (0.134 mi.)***	***C14***	***52***
CONSOLIDATED FREIGHTWAYS 3RD A Active Sites: No	***1002 3RD AVE N***	***WNW 1/8 - 1/4 (0.187 mi.)***	***D19***	***56***
BAIRS TRUCK STOP BILLINGS Active Sites: No	***1ST AVE N & N 13TH ST***	***WNW 1/8 - 1/4 (0.207 mi.)***	***F22***	***60***
KEENAN & ASSOCIATES Active Sites: Yes	***711 4TH AVE N***	***NW 1/8 - 1/4 (0.229 mi.)***	***G29***	***68***
GM PETROLEUM DIST INC CARDTROL Active Sites: Yes Active Sites: No **Additional key fields are available in the Map Findings section*	***1004 4TH AVE N***	***WNW 1/8 - 1/4 (0.250 mi.)***	***39***	***86***
AT & T COMMUNICATIONS BILLINGS Active Sites: Yes	***US HIGHWAY 87***	***NNW 1/4 - 1/2 (0.261 mi.)***	***40***	***87***
SHOWROOM AUTO BODY #4476 Active Sites: Yes	1415 1ST AVE N	W 1/4 - 1/2 (0.272 mi.)	41	87
BARRY OLEARY INC Active Sites: No	***1141 4TH AVE N***	***WNW 1/4 - 1/2 (0.308 mi.)***	***42***	***88***
EAST PARKWAY CENEX TRUCKSTOP Active Sites: No Active Sites: Yes	***501 MAIN ST***	***NNW 1/4 - 1/2 (0.335 mi.)***	***I43***	***88***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METRA PARK BILLINGS #1156 Active Sites: Yes	308 6TH AVE N	NNW 1/4 - 1/2 (0.336 mi.)	I44	89
GRIFFIN AUTOMOTIVE ENTERPRISES Active Sites: No	1501 2ND AVE N	W 1/4 - 1/2 (0.367 mi.)	45	89
ENERGY ONE STOP #3260 Active Sites: Yes	1305 4TH AVE N	WNW 1/4 - 1/2 (0.396 mi.)	46	90
E R YOUNG CO REALTORS Active Sites: No	***1411 4TH AVE N***	***WNW 1/4 - 1/2 (0.431 mi.)***	***48***	***90***
LINDSEY LUMBER & HARDWARE CO Active Sites: No	***548 MAIN ST***	***NNW 1/4 - 1/2 (0.454 mi.)***	***49***	***91***
NORMS SERVICE FORMER Active Sites: Yes Active Sites: Yes	***1724 1ST AVE N***	***WSW 1/4 - 1/2 (0.473 mi.)***	***50***	***92***

Lower Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD WATER USERS ASSOCIATI Active Sites: No	736 CERISE RD	NE 1/8 - 1/4 (0.210 mi.)	23	60

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Statewide UST List.

A review of the UST list, as provided by EDR, and dated 06/30/2011 has revealed that there are 13 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
A & I DISTRIBUTORS OF BILLINGS	***900 1ST AVE N***	***WSW 0 - 1/8 (0.053 mi.)***	***A4***	***41***
INTERNATIONAL HARVESTER	917 1ST AVE N	WSW 0 - 1/8 (0.056 mi.)	A6	44
BILLINGS TRUCK CENTER	***827 2ND AVE N***	***NW 0 - 1/8 (0.085 mi.)***	***B7***	***45***
HIGHBALL TRUCKING CO UST	2348 LOCKWOOD DR	NW 0 - 1/8 (0.094 mi.)	B10	49
ZIP TRIP 55	***236 MAIN ST***	***NW 0 - 1/8 (0.106 mi.)***	***12***	***51***
JACK YURKO	1002 2ND AVE N	W 1/8 - 1/4 (0.134 mi.)	C13	52
FORMER GAS STATION AT VIRDON P	1018 2ND AVE N	W 1/8 - 1/4 (0.143 mi.)	C15	53
CONSOLIDATED FREIGHTWAYS 3RD A	1002 3RD AVE N	WNW 1/8 - 1/4 (0.187 mi.)	D18	56
BAIRS TRUCK STOP BILLINGS	1ST AVE N & N 13TH ST	WNW 1/8 - 1/4 (0.207 mi.)	F21	59
PHOENIX IND	1400 MONTANA AVE	WSW 1/8 - 1/4 (0.226 mi.)	E26	65
KEENAN & ASSOCIATES	711 4TH AVE N	NW 1/8 - 1/4 (0.229 mi.)	G28	68
NORTHWEST PETERBILT CO	1110 3RD AVE N	W 1/8 - 1/4 (0.241 mi.)	H37	85
GM PETROLEUM DIST INC CARDTROL	***1004 4TH AVE N***	***WNW 1/8 - 1/4 (0.250 mi.)***	***39***	***86***

EXECUTIVE SUMMARY

State and tribal voluntary cleanup sites

VCP: Sites involved in the Voluntary Cleanup & Redevelopment program.

A review of the VCP list, as provided by EDR, and dated 08/15/2011 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC HIDE & FUR BILLINGS 4T	***777 4TH AVE N***	***NW 1/8 - 1/4 (0.229 mi.)***	***G33***	***72***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properites addressed by Cooperative Agreement Recipients and Brownfields properties addressed by Targeted Brownfields Assessments

A review of the US BROWNFIELDS list, as provided by EDR, and dated 03/29/2011 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COULSON PARK	E. FRONTAGE ROAD OFF I-	S 1/8 - 1/4 (0.143 mi.)	16	53

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling center locations.

A review of the SWRCY list, as provided by EDR, and dated 01/21/2010 has revealed that there are 2 SWRCY sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC RECYCLING	777 4TH AVE. N	NW 1/8 - 1/4 (0.229 mi.)	G32	71
GOLDEN RECYCLING	1100 6TH AVE. N	WNW 1/4 - 1/2 (0.409 mi.)	47	90

Local Lists of Hazardous waste / Contaminated Sites

DEL SHWS: A list of sites that have been delisted from the CECRA Priority List.

A review of the DEL SHWS list, as provided by EDR, and dated 08/15/2011 has revealed that there are 2 DEL SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BURLINGTON NORTHERN INC PROPER	***2224 MONTANA AVE***	***WSW 1/2 - 1 (0.813 mi.)***	***53***	***93***
CONOCO BILLINGS REFINERY,	401 S. 23RD ST	SW 1/2 - 1 (0.895 mi.)	J55	150

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 06/15/2011 has revealed that there is 1 RCRA-NonGen site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AWZWOLT INTRNTL INC AKA MONTAN	1310 MONTANA AVE	WSW 1/8 - 1/4 (0.192 mi.)	E20	57

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 02/25/2011 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOCKWOOD SOLVENT GROUND WATER	***LOCKWOOD ROAD***	***ESE 0 - 1/8 (0.039 mi.)***	***0***	***22***

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the Manufactured Gas Plants list, as provided by EDR, has revealed that there are 2 Manufactured Gas Plants sites within approximately 1 mile of the target property.

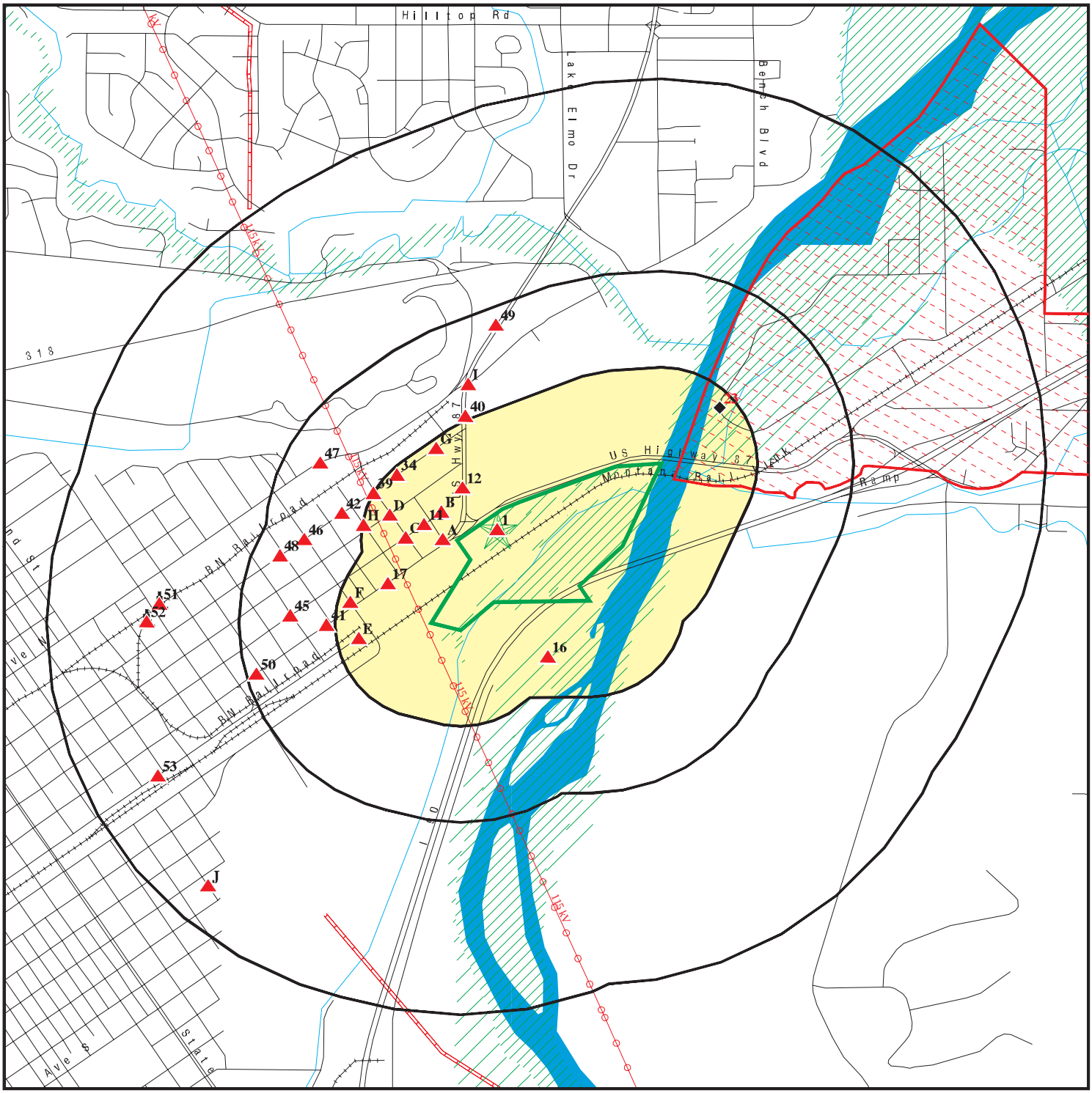
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BILLINGS GAS CO	N 19TH STREET	W 1/2 - 1 (0.708 mi.)	51	92
PINTSCH GAS CO	4TH AVE N	W 1/2 - 1 (0.739 mi.)	52	93

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 40 records.

Site Name	Database(s)
JAN'S IGA LAUREL	SWRCY
ALBERTSONS	SWRCY
LOCKWOOD SCHOOL	SWRCY
CENEX YALE TANK FARM	WQA
BALLANTINE RAMONA BARKER HEATING O	SPILLS
FARSTAD OIL INC	SPILLS
ROCKY MOUNTAIN OIL INC	SPILLS
LOCKWOOD SOLVENT SITE	SHWS
EXXON REFINERY & OLD FLARE SITE	SHWS, DEL SHWS, REM RPROGRAM
BILLINGS GRAIN TERMINAL	CERC-NFRAP, SHWS, DEL SHWS
EMPIRE SAND & GRAVEL CO INC BILLIN	SHWS, REM RPROGRAM
BILLINGS PCE SITE	CERCLIS, FINDS
COMET OIL CO.	CERC-NFRAP
YALE OIL OF SOUTH DAKOTA	CERC-NFRAP
MONTANA POWER CO FRANK BIRD PLANT	CERC-NFRAP, RCRA-NonGen
BIG HORN OIL & REFINING CO.	CERC-NFRAP
USTFIELDS PROJECT #4502	LUST
CHUBB DITCH LUST TRUST #4688	LUST
MDOT MAINTENCE SHOP #2569	LUST
ORGANIZATIONAL MAINT SHOP 6 #704	LUST, UST
FIVE CORNERS QUIK STOP	UST
ZENTZ LUMBER	UST
AT&T B470030 BLNGMTMA	RCRA-CESQG, FINDS
CONOCOPHILLIPS CO GLACIER DIST OFF	RCRA-CESQG, FINDS
W R DRINKWALTER AND SONS TRUCKING	RCRA-CESQG
REPAIR SHOP OIL ALLEGEDLY BEING DU	ERNS
REPAIR SHOP OIL ALLEGEDLY BEING DU	ERNS
2005 BILLINGS CRUDE OIL TANK	FINDS
COMET OIL COMPANY	FINDS
BIG HORN OIL AND REFINING COMPANY	FINDS
STOCKTON OIL COMPANY BILLINGS	FINDS
RUSSELL OIL COMPANY BILLINGS	FINDS
YALE OIL OF SOUTH DAKOTA	FINDS
CONOCO SEMINOE PIPELINE TERMINAL Y	FINDS
CENEX YALE TANK FARM	FINDS
AT&T COMMUNICATION	INDIAN UST
AT&T COMMUNICATION	INDIAN LUST
CENEX YALE TANK FARM, CENEX PIPELI	REM RPROGRAM
FARSTAD OIL TRANKER WRECK,	REM RPROGRAM
BIG HORN OIL & REFINING CO	REM RPROGRAM

OVERVIEW MAP - 3156252.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Yale Oil	CLIENT: Cardno ERI
ADDRESS: 700 First Avenue North Billings MT 59101	CONTACT: Robert Serrato INQUIRY #: 3156252.2s
LAT/LONG: 45.7939 / 108.4796	DATE: August 26, 2011 8:11 pm

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DETAIL MAP - 3156252.2s

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Yale Oil	CLIENT: Cardno ERI
ADDRESS: 700 First Avenue North Billings MT 59101	CONTACT: Robert Serrato INQUIRY #: 3156252.2s
LAT/LONG: 45.7939 / 108.4796	DATE: August 26, 2011 8:12 pm

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	1	0	0	0	NR	1
Proposed NPL		1.000	1	0	0	0	NR	1
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	1	0	0	NR	NR	1
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	1	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG		0.250	0	0	NR	NR	NR	0
RCRA-CESQG		0.250	6	8	NR	NR	NR	14
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	1	0	0	NR	NR	1
US INST CONTROL		0.500	1	0	0	NR	NR	1
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
SHWS	X	1.000	0	1	0	0	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	2	6	10	NR	NR	18
INDIAN LUST		0.500	0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST		0.250	5	8	NR	NR	NR	13

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL		0.500	0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP		0.500	0	1	0	NR	NR	1
INDIAN VCP		0.500	0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	1	0	NR	NR	1
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	1	1	NR	NR	2
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
DEL SHWS		1.000	0	0	0	2	NR	2
CDL		TP	NR	NR	NR	NR	NR	0
HIST CDL		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
SPILLS		TP	NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	0	1	NR	NR	NR	1
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	1	0	0	0	NR	1
UMTRA		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
WQA		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
REM RPROGRAM	X	TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
COAL ASH		0.500	0	0	0	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	2	NR	2

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 Target Property | **YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS**
700 FIRST AVE N
BILLINGS, MT | **SHWS**
REM RPROGRAM | **S105697061**
N/A

Actual: 3102 ft.

SHWS:

Site:	YOSD
Program:	CECRA
Start Date:	1/1/1997
End Date:	Not reported
Report Date:	Not reported
Description:	Site Assessment Activities - Entire Site
Purpose:	Not reported

Site:	YOSD
Program:	CECRA
Start Date:	12/14/1998
End Date:	7/14/1999
Report Date:	10/12/1999
Description:	Interim Action - Soil investigation and removal action - On railroad right of way south of tracks, north of Midland Empire Packing Plant
Purpose:	Characterizing transformer oil release, remove contaminated soil

Site:	YOSD
Program:	CECRA
Start Date:	7/1/2000
End Date:	7/1/2000
Report Date:	7/1/2000
Description:	Interim Action - T&L plant area - North of tracks on RR right of way, on area of former tetra ethyl lead plant
Purpose:	Isolate public from accessing areas of high lead contamination

REM RPROGRAM:

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	05/08/1986
Program:	CERCLA
Description:	CERCLA Discovery - CERCLA Discovery - Entire Site
End Date:	05/08/1986
Report Date:	Not reported
Purpose:	To evaluate the extent of contamination at the site, potential pathways and receptors, and the sites potential for inclusion on the NPL.
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	05/08/1986
Program:	CERCLA
Description:	CERCLA Preliminary Assessment - CERCLA Preliminary Assessment - Entire Site

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

End Date:	12/24/1987
Report Date:	12/18/1987
Purpose:	EPA CERCLIS DATA: Higher priority for further assessment
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	06/08/1989
Program:	CERCLA
Description:	Site Assessment Activities - Northwest portion of property (location of old refinery)
End Date:	11/01/1989
Report Date:	11/01/1989
Purpose:	Sample soil, sediments and surface water to assess health hazard posed by facility and whether contamination is migrating off-site.
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	11/01/1989
Program:	CERCLA
Description:	Site Assessment Activities - Site Inspection - Entire Site
End Date:	11/01/1989
Report Date:	Not reported
Purpose:	EPA CERCLIS Data: Action Code - SI - SITE INSPECTION
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	11/01/1989
Program:	CERCLA

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Description:	NFRAP - No Further Remedial Action Planned - NFRAP - No Further Remedial Action Planned - Entire Site
End Date:	11/01/1989
Report Date:	Not reported
Purpose:	EPA CERCLIS DATA: NFRAP: No further Remedial Action planned.
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	04/15/1991
Program:	UST
Description:	Site Assessment Activities - UST program - follow-up leak report - Department of Military Affairs shop (UST locations) on N part of facility
End Date:	04/19/1991
Report Date:	05/09/1991
Purpose:	Sample soils from UST removal to determine if leaks occurred. Petroleum hydrocarbons detected but may be due to historic contamination from refinery.
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	03/16/1992
Program:	VOL
Description:	Site Assessment Activities - Site investigation for MDOT construction on Hwy 87 - Hwy 87 right-of-way
End Date:	03/27/1992
Report Date:	04/23/1992
Purpose:	Document existing or potential contamination on MDOT right-of-way prior to an MDOT construction project on Hwy 87.
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	08/02/1994
Program:	WQA
Description:	Notice Letter - Historic refinery - Entire Site
End Date:	01/01/1900
Report Date:	Not reported
Purpose:	Referred to CECRA. CECRA oversight.
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	01/01/1997
Program:	CECRA
Description:	Site Assessment Activities - Entire Site
End Date:	Not reported
Report Date:	Not reported
Purpose:	Not reported
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	12/14/1998
Program:	CECRA
Description:	Interim Action - Soil investigation and removal action - On railroad right of way south of tracks, north of Midland Empire Packing Plant
End Date:	07/14/1999
Report Date:	10/12/1999
Purpose:	Characterizing transformer oil release, remove contaminated soil
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

the source). No contaminants found in Yellowstone R. sediments.

Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.

Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.

Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.

Program:	CECRA
Program Date:	11/01/1989
Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Site ID:	YOSD
Lat/Long:	45.79333 / -108.47945
Start Date:	07/01/2000
Program:	CECRA
Description:	Interim Action - T&L plant area - North of tracks on RR right of way, on area of former tetra ethyl lead plant
End Date:	07/01/2000
Report Date:	07/01/2000
Purpose:	Isolate public from accessing areas of high lead contamination
Sphere:	Surface Sediment
Contaminant:	Metals; PAH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Slightly elevated lead in on-site pond & Yegen Ditch sediments; PAHs in Yegen Ditch including some in upgradient samples (Yale may not be the source). No contaminants found in Yellowstone R. sediments.
Sphere:	Sludge
Contaminant:	BTEX; Metals; Volatile
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Sludge sample from concrete storage tank contained elevated Pb levels and low levels of PAH, the volatile solvents PCE and TCE, and toluene.
Sphere:	Surface Water
Contaminant:	Metals
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Municipal drinking water intake
Distance:	300
Area Impacted:	Not reported
Remark:	Elevated lead levels in an on-site pond. No organic contaminants found in surface water.
Sphere:	Soils
Contaminant:	Metals; PAH; TPH
Observed:	Yes
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Residences
Distance:	700
Area Impacted:	Not reported
Remark:	Open sludge pit(s) on site. Soil contaminated with TPH up to 41500 ppm; PAHs up to 51 ppm; Pb up to 18900 ppm; and slightly elevated levels of As, Cr, & Hg.
Program:	CECRA
Program Date:	11/01/1989

YALE OIL OF SOUTH DAKOTA, CARTER REFINERY - BILLINGS (Continued) **S105697061**

Listed Date:	01/01/1992
DeListed Date:	Not reported
State Rank:	High priority
Referred:	Not reported

Program:	CERCLA
Program Date:	05/08/1986
Listed Date:	05/08/1986
DeListed Date:	11/01/1989
State Rank:	Not reported
Referred:	11/01/1989

Program:	WQA
Program Date:	05/08/1986
Listed Date:	Not reported
DeListed Date:	11/01/1989
State Rank:	Referred to another program
Referred:	11/01/1989

NPL
Region
ESE
< 1/8
204 ft.

LOCKWOOD SOLVENT GROUND WATER PLUME
LOCKWOOD ROAD
BILLINGS, MT 59101

NPL **1001475679**
Proposed NPL **MT0007623052**
CERCLIS
US ENG CONTROLS
US INST CONTROL
ROD
FINDS

NPL:

EPA ID:	MT0007623052
EPA Region:	08
Federal:	N
Final Date:	2000-12-01 00:00:00

Site Details:

Site Name:	LOCKWOOD SOLVENT GROUND WATER PLUME
Site Status:	Final
Site Zip:	59101
Site City:	BILLINGS
Site State:	MT
Federal Site:	No
Site County:	YELLOWSTONE
EPA Region:	08
Date Proposed:	05/11/00
Date Deleted:	Not reported
Date Finalized:	12/01/00

Substance Details:

NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
Substance:	Not reported
CAS #:	Not reported
Pathway:	Not reported
Scoring:	Not reported

NPL Status:	Currently on the Final NPL
Substance ID:	C266

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Substance: ETHYL CHLORIDE
CAS #: 75-00-3
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: C324
Substance: CIS-1,2-DICHLOROETHYLENE
CAS #: 156-59-2
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U043
Substance: VINYL CHLORIDE
CAS #: 75-01-4
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U076
Substance: DICHLOROETHANE, 1,1-
CAS #: 75-34-3
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U078
Substance: DICHLOROETHENE, 1,1-
CAS #: 75-35-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U079
Substance: TRANS-DICHLOROETHYLENE, 1,2-
CAS #: 156-60-5
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U211
Substance: CARBON TETRACHLORIDE
CAS #: 56-23-5
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at Proposal May 11, 2000): The Lockwood Solvent Ground Water Plume site is located in the town of Billings, Yellowstone County, Montana. The site is currently defined as a solvent ground water plume with no identified source. Proposal of the Lockwood Solvent Ground Water Plume site to the National Priorities List NPL) is based on releases to groundwater of tetrachloroethene PCE), trichloroethene TCE), cis-1,2-dichloroethene DCE), and vinyl chloride VC) that have been documented in several residential drinking water supply wells. These releases were detected at concentrations that exceed health-based benchmarks. The history of ground water contamination at this site dates back to the mid-1980s. Ben ene, toluene, xylenes, ethyl ben ene, TCE and DCE were detected in the ground water in the vicinity of Lockwood Water Users Association LWUA) municipal supply wells and in ground water monitoring wells up to one-half mile east of the LWUA wells. Several possible contributors are present in the general vicinity of the plume, however, there is not adequate information to attribute contamination to a specific source or sources. In June 1998, the Montana Department of Environmental Quality DEQ) conducted a site investigation and sampled possible source areas upgradient from contaminated monitoring wells that had been previously sampled. Based on findings from June 1998, DEQ conducted a second investigation in winter 1998-99 that focused on identifying the potential sources of PCE in the Lomond Lane area. DEQ concluded that no wastewater systems were contributing to the PCE problem, that three business wells contained contaminants above health standards, and that contamination in residential wells continued to exceed health standards. DEQ requested that the Agency for Toxic Substances and Disease Registry ATSDR) provide a Health Consultation in spring 1999, for the Lockwood Solvent Ground Water Plume site to identify any potentialhealth effects from bathing, showering, or watering lawns and gardens with the ground water. ATSDR recommended that agencies provide alternative whole house water supplies to affected residences within one year. In response, EPA conducted sampling investigations in September and October 1999. EPA found PCE, TCE, cis-1,2-DCE, and vinyl chloride in the ground water. DEQ and EPA are currently supplying ten households with bottled drinking water. Status December 2000): EPAis considering various alternatives for this site. The description of the site release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices. For more information about the ha ardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDRor 1-888-422-8737.

Site Status Details:

NPL Status: Final
Proposed Date: 05/11/2000
Final Date: 12/01/2000
Deleted Date: Not reported

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Narratives Details:

NPL Name:	LOCKWOOD SOLVENT GROUND WATER PLUME
City:	BILLINGS
State:	MT

CERCLIS:

Site ID:	0801709
EPA ID:	MT0007623052
Facility County:	YELLOWSTONE
Short Name:	LOCKWOOD SOLVENT GROUND W
Congressional District:	Not reported
IFMS ID:	08AK
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	08
Classification:	Groundwater
Site Settings Code:	CS
NPL Status:	Currently on the Final NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Not reported
Non NPL Status Date:	Not reported
Site Fips Code:	30111
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	13000471.00000
Contact Name:	Wendy Thomi
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Contact Title:	Community Involvement Coordinator
Contact Email:	thomi.wendy@epa.gov
Contact ID:	8270238.00000
Contact Name:	Roger Hoogerheide
Contact Tel:	(406) 457-5031
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not reported
Contact ID:	8000108.00000
Contact Name:	Pete Stevenson
Contact Tel:	(303) 312-6799

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Contact ID: 13003439.00000
Contact Name: Leslie Sims
Contact Tel: (406) 457-5032
Contact Title: Remedial Project Manager (RPM)
Contact Email: Not reported

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: LOCKWOOD SOLVENT
Alias Address: LOCKWOOD ROAD
BILLINGS, MT 59101
Alias ID: 102
Alias Name: LOCKWOOD SOLVENTS SITE
Alias Address: Not reported
Not reported
Alias ID: 103
Alias Name: LOCKWOOD SOLVENT GROUND WATER PLUME
Alias Address: INTERSECT OF LOMOND LN & ISLAND PARK RD
BILLINGS, MT 59101
Alias Comments: Not reported
Site Description: The Lockwood Solvent Groundwater Plume Site (LSGPS) is a 580-acre site on the outskirts of Billings, in Yellowstone County, Montana, that has been found to have chlorinated solvent contamination in soil and groundwater. Current land use within the LSGPS is characterized as residential, commercial, and "light" industrial. Examples of commercial and light industrial businesses in the area include trucking, vehicle repair, truck tank manufacturing, chemical repackaging, machine shops, and auto salvage. At this time, the primary source of domestic use water in the LSGPS is from the Lockwood Water and Sewer District Public Water Supply. However, some full-use domestic, other domestic (such as irrigation), commercial, and nondomestic use water is known to come from the shallow alluvial aquifer via several individual wells. Previous investigations by Montana Department of Environmental Quality (DEQ), EPA, and others indicate chlorinated solvents at the LSGPS have adversely affected groundwater, surface water, soil, soil vapor, and indoor air. The primary contaminants of concern are the volatile organic compounds tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC). On December 1, 2000, EPA placed the LSGPS on the National Priorities List. Beall manufactures and repairs tanker truck trailers, primarily to transport asphalt. From 1978 to 1990, trailers were cleaned with a solution of dissolved TCE and steam prior to maintenance and/or repair. The wastewater from the steam clean bay was discharged to a septic system and drain field. Brenntag (formerly hci Dyce Chemical) is a chemical re-packaging and distribution company. Under previous owners, the property was developed and operations began in 1972. Historic releases of what are believed to be PCE and possibly TCE, as well as petroleum products and other organic compounds, characterize the Brenntag Source Area. In October 1986, Lockwood Water and Sewer District personnel discovered the presence of benzene and chlorinated solvents in their water supply wells. That discovery led to the initiation of a number of investigations by DEQ of underground storage tanks and a petroleum pipeline in the vicinity of the Lockwood Water and Sewer District property. In June 1998, DEQ Site Response Section performed an Integrated Assessment of the LSGPS. On December 16, 1999, EPA issued the first Request for Information letters to Beall and hci Dyce Chemical. EPA then issued a follow-up Request for Information letters to Beall and hci Dyce Chemical on May 25, 2000. The

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

information requests included questions regarding ownership history, locations of historical and current facilities, retention basins, chemical storage areas, all operations involving hazardous chemicals, waste generation and disposal practices, trade name and quantities of chemical products used, and all leaks, spills or releases. On August 23, 2000, EPA issued letters of General Notice of Potential Superfund Liability to Beall and hci Dyce Chemical. Subsequent to the issuance of the 2005 Record of Decision (ROD), EPA initiated negotiations for implementation of the Selected Remedy. During the summer of 2000, EPA's Emergency Removal Program extended the public water supply line to the Lomond Lane area and 14 residences with contaminated wells were connected by August 2000. EPA also conducted indoor air sampling, provided mitigation for indoor air contamination, and continued groundwater monitoring. DEQ continued indoor air sampling on a quarterly basis through February 2002. DEQ began the Remedial Investigation in 2002. The Remedial Investigation included surface and subsurface soil sampling, monitoring well construction and groundwater sampling, aquifer testing, surface water and sediment sampling, and indoor air sampling. Groundwater sampling for protection of human health and contaminant characteristics continues today. Because of the considerable size of the LSGPS, over 580 acres, DEQ divided it into nine subareas for the risk evaluations and site descriptions. The nine areas are Area A (Brenntag source and nonsource areas), Area B (Beall source and nonsource areas), Area C, the AJ Gravel Pond, the Coulson Irrigation Ditch, the wetland area on Cerise Road, and the Yellowstone River. Two primary source areas for chlorinated solvent groundwater contamination have been identified at the LSGPS based on the results of surface water, soil, soil vapor, non-aqueous phase liquid (NAPL) ribbon samplers, membrane interface probe, and groundwater sampling from site investigations, including the Remedial Investigation. The two source areas are the Beall Source Area and the Brenntag Source Area. No other source areas have been identified. Vadose and saturated soil with contaminant concentrations above site-specific soil screening levels is considered a potential source for groundwater contamination. No surface or subsurface soil samples from locations outside the Beall and Brenntag Source Areas contained contaminants at concentrations above soil screening levels. Currently, groundwater is used for domestic and commercial purposes throughout portions of the site. Given the presence of contamination from various sources in the groundwater, the Lockwood Water and Sewer District is unable to utilize the groundwater for potable water distribution or even maintenance of the distribution system. Currently, public water is obtained from the Yellowstone River; however, without the use of the groundwater wells, there is not a backup water supply. The Administrative Rules of Montana classify the groundwater within the LSGPS as Class I or Class II waters in which contaminants may not exceed the human health standards identified in the Department of Environmental Quality Water Quality Bureau Circular 7. Future use of groundwater within the LSGPS is anticipated to continue as a drinking water supply. The Lockwood area is zoned "controlled industrial" (minor industry) according to the Yellowstone City/County Planning Department. The current land use within the LSGPS includes residential, commercial, and "light" industrial operations. There are 81 commercial and light industrial businesses within the boundaries of the LSGPS including trucking companies, a chemical distribution plant, an auto auction facility, auto repair shops, construction companies, a water treatment plant, open agricultural land, a lumberyard, and three active gas stations. An estimated 75 residential single-family residences, two trailer parks, and one apartment complex are currently located within the boundaries of the LSGPS. Current land use of the identified source areas is commercial; specifically tractor trailer manufacture and repair and chemical repackaging and distribution. For the source areas, future land use is reasonably anticipated to continue as commercial. Given the zoning, future development within the LSGPS is

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

anticipated to convert from residential to commercial and industrial uses. Current surface water uses include recreational fishing in the AJ Gravel Pond and off-site irrigation of water in the Coulson Irrigation Ditch. Future surface water usage is not expected to change significantly. A ROD addressing OU 1 was completed in August 2005.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	05/02/1998
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	SITE INSPECTION
Date Started:	05/02/1998
Date Completed:	01/31/1999
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	05/02/1998
Date Completed:	01/31/1999
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	INTEGRATED ASSESSMENT
Date Started:	Not reported
Date Completed:	07/06/1999
Priority Level:	Recommended for HRS Scoring
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 12/16/1999
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 12/16/1999
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: 10/15/1999
Date Completed: 05/10/2000
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: Not reported
Date Completed: 05/11/2000
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Action Code:	002
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	08/23/2000
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	03/16/2000
Date Completed:	09/15/2000
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL
Date Started:	07/13/1999
Date Completed:	10/19/2000
Priority Level:	Stabilized
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Emergency
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL ASSESSMENT
Date Started:	03/01/2000
Date Completed:	10/19/2000
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started:	Not reported
Date Completed:	12/01/2000
Priority Level:	Not reported
Operable Unit:	SITEWIDE

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	09/25/2000
Date Completed:	08/16/2005
Priority Level:	Not reported
Operable Unit:	BEALL
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	RECORD OF DECISION
Date Started:	Not reported
Date Completed:	08/16/2005
Priority Level:	Final Remedy Selected at Site
Operable Unit:	BEALL
Primary Responsibility:	State, with EPA Concurrence
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	02/28/2006
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	03/09/2006
Date Completed:	09/19/2006
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	CONSENT AGREEMENT (ADMINISTRATIVE)
Date Started:	Not reported
Date Completed:	02/28/2007
Priority Level:	Not reported
Operable Unit:	BEALL
Primary Responsibility:	State Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	TECHNICAL ASSISTANCE
Date Started:	06/18/2009
Date Completed:	Not reported
Priority Level:	Not reported
Operable Unit:	BEALL
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	TECHNICAL ASSISTANCE
Date Started:	02/28/2006
Date Completed:	11/29/2009
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:

Fed Register Date:	12/01/2000
Fed Register Volume:	65
Page Number:	75179

Fed Register Date:	05/11/2000
Fed Register Volume:	65
Page Number:	30489

Click this hyperlink while viewing on your computer to access
1060 additional US CERCLIS Financial: record(s) in the EDR Site Report.

US ENG CONTROLS:

EPA ID:	MT0007623052
Site ID:	0801709

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Name: LOCKWOOD SOLVENT GROUND WATER PLUME
Address: LOCKWOOD ROAD
BILLINGS, MT 59101
EPA Region: 08
County: YELLOWSTONE
Event Code: Not reported
Actual Date: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Air
Engineering Control: Monitoring

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Bioremediation (In-Situ)

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Passive Treatment Walls

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Bioremediation (In-Situ)

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Excavation

Action ID: 001

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Low Temperature Thermal Desorption

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Physical/Chemical Treatment, (N.O.S.)

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Sheet Piling

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Slope Stabilization

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 8/16/2005
Planned Complet. date: 9/30/2005
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Treatment, (N.O.S.)

US INST CONTROL:
EPA ID: MT0007623052
Site ID: 0801709
Name: LOCKWOOD SOLVENT GROUND WATER PLUME
Action Name: RECORD OF DECISION
Address: LOCKWOOD ROAD
BILLINGS, MT 59101
EPA Region: 08
County: YELLOWSTONE

LOCKWOOD SOLVENT GROUND WATER PLUME (Continued) **1001475679**

Event Code: Not reported
Inst. Control: Deed Notices
Actual Date: Not reported
Complet. Date: 8/16/2005
Operable Unit: 01
Contaminated Media : Groundwater

EPA ID: MT0007623052
Site ID: 0801709
Name: LOCKWOOD SOLVENT GROUND WATER PLUME
Action Name: RECORD OF DECISION
Address: LOCKWOOD ROAD
BILLINGS, MT 59101
EPA Region: 08
County: YELLOWSTONE
Event Code: Not reported
Inst. Control: Groundwater use/well drilling regulation
Actual Date: Not reported
Complet. Date: 8/16/2005
Operable Unit: 01
Contaminated Media : Groundwater

ROD:
Full-text of USEPA Record of Decision(s) is available from EDR.

FINDS:

Registry ID: 110009296056

Environmental Interest/Information System
CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

A2 West < 1/8 0.038 mi. 199 ft. | **BILLINGS MACHINE & WELDING SHOP INC** | **RCRA-CESQG** | **1012183148**
115 N 9TH ST | **MTR000005959**
BILLINGS, MT 59101

Site 1 of 5 in cluster A

Relative: Higher

Actual: 3106 ft.

RCRA-CESQG:
Date form received by agency: 07/09/1998
Facility name: BILLINGS MACHINE & WELDING SHOP INC
Facility address: 115 N 9TH ST
BILLINGS, MT 59101
EPA ID: MTR000005959
Mailing address: N 9TH ST
BILLINGS, MT 59101
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported

BILLINGS MACHINE & WELDING SHOP INC (Continued) **1012183148**

Contact email: Not reported
EPA Region: 08
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: MIKE STEVE OR RICK DEGENHART
Owner/operator address: 115 N 9TH ST
BILLINGS, MT 59101
Owner/operator country: Not reported
Owner/operator telephone: (406) 248-6707
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

BILLINGS MACHINE & WELDING SHOP INC (Continued) **1012183148**

Facility Has Received Notices of Violations:

Regulation violated:	SR - ARM 17.54.309(5)
Area of violation:	Used Oil - Generators
Date violation determined:	07/09/1998
Date achieved compliance:	08/06/1998
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/20/1998
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	SR - ARM 17.54.402(5)(b)
Area of violation:	Listing - General
Date violation determined:	07/09/1998
Date achieved compliance:	08/06/1998
Violation lead agency:	State
Enforcement action:	DOCUMENT RECEIVED
Enforcement action date:	08/06/1998
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	SR - ARM 17.54.402(5)(b)
Area of violation:	Listing - General
Date violation determined:	07/09/1998
Date achieved compliance:	08/06/1998
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/20/1998
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

Regulation violated:	SR - ARM 17.54.309(5)
Area of violation:	Used Oil - Generators
Date violation determined:	07/09/1998
Date achieved compliance:	08/06/1998
Violation lead agency:	State
Enforcement action:	DOCUMENT RECEIVED
Enforcement action date:	08/06/1998
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	0
Final penalty amount:	0
Paid penalty amount:	0

BILLINGS MACHINE & WELDING SHOP INC (Continued) **1012183148**

Evaluation Action Summary:

Evaluation date:	07/09/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Listing - General
Date achieved compliance:	08/06/1998
Evaluation lead agency:	State

Evaluation date:	07/09/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Used Oil - Generators
Date achieved compliance:	08/06/1998
Evaluation lead agency:	State

A3 WSW < 1/8 0.047 mi. 248 ft. | **GOLDSTAR** | **RCRA-CESQG** | **1012182926**
600 1ST AVE N WEST END | **MT0000873083**
BILLINGS, MT 59101

Site 2 of 5 in cluster A

Relative: Higher

Actual: 3106 ft.

RCRA-CESQG:

Date form received by agency:	06/14/2000
Facility name:	GOLDSTAR
Facility address:	600 1ST AVE N WEST END BILLINGS, MT 59101
EPA ID:	MT0000873083
Mailing address:	BROADWATER BILLINGS, MT 59102
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	KAREN BEGEMAN & WAYMAN TRUST
Owner/operator address:	2215 BROADWATER BILLINGS, MT 59102
Owner/operator country:	Not reported
Owner/operator telephone:	(406) 652-4800
Legal status:	Private

GOLDSTAR (Continued) **1012182926**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Facility Has Received Notices of Violations:
Regulation violated: SR - ARM 17.54.309(5)
Area of violation: Used Oil - Generators
Date violation determined: 06/14/2000
Date achieved compliance: 10/17/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 10/17/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.309(5)
Area of violation: Used Oil - Generators
Date violation determined: 06/14/2000
Date achieved compliance: 10/17/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 09/28/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.309(5)
Area of violation: Used Oil - Generators
Date violation determined: 06/14/2000
Date achieved compliance: 10/17/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

GOLDSTAR (Continued) **1012182926**

Enforcement action date: 06/28/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.309(5)
Area of violation: Used Oil - Generators
Date violation determined: 06/14/2000
Date achieved compliance: 08/18/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 08/18/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.309(5)
Area of violation: Used Oil - Generators
Date violation determined: 06/14/2000
Date achieved compliance: 08/18/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/28/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.309(5)
Area of violation: Used Oil - Generators
Date violation determined: 06/14/2000
Date achieved compliance: 10/17/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 10/04/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Evaluation Action Summary:
Evaluation date: 06/14/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 08/18/2000
Evaluation lead agency: State

GOLDSTAR (Continued) **1012182926**

Evaluation date:	06/14/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Used Oil - Generators
Date achieved compliance:	10/17/2000
Evaluation lead agency:	State

Evaluation date:	09/22/1994
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State

A4 WSW < 1/8 0.053 mi. 281 ft. | **A & I DISTRIBUTORS OF BILLINGS** | **RCRA-CESQG FINDS UST** | **1000980542 MT0000929042**

900 1ST AVE N
BILLINGS, MT 59101

Site 3 of 5 in cluster A

Relative: Higher

Actual: 3106 ft.

RCRA-CESQG:

Date form received by agency:	04/17/1998
Facility name:	A & I DISTRIBUTORS
Facility address:	900 1ST AVE N BILLINGS, MT 59101
EPA ID:	MT0000929042
Mailing address:	PO BOX 1999 BILLINGS, MT 59103
Contact:	THOMAS COMBS
Contact address:	PO BOX 553 PARK CITY, MT 59063
Contact country:	US
Contact telephone:	(406) 245-6443
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	DON STANAWAY
Owner/operator address:	REMINGTON SQ BILLINGS, MT 59102
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5200
Legal status:	Private
Owner/Operator Type:	Owner

A & I DISTRIBUTORS OF BILLINGS (Continued) **1000980542**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/04/1998
Facility name: A & I DISTRIBUTORS
Classification: Small Quantity Generator

Date form received by agency: 12/08/1997
Facility name: A & I DISTRIBUTORS
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 10/26/1994
Facility name: A & I DISTRIBUTORS
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D018
Waste name: BENZENE

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 04/17/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/14/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

A & I DISTRIBUTORS OF BILLINGS (Continued) **1000980542**

Evaluation date: 02/04/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/08/1997
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/06/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/25/1997
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/26/1994
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004001605

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate

A & I DISTRIBUTORS OF BILLINGS (Continued) **1000980542**

that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

UST:
Facility ID: 5601282
Alt Facility ID: 56-01282
Active Tanks: Not reported
Inactive Tanks: 2

A5
WSW
< 1/8
0.056 mi.
294 ft.

INTERNATIONAL HARVESTER
917 1ST AVE N
BILLINGS, MT 59103

FINDS **1007866458**
LUST **N/A**

Site 4 of 5 in cluster A

Relative:
Higher

Actual:
3106 ft.

FINDS:

Registry ID: 110020353927

Environmental Interest/Information System
MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:
Facility ID: 5609870
Release ID: 382
Date of Release: 03/22/1989
Priority: Not reported
Active Site: No
Priority Date: Not reported
Transferred Lead Not reported
Project Officer: Rogness, Douglas (17297)
Event ID: 2685
EPA Lead: Not reported
Date Resolved: 03/22/1989
Date transferred to another program: Not reported

A6
WSW
< 1/8
0.056 mi.
294 ft.

INTERNATIONAL HARVESTER
917 1ST AVE N
BILLINGS, MT

UST **U001118477**
N/A

Site 5 of 5 in cluster A

Relative:
Higher

Actual:
3106 ft.

UST:
Facility ID: 5609870
Alt Facility ID: 56-09870
Active Tanks: Not reported
Inactive Tanks: 1

B7 NW < 1/8 0.085 mi. 448 ft. | **BILLINGS TRUCK CENTER** | **FINDS** | **1007866848**
827 2ND AVE N | **UST** | **N/A**
BILLINGS, MT 59107

Site 1 of 4 in cluster B

Relative: Higher

Actual: 3107 ft.

FINDS:

Registry ID: 110020357825

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

UST:

Facility ID:	5606104
Alt Facility ID:	56-06104
Active Tanks:	Not reported
Inactive Tanks:	1

B8 NW < 1/8 0.085 mi. 448 ft. | **ISTATE TRUCK CENTER** | **RCRA-CESQG** | **1008882651**
827 2ND AVE N | **MTR000203364**
BILLINGS, MT 59101

Site 2 of 4 in cluster B

Relative: Higher

Actual: 3107 ft.

RCRA-CESQG:

Date form received by agency:	10/25/2005
Facility name:	ISTATE TRUCK CENTER
Facility address:	827 2ND AVE N BILLINGS, MT 59101
EPA ID:	MTR000203364
Mailing address:	PO BOX 1099 BILLINGS, MT 591031099
Contact:	GARY L HART
Contact address:	PO BOX 1099 BILLINGS, MT 591031099
Contact country:	US
Contact telephone:	(406) 252-5121
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

ISTATE TRUCK CENTER (Continued) **1008882651**

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CLIFFORD HANSON
Owner/operator address:	PO BOX 30235 BILLINGS, MT 59107
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5121
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/10/2004
Owner/Op end date:	Not reported

Owner/operator name:	BILLINGS TRUCK CENTER
Owner/operator address:	PO BOX 30235 BILLINGS, MT 59107
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5121
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	08/10/2004
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

ISTATE TRUCK CENTER (Continued) **1008882651**

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 10/26/2005
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

B9 **RELIABLE DISTRIBUTING INC** **RCRA-CESQG** **1001124340**
NW **811 2ND AVE N** **FINDS** **MTR000003061**
< 1/8 **BILLINGS, MT 59103**
0.085 mi.
450 ft. **Site 3 of 4 in cluster B**

Relative:
Higher

Actual:
3107 ft.

RCRA-CESQG:
Date form received by agency: 10/31/1996
Facility name: RELIABLE DISTRIBUTING INC
Facility address: 811 2ND AVE N
BILLINGS, MT 59103
EPA ID: MTR000003061
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 08
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

RELIABLE DISTRIBUTING INC (Continued) **1001124340**

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	PAUL RICE
Owner/operator address:	811 2ND AVE N BILLINGS, MT 59103
Owner/operator country:	Not reported
Owner/operator telephone:	(406) 259-4786
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date:	10/24/1996
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State

FINDS:

Registry ID: 110004010043

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

RELIABLE DISTRIBUTING INC (Continued) **1001124340**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

B10
NW
< 1/8
0.094 mi.
495 ft.

HIGHBALL TRUCKING CO UST **UST** **U000306595**
2348 LOCKWOOD DR **N/A**
BILLINGS, MT

Site 4 of 4 in cluster B

Relative:
Higher

Actual:
3107 ft.

UST:

Facility ID:	5606103
Alt Facility ID:	56-06103
Active Tanks:	Not reported
Inactive Tanks:	2

11
WNW
< 1/8
0.096 mi.
505 ft.

ADVANTAGE MACHINE & TOOL INC **RCRA-CESQG** **1009312278**
923 2ND AVE N **MTR000204149**
BILLINGS, MT 59101

Relative:
Higher

Actual:
3108 ft.

RCRA-CESQG:

Date form received by agency:	05/08/2007
Facility name:	ADVANTAGE MACHINE & TOOL INC
Facility address:	923 2ND AVE N BILLINGS, MT 591012648
EPA ID:	MTR000204149
Mailing address:	2ND AVE N BILLINGS, 591012648
Contact:	MAGGIE DOWNS
Contact address:	2ND AVE N BILLINGS, 591012648
Contact country:	Not reported
Contact telephone:	(406) 896-0066
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ADVANTAGE MACHINE & TOOL INC

ADVANTAGE MACHINE & TOOL INC (Continued) **1009312278**

Owner/operator address: 923 2ND AVE N
BILLINGS, MT 59101
Owner/operator country: US
Owner/operator telephone: (406) 896-0066
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 06/01/2000
Owner/Op end date: Not reported

Owner/operator name: ADVANTAGE MACHINE & TOOL INC
Owner/operator address: 923 2ND AVE N
BILLINGS, MT 59101
Owner/operator country: US
Owner/operator telephone: (406) 896-0066
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 06/01/2000
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/13/2006
Facility name: ADVANTAGE MACHINE & TOOL INC
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D040
Waste name: TRICHLOROETHYLENE

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

ADVANTAGE MACHINE & TOOL INC (Continued) **1009312278**

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D040
Waste name: TRICHLOROETHYLENE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 05/16/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/08/2007
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/09/2007
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/13/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

12
NW
< 1/8
0.106 mi.
558 ft.

ZIP TRIP 55 **LUST** **U003364193**
236 MAIN ST **UST** **N/A**
BILLINGS, MT

Relative:
Higher

Actual:
3106 ft.

LUST:

Facility ID: 5608904
Release ID: 3696
Date of Release: 03/26/1999
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 05/12/2008
Transferred Lead Not reported
Project Officer: Raty, John (18983)
Event ID: 3564
EPA Lead: Not reported
Date Resolved: 03/26/1999
Date transferred to another program: Not reported

ZIP TRIP 55 (Continued) **U003364193**

UST:
Facility ID: 5608904
Alt Facility ID: 56-08904
Active Tanks: 3
Inactive Tanks: Not reported

C13
West
1/8-1/4
0.134 mi.
706 ft.

JACK YURKO **UST** **U001881275**
1002 2ND AVE N **N/A**
BILLINGS, MT

Site 1 of 3 in cluster C

Relative:
Higher

Actual:
3108 ft.

UST:
Facility ID: 5611193
Alt Facility ID: 56-11193
Active Tanks: Not reported
Inactive Tanks: 5

C14
West
1/8-1/4
0.134 mi.
706 ft.

JACK YURKO **FINDS** **1007866374**
1002 2ND AVE N **LUST** **N/A**
BILLINGS, MT 59102

Site 2 of 3 in cluster C

Relative:
Higher

Actual:
3108 ft.

FINDS:

Registry ID: 110020353071

Environmental Interest/Information System
MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:
Facility ID: 5611193
Release ID: 3455
Date of Release: 06/05/1998
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 05/12/2008
Transferred Lead Not reported
Project Officer: Stremcha, Marla (17451)
Event ID: 3328
EPA Lead: Not reported
Date Resolved: 04/21/2003
Date transferred to another program: Not reported

C15 West 1/8-1/4 0.143 mi. 756 ft. | **FORMER GAS STATION AT VIRDON PROPERTY** | **UST** | **U003997666**
1018 2ND AVE N | **N/A**
BILLINGS, MT

Site 3 of 3 in cluster C

Relative: Higher

Actual: 3108 ft.

UST:

Facility ID:	6015015
Alt Facility ID:	60-15015
Active Tanks:	Not reported
Inactive Tanks:	1

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16 South 1/8-1/4 0.143 mi. 756 ft. | **COULSON PARK** | **US BROWNFIELDS** | **1009569490**
E. FRONTAGE ROAD OFF I-90, SE OF BILLINGS | **N/A**
BILLINGS, MT 59101

Relative: Higher

Actual: 3103 ft.

US BROWNFIELDS:

Recipient name:	Beartooth Resource Conservation and Development Area, Inc.
Grant type:	Assessment Grant
Property name:	Coulson Park
Property #:	Lot 3, fraction of SW/4 of Lot 4, located in S34, T1N, R26E
Parcel size:	50
Latitude:	45.789106
Longitude:	-108.476867
HCM label:	Not reported
Map scale:	Not reported
Point of reference:	Not reported
Datum:	World Geodetic System of 1984
ACRES property ID:	15804
Start date:	N/A
Completed date:	N/A
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	$8,112.94
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	N/A
Assessment funding entity:	US EPA - Brownfields Assessment Cooperative Agreement
Cleanup funding entity:	Not reported
Grant type:	Hazardous Substance
Accomplishment type:	Phase I Environmental Assessment
Ownership entity:	Government
Current owner:	City of Billings
Did owner change:	No
Cleanup required:	Unknown
Video available:	Not reported
Photo available:	Not reported
Institutional controls required:	Not reported
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	N/A
IC in place:	Unknown
Enrolled in state/tribal program:	No

COULSON PARK (Continued) **1009569490**

State/tribal program date:	N/A
State/tribal program ID:	Not reported
State/tribal NFA date:	N/A
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Not reported
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Property Description: Northwest banks of Yellowstone River/former unofficial city dump

17 WNW 1/8-1/4 0.150 mi. 793 ft. | **FEDERAL EXPRESS BILLINGS**
1148 1ST AVE N
BILLINGS, MT 59101 | **RCRA-CESQG FINDS** | **1004744054 MTD986067122**

Relative: Higher

Actual: 3108 ft.

RCRA-CESQG:

Date form received by agency:	07/10/1990
Facility name:	FEDERAL EXPRESS BILLINGS
Facility address:	1148 1ST AVE N BILLINGS, MT 59101
EPA ID:	MTD986067122
Mailing address:	1ST AVE N BILLINGS, MT 59101
Contact:	JOHN LAHADERNE
Contact address:	1ST AVE N BILLINGS, MT 59101
Contact country:	US
Contact telephone:	(406) 245-0555
Contact email:	Not reported
EPA Region:	08
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	FEDERAL EXPRESS CORP
Owner/operator address:	1148 1ST AVE N BILLINGS, MT 59101
Owner/operator country:	Not reported
Owner/operator telephone:	(406) 245-0555
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

FEDERAL EXPRESS BILLINGS (Continued) **1004744054**

Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110004005246

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D18 **CONSOLIDATED FREIGHTWAYS 3RD AVE N** **UST** **U003363972**
WNW **1002 3RD AVE N** **N/A**
1/8-1/4 **BILLINGS, MT**
0.187 mi.
988 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
3110 ft.

UST:
Facility ID: 5602030
Alt Facility ID: 56-02030
Active Tanks: Not reported
Inactive Tanks: 3

D19 **CONSOLIDATED FREIGHTWAYS 3RD AVE N** **FINDS** **1007867543**
WNW **1002 3RD AVE N** **LUST** **N/A**
1/8-1/4 **BILLINGS, MT 59102**
0.187 mi.
988 ft. **Site 2 of 2 in cluster D**

Relative:
Higher

Actual:
3110 ft.

FINDS:

Registry ID: 110020364764

Environmental Interest/Information System
MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And

CONSOLIDATED FREIGHTWAYS 3RD AVE N (Continued) **1007867543**

Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:

Facility ID:	5602030
Release ID:	221
Date of Release:	01/25/1990
Priority:	Not reported
Active Site:	**No**
Priority Date:	**Not reported**
Transferred Lead	**Not reported**
Project Officer:	Smith, Monte (2335)
Event ID:	320
EPA Lead:	Not reported
Date Resolved:	06/10/1990

Date transferred to another program: Not reported

E20 WSW 1/8-1/4 0.192 mi. 1012 ft. **AWZWOLT INTRNTL INC AKA MONTANA DRUM COMPANY** **RCRA-NonGen** **1010323049**
1310 MONTANA AVE **MTR000204396**
BILLINGS, MT 59101

Site 1 of 3 in cluster E

Relative: Higher

Actual: 3108 ft.

RCRA-NonGen:

Date form received by agency:	02/25/2008
Facility name:	AWZWOLT INTRNTL INC AKA MONTANA DRUM COMPANY
Facility address:	1310 MONTANA AVE BILLINGS, MT 591012606
EPA ID:	MTR000204396
Mailing address:	BURLINGTON AVE BILLINGS, MT 591016027
Contact:	OSMAR TORRES
Contact address:	BURLINGTON AVE BILLINGS, MT 591016027
Contact country:	US
Contact telephone:	(406) 672-8537
Contact email:	MTDRUMCO@BRESNAN.NET
EPA Region:	08
Land type:	Private
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	OSMAR TORRES
Owner/operator address:	BURLINGTON AVE BILLINGS, MT 59101
Owner/operator country:	US
Owner/operator telephone:	(406) 672-8537
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/20/2006
Owner/Op end date:	Not reported
Owner/operator name:	OSMAR TORRES

AWZWOLT INTRNTL INC AKA MONTANA DRUM COMPANY (Continued) **1010323049**

Owner/operator address: BURLINGTON AVE
BILLINGS, MT 59101
Owner/operator country: US
Owner/operator telephone: (406) 672-8537
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/20/2006
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/29/2006
Facility name: AWZWOLT INTRNTL INC AKA MONTANA DRUM COMPANY
Site name: MONTANA DRUM COMPANY
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

AWZWOLT INTRNTL INC AKA MONTANA DRUM COMPANY (Continued) **1010323049**

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/25/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/05/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/05/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

F21 WNW 1/8-1/4 0.207 mi. 1095 ft. | **BAIRS TRUCK STOP BILLINGS** | **UST** | **U003364212**
1ST AVE N & N 13TH ST | **N/A**
BILLINGS, MT

Site 1 of 4 in cluster F

Relative: Higher
Actual: 3108 ft.

UST:
Facility ID: 5609862
Alt Facility ID: 56-09862
Active Tanks: Not reported
Inactive Tanks: 3

F22
WNW
1/8-1/4
0.207 mi.
1095 ft.

BAIRS TRUCK STOP BILLINGS — **FINDS** — **1007867956**
1ST AVE N & N 13TH ST — **LUST** — **N/A**
BILLINGS, MT 59101

Site 2 of 4 in cluster F

Relative:
Higher

Actual:
3108 ft.

FINDS:

Registry ID: 110020368895

Environmental Interest/Information System
MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:
Facility ID: 5609862
Release ID: 105
Date of Release: 08/09/1989
Priority: 2.0 - Medium Priority Characterization
Active Site: No
Priority Date: 05/12/2008
Transferred Lead Not reported
Project Officer: Unassigned, DEQ Officer (20213)
Event ID: 2697
EPA Lead: Not reported
Date Resolved: 08/16/1989
Date transferred to another program: Not reported

23
NE
1/8-1/4
0.210 mi.
1107 ft.

LOCKWOOD WATER USERS ASSOCIATION #4420 — **LUST** — **S106953764**
736 CERISE RD — **N/A**
BILLINGS, MT

Relative:
Lower

Actual:
3097 ft.

LUST:
Facility ID: 9995010
Release ID: 4420
Date of Release: 06/23/2005
Priority: 5.0 - Pending Closure
Active Site: No
Priority Date: 07/25/2007
Transferred Lead Not reported
Project Officer: Raty, John (18983)
Event ID: 4420
EPA Lead: Not reported
Date Resolved: 06/23/2005
Date transferred to another program: Not reported

F24	**AUTOMATIC TRANSMISSION CO 1ST AVE N**	**RCRA-CESQG**	**1000632099**
West	**1313 1ST AVE N**	**FINDS**	**MTD986069458**
1/8-1/4	**BILLINGS, MT 59101**		
0.215 mi.			
1136 ft.	**Site 3 of 4 in cluster F**		

Relative:
Higher

Actual:
3108 ft.

RCRA-CESQG:

Date form received by agency:	06/18/1991
Facility name:	AUTOMATIC TRANSMISSION CO 1ST AVE N
Facility address:	1313 1ST AVE N BILLINGS, MT 59101
EPA ID:	MTD986069458
Mailing address:	1ST AVE N BILLINGS, MT 59101
Contact:	GORDON TRYAN
Contact address:	1ST AVE N BILLINGS, MT 59101
Contact country:	US
Contact telephone:	(406) 252-8011
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	JAMES E BROWN
Owner/operator address:	1144 BROADWATER AVE BILLINGS, MT 59102
Owner/operator country:	Not reported
Owner/operator telephone:	(406) 259-4008
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

AUTOMATIC TRANSMISSION CO 1ST AVE N (Continued) **1000632099**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D006
Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D018
Waste name: BENZENE

Waste code: D021
Waste name: CHLOROBENZENE

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 06/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

AUTOMATIC TRANSMISSION CO 1ST AVE N (Continued) **1000632099**

Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004006236

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

F25 **OREILLY AUTO PARTS 13TH ST** **RCRA-CESQG** **1009217539**
WNW **119 N 13TH ST** **MTR000204131**
1/8-1/4 **BILLINGS, MT 59101**
0.218 mi.
1149 ft. **Site 4 of 4 in cluster F**

Relative:
Higher

Actual:
3109 ft.

RCRA-CESQG:
Date form received by agency: 07/25/2006
Facility name: OREILLY AUTO PARTS 13TH ST
Facility address: 119 N 13TH ST
BILLINGS, MT 591012634
EPA ID: MTR000204131
Mailing address: S PATTERSON AVE
SPRINGFIELD, MO 658022210
Contact: DON M WHITCOMB
Contact address: S PATTERSON AVE
SPRINGFIELD, MO 658022210
Contact country: US
Contact telephone: (417) 829-5852
Telephone ext.: 5852
Contact email: Not reported
EPA Region: 08
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: DON WHITCOMB
Owner/operator address: S PATTERSON AVE

OREILLY AUTO PARTS 13TH ST (Continued) **1009217539**

	SPRINGFIELD, MO 65802
Owner/operator country:	US
Owner/operator telephone:	(417) 829-5852
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	07/25/2006
Owner/Op end date:	Not reported
Owner/operator name:	BRUCE M CREASON
Owner/operator address:	S PATTERSON AVE
	SPRINGFIELD, MO 65802
Owner/operator country:	US
Owner/operator telephone:	(417) 829-5852
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	06/01/2005
Owner/Op end date:	Not reported
Owner/operator name:	OREILLY AUTO PARTS
Owner/operator address:	S PATTERSON AVE
	SPRINGFIELD, MO 65802
Owner/operator country:	US
Owner/operator telephone:	(417) 829-5852
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	06/01/2005
Owner/Op end date:	Not reported
Owner/operator name:	BRUCE M CREASON
Owner/operator address:	S PATTERSON AVE
	SPRINGFIELD, MO 65802
Owner/operator country:	US
Owner/operator telephone:	(417) 829-5852
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	06/01/2005
Owner/Op end date:	07/25/2006

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

OREILLY AUTO PARTS 13TH ST (Continued) **1009217539**

Date form received by agency: 01/25/2006
Facility name: OREILLY AUTO PARTS 13TH ST
Site name: OREILLY AUTO PARTS
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 08/11/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/25/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/27/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

E26 **PHOENIX IND** **UST** **U001881202**
WSW **1400 MONTANA AVE** **N/A**
1/8-1/4 **BILLINGS, MT**
0.226 mi.
1191 ft. **Site 2 of 3 in cluster E**

Relative:
Higher

Actual:
3111 ft.

UST:
Facility ID: 5600641
Alt Facility ID: 56-00641
Active Tanks: Not reported
Inactive Tanks: 1

E27 **WSW** **1/8-1/4** **0.227 mi.** **1199 ft.**	**GLOBALNEXXT** **1400 MONTANA AVE** **BILLINGS, MT 59601** **Site 3 of 3 in cluster E**	**RCRA-CESQG**	**1010786549** **MTR000007708**

Relative:
Higher

Actual:
3111 ft.

RCRA-CESQG:

Date form received by agency:	01/28/2011
Facility name:	GLOBALNEXXT
Facility address:	1400 MONTANA AVE BILLINGS, MT 591012651
EPA ID:	MTR000007708
Mailing address:	MONTANA AVE BILLINGS, MT 591012651
Contact:	OSMAR L TORRES
Contact address:	MONTANA AVE BILLINGS, MT 59101
Contact country:	US
Contact telephone:	(406) 794-6975
Contact email:	OTORRES@AZWZOLTINTERNATIONAL.COM
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	OSMAR TORRES
Owner/operator address:	BURLINGTON AVE BILLINGS, MT 59101
Owner/operator country:	US
Owner/operator telephone:	(406) 248-3699
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	02/14/2008
Owner/Op end date:	Not reported
Owner/operator name:	OSMAR TORRES
Owner/operator address:	BURLINGTON AVE BILLINGS, MT 59101
Owner/operator country:	US
Owner/operator telephone:	(406) 248-3699
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	02/14/2008
Owner/Op end date:	Not reported

GLOBALNEXXT (Continued) **1010786549**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	02/22/2008
Facility name:	GLOBALNEXXT
Site name:	AWZWOLT INTERNATIONAL INC
Classification:	Conditionally Exempt Small Quantity Generator

Date form received by agency:	10/19/1999
Facility name:	GLOBALNEXXT
Site name:	TOP NOTCH AUTO SERVICES
Classification:	Not a generator, verified

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code:	F003
Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

Evaluation Action Summary:

Evaluation date:	01/28/2011
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE

GLOBALNEXXT (Continued) **1010786549**

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/25/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/19/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

G28 **KEENAN & ASSOCIATES** **UST** **U003364263**
NW **711 4TH AVE N** **N/A**
1/8-1/4 **BILLINGS, MT**
0.229 mi.
1208 ft. **Site 1 of 6 in cluster G**

Relative:
Higher

Actual:
3112 ft.

UST:
Facility ID: 5613771
Alt Facility ID: 56-13771
Active Tanks: Not reported
Inactive Tanks: 2

G29 **KEENAN & ASSOCIATES** **FINDS** **1007866206**
NW **711 4TH AVE N** **LUST** **N/A**
1/8-1/4 **BILLINGS, MT 59101**
0.229 mi.
1208 ft. **Site 2 of 6 in cluster G**

Relative:
Higher

Actual:
3112 ft.

FINDS:

Registry ID: 110020351402

Environmental Interest/Information System
MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:
Facility ID: 5613771
Release ID: 3034
Date of Release: 10/09/1996
Priority: 1.4 - High Priority Characterization

KEENAN & ASSOCIATES (Continued) **1007866206**

Active Site: **Yes**
Priority Date: **06/09/2008**
Transferred Lead **Not reported**
Project Officer: Raty, John (18983)
Event ID: 151
EPA Lead: Not reported
Date Resolved: 10/09/1996
Date transferred to another program: Not reported

G30 **PACIFIC HIDE & FUR** **CERC-NFRAP** **1003877811**
NW **777 4TH AVENUE NORTH** **MTD986071009**
1/8-1/4 **BILLINGS, MT 59101**
0.229 mi.
1210 ft. **Site 3 of 6 in cluster G**

Relative:
Higher

Actual:
3112 ft.

CERC-NFRAP:
Site ID: 0801212
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13162126.00000
Person ID: 13002699.00000

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 02/11/1992
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 08/24/1992
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/24/1992
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

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G31 **PACIFIC RECYCLING BILLINGS** **RCRA-CESQG** **1000868939**
NW **777 4TH AVE N** **MT0000000356**
1/8-1/4 **BILLINGS, MT 59103**
0.229 mi.
1210 ft. **Site 4 of 6 in cluster G**

Relative:
Higher

Actual:
3112 ft.

RCRA-CESQG:
Date form received by agency: 01/14/1997
Facility name: PACIFIC RECYCLING BILLINGS
Facility address: 777 4TH AVE N
BILLINGS, MT 59103
EPA ID: MT0000000356
Mailing address: PO BOX 893
BILLINGS, MT 59103

PACIFIC RECYCLING BILLINGS (Continued) **1000868939**

Contact:	TREY HARBERT
Contact address:	PO BOX 1549 GREAT FALLS, MT 59403
Contact country:	US
Contact telephone:	(406) 727-6222
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	MONTANA RAIL LINK
Owner/operator address:	PO BOX 8779 MISSOULA, MT 59807
Owner/operator country:	Not reported
Owner/operator telephone:	(800) 338-4750
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/11/1996
Facility name:	PACIFIC RECYCLING BILLINGS
Classification:	Large Quantity Generator

PACIFIC RECYCLING BILLINGS (Continued) **1000868939**

Date form received by agency: 09/08/1995
Facility name: PACIFIC RECYCLING BILLINGS
Site name: PACIFIC RECYCLING - BILLINGS
Classification: Not a generator, verified

Date form received by agency: 09/08/1993
Facility name: PACIFIC RECYCLING BILLINGS
Site name: PACIFIC RECYCLING - BILLINGS
Classification: Not a generator, verified

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 04/03/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/08/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

G32 **PACIFIC RECYCLING** **SWRCY** **S110596660**
NW **777 4TH AVE. N** **N/A**
1/8-1/4 **BILLINGS, MT**
0.229 mi.
1210 ft. **Site 5 of 6 in cluster G**

Relative:
Higher

Actual:
3112 ft.

SWRCY:
Cardboard: X
Newspaper: X
Magzines: X
Off Paper: Not reported
Aluminum Cans: X
Steel Cans: X
#1 and 2 Plastic: Not reported
Yard Waste: Not reported

G33 NW 1/8-1/4 0.229 mi. 1210 ft. | **PACIFIC HIDE & FUR BILLINGS 4TH AVE ,**
777 4TH AVE N
BILLINGS, MT

SHWS **S106561002**
VCP **N/A**
REM RPROGRAM

Site 6 of 6 in cluster G

Relative: Higher

Actual: 3112 ft.

SHWS:

Site:	PHF4
Program:	CECRA
Start Date:	1/15/1992
End Date:	4/21/1992
Report Date:	4/21/1992
Description:	Site Assessment Activities - CECRA - Entire Site
Purpose:	CECRA initial investigation to follow-up complaint.

Site:	PHF4
Program:	CECRA
Start Date:	2/11/1992
End Date:	8/5/1992
Report Date:	8/5/1992
Description:	Site Assessment Activities - CECRA - Entire Site
Purpose:	CERCLA preliminary assessment.

Site:	PHF4
Program:	CECRA
Start Date:	5/1/1993
End Date:	Not reported
Report Date:	Not reported
Description:	Site Assessment Activities - Entire Site
Purpose:	CERCLA preliminary assessment.

VCP:

Site:	PHF4
Program:	VCRA
Start Date:	01/01/1996
End Date:	07/01/1996
Report Date:	07/30/1996
Description:	Remedial Investigation - Voluntary - Entire Site
Purpose:	Collect information and determine most efficient cleanup methods for the contaminated soils

REM RPROGRAM:

Site ID:	PHF4
Lat/Long:	45.79778 / -108.48194
Start Date:	01/15/1992
Program:	CECRA
Description:	Site Assessment Activities - CECRA - Entire Site
End Date:	04/21/1992
Report Date:	04/21/1992
Purpose:	CECRA initial investigation to follow-up complaint.
Sphere:	Groundwater
Contaminant:	Petroleum
Observed:	Yes
Low Depth:	36
Matieral Volume:	Not reported
Receptor:	River
Distance:	2700
Area Impacted:	Not reported

PACIFIC HIDE & FUR BILLINGS 4TH AVE , (Continued) **S106561002**

Remark:	Petroleum contamination found in on-site monitoring well which is 36 deep.

Sphere:	Soils
Contaminant:	Metals; PCB; Petroleum
Observed:	Yes
Low Depth:	3
Matieral Volume:	Not reported
Receptor:	Residence
Distance:	1000
Area Impacted:	5 ac
Remark:	Soil contamination throughout the site.

Program:	CECRA
Program Date:	12/18/1991
Listed Date:	02/11/1992
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

Program:	VCRA
Program Date:	02/11/1992
Listed Date:	Not reported
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

Site ID:	PHF4
Lat/Long:	45.79778 / -108.48194
Start Date:	02/11/1992
Program:	CECRA
Description:	Site Assessment Activities - CECRA - Entire Site
End Date:	08/05/1992
Report Date:	08/05/1992
Purpose:	CERCLA preliminary assessment.
Sphere:	Groundwater
Contaminant:	Petroleum
Observed:	Yes
Low Depth:	36
Matieral Volume:	Not reported
Receptor:	River
Distance:	2700
Area Impacted:	Not reported
Remark:	Petroleum contamination found in on-site monitoring well which is 36 deep.

Sphere:	Soils
Contaminant:	Metals; PCB; Petroleum
Observed:	Yes
Low Depth:	3
Matieral Volume:	Not reported
Receptor:	Residence
Distance:	1000
Area Impacted:	5 ac
Remark:	Soil contamination throughout the site.

PACIFIC HIDE & FUR BILLINGS 4TH AVE , (Continued) **S106561002**

Program:	CECRA
Program Date:	12/18/1991
Listed Date:	02/11/1992
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

Program:	VCRA
Program Date:	02/11/1992
Listed Date:	Not reported
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

Site ID:	PHF4
Lat/Long:	45.79778 / -108.48194
Start Date:	05/01/1993
Program:	CECRA
Description:	Site Assessment Activities - Entire Site
End Date:	Not reported
Report Date:	Not reported
Purpose:	CERCLA preliminary assessment.
Sphere:	Groundwater
Contaminant:	Petroleum
Observed:	Yes
Low Depth:	36
Matieral Volume:	Not reported
Receptor:	River
Distance:	2700
Area Impacted:	Not reported
Remark:	Petroleum contamination found in on-site monitoring well which is 36 deep.

Sphere:	Soils
Contaminant:	Metals; PCB; Petroleum
Observed:	Yes
Low Depth:	3
Matieral Volume:	Not reported
Receptor:	Residence
Distance:	1000
Area Impacted:	5 ac
Remark:	Soil contamination throughout the site.

Program:	CECRA
Program Date:	12/18/1991
Listed Date:	02/11/1992
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

Program:	VCRA
Program Date:	02/11/1992
Listed Date:	Not reported
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

PACIFIC HIDE & FUR BILLINGS 4TH AVE , (Continued) **S106561002**

Site ID:	PHF4
Lat/Long:	45.79778 / -108.48194
Start Date:	01/01/1996
Program:	VCRA
Description:	Remedial Investigation - Voluntary - Entire Site
End Date:	07/01/1996
Report Date:	07/30/1996
Purpose:	Collect information and determine most efficient cleanup methods for the contaminated soils
Sphere:	Groundwater
Contaminant:	Petroleum
Observed:	Yes
Low Depth:	36
Matieral Volume:	Not reported
Receptor:	River
Distance:	2700
Area Impacted:	Not reported
Remark:	Petroleum contamination found in on-site monitoring well which is 36 deep.

Sphere:	Soils
Contaminant:	Metals; PCB; Petroleum
Observed:	Yes
Low Depth:	3
Matieral Volume:	Not reported
Receptor:	Residence
Distance:	1000
Area Impacted:	5 ac
Remark:	Soil contamination throughout the site.

Program:	CECRA
Program Date:	12/18/1991
Listed Date:	02/11/1992
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

Program:	VCRA
Program Date:	02/11/1992
Listed Date:	Not reported
DeListed Date:	Not reported
State Rank:	Medium priority
Referred:	Not reported

34
NW
1/8-1/4
0.232 mi.
1224 ft.

CON WAY FREIGHT WESTERN EXPRESS
901 4TH AVE N
BILLINGS, MT 59101

RCRA-CESQG **1010323020**
MTR000202770

Relative:
Higher

Actual:
3112 ft.

RCRA-CESQG:

Date form received by agency:	10/26/2006
Facility name:	CON WAY FREIGHT WESTERN EXPRESS
Facility address:	901 4TH AVE N BILLINGS, MT 591011507
EPA ID:	MTR000202770
Mailing address:	4TH AVE N

CON WAY FREIGHT WESTERN EXPRESS (Continued) **1010323020**

	BILLINGS, MT 591011507
Contact:	MARVIN BESEL
Contact address:	4TH AVE N BILLINGS, MT 591011507
Contact country:	US
Contact telephone:	(406) 256-9527
Contact email:	BESEL.MARV@CON-WAY.COM
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CON WAY FREIGHT INC
Owner/operator address:	4TH AVE N BILLINGS, MT 59101
Owner/operator country:	US
Owner/operator telephone:	(406) 256-9527
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/19/2006
Owner/Op end date:	Not reported
Owner/operator name:	MARVIN BESEL
Owner/operator address:	4TH AVE N BILLINGS, MT 59101
Owner/operator country:	US
Owner/operator telephone:	(406) 256-9527
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/01/1999
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

CON WAY FREIGHT WESTERN EXPRESS (Continued) **1010323020**

Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 07/18/2006
Facility name: CON WAY FREIGHT WESTERN EXPRESS
Classification: Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/16/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/15/2007
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/30/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/18/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

H35
West
1/8-1/4
0.241 mi.
1272 ft.

NORTHWEST TRUCK AND TRAILER SALES INC **RCRA-CESQG** **1000474480**
1110 3RD AVE N **FINDS** **MTD035213958**
BILLINGS, MT 59101

Site 1 of 4 in cluster H

Relative:
Higher

Actual:
3110 ft.

RCRA-CESQG:
Date form received by agency: 09/23/2009
Facility name: MONTANA PETERBILT LLC
Facility address: 1110 3RD AVE N
BILLINGS, MT 591012507
EPA ID: MTD035213958
Mailing address: 3RD AVE N
BILLINGS, MT 591012507
Contact: MITCH EDWARDS
Contact address: 3RD AVE N
BILLINGS, MT 591012507
Contact country: US
Contact telephone: (406) 252-5667

NORTHWEST TRUCK AND TRAILER SALES INC (Continued) **1000474480**

Contact email:	MEDWARDS@MONTANAPB.COM
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	JIM ELKINS
Owner/operator address:	PO BOX 2511 BILLINGS, MT 59103
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5667
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	02/27/2002
Owner/Op end date:	01/26/2005
Owner/operator name:	TERRIE SCHAFF
Owner/operator address:	PO BOX 2511 BILLINGS, MT 59103
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5667
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/26/2005
Owner/Op end date:	08/01/2008
Owner/operator name:	JOHN T INGHAM
Owner/operator address:	PO BOX 2511 BILLINGS, MT 59103
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5667
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	11/14/1990
Owner/Op end date:	02/27/2002
Owner/operator name:	KEVIN GUSTAINIS
Owner/operator address:	3RD AVE N BILLINGS, MT 59101
Owner/operator country:	US
Owner/operator telephone:	(406) 252-5667
Legal status:	Private
Owner/Operator Type:	Operator

NORTHWEST TRUCK AND TRAILER SALES INC (Continued) **1000474480**

Owner/Op start date: 08/01/2008
Owner/Op end date: 09/23/2009

Owner/operator name: MONTANA PETERBILT LLC
Owner/operator address: 3RD AVE N
BILLINGS, MT 59101
Owner/operator country: US
Owner/operator telephone: (406) 252-5667
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/01/2008
Owner/Op end date: Not reported

Owner/operator name: W D LARSON COMPANYS
Owner/operator address: LYNDALE AVE S
BLOOMINGTON, MN 55420
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 11/14/1990
Owner/Op end date: Not reported

Owner/operator name: KEVIN GUSTAINIS
Owner/operator address: 3RD AVE N
BILLINGS, MT 59101
Owner/operator country: US
Owner/operator telephone: (406) 252-5667
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/01/2008
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/17/2008
Facility name: MONTANA PETERBILT LLC
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/26/2005

NORTHWEST TRUCK AND TRAILER SALES INC (Continued) **1000474480**

Facility name: MONTANA PETERBILT LLC
Site name: NORTHWEST TRUCK AND TRAILER SALES INC
Classification: Small Quantity Generator

Date form received by agency: 12/03/1990
Facility name: MONTANA PETERBILT LLC
Site name: NORTHWEST TRUCK & TRAILER SALES
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D039
Waste name: TETRACHLOROETHYLENE

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: SR - ARM 17.54.311
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 12/20/2000
Date achieved compliance: 02/15/2001
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/05/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.311
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 12/20/2000
Date achieved compliance: 02/15/2001
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 02/15/2001

NORTHWEST TRUCK AND TRAILER SALES INC (Continued) **1000474480**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/06/1991
Date achieved compliance: 03/15/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/20/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Evaluation Action Summary:
Evaluation date: 09/23/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/17/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/25/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/24/2007
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/12/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/20/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

NORTHWEST TRUCK AND TRAILER SALES INC (Continued) **1000474480**

Evaluation date: 02/09/2004
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/26/2004
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/22/2003
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/28/2002
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/09/2001
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/20/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 02/15/2001
Evaluation lead agency: State

Evaluation date: 11/07/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/20/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/06/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/15/1991
Evaluation lead agency: State

Evaluation date: 05/10/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

NORTHWEST TRUCK AND TRAILER SALES INC (Continued) **1000474480**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/07/1989
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/17/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110004002533

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

H36 **NORTHWEST TRUCK & TRAILER SALE** **HWAR** **S110940998**
West **1110 3RD AVE N** **N/A**
1/8-1/4 **BILLINGS, MT 59103**
0.241 mi.
1272 ft. **Site 2 of 4 in cluster H**

Relative:
Higher

Actual:
3110 ft.

HWAR:

Location Telephone Number:	4062525667
Location Contact Name:	JOHN T INGHAM
Latitude Decimal Degrees (Assumed Nn.Nnnnnn):	Not reported
Longitude In Decimal Degrees (Assumed Decimal):	Not reported
Owner Or Alternate Company Name:	NORTHWEST TRUCK & TRAILER SALE
Owner Or Alternate Street Address:	1110 3RD AVE N
Owner Or Alternate Post Office Box:	Not reported
Owner Or Alternate City:	BILLINGS
Owner Or Alternate State:	MT
Owner Or Alternate Zip Code:	59103
Owner Or Alternate Telephone Number:	4062525667
Owner Or Alternate Contact Name:	Not reported
Operator Or Alternate Company Name:	NORTHWEST TRUCK & TRAILER SALE
Operator Or Alternate Street Address:	1110 3RD AVE N
Operator Or Alternate Post Office Box:	Not reported
Operator Or Alternate City:	BILLINGS
Operator Or Alternate State:	MT

NORTHWEST TRUCK & TRAILER SALE (Continued) **S110940998**

Operator Or Alternate Zip Code:	59103
Operator Or Alternate Telephone Number:	4062525667
Operator Or Alternate Contact Name:	Not reported
Secondary Or Alternate Usepa Identification Number:	Not reported
Standard Industrial Classification Code:	Not reported
Primary NAIC System Code:	Not reported
Secondary NAIC System Code:	Not reported
Haz Waste Large Quantity Generator Ind (H/Historic, 0-9 Year Latest Report, E Last Report > 10 Yrs):	Not reported
Haz Waste Small Quantity Generator(or Smaller) Ind (as above):	Not reported
Nonhazardous Waste Generator Ind (as above):	H
Compost Annual Reort Ind (as above):	Not reported
Landfill Annual Report Ind (as above):	Not reported
Potentially Infectious Medical Waste Annual Report Ind (as above):	Not reported
Haz Waste Permit Ind (S Indicates Activity):	Not reported
Solid Waste Permit Ind (S Indicates Activity):	Not reported
Used Tire Program Activity Ind (S Indicates Activity):	Not reported
Compliance Order Tracking Activity Ind (S Indicates Activity):	Not reported
Facility Compliance Tracking System Activity Ind (S Indicates Activity):	Not reported
Ind Of Groundwater Data In Mainframe Groundwater System (S Indicates Activity):	Not reported
Lust Program Activity Ind (S Indicates Activity):	Not reported
Lust Reimbursement Program Activity Ind (S Indicates Activity):	Not reported
Site Remediation Program Activity Ind (S Indicates Activity):	Not reported
FSRS Activity Ind (S Indicates Activity):	Not reported
State Response Action Activity Ind (S Indicates Activity):	Not reported
Name And Address Change Date:	05/06/05
Hazardous Annual Report Company Name:	Not reported
Hazardous Annual Report Street Address:	Not reported
Hazardous Annual Report Post Office Box:	Not reported
Hazardous Annual Report City:	Not reported
Hazardous Annual Report State:	Not reported
Hazardous Annual Report Zip Code:	Not reported
Hazardous Annual Report Telephone Number:	Not reported
Hazardous Annual Report Contact First Name:	Not reported
Hazardous Annual Report Contact Last Name:	Not reported
Hazardous Annual Report Contact Person Title Code:	Not reported
Hazardous Annual Report New Notifier Code:	Not reported
FIPS Country Code:	001
FIPS State Code:	30
FIPS County Code:	111
FIPS City Or Township Code:	000
IEPA Region Identifier:	Not reported
Original Entry Date:	11/08/93
Change Date:	05/06/05
Primary USEPA Identification Number:	Not reported
Status:	Not reported
Code:	BP
Total Tanks:	Not reported

H37 West 1/8-1/4 0.241 mi. 1272 ft. | **NORTHWEST PETERBILT CO** | **UST** | **U003363960** | **N/A**
1110 3RD AVE N
BILLINGS, MT

Site 3 of 4 in cluster H

Relative: Higher

Actual: 3110 ft.

UST:

Facility ID:	5601366
Alt Facility ID:	56-01366
Active Tanks:	Not reported
Inactive Tanks:	2

H38 West 1/8-1/4 0.247 mi. 1302 ft. | **VALLEY WELDERS SUPPLY INC BILLINGS** | **RCRA-CESQG** | **1012182938** | **MTD035216530**
320 N 11TH ST
BILLINGS, MT 59101

Site 4 of 4 in cluster H

Relative: Higher

Actual: 3111 ft.

RCRA-CESQG:

Date form received by agency:	01/29/1988
Facility name:	VALLEY WELDERS SUPPLY INC BILLINGS
Facility address:	320 N 11TH ST BILLINGS, MT 59101
EPA ID:	MTD035216530
Mailing address:	N 11TH ST BILLINGS, MT 59101
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	08
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

VALLEY WELDERS SUPPLY INC BILLINGS (Continued) **1012182938**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 01/29/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

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39 WNW 1/8-1/4 0.250 mi. 1320 ft. | **GM PETROLEUM DIST INC CARDTROL SITE 3** | **LUST** | **U003363957**
1004 4TH AVE N | **UST** | **N/A**
BILLINGS, MT

Relative: Higher

Actual: 3112 ft.

LUST:
Facility ID: 5601290
Release ID: 1094
Date of Release: 09/28/1988
Priority: 4.0 - Ground Water Management
Active Site: Yes
Priority Date: 11/30/2010
Transferred Lead Not reported
Project Officer: Stremcha, Marla (17451)
Event ID: 458
EPA Lead: Not reported
Date Resolved: 09/28/1988
Date transferred to another program: Not reported

Facility ID: 5601290
Release ID: 2586
Date of Release: 05/12/1995
Priority: Not reported
Active Site: No
Priority Date: Not reported
Transferred Lead Not reported
Project Officer: Smith, Monte (2335)
Event ID: 1754
EPA Lead: Not reported
Date Resolved: 05/12/1995
Date transferred to another program: Not reported

Facility ID: 5601290
Release ID: 3243
Date of Release: 09/09/1997
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 06/03/2008
Transferred Lead Not reported
Project Officer: Stremcha, Marla (17451)

GM PETROLEUM DIST INC CARDTROL SITE 3 (Continued) **U003363957**

Event ID: 3110
EPA Lead: Not reported
Date Resolved: 09/09/1997
Date transferred to another program: Not reported

UST:
Facility ID: 5601290
Alt Facility ID: 56-01290
Active Tanks: 5
Inactive Tanks: 16

---

40 NNW 1/4-1/2 0.261 mi. 1378 ft. | **AT & T COMMUNICATIONS BILLINGS RADIO** | **LUST** | **U001881010**
US HIGHWAY 87 | **UST** | **N/A**
BILLINGS, MT

Relative: Higher

Actual: 3113 ft.

LUST:
Facility ID: 5602406
Release ID: 644
Date of Release: 03/05/1991
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 06/03/2008
Transferred Lead Not reported
Project Officer: Shearer, Jay (22136)
Event ID: 864
EPA Lead: Not reported
Date Resolved: 03/05/1991
Date transferred to another program: Not reported

UST:
Facility ID: 5602406
Alt Facility ID: 56-02406
Active Tanks: Not reported
Inactive Tanks: 3

---

41 West 1/4-1/2 0.272 mi. 1434 ft. | **SHOWROOM AUTO BODY #4476** | **LUST** | **S107678482**
1415 1ST AVE N | **N/A**
BILLINGS, MT

Relative: Higher

Actual: 3111 ft.

LUST:
Facility ID: 9995025
Release ID: 4476
Date of Release: 02/22/2006
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 06/30/2008
Transferred Lead Not reported
Project Officer: Raty, John (18983)
Event ID: 4476
EPA Lead: Not reported
Date Resolved: 08/28/2006

SHOWROOM AUTO BODY #4476 (Continued) **S107678482**

Date transferred to another program: Not reported

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42 WNW 1/4-1/2 0.308 mi. 1624 ft. | **BARRY OLEARY INC** | **FINDS** | **1007867424**
1141 4TH AVE N | **LUST** | **N/A**
BILLINGS, MT 59103 | **UST**

Relative: Higher

Actual: 3112 ft.

FINDS:

Registry ID: 110020363578

Environmental Interest/Information System
MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:
Facility ID: 5602565
Release ID: 1263
Date of Release: 07/16/1992
Priority: Not reported
Active Site: No
Priority Date: Not reported
Transferred Lead Not reported
Project Officer: Stagner, Craig (17293)
Event ID: 2063
EPA Lead: Not reported
Date Resolved: 07/16/1992
Date transferred to another program: Not reported

UST:
Facility ID: 5602565
Alt Facility ID: 56-02565
Active Tanks: Not reported
Inactive Tanks: 3

I43 NNW 1/4-1/2 0.335 mi. 1767 ft. | **EAST PARKWAY CENEX TRUCKSTOP** | **LUST** | **U002290851**
501 MAIN ST | **UST** | **N/A**
BILLINGS, MT

Site 1 of 2 in cluster I

Relative: Higher

Actual: 3129 ft.

LUST:
Facility ID: 5608902
Release ID: 871
Date of Release: 08/23/1991
Priority: Not reported
Active Site: No
Priority Date: Not reported
Transferred Lead Not reported
Project Officer: Laskowski, Randall (17305)

EAST PARKWAY CENEX TRUCKSTOP (Continued) **U002290851**

Event ID: 602
EPA Lead: Not reported
Date Resolved: 08/23/1991
Date transferred to another program: Not reported

Facility ID: 5608902
Release ID: 2422
Date of Release: 11/09/1994
Priority: 4.0 - Ground Water Management
Active Site: Yes
Priority Date: 05/12/2008
Transferred Lead Not reported
Project Officer: Shearer, Jay (22136)
Event ID: 2798
EPA Lead: Not reported
Date Resolved: 06/26/1995
Date transferred to another program: Not reported

UST:
Facility ID: 5608902
Alt Facility ID: 56-08902
Active Tanks: Not reported
Inactive Tanks: 5

I44
NNW
1/4-1/2
0.336 mi.
1772 ft.

METRA PARK BILLINGS #1156 **LUST** **S102770352**
308 6TH AVE N **N/A**
BILLINGS, MT

Site 2 of 2 in cluster I

Relative:
Higher

Actual:
3132 ft.

LUST:
Facility ID: 5612748
Release ID: 1156
Date of Release: 04/07/1992
Priority: Not reported
Active Site: Yes
Priority Date: 05/10/2011
Transferred Lead Not reported
Project Officer: Raty, John (18983)
Event ID: 1757
EPA Lead: Not reported
Date Resolved: 04/07/1992
Date transferred to another program: Not reported

45
West
1/4-1/2
0.367 mi.
1936 ft.

GRIFFIN AUTOMOTIVE ENTERPRISES #2849 **LUST** **S102770350**
1501 2ND AVE N **N/A**
BILLINGS, MT

Relative:
Higher

Actual:
3113 ft.

LUST:
Facility ID: 5613721
Release ID: 2849
Date of Release: 12/04/1995
Priority: Not reported
Active Site: No

GRIFFIN AUTOMOTIVE ENTERPRISES #2849 (Continued) **S102770350**

Priority Date: **Not reported**
Transferred Lead **Not reported**
Project Officer: Stagner, Craig (17293)
Event ID: 2214
EPA Lead: Not reported
Date Resolved: 12/22/1995
Date transferred to another program: Not reported

46
WNW
1/4-1/2
0.396 mi.
2089 ft.

ENERGY ONE STOP #3260
1305 4TH AVE N
BILLINGS, MT

LUST **S102967765**
N/A

Relative:
Higher

Actual:
3112 ft.

LUST:
Facility ID: 5608284
Release ID: 3260
Date of Release: 08/27/1997
Priority: 2.0 - Medium Priority Characterization
Active Site: **Yes**
Priority Date: **06/10/2008**
Transferred Lead **Not reported**
Project Officer: Shearer, Jay (22136)
Event ID: 3123
EPA Lead: Not reported
Date Resolved: 08/27/1997
Date transferred to another program: Not reported

47
WNW
1/4-1/2
0.409 mi.
2159 ft.

GOLDEN RECYCLING
1100 6TH AVE. N
BILLINGS, MT

SWRCY **S110596640**
N/A

Relative:
Higher

Actual:
3134 ft.

SWRCY:
Cardboard: X
Newspaper: X
Magzines: Not reported
Off Paper: Not reported
Aluminum Cans: X
Steel Cans: Not reported
#1 and 2 Plastic: Not reported
Yard Waste: Not reported

48
WNW
1/4-1/2
0.431 mi.
2275 ft.

E R YOUNG CO REALTORS
1411 4TH AVE N
BILLINGS, MT 59101

FINDS **1007867124**
LUST **N/A**

Relative:
Higher

Actual:
3114 ft.

FINDS:

Registry ID: 110020360571

Environmental Interest/Information System

E R YOUNG CO REALTORS (Continued) **1007867124**

MT-CEDARS (Montana - Consolidated Environmental Data Acquisition And Retrieval System) is the Montana Department of Environmental Quality's (DEQ) consolidated system that allows facilities throughout the state to quickly and easily report daily air quality data and water quality data.

LUST:
Facility ID: 5604968
Release ID: 1116
Date of Release: 03/17/1992
Priority: Not reported
Active Site: No
Priority Date: Not reported
Transferred Lead Not reported
Project Officer: Newby, Patrick (17304)
Event ID: 2383
EPA Lead: Not reported
Date Resolved: 03/17/1992
Date transferred to another program: Not reported

49
NNW
1/4-1/2
0.454 mi.
2396 ft.

LINDSEY LUMBER & HARDWARE CO **LUST** **U001881153**
548 MAIN ST **UST** **N/A**
BILLINGS, MT

Relative:
Higher

Actual:
3180 ft.

LUST:
Facility ID: 5608667
Release ID: 1678
Date of Release: 06/02/1993
Priority: Not reported
Active Site: No
Priority Date: Not reported
Transferred Lead Not reported
Project Officer: Smith, Monte (2335)
Event ID: 389
EPA Lead: Not reported
Date Resolved: 06/02/1993
Date transferred to another program: Not reported

UST:
Facility ID: 5608667
Alt Facility ID: 56-08667
Active Tanks: Not reported
Inactive Tanks: 5

50 WSW 1/4-1/2 0.473 mi. 2496 ft. | **NORMS SERVICE FORMER 1724 1ST AVE N BILLINGS, MT** | **LUST UST** | **U003364184 N/A**

Relative: Higher

Actual: 3114 ft.

LUST:

Facility ID: 5608596
Release ID: 1812
Date of Release: 08/31/1993
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 05/12/2008
Transferred Lead Not reported
Project Officer: Raty, John (18983)
Event ID: 1113
EPA Lead: Not reported
Date Resolved: 03/30/2005
Date transferred to another program: Not reported

Facility ID: 5608596
Release ID: 3787
Date of Release: 10/22/1998
Priority: 2.0 - Medium Priority Characterization
Active Site: Yes
Priority Date: 06/25/2008
Transferred Lead Not reported
Project Officer: Raty, John (18983)
Event ID: 3666
EPA Lead: Not reported
Date Resolved: 03/30/2005
Date transferred to another program: Not reported

UST:

Facility ID: 5608596
Alt Facility ID: 56-08596
Active Tanks: Not reported
Inactive Tanks: 4

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51 West 1/2-1 0.708 mi. 3739 ft. | **BILLINGS GAS CO N 19TH STREET BILLINGS, MT 59101** | **Manufactured Gas Plants** | **1008408988 N/A**

Relative: Higher

Actual: 3115 ft.

Manufactured Gas Plants:

No additional information available

52 West 1/2-1 0.739 mi. 3904 ft. | **PINTSCH GAS CO**
4TH AVE N
BILLINGS, MT 59101 | **Manufactured Gas Plants** | **1008408989**
N/A

Relative: Higher

Actual: 3116 ft.

Manufactured Gas Plants:
No additional information available

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53 WSW 1/2-1 0.813 mi. 4292 ft. | **BURLINGTON NORTHERN INC PROPERTY,**
2224 MONTANA AVE
BILLINGS, MT | **DEL SHWS**
REM RPROGRAM | **S106561037**
N/A

Relative: Higher

Actual: 3122 ft.

DELETED HWS:

Site:	BNPY
Program:	CECRA
Ranking Code:	N
Delisted Date:	6/8/1994
Program Date:	Not reported
Listed:	1/1/1989
Referredj Date:	Not reported

REM RPROGRAM:

Site ID:	BNPY
Lat/Long:	45.78389 / -108.49917
Start Date:	09/01/1980
Program:	CERCLA
Description:	CERCLA Discovery - CERCLA Discovery - Entire Site
End Date:	09/01/1980
Report Date:	Not reported
Purpose:	To evaluate the extent of contamination at the site, potential pathways and receptors, and the sites potential for inclusion on the NPL.
Sphere:	Not reported
Contaminant:	Not reported
Observed:	Not reported
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Not reported
Program:	CECRA
Program Date:	Not reported
Listed Date:	01/01/1989
DeListed Date:	06/08/1994
State Rank:	No further action
Referred:	Not reported
Program:	CERCLA
Program Date:	09/01/1980
Listed Date:	09/01/1980
DeListed Date:	09/30/1985
State Rank:	Not reported

BURLINGTON NORTHERN INC PROPERTY, (Continued) **S106561037**

Referred:	09/30/1985

Site ID:	BNPY
Lat/Long:	45.78389 / -108.49917
Start Date:	01/01/1983
Program:	CERCLA
Description:	CERCLA Preliminary Assessment - CERCLA Preliminary Assessment - Entire Site
End Date:	09/30/1985
Report Date:	08/20/1985
Purpose:	EPA CERCLIS DATA: NFRAP: No further Remedial Action planned
Sphere:	Not reported
Contaminant:	Not reported
Observed:	Not reported
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Not reported

Program:	CECRA
Program Date:	Not reported
Listed Date:	01/01/1989
DeListed Date:	06/08/1994
State Rank:	No further action
Referred:	Not reported

Program:	CERCLA
Program Date:	09/01/1980
Listed Date:	09/01/1980
DeListed Date:	09/30/1985
State Rank:	Not reported
Referred:	09/30/1985

Site ID:	BNPY
Lat/Long:	45.78389 / -108.49917
Start Date:	09/30/1985
Program:	CERCLA
Description:	NFRAP - No Further Remedial Action Planned - NFRAP - No Further Remedial Action Planned - Entire Site
End Date:	09/30/1985
Report Date:	Not reported
Purpose:	EPA CERCLIS DATA: NFRAP: No further Remedial Action planned.
Sphere:	Not reported
Contaminant:	Not reported
Observed:	Not reported
Low Depth:	Not reported
Matieral Volume:	Not reported
Receptor:	Not reported
Distance:	Not reported
Area Impacted:	Not reported
Remark:	Not reported

Program:	CECRA

BURLINGTON NORTHERN INC PROPERTY, (Continued) **S106561037**

Program Date:	Not reported
Listed Date:	01/01/1989
DeListed Date:	06/08/1994
State Rank:	No further action
Referred:	Not reported

Program:	CERCLA
Program Date:	09/01/1980
Listed Date:	09/01/1980
DeListed Date:	09/30/1985
State Rank:	Not reported
Referred:	09/30/1985

J54
SW
1/2-1
0.895 mi.
4724 ft.

Relative:
Higher

Actual:
3115 ft.

CONOCOPHILLIPS CO BILLINGS REFINERY
401 S 23RD ST
BILLINGS, MT 59103

Site 1 of 2 in cluster J

RCRA-TSDF **1000331305**
CERC-NFRAP **59101CNCBL40**
CORRACTS
RCRA-LQG
TRIS
RAATS
FINANCIAL ASSURANCE

RCRA-TSDF:

Date form received by agency:	03/10/2010
Facility name:	CONOCOPHILLIPS CO BILLINGS REFINERY
Facility address:	401 S 23RD ST BILLINGS, MT 591014337
EPA ID:	MTD006229405
Mailing address:	PO BOX 30198 BILLINGS, MT 591070198
Contact:	ALLEN C EGGEN
Contact address:	S 23RD ST BILLINGS, MT 591014337
Contact country:	US
Contact telephone:	(406) 255-2626
Contact email:	ALLEN.EGGEN@CONOCOPHILLIPS.COM
EPA Region:	08
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	CONOCO INC

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Owner/operator address: PO BOX 30198
BILLINGS, MT 59107
Owner/operator country: US
Owner/operator telephone: (406) 255-2677
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 06/13/1917
Owner/Op end date: 08/30/2002

Owner/operator name: CONOCOPHILLIPS COMPANY
Owner/operator address: N DAIRY ASHFORD ST
HOUSTON, TX 77079
Owner/operator country: US
Owner/operator telephone: (406) 255-2677
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/30/2002
Owner/Op end date: Not reported

Owner/operator name: CONOCOPHILLIPS COMPANY
Owner/operator address: PO BOX 30198
BILLINGS, MT 59107
Owner/operator country: US
Owner/operator telephone: (406) 255-2677
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/30/2002
Owner/Op end date: Not reported

Owner/operator name: CONOCOPHILLIPS COMPANY
Owner/operator address: 600 N DAIRY ASHFORD
HOUSTON, TX 77079
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/30/2002
Owner/Op end date: Not reported

Owner/operator name: CONOCOPHILLIPS COMPANY
Owner/operator address: PO BOX 30198
BILLINGS, MT 59107
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/30/2002
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 03/10/2010
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCOPHILLIPS COMPANY BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 07/15/2008
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 03/05/2008
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 02/28/2008
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 03/03/2006
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 09/02/2004
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 02/26/2004
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 02/25/2003
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Classification: Large Quantity Generator

Date form received by agency: 03/01/2001
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY BILLINGS

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Classification: Large Quantity Generator

Date form received by agency: 03/15/2000
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY BILLINGS
Classification: Large Quantity Generator

Date form received by agency: 02/26/1998
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY BILLINGS
Classification: Large Quantity Generator

Date form received by agency: 02/27/1996
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY
Classification: Large Quantity Generator

Date form received by agency: 01/09/1995
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY BILLINGS
Classification: Large Quantity Generator

Date form received by agency: 02/24/1994
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY
Classification: Large Quantity Generator

Date form received by agency: 03/14/1990
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO INC.
Classification: Large Quantity Generator

Date form received by agency: 11/19/1980
Facility name: CONOCOPHILLIPS CO BILLINGS REFINERY
Site name: CONOCO REFINERY BILLINGS
Classification: Not a generator, verified

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004
Waste name: ARSENIC

Waste code: D006
Waste name: CADMIUM

Waste code: D009
Waste name: MERCURY

Waste code: D010
Waste name: SELENIUM

Waste code: D018
Waste name: BENZENE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F037
Waste name: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN: OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORMWATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGE GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Waste code: K050
Waste name: HEAT EXCHANGER BUNDLE CLEANING SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K051
Waste name: API SEPARATOR SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K171
Waste name: Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U154
Waste name: METHANOL (I)

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D006

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Waste name: CADMIUM

Waste code: D009
Waste name: MERCURY

Waste code: D010
Waste name: SELENIUM

Waste code: D018
Waste name: BENZENE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F037
Waste name: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN: OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORMWATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGE

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Waste code: K048
Waste name: DISSOLVED AIR FLOTATION (DAF) FLOAT FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K050
Waste name: HEAT EXCHANGER BUNDLE CLEANING SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K051
Waste name: API SEPARATOR SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K169
Waste name: Crude oil storage tank sediment from petroleum refining operations.

Waste code: K170
Waste name: Clarified slurry oil storage tank sediment and/or in-line filter/separation solids from petroleum refining operations.

Waste code: K171
Waste name: Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U154
Waste name: METHANOL (I)

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 6301.6

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Amount (Lbs): 57

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 2504

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 21300

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 2650

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 1257

Waste code: D010
Waste name: SELENIUM
Amount (Lbs): 2504

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 19820

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 5052.2

Waste code: D039
Waste name: TETRACHLOROETHYLENE
Amount (Lbs): 3870.6

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 2809.2

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

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2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 5052.2

Waste code: F037
Waste name: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN: OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORMWATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGE GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.
Amount (Lbs): 9535

Waste code: K050
Waste name: HEAT EXCHANGER BUNDLE CLEANING SLUDGE FROM THE PETROLEUM REFINING INDUSTRY
Amount (Lbs): 9535

Waste code: K051
Waste name: API SEPARATOR SLUDGE FROM THE PETROLEUM REFINING INDUSTRY
Amount (Lbs): 0

Waste code: K171
Waste name: Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media)
Amount (Lbs): 524534

Waste code: U057
Waste name: CYCLOHEXANONE (I)
Amount (Lbs): 57

Waste code: U154
Waste name: METHANOL (I)
Amount (Lbs): 57

Corrective Action Summary:
Event date: 09/30/1987
Event: RFA Completed, Assessment was an RFA.

Event date: 10/01/1990
Event: RFI Imposition

Event date: 01/08/1991

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Event:	RFI Workplan Received
Event date:	02/21/1991
Event:	RFI Workplan Notice Of Deficiency Issued
Event date:	04/12/1991
Event:	Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).
Event date:	04/12/1991
Event:	RFI Workplan Approved
Event date:	12/18/1991
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	02/25/1992
Event:	RFI Imposition
Event date:	04/21/1992
Event:	RFI Workplan Notice Of Deficiency Issued
Event date:	04/23/1992
Event:	Stabilization Measures Evaluation,This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.
Event date:	09/30/1993
Event:	Stabilization Measures Implemented
Event date:	10/01/1994
Event:	Stabilization Construction Completed
Event date:	06/05/1996
Event:	RFI Report Received
Event date:	09/01/1997
Event:	RFA Determination Of Need For An RFI, RFI is Necessary;
Event date:	09/01/1997
Event:	CA077ME
Event date:	09/01/1997
Event:	CA076ME
Event date:	09/15/1997
Event:	Igration of Contaminated Groundwater under Control, Unacceptable migration of contaminated groundwater is observed or expected.
Event date:	09/15/1997
Event:	Current Human Exposures under Control, Current human exposures are NOT under control.
Event date:	10/13/1997
Event:	Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information

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contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 10/13/1997
Event: RFI Approved

Event date: 08/31/1999
Event: CMS Report Received

Event date: 01/31/2000
Event: RFI Report Received

Event date: 02/01/2001
Event: RFI Report Received

Event date: 03/30/2001
Event: CMS Workplan Received

Event date: 02/15/2002
Event: CMS Workplan Approved

Event date: 05/12/2002
Event: CMS Approved

Event date: 05/12/2002
Event: Date For Remedy Selection (CM Imposed)

Event date: 05/28/2003
Event: RFI Imposition

Event date: 09/12/2003
Event: RFI Workplan Received

Event date: 01/26/2004
Event: RFI Workplan Modification Requested By Agency

Event date: 02/27/2004
Event: RFI Workplan Received

Event date: 04/15/2004
Event: RFI Workplan Approved

Event date: 01/31/2005
Event: RFI Report Received

Event date: 03/09/2005
Event: CMI Workplan Approved

Event date: 03/09/2005
Event: CMI Workplan Approved

Event date: 03/10/2005
Event: CA550RC

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Event date: 03/10/2005
Event: CA506

Event date: 03/10/2005
Event: CA506

Event date: 06/13/2005
Event: CMS Report Received

Event date: 10/14/2005
Event: CMS Report Received

Event date: 12/19/2005
Event: Date For Public Notice On Proposed Remedy

Event date: 03/30/2006
Event: CMS Approved

Event date: 03/30/2006
Event: Date For Remedy Selection (CM Imposed)

Event date: 03/30/2006
Event: Corrective Measures Design Approved

Event date: 02/26/2007
Event: Stabilization Measures Implemented

Event date: 12/04/2007
Event: Stabilization Measures Implemented

Event date: 06/19/2008
Event: CMI Workplan Approved

Event date: 08/15/2008
Event: CA506

Event date: 10/02/2009
Event: CA550RC

Event date: 01/28/2010
Event: Stabilization Construction Completed

Event date: Not reported
Event: CA006OU

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 12/10/2009
Date achieved compliance: 12/10/2009
Violation lead agency: State
Enforcement action: BACK IN COMPLIANCE LTR
Enforcement action date: 12/28/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 12/10/2009
Date achieved compliance: 12/15/2009
Violation lead agency: State
Enforcement action: BACK IN COMPLIANCE LTR
Enforcement action date: 12/28/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/25/2008
Date achieved compliance: 06/25/2008
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 06/25/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/25/2008
Date achieved compliance: 06/25/2008
Violation lead agency: State
Enforcement action: BACK IN COMPLIANCE LTR
Enforcement action date: 07/11/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 01/10/2007
Date achieved compliance: 02/26/2007
Violation lead agency: State
Enforcement action: BACK IN COMPLIANCE LTR
Enforcement action date: 03/28/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 01/10/2007
Date achieved compliance: 02/26/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/31/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 01/10/2007
Date achieved compliance: 02/26/2007
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 02/26/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Permit Condition or Requirement
Date violation determined: 01/09/2007
Date achieved compliance: 03/13/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/31/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: Permit Condition or Requirement
Date violation determined: 01/09/2007
Date achieved compliance: 03/13/2007
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 03/13/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Regulation violated: Not reported
Area of violation: Permit Condition or Requirement
Date violation determined: 01/09/2007
Date achieved compliance: 03/13/2007
Violation lead agency: State
Enforcement action: BACK IN COMPLIANCE LTR
Enforcement action date: 03/28/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - Permit Condition IV.6.2.b
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 01/24/2006
Date achieved compliance: 03/31/2006
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/24/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - Permit Condition IV.6.2.b
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 01/24/2006
Date achieved compliance: 03/31/2006
Violation lead agency: State
Enforcement action: BACK IN COMPLIANCE LTR
Enforcement action date: 03/31/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - Permit Condition IV.6.2.b
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 01/24/2006
Date achieved compliance: 03/31/2006
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 03/21/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 262.34

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Area of violation: Generators - Pre-transport
Date violation determined: 09/29/2005
Date achieved compliance: 09/29/2005
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 11/02/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 262.11
Area of violation: Generators - Pre-transport
Date violation determined: 09/02/2004
Date achieved compliance: 01/21/2005
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 01/21/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 262.11
Area of violation: Generators - Pre-transport
Date violation determined: 09/02/2004
Date achieved compliance: 01/21/2005
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 11/19/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 262.11
Area of violation: Generators - Pre-transport
Date violation determined: 09/02/2004
Date achieved compliance: 01/21/2005
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 12/15/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 279.22
Area of violation: Used Oil - Generators

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Date violation determined: 09/02/2004
Date achieved compliance: 09/02/2004
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 11/03/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 262.11
Area of violation: Generators - Pre-transport
Date violation determined: 09/02/2004
Date achieved compliance: 01/21/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/03/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 279.22
Area of violation: Used Oil - Generators
Date violation determined: 09/02/2004
Date achieved compliance: 09/02/2004
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/03/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.134(f)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 05/28/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.145(f)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/29/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.147(g)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/29/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.147(g)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 05/28/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.134(f)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 05/19/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.147(g)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 05/19/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.145(f)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 05/28/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.134(f)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/29/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: PC - 40 CFR 264.145(f)
Area of violation: TSD - Financial Requirements
Date violation determined: 04/29/2003
Date achieved compliance: 05/28/2003
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 05/19/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 265.310(b)(l)
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 09/06/2001
Date achieved compliance: 12/24/2001
Violation lead agency: State

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Enforcement action: VERBAL INFORMAL
Enforcement action date: 03/01/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 265.310(b)(l)
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 09/06/2001
Date achieved compliance: 12/24/2001
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/09/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 40 CFR 265.310(b)(l)
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 09/06/2001
Date achieved compliance: 12/24/2001
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 10/16/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421
Area of violation: Generators - Pre-transport
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/04/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421
Area of violation: Generators - Pre-transport
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Enforcement action date: 12/23/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421
Area of violation: Generators - Pre-transport
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/05/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.105(2)
Area of violation: Generators - General
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 12/23/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.105(2)
Area of violation: Generators - General
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/05/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.105(2)
Area of violation: Generators - General
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/13/1999

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421
Area of violation: Generators - Pre-transport
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/13/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.105(2)
Area of violation: Generators - General
Date violation determined: 12/01/1999
Date achieved compliance: 01/05/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/04/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421(4)(d)
Area of violation: Generators - Pre-transport
Date violation determined: 11/17/1999
Date achieved compliance: 01/24/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421(4)(d)
Area of violation: Generators - Pre-transport
Date violation determined: 11/17/1999
Date achieved compliance: 01/24/2000
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/19/2000
Enf. disposition status: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421(4)(b)
Area of violation: Generators - Pre-transport
Date violation determined: 09/17/1998
Date achieved compliance: 11/12/1998
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 11/09/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.421(4)(b)
Area of violation: Generators - Pre-transport
Date violation determined: 09/17/1998
Date achieved compliance: 11/12/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/09/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.309(5)(d)
Area of violation: Generators - Pre-transport
Date violation determined: 11/04/1997
Date achieved compliance: 11/04/1997
Violation lead agency: State
Enforcement action: VERBAL INFORMAL
Enforcement action date: 11/04/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.609
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 11/04/1997
Date achieved compliance: 12/24/1997
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 12/24/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 17.54.609
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 11/04/1997
Date achieved compliance: 12/24/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/04/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM17.54.421(1)(e)
Area of violation: Generators - Records/Reporting
Date violation determined: 11/26/1996
Date achieved compliance: 01/08/1997
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/02/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM17.54.421(1)(e)
Area of violation: Generators - Records/Reporting
Date violation determined: 11/26/1996
Date achieved compliance: 01/08/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/26/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM17.54.421
Area of violation: Generators - General
Date violation determined: 12/01/1995
Date achieved compliance: 02/06/1996
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM17.54.421
Area of violation: Generators - General
Date violation determined: 12/01/1995
Date achieved compliance: 02/06/1996
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/08/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.817
Area of violation: TSD - Financial Requirements
Date violation determined: 04/28/1995
Date achieved compliance: 06/13/1995
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 06/13/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.805
Area of violation: TSD - Financial Requirements
Date violation determined: 04/28/1995
Date achieved compliance: 06/13/1995
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 06/13/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.415
Area of violation: Generators - General
Date violation determined: 12/14/1994
Date achieved compliance: 01/05/1995
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: 0

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SS - ARM 16.44.811
Area of violation: TSD - Financial Requirements
Date violation determined: 04/21/1993
Date achieved compliance: 05/21/1993
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 05/13/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SS - ARM 16.44.811
Area of violation: TSD - Financial Requirements
Date violation determined: 04/21/1993
Date achieved compliance: 05/21/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/23/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.415
Area of violation: Generators - Records/Reporting
Date violation determined: 12/07/1992
Date achieved compliance: 01/07/1993
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 01/06/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.415
Area of violation: Generators - Records/Reporting
Date violation determined: 12/07/1992
Date achieved compliance: 01/07/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/07/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.811
Area of violation: TSD - Financial Requirements
Date violation determined: 05/28/1992
Date achieved compliance: 08/11/1992
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 05/28/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.811
Area of violation: TSD - Financial Requirements
Date violation determined: 05/28/1992
Date achieved compliance: 08/11/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/01/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - ARM 16.44.811
Area of violation: TSD - Financial Requirements
Date violation determined: 05/28/1992
Date achieved compliance: 08/11/1992
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 08/11/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: SR - 16.44.415
Area of violation: Generators - General
Date violation determined: 09/25/1991
Date achieved compliance: 11/08/1991
Violation lead agency: State
Enforcement action: DOCUMENT RECEIVED
Enforcement action date: 10/29/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Regulation violated: SR - 16.44.415
Area of violation: Generators - General
Date violation determined: 09/25/1991
Date achieved compliance: 11/08/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/01/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 09/05/1990
Date achieved compliance: 10/06/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/05/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 07/10/1990
Date achieved compliance: 09/27/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/30/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 05/13/1988
Date achieved compliance: 06/25/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/16/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Area of violation: TSD - General
Date violation determined: 07/31/1986
Date achieved compliance: 09/29/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/05/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 04/15/1986
Date achieved compliance: 05/29/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/17/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 08/08/1985
Date achieved compliance: 11/25/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/17/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 04/03/1985
Date achieved compliance: 04/11/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/03/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Date violation determined: 10/02/1984
Date achieved compliance: 04/02/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/09/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 07/26/1984
Date achieved compliance: 07/21/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/31/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: Not reported
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 10/05/1983
Date achieved compliance: 07/21/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/14/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Evaluation Action Summary:
Evaluation date: 04/11/2011
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/01/2011
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/01/2011
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: State

Evaluation date: 09/28/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/28/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 04/07/2010
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/11/2010
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/11/2010
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/10/2010
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/09/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/15/2009
Evaluation lead agency: State

Evaluation date: 12/09/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/10/2009
Evaluation lead agency: State

Evaluation date: 05/06/2009
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 04/03/2009

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/06/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/05/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/05/2009
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/08/2008
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/15/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/25/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 06/25/2008
Evaluation lead agency: State

Evaluation date: 05/22/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/29/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/05/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: State

Evaluation date: 07/25/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/06/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/04/2007
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/06/2007
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/09/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 02/26/2007
Evaluation lead agency: State

Evaluation date: 01/09/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permit Condition or Requirement
Date achieved compliance: 03/13/2007
Evaluation lead agency: State

Evaluation date: 06/05/2006
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/31/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/08/2006
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/24/2006

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 03/31/2006
Evaluation lead agency: State

Evaluation date: 11/17/2005
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/29/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 09/29/2005
Evaluation lead agency: State

Evaluation date: 08/23/2005
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/21/2005
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/01/2004
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/02/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 09/02/2004
Evaluation lead agency: State

Evaluation date: 09/02/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 01/21/2005
Evaluation lead agency: State

Evaluation date: 05/10/2004
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/09/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: State

Evaluation date: 03/09/2004
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/23/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/14/2003
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/29/2003
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 05/28/2003
Evaluation lead agency: State

Evaluation date: 03/05/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/03/2003
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/08/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2002
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/13/2002
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/10/2002

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/10/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/03/2002
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 09/06/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 12/24/2001
Evaluation lead agency: State

Evaluation date: 07/31/2001
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/02/2001
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/14/2000
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 11/15/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/01/1999
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 01/05/2000
Evaluation lead agency: State

Evaluation date: 12/01/1999
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Pre-transport
Date achieved compliance: 01/05/2000

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: State

Evaluation date: 11/17/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 01/24/2000
Evaluation lead agency: State

Evaluation date: 09/17/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 11/12/1998
Evaluation lead agency: State

Evaluation date: 11/04/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 12/24/1997
Evaluation lead agency: State

Evaluation date: 11/04/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 11/04/1997
Evaluation lead agency: State

Evaluation date: 06/09/1997
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/23/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 01/08/1997
Evaluation lead agency: State

Evaluation date: 04/26/1996
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/14/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/06/1996
Evaluation lead agency: State

Evaluation date: 09/13/1995
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/30/1995

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/08/1995
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/28/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/13/1995
Evaluation lead agency: State

Evaluation date: 04/18/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/13/1995
Evaluation lead agency: State

Evaluation date: 11/17/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/05/1995
Evaluation lead agency: State

Evaluation date: 10/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/21/1993
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 05/21/1993
Evaluation lead agency: State

Evaluation date: 03/18/1993
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/06/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 01/07/1993
Evaluation lead agency: State

Evaluation date: 09/15/1992
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: EPA

Evaluation date: 05/28/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 08/11/1992
Evaluation lead agency: State

Evaluation date: 09/12/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/08/1991
Evaluation lead agency: State

Evaluation date: 04/12/1991
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/03/1990
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/05/1990
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 10/06/1990
Evaluation lead agency: State

Evaluation date: 07/10/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/27/1990
Evaluation lead agency: State

Evaluation date: 01/10/1990
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/30/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/07/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/28/1989

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/1988
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/24/1988
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/13/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/25/1988
Evaluation lead agency: State

Evaluation date: 03/29/1988
Evaluation: OPERATION AND MAINTENANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/29/1988
Evaluation: OPERATION AND MAINTENANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 03/22/1988
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/09/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 07/09/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/09/1987
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: EPA

Evaluation date: 04/15/1987
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/11/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 10/22/1986
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/20/1986
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/20/1986
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 07/31/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/29/1986
Evaluation lead agency: State

Evaluation date: 04/15/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 05/29/1986
Evaluation lead agency: State

Evaluation date: 03/27/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 12/18/1985
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/08/1985

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General
Date achieved compliance: 11/25/1985
Evaluation lead agency: State

Evaluation date: 07/30/1985
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/30/1985
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 04/03/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/11/1985
Evaluation lead agency: State

Evaluation date: 02/20/1985
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 10/28/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/02/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 04/02/1985
Evaluation lead agency: State

Evaluation date: 10/02/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 08/29/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/26/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 07/21/1986

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Evaluation lead agency: State

Evaluation date: 05/08/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/02/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/05/1983
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 07/21/1986
Evaluation lead agency: State

CERC-NFRAP:
Site ID: 0800375
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13162168.00000
Person ID: 13002699.00000

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: CONOCO PIPELINE CO GLACIER
Alias Address: 401 S 23RD ST SITE B
BILLINGS, MT 59103

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1980
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/24/1987
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 12/24/1987
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

CORRACTS:

EPA ID: MTD006229405
EPA Region: 08

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Area Name: ENTIRE FACILITY
Actual Date: 01/08/1991
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: NORTHWEST AREA 3 LANDFARM AREA
Actual Date: 01/26/2004
Action: CA120 - RFI Workplan Modification Requested By Agency
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: BUTANE RELEASE AREA
Actual Date: 01/28/2010
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOUTH 40 DNAPL AREA
Actual Date: 01/31/2000
Action: CA190 - RFI Report Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 01/31/2000
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: NORTHWEST AREA 3 LANDFARM AREA
Actual Date: 01/31/2005
Action: CA190 - RFI Report Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOUTH 40 DNAPL AREA
Actual Date: 02/01/2001
Action: CA190 - RFI Report Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 02/01/2001
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOUTH 40 DNAPL AREA
Actual Date: 02/15/2002
Action: CA300 - CMS Workplan Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 02/15/2002
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 02/21/1991
Action: CA140 - RFI Workplan Notice Of Deficiency Issued
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 02/25/1992
Action: CA100 - RFI Imposition
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: CRUDE OIL RELEASE GLACIER PIPE LINE AREA
Actual Date: 02/26/2007
Action: CA600 - Stabilization Measures Implemented
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: NORTHWEST AREA 3 LANDFARM AREA
Actual Date: 02/27/2004
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: AREA 3 LANDFARM
Actual Date: 03/09/2005
Action: CA500 - CMI Workplan Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 03/09/2005
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 03/09/2005
Action: CA500 - CMI Workplan Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 03/09/2005
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: AREA 3 LANDFARM
Actual Date: 03/10/2005
Action: CA550RC
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: AREA 3 LANDFARM
Actual Date: 03/10/2005
Action: CA506
NAICS Code(s): 32411 42471 48611

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 03/10/2005
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 03/10/2005
Action: CA506
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 03/10/2005
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOUTH 40 DNAPL AREA
Actual Date: 03/30/2001
Action: CA260 - CMS Workplan Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 03/30/2001
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 03/30/2006
Action: CA350 - CMS Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 03/30/2006
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 03/30/2006
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Actual Date: 03/30/2006
Action: CA450 - Corrective Measures Design Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 04/12/1991
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 04/12/1991
Action: CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: NORTHWEST AREA 3 LANDFARM AREA
Actual Date: 04/15/2004
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 04/21/1992
Action: CA140 - RFI Workplan Notice Of Deficiency Issued
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 04/23/1992
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 05/12/2002
Action: CA350 - CMS Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 05/12/2002
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 05/12/2002
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 05/12/2002
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: NORTHWEST AREA 3 LANDFARM AREA
Actual Date: 05/28/2003
Action: CA100 - RFI Imposition
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 06/05/1996
Action: CA190 - RFI Report Received
NAICS Code(s): 32411 42471 48611

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOUTH 40 DNAPL AREA
Actual Date: 06/13/2005
Action: CA340 - CMS Report Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 06/13/2005
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 06/19/2008
Action: CA500 - CMI Workplan Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 08/15/2008
Action: CA506
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 08/31/1999
Action: CA340 - CMS Report Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 08/31/1999
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Actual Date: 09/01/1997
Action: CA076ME
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 09/01/1997
Action: CA077ME
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 09/01/1997
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: NORTHWEST AREA 3 LANDFARM AREA
Actual Date: 09/12/2003
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 09/15/1997
Action: CA750NO - Migration of Contaminated Groundwater under Control, Unacceptable migration of contaminated groundwater is observed or expected
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 09/15/1997
Action: CA725NO - Current Human Exposures Under Control, Current human exposures are NOT under control
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 09/30/1987
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 09/30/1993
Action: CA600 - Stabilization Measures Implemented
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 10/01/1993
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 10/01/1990
Action: CA100 - RFI Imposition
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 10/01/1994
Action: CA650 - Stabilization Construction Completed
NAICS Code(s): 32411 42471 48611

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 10/02/2009
Action: CA550RC
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 10/13/1997
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 10/13/1997
Action: CA200 - RFI Approved
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 10/14/2005
Action: CA340 - CMS Report Received
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 10/14/2005
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08

CONOCOPHILLIPS CO BILLINGS REFINERY (Continued) **1000331305**

Area Name: BUTANE RELEASE AREA
Actual Date: 12/04/2007
Action: CA600 - Stabilization Measures Implemented
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 12/18/1991
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: SOSP
Actual Date: 12/19/2005
Action: CA380 - Date For Public Notice On Proposed Remedy
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: MTD006229405
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: Not reported
Action: CA006OU
NAICS Code(s): 32411 42471 48611
Petroleum Refineries
Petroleum Bulk Stations and Terminals
Pipeline Transportation of Crude Oil
Original schedule date: 01/01/1950
Schedule end date: Not reported

MT FINANCIAL ASSURANCE:
EPA ID Number: MTD006229405
Type of Mechanism: Financial Test
Name of Issuer: ConocoPhillips
Amount of Coverage: $8,057,508.00
Effective Period of Coverage: Updated and verified annually
Coverage: Facility-wide corrective action and post-closure care

J55
SW
1/2-1
0.895 mi.
4724 ft.

CONOCO BILLINGS REFINERY,
401 S. 23RD ST
BILLINGS, MT

Site 2 of 2 in cluster J

DEL SHWS

S105696883
N/A

Relative:
Higher

Actual:
3115 ft.

DELETED HWS:

Site:	CONB
Program:	CECRA
Ranking Code:	R
Delisted Date:	12/21/1996
Program Date:	Not reported
Listed:	1/1/1989
Referredj Date:	Not reported

Count: 40 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BILLINGS	1003877459	COMET OIL CO.	1-90	59101	CERC-NFRAP
BILLINGS	S111099103	CENEX YALE TANK FARM, CENEX PIPELI	1ST & 4 MILE EAST OF BILLINGS		REM RPROGRAM
BILLINGS	S106516509	CENEX YALE TANK FARM	1ST & 4 MILE EAST OF BILLINGS		WQA
BILLINGS	1003877527	YALE OIL OF SOUTH DAKOTA	1ST AVE. NORTH	59101	CERC-NFRAP
BILLINGS	S110596646	JAN'S IGA LAUREL	205 1ST AVE S		SWRCY
BILLINGS	S106851954	LOCKWOOD SOLVENT SITE	1ST & 2 MILE NORTHEAST OF BIL		SHWS
BILLINGS	S108175851	USTFIELDS PROJECT #4502	1ST AVE		LUST
BILLINGS	1004744057	AT&T B470030 BLNGMTMA	3011 2ND AVE	59101	RCRA-CESQG, FINDS
BILLINGS	S106561043	EXXON REFINERY & OLD FLARE SITE	3RD NE ON & LOCKWOOD RD		SHWS, DEL SHWS, REM RPROGRAM
BILLINGS	1004744045	CONOCOPHILLIPS CO GLACIER DIST OFF	338 HWY 87 E	59101	RCRA-CESQG, FINDS
BILLINGS	1012183033	W R DRINKWALTER AND SONS TRUCKING	2546 HWY 87	59101	RCRA-CESQG
BILLINGS	1003877802	BILLINGS GRAIN TERMINAL	3600 BLOCKS OF 1ST AVE S		CERC-NFRAP, SHWS, DEL SHWS
BILLINGS	1000396070	MONTANA POWER CO FRANK BIRD PLANT	CHARLENE ST	59101	CERC-NFRAP, RCRA-NonGen
BILLINGS	1003877504	BIG HORN OIL & REFINING CO.	FOURTH AVENUE NORTH	59101	CERC-NFRAP
BILLINGS	1009389285	AT&T COMMUNICATION	US HWY 87 BILLINGS JUNCTION	59101	INDIAN UST
BILLINGS	1009391421	AT&T COMMUNICATION	US HWY 87 BILLINGS JUNCTION	59101	INDIAN LUST
BILLINGS	S111026754	CHUBB DITCH LUST TRUST #4688	KING AVE E & S 12TH ST W		LUST
BILLINGS	S110596620	ALBERTSONS	670 MAIN SAINT BILLINGS HTS		SWRCY
BILLINGS	S111099346	FARSTAD OIL TRANKER WRECK,	E MILE ON ABOUT 20		REM RPROGRAM
BILLINGS	S107982280	BIG HORN OIL & REFINING CO	ON N SIDE OF 4TH AVE N & E OF		REM RPROGRAM
BILLINGS	S107982300	EMPIRE SAND & GRAVEL CO INC BILLIN	3 ON		SHWS, REM RPROGRAM
BILLINGS	1009591762	2005 BILLINGS CRUDE OIL TANK	T1N R26E S34 SW	59101	FINDS
BILLINGS	98576350	REPAIR SHOP OIL ALLEGEDLY BEING DU	REPAIR SHOP OIL ALLEGEDLY BEIN		ERNS
BILLINGS	98576333	REPAIR SHOP OIL ALLEGEDLY BEING DU	REPAIR SHOP OIL ALLEGEDLY BEIN		ERNS
BILLINGS	1003862197	BILLINGS PCE SITE	SECTION 4&5 TOWNSHIP 1 SOUTH	59101	CERCLIS, FINDS
BILLINGS	1007868839	COMET OIL COMPANY	UNK	59101	FINDS
BILLINGS	1007869111	BIG HORN OIL AND REFINING COMPANY	UNK	59101	FINDS
BILLINGS	1007868533	STOCKTON OIL COMPANY BILLINGS	UNK	59101	FINDS
BILLINGS	1007868503	RUSSELL OIL COMPANY BILLINGS	UNK	59101	FINDS
BILLINGS	1007856518	YALE OIL OF SOUTH DAKOTA	UNK	59101	FINDS
BILLINGS	1007868944	CONOCO SEMINOE PIPELINE TERMINAL Y	UNK	59101	FINDS
BILLINGS	1007868934	CENEX YALE TANK FARM	UNK	59101	FINDS
BILLINGS	S106343038	MDOT MAINTENCE SHOP #2569	924 USHY 87 MDTRIGHTAWAYPARCEL		LUST
BILLINGS	U000306720	ORGANIZATIONAL MAINT SHOP 6 #704	USHY 87 S		LUST, UST
BILLINGS	U004148607	FIVE CORNERS QUIK STOP	5550 USHY 312		UST
BILLINGS	U004148619	ZENTZ LUMBER	2732 USHY 312		UST
BILLINGS	S110596650	LOCKWOOD SCHOOL	1932 USHY 87 LOCKWOOD E		SWRCY
YELLOWSTONE COUNTY	S105756478	BALLANTINE RAMONA BARKER HEATING O	ON 2ND STREET WEST, SOUTH OF C		SPILLS
YELLOWSTONE COUNTY	S105755611	FARSTAD OIL INC	3317 FIRST AVENUE SOUTH, BILLI		SPILLS
YELLOWSTONE COUNTY	S105755944	ROCKY MOUNTAIN OIL INC	NEAR GAS DISPENSER MIGR04-29		SPILLS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/31/2011
Date Data Arrived at EDR: 04/13/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 07/12/2011
Next Scheduled EDR Contact: 10/24/2011
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/31/2011
Date Data Arrived at EDR: 04/13/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 07/12/2011
Next Scheduled EDR Contact: 10/24/2011
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/31/2011	Source: EPA
Date Data Arrived at EDR: 04/13/2011	Telephone: N/A
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 07/12/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/24/2011
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/25/2011	Source: EPA
Date Data Arrived at EDR: 03/01/2011	Telephone: 703-412-9810
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 06/14/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 09/12/2011
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPAa??s Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/10/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/11/2011	Telephone: 703-603-8704
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 07/15/2011
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/24/2011
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/25/2011	Source: EPA
Date Data Arrived at EDR: 03/01/2011	Telephone: 703-412-9810
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 06/14/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 09/12/2011
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/09/2011
Date Data Arrived at EDR: 03/15/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 91

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 07/07/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 07/07/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 07/07/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 07/07/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/16/2011
Date Data Arrived at EDR: 03/25/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/16/2011
Date Data Arrived at EDR: 03/25/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/05/2011
Date Data Arrived at EDR: 04/05/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 70

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/05/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Annually

State- and tribal - equivalent NPL

SHWS: CECRA (Non-NPL) Priority Sites List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/17/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 406-444-1420
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Management Facilities List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/01/2006
Date Data Arrived at EDR: 12/13/2007
Date Made Active in Reports: 01/28/2008
Number of Days to Update: 46

Source: Department of Environmental Quality
Telephone: 406-444-5294
Last EDR Contact: 07/25/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank List for Montana
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/19/2011
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/23/2011
Number of Days to Update: 34

Source: Department of Environmental Quality
Telephone: 406-444-5970
Last EDR Contact: 06/15/2011
Next Scheduled EDR Contact: 08/01/2011
Data Release Frequency: Semi-Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/16/2011
Date Data Arrived at EDR: 05/17/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 28

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 11/04/2009
Date Data Arrived at EDR: 05/04/2010
Date Made Active in Reports: 07/07/2010
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 05/20/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 25

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/17/2011
Date Data Arrived at EDR: 05/19/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 26

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/31/2011
Date Data Arrived at EDR: 02/01/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 48

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 03/03/2011
Date Data Arrived at EDR: 03/18/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 45

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Semi-Annually

State and tribal registered storage tank lists

UST: Statewide UST Underground Storage Tank List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/30/2011
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 33

Source: Department of Environmental Quality
Telephone: 406-444-5970
Last EDR Contact: 07/20/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/17/2011
Date Data Arrived at EDR: 05/19/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 26

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/16/2011
Date Data Arrived at EDR: 05/17/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 28

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 05/04/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 41

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2011
Date Data Arrived at EDR: 06/01/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 13

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/01/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 68

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 03/03/2011
Date Data Arrived at EDR: 03/18/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 45

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/18/2011
Date Data Arrived at EDR: 05/26/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 19

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Response Action List
Response Action Sites that have institutional controls in place.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/17/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 406-444-2544
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 02/25/2011
Date Data Arrived at EDR: 04/05/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 70

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/05/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

VCP: Voluntary Cleanup & Redevelopment Act Registry
Sites involved in the Voluntary Cleanup & Redevelopment program.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/17/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 406-444-1420
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site Listing
The Environmental Protection Agency (EPA) defines brownfields as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 07/18/2011
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 33

Source: Department of Environmental Quality
Telephone: 406-841-5070
Last EDR Contact: 07/20/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 03/29/2011
Date Data Arrived at EDR: 03/29/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/27/2011
Next Scheduled EDR Contact: 10/10/2011
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 06/27/2011
Next Scheduled EDR Contact: 10/10/2011
Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities

A listing of recycling center locations.

Date of Government Version: 01/21/2010
Date Data Arrived at EDR: 10/01/2010
Date Made Active in Reports: 12/01/2010
Number of Days to Update: 61

Source: Department of Environmental Quality
Telephone: 406-841-5200
Last EDR Contact: 07/08/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/02/2011
Date Data Arrived at EDR: 03/17/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 46

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 06/07/2011
Next Scheduled EDR Contact: 09/19/2011
Data Release Frequency: Quarterly

DEL SHWS: Delisted List of CECRA Sites

A list of sites that have been delisted from the CECRA Priority List.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/17/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 406-444-1420
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Semi-Annually

CDL: Clandestine Drug Labs

Clandestine drug lab locations.

Date of Government Version: 06/14/2011
Date Data Arrived at EDR: 06/14/2011
Date Made Active in Reports: 06/22/2011
Number of Days to Update: 8

Source: Department of Environmental Quality
Telephone: 406-444-2544
Last EDR Contact: 06/14/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

HIST CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab locations. This listing includes fields and records that the CDL listing does not. It is no longer updated by the state.

Date of Government Version: 07/05/2006
Date Data Arrived at EDR: 10/24/2006
Date Made Active in Reports: 11/07/2006
Number of Days to Update: 14

Source: Department of Environmental Quality
Telephone: 406-444-5286
Last EDR Contact: 01/02/2008
Next Scheduled EDR Contact: 03/31/2008
Data Release Frequency: No Update Planned

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 02/04/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/12/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 07/11/2011
Next Scheduled EDR Contact: 09/05/2011
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 01/05/2011
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 51

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/05/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Annually

SPILLS: Hazardous Material Spills Report

Reported spills or hazardous material spills or releases

Date of Government Version: 05/19/2011
Date Data Arrived at EDR: 05/20/2011
Date Made Active in Reports: 06/22/2011
Number of Days to Update: 33

Source: Department of Environmental Quality
Telephone: 406-431-0014
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 07/07/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/12/2011
Date Data Arrived at EDR: 02/11/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/09/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 06/14/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 04/05/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 02/25/2011
Date Data Arrived at EDR: 03/16/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 5

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/15/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/21/2010
Date Made Active in Reports: 01/28/2011
Number of Days to Update: 99

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 06/02/2011
Next Scheduled EDR Contact: 09/12/2011
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/08/2011
Next Scheduled EDR Contact: 09/19/2011
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/17/2010	Telephone: 202-566-0250
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 05/27/2011
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/12/2011
	Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006	Source: EPA
Date Data Arrived at EDR: 09/29/2010	Telephone: 202-260-5521
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 06/30/2011
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/10/2011
	Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/27/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/12/2011
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/27/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/12/2011
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 08/18/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/07/2011
Date Data Arrived at EDR: 01/21/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 06/27/2011
Next Scheduled EDR Contact: 10/10/2011
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2010
Date Data Arrived at EDR: 11/10/2010
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 98

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/18/2010
Date Data Arrived at EDR: 04/06/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 51

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/13/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/11/2011
Date Data Arrived at EDR: 01/13/2011
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/12/2011
Next Scheduled EDR Contact: 10/24/2011
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 41

Source: EPA
Telephone: (303) 312-6312
Last EDR Contact: 06/14/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/27/2011
Next Scheduled EDR Contact: 09/12/2011
Data Release Frequency: Biennially

WQA: WQA Site Ranking List

Sites regulated under the Montana Water Quality Act (WQA) are addressed by the Groundwater Remediation Program. These sites typically require long-term soil, surface water, and/or groundwater remediation and monitoring. This program addresses sites that are not addressed by the Leaking Underground Storage Tank Program, CECRA Program, Permitting and Compliance Division, or other state authorities.

Date of Government Version: 05/09/2011
Date Data Arrived at EDR: 05/10/2011
Date Made Active in Reports: 06/22/2011
Number of Days to Update: 43

Source: Department of Environmental Quality
Telephone: 406-841-5062
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner facilities

A listing of drycleaner facility locations.

Date of Government Version: 01/26/2006
Date Data Arrived at EDR: 01/26/2006
Date Made Active in Reports: 02/28/2006
Number of Days to Update: 33

Source: Department of Environmental Quality
Telephone: 406-841-5251
Last EDR Contact: 06/21/2011
Next Scheduled EDR Contact: 10/03/2011
Data Release Frequency: Varies

AIRS: Emissions Inventory Listing
Emissions inventory information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 05/31/2011
Date Made Active in Reports: 06/22/2011
Number of Days to Update: 22

Source: Department of Environmental Quality
Telephone: 406-444-2742
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Annually

REM RPROGRAM: Remediation Response Site Database
A listing of sites included in the Remediation Response Site Database.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/17/2011
Date Made Active in Reports: 08/22/2011
Number of Days to Update: 5

Source: Department of Environmental Quality
Telephone: 406-444-0474
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Quarterly

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 07/15/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

FINANCIAL ASSURANCE: Financial Assurance Information Listing
Financial Assurance information.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 04/24/2006
Date Made Active in Reports: 05/26/2006
Number of Days to Update: 32

Source: Department of Environmental Quality
Telephone: 406-444-2876
Last EDR Contact: 06/20/2011
Next Scheduled EDR Contact: 10/03/2011
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 01/20/2009
Date Data Arrived at EDR: 06/26/2009
Date Made Active in Reports: 07/06/2009
Number of Days to Update: 10

Source: Department of Environmental Quality
Telephone: 406-444-1808
Last EDR Contact: 07/25/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: N/A

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/05/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/14/2011
Next Scheduled EDR Contact: 09/26/2011
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 05/12/2011
Date Made Active in Reports: 05/24/2011
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/09/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Daycare Facility List
Source: Department of Public Health & Human Services
Telephone: 406-444-1742

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

YALE OIL
700 FIRST AVENUE NORTH
BILLINGS, MT 59101

TARGET PROPERTY COORDINATES

Latitude (North):	45.79390 - 45˚ 47' 38.0''
Longitude (West):	108.4796 - 108˚ 28' 46.6''
Universal Tranverse Mercator:	Zone 12
UTM X (Meters):	695887.9
UTM Y (Meters):	5074020.5
Elevation:	3102 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	45108-G4 BILLINGS EAST, MT
Most Recent Revision:	1975

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

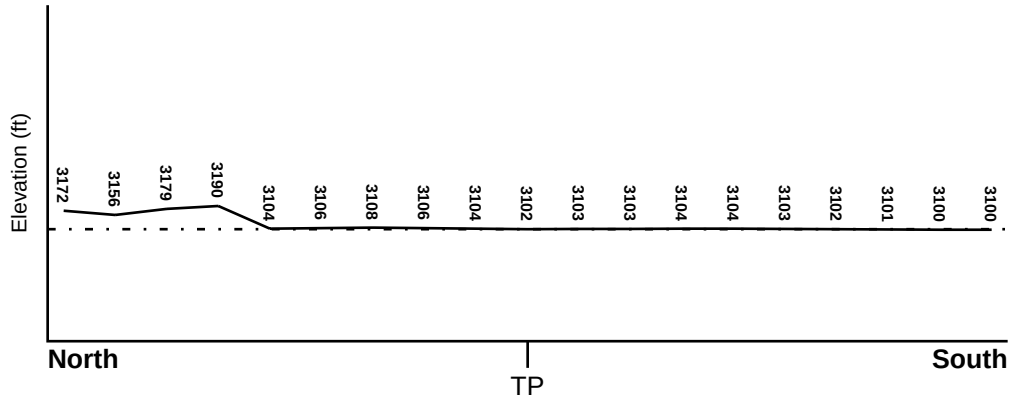
TOPOGRAPHIC INFORMATION

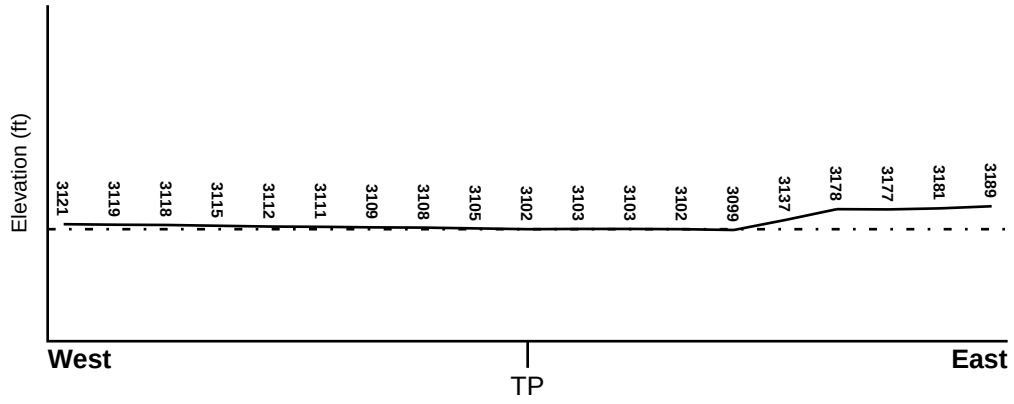
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 3102 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
YELLOWSTONE, MT	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	3001421010A - FEMA Q3 Flood data
Additional Panels in search area:	3001420890A - FEMA Q3 Flood data
	3000850010C - FEMA Q3 Flood data
	3001420870A - FEMA Q3 Flood data
	3001421030A - FEMA Q3 Flood data
	3000850020C - FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

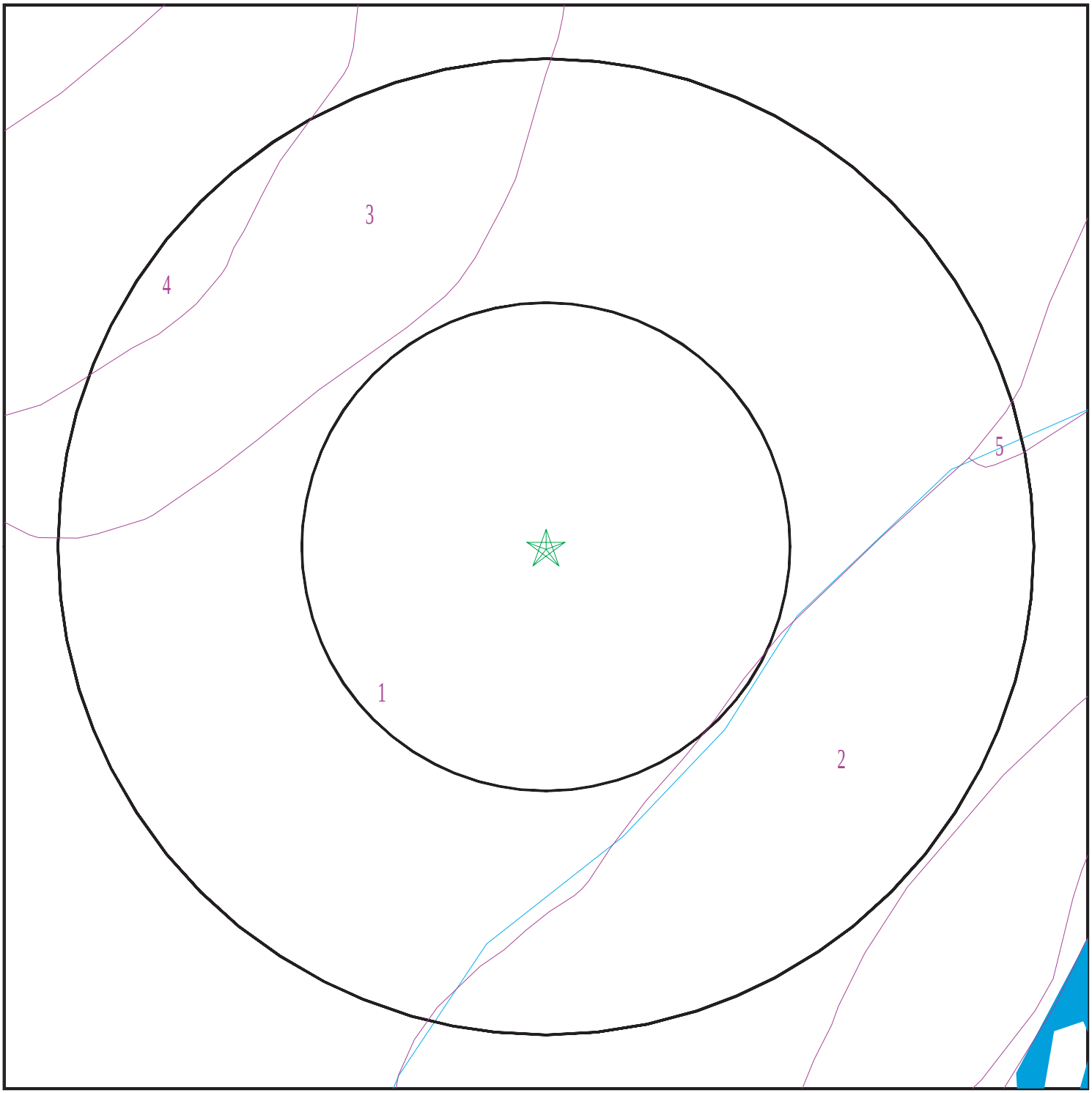
Era:	Mesozoic
System:	Cretaceous
Series:	Taylor Group
Code:	uK3a *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3156252.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Yale Oil ADDRESS: 700 First Avenue North Billings MT 59101 LAT/LONG: 45.7939 / 108.4796	CLIENT: Cardno ERI CONTACT: Robert Serrato INQUIRY #: 3156252.2s DATE: August 26, 2011 8:12 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HAVERSON

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 137 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	5 inches	68 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: HAVERSON

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	5 inches	68 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: HAVERSON

Soil Surface Texture:

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	5 inches	68 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

Soil Map ID: 4

Soil Component Name: MCRAE

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	5 inches	11 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
3	11 inches	59 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

Soil Map ID: 5

Soil Component Name: ALLUVIAL LAND

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 54 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 141 Min: 141	Max: 8.4 Min: 7.4
2	5 inches	59 inches		Not reported	Not reported	Max: 141 Min: 141	Max: 8.4 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AF169	USGS3001255	1/2 - 1 Mile East
196	USGS3001422	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	MTG400000049344	1/8 - 1/4 Mile WSW
A2	MTG400000049345	1/8 - 1/4 Mile WSW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
3	MTG400000049668	1/8 - 1/4 Mile NNE
A4	MTG400000049229	1/8 - 1/4 Mile WSW
A5	MTG400000049228	1/8 - 1/4 Mile WSW
A6	MTG400000049230	1/8 - 1/4 Mile WSW
A7	MTG400000049232	1/8 - 1/4 Mile WSW
A8	MTG400000049231	1/8 - 1/4 Mile WSW
B9	MTG400000048912	1/4 - 1/2 Mile SE
B10	MTG400000048911	1/4 - 1/2 Mile SE
B11	MTG400000048910	1/4 - 1/2 Mile SE
B12	MTG400000048913	1/4 - 1/2 Mile SE
B13	MTG400000048916	1/4 - 1/2 Mile SE
B14	MTG400000048915	1/4 - 1/2 Mile SE
B15	MTG400000048914	1/4 - 1/2 Mile SE
16	MTG400000049670	1/4 - 1/2 Mile NW
C17	MTG400000049398	1/4 - 1/2 Mile West
C18	MTG400000049397	1/4 - 1/2 Mile West
C19	MTG400000049396	1/4 - 1/2 Mile West
C20	MTG400000049401	1/4 - 1/2 Mile West
C21	MTG400000049400	1/4 - 1/2 Mile West
C22	MTG400000049399	1/4 - 1/2 Mile West
23	MTG400000049837	1/4 - 1/2 Mile NNW
D24	MTG400000049561	1/4 - 1/2 Mile WNW
D25	MTG400000049562	1/4 - 1/2 Mile WNW
D26	MTG400000049563	1/4 - 1/2 Mile WNW
D27	MTG400000049560	1/4 - 1/2 Mile WNW
D28	MTG400000049557	1/4 - 1/2 Mile WNW
D29	MTG400000049558	1/4 - 1/2 Mile WNW
D30	MTG400000049559	1/4 - 1/2 Mile WNW
D31	MTG400000049568	1/4 - 1/2 Mile WNW
D32	MTG400000049569	1/4 - 1/2 Mile WNW
D33	MTG400000049570	1/4 - 1/2 Mile WNW
D34	MTG400000049567	1/4 - 1/2 Mile WNW
D35	MTG400000049564	1/4 - 1/2 Mile WNW
D36	MTG400000049565	1/4 - 1/2 Mile WNW
D37	MTG400000049566	1/4 - 1/2 Mile WNW
38	MTG400000049233	1/4 - 1/2 Mile ESE
E39	MTG400000049114	1/4 - 1/2 Mile WSW
E40	MTG400000049115	1/4 - 1/2 Mile WSW
E41	MTG400000049113	1/4 - 1/2 Mile WSW
E42	MTG400000049111	1/4 - 1/2 Mile WSW
E43	MTG400000049112	1/4 - 1/2 Mile WSW
E44	MTG400000049119	1/4 - 1/2 Mile WSW
E45	MTG400000049120	1/4 - 1/2 Mile WSW
E46	MTG400000049118	1/4 - 1/2 Mile WSW
E47	MTG400000049116	1/4 - 1/2 Mile WSW
E48	MTG400000049117	1/4 - 1/2 Mile WSW
F49	MTG400000048666	1/4 - 1/2 Mile South
F50	MTG400000048665	1/4 - 1/2 Mile South
F51	MTG400000048668	1/4 - 1/2 Mile South
F52	MTG400000048667	1/4 - 1/2 Mile South
G53	MTG400000049536	1/4 - 1/2 Mile ENE
54	MTG400000049395	1/4 - 1/2 Mile East

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
55	MTG400000049838	1/4 - 1/2 Mile NW
G56	MTG400000049573	1/4 - 1/2 Mile ENE
G57	MTG400000049572	1/4 - 1/2 Mile ENE
G58	MTG400000049575	1/4 - 1/2 Mile ENE
G59	MTG400000049574	1/4 - 1/2 Mile ENE
H60	MTG400000048809	1/4 - 1/2 Mile SW
H61	MTG400000048810	1/4 - 1/2 Mile SW
H62	MTG400000048811	1/4 - 1/2 Mile SW
63	MTG400000048662	1/4 - 1/2 Mile SSW
64	MTG400000048564	1/4 - 1/2 Mile SSE
I65	MTG400000049482	1/4 - 1/2 Mile East
I66	MTG400000049483	1/4 - 1/2 Mile East
I67	MTG400000049484	1/4 - 1/2 Mile East
68	MTG400000050037	1/4 - 1/2 Mile NNE
J69	MTG400000048663	1/4 - 1/2 Mile SE
J70	MTG400000048664	1/4 - 1/2 Mile SE
K71	MTG400000048437	1/4 - 1/2 Mile South
K72	MTG400000048438	1/4 - 1/2 Mile South
L73	MTG400000049315	1/4 - 1/2 Mile West
L74	MTG400000049316	1/4 - 1/2 Mile West
75	MTG400000048556	1/4 - 1/2 Mile SW
76	MTG400000048527	1/4 - 1/2 Mile SSE
M77	MTG400000050132	1/2 - 1 Mile NE
M78	MTG400000050133	1/2 - 1 Mile NE
79	MTG400000049227	1/2 - 1 Mile East
80	MTG400000050361	1/2 - 1 Mile North
N81	MTG400000049669	1/2 - 1 Mile ENE
N82	MTD400000000727	1/2 - 1 Mile ENE
N83	MTD400000000728	1/2 - 1 Mile ENE
N84	MTG400000049814	1/2 - 1 Mile ENE
85	MTG400000049571	1/2 - 1 Mile East
86	MTG400000047959	1/2 - 1 Mile South
O87	MTG400000048106	1/2 - 1 Mile SSE
O88	MTG400000048107	1/2 - 1 Mile SSE
O89	MTG400000048108	1/2 - 1 Mile SSE
P90	MTG400000049839	1/2 - 1 Mile ENE
P91	MTG400000049840	1/2 - 1 Mile ENE
Q92	MTG400000047955	1/2 - 1 Mile SSW
Q93	MTG400000047954	1/2 - 1 Mile SSW
Q94	MTG400000047956	1/2 - 1 Mile SSW
Q95	MTG400000047958	1/2 - 1 Mile SSW
Q96	MTG400000047957	1/2 - 1 Mile SSW
97	MTG400000050526	1/2 - 1 Mile North
98	MTG400000050364	1/2 - 1 Mile NE
99	MTG400000050525	1/2 - 1 Mile NNW
R100	MTG400000049320	1/2 - 1 Mile West
R101	MTG400000049321	1/2 - 1 Mile West
R102	MTG400000049319	1/2 - 1 Mile West
R103	MTG400000049317	1/2 - 1 Mile West
R104	MTG400000049318	1/2 - 1 Mile West
R105	MTG400000049322	1/2 - 1 Mile West
R106	MTG400000049326	1/2 - 1 Mile West

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
R107	MTG400000049327	1/2 - 1 Mile West
R108	MTG400000049325	1/2 - 1 Mile West
R109	MTG400000049323	1/2 - 1 Mile West
R110	MTG400000049324	1/2 - 1 Mile West
S111	MTG400000047828	1/2 - 1 Mile SSW
S112	MTG400000047829	1/2 - 1 Mile SSW
T113	MTG400000048383	1/2 - 1 Mile SW
T114	MTG400000048384	1/2 - 1 Mile SW
U115	MTG400000048242	1/2 - 1 Mile SW
U116	MTG400000048241	1/2 - 1 Mile SW
U117	MTG400000048244	1/2 - 1 Mile SW
U118	MTG400000048243	1/2 - 1 Mile SW
U119	MTG400000048225	1/2 - 1 Mile SW
120	MTG400000049419	1/2 - 1 Mile East
V121	MTG400000047788	1/2 - 1 Mile South
V122	MTG400000047776	1/2 - 1 Mile South
123	MTG400000047996	1/2 - 1 Mile SSW
S124	MTG400000047738	1/2 - 1 Mile South
S125	MTG400000047740	1/2 - 1 Mile SSW
S126	MTG400000047741	1/2 - 1 Mile SSW
S127	MTG400000047742	1/2 - 1 Mile SSW
128	MTD400000000722	1/2 - 1 Mile WSW
W129	MTG400000048728	1/2 - 1 Mile WSW
W130	MTG400000048729	1/2 - 1 Mile WSW
W131	MTG400000048730	1/2 - 1 Mile WSW
X132	MTD400000000735	1/2 - 1 Mile NNE
X133	MTD400000000734	1/2 - 1 Mile NNE
134	MTG400000049146	1/2 - 1 Mile West
135	MTD400000000733	1/2 - 1 Mile NNE
Y136	MTG400000047684	1/2 - 1 Mile SSW
137	MTG400000047643	1/2 - 1 Mile South
Z138	MTG400000050368	1/2 - 1 Mile NW
Z139	MTG400000050367	1/2 - 1 Mile NW
Z140	MTG400000050370	1/2 - 1 Mile NW
Z141	MTG400000050369	1/2 - 1 Mile NW
142	MTG400000047994	1/2 - 1 Mile SW
143	MTG400000050039	1/2 - 1 Mile ENE
AA144	MTG400000047744	1/2 - 1 Mile SSW
AA145	MTG400000047745	1/2 - 1 Mile SSW
AB146	MTG400000050730	1/2 - 1 Mile NNE
AB147	MTG400000050731	1/2 - 1 Mile NNE
AB148	MTG400000050728	1/2 - 1 Mile NNE
AB149	MTG400000050729	1/2 - 1 Mile NNE
AB150	MTG400000050732	1/2 - 1 Mile NNE
AB151	MTG400000050735	1/2 - 1 Mile NNE
AB152	MTG400000050736	1/2 - 1 Mile NNE
AB153	MTG400000050733	1/2 - 1 Mile NNE
AB154	MTG400000050734	1/2 - 1 Mile NNE
155	MTG400000050533	1/2 - 1 Mile NW
Y156	MTG400000047551	1/2 - 1 Mile SSW
Y157	MTG400000047552	1/2 - 1 Mile SSW
AC158	MTG400000048992	1/2 - 1 Mile WSW

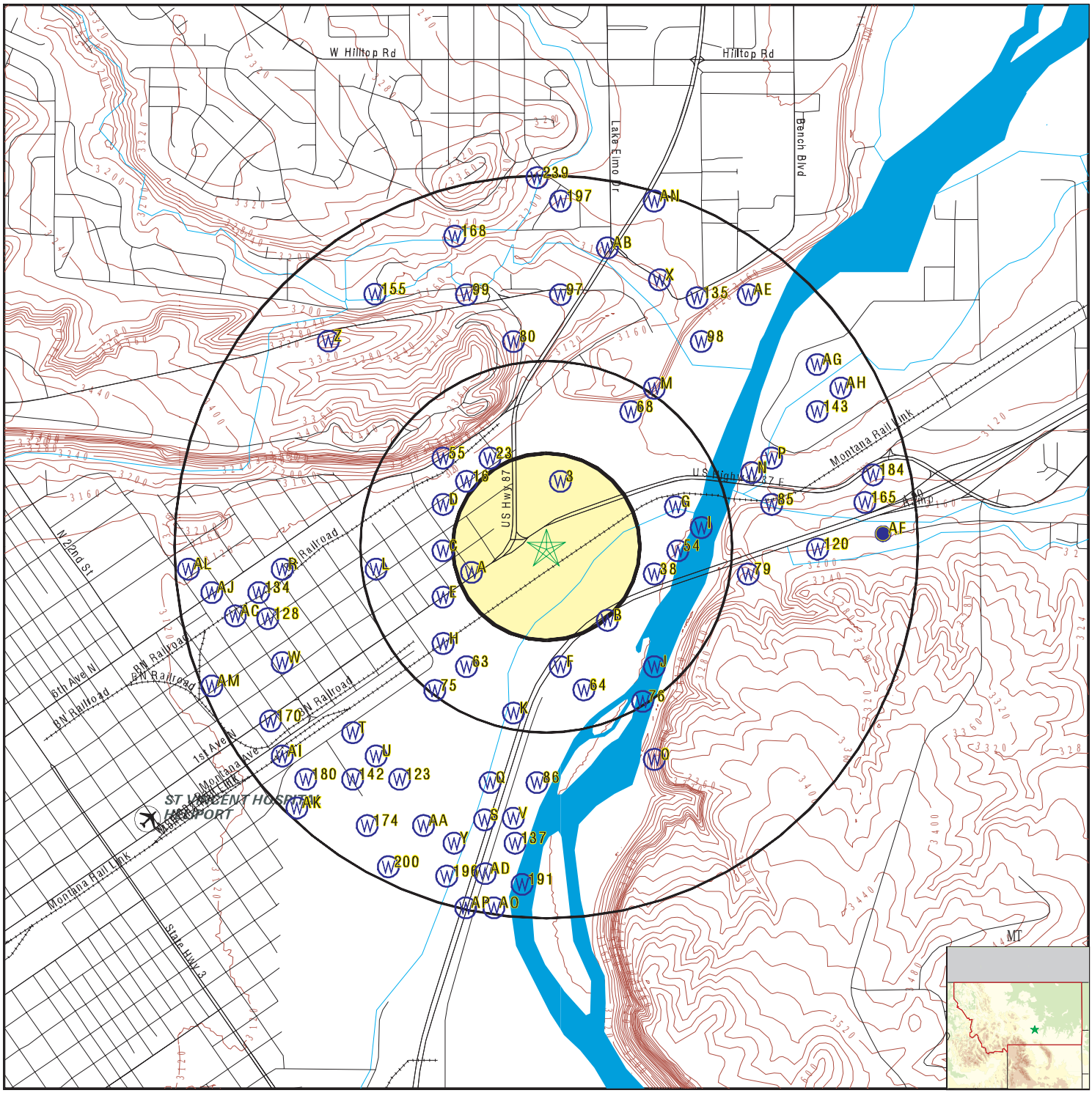
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AC159	MTG400000048991	1/2 - 1 Mile WSW
AC160	MTG400000048994	1/2 - 1 Mile WSW
AC161	MTG400000048993	1/2 - 1 Mile WSW
AC162	MTG400000048989	1/2 - 1 Mile WSW
AC163	MTG400000048990	1/2 - 1 Mile WSW
AD164	MTG400000047470	1/2 - 1 Mile South
165	MTG400000049587	1/2 - 1 Mile East
AE166	MTG400000050527	1/2 - 1 Mile NE
AE167	MTG400000050528	1/2 - 1 Mile NE
168	MTG400000050789	1/2 - 1 Mile NNW
170	MTG400000048418	1/2 - 1 Mile WSW
AG171	MTG400000050286	1/2 - 1 Mile NE
AG172	MTG400000050287	1/2 - 1 Mile NE
AD173	MTG400000047437	1/2 - 1 Mile South
174	MTG400000047743	1/2 - 1 Mile SSW
AD175	MTG400000047409	1/2 - 1 Mile SSW
AD176	MTG400000047408	1/2 - 1 Mile SSW
AD177	MTG400000047410	1/2 - 1 Mile SSW
AD178	MTG400000047412	1/2 - 1 Mile SSW
AD179	MTG400000047411	1/2 - 1 Mile SSW
180	MTG400000047995	1/2 - 1 Mile SW
AH181	MTG400000050137	1/2 - 1 Mile ENE
AH182	MTG400000050138	1/2 - 1 Mile ENE
AH183	MTG400000050139	1/2 - 1 Mile ENE
184	MTD400000000726	1/2 - 1 Mile ENE
AI185	MTG400000048233	1/2 - 1 Mile SW
AI186	MTG400000048234	1/2 - 1 Mile SW
AJ187	MTG400000049147	1/2 - 1 Mile West
AJ188	MTG400000049148	1/2 - 1 Mile West
AJ189	MTG400000049149	1/2 - 1 Mile West
AF190	MTG400000049459	1/2 - 1 Mile East
191	MTG400000047322	1/2 - 1 Mile South
AD192	MTG400000047320	1/2 - 1 Mile South
AD193	MTG400000047321	1/2 - 1 Mile South
AF194	MTG400000049498	1/2 - 1 Mile East
AF195	MTG400000049499	1/2 - 1 Mile East
197	MTG400000050973	1/2 - 1 Mile North
AK198	MTG400000047826	1/2 - 1 Mile SW
AK199	MTG400000047827	1/2 - 1 Mile SW
200	MTG400000047461	1/2 - 1 Mile SSW
AL201	MTG400000049328	1/2 - 1 Mile West
AL202	MTG400000049329	1/2 - 1 Mile West
AM203	MTG400000048603	1/2 - 1 Mile WSW
AM204	MTG400000048604	1/2 - 1 Mile WSW
AM205	MTG400000048605	1/2 - 1 Mile WSW
AN206	MTG400000050955	1/2 - 1 Mile NNE
AN207	MTG400000050954	1/2 - 1 Mile NNE
AN208	MTG400000050953	1/2 - 1 Mile NNE
AN209	MTG400000050958	1/2 - 1 Mile NNE
AN210	MTG400000050957	1/2 - 1 Mile NNE
AN211	MTG400000050956	1/2 - 1 Mile NNE
AN212	MTG400000050952	1/2 - 1 Mile NNE

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AN213	MTG400000050948	1/2 - 1 Mile NNE
AN214	MTG400000050947	1/2 - 1 Mile NNE
AN215	MTG400000050946	1/2 - 1 Mile NNE
AN216	MTG400000050951	1/2 - 1 Mile NNE
AN217	MTG400000050950	1/2 - 1 Mile NNE
AN218	MTG400000050949	1/2 - 1 Mile NNE
AN219	MTG400000050959	1/2 - 1 Mile NNE
AN220	MTG400000050969	1/2 - 1 Mile NNE
AN221	MTG400000050968	1/2 - 1 Mile NNE
AN222	MTG400000050967	1/2 - 1 Mile NNE
AN223	MTG400000050972	1/2 - 1 Mile NNE
AN224	MTG400000050971	1/2 - 1 Mile NNE
AN225	MTG400000050970	1/2 - 1 Mile NNE
AN226	MTG400000050966	1/2 - 1 Mile NNE
AN227	MTG400000050962	1/2 - 1 Mile NNE
AN228	MTG400000050961	1/2 - 1 Mile NNE
AN229	MTG400000050960	1/2 - 1 Mile NNE
AN230	MTG400000050965	1/2 - 1 Mile NNE
AN231	MTG400000050964	1/2 - 1 Mile NNE
AN232	MTG400000050963	1/2 - 1 Mile NNE
AO233	MTG400000047123	1/2 - 1 Mile South
AO234	MTG400000047122	1/2 - 1 Mile South
AO235	MTG400000047125	1/2 - 1 Mile South
AO236	MTG400000047124	1/2 - 1 Mile South
AK237	MTG400000047824	1/2 - 1 Mile SW
AK238	MTG400000047825	1/2 - 1 Mile SW
239	MTG400000051053	1/2 - 1 Mile North
AP240	MTG400000047118	1/2 - 1 Mile SSW
AP241	MTG400000047119	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 3156252.2s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

N

SITE NAME: Yale Oil	CLIENT: Cardno ERI
ADDRESS: 700 First Avenue North Billings MT 59101	CONTACT: Robert Serrato
LAT/LONG: 45.7939 / 108.4796	INQUIRY #: 3156252.2s
	DATE: August 26, 2011 8:12 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **WSW** **1/8 - 1/4 Mile** **Higher**	**MT WELLS**	**MTG400000049344**

Mnumber:	94216		
Dnrc no:	Not Reported		
Site name:	NAVISTAR MW-1		
Latitude:	45.793064		
Longitude:	-108.483054		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCACD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	Not Reported	Lic no:	Not Reported
Comp date:	07/06/1989	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049344		

A2 **WSW** **1/8 - 1/4 Mile** **Higher**	**MT WELLS**	**MTG400000049345**

Mnumber:	94217		
Dnrc no:	Not Reported		
Site name:	NAVISTAR MW-2		
Latitude:	45.793064		
Longitude:	-108.483054		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCACD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	Not Reported	Lic no:	Not Reported
Comp date:	07/06/1989	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049345		

3
NNE **MT WELLS** **MTG400000049668**
1/8 - 1/4 Mile
Higher

Mnumber:	222101		
Dnrc no:	Not Reported		
Site name:	METRA PARK		
Latitude:	45.796451		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	32		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWD36
Comp date:	07/13/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049668		

A4
WSW **MT WELLS** **MTG400000049229**
1/8 - 1/4 Mile
Higher

Mnumber:	180218		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAY		
Latitude:	45.792839		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	7		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	02/04/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049229		

A5
WSW **MT WELLS** **MTG400000049228**
1/8 - 1/4 Mile
Higher

Mnumber:	180217		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAY		
Latitude:	45.792839		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	7		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	02/04/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049228		

A6
WSW **MT WELLS** **MTG400000049230**
1/8 - 1/4 Mile
Higher

Mnumber:	180219		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAY		
Latitude:	45.792839		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	7		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	02/04/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049230		

A7
WSW **MT WELLS** **MTG400000049232**
1/8 - 1/4 Mile
Higher

Mnumber:	180221		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAY		
Latitude:	45.792839		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	7.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	02/03/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049232		

A8
WSW **MT WELLS** **MTG400000049231**
1/8 - 1/4 Mile
Higher

Mnumber:	180220		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAY		
Latitude:	45.792839		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	6.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	02/03/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049231		

B9
SE **MT WELLS** **MTG400000048912**
1/4 - 1/2 Mile
Higher

Mnumber:	11513		
Dnrc no:	Not Reported		
Site name:	MIDLAND FOODS INC.		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	27		
Pwl:	19		
Swl:	11		
Recov wl:	0		
Yield:	23		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	BILLINGS	Lic no:	WWC344
Comp date:	10/02/1980	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048912		

B10
SE **MT WELLS** **MTG400000048911**
1/4 - 1/2 Mile
Higher

Mnumber:	11512		
Dnrc no:	Not Reported		
Site name:	AGRI SYSTEMS		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	26		
Pwl:	24		
Swl:	11		
Recov wl:	0		
Yield:	20		
Test type:	PUMP	Test dur:	1
Recov tm:	0		
Drillset:	0		
Who drill:	DIGGER DRILLING	Lic no:	WWC197
Comp date:	11/26/1980	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048911		

B11
SE **MT WELLS** **MTG400000048910**
1/4 - 1/2 Mile
Higher

Mnumber:	11511		
Dnrc no:	12924		
Site name:	WELDON VICK		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	51		
Pwl:	30		
Swl:	30		
Recov wl:	0		
Yield:	14		
Test type:	BAILER	Test dur:	2
Recov tm:	0		
Drillset:	0		
Who drill:	ROCK CREEK DRILLING	Lic no:	WWC300
Comp date:	09/16/1976	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048910		

B12
SE **MT WELLS** **MTG400000048913**
1/4 - 1/2 Mile
Higher

Mnumber:	134808		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * RW-112		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	01/25/1993	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048913		

B13
SE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048916**

Mnumber:	147380		
Dnrc no:	Not Reported		
Site name:	MT DEPT OF HWYS		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	35		
Pwl:	31.5		
Swl:	16.8		
Recov wl:	0		
Yield:	7		
Test type:	AIR	Test dur:	7.5
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC532
Comp date:	07/14/1994	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048916		

B14
SE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048915**

Mnumber:	134846		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * RW-114		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	01/18/1993	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048915		

B15
SE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048914**

Mnumber:	134810		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * RW-113		
Latitude:	45.791033		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	01/15/1993	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048914		

16
NW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049670**

Mnumber:	11522		
Dnrc no:	4552		
Site name:	CHARBONNEAU R. W.		
Latitude:	45.796451		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	130		
Pwl:	80		
Swl:	70		
Recov wl:	0		
Yield:	20		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	DIGGER DRILLING	Lic no:	WWC197
Comp date:	11/20/1974	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049670		

C17
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049398**

Mnumber:	190070		
Dnrc no:	Not Reported		
Site name:	YURKO PROPERTIES*MW-04		
Latitude:	45.793742		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	15		
Pwl:	0		
Swl:	7.89		
Recov wl:	0		
Yield:	2		
Test type:	BAILER	Test dur:	0.33
Recov tm:	0		
Drillset:	0		
Who drill:	S & K	Lic no:	Not Reported
Comp date:	06/16/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049398		

C18
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049397**

Mnumber:	190069		
Dnrc no:	Not Reported		
Site name:	YURKO PROPERTIES*MW-03		
Latitude:	45.793742		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	8.36		
Recov wl:	0		
Yield:	2		
Test type:	BAILER	Test dur:	0.33
Recov tm:	0		
Drillset:	0		
Who drill:	S & K	Lic no:	Not Reported
Comp date:	06/15/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049397		

C19
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049396**

Mnumber:	190065		
Dnrc no:	Not Reported		
Site name:	YURKO PROPERTIES*MW-02		
Latitude:	45.793742		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	7.93		
Recov wl:	0		
Yield:	2		
Test type:	BAILER	Test dur:	0.33
Recov tm:	0		
Drillset:	0		
Who drill:	S & K	Lic no:	Not Reported
Comp date:	06/15/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049396		

C20
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049401**

Mnumber:	219663		
Dnrc no:	Not Reported		
Site name:	YURKO PROPERTIES *MW-05		
Latitude:	45.793742		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	15		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	06/16/2005	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049401		

C21
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049400**

Mnumber:	219660		
Dnrc no:	Not Reported		
Site name:	YURKO PROPERTIES *MW-06		
Latitude:	45.793742		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	15		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	06/16/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049400		

C22
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049399**

Mnumber:	190071		
Dnrc no:	Not Reported		
Site name:	YURKO PROPERTIES*MW-01		
Latitude:	45.793742		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	6.32		
Recov wl:	0		
Yield:	2		
Test type:	BAILER	Test dur:	0.33
Recov tm:	0		
Drillset:	0		
Who drill:	S & K	Lic no:	Not Reported
Comp date:	06/15/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049399		

23
NNW **MT WELLS** **MTG400000049837**
1/4 - 1/2 Mile
Higher

Mnumber:	146657		
Dnrc no:	Not Reported		
Site name:	PACIFIC HIDE AND FUR RECYCLING*MW-1		
Latitude:	45.797354		
Longitude:	-108.482728		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	30		
Pwl:	0		
Swl:	25.26		
Recov wl:	0		
Yield:	5		
Test type:	BAILER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADT	Lic no:	Not Reported
Comp date:	10/15/1993	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049837		

D24
WNW **MT WELLS** **MTG400000049561**
1/4 - 1/2 Mile
Higher

Mnumber:	218962		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	05/11/2005	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049561		

D25
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049562**

Mnumber:	219658		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO. *MW-12		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	06/15/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049562		

D26
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049563**

Mnumber:	219659		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO. *MW-13		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	06/15/2005	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049563		

D27
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049560**

Mnumber:	218959		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	05/11/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049560		

D28
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049557**

Mnumber:	218954		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	05/10/2005	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049557		

D29
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049558**

Mnumber:	218955		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	05/10/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049558		

D30
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049559**

Mnumber:	218957		
Dnrc no:	Not Reported		
Site name:	CON-WAY TRANSPORTATION CO		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	05/11/2005	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049559		

D31
WNW **MT WELLS** **MTG400000049568**
1/4 - 1/2 Mile
Higher

Mnumber:	248881		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT * MW-18		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	26		
Pwl:	0		
Swl:	16		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/05/2008	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049568		

D32
WNW **MT WELLS** **MTG400000049569**
1/4 - 1/2 Mile
Higher

Mnumber:	248882		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT * MW-19		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	16.5		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/04/2008	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049569		

D33
WNW **MT WELLS** **MTG400000049570**
1/4 - 1/2 Mile
Higher

Mnumber:	248884		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT *MW-20		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	26		
Pwl:	0		
Swl:	16.6		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/05/2008	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049570		

D34
WNW **MT WELLS** **MTG400000049567**
1/4 - 1/2 Mile
Higher

Mnumber:	248880		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT * MW-17		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	10		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/04/2008	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049567		

D35
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049564**

Mnumber:	248877		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT * MW-14		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	14		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/02/2008	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049564		

D36
WNW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049565**

Mnumber:	248878		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT * MW-15		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	13.6		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/03/2008	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049565		

D37
WNW **MT WELLS** **MTG400000049566**
1/4 - 1/2 Mile
Higher

Mnumber:	248879		
Dnrc no:	Not Reported		
Site name:	CON-WAY FREIGHT * MW-16		
Latitude:	45.795548		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	11.6		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SK GEOTECHNICAL CO	Lic no:	MWC417
Comp date:	12/03/2008	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049566		

38
ESE **MT WELLS** **MTG400000049233**
1/4 - 1/2 Mile
Lower

Mnumber:	195369		
Dnrc no:	Not Reported		
Site name:	CONOCO INC		
Latitude:	45.792839		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	10		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	04/26/2002	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049233		

E39
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049114**

Mnumber:	123507		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-4		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	04/17/1990	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049114		

E40
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049115**

Mnumber:	123508		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-5		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	02/05/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049115		

E41
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049113**

Mnumber:	123506		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-3		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	04/10/1990	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049113		

E42
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049111**

Mnumber:	123504		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-1		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	04/10/1990	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049111		

E43
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049112**

Mnumber:	123505		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-2		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	04/19/1990	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049112		

E44
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049119**

Mnumber:	123512		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-9		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	02/04/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049119		

E45
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049120**

Mnumber:	123513		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-10		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	02/06/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049120		

E46
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049118**

Mnumber:	123511		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-8		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	02/05/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049118		

E47
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049116**

Mnumber:	123509		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-6		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	02/05/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049116		

E48
WSW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049117**

Mnumber:	123510		
Dnrc no:	Not Reported		
Site name:	CONSOLIDATED FREIGHT WAYS * CF-7		
Latitude:	45.791936		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	CHEN-NORTHERN	Lic no:	WWC209
Comp date:	02/05/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049117		

F49
South
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048666**

Mnumber:	179478		
Dnrc no:	Not Reported		
Site name:	CONOCO INC.*CCPMW#1		
Latitude:	45.789227		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	03/28/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048666		

F50
South
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048665**

Mnumber:	179477		
Dnrc no:	Not Reported		
Site name:	CONOCO INC.*CCPMW#2		
Latitude:	45.789227		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	03/29/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048665		

F51
South
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048668**

Mnumber:	179480		
Dnrc no:	Not Reported		
Site name:	CONOCO INC.*CCPMW#4		
Latitude:	45.789227		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	15		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	03/30/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048668		

F52
South
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048667**

Mnumber:	179479		
Dnrc no:	Not Reported		
Site name:	CONOCO INC.*CCPMW#3		
Latitude:	45.789227		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	11.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	03/29/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048667		

G53
ENE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049536**

Mnumber:	29688		
Dnrc no:	Not Reported		
Site name:	CENEX BILLINGS TANK FARM * MW-5		
Latitude:	45.795096		
Longitude:	-108.472926		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	ABDC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	17		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC171
Comp date:	09/04/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049536		

54
East
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000049395**

Mnumber:	29689		
Dnrc no:	Not Reported		
Site name:	CENEX BILLINGS TANK FARM * MW-3		
Latitude:	45.793742		
Longitude:	-108.472272		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	ACA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	17		
Pwl:	0		
Swl:	10.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC171
Comp date:	09/04/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049395		

55
NW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049838**

Mnumber:	161473		
Dnrc no:	Not Reported		
Site name:	OSTER DONNA		
Latitude:	45.797354		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	BBB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	26		
Pwl:	15		
Swl:	10		
Recov wl:	0		
Yield:	12		
Test type:	PUMP	Test dur:	1
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	07/29/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049838		

G56
ENE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049573**

Mnumber:	29665		
Dnrc no:	Not Reported		
Site name:	CENEX BILLINGS TANK FARM * MW-4		
Latitude:	45.795548		
Longitude:	-108.472272		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	ABD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC171
Comp date:	09/04/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049573		

G57
ENE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049572**

Mnumber:	29647		
Dnrc no:	Not Reported		
Site name:	CENEX BILLINGS TANK FARM * MW-1		
Latitude:	45.795548		
Longitude:	-108.472272		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	ABD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	17		
Pwl:	0		
Swl:	4.7		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC171
Comp date:	09/03/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049572		

G58
ENE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049575**

Mnumber:	29676		
Dnrc no:	Not Reported		
Site name:	CENEX BILLINGS TANK FARM * MW-6		
Latitude:	45.795548		
Longitude:	-108.472272		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	ABD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC171
Comp date:	09/05/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049575		

G59
ENE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049574**

Mnumber:	29668		
Dnrc no:	Not Reported		
Site name:	CENEX BILLINGS TANK FARM * MW-2		
Latitude:	45.795548		
Longitude:	-108.472272		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	ABD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	17		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC171
Comp date:	09/03/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049574		

H60
SW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048809**

Mnumber:	130058		
Dnrc no:	Not Reported		
Site name:	MT DEPT OF HIWYS * 13TH ST UNDERPASS		
Latitude:	45.79013		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CBB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	30		
Pwl:	0		
Swl:	16.8		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PICKETT	Lic no:	Not Reported
Comp date:	08/31/1992	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048809		

H61
SW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048810**

Mnumber:	130059		
Dnrc no:	Not Reported		
Site name:	MT DEPT OF HIWYS * 13TH ST UNDERPASS		
Latitude:	45.79013		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CBB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	14		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PICKETT	Lic no:	Not Reported
Comp date:	09/01/1992	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048810		

H62
SW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048811**

Mnumber:	130062		
Dnrc no:	Not Reported		
Site name:	MT DEPT OF HIWYS * 13TH ST UNDERPASS		
Latitude:	45.79013		
Longitude:	-108.485341		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CBB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	30		
Pwl:	0		
Swl:	15.4		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PICKETT	Lic no:	Not Reported
Comp date:	09/02/1992	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048811		

63
SSW **MT WELLS** **MTG400000048662**
1/4 - 1/2 Mile
Higher

Mnumber:	11524		
Dnrc no:	Not Reported		
Site name:	RICHARDS LAURA		
Latitude:	45.789227		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	0		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1950	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW2
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048662		

64
SSE **MT WELLS** **MTG400000048564**
1/4 - 1/2 Mile
Higher

Mnumber:	171707		
Dnrc no:	Not Reported		
Site name:	CITY OF BILLINGS		
Latitude:	45.788324		
Longitude:	-108.4775		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	15		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	02/23/1999	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048564		

I65
East
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000049482**

Mnumber:	11514		
Dnrc no:	Not Reported		
Site name:	LOCKWOOD WATER USERS #2		
Latitude:	45.794645		
Longitude:	-108.470965		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	A	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	27		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	350		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	12/01/1956	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049482		

I66
East
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000049483**

Mnumber:	11515		
Dnrc no:	Not Reported		
Site name:	LOCKWOOD WATER USERS #3		
Latitude:	45.794645		
Longitude:	-108.470965		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	A	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	27		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	500		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	12/01/1956	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049483		

I67
East
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000049484**

Mnumber:	11517		
Dnrc no:	Not Reported		
Site name:	LOCKWOOD WATER USERS #1		
Latitude:	45.794645		
Longitude:	-108.470965		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	A	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	27		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	350		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	12/01/1956	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049484		

68
NNE
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000050037**

Mnumber:	161487		
Dnrc no:	Not Reported		
Site name:	YELLOWSTONE CO METRA PARK		
Latitude:	45.799164		
Longitude:	-108.474886		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	DCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	40		
Pwl:	13		
Swl:	9		
Recov wl:	0		
Yield:	85		
Test type:	AIR	Test dur:	6
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	06/16/1995	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050037		

J69
SE
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000048663**

Mnumber:	11526		
Dnrc no:	Not Reported		
Site name:	SCHULTZ RAY E.		
Latitude:	45.789227		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	DB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	18		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	05/01/1937	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW2
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048663		

J70
SE
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000048664**

Mnumber:	140977		
Dnrc no:	Not Reported		
Site name:	INTERNATIONAL LEATHER MAN.		
Latitude:	45.789227		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	DB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	7.8		
Recov wl:	0		
Yield:	75		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	MAYES DRILLING INC	Lic no:	WWC500
Comp date:	11/02/1990	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048664		

K71
South
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048437**

Mnumber:	11523		
Dnrc no:	Not Reported		
Site name:	BOWMAN BURT		
Latitude:	45.787421		
Longitude:	-108.481421		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	C	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	14		
Swl:	12		
Recov wl:	0		
Yield:	20		
Test type:	PUMP	Test dur:	2
Recov tm:	0		
Drillset:	0		
Who drill:	BEVEN DRILLING	Lic no:	WWC294
Comp date:	10/06/1980	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048437		

K72
South
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048438**

Mnumber:	126401		
Dnrc no:	Not Reported		
Site name:	AGRI SYSTEMS		
Latitude:	45.787421		
Longitude:	-108.481421		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	C	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	18		
Swl:	6		
Recov wl:	0		
Yield:	30		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	10/05/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048438		

L73
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049315**

Mnumber:	11501		
Dnrc no:	Not Reported		
Site name:	PARSHALL HUGH P.		
Latitude:	45.793026		
Longitude:	-108.489069		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	12		
Recov wl:	0		
Yield:	5		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	07/01/1961	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049315		

L74
West
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000049316**

Mnumber:	122061		
Dnrc no:	Not Reported		
Site name:	PETES AUTOMATIC TRANSMISSION		
Latitude:	45.793026		
Longitude:	-108.489069		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	MWC154
Comp date:	02/05/1990	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049316		

75
SW
1/4 - 1/2 Mile
Higher

MT WELLS **MTG400000048556**

Mnumber:	187033		
Dnrc no:	Not Reported		
Site name:	CONOCO		
Latitude:	45.7883		
Longitude:	-108.4858		
Geomethod:	NAV-GPS	Datum:	1983
Township:	01S	Range:	26E
Isp sect:	11		
Tract:	BA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	9.3		
Swl:	7.2		
Recov wl:	9.2		
Yield:	85		
Test type:	PUMP	Test dur:	3
Recov tm:	.25		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC508
Comp date:	06/23/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048556		

76
SSE
1/4 - 1/2 Mile
Lower

MT WELLS **MTG400000048527**

Mnumber:	208046		
Dnrc no:	Not Reported		
Site name:	SCHAFNITZ JOHN		
Latitude:	45.787872		
Longitude:	-108.474232		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	DBCD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	29		
Pwl:	0		
Swl:	12.2		
Recov wl:	12.2		
Yield:	28		
Test type:	AIR	Test dur:	2
Recov tm:	.5		
Drillset:	28		
Who drill:	A-1 DRILLING/BILLING	Lic no:	MWC532
Comp date:	12/11/2003	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048527		

M77
NE
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050132**

Mnumber:	200625		
Dnrc no:	Not Reported		
Site name:	METRA PARK		
Latitude:	45.800075		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	15.1		
Recov wl:	15.1		
Yield:	85		
Test type:	AIR	Test dur:	8
Recov tm:	.25		
Drillset:	25		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	10/08/2002	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050132		

M78
NE
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050133**

Mnumber:	200640		
Dnrc no:	Not Reported		
Site name:	METRA PARK		
Latitude:	45.800075		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	26		
Pwl:	0		
Swl:	15		
Recov wl:	15		
Yield:	80		
Test type:	AIR	Test dur:	8
Recov tm:	.5		
Drillset:	30		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	10/05/2002	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050133		

79
East
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049227**

Mnumber:	182034		
Dnrc no:	Not Reported		
Site name:	METRA PARK		
Latitude:	45.79283866		
Longitude:	-108.4683513		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	23		
Swl:	9		
Recov wl:	0		
Yield:	70		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	05/12/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049227		

80
North
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050361**

Mnumber:	171685		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY * AS-01		
Latitude:	45.801898		
Longitude:	-108.481421		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	C	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	36		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/26/1958	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	Not Reported
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050361		

N81
ENE **MT WELLS** **MTG400000049669**
1/2 - 1 Mile
Lower

Mnumber:	198254		
Dnrc no:	Not Reported		
Site name:	MONTANA DEQ		
Latitude:	45.796451		
Longitude:	-108.468351		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	28		
Pwl:	0		
Swl:	9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	MWC344
Comp date:	07/18/2002	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049669		

N82
ENE **MT WELLS** **MTD400000000727**
1/2 - 1 Mile
Lower

Pwsid:	MT0003714	Sourceid:	SWP
Class:	C	Sourcetype:	Purchased
Primryname:	Woodland Court		
Sourcename:	Lockwood Wua		
City:	Billings	County:	Yellowstone
Respopul:	40		
Nrespopul:	0		
Latdd:	45.7969		
Longdd:	-108.4683		
Objectid:	17371		
Site id:	MTD400000000727		

N83
ENE **MT WELLS** **MTD400000000728**
1/2 - 1 Mile
Lower

Pwsid:	MT0000156	Sourceid:	IN005
Class:	C	Sourcetype:	Surface Water
Primryname:	Lockwood WUA		
Sourcename:	Yellowstone River		
City:	Billings	County:	Yellowstone
Respopul:	5400		
Nrespopul:	0		
Latdd:	45.7969		
Longdd:	-108.4683		
Objectid:	17897		
Site id:	MTD400000000728		

N84
ENE **MT WELLS** **MTG400000049814**
1/2 - 1 Mile
Lower

Mnumber:	11520		
Dnrc no:	Not Reported		
Site name:	LOCKWOOD WATER USERS WELL 4		
Latitude:	45.796902		
Longitude:	-108.467698		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AAAC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	32		
Pwl:	23		
Swl:	17		
Recov wl:	0		
Yield:	210		
Test type:	PUMP	Test dur:	24
Recov tm:	0		
Drillset:	0		
Who drill:	EAGLE DRILLING AND P	Lic no:	WWC145
Comp date:	10/04/1965	Pws id:	156005
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049814		

85
East **MT WELLS** **MTG400000049571**
1/2 - 1 Mile
Higher

Mnumber:	11521		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.795548		
Longitude:	-108.467044		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AAD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	22		
Pwl:	0		
Swl:	20		
Recov wl:	0		
Yield:	40		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1950	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049571		

86
South **MT WELLS** **MTG400000047959**
1/2 - 1 Mile
Higher

Mnumber:	185614		
Dnrc no:	Not Reported		
Site name:	CONOCO INC*P2-24		
Latitude:	45.784712		
Longitude:	-108.480114		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CDC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	9.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/20/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047959		

O87
SSE **MT WELLS** **MTG400000048106**
1/2 - 1 Mile
Higher

Mnumber:	11527		
Dnrc no:	Not Reported		
Site name:	JOHNSON J. DONOVAN		
Latitude:	45.785615		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	20		
Swl:	9		
Recov wl:	0		
Yield:	12		
Test type:	PUMP	Test dur:	2
Recov tm:	0		
Drillset:	0		
Who drill:	RYE	Lic no:	WWC151
Comp date:	08/07/1973	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048106		

O88
SSE **MT WELLS** **MTG400000048107**
1/2 - 1 Mile
Higher

Mnumber:	185616		
Dnrc no:	Not Reported		
Site name:	CONOCO INC*P2-25		
Latitude:	45.785615		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/21/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048107		

O89
SSE **MT WELLS** **MTG400000048108**
1/2 - 1 Mile
Higher

Mnumber:	185617		
Dnrc no:	Not Reported		
Site name:	CONOCO INC*P2-26		
Latitude:	45.785615		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	15		
Pwl:	0		
Swl:	9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/24/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048108		

P90
ENE **MT WELLS** **MTG400000049839**
1/2 - 1 Mile
Lower

Mnumber:	11519		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.797354		
Longitude:	-108.467044		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AAA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	45		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1946	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049839		

P91
ENE **MT WELLS** **MTG400000049840**
1/2 - 1 Mile
Lower

Mnumber:	165440		
Dnrc no:	102251		
Site name:	LOCKWOOD IRRIGATION DISTRICT		
Latitude:	45.797354		
Longitude:	-108.467044		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	AAA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	25		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	25		
Test type:	AIR	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AAQUA DRILLING INC	Lic no:	WWC542
Comp date:	10/20/1997	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049840		

Q92
SSW **MT WELLS** **MTG400000047955**
1/2 - 1 Mile
Higher

Mnumber:	129573		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-2		
Latitude:	45.784712		
Longitude:	-108.482728		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CCD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/26/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047955		

Q93
SSW **MT WELLS** **MTG400000047954**
1/2 - 1 Mile
Higher

Mnumber:	129570		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-1		
Latitude:	45.784712		
Longitude:	-108.482728		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CCD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/26/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047954		

Q94
SSW **MT WELLS** **MTG400000047956**
1/2 - 1 Mile
Higher

Mnumber:	129576		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-3		
Latitude:	45.784712		
Longitude:	-108.482728		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CCD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/25/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047956		

Q95
SSW **MT WELLS** **MTG400000047958**
1/2 - 1 Mile
Higher

Mnumber:	185615		
Dnrc no:	Not Reported		
Site name:	CONOCO INC* P2-23		
Latitude:	45.784712		
Longitude:	-108.482728		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CCD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	25		
Pwl:	0		
Swl:	9.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/20/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047958		

Q96
SSW **MT WELLS** **MTG400000047957**
1/2 - 1 Mile
Higher

Mnumber:	129579		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-4		
Latitude:	45.784712		
Longitude:	-108.482728		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	34		
Tract:	CCD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/25/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047957		

97
North **MT WELLS** **MTG400000050526**
1/2 - 1 Mile
Higher

Mnumber:	238116		
Dnrc no:	Not Reported		
Site name:	MERRY D.R.		
Latitude:	45.803722		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	CA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	50		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	Not Reported	Lic no:	WWC18
Comp date:	10/22/1931	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050526		

98
NE **MT WELLS** **MTG400000050364**
1/2 - 1 Mile
Lower

Mnumber:	11387		
Dnrc no:	Not Reported		
Site name:	HOLIDAY INN		
Latitude:	45.801898		
Longitude:	-108.470965		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	D	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	75		
Pwl:	67		
Swl:	35		
Recov wl:	0		
Yield:	50		
Test type:	BAILER	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	JOHNSON	Lic no:	WWC4
Comp date:	08/02/1962	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050364		

99
NNW **MT WELLS** **MTG400000050525**
1/2 - 1 Mile
Higher

Mnumber:	11386		
Dnrc no:	Not Reported		
Site name:	HORNUNG A.C.		
Latitude:	45.803722		
Longitude:	-108.484035		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	CB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	160		
Pwl:	0		
Swl:	40		
Recov wl:	0		
Yield:	50		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1948	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050525		

R100
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049320**

Mnumber:	154385		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP * MW-4		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	12/13/1995	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049320		

R101
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049321**

Mnumber:	157757		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP BILLINGS * COMBO 1		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	13		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	WWC230
Comp date:	06/26/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049321		

R102
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049319**

Mnumber:	154382		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP * MW-3		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	12/12/1995	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049319		

R103
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049317**

Mnumber:	154330		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	12/12/1995	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049317		

R104
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049318**

Mnumber:	154379		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP * MW-2		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	01/31/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049318		

R105
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049322**

Mnumber:	157758		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP BILLINGS * COMBO 2		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	13		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	WWC230
Comp date:	06/26/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049322		

R106
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049326**

Mnumber:	174981		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP BILLINGS		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	04/28/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049326		

R107
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049327**

Mnumber:	228979		
Dnrc no:	Not Reported		
Site name:	STOCKTON OIL CO.		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	8		
Pwl:	0		
Swl:	13		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	09/11/2006	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049327		

R108
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049325**

Mnumber:	171820		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP BILLINGS		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	WWC230
Comp date:	04/28/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049325		

R109
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049323**

Mnumber:	157759		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP BILLINGS * COMBO 3		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	13		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	WWC230
Comp date:	06/26/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049323		

R110
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049324**

Mnumber:	171819		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP BILLINGS		
Latitude:	45.793026		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	WWC230
Comp date:	04/28/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049324		

S111
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047828**

Mnumber:	129303		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-20		
Latitude:	45.783721		
Longitude:	-108.4829		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAAAB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/20/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047828		

S112
SSW **MT WELLS** **MTG400000047829**
1/2 - 1 Mile
Higher

Mnumber:	129304		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * BW-2		
Latitude:	45.783721		
Longitude:	-108.4829		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAAAB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	31		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	03/15/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047829		

T113
SW **MT WELLS** **MTG400000048383**
1/2 - 1 Mile
Higher

Mnumber:	177381		
Dnrc no:	Not Reported		
Site name:	CONOCO		
Latitude:	45.786656		
Longitude:	-108.490376		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DDB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	10.25		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC504
Comp date:	06/24/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048383		

T114
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048384**

Mnumber:	181411		
Dnrc no:	Not Reported		
Site name:	CONOCO INC* RW-C		
Latitude:	45.786656		
Longitude:	-108.490376		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DDB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	0		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADT	Lic no:	WWC508
Comp date:	10/15/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048384		

U115
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048242**

Mnumber:	204928		
Dnrc no:	Not Reported		
Site name:	PELICAN CONNIE		
Latitude:	45.78574644		
Longitude:	-108.4890693		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	12		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	08/26/2003	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048242		

U116
SW **MT WELLS** **MTG400000048241**
1/2 - 1 Mile
Higher

Mnumber:	204925		
Dnrc no:	Not Reported		
Site name:	PELICAN CONNIE		
Latitude:	45.78574644		
Longitude:	-108.4890693		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	10		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	08/25/2003	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048241		

U117
SW **MT WELLS** **MTG400000048244**
1/2 - 1 Mile
Higher

Mnumber:	204930		
Dnrc no:	Not Reported		
Site name:	PELICAN CONNIE		
Latitude:	45.78574644		
Longitude:	-108.4890693		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	12		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	08/25/2003	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048244		

U118
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048243**

Mnumber:	204929		
Dnrc no:	Not Reported		
Site name:	PELICAN CONNIE		
Latitude:	45.78574644		
Longitude:	-108.4890693		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	10		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	08/26/2003	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048243		

U119
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048225**

Mnumber:	205502		
Dnrc no:	Not Reported		
Site name:	PELICAN CONNIE		
Latitude:	45.785746		
Longitude:	-108.489069		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	08/26/2003	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048225		

120
East
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049419**

Mnumber:	11542		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.793809		
Longitude:	-108.464493		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	35		
Tract:	BCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	60		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1958	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049419		

V121
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047788**

Mnumber:	129260		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-19		
Latitude:	45.783377		
Longitude:	-108.481529		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	ABBBCB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/20/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047788		

V122
South **MT WELLS** **MTG400000047776**
1/2 - 1 Mile
Higher

Mnumber:	129257		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-18		
Latitude:	45.783263		
Longitude:	-108.481333		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	ABBBC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/22/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047776		

123
SSW **MT WELLS** **MTG400000047996**
1/2 - 1 Mile
Higher

Mnumber:	129568		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * OR-5		
Latitude:	45.784837		
Longitude:	-108.487763		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DDD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	03/12/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047996		

S124
South **MT WELLS** **MTG400000047738**
1/2 - 1 Mile
Higher

Mnumber:	147360		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * OR-16		
Latitude:	45.783		
Longitude:	-108.4825		
Geomethod:	UNKNOWN	Datum:	NAD27
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	15		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	03/04/1994	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047738		

S125
SSW **MT WELLS** **MTG400000047740**
1/2 - 1 Mile
Higher

Mnumber:	185122		
Dnrc no:	Not Reported		
Site name:	CONOCO INC.*P2-22		
Latitude:	45.783034		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	25		
Pwl:	0		
Swl:	9.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/19/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047740		

S126
SSW **MT WELLS** **MTG400000047741**
1/2 - 1 Mile
Higher

Mnumber:	185123		
Dnrc no:	Not Reported		
Site name:	CONOCO INC.*P2-21		
Latitude:	45.783034		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	9.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/19/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047741		

S127
SSW **MT WELLS** **MTG400000047742**
1/2 - 1 Mile
Higher

Mnumber:	200097		
Dnrc no:	Not Reported		
Site name:	CONOCO INC		
Latitude:	45.783034		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	24		
Pwl:	0		
Swl:	6.9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	11/15/2002	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047742		

128
WSW **MT WELLS** **MTD400000000722**
1/2 - 1 Mile
Higher

Pwsid:	MT0003996	Sourceid:	SWP
Class:	C	Sourcetype:	Purchased
Primryname:	Yellowstone Ice and Water		
Sourcename:	Billings, City of		
City:	Billings	County:	Yellowstone
Respopul:	18		
Nrespopul:	43		
Latdd:	45.7911		
Longdd:	-108.4951		
Objectid:	18818		
Site id:	MTD400000000722		

W129
WSW **MT WELLS** **MTG400000048728**
1/2 - 1 Mile
Higher

Mnumber:	238985		
Dnrc no:	Not Reported		
Site name:	BLESKIN PETE*MW07-1		
Latitude:	45.789386		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	12.5		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	09/14/2007	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048728		

W130
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048729**

Mnumber:	238986		
Dnrc no:	Not Reported		
Site name:	BLESKIN PETE*MW07-2		
Latitude:	45.789386		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	12		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	09/14/2007	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048729		

W131
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048730**

Mnumber:	238987		
Dnrc no:	Not Reported		
Site name:	BLESKIN PETE*MW07-3		
Latitude:	45.789386		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	12		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	09/14/2007	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048730		

X132
NNE
1/2 - 1 Mile
Higher

MT WELLS **MTD400000000735**

Pwsid:	MT0004068	Sourceid:	SWP
Class:	N	Sourcetype:	Purchased
Primryname:	Culligan, Billings Heights		
Sourcename:	Billings, City of - Distilled		
City:	Billings	County:	Yellowstone
Respopul:	40		
Nrespopul:	0		
Latdd:	45.8043		
Longdd:	-108.4733		
Objectid:	18176		
Site id:	MTD400000000735		

X133
NNE
1/2 - 1 Mile
Higher

MT WELLS **MTD400000000734**

Pwsid:	MT0004068	Sourceid:	SWP
Class:	N	Sourcetype:	Purchased
Primryname:	Culligan, Billings Heights		
Sourcename:	Billings, City of - Purified (Ro)		
City:	Billings	County:	Yellowstone
Respopul:	40		
Nrespopul:	0		
Latdd:	45.8043		
Longdd:	-108.47328		
Objectid:	18177		
Site id:	MTD400000000734		

134
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049146**

Mnumber:	11500		
Dnrc no:	Not Reported		
Site name:	WAGNER CARL		
Latitude:	45.792116		
Longitude:	-108.495602		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	ACC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	10		
Swl:	9		
Recov wl:	0		
Yield:	55		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	TIPPETS	Lic no:	Not Reported
Comp date:	03/19/1973	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049146		

135
NNE
1/2 - 1 Mile
Higher

MT WELLS **MTD400000000733**

Pwsid:	MT0004054	Sourceid:	SWP
Class:	N	Sourcetype:	Purchased
Primryname:	Holiday Store #280		
Sourcename:	Billings, City of		
City:	Billings	County:	Yellowstone
Respopul:	0		
Nrespopul:	100		
Latdd:	45.8036		
Longdd:	-108.4712		
Objectid:	19438		
Site id:	MTD400000000733		

Y136
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047684**

Mnumber:	93608		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-30		
Latitude:	45.782805		
Longitude:	-108.484468		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAACB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	17		
Pwl:	0		
Swl:	6		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	WWC508
Comp date:	01/03/1990	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047684		

137
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047643**

Mnumber:	129266		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * OR-1		
Latitude:	45.782347		
Longitude:	-108.481333		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	ABBCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	17		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	03/07/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047643		

Z138
NW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050368**

Mnumber:	11390		
Dnrc no:	Not Reported		
Site name:	SCHMALZ PIUS		
Latitude:	45.801913		
Longitude:	-108.491726		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	28		
Tract:	D	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	275		
Pwl:	250		
Swl:	125		
Recov wl:	0		
Yield:	10		
Test type:	BAILER	Test dur:	2
Recov tm:	0		
Drillset:	0		
Who drill:	BILLINGS	Lic no:	WWC264
Comp date:	01/30/1976	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050368		

Z139
NW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050367**

Mnumber:	11389		
Dnrc no:	Not Reported		
Site name:	KIMBLE MONTE		
Latitude:	45.801913		
Longitude:	-108.491726		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	28		
Tract:	D	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	210		
Pwl:	200		
Swl:	60		
Recov wl:	0		
Yield:	7		
Test type:	BAILER	Test dur:	2
Recov tm:	0		
Drillset:	0		
Who drill:	BILLINGS	Lic no:	WWC264
Comp date:	01/09/1975	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050367		

Z140
NW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050370**

Mnumber:	170635		
Dnrc no:	Not Reported		
Site name:	PICKENS JIM		
Latitude:	45.801913		
Longitude:	-108.491726		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	28		
Tract:	D	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	80		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	03/27/1998	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050370		

Z141
NW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050369**

Mnumber:	11391		
Dnrc no:	Not Reported		
Site name:	ROORDA NELLY		
Latitude:	45.801913		
Longitude:	-108.491726		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	28		
Tract:	D	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	233		
Pwl:	233		
Swl:	138		
Recov wl:	0		
Yield:	4		
Test type:	AIR	Test dur:	1
Recov tm:	0		
Drillset:	0		
Who drill:	BILLINGS	Lic no:	WWC264
Comp date:	05/26/1982	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050369		

142
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047994**

Mnumber:	181040		
Dnrc no:	Not Reported		
Site name:	SUNWALL BRUCE		
Latitude:	45.784837		
Longitude:	-108.490376		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DDC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	72		
Pwl:	38		
Swl:	18		
Recov wl:	18		
Yield:	25		
Test type:	PUMP	Test dur:	4
Recov tm:	1		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	01/26/2000	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047994		

143
ENE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050039**

Mnumber:	11354		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.799167		
Longitude:	-108.464513		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	26		
Tract:	CCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	120		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1959	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050039		

AA144
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047744**

Mnumber:	93609		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-27		
Latitude:	45.783034		
Longitude:	-108.486427		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	7		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	WWC508
Comp date:	12/29/1989	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047744		

AA145
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047745**

Mnumber:	93610		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-31		
Latitude:	45.783034		
Longitude:	-108.486427		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	WWC508
Comp date:	01/04/1990	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047745		

AB146
NNE
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050730**

Mnumber:	11359		
Dnrc no:	Not Reported		
Site name:	LAMBRECHT ALBERT		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	31		
Pwl:	16		
Swl:	14		
Recov wl:	0		
Yield:	30		
Test type:	PUMP	Test dur:	3
Recov tm:	0		
Drillset:	0		
Who drill:	BILLINGS	Lic no:	WWC264
Comp date:	06/12/1975	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050730		

AB147
NNE
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050731**

Mnumber:	11360		
Dnrc no:	34706		
Site name:	BARRETT MARK		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	190		
Pwl:	150		
Swl:	35		
Recov wl:	0		
Yield:	15		
Test type:	BAILER	Test dur:	1
Recov tm:	0		
Drillset:	0		
Who drill:	DIGGER DRILLING	Lic no:	WWC197
Comp date:	06/25/1981	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050731		

AB148
NNE
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050728**

Mnumber:	11357		
Dnrc no:	16303		
Site name:	KRUEGER BENJAMIN		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	220		
Pwl:	110		
Swl:	108		
Recov wl:	0		
Yield:	5		
Test type:	AIR	Test dur:	1
Recov tm:	0		
Drillset:	0		
Who drill:	DAVIS DRILLING	Lic no:	WWC308
Comp date:	10/17/1977	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050728		

AB149
NNE **MT WELLS** **MTG400000050729**
1/2 - 1 Mile
Higher

Mnumber:	11358		
Dnrc no:	Not Reported		
Site name:	ADKINS E.R.		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	KUCK	Lic no:	Not Reported
Comp date:	05/02/1979	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050729		

AB150
NNE **MT WELLS** **MTG400000050732**
1/2 - 1 Mile
Higher

Mnumber:	11361		
Dnrc no:	Not Reported		
Site name:	MODEL MARK		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	190		
Pwl:	160		
Swl:	35		
Recov wl:	0		
Yield:	25		
Test type:	PUMP	Test dur:	1
Recov tm:	0		
Drillset:	0		
Who drill:	DIGGER DRILLING	Lic no:	WWC197
Comp date:	06/24/1981	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050732		

AB151
NNE **MT WELLS** **MTG400000050735**
1/2 - 1 Mile
Higher

Mnumber:	103076		
Dnrc no:	Not Reported		
Site name:	CITY OF BILLINGS * WELL #10		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	13		
Pwl:	0		
Swl:	9		
Recov wl:	0		
Yield:	268		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	RICHARDSON	Lic no:	WWC419
Comp date:	11/16/1974	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050735		

AB152
NNE **MT WELLS** **MTG400000050736**
1/2 - 1 Mile
Higher

Mnumber:	174466		
Dnrc no:	Not Reported		
Site name:	JOHANSEN J.E.		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	26		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	30		
Test type:	BAILER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ANDERSON DRILLING	Lic no:	WWC43
Comp date:	11/16/1974	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050736		

AB153
NNE **MT WELLS** **MTG400000050733**
1/2 - 1 Mile
Higher

Mnumber:	11362		
Dnrc no:	Not Reported		
Site name:	RUTH HAROLD		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	50		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	1		
Test type:	FLOW	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	SANDO	Lic no:	Not Reported
Comp date:	07/13/1959	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050733		

AB154
NNE **MT WELLS** **MTG400000050734**
1/2 - 1 Mile
Higher

Mnumber:	103073		
Dnrc no:	Not Reported		
Site name:	CITY OF BILLINGS * WELL #9		
Latitude:	45.805545		
Longitude:	-108.476193		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	29		
Pwl:	0		
Swl:	12		
Recov wl:	0		
Yield:	243		
Test type:	PUMP	Test dur:	4
Recov tm:	0		
Drillset:	0		
Who drill:	RICHARDSON	Lic no:	WWC419
Comp date:	10/23/1974	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050734		

155
NW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050533**

Mnumber:	186015		
Dnrc no:	Not Reported		
Site name:	J & E CONSTRUCTION		
Latitude:	45.803742		
Longitude:	-108.489137		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	28		
Tract:	DA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	120		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	12/05/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050533		

Y156
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047551**

Mnumber:	129300		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-21		
Latitude:	45.782118		
Longitude:	-108.48486		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/21/1988	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047551		

Y157
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047552**

Mnumber:	129301		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * RW-1		
Latitude:	45.782118		
Longitude:	-108.48486		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	10.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	03/18/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047552		

AC158
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048992**

Mnumber:	11499		
Dnrc no:	Not Reported		
Site name:	LECHNER MARCUS J.		
Latitude:	45.791206		
Longitude:	-108.496909		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	7		
Swl:	7		
Recov wl:	0		
Yield:	3		
Test type:	BAILER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ANDERSON DRILLING	Lic no:	Not Reported
Comp date:	06/01/1948	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048992		

AC159
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048991**

Mnumber:	11498		
Dnrc no:	Not Reported		
Site name:	BUFF JOHN B		
Latitude:	45.791206		
Longitude:	-108.496909		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	49		
Test type:	PUMP	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MCCRACKEN	Lic no:	Not Reported
Comp date:	05/02/1973	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048991		

AC160
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048994**

Mnumber:	191375		
Dnrc no:	Not Reported		
Site name:	WASHINGTON CORP		
Latitude:	45.791206		
Longitude:	-108.496909		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	13.9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	08/07/2001	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048994		

AC161
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048993**

Mnumber:	140976		
Dnrc no:	Not Reported		
Site name:	KOCH MATERIALS		
Latitude:	45.791206		
Longitude:	-108.496909		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	20		
Test type:	AIR	Test dur:	5
Recov tm:	0		
Drillset:	0		
Who drill:	MAYES DRILLING INC	Lic no:	WWC500
Comp date:	05/28/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048993		

AC162
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048989**

Mnumber:	11496		
Dnrc no:	14534		
Site name:	MAHAN WAYNE		
Latitude:	45.791206		
Longitude:	-108.496909		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	11		
Swl:	11		
Recov wl:	0		
Yield:	35		
Test type:	PUMP	Test dur:	3.5
Recov tm:	0		
Drillset:	0		
Who drill:	TIPPETS	Lic no:	Not Reported
Comp date:	05/27/1977	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048989		

AC163
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048990**

Mnumber:	11497		
Dnrc no:	Not Reported		
Site name:	KUHL SYDNEY M.		
Latitude:	45.791206		
Longitude:	-108.496909		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	14		
Pwl:	11		
Swl:	9		
Recov wl:	0		
Yield:	15		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	OWNER	Lic no:	Not Reported
Comp date:	05/10/1963	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW2
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048990		

AD164
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047470**

Mnumber:	129310		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R16-A		
Latitude:	45.78166		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BADA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	12		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	02/15/1991	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047470		

165
East
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049587**

Mnumber:	11541		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.795629		
Longitude:	-108.461855		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	35		
Tract:	BBD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	60		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1958	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049587		

AE166
NE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050527**

Mnumber:	181685		
Dnrc no:	Not Reported		
Site name:	JEFF JUN KENT CONSTRUCTI		
Latitude:	45.803722		
Longitude:	-108.468351		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	DA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	100		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	12/01/1999	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050527		

AE167
NE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050528**

Mnumber:	239960		
Dnrc no:	Not Reported		
Site name:	COMMUNITY OF CHRIST CHURCH		
Latitude:	45.803722		
Longitude:	-108.468351		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	DA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	160		
Pwl:	0		
Swl:	32		
Recov wl:	32		
Yield:	28		
Test type:	AIR	Test dur:	1
Recov tm:	.5		
Drillset:	159		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	06/05/2007	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050528		

168
NNW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050789**

Mnumber:	11385		
Dnrc no:	Not Reported		
Site name:	RUTH HAROLD		
Latitude:	45.806001		
Longitude:	-108.484688		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	BCCD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	100		
Pwl:	99		
Swl:	40		
Recov wl:	0		
Yield:	16		
Test type:	PUMP	Test dur:	20
Recov tm:	0		
Drillset:	0		
Who drill:	SANDO	Lic no:	WWC2
Comp date:	09/01/1955	Pws id:	Not Reported

Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050789		

AF169
East
1/2 - 1 Mile
Higher

FED USGS **USGS3001255**

Agency cd:	USGS	Site no:	454739108273901
Site name:	01N26E36B 01		
Latitude:	454739	EDR Site id:	USGS3001255
Longitude:	1082739	Dec lat:	45.7941194
Dec lon:	-108.4615228	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	30
State:	30	County:	111
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Upper YellowstonePompeys Pillar. Montana. Area = 2000 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	MST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ALLUVIUM		
Well depth:	60.0	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1921-10-25
Water quality data end date:	1921-10-25	Water quality data count:	1
Ground water data begin date:	1964-00-00	Ground water data end date:	1964-00-00
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1964	50.00	

170
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048418**

Mnumber:	11510		
Dnrc no:	Not Reported		
Site name:	WILCOXSON'S ICE CREAM & CANDY CO		
Latitude:	45.787111		
Longitude:	-108.494949		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DCBA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	14		
Swl:	9		
Recov wl:	0		
Yield:	15		
Test type:	OTHER	Test dur:	0.03
Recov tm:	0		
Drillset:	0		
Who drill:	JOHNSON	Lic no:	WWC273
Comp date:	01/26/1959	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048418		

AG171
NE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050286**

Mnumber:	11352		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.800997		
Longitude:	-108.464513		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	26		
Tract:	CCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	120		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1959	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050286		

AG172
NE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050287**

Mnumber:	11353		
Dnrc no:	Not Reported		
Site name:	ORCHOWSKI FRANK		
Latitude:	45.800997		
Longitude:	-108.464513		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	26		
Tract:	CCB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	18		
Recov wl:	0		
Yield:	120		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	01/01/1959	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW4
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050287		

AD173
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047437**

Mnumber:	147364		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * OR-17		
Latitude:	45.7813		
Longitude:	-108.483		
Geomethod:	UNKNOWN	Datum:	NAD27
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	Not Reported	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	14		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	03/08/1994	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047437		

174
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047743**

Mnumber:	93611		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-32		
Latitude:	45.783034		
Longitude:	-108.489562		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BBA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	WWC508
Comp date:	01/04/1990	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047743		

AD175
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047409**

Mnumber:	129306		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-6		
Latitude:	45.781202		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	18		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/22/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047409		

AD176
SSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047408**

Mnumber:	129305		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-5		
Latitude:	45.781202		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/25/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047408		

AD177
SSW **MT WELLS** **MTG400000047410**
1/2 - 1 Mile
Higher

Mnumber:	129307		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-7		
Latitude:	45.781202		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	29		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/18/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047410		

AD178
SSW **MT WELLS** **MTG400000047412**
1/2 - 1 Mile
Higher

Mnumber:	129309		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R16-A		
Latitude:	45.781202		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	12		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	02/15/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047412		

AD179
SSW **MT WELLS** **MTG400000047411**
1/2 - 1 Mile
Higher

Mnumber:	129308		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-8		
Latitude:	45.781202		
Longitude:	-108.483292		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/19/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047411		

180
SW **MT WELLS** **MTG400000047995**
1/2 - 1 Mile
Higher

Mnumber:	181412		
Dnrc no:	Not Reported		
Site name:	CONOCO INC* RW-A		
Latitude:	45.784837		
Longitude:	-108.492989		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DCD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	0		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADT	Lic no:	WWC508
Comp date:	10/15/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047995		

AH181
ENE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050137**

Mnumber:	11350		
Dnrc no:	Not Reported		
Site name:	NELSON ROBERT C. #1		
Latitude:	45.800082		
Longitude:	-108.463199		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	26		
Tract:	CC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	28		
Pwl:	24		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	04/01/1970	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW2
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050137		

AH182
ENE
1/2 - 1 Mile
Lower

MT WELLS **MTG400000050138**

Mnumber:	11351		
Dnrc no:	Not Reported		
Site name:	NELSON ROBERT C. # 2		
Latitude:	45.800082		
Longitude:	-108.463199		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	26		
Tract:	CC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	14		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	UNKNOWN	Lic no:	Not Reported
Comp date:	07/03/1973	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	GW2
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050138		

AH183
ENE **MT WELLS** **MTG400000050139**
1/2 - 1 Mile
Lower

Mnumber:	157222		
Dnrc no:	97555		
Site name:	HERT DALE		
Latitude:	45.800082		
Longitude:	-108.463199		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	26		
Tract:	CC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	11		
Swl:	9		
Recov wl:	0		
Yield:	30		
Test type:	PUMP	Test dur:	3
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	02/14/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050139		

184
ENE **MT WELLS** **MTD400000000726**
1/2 - 1 Mile
Higher

Pwsid:	MT0001995	Sourceid:	WL002
Class:	N	Sourcetype:	Groundwater
Primryname:	Suds Hut of Lockwood Inc		
Sourcename:	Well # 1		
City:	Billings	County:	Yellowstone
Respopul:	0		
Nrespopul:	50		
Latdd:	45.7967		
Longdd:	-108.4614		
Objectid:	18885		
Site id:	MTD400000000726		

AI185
SW **MT WELLS** **MTG400000048233**
1/2 - 1 Mile
Higher

Mnumber:	222210		
Dnrc no:	Not Reported		
Site name:	BILLINGS GREYHOUND BUS *WELL I		
Latitude:	45.785746		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	05/17/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048233		

AI186
SW **MT WELLS** **MTG400000048234**
1/2 - 1 Mile
Higher

Mnumber:	222212		
Dnrc no:	Not Reported		
Site name:	GREYHOUND BUS BILLINGS *WELL II		
Latitude:	45.785746		
Longitude:	-108.494296		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	DC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	24		
Pwl:	0		
Swl:	11		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	05/18/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048234		

AJ187
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049147**

Mnumber:	11502		
Dnrc no:	Not Reported		
Site name:	SCHOOL DISTRICT #2 (NORTH PARK SCHOOL)		
Latitude:	45.792116		
Longitude:	-108.498216		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	BDD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	31		
Pwl:	17.2		
Swl:	13		
Recov wl:	0		
Yield:	40		
Test type:	PUMP	Test dur:	8
Recov tm:	0		
Drillset:	0		
Who drill:	DAVIS DRILLING	Lic no:	WWC326
Comp date:	08/25/1983	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049147		

AJ188
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049148**

Mnumber:	162939		
Dnrc no:	101338		
Site name:	8TH AVE N APARTMENTS LP		
Latitude:	45.792116		
Longitude:	-108.498216		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	BDD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	50		
Pwl:	0		
Swl:	28		
Recov wl:	0		
Yield:	30		
Test type:	AIR	Test dur:	2
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC532
Comp date:	02/28/1997	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049148		

AJ189
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049149**

Mnumber:	198253		
Dnrc no:	Not Reported		
Site name:	MODERN MACHINERY		
Latitude:	45.792116		
Longitude:	-108.498216		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	BDD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HANSEN ENVIRONMENTAL	Lic no:	MWC230
Comp date:	03/22/2002	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049149		

AF190
East
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049459**

Mnumber:	105		
Dnrc no:	Not Reported		
Site name:	PETERS A.J. *2.7 MI E YELLOWSTONE FAIRGRND		
Latitude:	45.7941		
Longitude:	-108.4608		
Geomethod:	UNKNOWN	Datum:	NAD27
Township:	01N	Range:	26E
Isp sect:	36		
Tract:	B	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	60		
Pwl:	0		
Swl:	50		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	Not Reported	Lic no:	Not Reported
Comp date:	06/15/1957	Pws id:	Not Reported
Gwsi id:	454739108273901	Data sour:	Not Reported
Wqdata:	Y	Hydrograph:	N
Site id:	MTG400000049459		

191
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047322**

Mnumber:	129267		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-16A		
Latitude:	45.780744		
Longitude:	-108.480941		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	ABCC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	16		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	04/06/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047322		

AD192
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047320**

Mnumber:	129311		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-17		
Latitude:	45.780744		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BADD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	18		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/22/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047320		

AD193
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047321**

Mnumber:	129312		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-25		
Latitude:	45.780744		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BADD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	8		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/23/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047321		

AF194
East
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049498**

Mnumber:	11537		
Dnrc no:	14721		
Site name:	OTT V R		
Latitude:	45.794719		
Longitude:	-108.460536		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	35		
Tract:	B	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	40		
Pwl:	27		
Swl:	20		
Recov wl:	0		
Yield:	15		
Test type:	BAILER	Test dur:	3
Recov tm:	0		
Drillset:	0		
Who drill:	JEWETT	Lic no:	WWC264
Comp date:	07/27/1977	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049498		

AF195
East
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049499**

Mnumber:	145043		
Dnrc no:	Not Reported		
Site name:	HOUGEN RODGER		
Latitude:	45.794719		
Longitude:	-108.460536		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	35		
Tract:	B	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	85		
Pwl:	0		
Swl:	33		
Recov wl:	0		
Yield:	15		
Test type:	PUMP	Test dur:	3
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	01/15/1990	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049499		

196
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS3001422**

Agency cd:	USGS	Site no:	454652108290401
Site name:	01S26E02BADC01		
Latitude:	454652	EDR Site id:	USGS3001422
Longitude:	1082904	Dec lat:	45.78106361
Dec lon:	-108.48513444	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	30
State:	30	County:	111
Country:	US	Land net:	Not Reported
Location map:	BILLINGS EAST	Map scale:	Not Reported
Altitude:	3105		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	Not Reported		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Upper YellowstoneLake Basin. Montana. Area = 1580 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	MST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ALLUVIUM (QUATERNARY)		
Well depth:	15.4	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1978-08-24	Ground water data end date:	1978-08-24
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1978-08-24	4.20	

197
North
1/2 - 1 Mile
Higher

MT WELLS **MTG400000050973**

Mnumber:	170807		
Dnrc no:	Not Reported		
Site name:	OASIS SPKLR		
Latitude:	45.807368		
Longitude:	-108.478807		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	BD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	29		
Pwl:	0		
Swl:	24.3		
Recov wl:	24.3		
Yield:	2		
Test type:	AIR	Test dur:	Not Reported
Recov tm:	.25		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC508
Comp date:	04/17/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050973		

AK198
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047826**

Mnumber:	129313		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-22		
Latitude:	45.783721		
Longitude:	-108.493089		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BBBBA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/21/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047826		

AK199
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047827**

Mnumber:	129314		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * RW-102		
Latitude:	45.783721		
Longitude:	-108.493089		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BBBBA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	8		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	03/19/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047827		

200
SSW **MT WELLS** **MTG400000047461**
1/2 - 1 Mile
Higher

Mnumber:	147355		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-42		
Latitude:	45.781431		
Longitude:	-108.488387		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BBDAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ESD INC	Lic no:	Not Reported
Comp date:	08/05/1994	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047461		

AL201
West **MT WELLS** **MTG400000049328**
1/2 - 1 Mile
Higher

Mnumber:	191179		
Dnrc no:	Not Reported		
Site name:	WASHINGTON CORP.(MODERN MACHINERY)		
Latitude:	45.793026		
Longitude:	-108.499522		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	BD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	22		
Pwl:	0		
Swl:	13.9		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAXIM TECHNOLOGIES	Lic no:	WWC344
Comp date:	08/07/2001	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049328		

AL202
West
1/2 - 1 Mile
Higher

MT WELLS **MTG400000049329**

Mnumber:	222061		
Dnrc no:	Not Reported		
Site name:	TOWN PUMP *M-8		
Latitude:	45.793026		
Longitude:	-108.499522		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	BD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	13.5		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	10/04/2005	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000049329		

AM203
WSW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000048603**

Mnumber:	133634		
Dnrc no:	Not Reported		
Site name:	METZ C.B & DOROTHY * MW-1A		
Latitude:	45.788476		
Longitude:	-108.498216		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	CAD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	21		
Pwl:	0		
Swl:	13.02		
Recov wl:	0		
Yield:	0		
Test type:	BAILER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HKM ASSOCIATES	Lic no:	MWC3
Comp date:	11/02/1992	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048603		

AM204
WSW **MT WELLS** **MTG400000048604**
1/2 - 1 Mile
Higher

Mnumber:	133637		
Dnrc no:	Not Reported		
Site name:	METZ C.B & DOROTHY * MW-2		
Latitude:	45.788476		
Longitude:	-108.498216		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	CAD	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	21		
Pwl:	0		
Swl:	12.91		
Recov wl:	0		
Yield:	0		
Test type:	BAILER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HKM ASSOCIATES	Lic no:	MWC3
Comp date:	11/02/1992	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048604		

AM205
WSW **MT WELLS** **MTG400000048605**
1/2 - 1 Mile
Higher

Mnumber:	133642		
Dnrc no:	Not Reported		
Site name:	METZ C.B. & DOROTHY * MW-3		
Latitude:	45.788476		
Longitude:	-108.498216		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	33		
Tract:	CAD	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	21		
Pwl:	0		
Swl:	12.52		
Recov wl:	0		
Yield:	0		
Test type:	BAILER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HKM ASSOCIATES	Lic no:	MWC3
Comp date:	11/02/1992	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000048605		

AN206
NNE **MT WELLS** **MTG400000050955**
1/2 - 1 Mile
Higher

Mnumber:	171698		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/09/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050955		

AN207
NNE **MT WELLS** **MTG400000050954**
1/2 - 1 Mile
Higher

Mnumber:	171697		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	34		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/20/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050954		

AN208
NNE **MT WELLS** **MTG400000050953**
1/2 - 1 Mile
Higher

Mnumber:	171696		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/08/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050953		

AN209
NNE **MT WELLS** **MTG400000050958**
1/2 - 1 Mile
Higher

Mnumber:	171701		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	32		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/15/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050958		

AN210
NNE **MT WELLS** **MTG400000050957**
1/2 - 1 Mile
Higher

Mnumber:	171700		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	33		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/16/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050957		

AN211
NNE **MT WELLS** **MTG400000050956**
1/2 - 1 Mile
Higher

Mnumber:	171699		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	24		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/08/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050956		

AN212
NNE **MT WELLS** **MTG400000050952**
1/2 - 1 Mile
Higher

Mnumber:	171695		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/07/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050952		

AN213
NNE **MT WELLS** **MTG400000050948**
1/2 - 1 Mile
Higher

Mnumber:	171691		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	24		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/16/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	Not Reported
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050948		

AN214
NNE **MT WELLS** **MTG400000050947**
1/2 - 1 Mile
Higher

Mnumber:	171690		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	28		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/16/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	Not Reported
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050947		

AN215
NNE **MT WELLS** **MTG400000050946**
1/2 - 1 Mile
Higher

Mnumber:	157631		
Dnrc no:	Not Reported		
Site name:	CENEX SUPPLY & MARKETING INC		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	30		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	PRO PUMP & EQUIPMENT	Lic no:	WWC508
Comp date:	04/16/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050946		

AN216
NNE **MT WELLS** **MTG400000050951**
1/2 - 1 Mile
Higher

Mnumber:	171694		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/16/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050951		

AN217
NNE **MT WELLS** **MTG400000050950**
1/2 - 1 Mile
Higher

Mnumber:	171693		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	33		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/19/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050950		

AN218
NNE **MT WELLS** **MTG400000050949**
1/2 - 1 Mile
Higher

Mnumber:	171692		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	27		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/16/1996	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	Not Reported
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050949		

AN219
NNE **MT WELLS** **MTG400000050959**
1/2 - 1 Mile
Higher

Mnumber:	171702		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	37		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	03/29/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050959		

AN220
NNE **MT WELLS** **MTG400000050969**
1/2 - 1 Mile
Higher

Mnumber:	237624		
Dnrc no:	Not Reported		
Site name:	CHS INC.* EP-22		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	29		
Pwl:	0		
Swl:	18.21		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	07/24/2007	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050969		

AN221
NNE **MT WELLS** **MTG400000050968**
1/2 - 1 Mile
Higher

Mnumber:	219637		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY TRUCKSTOP		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	20		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ENGELMEIER	Lic no:	WWC355
Comp date:	11/18/1997	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050968		

AN222
NNE **MT WELLS** **MTG400000050967**
1/2 - 1 Mile
Higher

Mnumber:	211369		
Dnrc no:	Not Reported		
Site name:	CENEX HARVEST STATES		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	27		
Pwl:	0		
Swl:	21		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	06/08/2004	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050967		

AN223
NNE **MT WELLS** **MTG400000050972**
1/2 - 1 Mile
Higher

Mnumber:	237627		
Dnrc no:	Not Reported		
Site name:	CHS INC* EP-19		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	30		
Pwl:	0		
Swl:	18.9		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	07/23/2007	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050972		

AN224
NNE **MT WELLS** **MTG400000050971**
1/2 - 1 Mile
Higher

Mnumber:	237626		
Dnrc no:	Not Reported		
Site name:	CHS INC.* EP-20		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	28		
Pwl:	0		
Swl:	18.67		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	07/23/2007	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050971		

AN225
NNE **MT WELLS** **MTG400000050970**
1/2 - 1 Mile
Higher

Mnumber:	237625		
Dnrc no:	Not Reported		
Site name:	CHS INC* EP-21		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	29		
Pwl:	0		
Swl:	17.28		
Recov wl:	0		
Yield:	0		
Test type:	Not Reported	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	HAZ TECH DRILLING IN	Lic no:	MWC344
Comp date:	07/24/2007	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050970		

AN226
NNE **MT WELLS** **MTG400000050966**
1/2 - 1 Mile
Higher

Mnumber:	171827		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	24		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	11/24/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050966		

AN227
NNE **MT WELLS** **MTG400000050962**
1/2 - 1 Mile
Higher

Mnumber:	171705		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	29		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/12/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050962		

AN228
NNE **MT WELLS** **MTG400000050961**
1/2 - 1 Mile
Higher

Mnumber:	171704		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	32		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/14/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050961		

AN229
NNE **MT WELLS** **MTG400000050960**
1/2 - 1 Mile
Higher

Mnumber:	171703		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	32		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/13/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050960		

AN230
NNE **MT WELLS** **MTG400000050965**
1/2 - 1 Mile
Higher

Mnumber:	171826		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	28		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	11/23/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050965		

AN231
NNE **MT WELLS** **MTG400000050964**
1/2 - 1 Mile
Higher

Mnumber:	171825		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	29		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	11/23/1998	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050964		

AN232
NNE **MT WELLS** **MTG400000050963**
1/2 - 1 Mile
Higher

Mnumber:	171706		
Dnrc no:	Not Reported		
Site name:	FORMER EAST PARKWAY		
Latitude:	45.807368		
Longitude:	-108.473579		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	AC	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	32		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	03/30/1999	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000050963		

AO233
South **MT WELLS** **MTG400000047123**
1/2 - 1 Mile
Higher

Mnumber:	129347		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-10		
Latitude:	45.779828		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BDAA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	21		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/20/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047123		

AO234
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047122**

Mnumber:	129344		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-9		
Latitude:	45.779828		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BDAA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	25		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/21/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047122		

AO235
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047125**

Mnumber:	129351		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-12		
Latitude:	45.779828		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BDAA	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/22/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047125		

AO236
South
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047124**

Mnumber:	129349		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * PZ-11		
Latitude:	45.779828		
Longitude:	-108.482508		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BDAA	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	23		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ADVANCED WELL DRILLI	Lic no:	Not Reported
Comp date:	02/19/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047124		

AK237
SW
1/2 - 1 Mile
Higher

MT WELLS **MTG400000047824**

Mnumber:	129315		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-23		
Latitude:	45.783721		
Longitude:	-108.493873		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BBBBB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	22		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/21/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047824		

AK238
SW **MT WELLS** **MTG400000047825**
1/2 - 1 Mile
Higher

Mnumber:	129316		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * OR-4		
Latitude:	45.783721		
Longitude:	-108.493873		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BBBBB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	MAYES DRILLING INC	Lic no:	Not Reported
Comp date:	03/12/1991	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047825		

239
North **MT WELLS** **MTG400000051053**
1/2 - 1 Mile
Higher

Mnumber:	182033		
Dnrc no:	Not Reported		
Site name:	WILSON CAROLINE		
Latitude:	45.80827987		
Longitude:	-108.4801137		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01N	Range:	26E
Isp sect:	27		
Tract:	BDB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	303		
Pwl:	260		
Swl:	101		
Recov wl:	101		
Yield:	4		
Test type:	PUMP	Test dur:	4
Recov tm:	2		
Drillset:	0		
Who drill:	AMERICAN DRILLING &	Lic no:	WWC344
Comp date:	04/28/2000	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000051053		

AP240
SSW **MT WELLS** **MTG400000047118**
1/2 - 1 Mile
Higher

Mnumber:	129353		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R-15		
Latitude:	45.779828		
Longitude:	-108.484076		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BDAB	County:	YELLOWSTONE
Type:	WELL		
Tot dept:	19		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	BRAUN	Lic no:	Not Reported
Comp date:	09/26/1988	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047118		

AP241
SSW **MT WELLS** **MTG400000047119**
1/2 - 1 Mile
Higher

Mnumber:	133222		
Dnrc no:	Not Reported		
Site name:	BILLINGS REFINERY * R15-A		
Latitude:	45.779828		
Longitude:	-108.484076		
Geomethod:	TRS-SEC	Datum:	NAD83
Township:	01S	Range:	26E
Isp sect:	2		
Tract:	BDAB	County:	YELLOWSTONE
Type:	WELL		

Tot dept:	13		
Pwl:	0		
Swl:	0		
Recov wl:	0		
Yield:	0		
Test type:	OTHER	Test dur:	Not Reported
Recov tm:	0		
Drillset:	0		
Who drill:	ESD INC	Lic no:	Not Reported
Comp date:	09/14/1992	Pws id:	Not Reported
Gwsi id:	Not Reported	Data sour:	LOG
Wqdata:	N	Hydrograph:	N
Site id:	MTG400000047119		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MT Radon

Radon Test Results

Total Meas	Mean	Geom mean	Median	Std Dev	Max	% Sites>4 pCi/L	% Sites>10 pCi/L
101	3.7	2.9	3.2	2.7	14.6	32	0

Federal EPA Radon Zone for YELLOWSTONE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 59101

Number of sites tested: 17

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	4.765 pCi/L	65%	35%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Montana Public Water Supply Well Locations
Source: Department of Environmental Quality
Telephone: 406-444-3744

Montana Groundwater Information Center Water Well Data
Source: Bureau of Mines and Geology
Telephone: 406-444-5358

OTHER STATE DATABASE INFORMATION

RADON

State Database: MT Radon
Source: Department of Environmental Quality
Telephone: 406-444-6768
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Yale Oil
700 First Avenue North
Billings, MT 59101

Inquiry Number: 3156252.3
August 31, 2011

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

8/31/11

Site Name:
Yale Oil
700 First Avenue North
Billings, MT 59101

Client Name:
Cardno ERI
4572 Telephone Road
Ventura, CA 93033

EDR Inquiry # 3156252.3

Contact: Robert Serrato

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Cardno ERI were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Yale Oil
Address: 700 First Avenue North
City, State, Zip: Billings, MT 59101
Cross Street:
P.O. # 051020M111
Project: Yale Oil
Certification # 4D56-47F7-8FB2

Maps Provided:

1969
1968
1961
1958
1948
1923

Sanborn® Library search results
Certification # 4D56-47F7-8FB2

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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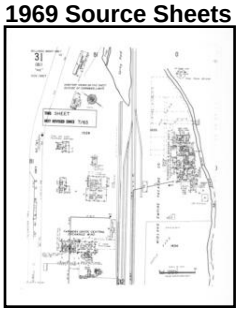
Sanborn Sheet Thumbnails

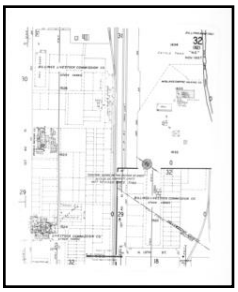
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1969 Source Sheets



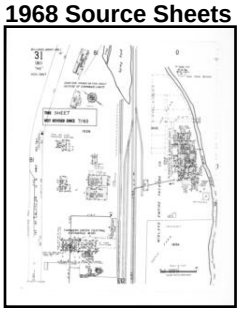
Volume 1, Sheet 31

Volume 1, Sheet 81



Volume 1, Sheet 32

1968 Source Sheets

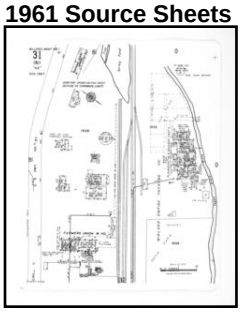


Volume 1, Sheet 31

Volume 1, Sheet 81

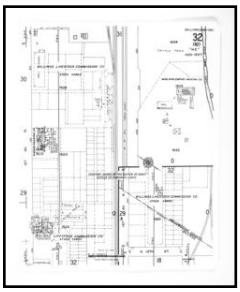
Volume 1, Sheet 32

1961 Source Sheets



Volume 1, Sheet 31

Volume 1, Sheet 81



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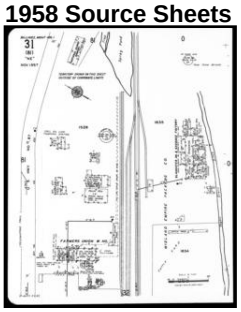
1958 Source Sheets



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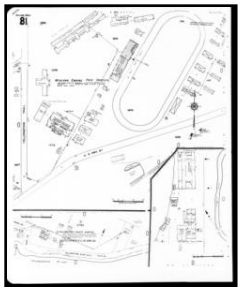

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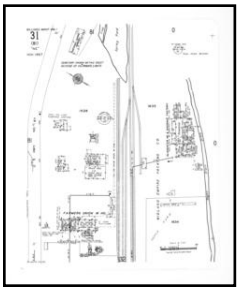

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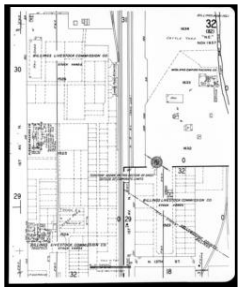
Volume 1, Sheet 81



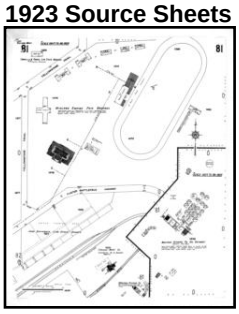
Volume 1, Sheet 32

1948 Source Sheets

Volume 1, Sheet 81

Volume 1, Sheet 82

1923 Source Sheets



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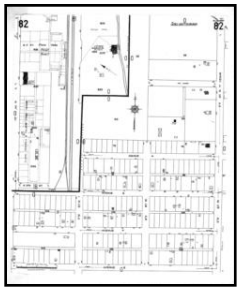
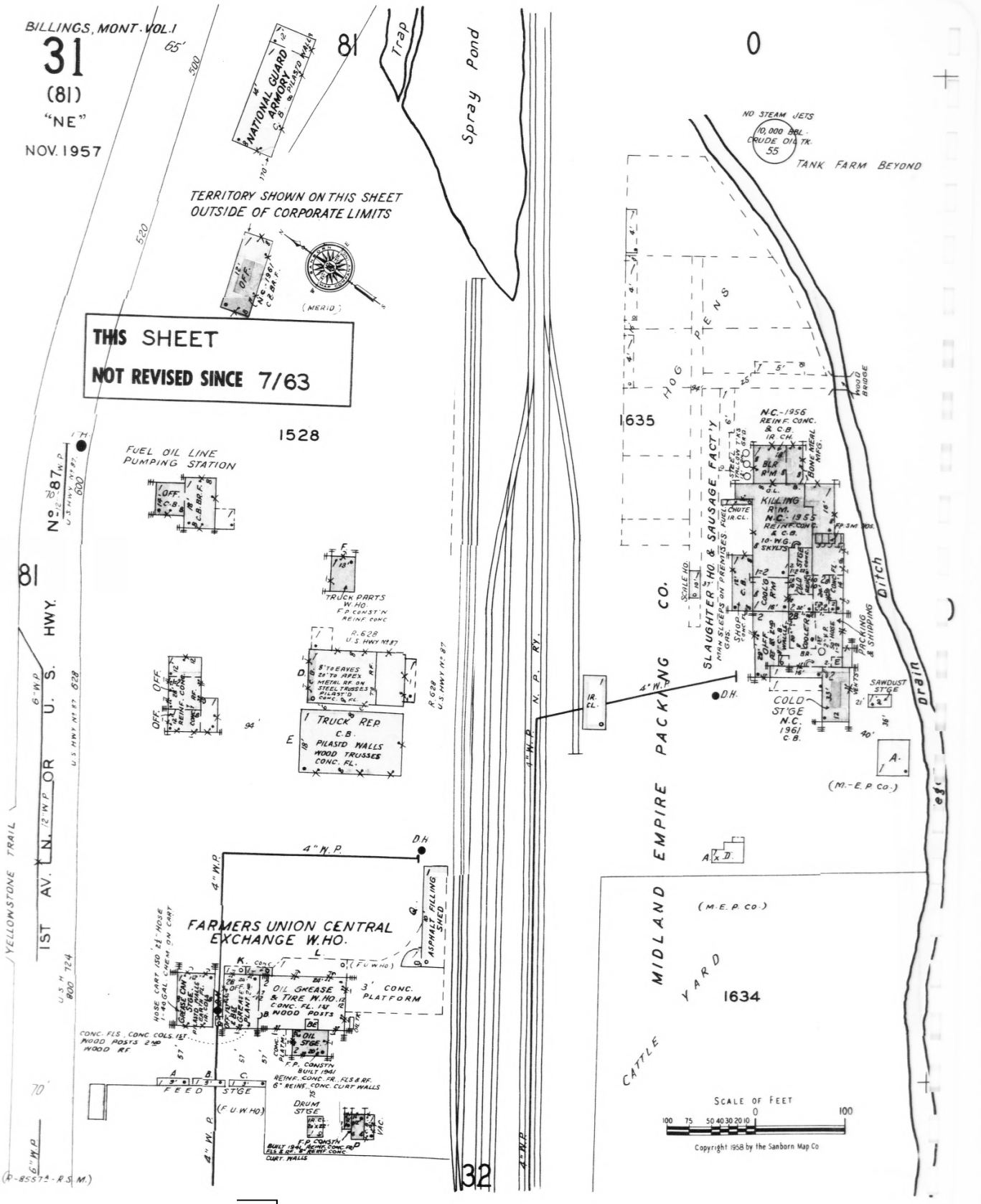


Volume 1, Sheet 82

1969 Certified Sanborn Map



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Site Name:	Yale Oil
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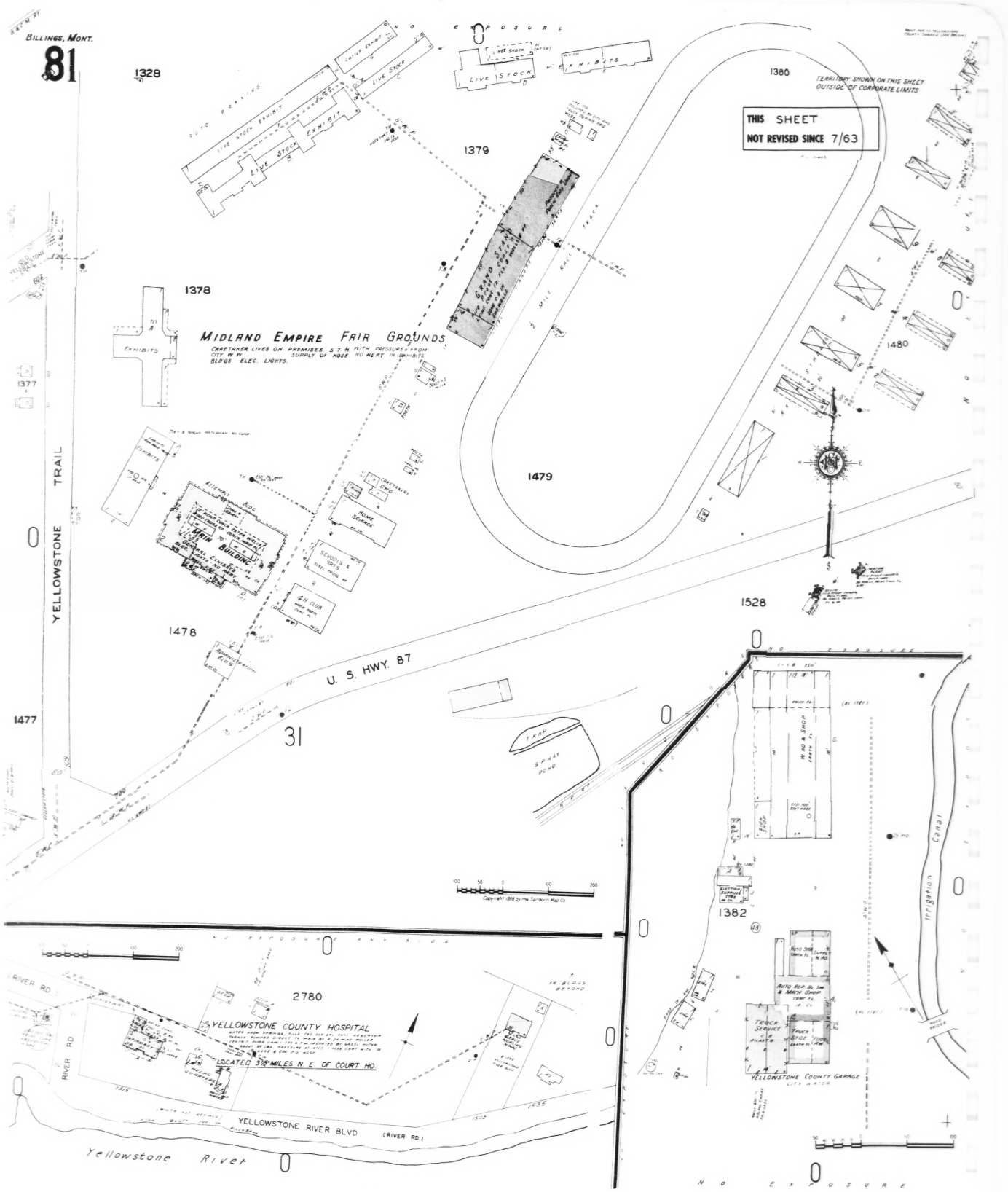
City, ST, ZIP:	Billings MT 59101
Client:	Cardno ERI
EDR Inquiry:	3156252.3
Order Date:	8/31/2011 10:16:02 AM
Certification #	4D56-47F7-8FB2
Copyright:	1969

1969 Certified Sanborn Map



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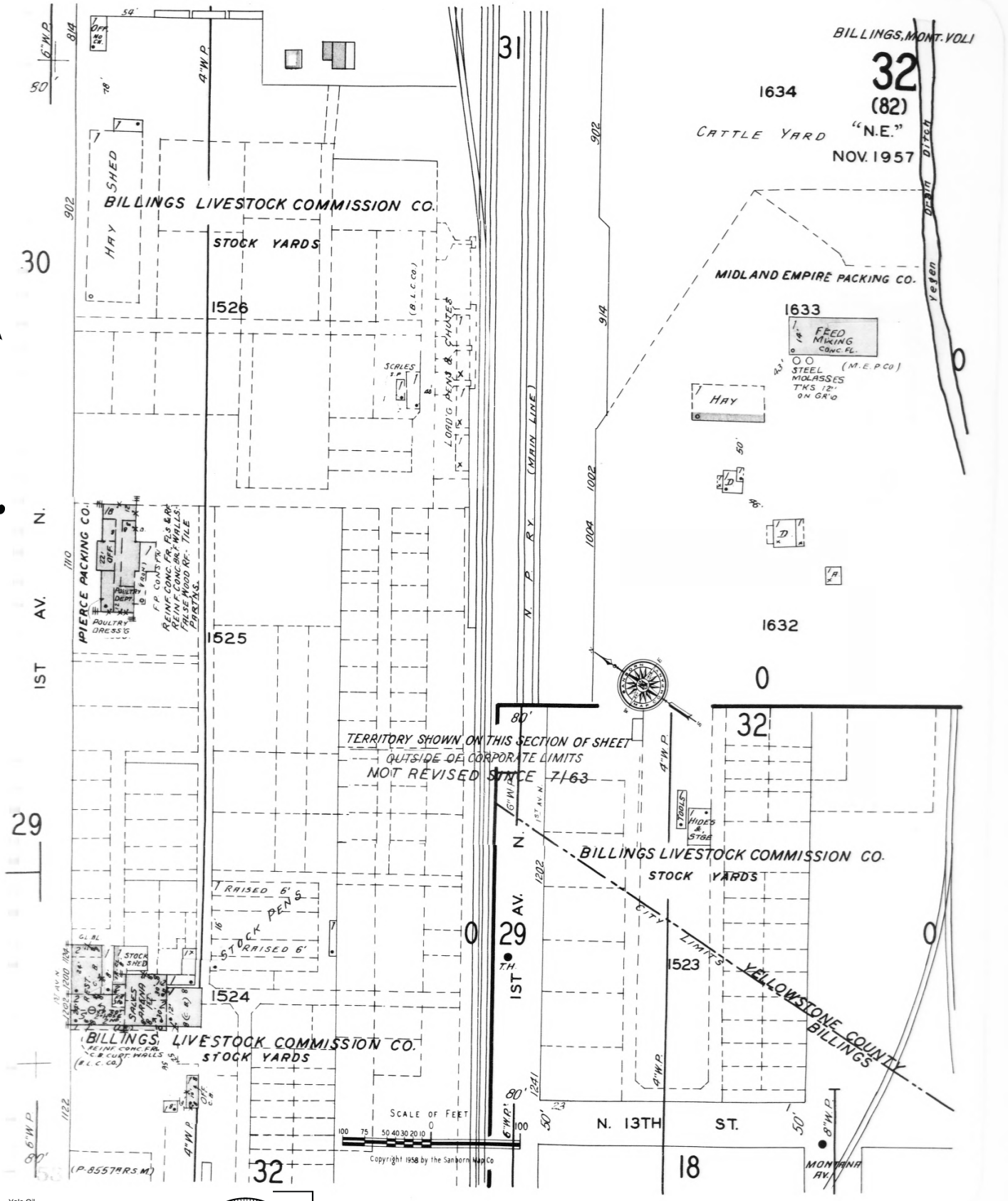

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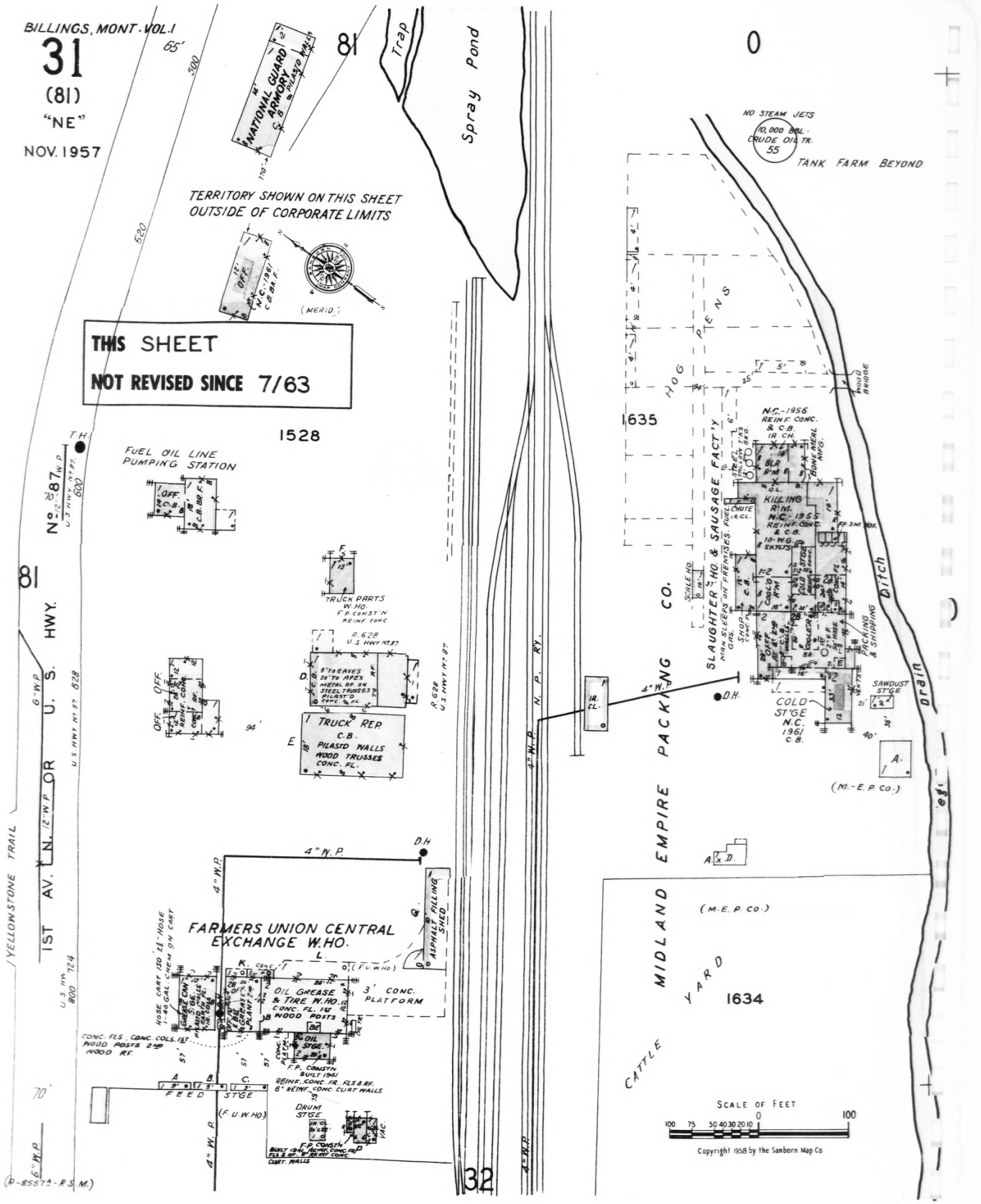
1968 Certified Sanborn Map



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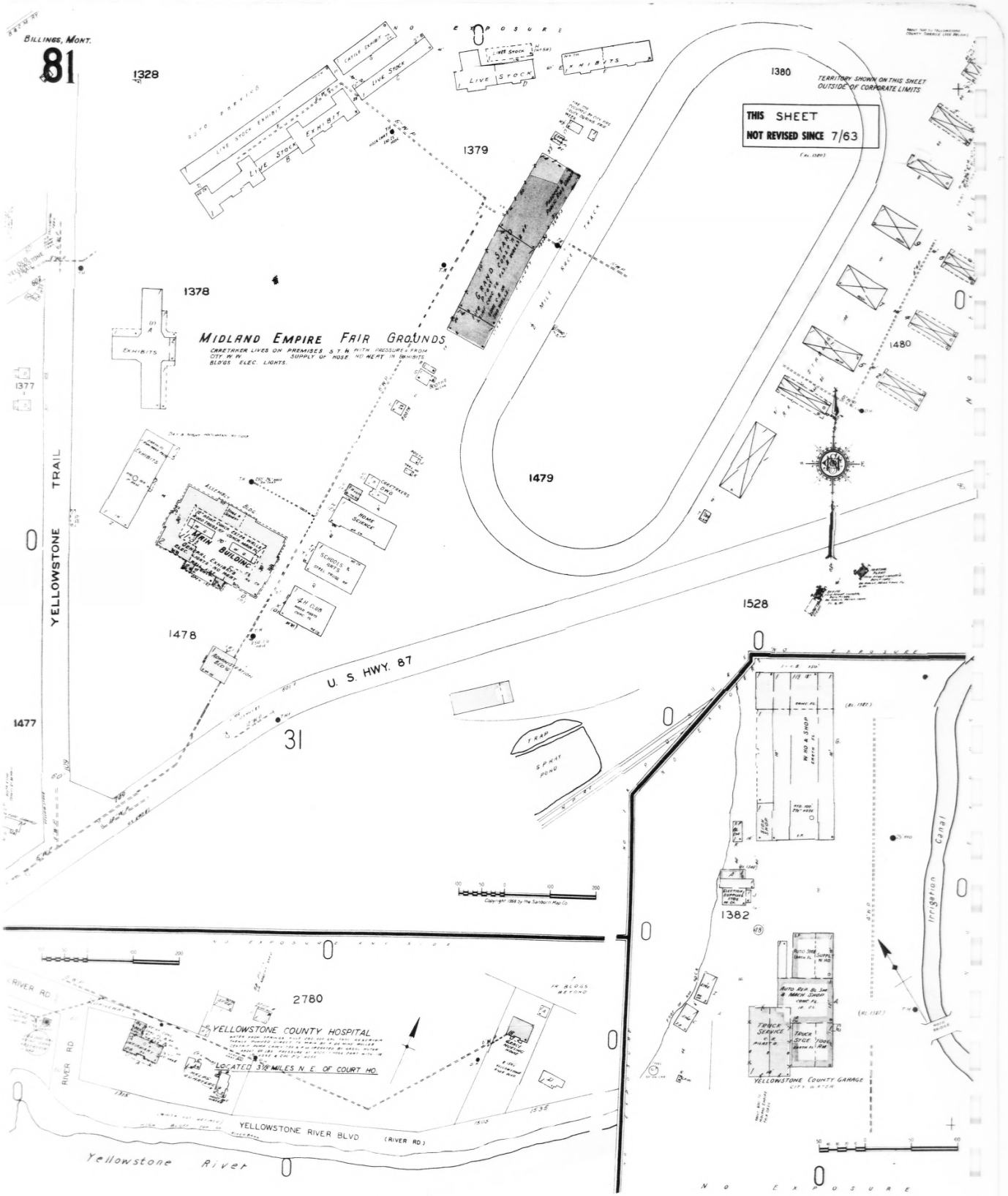
1968 Certified Sanborn Map



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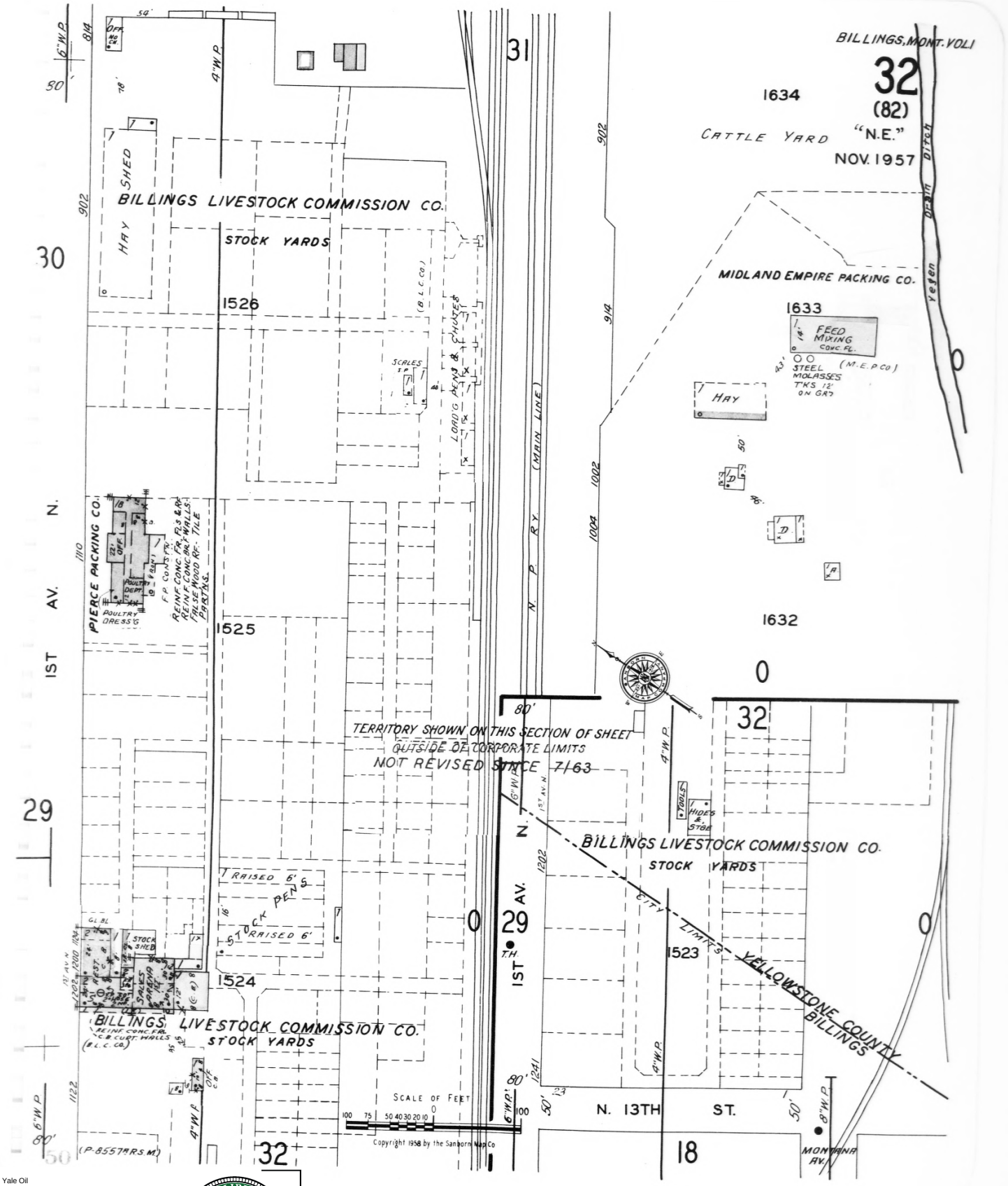

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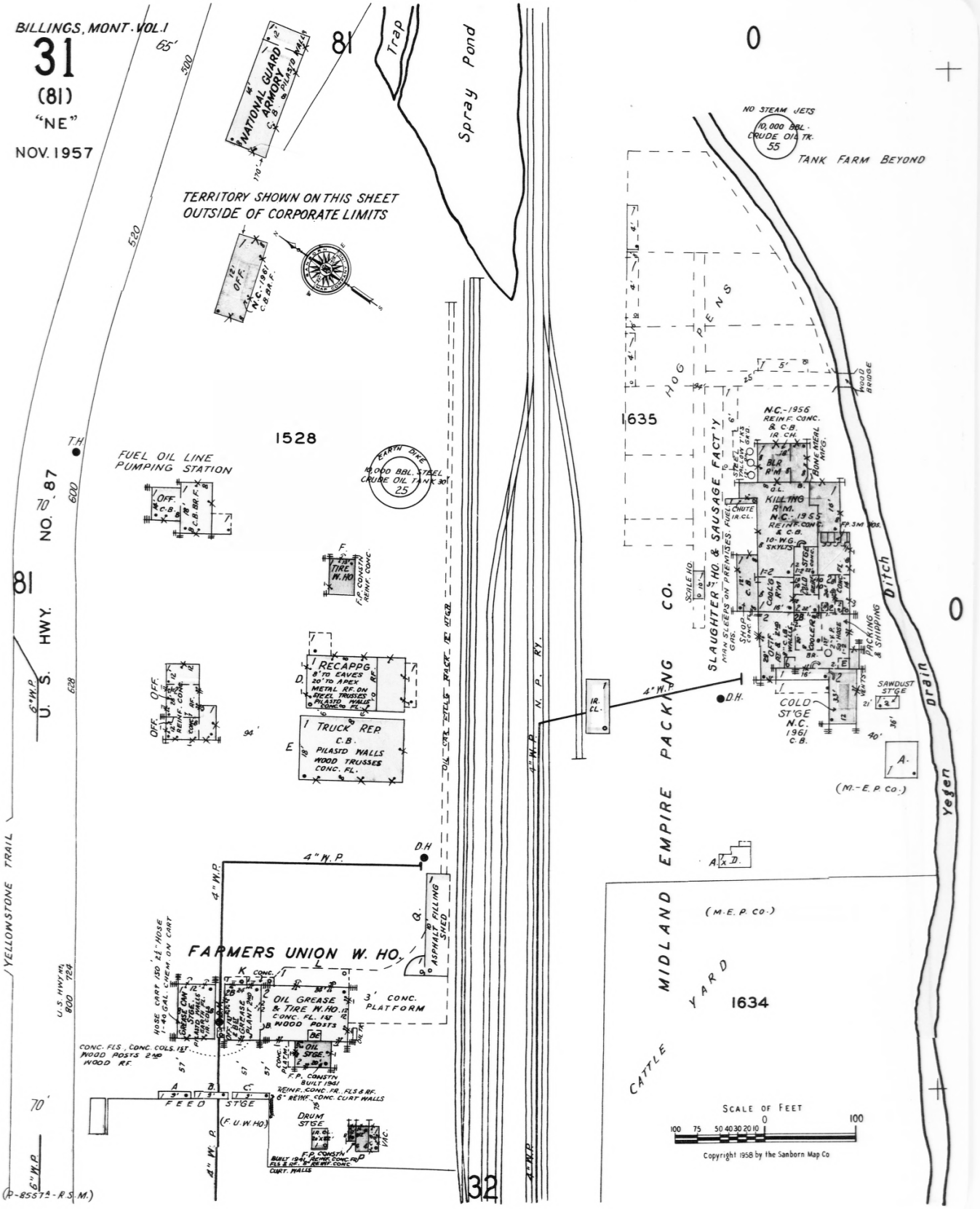
Copyright:	1968

1961 Certified Sanborn Map



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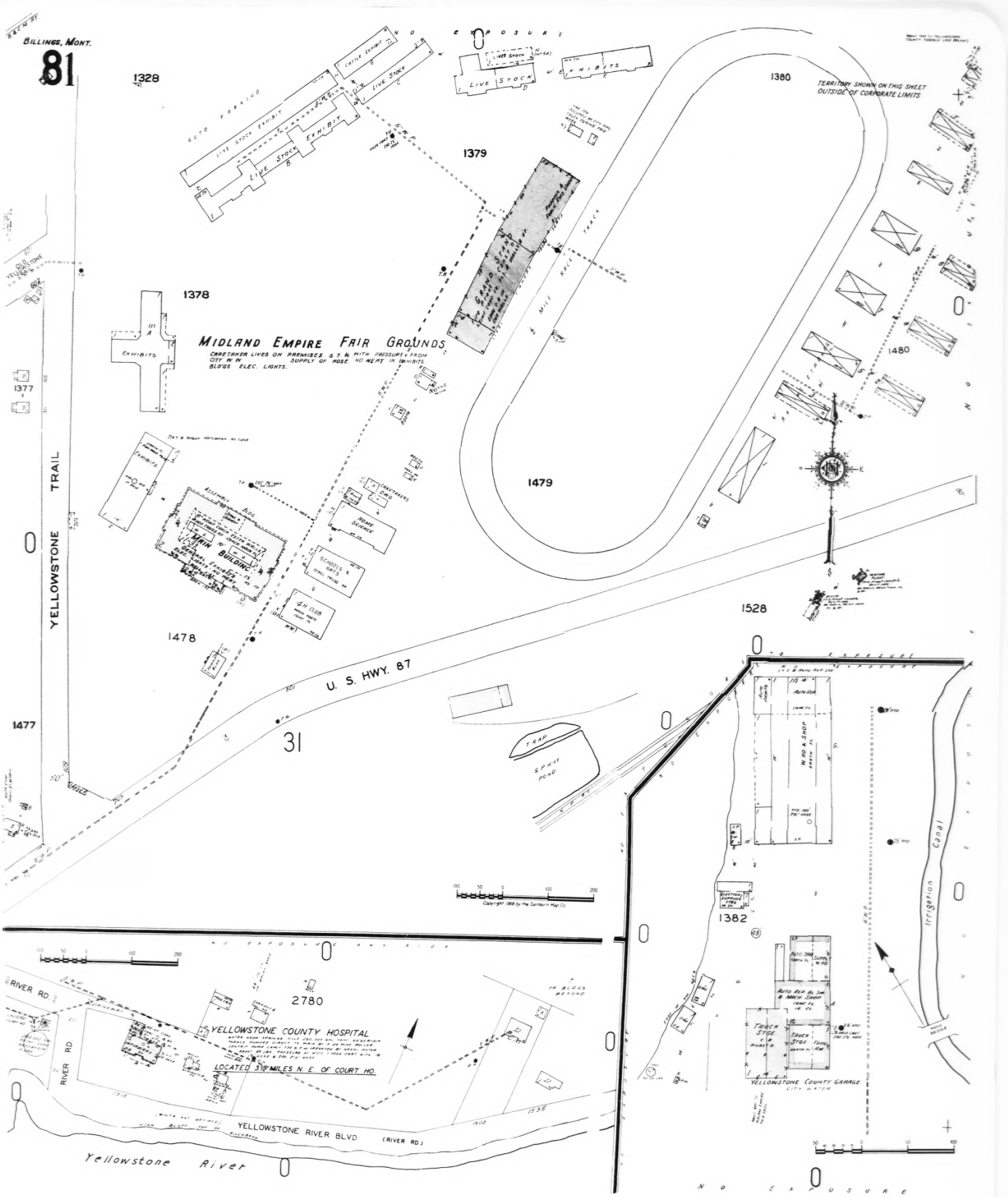
Copyright:	1961

1961 Certified Sanborn Map



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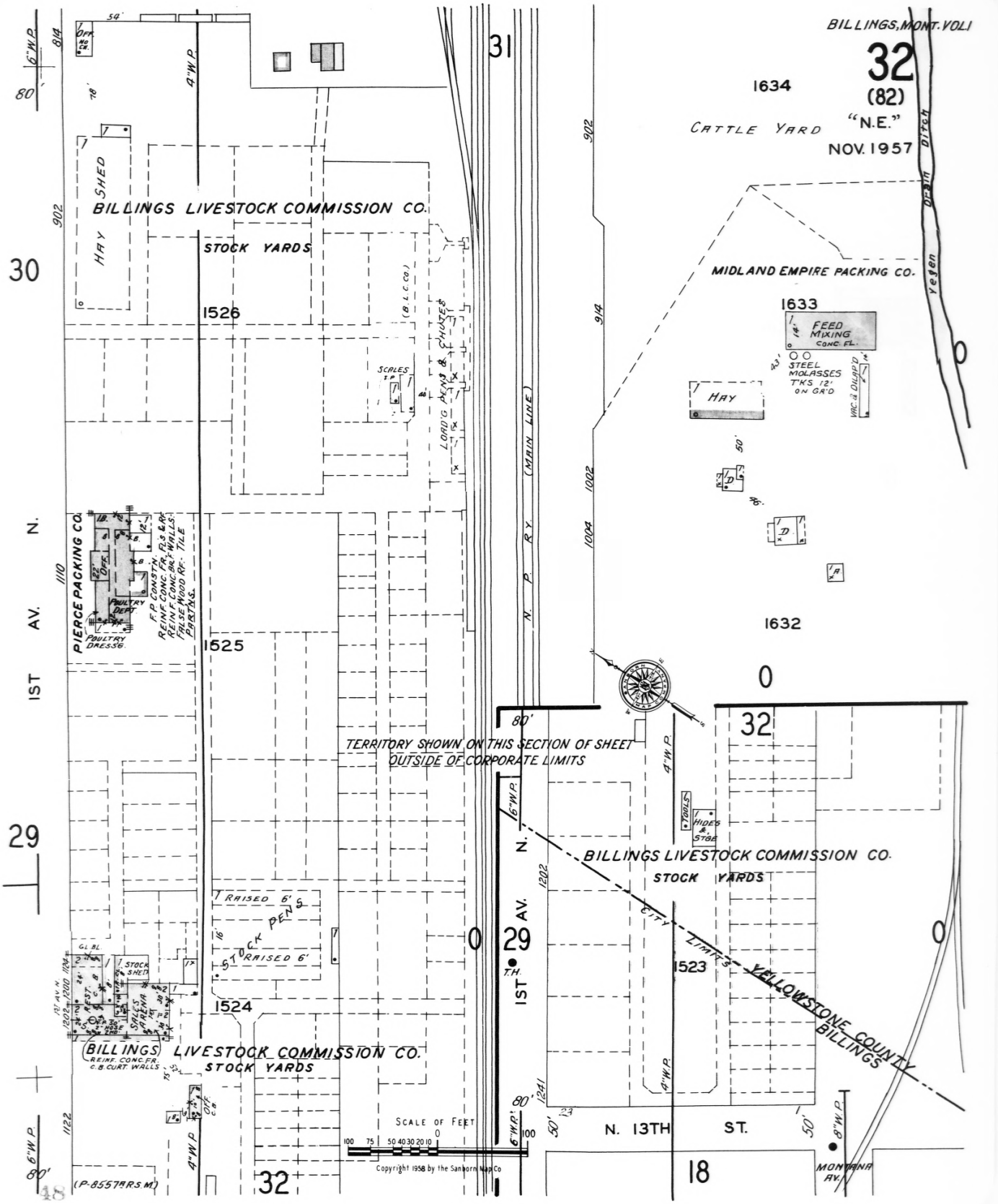

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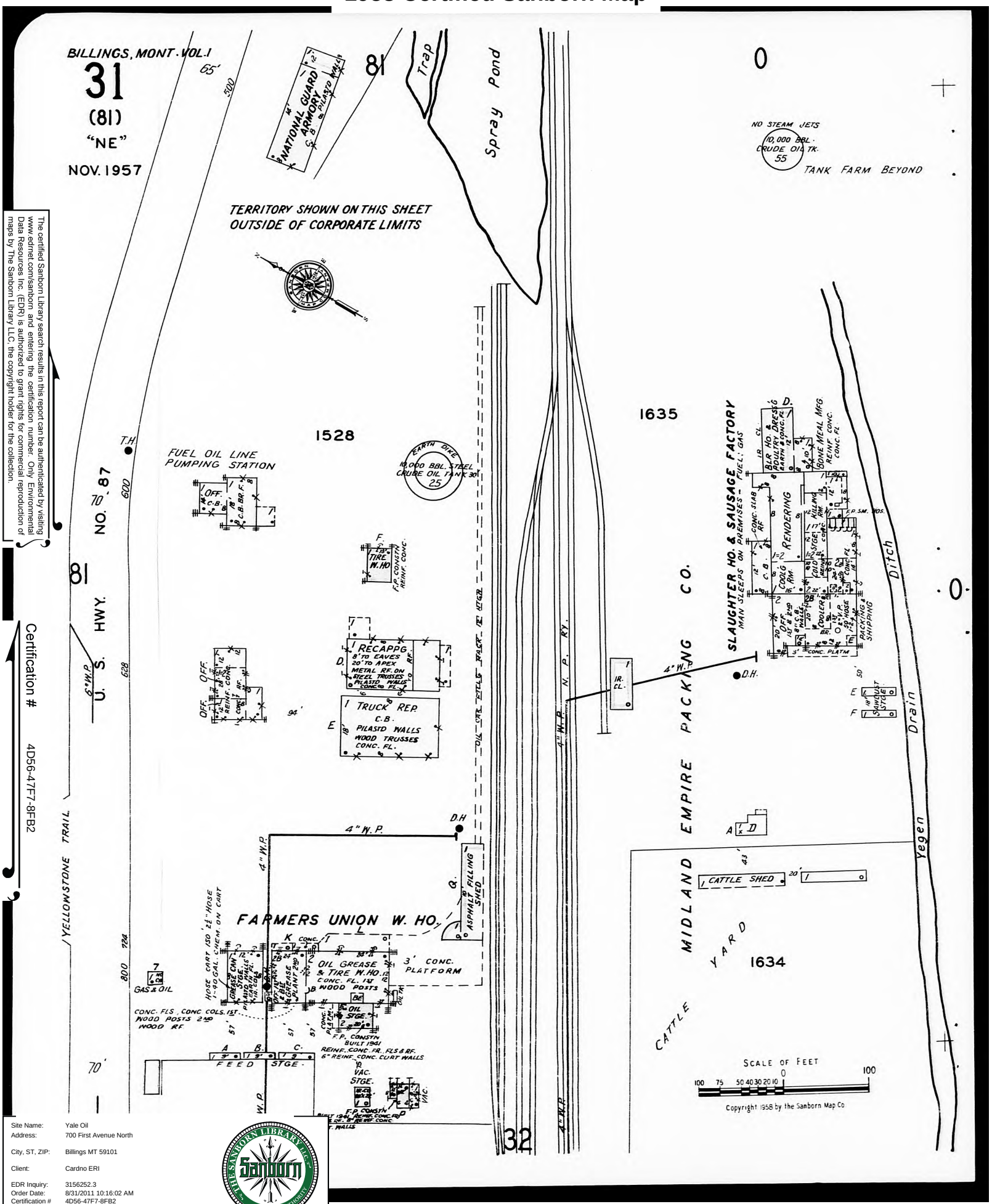
Order Date:	8/31/2011 10:16:02 AM
Certification #	4D56-47F7-8FB2
Copyright:	1961

1958 Certified Sanborn Map



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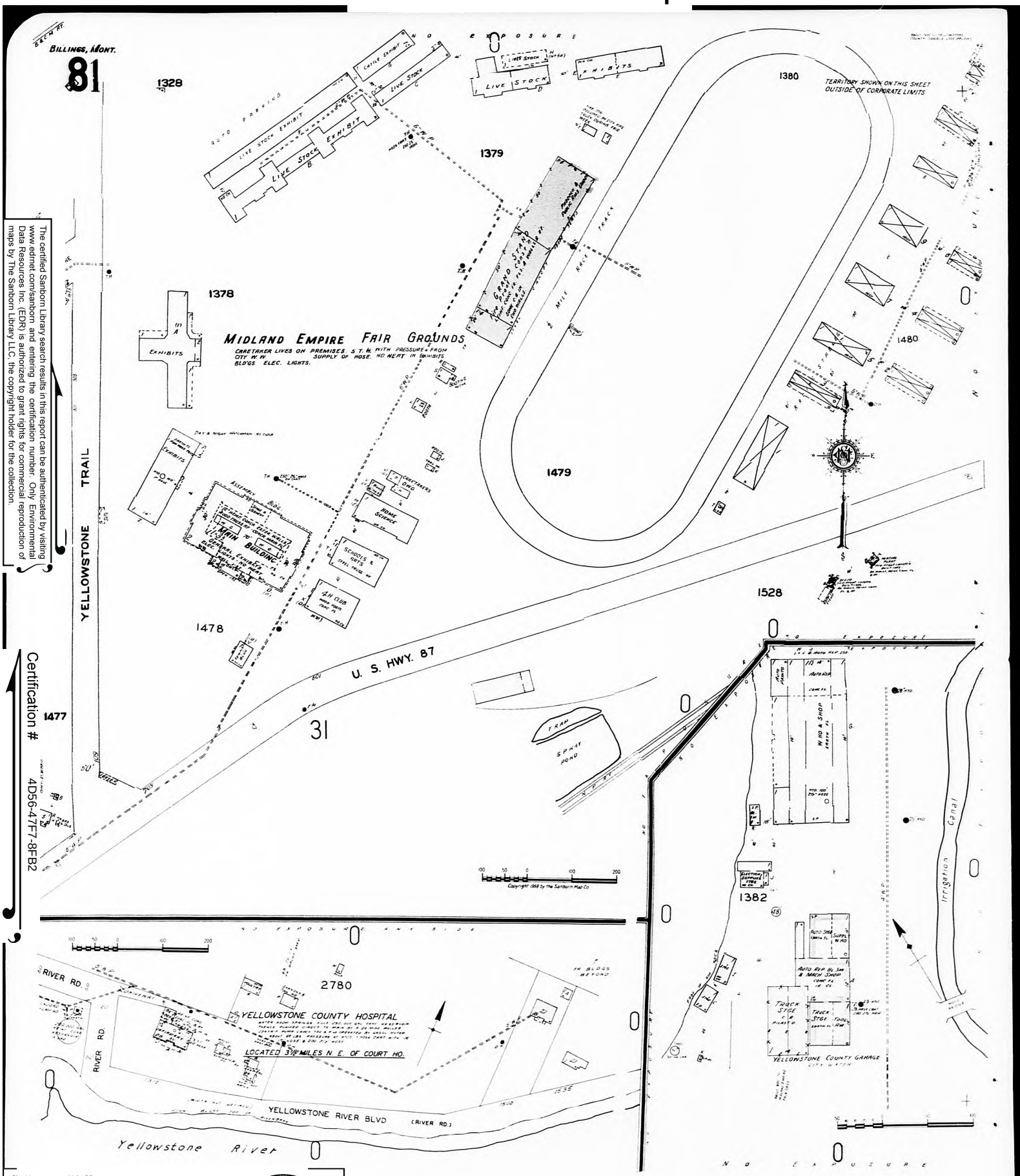
Certification #	4D56-47F7-8FB2
Copyright:	1958

1958 Certified Sanborn Map



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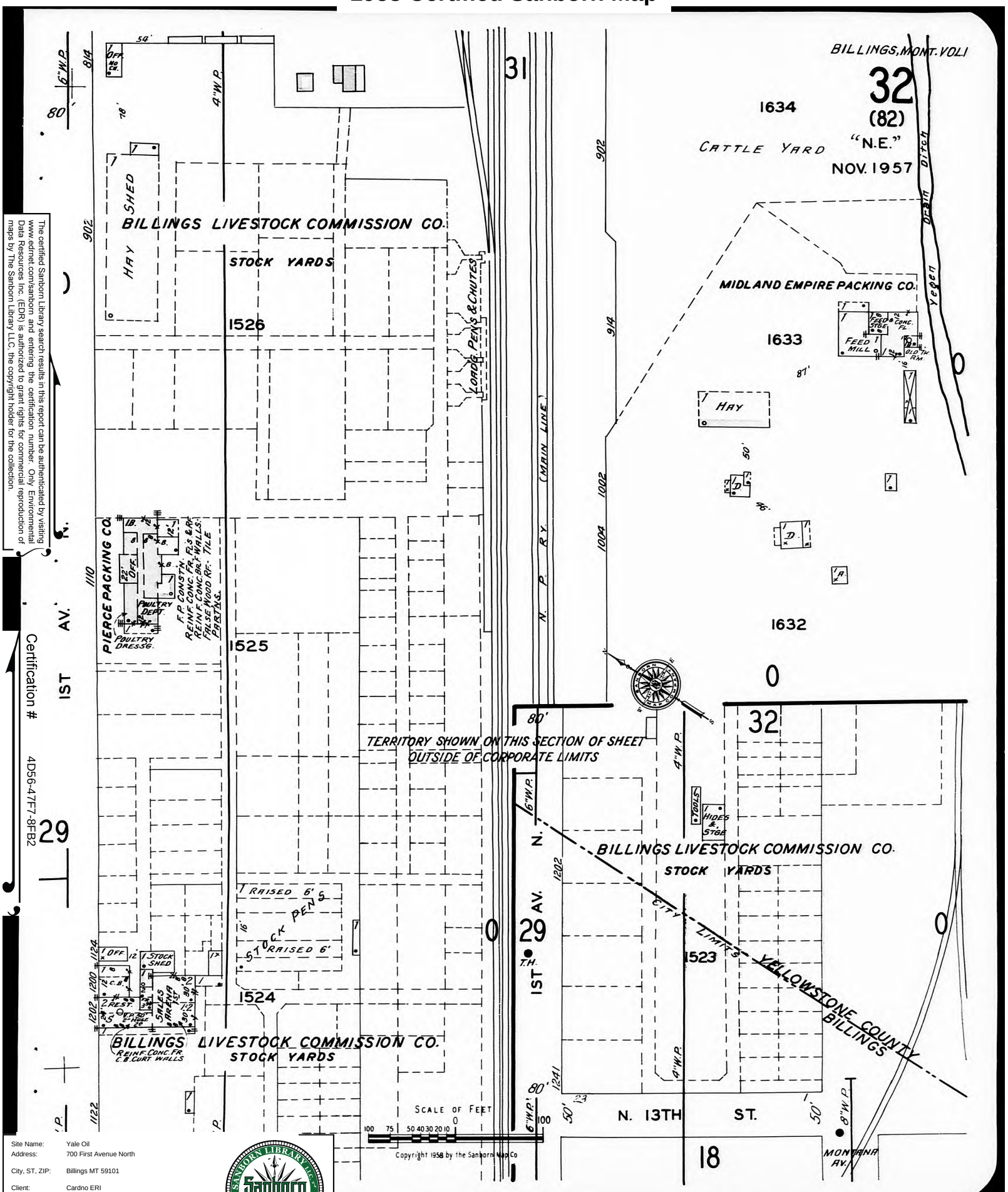
1958 Certified Sanborn Map



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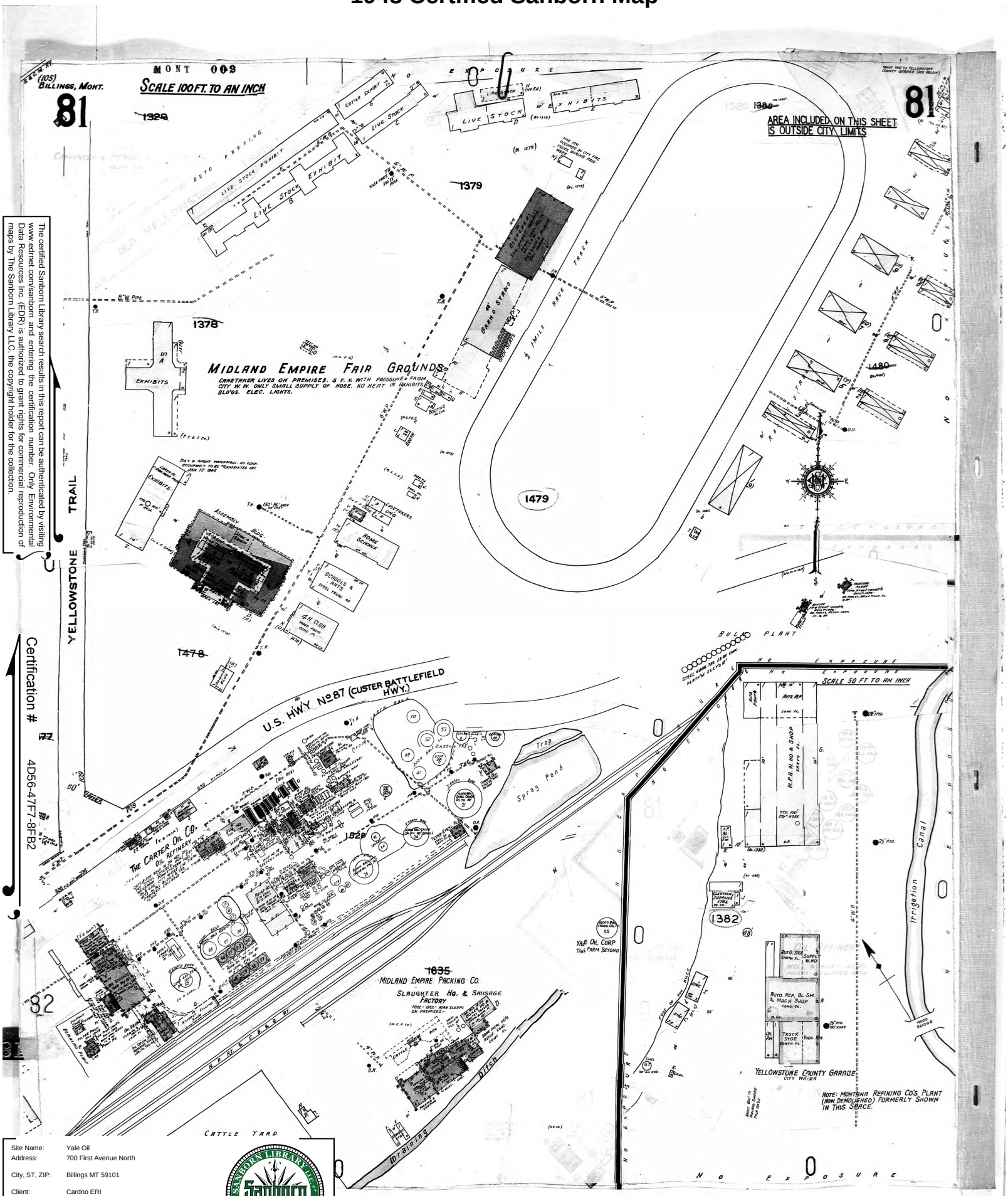
1948 Certified Sanborn Map



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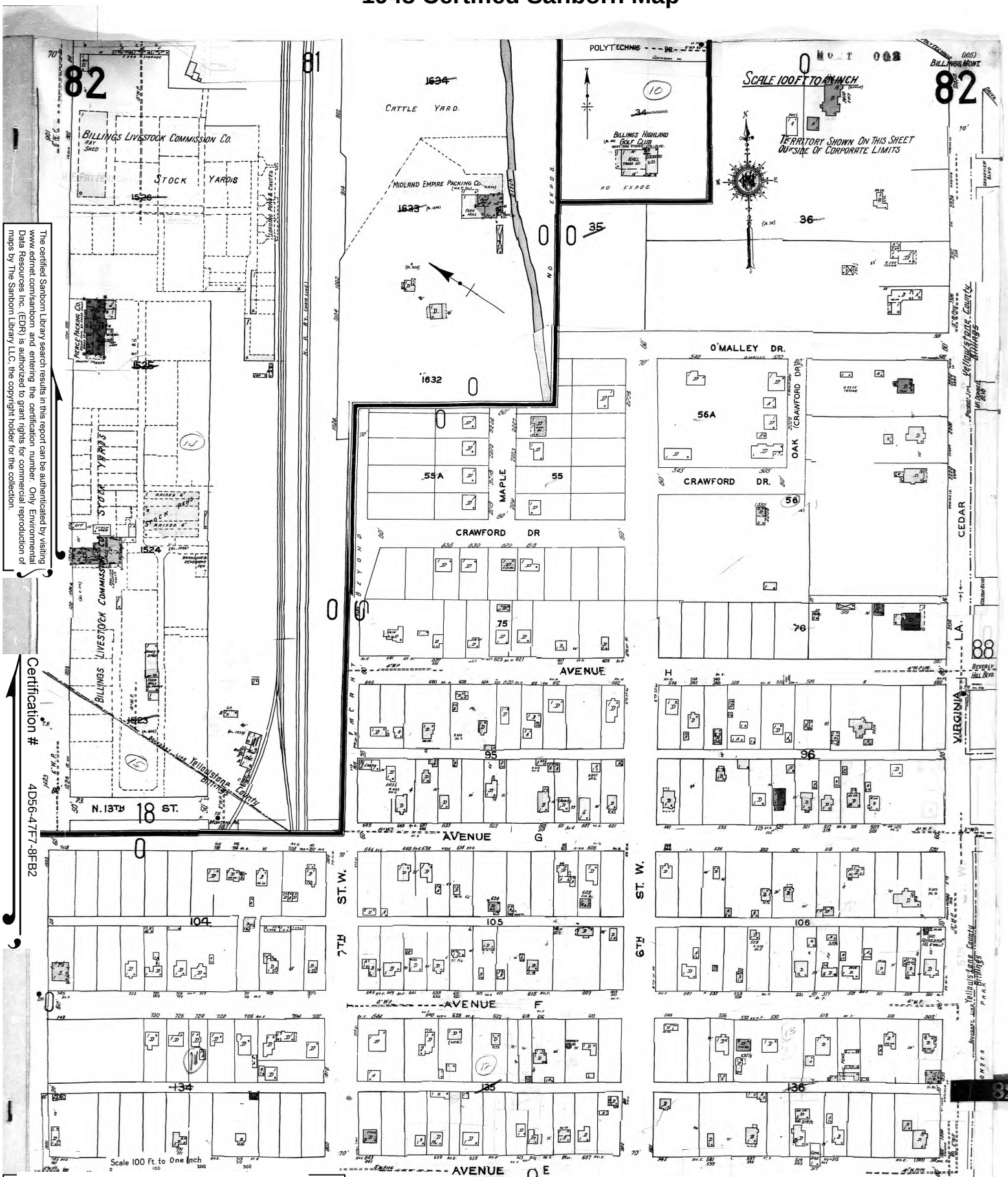
Copyright:	1948

1948 Certified Sanborn Map



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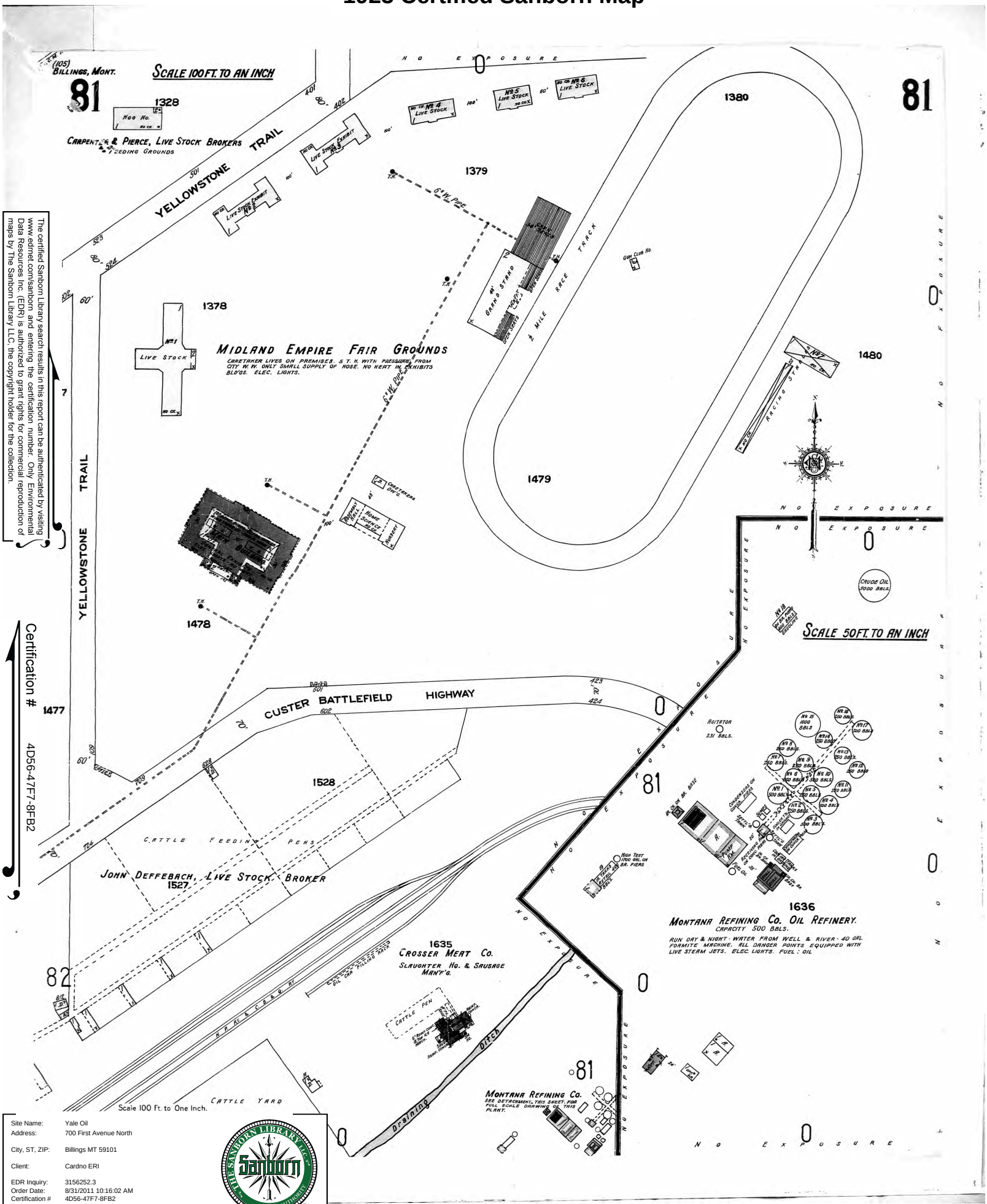
Certification # 4D56-47F7-8FB2

Scale 100 Ft. to One Inch

Site Name:	Yale Oil
Address:	700 First Avenue North
City, ST, ZIP:	Billings MT 59101
Client:	Cardno ERI
EDR Inquiry:	3156252.3
Order Date:	8/31/2011 10:16:02 AM
Certification #	4D56-47F7-8FB2
Copyright:	1948

THE SANBORN LIBRARY LLC Sanborn SEAL OF AUTHORITY

1923 Certified Sanborn Map



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Copyright:	1923

1923 Certified Sanborn Map

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Order Date:	8/31/2011 10:16:02 AM
Certification #	4D56-47F7-8FB2
Copyright:	1923

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Yale Oil
700 First Avenue North
Billings, MT 59101

Inquiry Number: 3156252.4
August 31, 2011

EDR Historical Topographic Map Report

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

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with any questions or comments.

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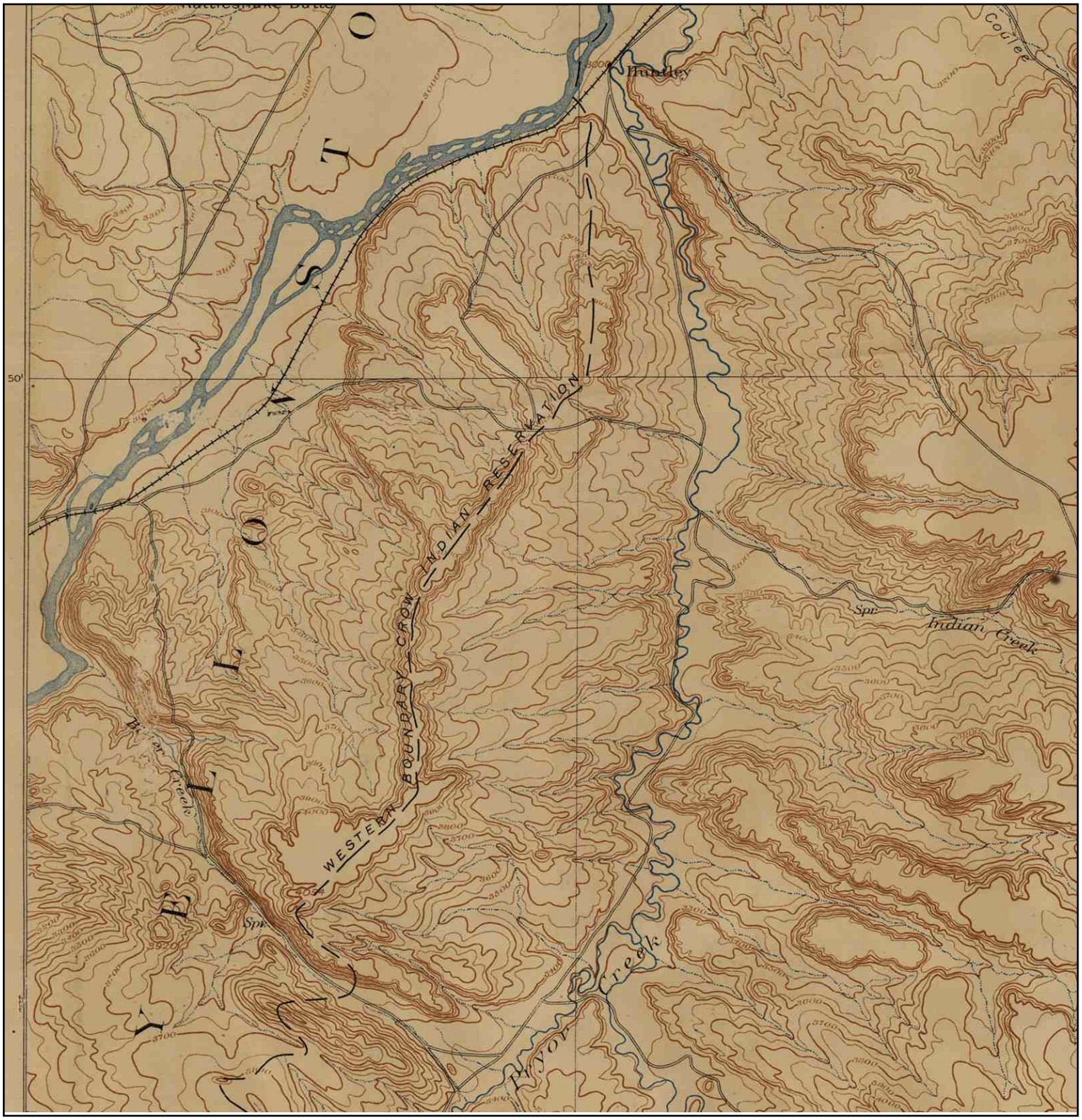
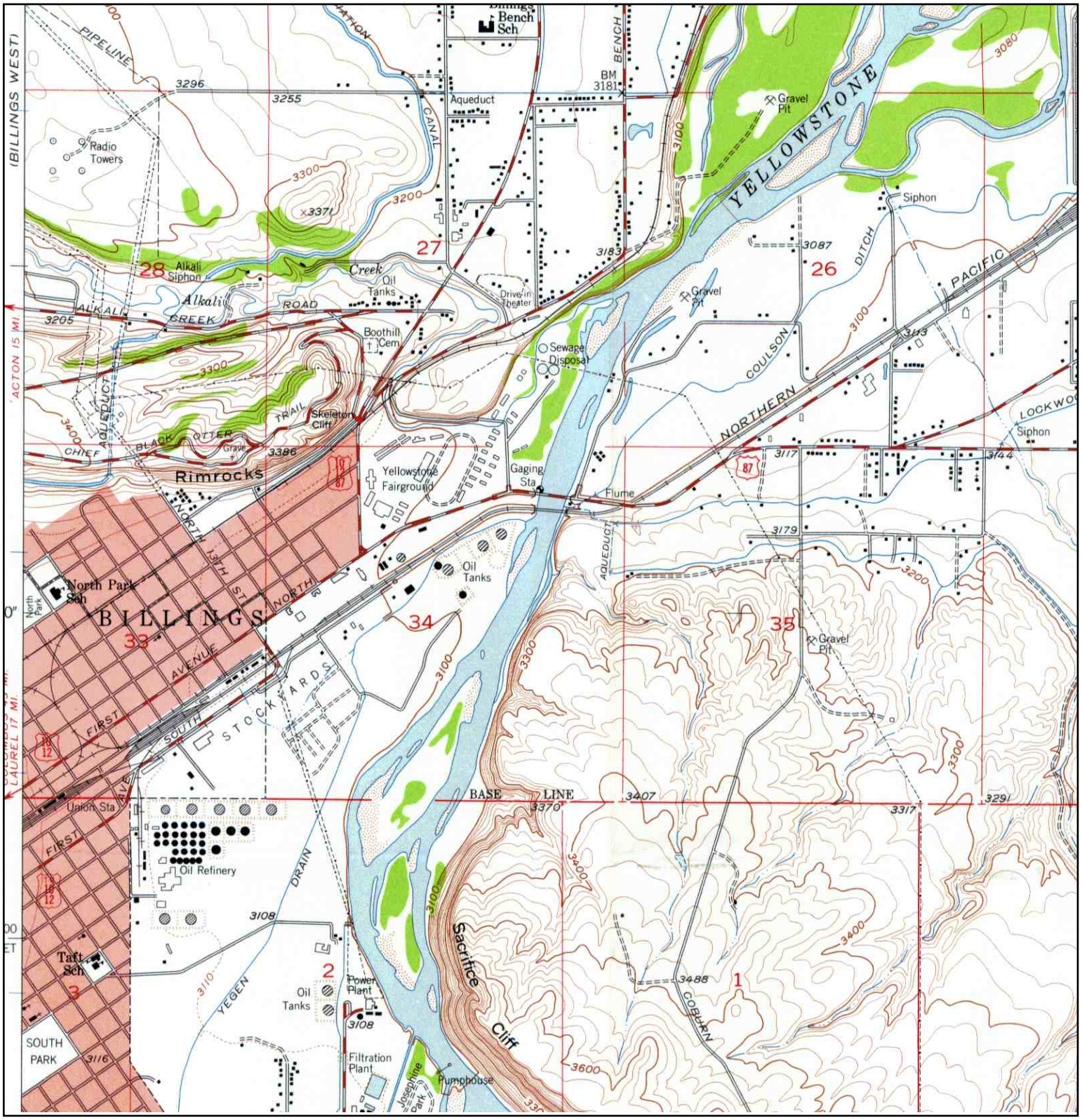
Historical Topographic Map



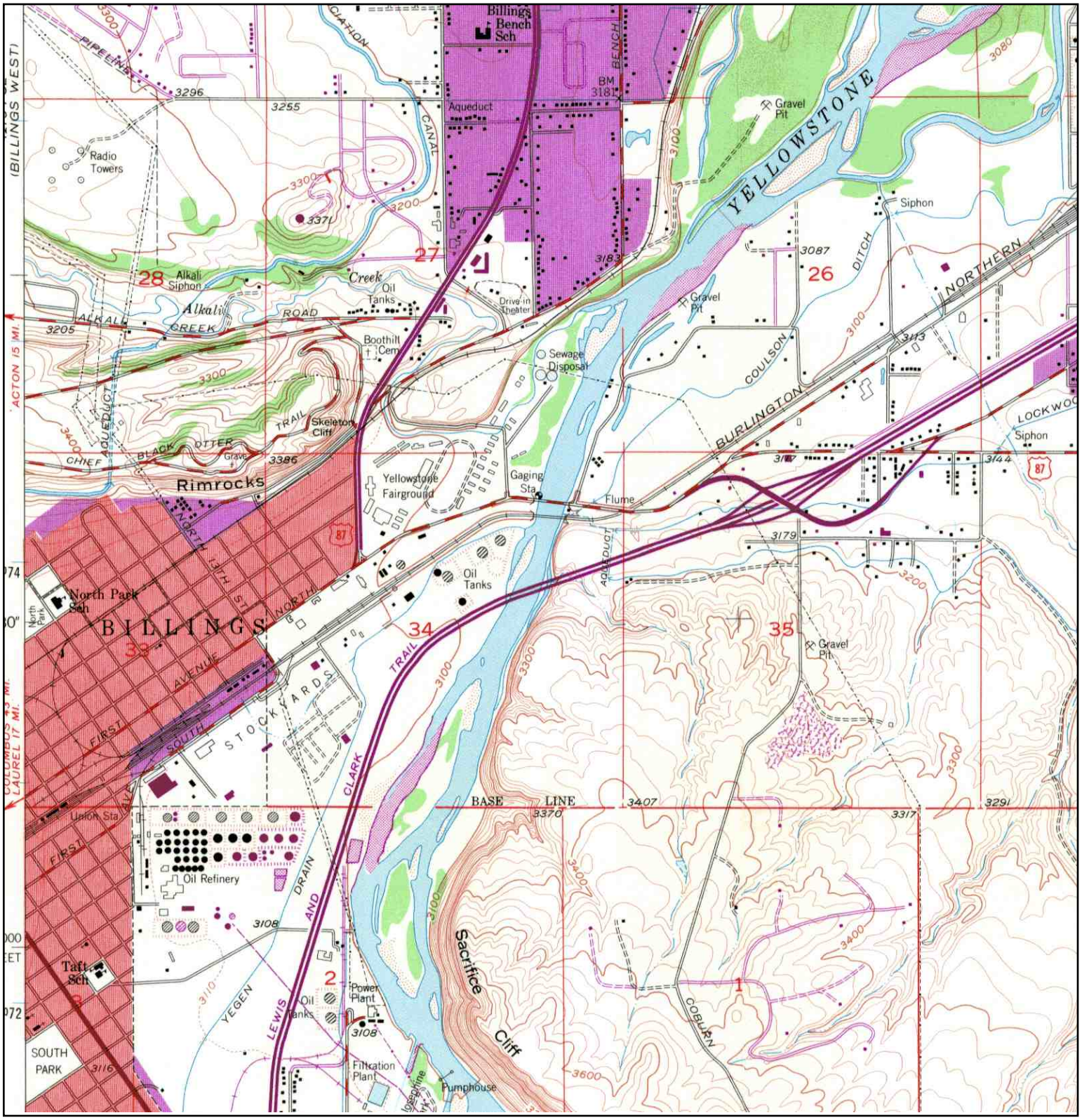
N	TARGET QUAD NAME: HUNTLEY MAP YEAR: 1893 SERIES: 30 SCALE: 1:125000	SITE NAME: Yale Oil ADDRESS: 700 First Avenue North Billings, MT 59101 LAT/LONG: 45.7939 / -108.4796	CLIENT: Cardno ERI CONTACT: Robert Serrato INQUIRY#: 3156252.4 RESEARCH DATE: 08/31/2011

Historical Topographic Map



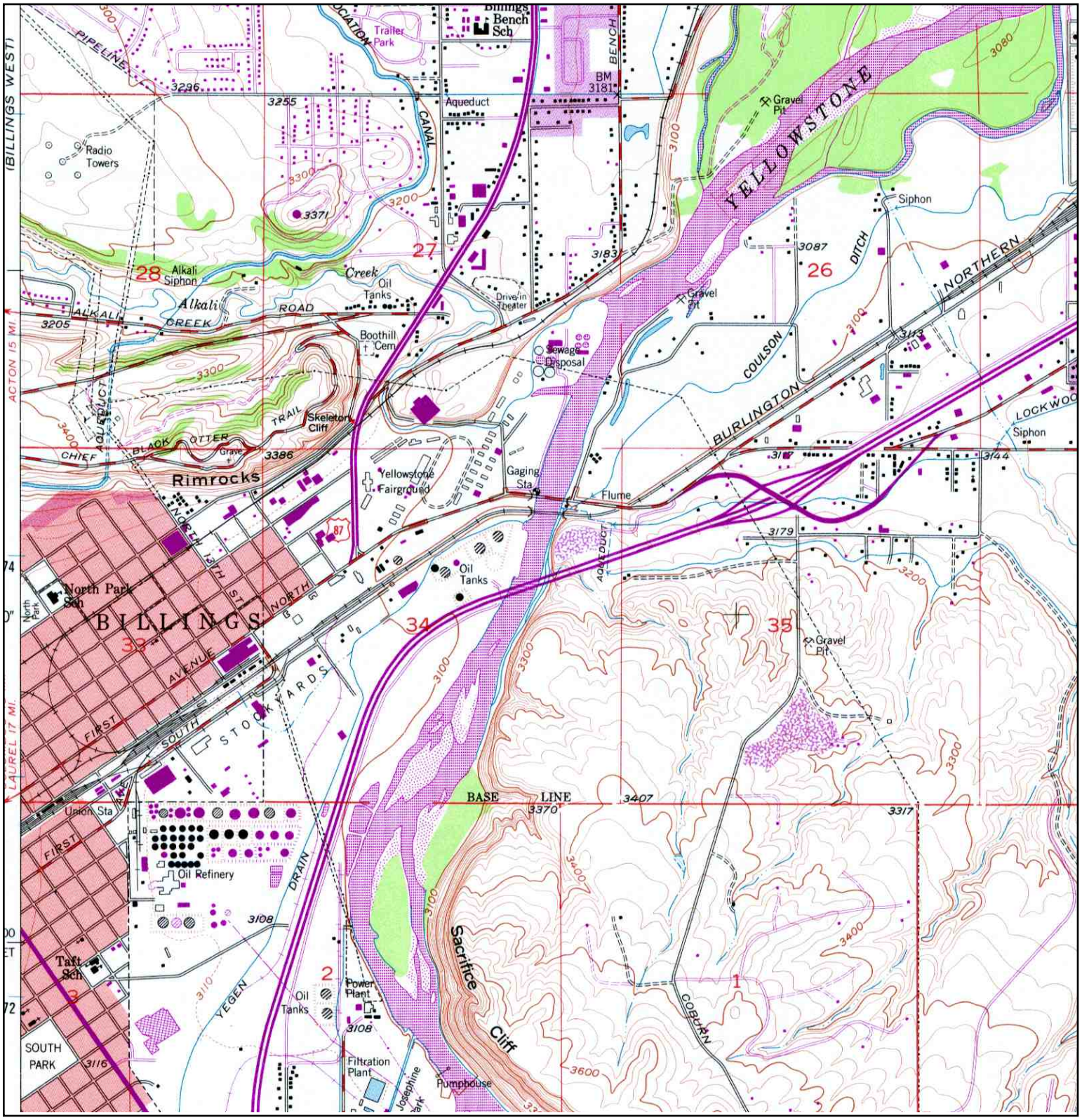
N	TARGET QUAD NAME: BILLINGS EAST MAP YEAR: 1956 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Yale Oil ADDRESS: 700 First Avenue North Billings, MT 59101 LAT/LONG: 45.7939 / -108.4796	CLIENT: Cardno ERI CONTACT: Robert Serrato INQUIRY#: 3156252.4 RESEARCH DATE: 08/31/2011

Historical Topographic Map



N	TARGET QUAD NAME: BILLINGS EAST MAP YEAR: 1969 PHOTOREVISED:1956 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Yale Oil ADDRESS: 700 First Avenue North Billings, MT 59101 LAT/LONG: 45.7939 / -108.4796	CLIENT: Cardno ERI CONTACT: Robert Serrato INQUIRY#: 3156252.4 RESEARCH DATE: 08/31/2011

Historical Topographic Map



N	TARGET QUAD NAME: BILLINGS EAST MAP YEAR: 1975 PHOTOREVISED:1956 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Yale Oil ADDRESS: 700 First Avenue North Billings, MT 59101 LAT/LONG: 45.7939 / -108.4796	CLIENT: Cardno ERI CONTACT: Robert Serrato INQUIRY#: 3156252.4 RESEARCH DATE: 08/31/2011

Yale Oil
700 First Avenue North
Billings, MT 59101

Inquiry Number: 3156252.5
August 31, 2011

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography August 31, 2011

Target Property:

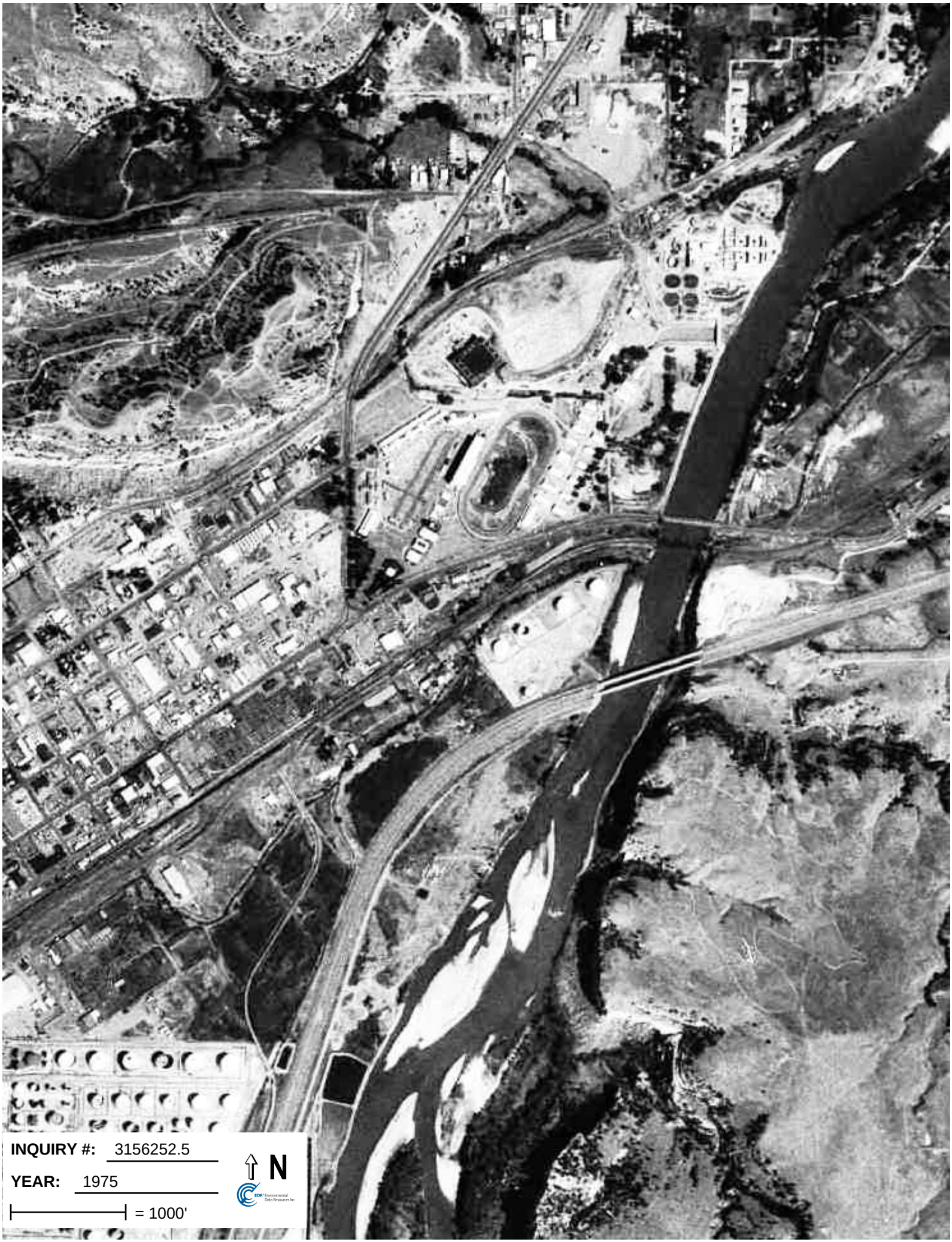
700 First Avenue North

Billings, MT 59101

Year	***Scale***	***Details***	***Source***
1951	Aerial Photograph. Scale: 1"=750'	Panel #: 45108-G4, Billings East, MT;/Flight Date: May 15, 1951	EDR
1969	Aerial Photograph. Scale: 1"=750'	Panel #: 45108-G4, Billings East, MT;/Flight Date: August 27, 1969	EDR
1975	Aerial Photograph. Scale: 1"=1000'	Panel #: 45108-G4, Billings East, MT;/Flight Date: August 28, 1975	EDR
1981	Aerial Photograph. Scale: 1"=1000'	Panel #: 45108-G4, Billings East, MT;/Flight Date: August 24, 1981	EDR
1992	Aerial Photograph. Scale: 1"=750'	Panel #: 45108-G4, Billings East, MT;/Flight Date: August 10, 1992	EDR
1996	Aerial Photograph. Scale: 1"=750'	Panel #: 45108-G4, Billings East, MT;/Flight Date: August 23, 1996	EDR
2005	Aerial Photograph. Scale: 1"=604'	Panel #: 45108-G4, Billings East, MT;/Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=604'	Panel #: 45108-G4, Billings East, MT;/Flight Year: 2006	EDR

INQUIRY #: 3156252.5
YEAR: 1951
= 750'
N

INQUIRY #: 3156252.5
YEAR: 1969
= 750'
N


INQUIRY #: 3156252.5
YEAR: 1975
= 1000'
N

INQUIRY #: 3156252.5
YEAR: 1981
= 1000'
N

INQUIRY #: 3156252.5
YEAR: 1992
= 750'
N

INQUIRY #: 3156252.5
YEAR: 1996
= 750'
N

INQUIRY #: 3156252.5
YEAR: 2005
= 604'
N
EDR Environmental Data Resources Inc

INQUIRY #: 3156252.5
YEAR: 2006
= 604'
N

Yale Oil
700 First Avenue North
Billings, MT 59101

Inquiry Number: 3156252.6
August 31, 2011

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2011	Polk's City Directory	-	X	X	-
2006	Polk's City Directory	-	X	X	-
2001	Polk's City Directory	-	X	X	-
1995	Polk's City Directory	-	X	X	-
1989	Polk's City Directory	-	X	X	-
1984	Polk's City Directory	-	X	X	-
1979	Polk's City Directory	-	X	X	-
1974	Polk's City Directory	-	X	X	-
1968	Polk's City Directory	X	X	X	-
1963	Polk's City Directory	X	X	X	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

700 First Avenue North
Billings, MT 59101

FINDINGS DETAIL

Target Property research detail.

Year	Uses	Source
1968	City Waste Water Treatment Plant	Polk's City Directory
	County Weed Control (Shops)	Polk's City Directory
1963	City Sewage Disposal Plant	Polk's City Directory
	County Weed Control (Shops)	Polk's City Directory

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

First Avenue North

First Avenue North

Year	Uses	Source
2011	No addresses listed prior to 600	Polk's City Directory
2006	No addresses listed prior to 600	Polk's City Directory
2001	No addresses listed prior to 550	Polk's City Directory
1995	No addresses listed prior to 600	Polk's City Directory
1989	No addresses listed between 242 and 600	Polk's City Directory
1984	No addresses listed between 242 and 600	Polk's City Directory
1979	No addresses listed between 242 and 720	Polk's City Directory
1974	No addresses listed between 242 and 720	Polk's City Directory
1968	No addresses listed between 242 and 700	Polk's City Directory
1963	No addresses listed between 242 and 700	Polk's City Directory

550 First Avenue North

Year	Uses	Source
2001	Mountain Rovers (used cars)	Polk's City Directory

600 First Avenue North

Year	Uses	Source
2011	Northern Broadcasting System (radio sta)	Polk's City Directory
	Reporter Inc	Polk's City Directory
2006	Car Guys Towing Auto & Truck	Polk's City Directory
	Northern Broadcasting System (radio sta)	Polk's City Directory
2001	Goldstar	Polk's City Directory
	Northern Broadcasting System (radio sta)	Polk's City Directory
1995	Superior Welding Sup	Polk's City Directory
	Tanna Indus Inv Factory	Polk's City Directory
1989	BFI (garbage removal)	Polk's City Directory
	Denver Business College - Billings Branch	Polk's City Directory
1984	Auto Acres (used cars)	Polk's City Directory
	Rimrock Stages Inc	Polk's City Directory
	Timberline Paint & Body (auto rpr)	Polk's City Directory

FINDINGS

720 First Avenue North

Year	Uses	Source
2011	Auto Magic (used cars)	Polk's City Directory
	Billings Limousine Svc	Polk's City Directory
	Billings Yellow Cab	Polk's City Directory
2006	Metra RV Center (recreational vehicles)	Polk's City Directory
2001	Metra RV Center	Polk's City Directory
1995	Harry Taylor Sales Inc (used cars)	Polk's City Directory
1989	Hale Trailer Sales Of Montana (horse trailers)	Polk's City Directory
	Harry Taylor Sales Inc (used cars)	Polk's City Directory
1984	Hale Trailer Sales Of Montana (horse trailers)	Polk's City Directory
1979	Hale Manufacturing Co (horse & cattle trailers)	Polk's City Directory
1974	Hale Manufacturing Co (horse & cattle trailers)	Polk's City Directory

724 First Avenue North

Year	Uses	Source
2006	Business Interiors Of Montana (int design)	Polk's City Directory
	Reporter Inc	Polk's City Directory
2001	Business Interiors Of Montana (int design)	Polk's City Directory
1995	Reporter Office Products (Whse)	Polk's City Directory
1989	Reporter Office Products (Ofc)	Polk's City Directory
1984	Reporter Inc (Ofc)	Polk's City Directory
1979	Reporter Inc	Polk's City Directory
1974	Vacant	Polk's City Directory
1968	Farmers Union Central Exchange Inc (Whse)	Polk's City Directory
1963	Farmers Union Central Exchange Inc	Polk's City Directory

801 First Avenue North

Year	Uses	Source
1979	Your Auto Lot	Polk's City Directory
1963	A & B Trailer Sales	Polk's City Directory

812 First Avenue North

Year	Uses	Source
1963	Wigwam Trailer Sales	Polk's City Directory

FINDINGS

849 First Avenue North

Year	Uses	Source
2011	Berry's Auto (used cars)	Polk's City Directory
	Take A Chance Finance Co	Polk's City Directory
2006	Berry's Auto (used cars)	Polk's City Directory

900 First Avenue North

Year	Uses	Source
2011	A & I Distributors (whol oils)	Polk's City Directory
	Four-S	Polk's City Directory
2006	A & I Distributors (whol oils)	Polk's City Directory
	Four-S	Polk's City Directory
2001	A & I Distributors Of Billings	Polk's City Directory
	Four-S	Polk's City Directory
1995	A & I Distributors Of Billings (lubricating oils)	Polk's City Directory
1968	J & R Cattle Co (livestock)	Polk's City Directory
	T C Cattle Co	Polk's City Directory
1963	J & R Cattle Co (livestock)	Polk's City Directory
	T C Cattle Co (livestock)	Polk's City Directory

Unnumbered First Avenue North

Year	Uses	Source
1995	Metrapark Arena (exposition trade shows)	Polk's City Directory
1989	Metrapark Arena (exposition trade shows)	Polk's City Directory
1984	Yellowstone Exhibition	Polk's City Directory
	Yellowstone Metra (exposition trade shows)	Polk's City Directory
1979	Yellowstone Exhibition	Polk's City Directory
	Yellowstone Metra	Polk's City Directory
1974	Midland Empire State Fair	Polk's City Directory
1968	County Road & Bridge Dept (Shops)	Polk's City Directory
	Midland Empire Fairgrounds	Polk's City Directory
1963	County Road & Bridge Dept (Shops)	Polk's City Directory
	Midland Empire Fairgrounds	Polk's City Directory

Hwy 87 E

338 Hwy 87 E

Year	Uses	Source
1963	Glacier Pipeline Co	Polk's City Directory

FINDINGS

Year	***Uses***	***Source***
1963	Yellowstone Pipeline Co	Polk's City Directory

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
700 First Avenue North	2011, 2006, 2001, 1995, 1989, 1984, 1979, 1974

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
First Avenue North	No Years Found
338 Hwy 87 E	No Years Found
550 First Avenue North	1995, 1989, 1984, 1979, 1974, 1968, 1963
600 First Avenue North	1979, 1974, 1968, 1963
720 First Avenue North	1968, 1963
724 First Avenue North	No Years Found
801 First Avenue North	1974, 1968
812 First Avenue North	No Years Found
849 First Avenue North	2001, 1995, 1989, 1984, 1979, 1974, 1968, 1963
900 First Avenue North	1989, 1984, 1979, 1974
Unnumbered First Avenue North	No Years Found

Appendix C

Boring Logs

On-Site Boring Logs

Form No. 603 R10/79

O1N 26E 34 -01

File No. _____

WELL LOG REPORT

yellowstone

State law requires that this form be filed by the water well driller within 60 days after comp

015331

1. WELL OWNER
Name AGRI Systems

2. CURRENT MAILING ADDRESS
3115 First Ave So
Billings Mt. 59101

3. WELL LOCATION

NW NE SW SE

DOCUMENT # 852510
____ ¼ ____ ¼ ____ ¼ Section ____
Township ____ N/S Range ____ E/W
County Yellowstone
Lot 1 Block 2
Subdivision OLD SPUR INDUSTRIAL SUB
Well Elevation ____
Accuracy: ____ ± 10'; ____ ± 50'; ____ ± 100';

4. DRILLING METHOD ____ cable, ____ bored, ✓ forward rotary, ____ reverse rotary, ____ jetted, ____ other (specify) ____

5. WELL CONSTRUCTION AND COMPLETION

Size of drilled hole	Size and weight of casing	From (feet)	To (feet)	Perforations ____ and/or Screen ✓ Kind Size	From (feet)	To (feet)
8	5" 6817	2+	26	S.S. Screen 50 Slot	24	26

Was casing left open end? ✓ Yes ____ No
Was a packer or seal used? ____ Yes ✓ No
If so, what material ____
Was the well gravel packed? ____ Yes ✓ No
Was the well grouted? ✓ Yes ____ No
To what depth? 12
Material used in grouting Bentonite
Well head completion: Pitless adapter ____
12 in. above grade ✓, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

6. WATER LEVEL
Static water level 11 feet below land surface
If flowing, closed-in pressure ____ psi
____ gpm flow through ____ inch pipe
Controlled by: ____ valve, ____ reducers, ____ other
(if other, specify) ____

7. WELL TEST DATA ✓ pump ____ bailer ____ other
(if other, specify) ____
Pumping level below land surface:
24 ft. after 1 hrs. pumping 20 gpm
____ ft. after ____ hrs. pumping ____ gpm

8. WAS WELL PLUGGED OR ABANDONED? ____ Yes ✓ No
If yes, how? ____

9. DATE STARTED 11-14-80
DATE COMPLETED 11-26-80

10. WELL LOG

Depth (ft.) From	To	Formation
0	4	Top Soil
4	20	Gravel
20	26	Blue Shale

RECEIVED
DEC 1980
DEPT. OF NATURAL RESOURCES AND CONSERVATION BILLINGS OFFICE

UNABLE

(use separate sheet if necessary)

11. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

12-1-80
Date

Firm Name Dissera Drlg
Address Billings Mont
Signature J. J. Bem License No. 197

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

M: 11512
WL - 2748

DEPARTMENT COPY

1/1 Form No. 603 R10/79 IN 26E 34 -02 File No. Yellowstone

WELL LOG REPORT

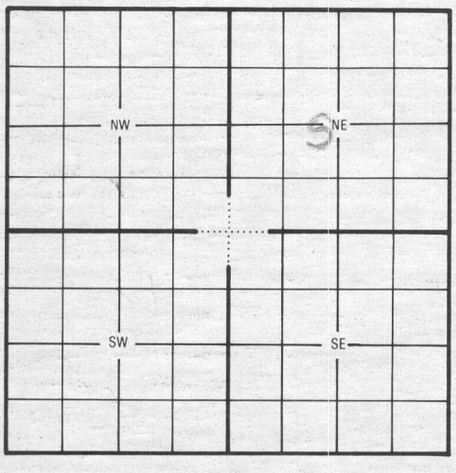
State law requires that this form be filed by the water well driller within 60 days after comp

015333

1. WELL OWNER
Name Midland Empire Paping Co.
Div. Midland Foods Inc

2. CURRENT MAILING ADDRESS
P.O. Box 30457
Bgs Mt. 59107

3. WELL LOCATION



____ 1/4 ____ 1/4 ____ 1/4 Section 34
Township 1 (N/S) Range 26 (E/W)
County Yellowstone
Lot ____ Block Tr. 1
Subdivision C.O.S. 1037
Well Elevation ____
Accuracy: ____ ± 10'; ____ ± 50'; ____ ± 100';

4. DRILLING METHOD ____ cable, ____ bored, ✓ forward rotary, ____ reverse rotary, ____ jetted, ____ other (specify) ____

5. WELL CONSTRUCTION AND COMPLETION

Size of drilled hole	Size and weight of casing	From (feet)	To (feet)	Perforations ✓ and/or Screen 1/8 cuts		
				Kind Size	From (feet)	To (feet)
7 7/8	6625 .250 18.97#	0	24	1/8 cuts	19	23

Was casing left open end? ✓ Yes ____ No
Was a packer or seal used? ✓ Yes ____ No
If so, what material Bentonite
Was the well gravel packed? ____ Yes ✓ No
Was the well grouted? ✓ Yes ____ No
To what depth? 14
Material used in grouting Bentonite
Well head completion: Pitless adapter ____
12 in. above grade ✓, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

6. WATER LEVEL
Static water level 11 feet below land surface
If flowing, closed-in pressure ____ psi
____ gpm flow through ____ inch pipe
Controlled by: ____ valve, ____ reducers, ____ other
(if other, specify) ____

7. WELL TEST DATA ✓ pump ____ bailer ____ other
(if other, specify) ____
Pumping level below land surface:
19 ft. after 4 hrs. pumping 23 gpm
____ ft. after ____ hrs. pumping ____ gpm

8. WAS WELL PLUGGED OR ABANDONED? ____ Yes ✓ No
If yes, how? ____

9. DATE STARTED 10-1-80
DATE COMPLETED 10-2-80

10. WELL LOG

Depth (ft.) From	To	Formation
0	2	Top soil
2	8	clay
8	23	sandy gravel
23	27	shale

UNABLE

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(use separate sheet if necessary)

11. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
10-2-80
Date
Billings Drilling
Firm Name
1402 3 Rounds Rd
Address
Curtis Schulz 344
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

M:11513

DEPARTMENT COPY WL - 8512

Northern
Engineering
and Testing, Inc.

LOG OF EXPLORATION BORING

PROJECT: Big Sky Haul-Away

JOB NO.: 188-608
DRILL TYPE: SOIL Mobile B-53
ROCK
DRILLED BY: B. Krueger
LOGGED BY: S. Timmons
REMARKS:

HOLE NO. /DH-1
SHEET 1 OF 1
LOCATION: 20' south, 60' east of southeast corner of Denver Business College
ELEVATION: TOP OF HOLE Not Determined
GROUNDWATER 8.0
DATE: HOLE STARTED 8/03/88
COMPLETED 8/03/88

DEPTH (Feet)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE SYMBOL	S.P.T. (N) (BLOWS/FT.)	MOISTURE CONTENT (%)	IN-PLACE DRY DENSITY (pcf)	L.L. %	P.I. %	GRAVEL %	SAND %	SILT %	CLAY %
0.2		Asphaltic Concrete										
		FILL; bricks, gravel and debris, hydrocarbon material visible and drill cuttings.										
3.5		Silty SAND with Gravel; loose, moist, hydrocarbon material visible.	LSS	7								
7.5												
8.0		Water level (8/03/88)										
		Silty GRAVEL with Sand; dense, wet, hydrocarbon material visible.	LSS	50								
			LSS	85								
11.0		Bottom of Hole										

NET 122B

Northern
Engineering
and Testing, Inc.

LOG OF EXPLORATION BORING

PROJECT: Big Sky Haul-Away

JOB NO.: 188-608
DRILL TYPE: SOIL Mobile B-53
ROCK
DRILLED BY: B. Krueger
LOGGED BY: S. Timmons
REMARKS:

HOLE NO. DH-2
SHEET 1 OF 1
LOCATION: 50; south of southeast corner of shop building
ELEVATION: TOP OF HOLE Not determined
GROUNDWATER 9.0
DATE: HOLE STARTED 8/03/88
COMPLETED 8/03/88

DEPTH (Feet)	LEGEND	CLASSIFICATION AND DESCRIPTION	SAMPLE SYMBOL	S.P.T. (N) (BLOWS/FT.)	MOISTURE CONTENT (%)	IN-PLACE DRY DENSITY (pcf)	L.L. %	P.I. %	GRAVEL %	SAND %	SILT %	CLAY %
0.2		Asphaltic Concrete										
1.0		FILL; Gravel Base Course										
		Sandy Lean CLAY: stiff, slightly moist, hydrocarbon material visible.										
4.0			LSS	57								
		Silty GRAVEL with Sand; dense to very dense, slightly moist to wet, hydrocarbon material visible.										
			LSS	114								
9.0		Water level (8/03/88)										
			LSS	88								
			LSS	111								
12.0		Bottom of Hole										

NET 122B

Billings 01N26E34 Yellowstone

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 109413

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name STATE OF MONTANA, DOT, HIGHWAYS DIVISION

2. CURRENT MAILING ADDRESS
P.O. BOX 20437
BILLINGS, MT. 59104

3. WELL LOCATION
____ 1/4 ____ 1/4 ____ 1/4 Section 34
Township T1N N/S Range R 26 E E/W County YLSTNE
Govn't Lot ____, or Lot ____, Block ____
Subdivision Name ____
Tract Number ____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify DRAW DOWN WELL

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☒
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 7 7/8 in. from 0 ft. to 35 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 8 from +2 ft. to 16.25 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A-53 B Wall Thickness .250
Casing; Plastic Dia. ____ from ____ ft. to ____ ft.
Weight ____ Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used ____
Size of perforations ____ in. by ____ in.
____ perforations from ____ ft. to ____ ft.
____ perforations from ____ ft. to ____ ft.
____ perforations from ____ ft. to ____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name HOWARD SMITH
Type S.S. TEL Model No. ____
Dia. 8" TEL. Slot size .030 from 16 ft. to 26 ft.
Dia. BLANK Slot size BLANK from 26 ft. to 35 ft.
GRAVEL PACKED: Yes ☐ No ☒ Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
GROUTED: To what depth? 36.21.654 (4) ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name JACUZZI
Type SUB. Model No. 15S4456-S2 HP. 1.5

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air XX Pump XX Bailer ____
b) Static water level immediately before testing 16' 10.5" ft. If flowing; closed-in pressure ____ psi. ____ gpm. Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____.
c) Depth at which pump is set for test 32'
d) The pumping rate: 7 gpm.
e) Pumping water level 31.5 ft. at 1.5 hrs. after pumping began.
f) Duration of test: Pumping time 7.5 hrs.
g) Recovery time UNK. hrs.
h) Recovery water level UNK. ft. at ____ hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

12. WELL LOG

Depth (ft.) From	To	Formation
0	19.75	SAND/GRAVEL
19.75	35.0	SHALE

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7/14/94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
8/26/94
Date
PRO PUMP AND EQUIPMENT, INC./ADT, INC.
Firm Name
2621 S. RAMSHORN LAUREL, MT. 59044
Address
MARVIN W. JEWETT MWWC #532
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

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M:147380
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DEPARTMENT — BUREAU COPY

OIN 26E 34AC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# M-8

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc.
Mailing address: 600 North Dairyashford Rd
Houston Tx 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ NE ¼, Section 34
Township 1 (N)S Range 26 (E)W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address North end of Coulson Pk. Road Billings
GPS ☐ Yes ☐ No Yale Tank Farm
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 20½ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2 in. from 0 ft. to 20½ ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size .020 from 5 ft. to 20 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel #12 Silica Sand
Gravel placed from 4 ft. to 20½ ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 2 ft. to 4 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 10 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: Unable

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	1½	Silty Sand DK Brown
1½	18½	Course Sand + gravel
		With Cobbles DK Brown
18½	20½	Shale Grey

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MAY 08 2002
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 4/26/02

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, ~~or~~ corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT
Signature Paul Bray
Date 4/26/02 License no. MMWC # 344

MBMG ID# 195369

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT—BUREAU COPY

Billings

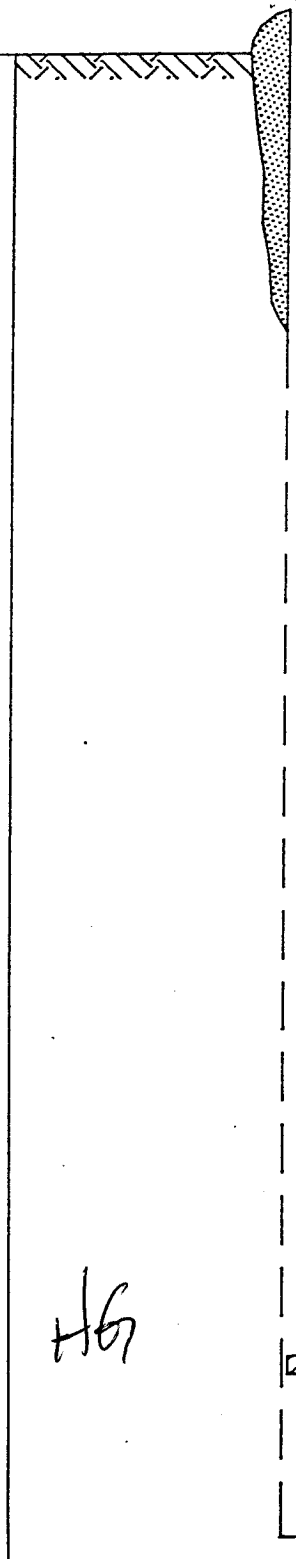
1N 26E 34 ABD -01 YELLOW STONE [084401]

WELL COMPLETION LOG

LSE

PROJECT Cenex Billings Tank Farm
SITE MRL right of way
COORDINATES T1N R26E Sec 34 ABD
DATE COMPLETED 9/3/91
SUPERVISED BY Jeffrey R. Rice

WELL NO. MW-1
AQUIFER Yellowstone R shallow alluvial



Elevation of reference point (Top of PVC) — 97.96' *

Height of reference point above ground surface — 3.1'

Depth of surface seal — 0.67' BGS (Outside Steel Casing)

Type of surface seal sacrete

I.D. of surface casing: 0.55'
Type of surface casing: locking steel

Depth of surface casing — 0.67 BGS

I.D. of riser pipe: 0.17'
Type of riser pipe: Env. Well Prod. Co. schedule 40 PVC, flush threaded

Diameter of borehole: 0.55'

Type of filler N/A

Depth to top of seal — 0.0 BGS
Type of seal: Enviroplug #8 Bentonite

Type of gravel pack Granusil #8 silica sand

Depth to top of gravel pack — 2.0' BGS

Depth to top of screen — 2.2' BGS
Description of screen Env. Well Prod. Co. schedule 40 PVC, flush threaded 0.020" slot

I.D. of screen section: 0.17'

Depth to bottom of screen — 17.2' BGS

Depth to bottom of gravel pack — 17.2' BGS

Depth to bottom of plugged blank section — N/A

Type of filler below plugged section N/A

Elevation of bottom of borehole — 77.7' *

HG

*Elevation referenced to top of outlet pipe tank 280 = elev 100.00'

M:29647

BORE LOG

Bore Number: MW-1 Owner: MRL (Property)

Location: BETWEEN YEGEN DRAIN Address:

& MRL R.R. SOUTHERN MOST OF 2 monitor wells

T1N, R26E, Sec 34 ABD

Surface Elevation: Water Level: 4.7' BGS

Drilling Company: ADT/PRO PUMP Drilling Method: AIR ROTARY

Date Drilled: 9/3/91

Driller: AL HICKS M.W. LIC. #171 Helper: ROSS LEHNER

Log By: JEFF RICE (LSE)

Notes: Cenex Monitor Well

Sketch Map

Depth (Feet)	Sample No.	Sample Type	Sample Blows	Description/Soil Classification (Color, Texture, Structures)
0.0'- 3.0'				Extremely gravelly fill (GM/GP), little fines after 1',grey, single grain, non-sticky, non-plastic, loose, dry to moist, no HC odor, 0-1' "silty" fill.
3.0'- 17.2'				Extremely cobbly river alluvium with some sand,(GM) grey, single grain, non sticky, non plastic, loose, moist to field capacity, wet at 6', freewater at 7', sandy lense at 14-16', several large cobbles below 16', poorly sorted, gravel & cobbles rounded.

Billings

1N 26E 34 ABD -03 YELLOWSTONE

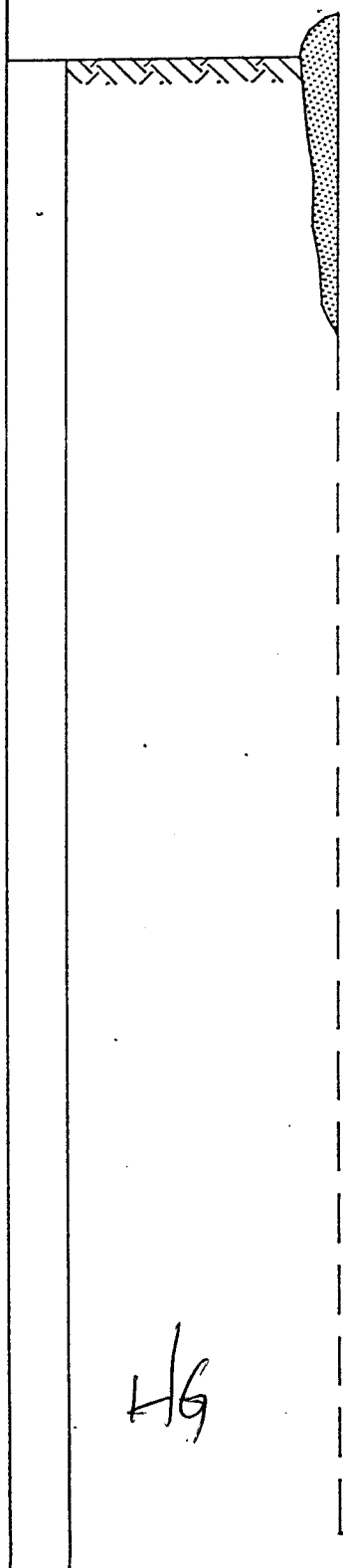
084403

WELL COMPLETION LOG

LSE

PROJECT Cenex Billings Tank Farm
SITE MRL Right of way
COORDINATES T1N, R26E Sec 34 ABD
DATE COMPLETED 9/3/91
SUPERVISED BY Jeffrey R. Rice

WELL NO. MW-2
AQUIFER Yellowstone R. shallow alluvial



Elevation of reference point (Top of PVC)	97.80'*
Height of reference point above ground surface	2.5'
Depth of surface seal	0.5' BGS
Type of surface seal sacrete	
I.D. of surface casing: 0.55'	
Type of surface casing: Locking steel	
Depth of surface casing	1.0' BGS
I.D. of riser pipe: 0.17'	
Type of riser pipe: Env. Well Prod. Co. schedule 40 PVC, flush threaded	
Diameter of borehole: 0.55'	
Type of filler N/A	
Depth to top of seal	0.0'
Type of seal: Enviroplug #8 Bentonite	
Type of gravel pack Granusil #8 silica sand	
Depth to top of gravel pack	2.2' BGS
Depth to top of screen	2.4' BGS
Description of screen Env. Well Products Co. schedule 40 PVC, flush threaded 0.020 slot	
I.D. of screen section: 0.17'	
Depth to bottom of screen	17.4' BGS
Depth to bottom of gravel pack	17.4' BGS
Depth to bottom of plugged blank section	N/A
Type of filler below plugged section N/A	
Elevation of bottom of borehole	77.9'*

HG

* Elevation referenced to top of outlet pipe tank 280 = elev 100.00'

M:2966 B

BORE LOG

Bore Number: MW-2 Owner: MRL (Property)

Location: BETWEEN YEGEN DRAIN Address:

AND MRL TRACKS

T1N, 26E, Sec 34 ABD

Surface Elevation: Water Level: 5.3'BGS

Drilling Company: ADT/PRO PUMP Drilling Method: AIR ROTARY

Date Drilled: 9/3/91

Driller: AL HICKS Helper: ROSS LEHNER
M.W. Lisc. #171

Log By: JEFF RICE (LSE)

Notes: Cenex Monitor Well

Sketch Map

Depth (Feet)	Sample No.	Sample Type	Sample Blows	Description/Soil Classification (Color, Texture, Structures)
0.0'-				Very gravelly fill (GM), single grain, non-sticky, non plastic, loose, dry, some fines top foot
3.0'				
3.0'-				Gravel (GP), single grain, non sticky, non plastic, loose, moist, alluvium, appears to be native gravel, gravel has different lithologies.
6.0'				
6.0'-				Very gravely/cobbly sands, (GP/GW), single grain, non sticky, non plastic, loose, wet to saturated, alluvium, free water @ 8', sands fine to medium, more med-fine sands than adjacent boring (MW-1), trace silts, becoming coarser at 17', gravel and cobbles rounded.
17.4'				

Billings

1N 26E 34 ACA

084406

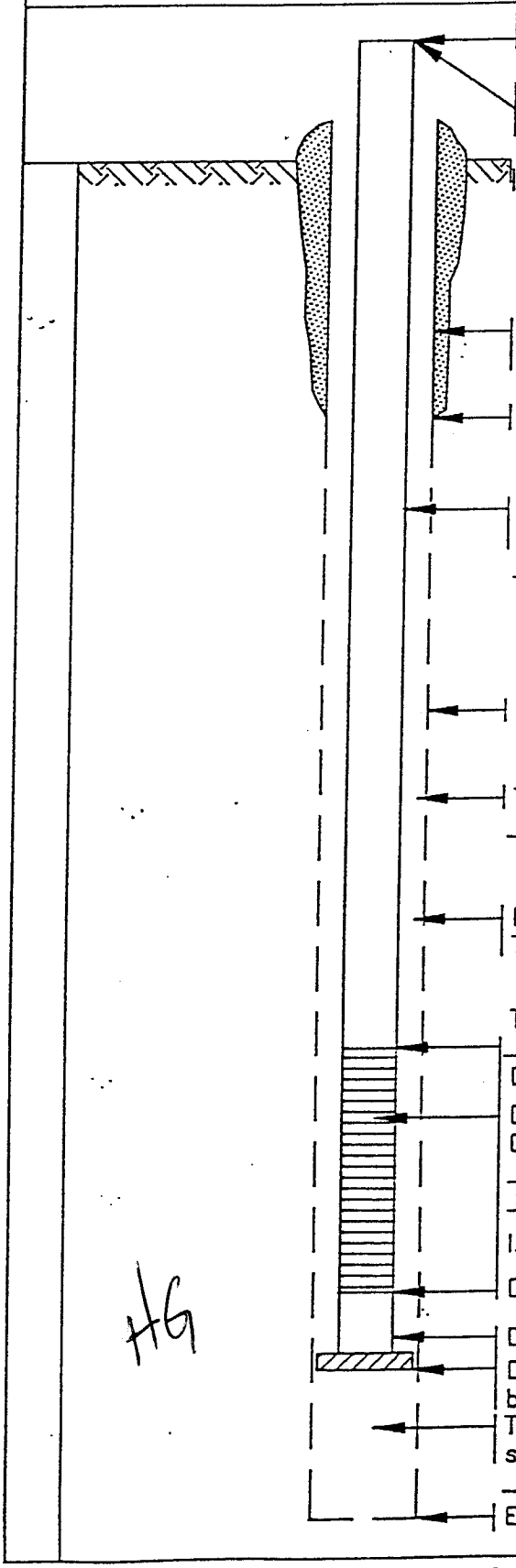
YELLOWSTONE

WELL COMPLETION LOG

LSE

PROJECT Cenex Billings Tank Farm
SITE Inside Tank 280 dike (southwest of tank)
COORDINATES T1N R26E Sec 34 ACA
DATE COMPLETED 9/4/91
SUPERVISED BY Jeffrey R. Rice

WELL NO. MW-3
AQUIFER Yellowstone R. shallow alluvial



Elevation of reference point (Top of PVC) — 97.55' *

Height of reference point above ground surface — 2.2'

Depth of surface seal — 0.5' BGS

Type of surface seal sacrete

I.D. of surface casing: 0.55'
Type of surface casing: Locking steel

Depth of surface casing — .88' BGS

I.D. of riser pipe: 0.17'
Type of riser pipe: Env. Well Prod. Co. schedule 40 PVC, flush threaded

Diameter of borehole: 0.55'

Type of filler N/A

Depth to top of seal — 0.0
Type of seal: Enviroplug #8 Bentonite

Type of gravel pack Granusil #8 silica sand

Depth to top of gravel pack — 2.25' BGS

Depth to top of screen — 2.85' BGS

Description of screen Env. Well Products Co. schedule 40 PVC, flush threaded 0.020 slot

I.D. of screen section: 0.17'

Depth to bottom of screen — 17.85' BGS

Depth to bottom of gravel pack — 17.85' BGS

Depth to bottom of plugged blank section — N/A

Type of filler below plugged section N/A

Elevation of bottom of borehole — 77.5' *

HG

*Elevation referenced to top of outlet pipe tank 280 = elev 100.00'

M:29689

BORE LOG

Sketch Map

Bore Number: MW-3 Owner: CENEX

Location: SOUTH CORNER INSIDE TANK 280 DIKE Address:

T1N, R26E, Sec 34 ACA

Surface Elevation: Water Level: 10.5' BGS

Drilling Company: ADT/PRO PUMP Drilling Method: AIR ROTARY

Date Drilled: 9/4/91

Driller: AL HICKS M.W. Lisc #171 Helper: ROSS LEHNER

Log By: JEFF RICE (LSE)

Notes:

Depth (Feet)	Sample No.	Sample Type	Sample Blows	Description/Soil Classification (Color, Texture, Structures)
0.0'- 6.5'				Very cobbly med/fine sands (GW), dark brown, single grain, non-sticky, non-plastic, loose, dry to moist, alluvium (disturbed).
6.5'- 10.0'				Very cobbly fine sand (GW/GM), grey, single grain, non-sticky, non-plastic, loose, moist to field capacity, alluvium, fine to coarse sands present however, predominately fine sand, several large cobbles.
10.1'- 17.85'				Very gravelly sand (GW), grey, single grain, non-sticky, non-plastic, loose, saturated, alluvium, fine to coarse sands, avg is medium/fine sand.
17.85'				Shale, grey, dry.

Billings

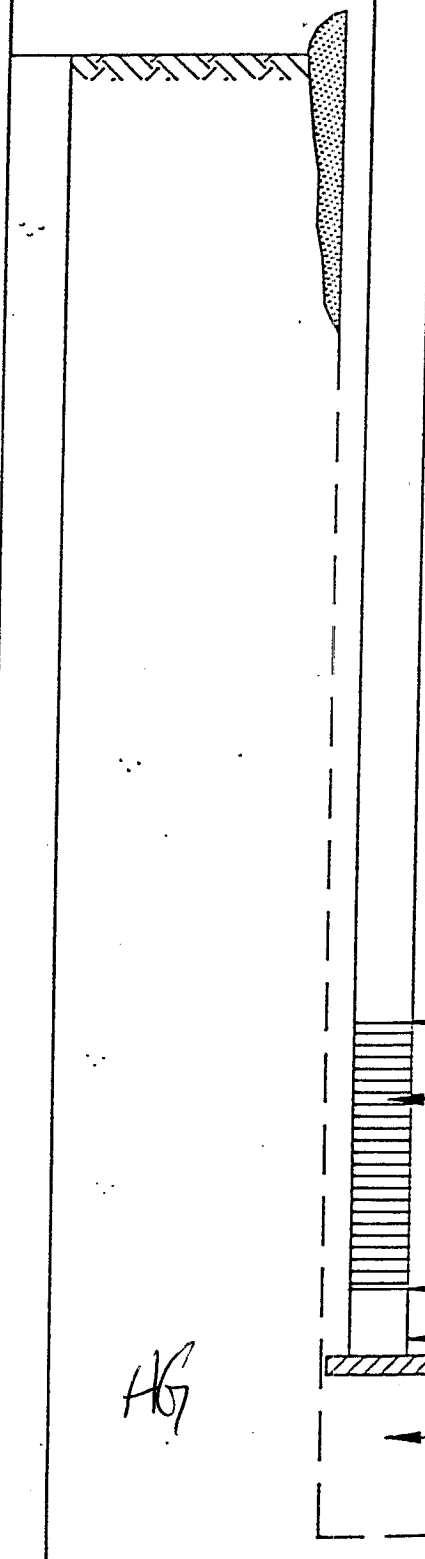
1N 26E 34 ABD -02 / YELLOWSTONE [084402]

WELL COMPLETION LOG

CSE

PROJECT Cenex Billings Tank Farm
SITE Outside Tank 280 dike (Northeast of tank)
COORDINATES T1N R26E Sec 34 ABD
DATE COMPLETED 9/4/91
SUPERVISED BY Jeffrey R. Rice

WELL NO. MW-4
AQUIFER Yellowstone R. shallow alluvial



Elevation of reference point (Top of PVC) — 99.88' *

Height of reference point above ground surface — 3.2'

Depth of surface seal — 0.67' BGS

Type of surface seal sacrete

I.D. of surface casing: 0.55'
Type of surface casing: Locking steel

Depth of surface casing — 0.67 BGS

I.D. of riser pipe: 0.17'
Type of riser pipe: Env. Well Prod. Co. schedule 40 PVC, flush threaded

Diameter of borehole: 0.55'

Type of filler N/A

Depth to top of seal — 0.0
Type of seal: Enviroplug #8 Bentonite

Type of gravel pack Granusil #8 silica sand

Depth to top of gravel pack — 2.3' BGS

Depth to top of screen — 2.5' BGS

Description of screen Env. Well Products Co. schedule 40 PVC, flush threaded 0.020 slot

I.D. of screen section: 0.17'

Depth to bottom of screen — 17.5' BGS

Depth to bottom of gravel pack — 17.5' BGS

Depth to bottom of plugged blank section — N/A

Type of filler below plugged section caved sands original total depth 19.5'

Elevation of bottom of borehole — 77.2' *

HG

*Elevation referenced to top of outlet pipe tank 280 = elev 100.00'

M:29665

BORE LOG

Bore Number: MW-4 Owner: CENEX

Location: NORTHEAST CORNER OF TANK FARM OUTSIDE TANK 280 DIKE, T1N, R26E, Sec 34 ABD

Address:

Surface Elevation: Water Level:

Drilling Company: ADT/PRO PUMP Drilling Method: AIR ROTARY

Date Drilled: 9/4/91

Driller: AL HICKS M.W. Lisc. #171 Helper: ROSS LEHNER

Log By: JEFF RICE (LSE)

Notes:

Sketch Map

Depth (Feet)	Sample No.	Sample Type	Sample Blows	Description/Soil Classification (Color, Texture, Structures)
0.0'-				Sand & gravel(GM/GP), fill, single grain, non sticky, non plastic, very friable, dry, medium sands, 0-2' fine sand with no gravel.
5.0'				
5.0'				Coarse sand (GP), single grain, non sticky, non-plastic, loose, dry.
7.0'				
7.0'-				Sand and gravel/cobble with trace silt (GW/GM), single grain, non-sticky, non-plastic, very friable, moist, moist to wet beginning 8.5', alluvium.
16.5'				
16.5'-				Gravelly medium sand (GW/GP), single grain, non-sticky, non-plastic, loose, dry to moist. Predominantely medium sands with small (≤ 1") gravel, all gravel & cobbles rounded.
19.5'				

Billings

1N 26E 34 ABDC

089405

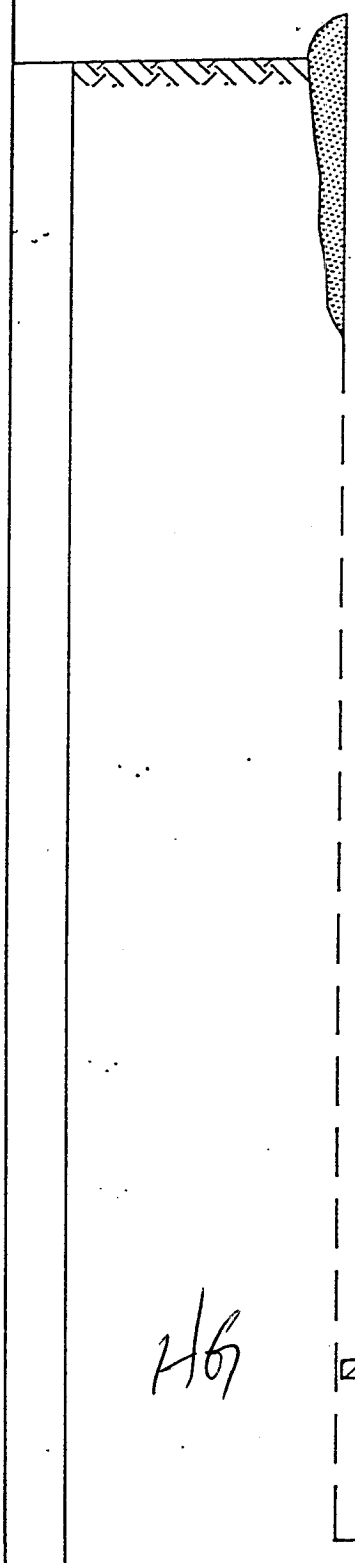
YELLOWSTONE

WELL COMPLETION LOG

LSE

PROJECT Cenex Billings Tank Farm
SITE Inside tank 280 dike (North of tank)
COORDINATES T1N R26E Sec 34 ABDC
DATE COMPLETED 9/4/91
SUPERVISED BY Jeffrey R. Rice

WELL NO. MW-5
AQUIFER Yellowstone R. shallow alluvial



Elevation of reference point (Top of PVC)	99.55' *
Height of reference point above ground surface	3.25'
Depth of surface seal	0.67' BGS
Type of surface seal sacrete	
I.D. of surface casing: 0.55'	
Type of surface casing: Locking steel	
Depth of surface casing	0.67' BGS
I.D. of riser pipe: 0.17'	
Type of riser pipe: Env. Well Prod. Co. schedule 40 PVC, flush threaded	
Diameter of borehole: 0.55'	
Type of filler N/A	
Depth to top of seal	0.0
Type of seal: Enviroplug #8 Bentonite	
Type of gravel pack Granusil #8 silica sand	
Depth to top of gravel pack	6.0' BGS
Depth to top of screen	7.4' BGS
Description of screen Env. Well Products Co. schedule 40 PVC, flush threaded 0.020 slot	
I.D. of screen section: 0.17'	
Depth to bottom of screen	17.4'BGS
Depth to bottom of gravel pack	17.4'BGS
Depth to bottom of plugged blank section	N/A
Type of filler below plugged section N/A	
Elevation of bottom of borehole	78.9' *

H6

*Elevation referenced to top of outlet pipe tank 280 = elev 100.00'

M:2968

BORE LOG

Bore Number: MW-5 Owner: CENEX

Location: NORTH OF RECOVERY Address:

TRENCH INSIDE TANK 280 DIKE

T1N, R26E, Sec 34 ABDC

Surface Elevation: Water Level:

Drilling Company: ADT/PRO PUMP Drilling Method: AIR ROTARY

Date Drilled: 9/4/91

Driller: AL HICKS Helper: ROSS LEHNER
M.W. Lisc. #171

Log By: JEFF RICE (LSE)

Notes:

Sketch Map

Depth (Feet)	Sample No.	Sample Type	Sample Blows	Description/Soil Classification (Color, Texture, Structures)
0.0'-				Very to extremely cobbly medium sands (GW), non-sticky, non-plastic, dry to 7.5', alluvium, several large cobbles encountered, 0-1' fine sand, moist at 7.5', wet at 9', poorly sorted, water has H_2S odor at bottom of bore hole; may indicate shale is near bottom of bore hole.
17.4'				

Billings 1N 26E 34 ABD -04 YELLOWSTINE

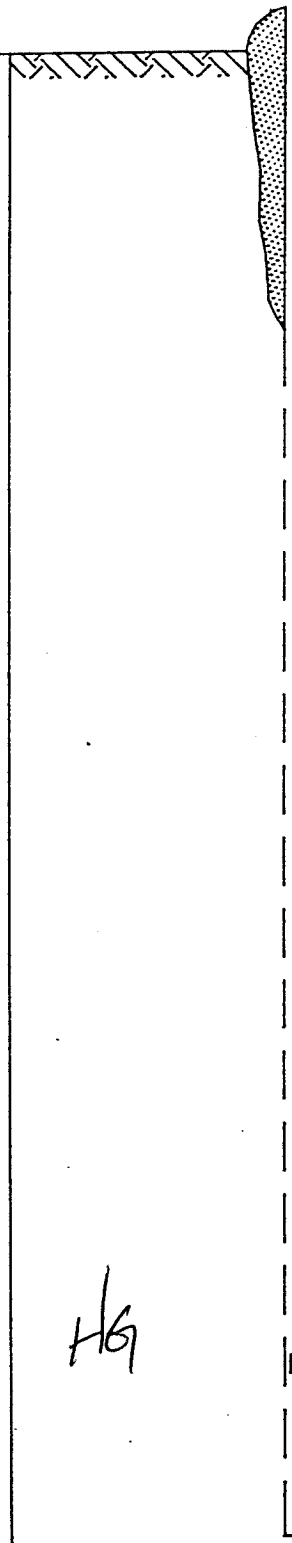
084409

WELL COMPLETION LOG

LSE

PROJECT Cenex Billings Tank Farm
SITE Inside tank 280 dike (East of tank)
COORDINATES T1N R26E Sec 34 ABD
DATE COMPLETED 9/5/91
SUPERVISED BY Jeffrey R. Rice

WELL NO. MW-6
AQUIFER Yellowstone R. shallow alluvial



Elevation of reference point 98.11'*

Height of reference point above ground surface 2.6'

Depth of surface seal 0.5' BGS (Outside steel casing)

Type of surface seal sacrete

I.D. of surface casing: 0.73'
Type of surface casing: Locking Steel

Depth of surface casing 0.95' BGS

I.D. of riser pipe: 0.5'
Type of riser pipe: Env. Well Prod. Co. flush threaded schedule 40 PVC

Diameter of borehole: 0.753'

Type of filler N/A

Depth to top of seal 0.0
Type of seal: Enviroplug #8 Bentonite

Type of gravel pack Granusil #8 silica sand

Depth to top of gravel pack 4.0' BGS

Depth to top of screen 5.0' BGS

Description of screen Env. Well Prod. Co. flush threaded schedule 40 PVC 0.020 slot

I.D. of screen section: 0.5'

Depth to bottom of screen 22.25' BGS

Depth to bottom of gravel pack 22.25' BGS

Depth to bottom of plugged blank section N/A

Type of filler below plugged section

Elevation of bottom of borehole 73.3' *

HG

* Elevation referenced to top of outlet pipe tank 280 = elev 100.00'

M:29676

BORE LOG

Sketch Map

Bore Number: MW-6 Owner: CENEX

Location: EAST OF TANK 280 Address:

INSIDE DIKE

T1N, R26E, Sec 34 ABD

Surface Elevation: Water Level:

Drilling Company: ADT/PRO PUMP Drilling Method: AIR ROTARY

Date Drilled: 9/5/91

Driller: AL HICKS Helper: ROSS LEHNER
M.W. Lisc. #171

Log By: JEFF RICE (LSE)

Notes:

Depth (Feet)	Sample No.	Sample Type	Sample Blows	Description/Soil Classification (Color, Texture, Structures)
0.0'-				Gravelly fine sand (GW), fill, dark brown, single grain, non-sticky,non-plastic, loose, dry.
3.0'				
3.0'-				Very cobbly/gravelly sand (GW), dark grey/brown, single grain, non-sticky, non-plastic, loose, dry to moist, alluvium, moist at 5'.
9.0'-				
9.0'-				Very cobbly/gravelly sand (GW), black/dark grey, single grain, non-sticky, non-plastic, loose, moist to field capacity, alluvium, moderate hydrocarbon odor.
10.5'				
10.5'-				Very cobbly/gravelly sand (GW/GM), grey/brown, single grain, non-sticky, non-plastic, loose, saturated, alluvium, "silty sands", free water at 10.5', no HC odor or sheen on water discharged.
20.0'				
20.1'-				Shale, grey, platy, single grain, very sticky, very plastic, firm to very firm, moist to field capacity first foot becoming dryer with depth, res. formation, "silty" 1st foot.
22.3'				

MONITORING WELL LOG NO. M1/SB1

PROJECT: Midland Packing Plant
OWNER NAME: Montana Power Company
ADDRESS: Midland Packing Plant
Billings, MT

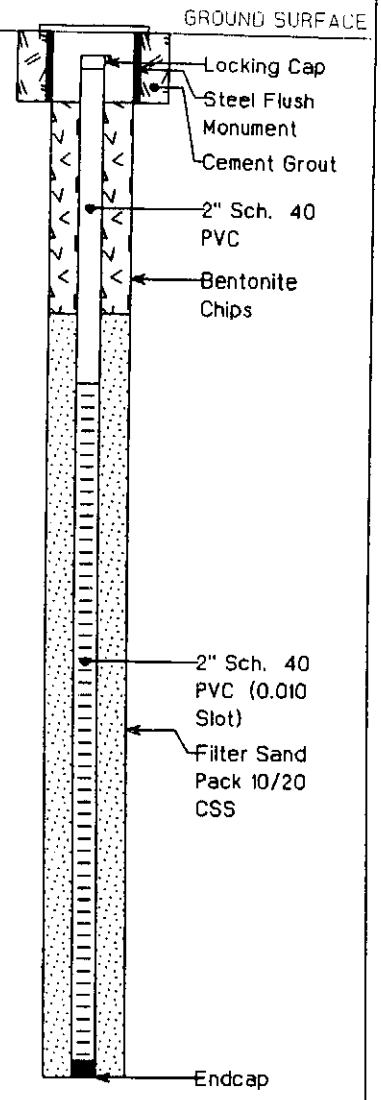
WELL LOCATION
COUNTY: Yellowstone
SECTION: SE/4 NW/4 34
TNSHP/RNG: T: North/R25 East

DATE: June 18, 1998
HOLE DIA.: 6 in.
TOC ELEV.: surface + 0.25 ft
GW DEPTH: 6.00 ft

LOGGED BY: Guy LaRango
DRILL RIG: CP 650 Air Rotary
SAMPLER TYPE: Drill Cuttings
GROUND ELEV.: ground surface ft.

DESCRIPTION	GRAPHIC LOG	DEPTH	SAMPLE DEPTH	HEADSPACE	GW DEPTH
Concrete		0			
Fill: sand and gravel					
Clay: black, moist, plastic, "old" petroleum odor.		1			
Clay becoming olive brown, moist, plastic. Petroleum odor decreasing.		2, 3, 4, 5, 6			▼
Clay as above becoming slightly sandy, increasing moisture, "old" petroleum odor.		7, 8, 9			
Sandy Gravel: dark gray to black, gravel clasts up to 2-inch diameter and generally subrounded, sand is upper fine to lower medium grained, "old" petroleum odor and staining, wet.		10, 11, 12, 13, 14			
Total Depth at 15 feet		15			
No soil samples collected.		16, 17, 18, 19, 20			

WELL CONSTRUCTION DETAIL



OLYMPUS TECHNICAL SERVCIES 454 Moore Lane, Suite 2 Billings, MT 59101	Licensed Well Contractor AQT/Pro Pump 2621 South Ramshorn Laurel, MT 59044 License No.: MWC 171	PROJECT NO. A4049 Page 1 of 1

Off-Site Boring Logs

111 01N 26E 26CC Yellowstone -01

(4)

111 N-26E-26 CC

3 GW 2 Revised 1969
STATE PUBLISHING COMPANY

RECEIVED
JUL - 3 1973
Montana Bureau of Mines and Geology

County ~~Flathead~~ Yellowstone

018339

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the **owner** with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner Robert C Nelson WELL NO 1

Address 3921 Dry Gulch Rd. Billings

Date well started APRIL 70

completed APRIL 70

Type of well DRIVEN (Dug, driven, bored or drilled)

Equipment used DRIVER (Churn drill, rotary or other)

For Administrator's Use
File
GW 1

Water Use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐

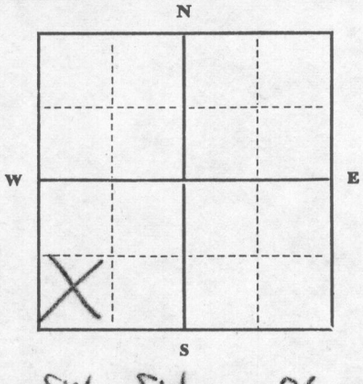
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*Describe

USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition).

ESTIMATED ANNUAL WITHDRAWAL 300,000

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
4"	1/4 x 4"	28'	28'			



SW ¼ SW ¼ Sec. 26
T. 1 N/S R. 26 E/W

Static water level ft.*
Pumping water level 24' ft.*
at gallons per minute,
measured minutes after pumping began.
*Measured from ground level.
Well developed by 4'
for hours.
Power Elect Pump 1 HP HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature

Driller's Address

LICENSE NO.

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, sand, gravel, shale, sands, stone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground (Elev. above sea level)

From (Feet)	To (Feet)	
4'	28	

H6

Show exact depth of bottom

M: 11350

111 01N 26E 26CC Yellowstone

-02 111 01N-26E 26CC

3 GW 2 Revised 1969
STATE PUBLISHING COMPANY

(4)

RECEIVED
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Montana Bureau of Mines and Geology

County [redacted] Yellowstone

018338

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the **owner** with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

WELL NO 2

Owner Robert C Nelson

Address 3921 Dry Gulch Rd.

Date well started Not Known

completed filedate 73 RR

Type of well Dug.
(Dug, driven, bored or drilled)

Equipment used By Hand
(Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☒ Irrigation ☒

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

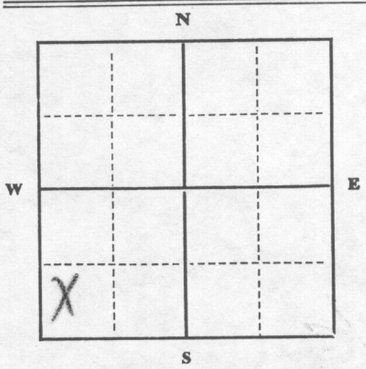
*Describe

USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition). IRRIGATION 4 ACRES

ESTIMATED ANNUAL WITHDRAWAL 600,000

For Administrator's Use
File
GW 1

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
3'	3'	20'	20'			



SW ¼ SW ¼ Sec. 26
T. 1 N/S R. 26 E/W

Static water level ft.*
Pumping water level 14' ft.*
at gallons per minute,
measured minutes after pumping began.
*Measured from ground level.
Well developed by
for hours.
Power GASS Pump 10 HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature

Driller's Address

LICENSE NO.

DRILLER'S LOG

Indicate the character, color, thickness of strata such as sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground (Elev. above sea level)

From (Feet)	To (Feet)	
4'	10	

H6

Show exact depth of bottom

M:11351

111 01N 26 E 26CCB Yellowstone -01

GW 4

File No. .....

(4)

111 T 1N R 26 E 26CCB

County Yellowstone

Well 1

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Montana Bureau of Mines and Geology

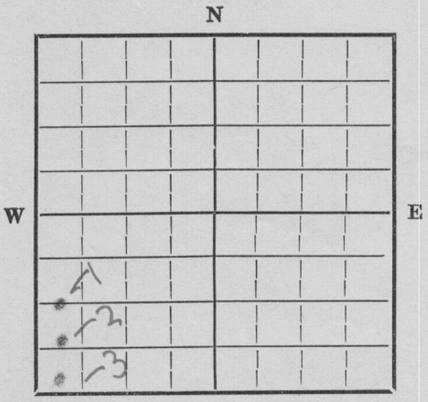
018340

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Frank Orchowski, of 101-N 24th Billings
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



26-1 rec lot 7 + 7 rec
SESW N of Ry 1/4 Sec. 26 T 1N R 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based drinking water + livestock

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1959 — every day —

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 120 —

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof .....

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
Jet Pump 1/3 hp. electric motor
Jet Pump 1/3 hp ✓ ✓
Jet Pump 1/3 hp ✓ ✓

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1959 —

8. The depth of water table 18 ft —

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
20 ft — 4 in casing
20 ft — ✓ ✓
20 ft — ✓ ✓

10. The estimated amount of groundwater withdrawn each year 26,400,000

11. The log of formations encountered in the drilling of each well if available
gravel.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record .....

HG

Signature of Owner [signature]

Date 12/30/63 —

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11352

GW 4 1N 26E 26CCB Yellowstone -02

File No. ..... (4) 111 T 1N R 26E 26CCB

County Yellowstone

Well 2

018342

TRIPLICATE

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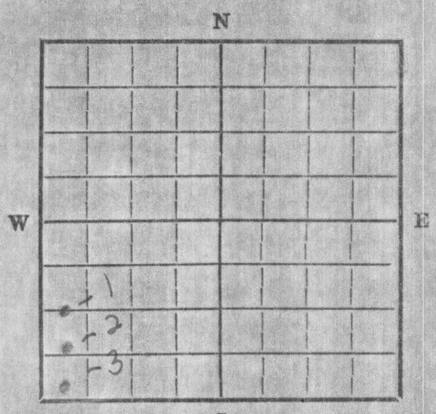
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Frank Orlowski, of 101-N 24th Billings
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



26-frac Lot 7 + 7 rec
SESW ¼ Sec. 26 T 1N R 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Drinking water + Lawnsprinkling

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1959 — every day —

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 120 —

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
Jet Pump 3 hp electric motor
Jet Pump 4½ hp — —
Jet Pump 4½ hp — —

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1959 —

8. The depth of water table 18 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
20 ft — 4 in Casing
20 ft — — —
20 ft — — —

10. The estimated amount of groundwater withdrawn each year 26,400,000

11. The log of formations encountered in the drilling of each well if available
Gravel.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

HG

Signature of Owner Frank Orlowski

Date 12/20/63 —

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11353

111 01N 26E 26CCC Yellowstone

GW 4

File No. .....

(4)

111 T 1N R 26E 26CCC

County Yellowstone

Well 3

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JAN 2 1964
Montana Bureau of Mines and Geology

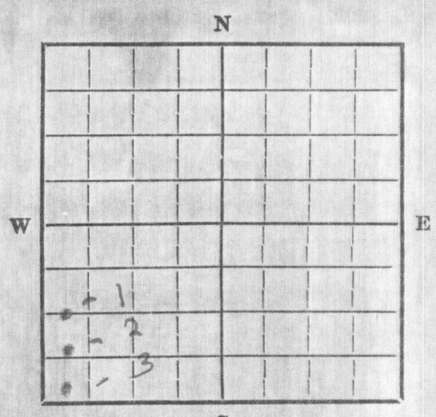
018341

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Frank Orchowski, of 101-N 24th Billings
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



26-1 rec Lot 7 & 7 rec
SESW N of Ry 1/4 Sec. 26 T 1N R 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Drinking Cattle + Lawnsprinkle

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1959 — every day —

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 120 —

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
Jet Pump 1/3 hp electric motor
Jet Pump 1/3 hp — —
Jet Pump 1/3 hp — —

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1959 —

8. The depth of water table 18 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
20 ft — Hin Casing
20 ft — — —
20 ft — — —

10. The estimated amount of groundwater withdrawn each year 26,400,000

11. The log of formations encountered in the drilling of each well if available
Gravel.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

HG

Signature of Owner Frank Orchowski

Date 12/20/63 —

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11354

111 01N 26E 27 Yellowstone

GW 2

-01

Approved Stock Form—State Publishing Co., Helena, Montana—39089

File No.....

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AUG 10 1962
Montana Bureau of
Mines and Geology

(1)

111 T. 1N R. 26 E 27

County Yellowstone

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER
OFFICE OF STATE ENGINEER

016681

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level.....)

From 0 ft. to 1 ft. Top Soil
1 ft. to 11 ft. Boulders & Sand
11 ft. to 28 ft. Brown sandy Shale
28 ft. to 42 ft. - Gray Sandrock
42 ft. to 67 ft.-Dark gray Sandrock
Water at 67 feet
Water supply 50 gal. per min.
Water level 35 feet from grade

Owner Holiday Inn / Address 429 Main St., Billings, Montana

Driller Leroy E. Johnson Address 1145 Lynn Ave. Billings, Montana

Date of Notice of Appropriation of Groundwater.....

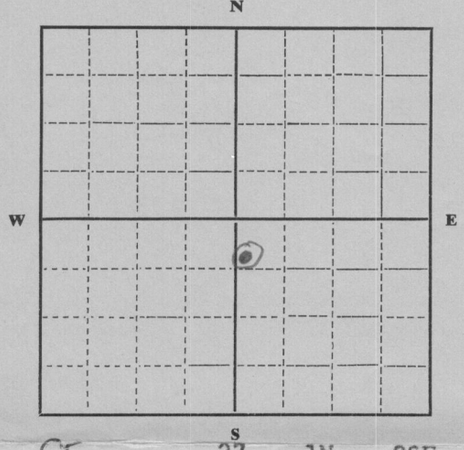
Date well started July 31, 1962 Date Completed August 2, 1962

Type of well Drilled (dug, driven, bored or drilled) Equipment Used cable tools (Churn, drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Other ☐ Irrigation ☐ Industrial ☐ Drainage ☐ Stock ☐

☞ Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
8"	8" steel surface pipe	6" above grade	12	1/4" holes drilled in casing	40	75
7"	20 gauge	5" above grade	75			



SE ¼ Sec. 27 T. 1N R. 26E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Static Water Level for non-flowing Well 35 feet.

Shut-in Pressure for Flowing Well.....

Pumping Water Level 67 feet at 50 gal. per minute.

Discharge in gal. per min. of flowing well.....

How Tested Bailer Length of Test 4 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation).....

Show exact depth of bottom.

75 feet

HD

#4
Driller's License Number

Leroy E Johnson
Driller's Signature

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

M: 11387

N1 0N 26E 33AD Yellowstone

-02

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana—42234

File No. .....

(4)

/// T. 1 N R. 26 E 33AD

County Yellowstone

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JAN 2 1974
Montana Bureau of Mines and Geology

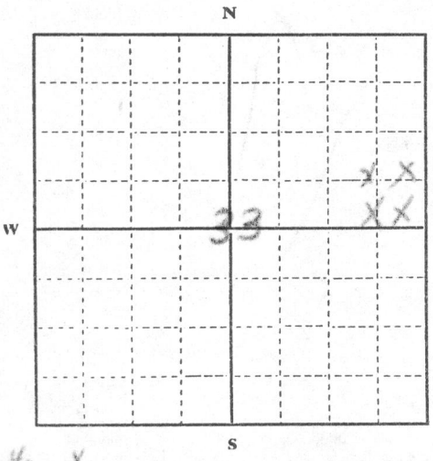
018404

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. HUGH P. PARSHALL (Name of Appropriator), of 315 No. 14 ST. (Address) BILLINGS (Town)
County of YELLOWSTONE State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE¼NE¼ ¼ Sec. 33 T. 1 N R. 26 E

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based
FOR LAWN SPRINKLING

3. Date or approximate date of earliest beneficial use; and how continuous the use has been JULY 1961
DURING SUMMER MONTHS

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 5 TO 6 GALLONS

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof
JUST LAWN-
HUGH P. PARSHALL

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
½ HORSE ELECTRIC PUMP
AT 315 No 14 of BILLINGS

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater STARTE IN JUNE AND COMMENCED USING THE WATER IN AUGUST

8. The depth of water table 12 FEET to WATER TABLE

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
WE ONLY HAVE ONE SMALL WELL TO SPRINKLE THE LAWN. THE DEPTH OF WELL IS 20 FEET

10. The estimated amount of groundwater withdrawn each year 162,000 GALLONS

11. The log of formations encountered in the drilling of each well if available
ENCOUNTERED ROCK AT 20 FT AND WERE UNABLE TO GO DOWN FARTHER.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record. TO MY KNOWLEDGE THIS IS ABOUT ALL THE INFORMATION I HAVE

Signature of Owner Hugh P. Parshall

HD

Date 12-30-63

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

M: 11501

m GW 4 1N 26E 34AAA Yellowstone

File No. .....

TRIPLICATE

RECEIVED
JAN 2 1964
Montana Bureau of Mines and Geology

111 T 1N R 26E 34 AAA

County Yellowstone

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

018407

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. FRANK ORCHOWSKI, of 101 - N-24th Billings,
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

N
W E
S

26 - Cert Irrw. + 225 - Lots

¼ Sec. 34 T 1N R 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Drinking water & lawns

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1946 - every day -

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 45 -

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Jet Pump - 3/4 hp electric motor

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1946 -

8. The depth of water table 18 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater 22 ft deep - 12 in Casing -

10. The estimated amount of groundwater withdrawn each year 12,600,000 gals -

11. The log of formations encountered in the drilling of each well if available gravel

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

HG

Signature of Owner Frank Orchowski

Date 12/30/63 -

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11519

111 01N 26E 34AAAC Yellowstone

File No.....

TRIPLICATE

RECEIVED
NOV 23 1965
Montana Bureau of
Mines and Geology

(1)

111 T. 1 N R. 26 E 34AAAC

County Yellowstone

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER
OFFICE OF STATE ENGINEER

018410

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level 3095 Gr.)

0-5 ft. Sand
5-32 ft. Coarse sand & gravel

Owner Lockwood Water Users Address Billings, Montana

Driller Eagle Drlg & Service Address P.O. Box 253, Billings

Date of Notice of Appropriation of Groundwater 9-27-65

Date well started 9-22-65 Date Completed 10-4-65

Type of well drilled (dug, driven, bored or drilled) Equipment Used rotary (Churn, drill, rotary or other)

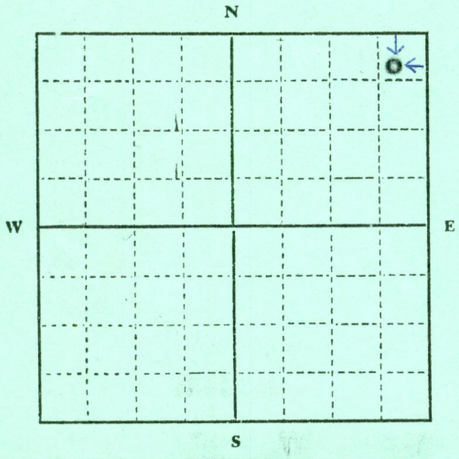
Water Use: Domestic ☐ Municipal ☒ Other ☐ Irrigation ☐ Industrial ☐ Drainage ☐ Stock ☐

☞ Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
24"	16"	Surface	32 ft.	Slotted	20'	30'

Approximately

510' W & 320' S of NE Corner



.....¼..... Sec. 34 ..... 1N ..... R. 26E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Static Water Level for non-flowing Well 17 feet.

Shut-in Pressure for Flowing Well -----

Pumping Water Level 23 feet at 210 gal. per minute.

Discharge in gal. per min. of flowing well.....

How Tested Pump tested Length of Test 24 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation)

Upon completion of the well the upper 15 ft. of casing was grouted

Show exact depth of bottom.

Eagle Drlg & Service
#145
Driller's License Number

Vernon G. Morlen
Secretary & Treasurer
Driller's Signature

HG

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

M-11520

111 01N 26E 34 AAD Yellowstone

GW 4

File No. .....

(2)

111 T 1N R 26E 34

County Yellowstone

TRIPLICATE

RECEIVED
JAN 2 1964
Montana Bureau of Mines and Geology

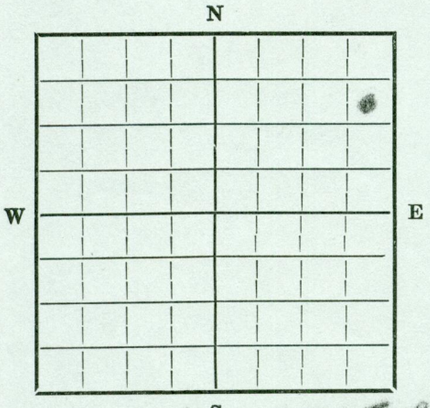
018409

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. FRANK ORCHOWSKI, of 101-N. 24th Billings
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



26 - Cert Serv. # 225 Lot 5

..... ¼ ..... Sec. 34 T 1N R 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Drinking Water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1950 - Every Day -

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 40

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof .....

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Jet Pump ½ hp electric Motor.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1950

8. The depth of water table 20 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
15 in tile Casing - 22 ft Deep -

10. The estimated amount of groundwater withdrawn each year 2,400,000 gals -

11. The log of formations encountered in the drilling of each well if available gravel -

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record .....

HG

Signature of Owner [signature]

Date 12/30/63 -

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M. 11521

FORM No. 603 New 7-73

111 01N 26E 34BB YELLOWSTONE 1N-26E-34

File No. 4552-943Q

RECEIVED APR 22 1975 Montana Bureau of Mines & Geology

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PINK — BUREAU
CANARY — W[illegible]
GOLDENROD — [illegible]

017895

WELL LOG REPORT

Lot 8 Blk 24 Poly Vista Sub.

State law requires that this form be filed by the water well driller on any water well completed by him on and after July 1, 1973 within sixty (60) days after completion of the well.

1. WELL OWNER: Name R.W. CHARBONNEAU Address 3617 MARIETTA AVE BILLINGS

2. WELL LOCATION: County Yellowstone; ¼NW¼NW¼, Sec. 34, Twp. 1 N-S, Rg. 26 E-W

3. PROPOSED USE: ✓ Domestic ___ Stock ___ Municipal ___ Industrial ✓ Lawn and Garden ___ Irrigation ___ Other (*if other, specify*)

4. METHOD DRILLED: ___ Cable ___ Bored ✓ Forward Rotary ___ Reverse Rotary ___ Jetted ___ Other (*if other, specify*)

5. WELL CONSTRUCTION:
Diameter of hole 6¾ inches. Depth 130 ft.
Casing: ___ Steel ✓ Plastic ___ Concrete ___ Threaded ✓ Welded ___ Other (*if other, specify*)

Pipe Weight:	Dia.:	From:	To:
160 lb/ft.	4½ inches	1+ feet	130 feet
___ lb/ft.	___ inches	___ feet	___ feet
___ lb/ft.	___ inches	___ feet	___ feet

Was perforated pipe used? ✓ Yes ___ No
Length of pipe perforated 11 feet
Was casing left open end? ✓ Yes ___ No
Was a well screen installed? ___ Yes ✓ No
Material ___ Dia. ___ inches (*stainless steel, bronze, etc.*)
Perforation type: ___ slots ___ holes
Size ¼ set from 119 feet to 130 feet
Size ___ set from ___ feet to ___ feet
Size ___ set from ___ feet to ___ feet
Was a packer or seal used? ✓ Yes ___ No
If so, what material Butyl
Well type: ___ Straight screen ___ Graveled
Was the well grouted? ✓ Yes ___ No
To what depth? 8 feet
Material used in grouting Cement
Well head completion: Pitless adapter ___
12" above grade ✓ Other ___
(*If other, specify*) ___
Was the well disinfected? ✓ Yes ___ No

6. WATER LEVEL:
Static water level 70 ft. below land surface
If flowing: closed-in pressure ___ psi
GPM flow ___ through ___ inch pipe
Controlled by: ___ Valve ___ Reducers ___ Other, *specify* ___

7. WELL TEST DATA: ✓ Pump ___ Bailer ___ Other (*If other, specify*) ___
Pumping level below land surface:
80 ft. after 4 hrs. pumping 20 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	119	Sand top soil
119	130	Gravel

(*Use separate sheet if necessary*)

HD

9. DATE STARTED: 11-15-74

10. DATE COMPLETED: 11-20-74

11. WAS WELL PLUGGED OR ABANDONED? ___ Yes ✓ No
If so, how ___

12. DRILLER'S CERTIFICATION:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Digger Drlg 197
Driller's or Firm Name *License No.*

3143 Prairie Drive Billings Mont
Address

J. J. Bar 11-20-74
Signed by *Date*

M: 11522

66

1110IN 26E 34 [redacted] Yellowstone CB (4)

3 GW 2 Revised 1969
STATE PUBLISHING COMPANY

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL

Developed after January 1, 2962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

RECEIVED JUL - 3 1973

This form to be prepared by driller, and three copies to be filed by the **owner** with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner: Laura Richards

Address: ~~1258 Lake Elmo Dr.~~ 1200 Minn
Billings, Montana

Date well started: Before 1950

completed: file date 73 pp

Type of well: Dug (Dug, driven, bored or drilled)

Equipment used: (Churn drill, rotary or other)

Water Use: Domestic [XX] Municipal [ ] Stock [ ] Irrigation [ ]

Industrial [ ] Drainage [ ] Other [ ]* Garden/Lawn [XX]

*Describe

USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition). 1250 Lake Elmo Tract 3 EOSS 960

ESTIMATED ANNUAL WITHDRAWAL 500,000

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
~~6 inch~~ 6"	~~8"~~ 6"					

N
W X E
S

NW ¼ SW ¼ Sec. 34
T. 1 N/~~S~~ R. 26 E/~~W~~

Static water level ft.*
Pumping water level ft.*
at gallons per minute,
measured minutes after pumping began.
*Measured from ground level.
Well developed by
for hours.
Power Pump HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature none

Driller's Address

LICENSE NO.

County Yellowstone

DRILLER'S LOG

018408

Indicate the characteristics of strata such as gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground (Elev. above sea level)

From (Feet)	To (Feet)	
		HP

Show exact depth of bottom

M: 11524

M No. 603 New 7-73 MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 01N 26E 34DC Yellowstone

File No.

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PIN
CA 016736
GO.

WELL LOG REPORT CODED

State law requires that this form be filed by the water well driller on any water well completed by him on and after July 1, 1973 within sixty (60) days after completion of the well.

1. WELL OWNER: Name J. Donovan Johnson Address 807 Grand - Billings Mont.

2. WELL LOCATION: County Yellowstone; ¼SW ¼SE ¼, Sec. 34, Twp. 1 N-S, Rg. 26 E-W

3. PROPOSED USE: ___ Domestic ___ Stock ___ Municipal ___ Industrial X Lawn and Garden ___ Irrigation ___ Other (*if other, specify*) ALTO Sub. W 50' of E 137½' of LOT 13 LOCK 1

4. METHOD DRILLED: ___ Cable ___ Bored ___ Forward Rotary ___ Reverse Rotary ___ Jetted ___ Other (*if other, specify*) Driven with hydraulic hammer

5. WELL CONSTRUCTION:
Diameter of hole 2 7/8 inches. Depth 20 ft.
Casing: X Steel ___ Plastic ___ Concrete
X Threaded ___ Welded ___ Other (*if other, specify*)
Pipe Weight: Dia.: From: To:
5 lb/ft. 2 7/8 inches 0 feet 20 feet
___ lb/ft. ___ inches ___ feet ___ feet
___ lb/ft. ___ inches ___ feet ___ feet
Was perforated pipe used? X Yes ___ No
Length of pipe perforated 6 feet
Was casing left open end? X Yes ___ No
Was a well screen installed? ___ Yes X No
Material ___ Dia. ___ inches
(*stainless steel, bronze, etc.*)
Perforation type: X slots ___ holes
Size 6" X 1/4" set from 20 feet to 14 feet
Size ___ set from ___ feet to ___ feet
Size ___ set from ___ feet to ___ feet
Was a packer or seal used? ___ Yes X No
If so, what material ___
Well type: ___ Straight screen X Graveled
Was the well grouted? ___ Yes X No
To what depth? ___ feet
Material used in grouting ___
Well head completion: Pitless adapter ___
12" above grade ___ Other temporary cap
(*If other, specify*) for pump installation
Was the well disinfected? ___ Yes X No

6. WATER LEVEL:
Static water level 9 ft. below land surface
If flowing: closed-in pressure — psi
GPM flow 12 through 1 1/4 inch pipe
Controlled by: ___ Valve ___ Reducers
___ Other, *specify* None

7. WELL TEST DATA: X Pump ___ Bailer ___ Other
(*If other, specify*) ___
Pumping level below land surface:
20 ft. after 1 hrs. pumping 6 gpm
20 ft. after 2 hrs. pumping 12 gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	20	Sand, dirt & gravel,

#6

(*Use separate sheet if necessary*)

9. DATE STARTED: 8-7-73

10. DATE COMPLETED: 8-7-73

11. WAS WELL PLUGGED OR ABANDONED? ___ Yes X No
If so, how ___

12. DRILLER'S CERTIFICATION:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Claude Rye — City 1511
Driller's or Firm Name — *License No.*
2301 Stillwater Dr. Billings Mont
Address
Claude Rye — 8-11-73
Signed by — *Date*

M. 11527

111 01N 26E 35 B Yellowstone

Form No. 603 (Rev. 7/76)

STATE OF MONTANA

File No. 14721-G43Q

BILLINGS.E.

Department of Natural Resources and Conservation

White-Department

016738

Gold-Driller

Coded

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name V. R. OTT

2. CURRENT MAILING ADDRESS
721 Lincoln Lane
Billings Mt.

3. PROPOSED USE ✓ domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) NO ELEVATION

4. WELL LOCATION

NW ¼ ____ ¼ ____ ¼ ____ ¼ Section 35
T. 1N N or ~~S~~ R. 26E E or ~~W~~
OR, Lot 1A Block ____
Subdivision Peters Sub. Lockwood Inter.
City Billings County Yellowstone
Elevation ____ Accuracy: ___ ±10'; ___ ±50'; ___ ±100';

5. DRILLING METHOD ____ cable, ____ bored, ✓ forward rotary, ____ reverse rotary, ____ jetted, ____ other (specify) ____

6. WELL CONSTRUCTION AND COMPLETION

Size of drilled hole	Size and weight of casing	From (feet)	To (feet)	Perforations ✓ and/or Screen ____ Kind Size	From (feet)	To (feet)
6 1/4	5.563	0	40	1/8 cuts	35	39
	2.03					

Was casing left open end? ✓ Yes, ____ No
Was a packer or seal used? ✓ Yes, ____ No
If so, what material Bentonite, rubber
Was the well gravel packed? ____ Yes, ✓ No
Was the well grouted? ____ Yes, ✓ No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade ✓, other ____
(if other, specify) ____
Pump horsepower 1/2, pump type Sub.
Pump intake level 30 feet below land surface
Power (electric, diesel, etc.) etc

7. WATER LEVEL
Static water level 20 feet below land surface
If flowing, closed-in pressure ____ psi
____ gpm flow through ____ inch pipe
Controlled by: ____ valve, ____ reducers, ____ other
(if other, specify) ____

8. WELL TEST DATA ____ pump ✓ bailer ____ other
(if other, specify) ____
Pumping level below land surface:
27 ft. after 3 hrs. pumping 15 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes ✓ No
If yes, how? ____

10. DATE STARTED July 27 1977
DATE COMPLETED July 27 1977

11. WELL LOG

Depth (ft.) From	To	Formation ~~HO ALUM~~
0	2	Top soil
2	18	clay
18	40	sand gravel
40		shale

HG

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8-1-77
Date

LaDeane Jewett
Signature

264
License No.

Billings Drilling
Firm name

14023 Roundup Rd Blgs
Address

M-11537

01 01N 26E 35BBD Yellowstone

GW 4

File No. ..... (4) (4)

111 T 1N R 26E 35 BBD

TRIPLICATE

County Yellowstone

Well 1

RECEIVED
JAN 2 1984
Montana Bureau of Mines and Geology

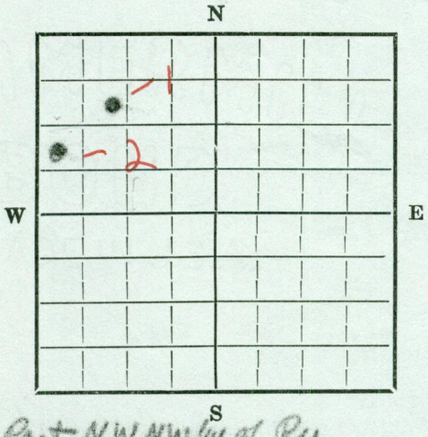
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

018413

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. FRANK ORCHOWSKI, of 101-N.24th Billings
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



26 Part NW NW ¼ of Rly

..... ¼ ..... Sec. 35 T. 1N R. 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Drinking water + livestock

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1958

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 60

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
(1) Jet Pumps ½ hp electric motor.
(2) Jet Pumps ½ hp " "

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1958

8. The depth of water table 18 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater 20 ft. 4 in Casing.
20 ft 4 in Casing.

10. The estimated amount of groundwater withdrawn each year 13,000,000

11. The log of formations encountered in the drilling of each well if available gravel.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

HG

Signature of Owner [signature]

Date 12/30/63

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

Mi 115 +1

111 0/N 26E 35BCB Yellowstone

GW 4

File No. ..... (4) (4)

111 T 1N R 26E 35 BCB

TRIPLICATE

County Yellowstone

well 2

RECEIVED
JAN 2 1984
Montana Bureau of Mines and Geology

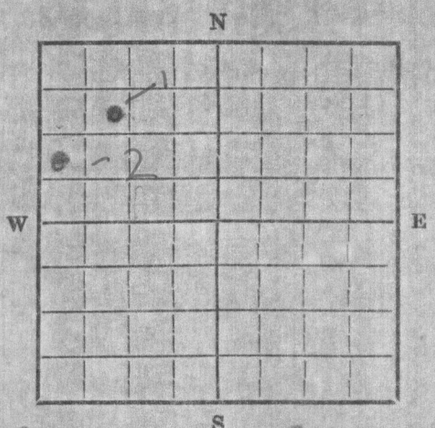
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

018414

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. FRANK ORCHOWSKI, of 101-N-24th Billings
(Name of Appropriator) (Address) (Town)
County of Yellowstone State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



Part NW NW ¼ of Sy

..... ¼ ..... Sec 35 T 1N R 26

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Drinking water & livestock

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1958

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 60

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
(1) Jet Pumps ½ hp electric motor
(2) Jet Pump ½ hp " "

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1958

8. The depth of water table 18 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
20 ft - 4 in casing
20 ft 4 in casing

10. The estimated amount of groundwater withdrawn each year 13,000,000

11. The log of formations encountered in the drilling of each well if available Gravel

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

HG

Signature of Owner [signature]

Date 12/30/63

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11542

Billings 111 1 N 26 E 33 AD -01 YELLOWSTONE

LOG OF BORING

PETE'S AUTOMATIC TRANSMISSION

BRAUN ENVIRONMENTAL LABORATORIES

PROJECT: MTG-002 [redacted]

BORING: DH-4

LOCATION: IN PARKING LOT 106ft. S. OF CENTERLINE 3RD AVE. N. AND 22ft. E. OF CENTERLINE ALLEY.

DRILL TYPE: CME55
DRILLED BY: B. Neff MWC154
LOGGED BY: SMS

DATE: 2/5/90 SCALE: 1"=3'

Elev. 000	Depth 0.0	ASTM D2487 Symbol	Description of Materials (ASTM D2488)	BPF	Well Diagram	Tests or Notes
	0.2		ASPHALTIC CONCRETE			CONCRETE WITH STEEL PROTECTOR
	1.0		BASE COURSE. POORLY GRADED GRAVEL W/SAND. dense, subrounded gravel to 3/4" max. dia., medium grained sand (GP).			BENTONITE
	2.5		SILTY GRAVEL W/SAND. Med. dense rounded gravel to 1 1/2" max. dia., medium grained sand (GM).			2" dia. flush threaded PVC 0.010" slot screen 3.5' to 18.5'
	7.5		LEAN CLAY. Stiff, moist, moderately plastic, grey staining, [redacted] some salts, glass, wood and metal debris (CL).			
	8.0	▽	SANDY SILTY CLAY. Soft, wet, fine grained sand, med. brown (CL-ML).			
	9.0	GWT				
			POORLY GRADED GRAVEL W/SAND. Dense, wet, rounded gravel to 3" max. dia., med. grained sand [redacted]			10/20 FRACTION GRADED SILICA SAND
	18.8		SANDY MUDSTONE. Med. hard rock, slightly fissile, fine grained sand, gray.			COLLAPSED GRAVEL W/SAND
	19.0		B.O.H.			

1 N 26 E 33 AD

HD

M: 122 061

Billings 1 N 26 E 34 BCC -01 YELLOWSTONE

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 082286

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CON SOLIDATED FREIGHT WAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☒
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 19.8 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 18.5 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size 0.02 from 3.5 ft. to 18.5 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 3.0 ft. to 18.5 ft.
GROUTED: To what depth? 3.0 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-1

Depth (ft.) From	To	Formation
0.0		
	0.5	CONCRETE
0.5		
	2.0	FILL
2.0		
	6.16	CLAY
		▽ GWL
	7.0	CLAY
7.0		
	19.8	GRAVEL

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/10/90

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger
Signature
209
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 123504

DEPARTMENT — BUREAU COPY

Billings 1N 26E 34 BCC -02 YELLOWSTONE

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 082287

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☒
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 18.8 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 17.5 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size .002 from 2.5 ft. to 17.5 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 2.0 ft. to 17.5 ft.
GROUTED: To what depth? 2.0 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-2

Depth (ft.) From	To	Formation
0.0		
		GRAVEL
	0.1	
0.1		
		FILL
	2.0	
2.0		
		CLAY
	6.31	▽ GWL
		CLAY
	8.5	
8.5		
		GRAVEL
	18.5	
18.5		
		CLAYSTONE
	18.8	B O H

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/19/90

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger 209
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6810
DNRC

M:123505

DEPARTMENT — BUREAU COPY

Billings 1 N 26 E 34 BCC -03 YELLOWSTONE

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 081928

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHT WAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☒
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 18.8 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 18.5 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size 0.02 from 3.5 ft. to 18.5 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 3.0 ft. to 18.5 ft.
GROUTED: To what depth? 3.0 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____.
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-3

Depth (ft.) From	To	Formation
0.0		
		CONCRETE
	0.5	
0.5		
		FILL
	1.5	
1.5		
		CLAY
	6.67	▽ GWL
		CLAY
	8.5	
8.5		
		GRAVEL
	18.0	
18.0		
		CLAY STONE
	18.8	B O H

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/10/90

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger
Signature
209
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 123506

DEPARTMENT — BUREAU COPY

Billings

1 N 26 E 34 BCC -04 YELLOWSTONE

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 081929

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHT WAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 (N)S Range 26 (E)W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☒
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 20.5 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 18.4 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size 0.02 from 3.4 ft. to 18.4 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 3.0 ft. to 18.4 ft.
GROUTED: To what depth? 3.0 ft.
Material used in grouting Ben TONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm. Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-4

Depth (ft.) From	To	Formation
0.0		
		FILL
	2.0	
2.0		
		CLAY
		▽ GWL
		CLAY
	8.0	
8.0		
		GRAVEL
	20.5	B OH

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/12/90

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger 209
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

M:123.507

DEPARTMENT — BUREAU COPY

Billings 1N26E34BCC-05 YELLOWSTONE

081930

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. _____

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot -, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:

New well	☒	Method: Dug	☐	Bored	☒
Deepened	☐	Cable	☐	Driven	☐
Reconditioned	☐	Rotary	☐	Jetted	☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 21.3 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 21.2 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size .002 from 6.2 ft. to 21.2 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.

GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 5.2 ft. to 21.2 ft.

GROUTED: To what depth? 5.2 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm. Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-5

Depth (ft.) From	To	Formation
0.0		
	2.0	FILL
2.0		
		~~CLAY~~ SILTY SAND
	5.4	✓ GWL
		~~CLAY~~ SILTY SAND
	7.8	
7.8		
		GRAVEL
	20.0	
20.0		
		CLAYSTONE
	21.3	BOTTOM OF HOLE

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2/5/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

3/19/91
Date

CHEN, NORTHERN, INC
Firm Name

600 So 25, BILLINGS, MT
Address

Ben Krueger — 209
Signature — License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 123508

DEPARTMENT — BUREAU COPY

Billings 1 N 26 E 34 BCC -06 YELLOWSTONE

081931

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. _____

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW 1/4 SW 1/4 NW 1/4 Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☒
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 19.3 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 19.0 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size 0.02 from 4.0 ft. to 19.0 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 3.5 ft. to 19.0 ft.
GROUTED: To what depth? 3.5 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-6

Depth (ft.) From	To	Formation
0.0		CONCRETE
	0.3	
0.3		FILL
	3.5	
3.5		CLAY
	6.5	▽ GWL
		CLAY
	9.0	
9.0		GRAVEL
	19.0	
19.0		CLAYSTONE
	19.3	BOH

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2/5/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEW-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger 209
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

M: 123509

DEPARTMENT — BUREAU COPY

Billings 1 N 26 E 34 BCC -07 YELLOWSTONE

081932

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. _____

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:

New well	☒	Method: Dug	☐	Bored	☒
Deepened	☐	Cable	☐	Driven	☐
Reconditioned	☐	Rotary	☐	Jetted	☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 20.0 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 20.0 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size .002 from 5.0 ft. to 20.0 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 3.9 ft. to 20.0 ft.
GROUTED: To what depth? 3.9 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-7

Depth (ft.) From	To	Formation
0.0		
		ASPHALTIC CONCRETE
	0.3	
0.3		
		FILL
	2.4	
2.4		
		CLAY
	6.5	▽ GWL
		CLAY
	6.7	
6.7		
		GRAVEL
	17.7	
17.7		
		CLAYSTONE
	20.0	B OH

#D

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2/5/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger
Signature
209
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:123510

DEPARTMENT — BUREAU COPY

Billings 1N 26E 34 BCC -08 YELLOWSTONE

081933

Form No. 603 (R 2-69)

WELL LOG REPORT

File No. _____

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:

New well	☒	Method: Dug	☐	Bored	☒
Deepened	☐	Cable	☐	Driven	☐
Reconditioned	☐	Rotary	☐	Jetted	☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 19.5 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 19.0 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size .002 from 4.0 ft. to 19.0 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 3.8 ft. to 19.0 ft.
GROUTED: To what depth? 3.8 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (If Installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Baller _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm. Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes ✓ No
If yes, how? _____

12. WELL LOG CF-8

Depth (ft.) From	To	Formation
0.0		
		FILL
	2.0	
2.0		
		CLAY
	5.6	▽ GWL
		CLAY
	6.3	
6.3		
		SILTY SAND
	9.0	
9.0		
		GRAVEL
	18.0	
18.0		
		CLAYSTONE
	19.5	B O H
		HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2/5/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger
Signature
209
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 123511

DEPARTMENT — BUREAU COPY

Billings 1 N 26 E 34 BCC -09 YELLOWSTONE

L081934

WELL LOG REPORT

File No. _____

Form No. 603 (R 2-89)

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☐ Bored ☒ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 21.7 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 21.2 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size 0.02 from 6.2 ft. to 21.2 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 5.0 ft. to 21.2 ft.
GROUTED: To what depth? 5.0 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-9

Depth (ft.) From	To	Formation
0.0		FILL
	0.2	
0.2		CLAY
	5.5	▽ GWL
		CLAY
	7.7	
7.7		SILTY SAND
	8.2	
8.2		GRAVEL
	20.5	
20.5		CLAYSTONE
	21.7	B OH

HD

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2/4/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger
Signature
209
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

M: 123512

DEPARTMENT — BUREAU COPY

Billings 1N26E34BCC -10 YELLOWSTONE

081935

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. _____

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name CONSOLIDATED FREIGHTWAYS

2. CURRENT MAILING ADDRESS
1002 3rd AVE NORTH
BILLINGS, MT

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 34
Township 1 (N)S Range 26 (E)W County YELLOWSTONE
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify MONITOR WELL

5. TYPE OF WORK:

New well	☒	Method: Dug	☐	Bored	☒
Deepened	☐	Cable	☐	Driven	☐
Reconditioned	☐	Rotary	☐	Jetted	☐

6. DIMENSIONS: Diameter of Hole
Dia. 10.0 in. from 0.0 ft. to 19.0 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. _____ from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 2" from 0.0 ft. to 19.0 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name _____
Type _____ Model No. _____
Dia. 2" Slot size 0.02 from 4.0 ft. to 19.0 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☒ No ☐ Size of gravel #10-20
Gravel placed from 2.8 ft. to 19.0 ft.
GROUTED: To what depth? 2.8 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No FLUSH MOUNT

9. PUMP (if installed)
Manufacturer's name _____
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump _____ Bailer _____
b) Static water level immediately before testing _____ ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate: _____ gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time _____ hrs.
g) Recovery time _____ hrs.
h) Recovery water level _____ ft. at _____ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG CF-10

Depth (ft.) From	To	Formation
0.0		
		CLAY
	6.3	∇ GWL
		CLAY
	6.5	
6.5		
		GRAVEL
	17.0	
17.0		
		CLAYSTONE
	19.0	B O H

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2/6/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/19/91
Date
CHEN-NORTHERN, INC
Firm Name
600 So 25, BILLINGS, MT
Address
Ben Krueger 209
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:123513

DEPARTMENT — BUREAU COPY

Billings 1N 26E 34C YELLOWSTONE

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 087089

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name: agRI Systems

2. CURRENT MAILING ADDRESS
1300 minnesota Ave
Blgs MT 59101

3. WELL LOCATION
1/4 W 1/2 1/4 SW 1/4 Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name IND. Sub
Tract Number TR. 2

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify Plant use only

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 9 3/4 in. from 0 ft. to 24 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 from +2 ft. to 19 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness 1/4
Casing; Plastic Dia. _____ from _____ ft. to _____ ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☐ No ☐
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

SCREENS: Yes ☒ No ☐
Manufacturer's Name Howard Smith
Type Telescope Model No. Stainless Steel
Dia. 5 5/8 Slot size 60 from 19 ft. to 24 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.

GRAVEL PACKED: Yes ☐ No ☒ Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

GROUTED: To what depth? 18 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name No
Type _____ Model No. _____ HP. _____

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air _____ Pump X Bailer _____
b) Static water level immediately before testing 6 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____.
c) Depth at which pump is set for test 23
d) The pumping rate: 30 gpm.
e) Pumping water level 18 ft. at 4 hrs. after pumping began.
f) Duration of test: Pumping time 4 hrs.
g) Recovery time 1 hrs.
h) Recovery water level 6 ft. at 1 hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG

Depth (ft.) From	To	Formation
0	2	Fill gravel
2	6	clay Black
6	24	gravel sand mixed

NO

RECEIVED
OCT 6 1991
DEPT. OF NATURAL RESOURCES AND CONSERVATION BILLINGS OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED _____

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
10-5-91
Date
American Drilling
Firm Name
1520 East Lane
Address
Curtis Schell 3414
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

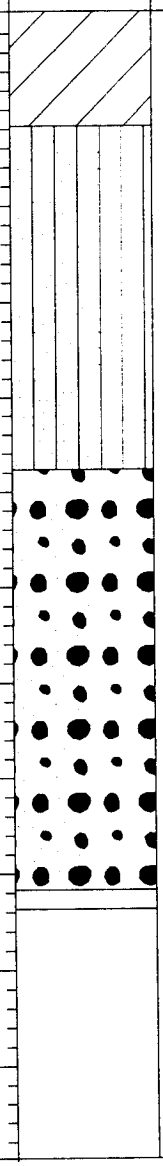
DEPARTMENT—BUREAU COPY

M:126401

Billings 1S 26E C2 ABBBC YELLOWSTONE 090240

CONOCO BILLINGS REFINERY	Identification: R-18
	Datum: Mean Sea Level
Location: -300.99 N 2673.43 E	Logged By: A. Eggen
Purpose: Monitoring Well / Ground Surface: 3104.34	Drilling Method: Hollow Stem Auger - 4" ID
Date(s): / / - 09/22/88	Well Casing: 2.00in Sch 40 PVC From -1.9 to 3.4 ft
Drilling Contractor: Braun Engineering	Type of Perforation: 0.010in From 3.4 to 22.4 ft
Remarks: Backfilled	Sand Pack: 10/20 Silica Sand From 2.5 to 22.4 ft
	Seal Type: No. 1 Grout From 0.0 to 1.0 ft
	Seal Type: No. 2 Bentonite From 1.0 to 2.5 ft

Elevation (feet) | Depth (feet) | Graphic Log | Material Description | Well Construction



3099.34

10

3089.34

20

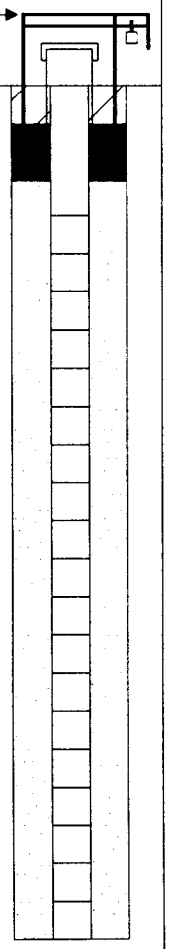
3079.34

0.0'-1.5': Gravel - fill.
1.5'-4.0': Black sandy clay, staining & strong odor.
4.0'-4.4': Medium sand, staining & odor. 4.4'-4.5': Silty clay.
4.5'-5.5': Silty sand, saturated and soupy, odor.
5.5'-6.7': Silty sand.
6.7'-7.0': Medium sand, soupy.
7.0'-7.5': Stiff clay, mottling.
7.5'-8.2': Medium sand, saturated.
8.2'-8.5': Stiff clay, moderate mottling.
8.5'-9.5': Medium sand, saturated, clay nodes, slight odor.
9.5'-10.5': Medium/coarse sand.
Soil sample R-18, 0.0' - 7.0', 7.5' - 8.2', and 8.5' -
10.5'-22.5': Medium/coarse sand.

22.5'-23.5': Grey shale.
23.5': End of bore.

TD = 23.5 feet

MP. EL. 3106.21



CD=22.40

HD

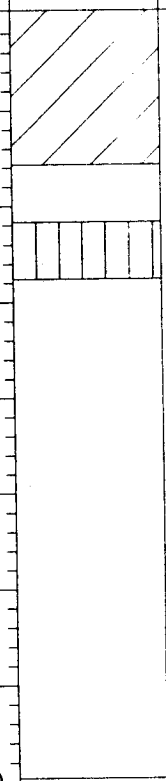
M:129257

Billings 1 S 26 E 02 ABBBCB YELLOWSTONE

090241

CONOCO BILLINGS REFINERY	Identification: R-19
	Datum: Mean Sea Level
Location: -29.56 N 2627.50 E	Logged By: A. Eggen
Purpose: Monitoring Well / Ground Surface: 3104.44	Drilling Method: Hollow Stem Auger - 4" ID
Date(s): / / - 09/20/88	Well Casing: 2.00in Sch 40 PVC From -1.6 to 1.5 ft
Drilling Contractor: Braun Engineering	Type of Perforation: 0.010in From 1.5 to 18.6 ft
Remarks: 1 S 26 E 02 ABBBCB	Sand Pack: 10/20 Silica Sand From 1.0 to 20.0 ft
	Seal Type: No. 1 Grout From 0.0 to 0.6 ft
	Seal Type: No. 2 Bentonite From 0.6 to 1.0 ft

Elevation (feet) | Depth (feet) | Graphic Log | Material Description | Well Construction



3099.44

10

3089.44

20

3079.44

0.0'-1.0': Fill - crushed gravel.

1.0'-2.5': No sample. 2.5'-2.7': Loamy sand.

2.7'-4.0': Silty clay, weakly mottled. Light iron staining suggests water table variation.

4.0'-5.5': Silty clay, moderate to strong mottling, gypsum precp. in fine stringers. Soil sample R-19 from 2.5' to 5.5'.

5.5'-7.0': 50% recovery. Medium grain, saturated sand with mica and iron oxides.

7.0'-7.5': Soupy, saturated, medium sand.

7.5'-8.5': Medium, saturated sand.

8.5'-10.0': Medium, saturated sand. Soil sample R-19 from 5.5' to 10.0'.

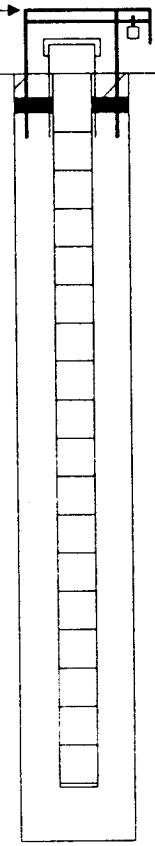
10.0'-11.5': Sandy gravel.

11.5'-20.0': Sandy gravel.

20.0': Grey shale, dry and hard.

20.0': End of bore. TD = 20.0 feet

MP. EL. 3106.09



CD=18.60

Drainage = HD

Mi129260

Billings 1S 26E 02 BAAAB #1 YELLOWSTONE 090108

CONOCO BILLINGS REFINERY	Identification: R-20
	Datum: Mean Sea Level
Location: -15.24 N 2289.19 E	Logged By: A. Eggen
Purpose: Monitoring Well / Ground Surface: 3104.64	Drilling Method: Hollow Stem Auger - 4" ID
Date(s): / / - 09/20/88	Well Casing: 2.00in Sch 40 PVC From -1.5 to 4.0 ft
Drilling Contractor: Braun Engineering	Type of Perforation: 0.010in From 4.0 to 19.0 ft
Remarks: 1S 26E 02 BAAAB	Sand Pack: 10/20 Silica Sand From 4.0 to 19.0 ft
	Seal Type: No. 1 Grout From 0.0 to 1.5 ft
	Seal Type: No. 2 Bentonite From 1.5 to 4.0 ft

Elevation (feet)	Depth (feet)	Graphic Log	Material Description	Well Construction
			0.0'-1.0': Fill - crushed gravel.	MP. EL. 3106.15
			1.0'-2.5': Silty clay, no stones.	
			2.5'-4.0': Dark brown, silty clay, no stones.	
			4.0'-5.2': Dark brown, silty clay.	
3099.64			5.2'-5.5': Grey, clayey silt. Soil sample R-20 from 2.5' to 5.0'.	
			5.5'-7.0': Sandy gravel.	
			7.0'-19.0': Sandy gravel, 3" minus. Soil sample R-20 from 5.0' to 19.0'.	
	10			
3089.64				
			19.0': Grey shale, dry, very hard. End of bore.	
			TD = 19.0 feet	CD=19.00
	20			
3079.64				

H/D

M:129303

1S26E02 BAAAB #2 YELLOWSTONE

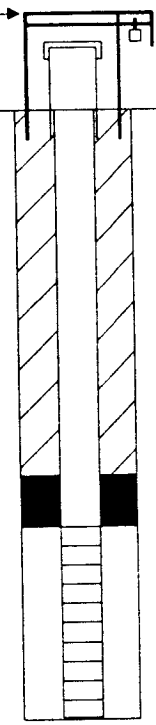
090148

CONOCO BILLINGS REFINERY	Identification: BW-2
	Datum: Mean Sea Level
Location: -14.27 N 2166.40 E	Logged By: L. O'Hanlon
Purpose: Bedrock Well / Ground Surface: 3104.94	Drilling Method: Air Rotary - 6" Tricone Bit
Date(s): 03/13/91 - 03/15/91	Well Casing: 2.00in Sch 40 PVC From -2.5 to 21.7 ft
Drilling Contractor: Advanced Drilling	Type of Perforation: 0.020in From 21.7 to 31.7 ft
Remarks	Sand Pack: 10/20 Silica Sand From 21.7 to 31.7 ft
1S 26E02 BAAAB (2)	Seal Type: No. 1 Grout From 0.0 to 19.0 ft
	Seal Type: No. 2 Bentonite From 19.0 to 21.7 ft

Elevation (feet)	Depth (feet)	Graphic Log	Material Description
			SILTY SAND w/occasional cobbles- medium grained, dark brown, moist, greenish staining and mod hydrocarbon odor below 2', PID=8-10 ppm
3099.94			PID=26.0 ppm @
			PID= 35.0 ppm @ 6' SANDY CLAY w/gravel- fine medium grained, green-brown (hydrocarbon staining), moist, moderate plasticity, gravel coarse and angular, strong hydrocarbon odor
	10		PID=16 ppm @8.5'
			POORLY GRADED GRAVEL- minor clay and silt, with sandy clay stringers
			PID=32 ppm @10'
3089.94			
			(unconformity)
			BEDROCK- Colorado Shale
	20		
			core begins @21'7"
3079.94			
	30		
			TD = 31.6 feet
3069.94			
	40		
3059.94			
	50		
3049.94			

Well Construction

MP. EL. 3107.47



CD=31.60

HD

M:129304

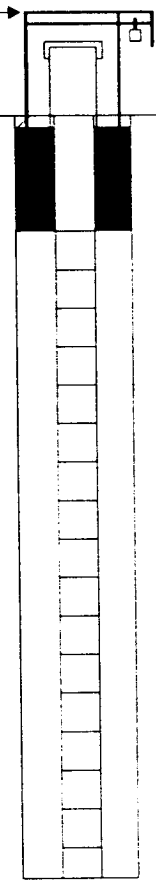
Billings 1N 26E 34CCD -01 YELLOWSTONE 090340

CONOCO BILLINGS REFINERY	Identification: PZ-1
	Datum: Mean Sea Level
Location: 121.52 N 2923.75 E	Logged By: E. Kvale
Purpose: Piezometer / Ground Surface: 3101.64	Drilling Method: Air Rotary - 6" Tricone Bit
Date(s): / / - 02/26/91	Well Casing: 2.00in Sch 40 PVC From -2.7 to 3.0 ft
Drilling Contractor: Advanced Drilling	Type of Perforation: 0.020in From 3.0 to 19.8 ft
Remarks: 1N 26E 34 CCD	Sand Pack: 10/20 Silica Sand From 3.0 to 19.8 ft
	Seal Type: No. 1 Grout From 0.0 to 0.3 ft
	No. 2 Bentonite From 0.3 to 3.0 ft

Elevation (feet)	Depth (feet)	Graphic Log	Material Description
			Sand, some gravel-probably fill, thickness 5.5'
3096.64			
			Gravel, some sand thickness 4.5'
	10		Sand possible gravel clasts thickness 1.0' Water @10' level gravel mixed with sand thickness 3'
3086.64			Sand, possible gravel clasts thickness 1'
			Gravel mixed with sand. Sand appears to be in thin lenses. Overall upward coarsening with more sand at base. Thickness 3'
			Black shale bedrock Colorado Sh thickness 1'10"
	20		TD = 19.8 feet
3076.64			

Well Construction

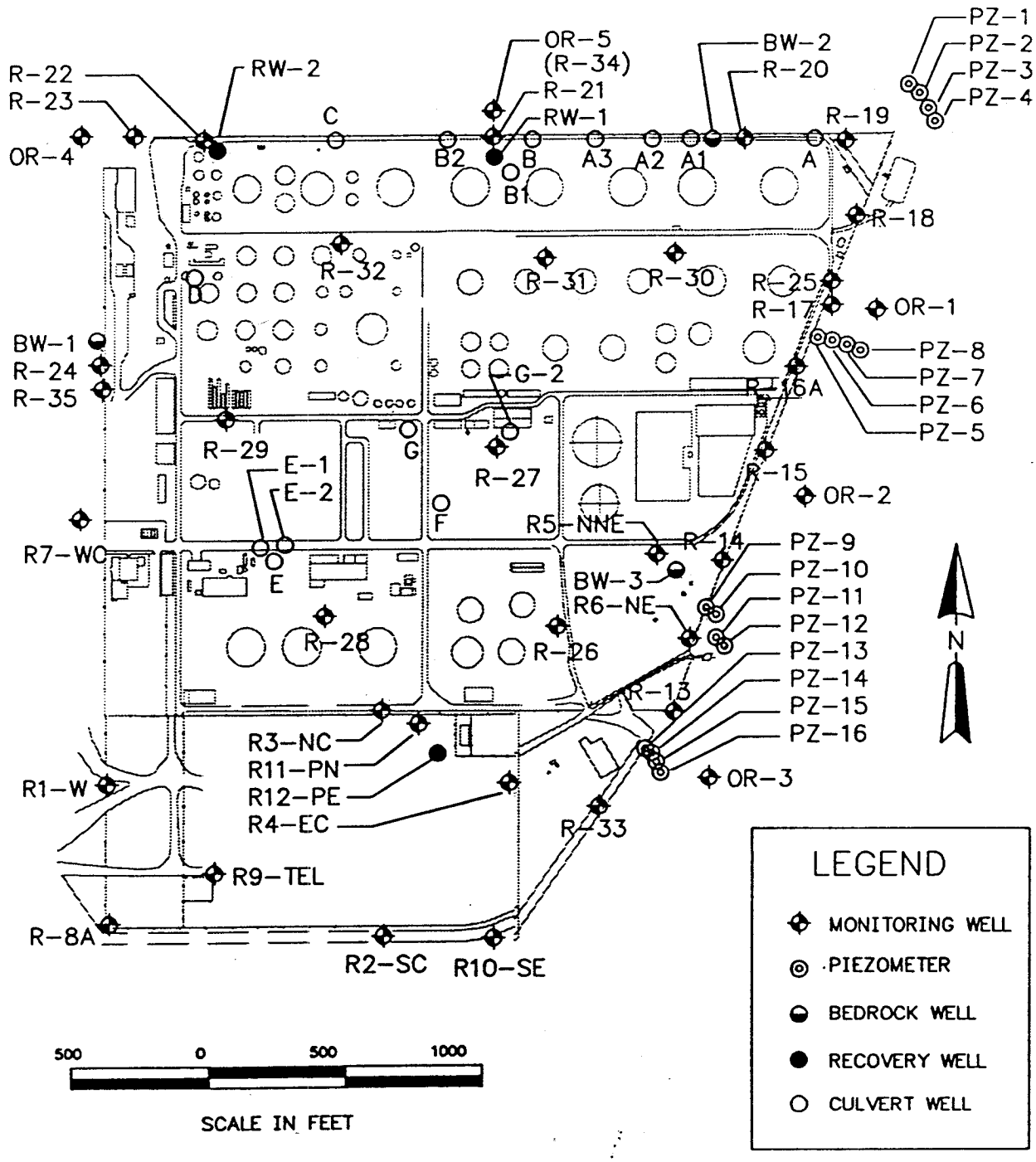
MP. EL. 3104.32



CD=19.80

HD

M: 129570



DRAWN BY	J.J.C.
DATE	10/2/91
CHK'D BY	H.S.M.
DATE	10/2/91
SCALE	

WELL LOCATION MAP
CONOCO BILLINGS REFINERY

REMEDIATION TECHNOLOGIES INC

FIGURE 1-1

Billings 1N 26E 34 CCD -02 YELLOWSTONE

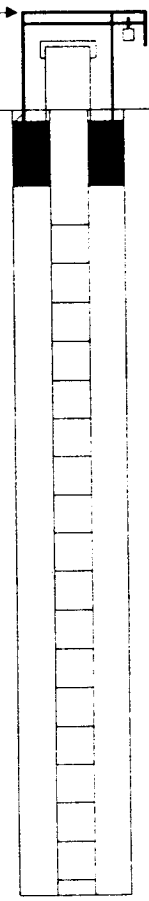
590323

CONOCO BILLINGS REFINERY	Identification: PZ-2
	Datum: Mean Sea Level
Location: 82.89 N 2945.33 E	Logged By: E. Kvale
Purpose: Piezometer / Ground Surface: 3102.64	Drilling Method: Air Rotary – 6" Tricone Bit
Date(s): / / - 02/26/91	Well Casing: 2.00in Sch 40 PVC From -2.5 to 3.0 ft
Drilling Contractor: Advanced Drilling	Type of Perforation: 0.020in From 3.0 to 20.4 ft
Remarks: 1N 26E 34 C CD (2)	Sand Pack: 10/20 Silica Sand From 2.0 to 20.4 ft
	Seal Type: No. 1 Grout From 0.0 to 0.3 ft
	Seal Type: No. 2 Bentonite From 0.3 to 2.0 ft

Elevation (feet)	Depth (feet)	Graphic Log	Material Description
			Mixed sand, gravel–fill thickness 3'
			Silty clay 1'
3097.64			Sand, black coarse–to fine–grained, poorly sorted thickness 3'
	10		Mixed gravel & sand. Loaded with water. Thickness 12'
3087.64			
	20		Black shale with intercolated sandst. streaks. Colorado Sh thickness 1.33'
			TD = 20.8 feet
3077.64			

Well Construction

MP. EL. 3105.18



CD=20.40

HD

M:129573

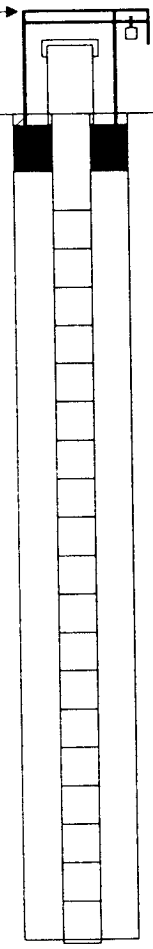
Billings 1N 26E 34 CCD -03 YELLOWSTONE 090324

CONOCO BILLINGS REFINERY	Identification: PZ-3
	Datum: Mean Sea Level
Location: 61.67 N 2958.73 E	Logged By: D. Fishbaugh
Purpose: Piezometer / Ground Surface: 3102.74	Drilling Method: Air Rotary - 6" Tricone Bit
Date(s): / / - 02/25/91	Well Casing: 2.00in Sch 40 PVC From -2.7 to 2.5 ft
Drilling Contractor: Advanced Drilling	Type of Perforation: 0.020in From 2.5 to 21.5 ft
Remarks: 1N 26E 34 CCD (3)	Sand Pack: 10/20 Silica Sand From 1.5 to 21.5 ft
	Seal Type: No. 1 Grout From 0.0 to 0.3 ft
	Seal Type: No. 2 Bentonite From 0.3 to 1.5 ft

Elevation (feet)	Depth (feet)	Graphic Log	Material Description
3097.74			Sandy clay, brown thickness 7'
			Sand, medium grain, gray thickness 0.5'
	10		Gravel with sand mix thickness 11.0'
3087.74			
	20		Shale, Bedrock, Colorado Sh
3077.74			TD = 21.6 feet

Well Construction

MP. EL. 3105.43



CD=21.60

HD

M: 129576

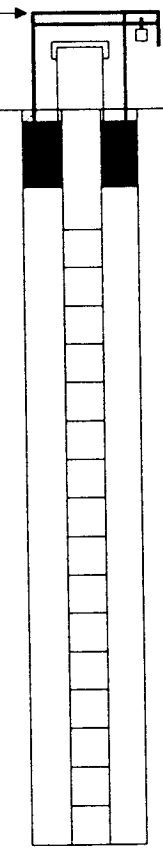
Billings 1N 26E 34CCD -04 YELLOWSTONE 090325

CONOCO BILLINGS REFINERY	Identification: PZ-4
	Datum: Mean Sea Level
Location: 28.24 N 2977.72 E	Logged By: D. Fishbaugh
Purpose: Piezometer / Ground Surface: 3101.54	Drilling Method: Air Rotary - 6" Tricone Bit
Date(s): / / - 02/25/91	Well Casing: 2.00in Sch 40 PVC From -2.5 to 3.1 ft
Drilling Contractor: Advanced Drilling	Type of Perforation: 0.020in From 3.1 to 19.1 ft
Remarks: 1N 26E 34CCD (4)	Sand Pack: 10/20 Silica Sand From 2.0 to 19.1 ft
	Seal Type: No. 1 Grout From 0.0 to 0.3 ft
	No. 2 Bentonite From 0.3 to 2.0 ft

Elevation (feet)	Depth (feet)	Graphic Log	Material Description
			Sandy clay some pea-size gravel in the clay near the base thickness 7.0'
3096.54			
	10		Gravel with sand thickness 9.5'
3086.54			
			Shale, bedrock, grey Colorado Sh thickness drilled 2.58'
	20		TD = 19.1 feet
3076.54			

Well Construction

MP. EL. 3104.04



CD=19.10

HD

M: 129579

Billings 01N26E34CBB -01 Yellowstone

Lab Form 30
Revised 12-89

MONTANA DEPARTMENT OF HIGHWAYS

090894

Boring No: 6-94-92 Project No: RRS 1022(2) Date: 8-31-92

Hole No: 4 Project Name: Billings-13th St. Underpass

Boring Location: 140+52.2 84' Lt. ℄ PTW

Legal Description: 1N 26E 34CBB Purpose: Water Observation

Geotech: Warfield Driller: Pickett

DEPTH	ELEV. 3110.2	LEGEND	SPT Core Rec. % RQD (xx)	DESCRIPTION OF MATERIALS	ADDITIONAL INFORMATION
				GRAVEL - grey gravel w/some sand	25' N Casing
3.0					
				SAND - dark grey silty sand w/ some gravel	
6.0					5.0-7.0 Shelby
			1/2/1	SILT - very loose tan sandy silt w/some clay	
9.0					
			7/50R (.6)	GRAVEL - very dense to dense grey coarse gravel	Installed: 2.0" dia PVC pipe 0.0-10.0 blank 10.0-25.0 slotted
			19/31/31		Monitor Well Manhole
16.8				G.W. 9/3/92	
21.0			26/12/13		
				CLAY - stiff grey silty clay w/ some gravel	
24.0					
			50R (.4)	SANDSTONE - very dense grey fine grained weathered sandstone	
30.0					
				Bottom of Hole	

HD

Depth Scale: 1" = 5'
Depth to H_2O measured from ground surface: 16.75
No. Sample Boxes: 1
No. Shelby Tubes: 1
PVC Pipe (ft.): 25'

MONTANA CADD
16-SEP-1992
15:16
GEO
zga0: [32, 13] 1957a. geo

M:130058

MONTANA DEPARTMENT OF TRANSPORTATION
Helena, MT 59620

Memorandum:

To: Geotechnical Section

From: Geotechnical Section

Subject: Core Logs

Date: September 21, 1992

Final Core Logs, numbers 6-59-92 tO 6-61-92 thru 6-94-92 to 6-96-92, for the below listed project are attached.

Project Number: RRS 1022(2)

Project Name: Billings - 13th St. Underpass

REMARKS:

If you have any questions, please contact William Warfield (6276) of the Geotechnical Section.

cc: Montana Bureau of Mines & Geology
Geotechnical Project File
Core Drill Section
Dick Weed - Billings District

Billings
Lab Form 30
Revised 12-89

01N 26E 34CBB -02 Yellowstone

MONTANA DEPARTMENT OF HIGHWAYS

090895

Boring No: 6-95-92 Project No: RRS 1022(2) Date: 9-1-92

Hole No: 5 Project Name: Billings-13th St. Underpass

Boring Location: 141+57 70.5' Lt. ℄ PTW

Legal Description: 1N 26E 34 CBB Purpose: Water Observation

Geotech: Warfield Driller: Pickett

DEPTH	ELEV. 3108.35	LEGEND	SPT Core Rec. % RQD (xx)	DESCRIPTION OF MATERIALS	ADDITIONAL INFORMATION
				SAND & GRAVEL - dense to very dense sand & gravel w/some boulders	23' N Casing
			11/21/24		
			29/40/42		
14.0				▽ G.W. 9/3/92	INSTALLED:
			38/40/42		2.0" dia PVC pipe
					0.0-8.0 Blank
					8.0-23.0 slotted
			50R (.4)		Monitor well manhole
24.0					
25.7			43/50R (.7)	SANDSTONE - very dense grey fine grained weathered sandstone	
				Bottom of Hole	

HD

Depth Scale: 1" = 5'
Depth to H_2O measured from ground surface: 14.90
No. Sample Boxes: 1
No. Shelby Tubes: --
PVC Pipe (ft.): 23'

MONTANA CADD 16-SEP-1992 15:16 GEO
zga0: [32,13]1957a.geo

M:130059

Billings
Lab Form 30
Revised 12-89

01N26E34CBB -03

Yellowstone

MONTANA DEPARTMENT OF HIGHWAYS

Boring No: 6-96-92 Project No: RRS 1022(2) Date: 9-2-92

Hole No: 6 Project Name: Billings-13th St. Underpass

Boring Location: 141+56.7 80' Rt. ℄ PTW

Legal Description: 1N 26E 34CBB Purpose: Water Observation

Geotech: Warfield Driller: Pickett

090896

DEPTH	ELEV. 3109.8	LEGEND	SPT Core Rec. % RQD (xx)	DESCRIPTION OF MATERIALS	ADDITIONAL INFORMATION
				SAND & GRAVEL - grey sand & gravel	25' N Casing
2.0				SAND - loose, dense to very dense dark grey silt sand w/ gravel and boulders	
			2/5/5		
			28/50R (.7)		
					INSTALLED:
15.4				▽ G.W. - 9/3/92	2" dia. PVC Pipe 0.0-14.0 Blank 14-0-29.0 Slotted
			35/40/50R (1.4)		
			20/15/15		- Monitor well manhole
24.0					
			26/50R (.9)	SANDSTONE - very dense grey fine grained weathered sandstone	
30.0					
				Bottom of Hole	

HD

Depth Scale: 1" = 5'
Depth to H_2O measured from ground surface: 15.4
No. Sample Boxes: 1
No. Shelby Tubes: --
PVC Pipe (ft.): 29.0'

MONTANA CADD
16-SEP-1992
15:17
GEO
zga0: [32, 13] 1957a.geo

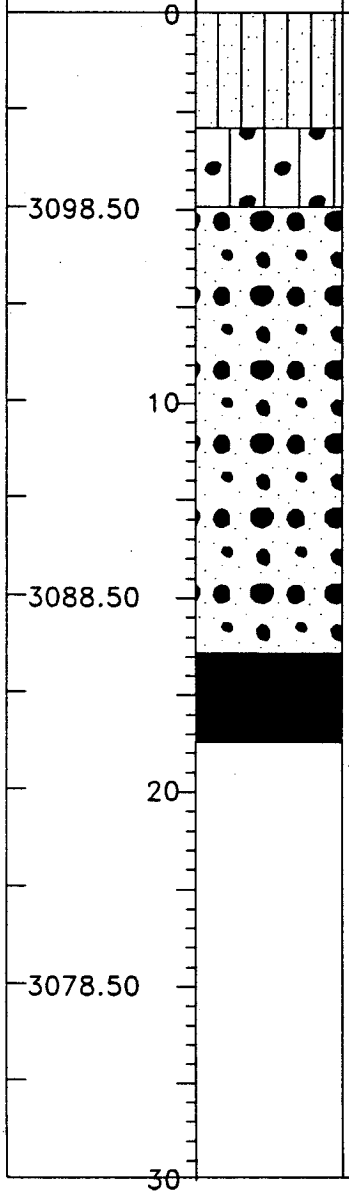
M:130062

Billings 1N 26E 34 -01 Yellowstone

C96126

CONOCO BILLINGS REFINERY	Identification: RW-112
	Datum: Mean Sea Level
Location:	Logged By: H. Williams
Purpose: Recovery Well / Ground Surface: 3103.50	Drilling Method: Air Rotary - 8" Tricone Bit
Date(s): / / - 01/25/93	Well Casing: 8.00in Steel From -4.5 to 1.9 ft
Drilling Contractor: Advanced Drilling	Type of Perforation: 0.030in From 1.9 to 16.9 ft
Remarks:	Sand Pack: Natural Pack From 0.5 to 18.8 ft
1N 26E 34 IRR	Seal Type: No. 1 Concrete From 0.0 to 0.5 ft
	No. 2 From to ft

Elevation (feet) | Depth (feet) | Graphic Log | Material Description | Well Construction



0.0 to 3.0': Dry, brown, sandy silt, no hydrocarbon odor
PID= 0 ppm @2'

3.0 to 5.0': Silty gravels, brown moist, no hydrocarbon odor
PID= 0 ppm @4'

5.0 to 8.0': Coarse gravels with large cobbles, wet
PID= 0 ppm @6'

8.0 to 12.0': Sandy gravels, wet, no hydrocarbon odor
PID= 0 ppm @9'

12.0 to 16.5': Sand & gravel, grey, no hydrocarbon odor
(slight odor @ 15') PID= 0 ppm @16'

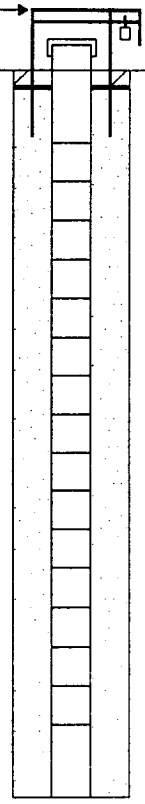
16.5': Shale - bedrock

TD = 18.80 feet

(PID readings from lugger bucket = 0.0 ppm)

~~HD-Irr~~
UNABLE

MP. EL. 3108.00



CD=18.80

m; 134808

Billings 1N 26E 34 -02 Yellowstone 096127

CONOCO BILLINGS REFINERY		Identification: RW-113
		Datum: Mean Sea Level
Location:		Logged By: P. Lemire
Purpose: Recovery Well	Ground Surface: 3103.50	Drilling Method: Air Rotary - 8" Tricone Bit
Date(s): / / - 01/15/93		Well Casing: 8.00in Steel From -4.5 to 3.5 ft
Drilling Contractor: Advanced Drilling		Type of Perforation: 0.030in From 3.5 to 21.0 ft
Remarks:		Sand Pack: Natural Pack From 0.5 to 23.0 ft
		Seal Type: No. 1 Concrete From 0.0 to 0.5 ft
1N 26E 34 IRR		No. 2 From to ft

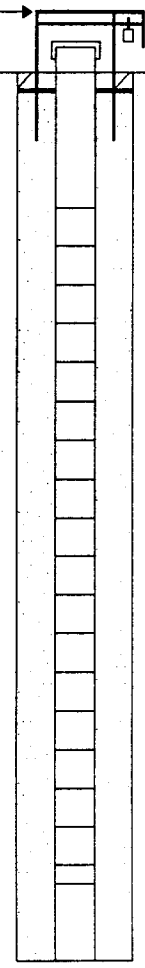
Elevation (feet)	Depth (feet)	Graphic Log	Material Description
	0		0.0 to 2.0': Silty sand
			2.0 to 10.0': Sand & gravel, brow, moist, no hydrocarbon odor PID= 0 ppm @5'
3098.50			
			10.0 to 15.0': Sand & gravel, brown ,wet, no hydrocarbon odor, up to 50% coarse sand, PID= 0 ppm @10'
	10		
			15.0 to 19.0': Sand & gravel, brow, wet, slight hydrocarbon odor @ 15', PID= 0 ppm @15'
3088.50			
			19.0': Shale - bedrock
	20		
			(Drill cuttings PID = 0.0 maximum readings)
			TD = 23.00 feet
3078.50			
	30		

~~HD~~ TK

UNABLE

Well Construction

MP. EL. 3108.00



CD=23.00

M:134810

Billings 1N 26E 34 -03 Yellowstone 096128

CONOCO BILLINGS REFINERY		Identification: RW-114	
		Datum: Mean Sea Level	
Location:		Logged By: H. Williams	
Purpose: Recovery Well	Ground Surface: 3102.50	Drilling Method: Air Rotary - 8" Tricone Bit	
Date(s): / / - 01/18/93		Well Casing: 8.00in Steel	From -4.5 to 2.0 ft
Drilling Contractor: Advanced Drilling		Type of Perforation: 0.030in	From 2.0 to 22.0 ft
Remarks:		Sand Pack: Natural Pack	From 0.5 to 24.1 ft
		Seal Type: No. 1 Concrete	From 0.0 to 0.5 ft
		No. 2	From to ft

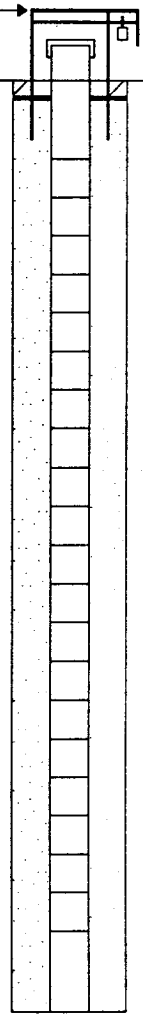
1N 26E 34 IRR

Elevation (feet)	Depth (feet)	Graphic Log	Material Description
	0		0.0 to 2.5': Sandy (fine) silt, dry, no hydrocarbon odor PID= 0 ppm @2'
3097.50			2.5 to 10.0': Sand & gravel, wet, no hydrocarbon odor, medium gravels PID= 0 ppm @ 7'
	10		10.0 to 20.0': Coarse sandy gravels & sands, wet slight hydrocarbon odor, coarse sands, sand increasing @ 13-15', black/grey sands, PID= 0 ppm @15'
3087.50			20.0': Shale - bedrock, PID= 0.5 ppm @21'
			(Drill cuttings in lugger bucket - PID= 0.0 ppm maximum readings)
	20		
3077.50			TD = 24.10 feet
	30		

~~HDT~~ UNABLE

Well Construction

MP. EL. 3107.00



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01N26E34CB

Form No. 603 (R 6-87)

Billings

File No. 35

Yellowstone

103224

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name International Leather Man.

2. CURRENT MAILING ADDRESS
Box 3072
Billings 59103

3. WELL LOCATION
County Yellow Stone
Township 1 (N)/S Range 26 (E)/W
NW 1/4 SW 1/4 Section 34
Lot _____ Block _____
Subdivision _____
Tract Number _____

4. PROPOSED USE Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify Hide Tanning Operation

5. DRILLING METHOD ____ cable, ____ air rotary, X forward rotary, ____ reverse rotary, ____ jetted, ____ other (specify) ____

6. WELL LOG

Depth (ft.) From	To	Formation
0	5	Brown Soil
5	21	Sand + Gravel
21		Grey shale

ATTACH ADDITIONAL SHEETS IF NECESSARY

RECEIVED
MAR 25 1991
DEPT. OF NATURAL RESOURCES AND CONSERVATION BILLINGS OFFICE

HD

OK

7. WELL CONSTRUCTION AND COMPLETION

Size of drilled hole	Size and PSI Rating of casing	From (feet)	To (feet)
9 7/8	6 3/8 .250	+18"	16'
	6" Screen	16'	21'

Perforations Screen and/or Screen

Kind Size	From (feet)	To (feet)
45/1000 Screen	16	21

Was casing left open end? ____ Yes X No
Was a packer or seal used? X Yes ____ No
If so, what material K Packer
Was the well gravel packed? X Yes ____ No
To what depth was the well grouted? 16' ft
Material used in grouting Bentonite Slurry + Chips
Well head completion: Pitless adapter X Yes ____ No
Top casing 18 in. or greater above grade X Yes ____ No

8. WELL TEST DATA

The pump test information request in this section is required for all wells. All depth measurements shall be from the top of the well casing unless otherwise specified.

All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:

a) Air ____ Pump X Bailer ____
b) Static water level immediately before testing 7'8" ft. If flowing; closed-in pressure ____ psi ____ gpm
Controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 21'
d) The pumping rate and means of discharge (i.e., bailing, airlift, pumping) 15 gpm
e) Maximum drawdown during the test 16' ft
f) Duration of test: Pumping time 4 hrs
Recovery time ____ hrs
g) Recovery water level 7'8 ft
Amount of time after pumping recovery level water data was taken ____ hrs

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form included in each packet of well logs.

NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE COMPLETED 11-2-90

11. DRILLER/CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 11-9-90
Firm Name Mayes Water Wells
Address 645 Joyce Street Billings Mont
Signature Joseph A Mayes License No. #500

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

DEPARTMENT — BUREAU COPY

M.140977

Billings 1N 26E 35B Yellowstone

Form No. 603 (R 6-87)

File No. 106888

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name Rodger Hougen

2. CURRENT MAILING ADDRESS
2024 Plaza Dr.
Billings Mt. 59102

3. WELL LOCATION
County Yellowstone
Township 1 (N/S) Range 26 (E/W)
N 1/2 1/4 NW 1/4 1/4 Section 35
Lot _____ Block _____
Subdivision C/S 396
Tract Number _____

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. DRILLING METHOD _____ cable, _____ air rotary,
X forward rotary, _____ reverse rotary, _____ jetted,
_____ other (specify) _____

6. WELL LOG

Depth (ft.) From	To	Formation
0	2	sandy top soil
2	5	sandy clay
5	24	sandy clay mixed with sand & small gravel
24	28	shale
28	85	sand rock

RECEIVED
MAR 14 1990
DEPT. OF NATURAL RESOURCES AND CONSERVATION BILLINGS OFFICE

HG

ATTACH ADDITIONAL SHEETS IF NECESSARY

7. WELL CONSTRUCTION AND COMPLETION

Size of drilled hole	Size and PSI Rating of casing	From (feet)	To (feet)	Perforations 1/8" cuts and/or Screen: Kind Size	From (feet)	To (feet)
9.3/4"	~~x18"xx29~~xxxxxx 6.5/8" .250 Steel caseing 18#	+18"	29'			
6"	4.1/2" 160## pvc	7'	85'	caseing 1/8" cuts	55'	84'

Was casing left open end? X Yes ____ No
Was a packer or seal used? X Yes ____ No
If so, what material bentonite
Was the well gravel packed? ____ Yes X No
To what depth was the well grouted? 29 ft
Material used in grouting Bentonite
Well head completion: Pitless adapter X Yes ____ No
Top casing 18 in. or greater above grade X Yes ____ No

8. WELL TEST DATA

The pump test information request in this section is required for all wells. All depth measurements shall be from the top of the well casing unless otherwise specified.

All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:

a) Air ____ Pump X Bailer ____
b) Static water level immediately before testing 33 ft. If flowing; closed-in pressure ____ psi ____ gpm
Controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 78
d) The pumping rate and means of discharge (i.e., bailing, airlift, pumping) 15 gpm
e) Maximum drawdown during the test 38 ft
f) Duration of test: Pumping time 3 hrs
Recovery time 1 hrs
g) Recovery water level 33 ft
Amount of time after pumping recovery level water data was taken 1 hrs

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form included in each packet of well logs.

NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? _____

10. DATE COMPLETED 1-15-1990

11. DRILLER/CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

1-19-90
Date

American Drilling
Firm Name

1520 East Lane Billings Mt. 59101
Address

[signature] 344#
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

M: 145043

DEPARTMENT — BUREAU COPY

Billings 01N26E34BBA 103405 Yellowstone

TEST HOLE LOG

HYDROMETRICS

HELENA, MONTANA

PROJECT Pacific Hide and Fur Recycling JOB NUMBER PHFD01 HOLE NUMBER MW-1

STATE Montana COUNTY Yellowstone LOCATION T 1N R 26E SEC. 34 TRACT BBA

SITE DESCRIPTION Southeast corner of Paper House ELEVATION G.S. DATE 10-15-93

RECORDED BY AJH DRILL METHOD Hollow Stem Auger DRILLER Al DRILLING COMPANY ADT

TOTAL DEPTH 30.0' CASING TYPE AND DESCRIPTION 2" PVC 20 slot factory cut

TOTAL DEPTH CASED 30.0' WELL COMPLETION DESCRIPTION Screen 30-15', 10-20 silica sand 30-13', bentonite 13' to surface, cement pad

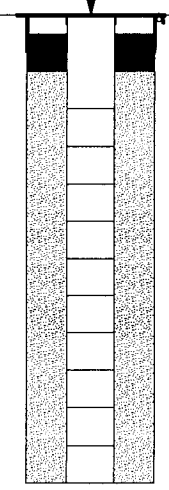
REMARKS Heavy rain. Note: At +/- 18', rig torqued slightly, cuttings included red ceramic and battery case. At surface, only 1 piece of battery case, but about 12 1" ceramic chips, clean below. No mottling observed. Depth to water 25.26 below measuring point. PVC stickup 2.1', steel stickup 2.24'. Gas like odor on probe. Bailed 5 gallons, turbidity high, slight sheen on water, gas like odor.

DEPTH	GRAPHICAL LOG	WELL COMPLETION	SAMPLE INTERVAL	SAMPLE TYPE / TIME	BOTTLES KEPT	CORE RECOVERY	NOTES ON: WATER LEVELS, DRILLING FLUID, DRILLING RATE, WELL COMPLETION	DESCRIPTION AND CLASSIFICATION
0			0'	0830	TPH/ Metals		PBHL-9310-508 (Metals)	0-7.9' Moist to very moist, gray, structureless, fine silty SAND, colluvium
								Tan stringer from 0.5 to 1.5', then gray SAND is poorly sorted, appears clean, no odors
5			5-5.5	0855	TPH/ Metals 24 (2')	85	PHBL-9310-500	
								7.9-9.8' Very moist to wet, gray, fine clayey, silty SAND, no obvious indication of correlation
10			10-10.5	0905	TPH/ Metals 15 for 2'	100	PHBL-9310-502 Possible perched zone on top of clay, let sit 15 minutes, no water	9.8-21.8' CLAY, silty, fat, moist, tan to light brown, colluvium, cohesive, sand stringer (2") at 21'
15			15-15.5	0930	TPH/ Metals 18 for 2'	100	PHBL-9310-503	HD
20			21-21.5	1045	TPH/ Metals 17 for 2'	100	PHBL-9310-504	21.8-24.0' SAND, and intercalated clay, wet, grayish brown, structureless, poorly sorted, 80% quartz, 5% dark colored fragements, drilled very easily 20-25', contains numerous alluvium
25			25-25.5	1115	TPH/ Metals 24 for 2'	100	PHBL-9310-505 Gasoline or aviation fuel like odor	24.0-30.0' SAND, wet, grayish brown, poorly sorted, may liquify, alluvium
								30.0' Total depth
30			30-30.5	1215	TPH/ Metals 6 for 2'	100	PHBL-9310-506	Materials: 15' 2" Sch 40 PVC screen, 20' 2" Sch 40 PVC solid, 1 bottom cap, 7 bags 10-20 silica sand, 4 bags enviroplug (medium), 1 expansion plug, steel protective casing
35								

M:146657

Billings D1S 26E 02 01. Yellowstone

CONOCO BILLINGS REFINERY		Site Id: OR-16	109406
Location: -428 N 2842 E		Purpose: Monitoring Well, Shallow	
Datum: Mean Sea Level	Ground Elev: 3104.00'	Measuring Point: 3104.00'	Completed Depth: 12.50'
Date(s): 03/08/94 - 03/08/94	Logged By: H. Williams	Blank Casing: type: Sch 40 PVC dia: 2.07" fm: 0.0' to: 2.50'	
Contractor: Braun Engineering			
Drilling Method: Hollow Stem Auger - 6 1/4" ID		Screens: type: Slotted size: .100" dia: 2.07" fm: 2.50' to: 12.50'	
Remarks: Temporary Well #1 - I-90 Easement		Annular Fill: type: Grout fm: .00' to: .50' type: Bentonite Chips fm: .50' to: 1.50' type: 10/20 Silica Sand fm: 1.50' to: 12.50'	
From Letter 1S 26E 02	Lat: 45°46'59" Lon: 108°28'57"		

Elevation (ft)	Depth (ft)	Graphic Log	Material Description	Well Construction
				MP. EL. 3104.00
3100	5		0 - 3.0: Lt. brown, clayey silts/fine sandy silts mosit; no odor (1.9 ppm PID) 3 - 4.5: Same; moisture increasing; no odor (3.5 ppm PID) 4.5 - 15.0: Coarse sandy gravels; wet, no odor (3.9 ppm PID) Water is very silty @ 4.5 below m.p., top of PVC	
	10			
3090	15			
	20		HB	
3080	25			

M:147360

1N26E26CC

43Q 118601

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. G(E) 097555

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name Dale Heni

2. CURRENT MAILING ADDRESS
3903½ King Ave East
Blgs MT 59101

3. WELL LOCATION
___ ¼ SW ¼ SW ¼ Section 26
Township 1 N/S Range 26 E/W County Yellowstone
Govn't Lot ___, or Lot ___, Block ___
Subdivision Name ___
Tract Number CLS 440 DR. D

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify ___

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☒
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 7 7/8 in. from 0 ft. to 25 ft.
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 from +18" ft. to 25 ft.
Threaded ☐ Welded ☒ Dia. ___ from ___ ft. to ___ ft.
Type A53-B Wall Thickness 1/4
Casing; Plastic Dia. ___ from ___ ft. to ___ ft.
Weight ___ Dia. ___ from ___ ft. to ___ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used open Bottom
Size of perforations ___ in. by ___ in.
___ perforations from ___ ft. to ___ ft.
___ perforations from ___ ft. to ___ ft.
___ perforations from ___ ft. to ___ ft.
SCREENS: Yes ☐ No ☒
Manufacturer's Name ___
Type ___ Model No. ___
Dia. ___ Slot size ___ from ___ ft. to ___ ft.
Dia. ___ Slot size ___ from ___ ft. to ___ ft.
GRAVEL PACKED: Yes ☐ No ☒ Size of gravel ___
Gravel placed from ___ ft. to ___ ft.
GROUTED: To what depth? 25 ft.
Material used in grouting Bentonite No 8#

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name Teil
Type Jet Model No. 3/4 HP. 3/4

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air ___ Pump ✗ Bailer ___
b) Static water level immediately before testing 9 ft. If flowing; closed-in pressure ___ psi. ___ gpm. Flow controlled by: ___ valve, ___ reducers, ___ other, (specify) ___.
c) Depth at which pump is set for test 20
d) The pumping rate: 30 gpm.
e) Pumping water level 11 ft. at 3 hrs. after pumping began.
f) Duration of test: Pumping time 3 hrs.
g) Recovery time 1 hrs.
h) Recovery water level 9 ft. at 1 hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port ½ inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? ___ Yes X No
If yes, how? ___

12. WELL LOG HG

Depth (ft.) From	To	Formation
0	2	Top soil
2	13	Clay
13	25	Sand gravel mixed
25	26	Shale

RECEIVED
JUN 19 1996
DEPT. OF NATURAL RESOURCES AND CONSERVATION
BILLINGS OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ___

14. DATE COMPLETED 2-14-96

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
2-14 96
Date
American Drilling
Firm Name
1520 East Lane Blgs MT
Address
Signature 344 II
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610

DNRC

M:157222

DEPARTMENT—BUREAU COPY

01 ~~06~~N 26E 27 DCC

122796

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. _____

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name Yellowstone County METRA PARK

2. CURRENT MAILING ADDRESS
COURTHOUSE 217 N. 27th
Billings MT 59101

3. WELL LOCATION
SW 1/4 SW 1/4 SE 1/4 Section 27
Township 6 N/S Range 26 E/W County Yellowstone
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☒
Other ☐ specify _____

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 9 1/8 in. from 0 ft. to 40 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 from +18 ft. to 30 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53 B Wall Thickness .250
Casing; Plastic Dia. _____ from _____ ft. to _____ ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
SCREENS: Yes ☒ No ☐
Manufacturer's Name Johnson
Type telescope Model No. _____
Dia. 5 Slot size 60 from 30 ft. to 40 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
GRAVEL PACKED: Yes ☐ No ☒ Size of gravel _____
Gravel placed from _____ ft. to _____ ft.
GROUTED: To what depth? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name Red Jacket
Type SUB Model No. 10 EC HP. 5

10. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing.
All wells under 100 gpm must be tested for a minimum of one hour and provide the following information:
a) Air X Pump _____ Bailer _____
b) Static water level immediately before testing 9 ft. If flowing; closed-in pressure _____ psi. _____ gpm. Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____.
c) Depth at which pump is set for test 36
d) The pumping rate: 35 gpm.
e) Pumping water level 13 ft. at 6 hrs. after pumping began.
f) Duration of test: Pumping time 6 hrs.
g) Recovery time 2 hrs.
h) Recovery water level _____ ft. at 1/2 hrs. after pumping stopped.

Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.

NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG HG

Depth (ft.) From	To	Formation
0	4	top soil
4	17	brown clay
17	20	pea gravel
20	40	sand gravel
40		black shale

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 6/16/95

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
6/20/95
Date
American Drilling
Firm Name
1520 East In Bliss MT
Address
[signature] 344
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

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JAN 2 - 1996
DEPT. OF NATURAL RESOURCE AND CONSERVATION BILLINGS OFFICE

DEPARTMENT—BUREAU COPY

M:161487

01N 26E 34 AAA

Form No. 603 R2-97

WELL LOG REPORT

File No. 102251

126390

1. WELL OWNER
Name Lockwood Irrigation District

2. CURRENT MAILING ADDRESS
736 - Cerise Road
Billings Mont 59101

3. WELL LOCATION
NE ¼ NE ¼ NE ¼ Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____
Latitude _____ Longitude _____

OK

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify pump rod cooling

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☒
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 9 3/4" in. from 0 ft. to 12 ft.
Dia. 7" in. from 12 ft. to 25 ft.
Dia. 6" in. from 25 ft. to 40 ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 in. from +1 1/2 ft. to 25 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type A53 Wall Thickness .250
Casing; Plastic Dia. _____ in. from _____ ft. to _____ ft.
Threaded ☐ Welded ☐ Dia. _____ in. from _____ ft. to _____ ft.

PERFORATIONS: Yes ☐ No ☒
Type of perforator used _____
Size of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

SCREENS: Yes ☐ No ☒
Manufacture's Name _____
Type _____ Model No. _____
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.

GRAVEL PACKED: Yes ☐ No ☒ Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

GROUTED: To what depth? surface ft.
Material used in grouting bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter Yes ☐ No ☐

9. WELL TEST DATA
The information requested in this section is required for all wells. All depth measurements must be from the top of the well casing.
All wells **under 100 gpm** must be tested for a minimum of one hour and provide the following information:
a) Air X Pump _____ Bailer _____
b) Static water level immediately before testing 8 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour _____ ft.
d) Recovery level 8 ft. Time of recovery 10 min/hrs.
e) Pumping rate 25 gpm.
Wells intended to yield **100 gpm or more** shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the intended appropriation. In addition to the above information, water level data shall be collected and recorded on the Department's "Aquifer Test Data" form.
NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Removable caps are acceptable as access ports.

10. PUMPING TEST DATA
a) Static level immediately before testing _____ ft.
b) Depth at which pump is set for test _____ ft.
c) Pumping rate _____ gpm.
d) Maximum drawdown _____ ft.
e) Duration of test: pumping time _____ hrs/min
recovery time _____ hrs/min
f) Recovery level _____ ft.
g) Duration of time to recovery level _____ hrs.

11. PUMP INSTALLATION INFORMATION
Installation depth _____
Actual pumping rate _____
Manufacturer's name _____
Type _____ Model No. _____ H.P. _____

12. WAS WELL PLUGGED OR ABANDONED? Yes ☐ No ☒
If yes, how? _____

13. WELL LOG
Depth (ft.)

HG

From	To	Formation
0	2	topsoil
2	10	silt
10	25	gravel
25	40	sandstone

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 10/30/97

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 10/30/97
Firm Name ARGUA Drilling INC
Address Box 104 Joliet Mont 59041
Signature Paul Fleming License No. 542

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MONTANA BMRC

M:165440

DEPARTMENT — BUREAU COPY

01N 26E 27C 131559

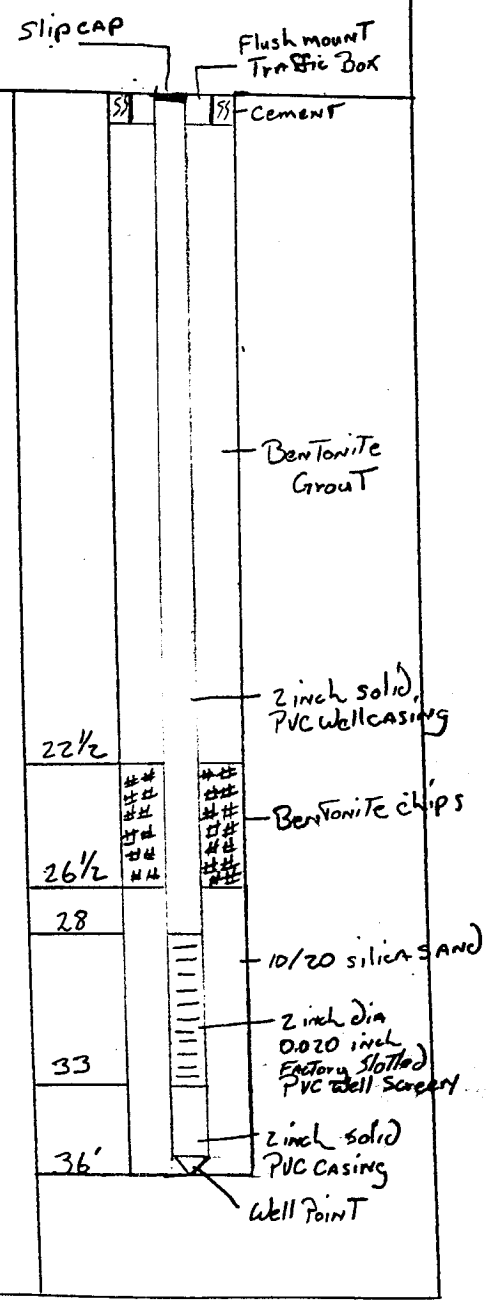
MAXIM TECHNOLOGIES, INC.

LOG OF MONITORING WELL INSTALLATION

PROJECT: Former East Parkway 501 E. Main
JOB NO: Billings MT
DRILL TYPE: B-61 HSA
DRILLED BY: P. Bray
LOGGED BY: J. Rice
REMARKS:

WELL NO: AS-#1
SHEET NO: 1 OF 1
LOCATION: T1N, R26E, Sec 27, SW¼
ELEVATION: TOP OF HOLE
GROUNDWATER
DATE: HOLE STARTED
COMPLETED

DEPTH (FT)	GRAPHIC LOG	CLASSIFICATION AND DESCRIPTION	SAMPLE INTERVAL	S.P.T. (IN) (BLOWS/FT.)	ORGANIC VAPOR CONTENT (ppm)	WELL COMPLETION
		Gravelly clay				
		clay				
10		Gravelly sand				
20						
		Decomposed sandstone				
30		sandstone				
36						



HD

Paul Bray #344

171685

RECEIVED 131536
MAR 11 1999
D.N.R.C.

01N 26E 34 CAD

Form No. 603(R 2-89) **WELL LOG REPORT** File No. 9104 -9106
State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

1. WELL OWNER
Name City of Billings
Coulson Park

2. CURRENT MAILING ADDRESS
Yellowstone Courthouse
Billings, MT 59101

ok

3. WELL LOCATION Coulson Park
SE 1/4 NE 1/4 SW 1/4 Section 34

Township 1 N Range 26 E County Yellowstone Govn't. Lot

or Lot Block
Subdivision Name
Tract Number

4. PROPOSED USE:
Monitor Well X

HD

5. TYPE OF WORK:
New Well X Deepened Reconditioned

Method: (Dug, Cable Tool, Rotary, Bored, Hollow Stem Auger) Hollow Stem Auger

6. DIMENSIONS: Diameter of Hole
Diam. from: 0 to 15'
Diam. from: to
Diam. from: to

7. CONSTRUCTION DETAILS:
Casing; PVC flush joint threaded
Diameter 2"
Weight Sch. 40
Diam. from: 0 to 5'
Diam. from: to
SCREENS:
Yes X No
Manufactur's Name Laibe Env. Products
Type threaded flush joint
Diam. 2" Slot Size 0.02 from 5' to 15'
Diam. Slot Size from to
SAND PACKED
Yes X No Size of sand 10/20
Sand packed from 3 to 15
GROUTED:
To what depth? 3'
Material used in grouting 3/8" Bentonite chips

M:171707

RECEIVED
MAR 11 1999
D.N.R.C.

8. WELL HEAD COMPLETION: File No. 9104 -9106

Pitless Adaptor Yes No X

9. PUMP (IF INSTALLED) N/A

10. WELL TEST DATA N/A

11. Was Well Plugged or Abandoned?

Yes No X

If yes, how?

12. WELL LOG MW 1, MW 2 , MW 3

Depth (ft.) (three identical wells)

From	To	Formation
0	11	silty sand
11	15	Coarse sand and gravel

13. DATE COMPLETED 2/23/99

14. DRILLER/CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 3/9/99

Firm Name Hansen Environmental Drilling

Address HC 71-1030
Glasgow, MT 59230

Signature

License # MWC - 230

Montana Department of Natural Resources & Conservation (DNRC)
1520 East 6th Ave. Helena, MT 59620-2301 #444-6610

YELLOWSTONE 01N 26E 27DC

135577

Form W. & S. 17—2M—11-34.

Top of Ground 0 to 8 ft
(Elev. above sea level.....)

8 to 24 ft gravel

24 to 60 ft grey sand shale
Encountered water sand at about 43 ft
Rather tight, flow increased as drilling proceeded

MONTANA STATE BOARD OF HEALTH
Water and Sewage Division
WELL DRILLER'S REPORT

Registration No. 43

Driller J. E. Anderson Address 622 N. 30 St Billings Mont

Owner of Well Yellowstone County

Exact Location of Well N. E. corner of Fair Grounds (SW SE, Sec. 27 1-N-26-E)

Water to Be Used for Machine shop

Drilling Begun ..... Well Finished .....

☞ Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

UNABLE

Casing Record

Size of Pipe	Kind and Weight of Material Used	From (Feet)	to (Feet)	PERFORATIONS Kind Size	From (Feet)	to (Feet)
6 5/8	Stel. 24 lb	0	24	none	---	—

Describe the type of joints in casing None

Describe any screens used None

Capacity of Well Do not know Bailer
(In Gallons or Barrels)

How Determined could not lower flow
(Pump, Bailer, Weir, Etc.)

Signed J. E. Anderson

Date 2-20-1937

(Law and Regulations on Reverse Side)

Show exact depth of bottom.

M: 174069

01N 26E 33DDB

135216

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# _____

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CONOCO
Mailing address 401 S. 23rd
Bozeman, MT 59101

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ NW ¼ SE ¼ SE ¼, Section 33
Township 1 N/S Range 26 E/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☑ Monitoring Well ☑ Other: Dewater

4. TYPE OF WORK:
☑ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☑ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 7 7/8 in. from 0 ft. to 20 1/2 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☑ Welded
Dia. 8 5/8 in. from +2 ft. to 18 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☐ Yes ☑ No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☐ Yes ☑ No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: ☐ Yes ☑ No
Type ____ Depth(s) ____

Grout: Material used Bent.
Depth from ____ ft. to ____ ft. OR ☑ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☐ Static water level 10 1/4 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone groundwater closure area only - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test 18 ft.
3 gpm pump rate with 0 ft. of drawdown after 2 hrs pumping
Time of recovery 15 hrs/min. Recovery water level 10 1/4 ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	1	Fill / Asphalt
1	10	OR Sand/Gravel
10	18 1/2	Wet Sand / Gravel
18 1/2	20 1/2	Shale

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/24/99

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) PRO Pump
Address 7621 S. Ronshore Lane
Signature Allan J Hicks
Date 7/30/99 License no. 504171

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 177381

DEPARTMENT—BUREAU COPY

01N 26E 34 CA

141655

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# CCPMW-2

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc.
Mailing address: 600 N. Dairy Ashford Rd
Houston Tx. - 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ SW ¼, Section 34
Township 1 (N)S Range 26 (E)W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Coulson Park Billings MT.
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 18 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 18 ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0020 from 2½ ft. to 17½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 2½ ft. to 18 ft.
Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from 1½ ft. to 2½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 11 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	10½	Clayey fill - med Brown
10½	18	Sandy Gravel - Grey

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 3/29/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT. 59102
Signature Paul Bray
Date 3/30/2000 License no. MMWC # 344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 179475

DEPARTMENT—BUREAU COPY

OIN 26E 34 CA

141654

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# CCP MW-1

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Conoco Inc
Mailing address 600 N. Dairy Ashford Rd
Houston Tx. 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ SW ¼, Section 34
Township 1 (N)S Range 26 (E)W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Coulson Park, Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8 1/2 in. from 0' ft. to 18' ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 18' ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 7 1/2 ft. to 17 1/2 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 6' ft. to 18' ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 2 ft. to 6 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 12 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6 1/2	Sandy - Light Brown
6 1/2	18	Sandy Gravel - Med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 3/28/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT
Signature Paul Burx
Date 3/30/2000 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 179478

DEPARTMENT—BUREAU COPY

CIN 26E 34 CA

141653

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# CCPmW-3

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc.
Mailing address: 600 N. Dairy Ashford Rd
Houston Tx. 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ SW ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Coulson Park Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 18 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 18 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 7½ ft. to 17½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel: 10/20 Silica Sand
Gravel placed from 6 ft. to 18 ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 2 ft. to 4 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 11½ ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6½	Sandy Silt med Brown
6½	8½	Sand Med Brown
8½	18	Gravely sand Med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 3/29/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT
Signature Paul Bray
Date 4/5/2000 License no. MMWC #344

MBMG ID# 179479

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT—BUREAU COPY

OIN 26E 34 CA

141652

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# CCPMW #4

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work.** **Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

ok

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 N. Dairy Ashford Rd
Houston Tx. 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ SW ¼, Section 34
Township 1 (N)/S Range 26 (E)/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Coulson Park, Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8 1/2 in. from 0 ft. to 15 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2 in. from 0 ft. to 15 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 4 1/2 ft. to 14 1/2 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3 ft. to 15 ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 2 ft. to 3 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 11 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6'	Silty Sand Med Brown
6'	15'	Sandy Gravel Med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 3/30/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT
Signature Paul Bray
Date 4/5/2000 License no. MMWC # 344

MBMG ID# 179480

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT—BUREAU COPY

CFN 26E 34 SC

MONTANA WELL LOG REPORT

1400661

Form No. 603 R2-99

Well ID# CFN-#5

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Consolidated Freight ways
Mailing address 901 4th Ave N
Billings MT. 59102

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ NW ¼, Section 34
Township 1 (N/S) Range 26 (E/W) County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 1004 4th Ave N., Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 16½ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 16½ ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 6 ft. to 16 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 4 ft. to 16½ ft.
Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from ____ ft. to ____ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 7 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Cement
6"	1'	Base Corse med Brown
1'	8½	Silty clay med Brown
8½	16	Sandy gravel med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 2/4/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT 59107
Signature Paul Berry
Date 2/7/2000 License no. MMWC #344

RECEIVED
FEB 15 2000
D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 180217

DEPARTMENT—BUREAU COPY

01S 26E 34 BC [140007]

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# CFN-#4

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Consolidated Freightway
Mailing address: 901 4th Ave N.
Billings MT 59102

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ NW ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 1004 ~~[illegible]~~ 4th Aven Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 16½ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 16½ ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 6 ft. to 16 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 4 ft. to 16½ ft.
Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from 2 ft. to 4 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 7 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ PUMPING TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Cement
6"	1'	Base Corse Med Brown
1'	9	Clayey Sand Light Brown
9'	11	Sand Med Brown
11'	16	Sandy Gravel Med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 2/4/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT 59102
Signature Paul Bray
Date 2/7/2000 License no. MMWC #344

RECEIVED FEB 15 2000 D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 180218

DEPARTMENT—BUREAU COPY

01S 26E 34 BC

MONTANA WELL LOG REPORT

140068

Form No. 603 R2-99

Well ID# CFN-#3

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Consolidated Freight Ways
Mailing address 901 4th Ave N.
Billings MT. 59107

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ NW ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 1004 4th Ave N. Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 16½ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 16½ ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 6 ft. to 16 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 4 ft. to 16½ ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 2 ft. to 4 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 7 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Cement
6"	1'	Base Corse Med Brown
1'	6'	Silty Clay Med Brown
6'	16½	Sandy gravel Med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 2/4/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT 59107
Signature Paul Brang
Date 2/7/2000 License no. MMWC #344

RECEIVED FEB 15 2000 D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 180219

DEPARTMENT—BUREAU COPY

GW 262 84 BC

140069

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# CFN-#2

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Consolidated Freightways
Mailing address 901 4th Ave N
Billings MT. 59102

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ NW ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 1004 4th Ave N. Billings MT.
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 16 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 15½ ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 5 ft. to 15 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3½' ft. to 16' ft.
Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from 2 ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 6½ ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ ADDITIONAL TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HS

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Cement
6"	1'	Base Course Med Brown
1'	7	Silty Clay Med Brown
7'	16	Sandy Gravel Med Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 2/3/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, ~~firm~~ or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT 59107
Signature Paul Brown
Date 2/7/2000 License no. MMWC #344

RECEIVED
FEB 15 2000
D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 180220

DEPARTMENT—BUREAU COPY

CFN 02 34 BC 140070

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# CFN-1

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Consolidated Freightways
Mailing address 901 4th Ave N.
Billings, MT 59102

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ NW ¼, Section 34
Township 1 (N)/S Range 26 (E)/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 1004 4th Ave N., Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 16½ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 16½ ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 0.020 from 6 ft. to 16 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 4 ft. to 16½ ft.
Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from 1½ ft. to 4 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 7½ ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Cement
6"	1'	Base Corse Med Brown
1'	7'	Silty clay Med Brown
7'	16½'	Sandy Gravel Light Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 2/3/2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address Box 30615 Billings MT. 59107
Signature Paul Bray
Date 2/7/2000 License no. MMWC #344

MONTANA RECEIVED FEB 15 2000 DNRC

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 180221

DEPARTMENT—BUREAU COPY

QN 26E 33 DDB

142460

WELL PLUG AND ABANDONMENT

WELL ID: RW-C

HD

DATE: October 15, 1999

ok

WELL OWNER: Conoco, Inc.
401 So. 23rd
Billlings, Montana 59101

WELL LOCATION: NW¼ SE¼ SE¼ Section 33, Township 1 North, Range 26 East
Yellowstone County, Montana
(near PAYS stockyards off Minesota Avenue, Billings)

ABANDONMENT PROCEDURE: Excavated to 3 feet below ground surface (bgs); cut off steel casing with torch 3 feet bgs; filled casing with bentonite chips to top of casing; backfilled with sand and gravel to surface.

CONTRACTOR: Pro Pump / ADT Drilling, Laurel, Montana

LICENSE NO.: 508/171

SIGNATURE: Allan D Heik

181416

01N 26E 34 AD

(144367)

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# South by Stage

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name METRA PARK
Mailing address P.O. Box 2514
Bigs MT 59103

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SE ¼ NE ¼, Section 34
Township 1 ☐N ☒S Range 26 ☒W ☐E County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☒ Irrigation
☐ Public water supply ☐ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☒ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 7 7/8 in. from 0 ft. to 24 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness 2.50 ☐ Threaded ☒ Welded
Dia. 6 5/8 in. from 0 ft. to 14 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating No lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.

Perforations/Slotted Pipe:
Type of perforator used No
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material Stainless Steel
Dia. 6" Slot size 70 from 14 ft. to 24 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☐ Yes ☒ No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: ☒ Yes ☐ No
Type ____ Depth(s) ____

Grout: Material used No 8# Bentonite
Depth from ____ ft. to ____ ft. OR ☒ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☐ Static water level 9 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone groundwater closure area only - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test 23 ft.
70 gpm pump rate with 14 ft. of drawdown after 4 hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	Top Soil
2	6	Clay
6	24	gravel sand
24	28	Shale

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5-12-2000

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) American Drilling
Address 1520 East Lake Bigs MT
Signature Curtis Schelle
Date 5-14-2000 License no. 3447

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 182034

DEPARTMENT—BUREAU COPY

01S26E02BAA

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# PZ-22

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 North Dairyashford Rd
Houston Texas 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ NE ¼ NE ¼ NW ¼, Section 2
Township 1 N/S Range 26 E/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Charlene Road, Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 25 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 25 ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 020 from 4½ ft. to 24½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 2 ft. to 25 ft.
Packer: ☐ Yes ☐ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from 6 inches ft. to 2 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9½ ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2½	Silty sand Med Brown
2½	22½	Sandy gravel Med Brown
22½	25	Shale Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 11/19/00

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT. 59107
Signature [signature]
Date 11/19/00 License no. MMWC #344

RECEIVED DEC 05 2000 D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 185122

DEPARTMENT—BUREAU COPY

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# P2-21

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 North Dairyash Ford Rd
Houston TX 77079

2. WELL LOCATION: List ¼ from smallest to largest
___ ¼ NE ¼ NE ¼ NW ¼, Section 2
Township 1 N/S Range 26 E/W County Yellowstone
Lot ___, Tract/Blk ___ Subdivision Name ___
Well Address Charlene Road, Billings MT
GPS ☐ Yes ☐ No
Latitude ___ Longitude ___
Error as reported by GPS locator (± feet) ___
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ___

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 24 ft.
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 24 ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ___ in. by ___ in.
___ no. of perforations/slots from ___ ft. to ___ ft.
___ no. of perforations/slots from ___ ft. to ___ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 020 from 3½ ft. to 23½ ft.
Dia. ___ Slot size ___ from ___ ft. to ___ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 1½ ft. to 24 ft.
Packer: ☐ Yes ☒ No
Type ___ Depth(s) ___
Grout: Material used Bentonite Chips
Depth from 6 inches to 1½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9½ ft. below top of casing **or**
☐ Closed-in artesian pressure ___ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ___
Yellowstone Controlled Groundwater Area - Water Temperature ___ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
___ gpm with drill stem set at ___ ft. for ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*
___ gpm with ___ ft. of drawdown after ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*
Depth pump set for test ___ ft.
___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*
___ gpm for ___ hours
Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2½	Silty sand Med Brown
2½	21	Sandy gravel Med Brown
21	24	Shale Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 11/19/00

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT 59107
Signature Paul Bray
Date 11/19/00 License no. MMWC #344

RECEIVED DEC 05 2000 D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 185123

DEPARTMENT—BUREAU COPY

01N 26E 34 CDC

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# P2-24

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 North Dairyash Ford Rd
Houston Tx 77079

2. WELL LOCATION: List ¼ from smallest to largest
___ ¼ SW ¼ SE ¼ SW ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ___, Tract/Blk ___ Subdivision Name ___
Well Address Charlene Road, Billings MT.
GPS ☐ Yes ☐ No
Latitude ___ Longitude ___
Error as reported by GPS locator (± feet) ___
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ___

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 23½ ft.
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 23½ ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ___ in. by ___ in.
___ no. of perforations/slots from ___ ft. to ___ ft.
___ no. of perforations/slots from ___ ft. to ___ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 020 from 3 ft. to 23 ft.
Dia. ___ Slot size ___ from ___ ft. to ___ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 2½ ft. to 23½ ft.
Packer: ☐ Yes ☒ No
Type ___ Depth(s) ___
Grout: Material used Bentonite Chips
Depth from 1½ ft. to 2½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9½ ft. below top of casing **or**
☐ Closed-in artesian pressure ___ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ___
Yellowstone Controlled Groundwater Area - Water Temperature ___ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
___ gpm with drill stem set at ___ ft. for ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*
___ gpm with ___ ft. of drawdown after ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*
Depth pump set for test ___ ft.
___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*
___ gpm for ___ hours
Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)	
0	5	Silty Sand	Brown
5	21½	Sandy gravel	Brown
21½	23½	Shale	Brown

RECEIVED
DEC 05 2000
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 11/20/00

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT. 59107
Signature Paul Gray
Date 11/20/00 License no. MMWC #344

MBMG ID# M# 185614

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# PZ-23

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 North Dairyashford Rd
Houston Texas 77079

2. WELL LOCATION: List ¼ from smallest to largest
___ ¼ SE ¼ SW ¼ SW ¼, Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Lot ___, Tract/Blk ___ Subdivision Name ___
Well Address Charlene Road, Billings MT.
GPS ☐ Yes ☐ No
Latitude ___ Longitude ___
Error as reported by GPS locator (± feet) ___
Horizontal datum ☐ NAD27 ☐ WGS84

ok

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ___

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 25 ft.
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ___ in. by ___ in.
___ no. of perforations/slots from ___ ft. to ___ ft.
___ no. of perforations/slots from ___ ft. to ___ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size .020 from 4½ ft. to 24½ ft.
Dia. ___ Slot size ___ from ___ ft. to ___ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3 ft. to 25 ft.

Packer: ☐ Yes ☒ No
Type ___ Depth(s) ___

Grout: Material used Bentonite chips
Depth from 1½ ft. to 3 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9½ ft. below top of casing **or**
☐ Closed-in artesian pressure ___ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ___
Yellowstone Controlled Groundwater Area - Water Temperature ___ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
___ gpm with drill stem set at ___ ft. for ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*
___ gpm with ___ ft. of drawdown after ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*
Depth pump set for test ___ ft.
___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*
___ gpm for ___ hours
Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	3	Road Base - Clayey gravel Brown
3	6½	Clayey silt Brown
6½	23½	Sandy gravel Brown
23½	25	Shale Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 11/20/00

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, ~~or~~ corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT. 59107
Signature Paul Brady
Date 11/20/00 License no. MMWC #344

RECEIVED DEC 05 2000 D.N.R.C.

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# M# 185615

DEPARTMENT—BUREAU COPY

01N 26E 34 BC

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# PZ-25

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 North Dairyashford Rd
Houston Tx 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ SE ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Charlene Road, Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 20 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 220 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 20 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 020 from 4½ ft. to 19½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3 ft. to 20 ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 1½ ft. to 3 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	20	Sandy gravel Brown

☐ ADDITIONAL SHEETS ATTACHED

RECEIVED DEC 05 2000 D.N.R.C.

8. DATE WELL COMPLETED: 11/21/00

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT
Signature Paul Brady
Date 11/21/00 License no. MMWC # 344

MBMG ID# M#185616

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT—BUREAU COPY

01N 26E 34 DC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# PZ-26

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Conoco Inc
Mailing address: 600 North Dairy Ashford Rd
Houston Tx 77079

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ SE ¼, Section 34
Township 1 (N) S Range 26 (E) W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Charlene Rd, Billings
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 15 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 15 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size 020 from 4½ ft. to 14½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3½ ft. to 15 ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	15	Silty Clayey Gravel Dark Brown

RECEIVED DEC 05 2000 D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 11/24/00

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, ~~or~~ corporation (print) Maxim Technologies
Address P.O. Box 30615 Billings MT 59107
Signature Paul Bray
Date 11/24/00 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# M#185617

DEPARTMENT—BUREAU COPY

01N26E34BCB

HYDROMETRICS INC.
Consulting Scientists and Engineers
Helena, Montana

Monitoring Well

Hole Name: MW-02

Date Hole Started: 6/15/00 Date Hole Finished: 6/15/00

Client: Yurko Properties
Project: Yurko Remedial Investigation
County: Yellowstone State: Montana
Property Owner: Jeff Yurko
Legal Description: NW SW NW S34 T1N R26E
Descriptive Location: 33 feet from west fence (property boundary) and 89 feet from power pole in SE corner.
Recorded By: MTB
Drilling Company: SK Geotech
Driller: Bill Neff
Drilling Method: Hollow Stem Auger
Drilling Fluids Used: Air/water
Purpose of Hole: Monitoring Well
Target Aquifer: 1st Water
Hole Diameter (in): 9 in
Total Depth Drilled (ft): 16

WELL COMPLETION	Y/N	DESCRIPTION	INTERVAL
Well Installed?	Y	2-inch, flush threaded, Sch 40, PVC	0-16
Surface Casing Used?	Y	Steel Flush	
Screen/Perforations?	Y	0.020-inch slot, Sch 40 PVC	5.5-15.5
Sand Pack?	Y	10-20 silica sand	4-16
Annular Seal?	Y	Bentonite chips	0.5-4
Surface Seal?	Y	Concrete	0-0.5
DEVELOPMENT/SAMPLING			
Well Developed?	Y	Bailer, 20 minutes, removed 2 gal minimum	
Water Samples Taken?	N		
Boring Samples Taken?	N		

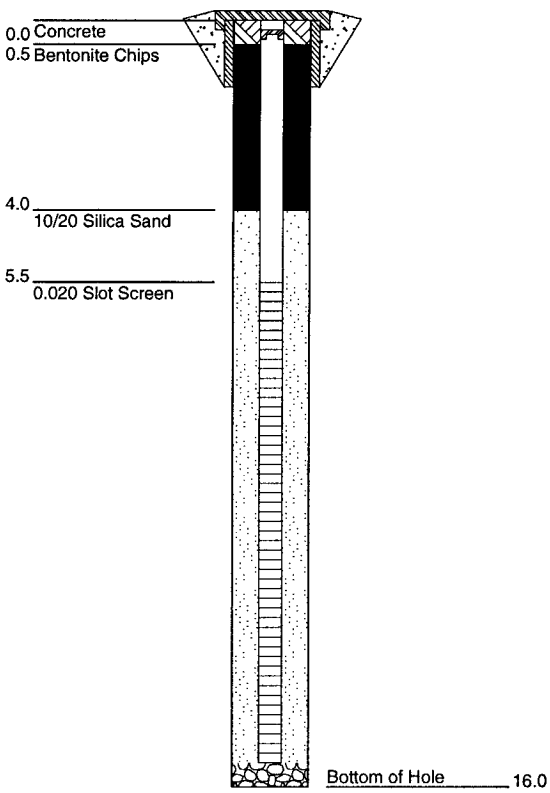
Static Water Level Below MP: 7.93
Date: 6/16/00
MP Description: Flush Mount
MP Height Above or Below Ground (ft):

Surface Casing Height (ft):
Riser Height (ft):
Ground Surface Elevation (ft):
MP Elevation (ft): 99.53

Remarks:

HD

WELL CONSTRUCTION



GRAPHICS

GEOLOGICAL DESCRIPTION

0.0 - 2.0' **Gravel**
Gravels, fine to 1"+ diameter grains, well graded, angular to chipped with a silty sand matrix; moist.
[Fill]

2.0 - 6.0' **Gravel**
Gravels, size less than 0.5", well graded, angular to chipped with a silty sand matrix; moist. No hydrocarbon odor noted.
[Fill]

6.0 - 8.0' **Gravel**
Gravels, grains less than 0.5" diameter, well graded, angular to chipped with a silty sand matrix; intervals of clay; moist; hydrocarbon staing at 7.4'; very strong hydrocarbon odor.
[Fill]

8.0 - 10.0' **Silty Sandy Clay**
Silty Sandy Clay with hydrocarbon stained Gravel intervals, well graded; saturated.
[Fill]

10.0 - 12.0' **Gravel**
Hydrocarbon stained Gravels, well graded; smear zone; saturated.
[Fill]

12.0 - 14.0' **Gravel**
Clean gravels, pea size grains, well graded, well rounded, hydrocarbon staining to 12.7' and then becoming more silty with larger size gravel grains.
[Fill]

14.0 - 16.0' **Gravel**
Gravels composed of granite, coarse grained, well graded; Sand intervals, poorly graded; 5-10% fines; saturated.
[Fill]

190065

STANDARD_REV1 1092.GPJ HYD-TUC.GDT 10/18/00

01N26E34BCB

HYDROMETRICS INC.
Consulting Scientists and Engineers
Helena, Montana

Monitoring Well

Hole Name: MW-03

Date Hole Started: 6/15/00 Date Hole Finished: 6/15/00

Client: Yurko Properties
Project: Yurko Remedial Investigation
County: Yellowstone State: Montana
Property Owner: Jeff Yurko
Legal Description: NW SW NW S34 T1N R26E
Descriptive Location: 21 feet south of building and 35 feet from SE corner of property.

Recorded By: MTB
Drilling Company: SK Geotech
Driller: Bill Neff
Drilling Method: Hollow Stem Auger
Drilling Fluids Used: Air/water
Purpose of Hole: Monitoring Well
Target Aquifer: 1st water
Hole Diameter (in): 9 in
Total Depth Drilled (ft): 16

WELL COMPLETION	Y/N	DESCRIPTION	INTERVAL
Well Installed?	Y	2-inch, flush threaded, Sch 40, PVC	0-16
Surface Casing Used?	Y	Stell Flush	
Screen/Perforations?	Y	0.020-inch slot, Sch 40 PVC	6-16
Sand Pack?	Y	10-20 silica sand	3.8-16
Annular Seal?	Y	Bentonite chips	0.5-3.8
Surface Seal?	Y	Concrete	0-0.5
DEVELOPMENT/SAMPLING			
Well Developed?	Y	Bailer, 20 minutes, removed 2 gallons minimum	
Water Samples Taken?	N		
Boring Samples Taken?	N		

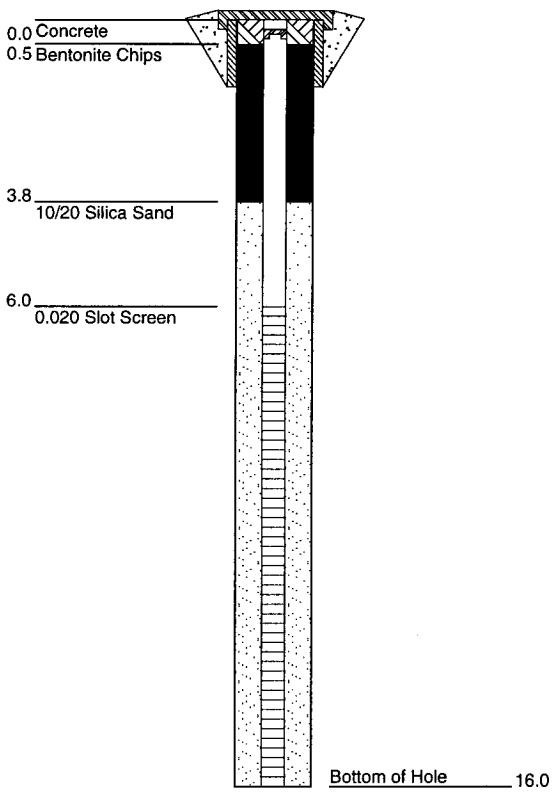
Static Water Level Below MP: 8.36
Date: 6/16/00
MP Description: Flush Mount
MP Height Above or Below Ground (ft):

Surface Casing Height (ft):
Riser Height (ft):
Ground Surface Elevation (ft):
MP Elevation (ft): 99.28

Remarks:

HD

WELL CONSTRUCTION



GRAPHICS

GEOLOGICAL DESCRIPTION

0.0 - 0.7' **Gravel**
[Road Base Fill]

0.7 - 2.0' **Silt**
Iron stained, low plasticity silt with very fine grained sand and clay; moist; moderately dense.
[Fill]

2.0 - 4.0' **Clay**
Dark brown Clay, moderately dense, moist.
[Fill]

4.0 - 6.7' **Clay**
Dark to medium brown Clay, moderatley dense; Sand 35%, very fine grained, increasing with depth; moist.
[Fill]

6.7 - 8.0' **Gravel**
Gravel, well graded, angular; minor Sand component, fine to medium grained, subangular; moist.
[Fill]

8.0 - 10.0' **Sand**
Gray clean Sand, poorly graded, subangular; minor pea gravel at 9.1', well rounded.
[Fill]

10.0 - 16.0' **Sand**
Gray clean Sand, poorly graded, subangular; coarse 1" diameter gravels 10-15%, well rounded; saturated.
[Fill]

STANDARD_REV1 1092.GPJ HYD-TUC.GDT 10/18/00

19 0069

01N26E34BCB

HYDROMETRICS INC.
Consulting Scientists and Engineers
Helena, Montana

Monitoring Well

Hole Name: MW-04

Date Hole Started: 6/16/00 Date Hole Finished: 6/16/00

Client: Yurko Properties
Project: Yurko Remedial Investigation
County: Yellowstone State: Montana
Property Owner: Jeff Yurko
Legal Description: NW SW NW S34 T1N R26E
Descriptive Location: 104 feet north of power pole in SE corner.

Recorded By: MTB
Drilling Company: SK Geotech
Driller: Bill Neff
Drilling Method: Hollow Stem Auger
Drilling Fluids Used: Air/water
Purpose of Hole: Monitoring Well
Target Aquifer: 1st water
Hole Diameter (in): 9 in
Total Depth Drilled (ft): 15

WELL COMPLETION	Y/N	DESCRIPTION	INTERVAL
Well Installed?	Y	2-inch, flush threaded, Sch 40, PVC	0-15
Surface Casing Used?	Y	Steel Flush	
Screen/Perforations?	Y	0.020-inch slot, Sch 40 PVC	5-15
Sand Pack?	Y	10-20 silica sand	3.5-5
Annular Seal?	Y	Bentonite chips	0.5-3.5
Surface Seal?	Y	Concrete	0-0.5
DEVELOPMENT/SAMPLING			
Well Developed?	Y	Bailer, 20 minutes, removed 2 gallons minimum.	
Water Samples Taken?	N		
Boring Samples Taken?	N		

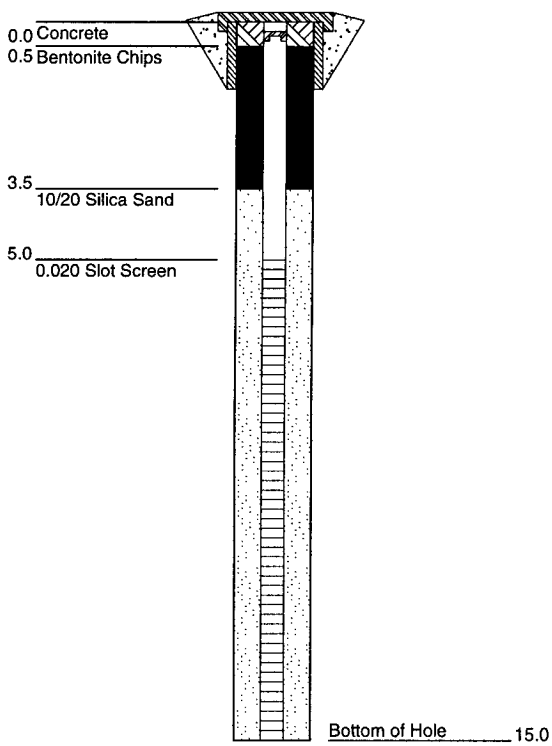
Static Water Level Below MP: 7.89
Date: 6/16/00
MP Description: Flush Mount
MP Height Above or Below Ground (ft):

Surface Casing Height (ft):
Riser Height (ft):
Ground Surface Elevation (ft):
MP Elevation (ft): 97.84

Remarks:

HD

WELL CONSTRUCTION



GRAPHICS

GEOLOGICAL DESCRIPTION

0.0 - 2.0' **Gravel**
Gravel, well graded up to 1-inch + diameter, well rounded; silty sand matrix; moist.
[Road Base Fill]

2.0 - 4.0' **Gravel**
Gravel, well graded up to 1-inch + diameter, well rounded; silty sand and clay matrix; moist.
[Fill]

4.0 - 8.0' **Gravel**
Gravel 80%, well graded up to 1-inch + diameter, well rounded; silty sand matrix; moist.
[Fill]

8.0 - 14.0' **Gravel**
Gravel 80%, well graded up to 1-inch + diameter, well rounded; sand; saturated.
[Fill]

14.0 - 15.0' No Returns, suspect as above.

190070

STANDARD_REV1 1092.GPJ HYD-TUC.GDT 10/18/00

01N26E34BCB

HYDROMETRICS INC.
Consulting Scientists and Engineers
Helena, Montana

Monitoring Well

Hole Name: MW-01

Date Hole Started: 6/15/00 Date Hole Finished: 6/15/00

Client: Yurko Properties
Project: Yurko Remedial Investigation
County: Yellowstone State: Montana
Property Owner: Jeff Yurko
Legal Description: NW SW NW S34 T1N R26E
Descriptive Location: 3 feet from west fence (property boundary) and 119 feet from power pole in SE corner.
Recorded By: MTB
Drilling Company: SK Geotech
Driller: Bill Neff
Drilling Method: Hollow Stem Auger
Drilling Fluids Used: Air/water
Purpose of Hole: Monitoring Well
Target Aquifer: 1st water
Hole Diameter (in): 9 in
Total Depth Drilled (ft): 16

WELL COMPLETION	Y/N	DESCRIPTION	INTERVAL
Well Installed?	Y	2-inch, flush threaded, Sch 40, PVC	0-16
Surface Casing Used?	Y	Steel Flush	
Screen/Perforations?	Y	0.020-inch slot, Sch 40 PVC	5.5-15.5
Sand Pack?	Y	10-20 silica sand	3-16
Annular Seal?	Y	Bentonite Chips	0.5-3
Surface Seal?	Y	Concrete	0-0.5
DEVELOPMENT/SAMPLING			
Well Developed?	Y	Bailer, 20 minutes, removed 2 gallons minimum	
Water Samples Taken?	N		
Boring Samples Taken?	N		

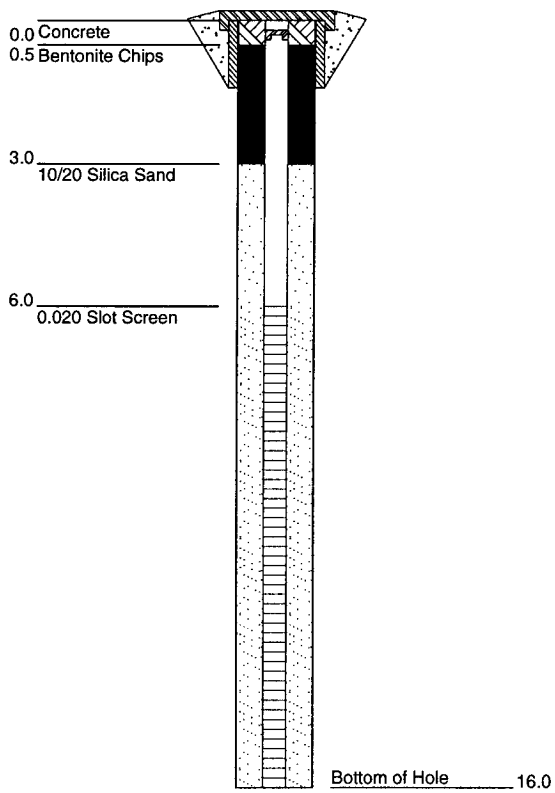
Static Water Level Below MP: 6.32
Date: 6/16/00
MP Description: Flush Mount
MP Height Above or Below Ground (ft):

Surface Casing Height (ft):
Riser Height (ft):
Ground Surface Elevation (ft):
MP Elevation (ft): 100

Remarks:

HD

WELL CONSTRUCTION



GEOLOGICAL DESCRIPTION

GRAPHICS

0.0 - 2.0' **Gravel**
Gravel, coarse 3-inch diameter +; sand, very fine to medium grained; silt 15-20%; moist.
[Fill]

2.0 - 4.0' **Silty Clay**
Dark brown Silty Clay, low plasticity; Sand 15%, very fine grained, subangular; moist; intermittent black/gray hydrocarbon staining from 1'-2'; hydrocarbon odor noted.
[Fill]

4.0 - 6.0' **Silty Clay**
Dark brown Silty Clay with white salts producing mottled texture & some iron stained horizons, low plasticity; Sand 15%, very fine grained with some coarse sand, subangular; moist; intermittent black/gray hydrocarbon staining from 4'-4.5".
[Fill]

6.0 - 8.0' **Silty Clay**
Dark brown Silty Clay with white salts, low plasticity; Sand 15%, very fine grained, subangular; moist. Hydrocarbon odor absent.
[Fill]

8.0 - 10.0' **Sand**
Iron stained Sand, fine, soft, subangular, water saturated; Gravel, 1 inch rounded metamorphic fragments with
2 mm quartz grains in green quartz matrix. 1.5' clay interval at 9' with white salts.
[Fill]

10.0 - 12.0' **Gravel**
Gravels, pea to 1" gravels, rounded to chipped; Sand 20%, fine to coarse, subangular; saturated.
[Fill]

12.0 - 14.0' **Gravel**
Metamorphosed granite and basalt black Gravels, pea to 1"+; Sand 20%, fine to coarse, subangular; saturated.
[Fill]

14.0 - 16.0' **Gravel**
As above.
[Fill]

STANDARD_REV1 1092.GPJ HYD-TUC.GDT 10/18/00

190671

01N26E34AA

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# MW-#304

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: MONTANA D.E.Q.
Mailing address: Mine Waste Cleanup Bureau
P.O. Box 200901 Helena MT. 59620

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ NE ¼, Section 34
Township 1 (N)/S Range 26 (E)/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address Sorite Trucking, 179 Cerise Rd Lockwood MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 28 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 28 ft.
Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size .010 from 7½ ft. to 27½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel #12 Silica Sand
Gravel placed from 5 ft. to 28 ft.
Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____
Grout: Material used Bentonite Chips
Depth from 1½ ft. to 5 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 9 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)	
0	2	Gravel	Brown + Black
2	8½	Silt w/M Sand	Brown
8½	26½	Sand + Gravel	Brown
26½	28	Sandstone	Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 7/18/02

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, ~~or~~ corporation (print) Maxim. Technologies
Address P.O. Box 30615 Billings MT
Signature Paul Brown
Date 7/18/02 License no. MMWC #344

MBMG ID# 198254

01S 26E 02 BAA

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# P2-22-A

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Conoco Inc

Mailing address 600 North Dairyash Ford Rd

Houston Texas 77079

2. WELL LOCATION List ¼ from smallest to largest

____ ¼ NE ¼ NE ¼ NW ¼, Section 2

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name

Well Address Charlene Road Billings MT

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☑ Monitoring Well ☐ Other:

4. TYPE OF WORK:

☑ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 24½ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☑ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 24½ ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☑ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .020 from 4 ft. to 24 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☑ Yes ☐ No

Size of gravel #12 Silica Sand

Gravel placed from 3 ft. to 24½ ft.

Packer: ☐ Yes ☑ No

Type ____ Depth(s) ____

Grout: Material used Bentonite chips

Depth from 1½ ft. to 3 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☑ Static water level 6.9 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	22½	Sandy Gravel med Brown
22½	24½	Shale Grey

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 11/15/02

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Maxim Technologies

Address P.O. Box 30615, Billings MT

Signature Paul Drury

Date 11/17/02 License no. MMWC #344

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# II Grandstand

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Metra Park
Mailing address Po Box 2514
Bigs MT 59103

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ SE ¼, Section 27
Township 1 (N)/S Range 2 (E)/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☑ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

ok

3. PROPOSED USE: ☐ Domestic ☐ Stock ☑ Irrigation
☐ Public water supply ☐ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☑ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☑ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 9 5/8 in. from 0 ft. to 30 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness 250 ☐ Threaded ☑ Welded
Dia. 7 5/8 in. from +19 ft. to 25 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating ____ lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☑ Yes ☐ No
Material Stainless
Dia. 7 Slot size 70 from 25 ft. to 30 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☐ Yes ☑ No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: ☑ Yes ☐ No
Type Rubber K Depth(s) 23
Grout: Material used bentonite
Depth from ____ ft. to ____ ft. OR ☑ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☐ Static water level 15* ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
15 gpm with drill stem set at 30 ft. for 8 hours
Time of recovery 15 (hrs)/min. Recovery water level 15* ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	lawn
2	10	brown sticky clay
10	30	sand and gravel
30		black shale

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 10-8-02

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) American Drilling
Address 1526 East 1st Bigs MT
Signature [signature]
Date 10-8-02 License no. 344 WP 36

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 200625

DEPARTMENT—BUREAU COPY

7N 26E 27SC

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# I Paulson

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Metra Park
Mailing address PO Box 25141
Bigs MT 59103

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ SW ¼ SE ¼, Section 27
Township 10 N/S Range 26 E/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☑ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☑ Irrigation
☐ Public water supply ☐ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☑ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☑ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:
Boreholes
Dia. 9 3/8 in. from 0 ft. to 31 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness .250 ☐ Threaded ☑ Welded
Dia. 7 5/8 in. from +17 ft. to 26 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating ____ lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: ☑ Yes ☐ No
Material Stainless
Dia. 7 Slot size 70 from 26 ft. to 31 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: ☐ Yes ☑ No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: ☑ Yes ☐ No
Type Rubber K Depth(s) 24
Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR ☑ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☐ Static water level 15 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
30 gpm with drill stem set at 30 ft. for 8 hours
Time of recovery 1/2 hrs/min. Recovery water level 15 ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	lawn
2	7	brown sticky clay
7	31	sand and gravel
31		black shale

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 10 - 5 - 02

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) American Drilling
Address 1520 East 1st Bigs MT 59101
Signature [signature]
Date 10 - 5 - 02 License no. 344 WD 36

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 200640

DEPARTMENT—BUREAU COPY

01 N 26 E 33 DD

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# PO-2

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Ms Connie Pelican
Mailing address: 1819 Montana Ave
Billings, MT 59101

2. WELL LOCATION List ¼ from smallest to largest
____ ¼ ____ ¼ SE ¼ SE ¼, Section 33
Township 1 (N/S) Range 26 (E/W) County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name
Well Address Pelican Oil Bulk Plant, 1 North 18th Street
GPS ☐ Yes ☐ No Billings MT.
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ☒ Monitoring Well ☐ Other:

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8½ in. from 0 ft. to 20½ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 20½ ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size .010 from 5 ft. to 20 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3½ ft. to 20½ ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite chips
Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 12 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2"	Asphalt
2"	8"	Concrete
8"	1'	Base - Sandy gravel Brown
1'	2'	Sand - Brown
2'	20½	Gravel with sand Brown

RECEIVED
AUG 28 2003
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8/26/03

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Haz Tech Drilling
Address P.O. Box 30622 Billings MT
Signature Paul Brady
Date 8/27/03 License no. MWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 204928

DEPARTMENT - BUREAU COPY

01 N 26 E 33 DD

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# PO-3

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Ms Connie Pelican

Mailing address 1819 Montana Ave

Billings, MT 59101

2. WELL LOCATION List ¼ from smallest to largest

____ ¼ ____ ¼ SE ¼ SE ¼, Section 33

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name

Well Address Pelican Oil Bulk Plant, 7 North 18th Street Billings, MT.

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other:

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 20½ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 20½ ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 5 ft. to 20 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 3½ ft. to 20½ ft.

Packer: ☐ Yes ☒ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 10 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.

All depth measurements shall be from the top of the well casing.

Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: 7/6

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Asphalt
6"	1'	Base - Sandy Gravel BR
1'	3½	Clayey Sand Lt Brown
3½	8	Gravelly Sand Med Brown
8	10	Sand Black
10	20	Gravelly Sand Grey

RECEIVED AUG 28 2003 M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8/26/03

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Hat Tech Drilling

Address P.O. Box 30622 Billings MT

Signature Paul Brant

Date 8/27/03 License no. MMWC #344

MBMG ID# 204929

01 N 26 E 33 DD

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# PO-4

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Ms Connie Pelican

Mailing address 1819 Montana Ave.

Billings, MT. 59101

2. WELL LOCATION List ¼ from smallest to largest

____ ¼ ____ ¼ SE ¼ SE ¼, Section 33

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name

Well Address Pelican Oil Bulk Plant, 7 North 18th Street

GPS ☐ Yes ☐ No Billings MT. 59101

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other:

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 20½ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 20½ ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 5 ft. to 20 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 3½ ft. to 20½ ft.

Packer: ☐ Yes ☒ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 12 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.

All depth measurements shall be from the top of the well casing.

Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Asphalt
6"	1	Base - Sandy gravel Br
1	2	Sandy Clay Br
2	20	Sandy Gravel Br To Black

RECEIVED AUG 28 2003 M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8/25/03

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) HarTech Drilling

Address P.O. Box 30622, Billings MT

Signature Paul Brady

Date 8/27/03 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 204930

DEPARTMENT - BUREAU COPY

01 N 26 E 33 DD

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# PO-5

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Ms Connie Pelican

Mailing address 1819 Montana Ave.
Billings MT. 59101

2. WELL LOCATION List ¼ from smallest to largest

____ ¼ ____ ¼ SE ¼ SE ¼, Section 33

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name

Well Address Pelican Oil Bulk Plant, North 18th Street
Billings MT. 59101

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other:

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 20½ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 20½ ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 5 ft. to 20 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 3½ ft. to 20½ ft.

Packer: ☐ Yes ☒ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 11 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HG

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	Sandy Gravel Brown
2	7	Clay with Sand Black
7	20½	Sandy Gravel Grey

RECEIVED
AUG 28 2003
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8/26/03

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling

Address P.O. Box 30622 Billings MT

Signature Paul Briggs

Date 8/27/03 License no. 14 MWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 205502

DEPARTMENT - BUREAU COPY

OIN 2GE 34 DBCD

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# _____

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name John Schafuitz

Mailing address 3532 Jene Helen Ave
Billings, MT 59101

2. WELL LOCATION List ¼ from smallest to largest

SW ¼ SW ¼ NW ¼ SE ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot _____, Tract/Blk ____ Subdivision Name

Well Address _____

GPS ☐ Yes ☐ No

Latitude _____ Longitude _____

Error as reported by GPS locator (± feet) _____

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☒ Domestic ☐ Stock ☒ Irrigation
☐ Public water supply ☐ Monitoring Well ☐ Other:

OK

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☒ Rotary ☐ Other: _____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 6 in. from 0 ft. to 34 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☒ Welded
Dia. 6 5/8 in. from +1'6" ft. to 29 ft.
Dia. _____ in. from _____ ft. to _____ ft.

Plastic: Pressure Rating _____ lbs. ☐ Threaded ☐ Welded
Dia. _____ in. from _____ ft. to _____ ft.

Perforations/Slotted Pipe:
Type of perforator used _____
Size of perforations/slots _____ in. by _____ in.
____ no. of perforations/slots from _____ ft. to _____ ft.
____ no. of perforations/slots from _____ ft. to _____ ft.

Screens: ☐ Yes ☒ No
Material _____
Dia. _____ Slot size _____ from _____ ft. to _____ ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.

Gravel Packed: ☐ Yes ☒ No
Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

Packer: ☐ Yes ☒ No
Type _____ Depth(s) _____

Grout: Material used #8 Casing Seal
Depth from 0 ft. to 28 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 12'3" ft. below top of casing **or**
☐ Closed-in artesian pressure _____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc _____

Yellowstone Controlled Groundwater Area - Water Temperature _____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
28 gpm with drill stem set at 28 ft. for 2 hours
Time of recovery 30 hrs/min. Recovery water level 12'3" ft.

OR Bailer test*
_____ gpm with _____ ft. of drawdown after _____ hours
Time of recovery _____ hrs/min. Recovery water level _____ ft.

OR Pump test*
Depth pump set for test 286" ft.
35 gpm pump rate with 6 ft. of drawdown after 5 hrs pumping
Time of recovery 14 hrs/min. Recovery water level 12'1¼" ft.

OR Flowing Artesian*
_____ gpm for _____ hours
Flow controlled by _____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	Topsoil
2	5	Black Dense Clay
5	11	Clay, Clay
11	30	Small Gravel with Sandstone Rubble
30	31	Bentonite - Pure
31	34	Blue Shale
		H2O = 35 gpm = 12-29 ft.

RECEIVED
DEC 23 2003
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-11-03

9. REMARKS: _____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) A-1 Drilling
Address 830 Yellowstone, S. Lagrange, MT.
Signature Marvin W. Jenson
Date 12-11-03 License no. Water # 532

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 208046

DEPARTMENT - BUREAU COPY

C1N 26E 34 BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-7

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name: Con-Way Transportation Co

OK

Mailing address: 110 Parkland Plaza

Ann Arbor, Michigan 48103

2. WELL LOCATION: List ¼ from smallest to largest

___ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot ___, Tract/Blk ___ Subdivision Name ___

Well Address 901 4th Ave North Billings MT

GPS ☐ Yes ☐ No

Latitude ___ Longitude ___

Error as reported by GPS locator (± feet) ___

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ___

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ___ in. from ___ ft. to ___ ft.

Dia. ___ in. from ___ ft. to ___ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ___ in. from ___ ft. to ___ ft.

Dia. ___ in. from ___ ft. to ___ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ___ in. by ___ in.

___ no. of perforations/slots from ___ ft. to ___ ft.

___ no. of perforations/slots from ___ ft. to ___ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 10 ft. to 25 ft.

Dia. ___ Slot size ___ from ___ ft. to ___ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 8 ft. to 25 ft.

Packer: ☐ Yes ☒ No

Type ___ Depth(s) ___

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 8 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ___ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ___

Yellowstone Controlled Groundwater Area - Water Temperature ___ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*

___ gpm with drill stem set at ___ ft. for ___ hours

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*

___ gpm with ___ ft. of drawdown after ___ hours

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*

Depth pump set for test ___ ft.

___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*

___ gpm for ___ hours

Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	9"	Asphalt
9"	1½	Sandy gravel Base Brown
1½	11½	Silty Clay - Dk grey To Lt Brown
11½	18	Silty Sand - Med Brown
18	25	Sand + Gravel Dark Grey

RECEIVED
MAY 25 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/10/05

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling

Address P.O. Box 30622, Billings MT

Signature Paul E. Brian

Date 5/18/05 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 218954

DEPARTMENT - BUREAU COPY

01N 26E 34 BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-8

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Con-Way Transportation Co.

Mailing address 110 Parkland Plaza

Ann Arbor, Michigan 48103

OK

2. WELL LOCATION: List ¼ from smallest to largest

____ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name ____

Well Address 901 4th Ave North Billings MT

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 8 ft. to 25 ft.

Packer: ☐ Yes ☒ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 8 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Asphalt
6"	1½	Sandy Gravel, Base Brown
1½	11½	Silty Clay DK Grey
11½	13½	Silty Sand Lt Brown
13½	25	Sandy Gravel Brown To Grey

RECEIVED
MAY 25 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/10/05

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling

Address P.O. Box 30622, Billings MT

Signature Paul E. Diaz

Date 5/19/05 License no. MMWC #344

MBMG ID# 218955

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT - BUREAU COPY

01N 26E 34BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-9

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name: Con-Way Transportation Co.

Mailing address: 110 Parkland Plaza

Ann Arbor, Michigan 48103

2. WELL LOCATION: List ¼ from smallest to largest

____ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name ____

Well Address 901 4th Ave North Billings, MT

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 9 ft. to 24 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 7 ft. to 25 ft.

Packer: ☐ Yes ☒ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 7 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Asphalt
6"	1½	Sandy Gravel-Base & Brown
1½	11½	Silty Clay Brown
11½	14	Sandy Gravel Lt Grey
14	16	Sand Med Grey
16	25	Sandy Gravel Lt Grey

RECEIVED
MAY 25 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/11/05

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Hac Tech Drilling

Address P.O. Box 30622, Billings MT

Signature Paul E. Brady

Date 5/19/05 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 218957

DEPARTMENT - BUREAU COPY

01N 26E 34BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-10

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name: Con-Way Transportation Co.

Mailing address: 110 Parkland Plaza

Ann Arbor, Michigan 48103

2. WELL LOCATION: List ¼ from smallest to largest

___ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 ☒ N/S Range 26 ☒ E/W County Yellowstone

Lot ___, Tract/Blk ___ Subdivision Name ___

Well Address 901 4th Ave North Billings

GPS ☐ Yes ☐ No

Latitude ___ Longitude ___

Error as reported by GPS locator (± feet) ___

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ___

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ___ in. from ___ ft. to ___ ft.

Dia. ___ in. from ___ ft. to ___ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ___ in. from ___ ft. to ___ ft.

Dia. ___ in. from ___ ft. to ___ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ___ in. by ___ in.

___ no. of perforations/slots from ___ ft. to ___ ft.

___ no. of perforations/slots from ___ ft. to ___ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 10 ft. to 25 ft.

Dia. ___ Slot size ___ from ___ ft. to ___ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 8 ft. to 25 ft.

Packer: ☐ Yes ☒ No

Type ___ Depth(s) ___

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 8 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ___ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ___

Yellowstone Controlled Groundwater Area - Water Temperature ___ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.

All depth measurements shall be from the top of the well casing.

Time of recovery is hours/minutes since pumping stopped.

Air test*

___ gpm with drill stem set at ___ ft. for ___ hours

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*

___ gpm with ___ ft. of drawdown after ___ hours

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*

Depth pump set for test ___ ft.

___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*

___ gpm for ___ hours

Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6"	Asphalt
6"	3'	Sand LT Brown
3'	7'	Silt LT Brown
7'	16'	Clayey Silt LT Brown
16'	21'	Sand Brown To Grey
21'	25	Sand + Gravel LT Grey

RECEIVED MAY 25 2005 M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/11/05

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling

Address P.O. Box 30677, Billings MT

Signature Paul E. Brown

Date 5/20/05 License no. MMWL #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 218959

DEPARTMENT - BUREAU COPY

O/N 26E 34 BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-11

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Con-Way Transportation Co.

OK Mailing address 110 Parkland Plaza

Ann Arbor, Michigan 48103

2. WELL LOCATION: List ¼ from smallest to largest

___ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot ___, Tract/Blk ___ Subdivision Name ___

Well Address 901 4th Ave North Billings MT

GPS ☐ Yes ☐ No

Latitude ___ Longitude ___

Error as reported by GPS locator (± feet) ___

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ___

4. TYPE OF WORK:

☒ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☒ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ___ in. from ___ ft. to ___ ft.

Dia. ___ in. from ___ ft. to ___ ft.

Casing:

Steel: Wall thickness NA ☒ Threaded ☐ Welded

Dia. ___ in. from ___ ft. to ___ ft.

Dia. ___ in. from ___ ft. to ___ ft.

Plastic: Pressure Rating 280 lbs. ☒ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ___ in. by ___ in.

___ no. of perforations/slots from ___ ft. to ___ ft.

___ no. of perforations/slots from ___ ft. to ___ ft.

Screens: ☒ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 10 ft. to 25 ft.

Dia. ___ Slot size ___ from ___ ft. to ___ ft.

Gravel Packed: ☒ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 8 ft. to 25 ft.

Packer: ☐ Yes ☒ No

Type ___ Depth(s) ___

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 8 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☒ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ___ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ___

Yellowstone Controlled Groundwater Area - Water Temperature ___ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.

All depth measurements shall be from the top of the well casing.

Time of recovery is hours/minutes since pumping stopped.

Air test*

___ gpm with drill stem set at ___ ft. for ___ hours

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*

___ gpm with ___ ft. of drawdown after ___ hours

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*

Depth pump set for test ___ ft.

___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping

Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*

___ gpm for ___ hours

Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2"	Asphalt
2"	1½	Sandy gravel - Base Brown
1½	11	Silty Clay Lt Brown
11	15½	Sand Lt Brown
15½	25	Sandy Gravel Brown To Grey

RECEIVED MAY 25 2005 M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/11/05

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling

Address P.O. Box 30622, Billings MT

Signature Paul E. Bray

Date 5/20/05 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 218962

DEPARTMENT - BUREAU COPY

01N 26E 34 BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-12

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name: Con-Way Transportation Co.

Mailing address: 110 Parkland Plaza
Ann Arbor, Michigan 48103

2. WELL LOCATION List ¼ from smallest to largest

____ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name

Well Address 901 4th Ave North Billings, MT

OK

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☑ Monitoring Well ☐ Other:

4. TYPE OF WORK:

☑ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☑ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☑ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☑ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 10 ft. to 25 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☑ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 8 ft. to 25 ft.

Packer: ☐ Yes ☑ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 8 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☑ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	8"	Asphalt
8"	1½'	Sandy Gravel (Base) Brown
1½	6	Clayey Silt LT Brown
6	15½	Silty Clay LT Brown
15½	25	Sandy Gravel Brown To Grey

RECEIVED
JUN 21 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/15/05

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling

Address P.O. Box 30622, Billings, MT

Signature Paul E. Brad

Date 6/16/05 License no. MMWC #344

MBMG ID# 219658

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT - BUREAU COPY

01N 26E 34 BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-13

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:

Name Con-Way Transportation Co.

Mailing address 110 Parkland Plaza

Ann Arbor, Michigan 48103

2. WELL LOCATION List ¼ from smallest to largest

OK

____ ¼ SW ¼ NW ¼ NW ¼, Section 34

Township 1 N/S Range 26 E/W County Yellowstone

Lot ____, Tract/Blk ____ Subdivision Name

Well Address 901 4th Ave North Billings, MT

GPS ☐ Yes ☐ No

Latitude ____ Longitude ____

Error as reported by GPS locator (± feet) ____

Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☑ Monitoring Well ☐ Other:

4. TYPE OF WORK:

☑ New well ☐ Deepen existing well ☐ Abandon existing well

Method: ☐ Cable ☐ Rotary ☑ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:

Dia. 8½ in. from 0 ft. to 25 ft.

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Casing:

Steel: Wall thickness NA ☐ Threaded ☐ Welded

Dia. ____ in. from ____ ft. to ____ ft.

Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☑ Threaded ☐ Welded

Dia. 2" in. from 0 ft. to 25 ft.

Perforations/Slotted Pipe:

Type of perforator used NA

Size of perforations/slots ____ in. by ____ in.

____ no. of perforations/slots from ____ ft. to ____ ft.

____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☑ Yes ☐ No

Material PVC Sch 40

Dia. 2" Slot size .010 from 10 ft. to 25 ft.

Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☑ Yes ☐ No

Size of gravel 10/20 Silica Sand

Gravel placed from 8 ft. to 25 ft.

Packer: ☐ Yes ☑ No

Type ____ Depth(s) ____

Grout: Material used Bentonite Chips

Depth from 1½ ft. to 8 ft. OR ☐ Continuous feed

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☑ Static water level 18 ft. below top of casing **or**

☐ Closed-in artesian pressure ____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc ____

Yellowstone Controlled Groundwater Area - Water Temperature ____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum

Drawdown is the amount water level is lowered below static level.

All depth measurements shall be from the top of the well casing.

Time of recovery is hours/minutes since pumping stopped.

Air test*

____ gpm with drill stem set at ____ ft. for ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*

____ gpm with ____ ft. of drawdown after ____ hours

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*

Depth pump set for test ____ ft.

____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping

Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*

____ gpm for ____ hours

Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	8"	Asphalt
8"	1'	Sandy Gravel (Base) Brown
1'	6'	Clayey Silt Lt Brown
6	12½	Silty Clay Lt Brown
12½	15½	Silty Sand Clay Green To Grey
15½	25	Sandy Gravel Grey To Black

RECEIVED JUN 21 2005 M.B.M.G.

RECEIVED JUN 21 2005 M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/15/05

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name, firm, or corporation (print) Haz Tech Drilling Inc

Address P.O. Box 30622, Billings MT

Signature Paul E. Brad

Date 6/16/05 License no. MMWC # 344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 219659

DEPARTMENT - BUREAU COPY

OIN 24E 34 BCB

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-06

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Yurko Properties
Mailing address 1002 2nd Ave North
Billings, MT 59102

2. WELL LOCATION List ¼ from smallest to largest
___ ¼ NW ¼ SW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Lot ___, Tract/Blk ___ Subdivision Name
Well Address 1002 2nd Ave North Billings MT
GPS ☐ Yes ☐ No
Latitude ___ Longitude ___
Error as reported by GPS locator (± feet) ___
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ☑ Monitoring Well ☐ Other:

4. TYPE OF WORK:
☑ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☑ Other: HSA

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8½ in. from 0 ft. to 15 ft.
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.

Plastic: Pressure Rating 280 lbs. ☑ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 15 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ___ in. by ___ in.
___ no. of perforations/slots from ___ ft. to ___ ft.
___ no. of perforations/slots from ___ ft. to ___ ft.

Screens: ☑ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size .020 from 5 ft. to 15 ft.
Dia. ___ Slot size ___ from ___ ft. to ___ ft.

Gravel Packed: ☑ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3½ ft. to 15 ft.

Packer: ☐ Yes ☑ No
Type ___ Depth(s) ___

Grout: Material used Bentonite Chips
Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☑ Static water level 8 ft. below top of casing **or**
☐ Closed-in artesian pressure ___ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ___
Yellowstone Controlled Groundwater Area - Water Temperature ___ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
___ gpm with drill stem set at ___ ft. for ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Bailer test*
___ gpm with ___ ft. of drawdown after ___ hours
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Pump test*
Depth pump set for test ___ ft.
___ gpm pump rate with ___ ft. of drawdown after ___ hrs pumping
Time of recovery ___ hrs/min. Recovery water level ___ ft.

OR Flowing Artesian*
___ gpm for ___ hours
Flow controlled by ___

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	Sandy Gravel Grey
2	4	Silty Clay Brown
4	15	Sandy Gravel Light Grey

RECEIVED
JUN 21 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/16/05

9. REMARKS: ___

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Haz Tech Drilling
Address P.O. Box 30677 Billings MT
Signature Paul E. Brau
Date 6/19/05 License no. MMWC #344

MBMG ID# 219660

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT - BUREAU COPY

OIN 2QE 34 BCB

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# MW-05

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: Yurko Properties
Mailing address: 1002 2nd Ave. North
Billings, MT 59102

2. WELL LOCATION List ¼ from smallest to largest
____ ¼ NW ¼ SW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Lot ____, Tract/Blk ____ Subdivision Name
Well Address 1002 2nd Ave North Billings MT
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☑ Monitoring Well ☐ Other:

4. TYPE OF WORK:
☑ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☑ Other: HSA

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8½ in. from 0 ft. to 15 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness NA ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 280 lbs. ☑ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 15 ft.

Perforations/Slotted Pipe:
Type of perforator used NA
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☑ Yes ☐ No
Material PVC Sch 40
Dia. 2" Slot size .020 from 5 ft. to 15 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☑ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 3½ ft. to 15 ft.

Packer: ☐ Yes ☑ No
Type ____ Depth(s) ____

Grout: Material used Bentonite Chips
Depth from 1½ ft. to 3½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☑ Static water level 8 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	Sandy Gravel Light Grey
2	4	Silty Clay Brown
4	15	Sandy Gravel grey

RECEIVED JUN 21 2005 M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/16/05

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Hag Tech Drilling
Address P.O. Box 30622 Billings MT
Signature Paul E. Bear
Date 6/19/05 License no. MMWC #344

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 219LEE3

DEPARTMENT - BUREAU COPY

1N 26E 34BA

MONTANA WELL LOG REPORT

Form No. 603 R2-04

Well ID# _____

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with MBMG within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name METRA PARK
Mailing address P.O. BOX 2514
BILLINGS MT 59103

OK

2. WELL LOCATION: List ¼ from smallest to largest
_____ ¼ _____ ¼ NE ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Lot _____, Tract/Blk ___ Subdivision Name
Well Address _____
GPS ☐ Yes ☑ No
Latitude _____ Longitude _____
Error as reported by GPS locator (± feet) _____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ☐ Monitoring Well ☐ Other:

4. TYPE OF WORK:
☑ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☑ Rotary ☐ Other: _____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 9 7/8 in. from 0 ft. to 32 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

Casing:
Steel: Wall thickness 250 ☐ Threaded ☑ Welded
Dia. 9 5/8 in. from +18 ft. to 25 ft.
Dia. _____ in. from _____ ft. to _____ ft.

Plastic: Pressure Rating _____ lbs. ☐ Threaded ☐ Welded
Dia. _____ in. from _____ ft. to _____ ft.

Perforations/Slotted Pipe:
Type of perforator used _____
Size of perforations/slots _____ in. by _____ in.
_____ no. of perforations/slots from _____ ft. to _____ ft.
_____ no. of perforations/slots from _____ ft. to _____ ft.

Screens: ☑ Yes ☐ No
Material Stainless
Dia. 8 Slot size 70 from 25 ft. to 32 ft.
Dia. _____ Slot size _____ from _____ ft. to _____ ft.

Gravel Packed: ☐ Yes ☑ No
Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

Packer: ☑ Yes ☐ No
Type Rubber Depth(s) 25

Grout: Material used Bentonite
Depth from _____ ft. to _____ ft. OR ☑ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☐ Static water level 118 ft. below top of casing **or**
☐ Closed-in artesian pressure _____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc _____
Yellowstone Controlled Groundwater Area - Water Temperature _____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
_____ gpm with drill stem set at _____ ft. for _____ hours
Time of recovery _____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
_____ gpm with _____ ft. of drawdown after _____ hours
Time of recovery _____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test _____ ft.
___ gpm pump rate with ____ ft. of drawdown after __ hrs pumping
Time of recovery _____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
_____ gpm for _____ hours
Flow controlled by _____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG: HD

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	2	top soil
3	4	clay
4	32	large gravel and sand

RECEIVED
OCT 06 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 07-13-05

9. REMARKS: _____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) American Drilling
Address 1520 East 1st Bllgs MT
Signature _____
Date 07-14-05 License no. 3441 WD 35

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MBMG ID# 222101

BUREAU OF MINES COPY

MONTANA WELL LOG REPORT

Form No. 603 R2-04

01N 26E 34 BDC

Well ID# MW-14

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work.** Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Conway Freight
Mailing address 2211 Old Earhart Rd. Suite 100 Ann Arbor, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ SW ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County Yellowstone
Lot Tract/Blk Subdivision Name
Well Address
GPS ☐ Yes ☐ No
Latitude Longitude
Error as reported by GPS locator (± feet)
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other:

4. TYPE OF WORK: ☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other:

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8" in. from 24 ft. to 0 ft.
Dia. in. from ft. to ft.
Dia. in. from ft. to ft.
Casing:
Steel: Wall thickness ☐ Threaded ☐ Welded
Dia. in. from ft. to ft.
Dia. in. from ft. to ft.
Plastic: Pressure Rating lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 9 ft. to 0 ft.
Perforations/Slotted Pipe:
Type of perforator used
Size of perforations/slots in. by in.
no. of perforations/slots from ft. to ft.
no. of perforations/slots from ft. to ft.
Screens: ☒ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 24 ft. to 9 ft.
Dia. Slot size from ft. to ft.
Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 24 ft. to 6½ ft.
Packer: ☐ Yes ☒ No
Type Depth(s)
Grout: Material used BENTONITE CHIPS
Depth from 6½ ft. to 1½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 14.0 ft. below top of casing or
☐ Closed-in artesian pressure psi.
How was test flow measured: bucket/stopwatch, weir, flume, flowmeter, etc
Yellowstone Controlled Groundwater Area - Water Temperature °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
gpm with drill stem set at ft. for hours
Time of recovery hrs/min. Recovery water level ft.

OR Bailer test*
gpm with ft. of drawdown after hours
Time of recovery hrs/min. Recovery water level ft.

OR Pump test*
Depth pump set for test ft.
gpm pump rate with ft. of drawdown after hrs pumping
Time of recovery hrs/min. Recovery water level ft.

OR Flowing Artesian*
gpm for hours
Flow controlled by

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
6"	2'	ASPHALT 6" FILL 6" to 2'
2'	6'	FAT CLAY
6'	8½	LEAN CLAY
8½	10'	SAND
10'	24	SANDY GRAVEL

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: DEC 2ND 2008

9. REMARKS:

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSEN
Address 2611 GABEL ROAD BILLINGS MT 59106
Signature Clayton Larsen
Date DEC 2ND 2008 License no. 417

RECEIVED
JAN 16 2009
M.B.M.G.

MBMG ID# 248877

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MONTANA WELL LOG REPORT

Form No. 603 R2-04

Well ID# MW-15

01N 26E 34 BBC

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work.** **Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CON-WAY FREIGHT
Mailing address 2211 OLD EARHART ROAD
SUITE 100 ANN ADOR, MT 48105

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 2E/W County YELLOWSTONE
Lot ____ Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ■ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
■ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8" in. from 22 ft. to 0 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ■ Threaded ☐ Welded
Dia. 2" in. from 7 ft. to 0 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ■ Yes ☐ No
Material PVC
Dia. 2" Slot size 010/10 from 22 ft. to 7 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☐ Yes ■ No
Size of gravel 10/20 SILICA
Gravel placed from 22 ft. to 5 ft.

Packer: ☐ Yes ■ No
Type ____ Depth(s) ____

Grout: Material used BENTONITE CHIPS
Depth from 5 ft. to 2 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
■ Static water level 13.6 ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	4"	ASPHALT
4"	2'	Fill
2'	8'	Ø FAT Clay
8'	10'	Ø SAND
10'	22	Ø SAND GRAVEL

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-3-08

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSEN
Address 2611 GABEL ROAD BILLINGS MT 59108
Signature Clayton Larsen
Date 12-3-08 License no. 417

RECEIVED
JAN 16 2009
M.B.M.G.

MBMG ID# 248878

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MONTANA WELL LOG REPORT

01N 26E 34 BBC

Well ID# MW-16

Form No. 603 R2-04

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work.** **Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CON-WAY FREIGHT
Mailing address 2211 OLD EARHART ROAD
SUITE 100 ANN ARBOR, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ SW ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Lot ____ Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ■ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
■ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8" in. from 19 ft. to 0" ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ■ Threaded ☐ Welded
Dia. 2" in. from 9 ft. to 0 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ■ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 19 ft. to 9 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ■ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 19 ft. to 7 ft.

Packer: ☐ Yes ■ No
Type ____ Depth(s) ____

Grout: Material used BENTONITE CHIPS
Depth from 7 ft. to 1'12 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
■ Static water level 11.6 ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0"	6"	ASPHALT
6"	6'	FILL
6'	12'	FAT CLAY
12'	21	SANDY GRAVEL

RECEIVED
JAN 16 2009
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-3-08

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSEN
Address 2611 GABEL ROAD BILLINGS MT 59108
Signature Clayton Larsen
Date 12-3-08 License no. 417

MBMG ID# 248879

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MONTANA WELL LOG REPORT

Form No. 603 R2-04

Well ID# MW-17

01N 26E 34 BBC

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work.** **Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CON-WAY FREIGHT
Mailing address 2211 OLD EARHART ROAD
SUITE 100 ANN ARBOR, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ SW ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Lot ____ Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ■ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
■ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8" in. from 19 ft. to 0 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ■ Threaded ☐ Welded
Dia. 2" in. from 9 ft. to 0 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ■ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 19 ft. to 9 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ■ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 19 ft. to 6½ ft.

Packer: ☐ Yes ■ No
Type ____ Depth(s) ____

Grout: Material used BENTONITE CHIPS
Depth from 6½ ft. to 1½ ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
■ Static water level 10.0 ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0"	7"	ASPHALT
7"	6'	FILL
6'	11'	FAT CLAY
11	21	SANDY GRAVEL

RECEIVED
JAN 16 2009
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-4-08

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSEN
Address 2611 GABEL ROAD BILLINGS MT 59108
Signature Clayton Larsen
Date 12-4-08 License no. 417

MBMG ID# 2408890

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MONTANA WELL LOG REPORT

Form No. 603 R2-04

01N 26E 34 BBC

Well ID# MW-18

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CON-WAY FREIGHT
Mailing address 2211 OLD EARHART ROAD
SUITE 100 ANN ARBOR, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ SW ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Lot ____ Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ■ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
■ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8" in. from 24 ft. to 0 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ■ Threaded ☐ Welded
Dia. 2" in. from 9 ft. to 0 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ■ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 24 ft. to 9 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ■ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 24 ft. to 7 ft.

Packer: ☐ Yes ■ No
Type ____ Depth(s) ____

Grout: Material used BENTONITE
Depth from 7 ft. to 2 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
■ Static water level 16.0 ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0"	6"	ASPHALT
6"	4'	FILL
4'	12½'	B FAT CLAY
12½	14	B SAND
14	26	B SANDY GRAVEL

RECEIVED
JAN 16 2009
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-5-08

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSEN
Address 2611 GABEL ROAD BILLINGS MT 59108
Signature Clayton Larsen
Date 12-6-08 License no. 417

MBMG ID# 248881

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MONTANA WELL LOG REPORT

Form No. 603 R2-04

01N 26E 34 BBC

Well ID# MW-19

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work.** Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CON-WAY FREIGHT
Mailing address 2211 OLD EARHART ROAD
SUITE 100 ANN ARBOR, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ SW ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Lot ____ Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ■ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
■ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8" in. from 24 ft. to 0" ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ■ Threaded ☐ Welded
Dia. 2" in. from 8 ft. to 0" ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ■ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 23 ft. to 8 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ■ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 24 ft. to 6 ft.

Packer: ☐ Yes ☐ No
Type ____ Depth(s) ____

Grout: Material used BENTONITE CHIPS
Depth from 6 ft. to 2 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
■ Static water level 16.5 ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	3½"	ASPHALT
3½"	2'	FILL
2'	12'	∅ FAT CLAY
12'	13'	∅ SAND
13'	26	∅ SAND & GRAVEL

RECEIVED
JAN 16 2009
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-4-08

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSEN
Address 2611 GABEZ ROAD BILLINGS MT 59108
Signature Clayton Larsen
Date 12-4-08 License no. 417

MBMG ID# 248882

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MONTANA WELL LOG REPORT

Form No. 603 R2-04

01N 26E 34 BBC

Well ID# MW-20

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name: CON-WAY FREIGHT
Mailing address: 2211 OLD EARHART ROAD
SUITE 100 ANN ARBOR, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ SW ¼ NW ¼ NW ¼, Section 34
Township 1 ☒N/S Range 26 ☒E/W County YELLOWSTONE
Lot ____ Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☐ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

OK

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation ☐ Public water supply ☒ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:

Borehole:
Dia. 8" in. from 24 ft. to 0 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 9 ft. to 0 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 24 ft. to 9 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 24 ft. to 7 ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used BENTONITE CHIPS
Depth from 7 ft. to 2 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☒ Static water level 16.6 ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured: bucket/stopwatch, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
____ gpm with drill stem set at ____ ft. for ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Bailer test*
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

HD

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0"	6"	ASPHALT
6"	1½'	Fill
1½'	12'	FAT Clay
12'	13½	SAND
13½	26'	SANDY GRAVEL

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-5-08

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Clayton LARSEN
Address 2611 GABEL ROAD BILLINGS MT 59108
Signature Clayton Larsen
Date 12-6-08 License no. 417

RECEIVED
JAN 16 2009
M.B.M.G.

MBMG ID# 248884

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

IN 26E 34 BBC

MONTANA WELL LOG REPORT

Form No. 603 R2-04

Well ID# BH 26/MW 21

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. This form is to be completed by the driller and filed with Mt. Bureau of Mines & Geology within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name CONWAY FREIGHT
Mailing address 2211 OLD EARHART ROAD
SUITE 100 ANN ARBOR, MI 48105

2. WELL LOCATION: List ¼ from smallest to largest
¼ ¼ NW ¼ NW ¼, Section 34
Township 1 N/S Range 26 E/W County YELLOWSTONE
Lot Tract/Blk Subdivision Name
Well Address
GPS ☐ Yes ☐ No
Latitude Longitude
Error as reported by GPS locator (± feet)
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☐ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ■ Monitoring Well ☐ Other:

4. TYPE OF WORK:
■ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☐ Rotary ☐ Other:

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 8" in. from 24 ft. to 0 ft.
Dia. in. from ft. to ft.
Dia. in. from ft. to ft.

Casing:
Steel: Wall thickness ☐ Threaded ☐ Welded
Dia. in. from ft. to ft.
Dia. in. from ft. to ft.

Plastic: Pressure Rating lbs. ■ Threaded ☐ Welded
Dia. 2" in. from 9 ft. to 5" ft. BELOW SURFACE

Perforations/Slotted Pipe:
Type of perforator used
Size of perforations/slots in. by in.
no. of perforations/slots from ft. to ft.
no. of perforations/slots from ft. to ft.

Screens: ■ Yes ☐ No
Material PVC
Dia. 2" Slot size 0.010 from 24 ft. to 9 ft.
Dia. Slot size from ft. to ft.

Gravel Packed: ■ Yes ☐ No
Size of gravel 10/20 SILICA
Gravel placed from 24 ft. to 7 ft.

Packer: ☐ Yes ■ No
Type Depth(s)

Grout: Material used BENTONITE CHIPS
Depth from 7 ft. to 2 ft. OR ☐ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
■ Static water level 15.6 ft. below top of casing or
☐ Closed-in artesian pressure psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc
Yellowstone Controlled Groundwater Area - Water Temperature °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*
gpm with drill stem set at ft. for hours
Time of recovery hrs/min. Recovery water level ft.

OR Bailer test*
gpm with ft. of drawdown after hours
Time of recovery hrs/min. Recovery water level ft.

OR Pump test*
Depth pump set for test ft.
gpm pump rate with ft. of drawdown after hrs pumping
Time of recovery hrs/min. Recovery water level ft.

OR Flowing Artesian* Pump 40GALS
gpm for hours
Flow controlled by

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the resevoir of the well casing.*

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	6½	FILL
6½	14½	8 FAT CLAY
14½	24	8 SANDY GRAVEL

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6-30-10

9. REMARKS:

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) CLAYTON LARSON
Address 2611 GABEL ROAD BILLINGS MT 59108
Signature Clayton Larson
Date 7-2-10 License no. 417

RECEIVED JUL 14 2010 M.B.M.G.

MBMG ID# 256938

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

111 1N26E34 BCACD YELLOWSTONE

1269569 0E

5073970N 060430

LOG OF MONITORING WELL

Well: MW-1 Date: JULY 6, 1989 Project: B89-108 NAVISTAR

Location: 917 1ST AVE N., BILLINGS, MT (See Sketches)

Owner: NAVISTAR

Designer: CORRIGAN CONSULTING, INC
ATTN: MR. JONATHAN POWELL
P.O. BOX 99
SEABROOK, TX 77586-0099
Phone: 713/474-7455

Contact:
Phone:

Drilling Method 4 3/8" I.D. HOLLOW STEM AUGER, NO WASH WATER

Soil/Rock Profile: (Depths referenced to GROUND SURFACE (RIM OF M.H.))
ELEV = 3103.93

Depth, ft.			Description of Material
From 0	to	6"	PORTLAND CEMENT CONCRETE
From 6"	to	8"	SANDY GRAVEL BASE
From 8"	to	6'	SILTY & SANDY CLAY
From 6'	to	20'	SANDY GRAVEL w/ COBBLES
From	to		
From	to		
From	to		
From	to		

Water Level, while drilling: 9.1'
" " , after completion:
" " , 8/5/89 : 8.23 (Elev. 3095.70)

Casing & Screen: (Stick-up = -0.57 feet) (Top of PVC elev. = 3103.36)

Depth, ft.			Diameter, in.	Material	Description
From 19.8	to	4.8	2"	PVC	#10 slot screen
From 4.8	to	0.6	2"	PVC	Schedule 40 riser
From	to				
From	to				

Annulus Backfill:

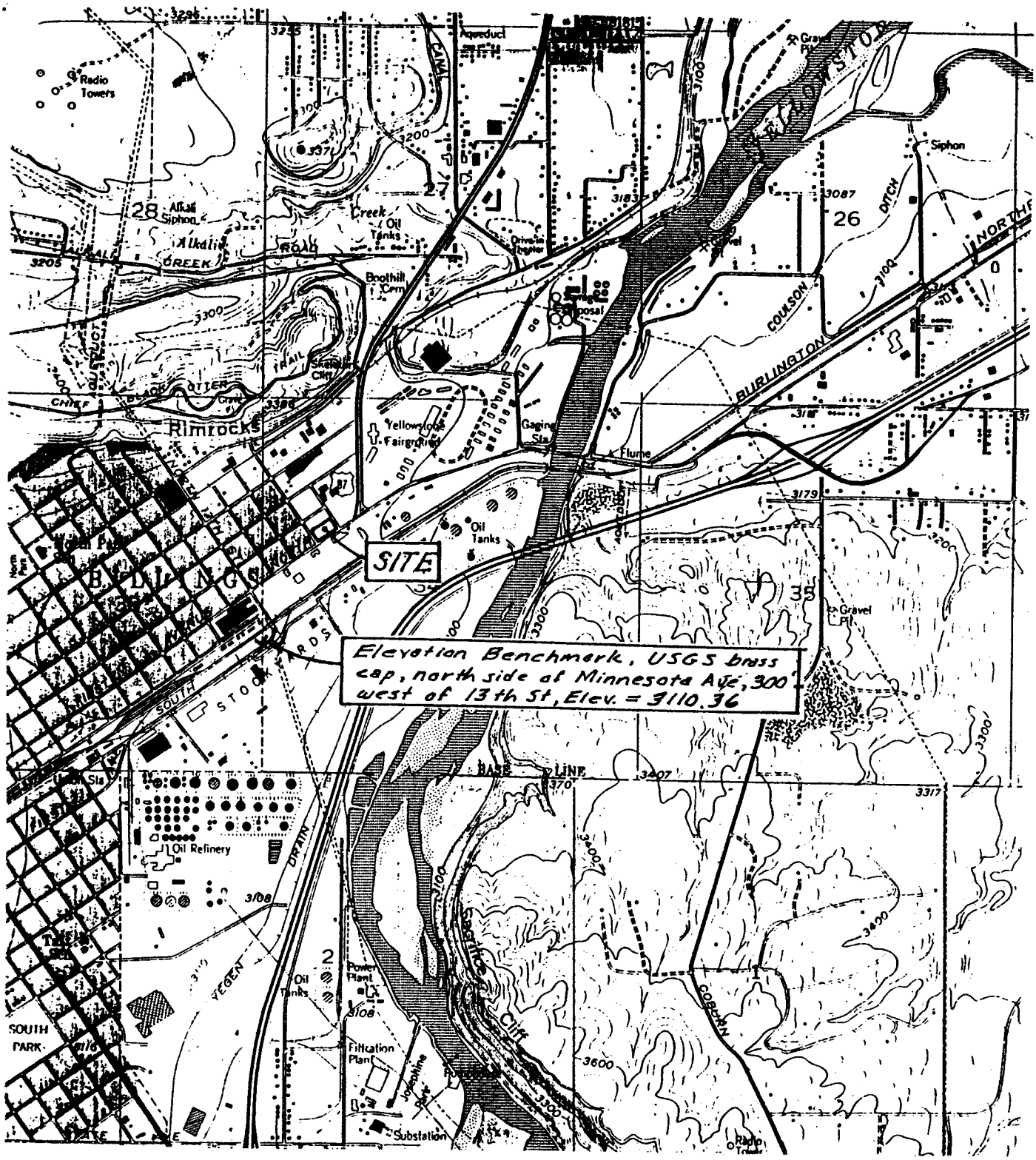
Depth, ft.			Diameter, in.	Material	Description
From 20	to	2.5	8"	SAND	#10-20 COLORADO SILICA
From 2.5	to	1.3	8"	BENTONITE	VOLCLAY "CRUMBLES"
From 1.3	to	0.6	8"	CONCRETE	SAKCRETE
From	to				
From	to				
From	to				

Protection: 9" THREADED LID MANHOLE, LOCKED PACKER

Driller, Firm: WILLIAM NEFF, BRAUN ENGR. Monitoring Well Constructor
" , Person:
Helper: EARL CUMMINGS

Bruce M. Thorson
Bruce M. Thorson, P.E.
License #MWC-001

M: 94216

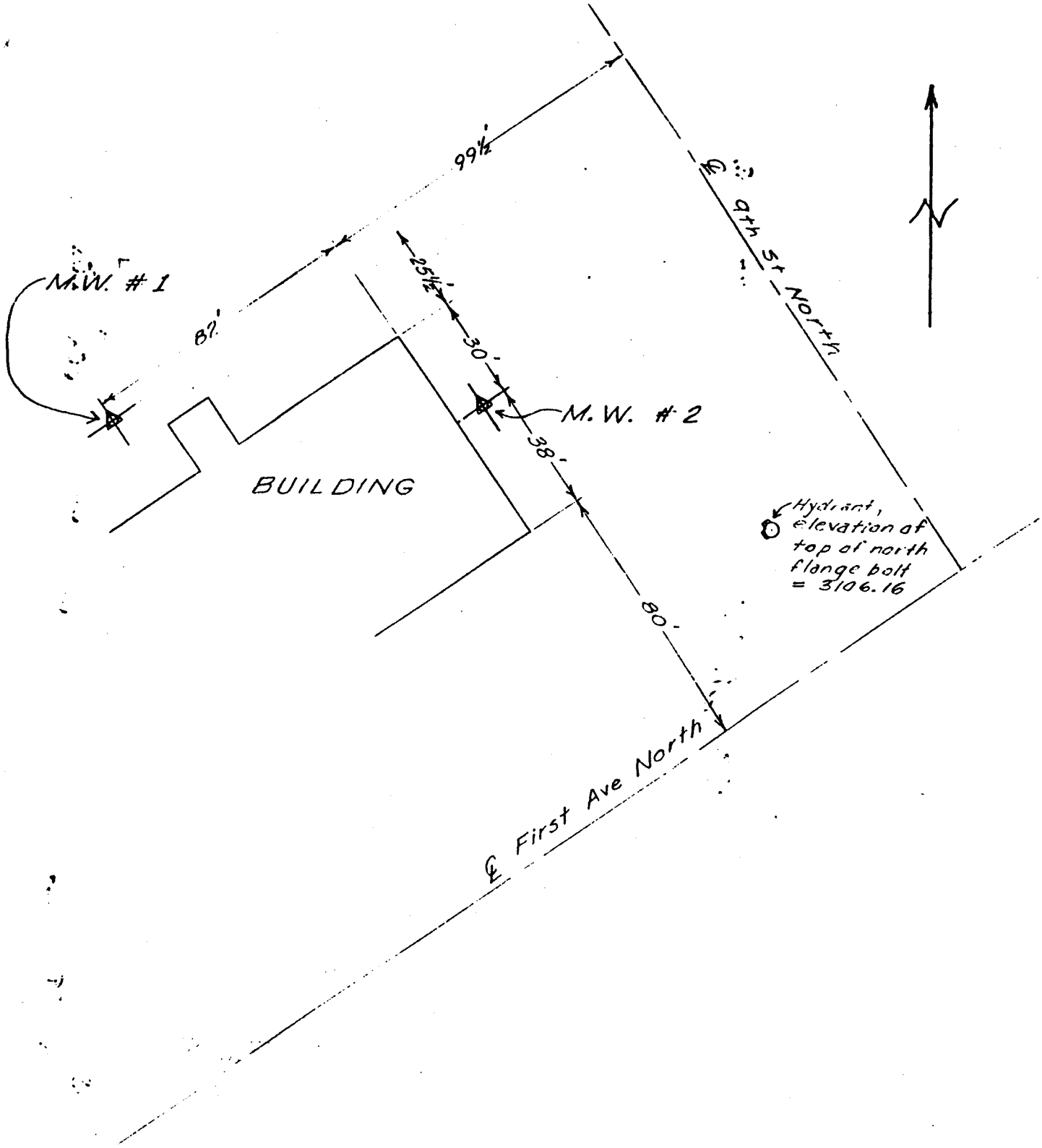


SITE LOCATION SKETCH

BRAUN

B89-108 MONITORING WELLS
Former Navistar Property
917 1st Ave. North
Billings, MT

Date: 8/6/89	Revised: BET	Drawn: USGS	Scale: 1"=2000'



MONITORING WELL LOCATION SKETCH

BRAUN

B89-108 MONITORING WELLS
Former Navistar Property
917 1st Ave. North
Billings, MT

Date: 8/6/89	Revised: ---	Drawn: BET	Scale: 1"=40'

111 1N26E34BCACD YELLOWSTONE

LOG OF MONITORING WELL UTM 12 0 5690E 5073970-N

Well: MW-2 Date: JULY 6, 1989 Project: B89-108 NAVISTAR

Location: 917 1ST AVE NORTH, BILLINGS, MT (See Sketches)

Owner: NAVISTAR

Designer: CORRIGAN CONSULTING, INC.
ATTN: MR. JONATHAN POWELL
P.O. BOX 99
SEABROOK, TX 77586-0099
Phone: 713/474-7455

Contact:
Phone:

Drilling Method 4 3/8" I.D. HOLLOW STEM AUGER, NO wash water

Soil/Rock Profile: (Depths referenced to GROUND SURFACE (RIM OF M.H.))
ELEV. = 3104.58

Depth, ft.			Description of Material
From	0.0	to 0.8	SANDY GRAVEL SURFACING
From	0.8	to 3.5	SILTY & SANDY CLAY
From	3.5	to 20.0	SANDY GRAVEL
From		to	
From		to	
From		to	
From		to	
From		to	

Water Level, while drilling: 8'
" " , after completion:
" " , 8/5/89 : 9.09 (ELEV. = 3095.49)

Casing & Screen: (Stick-up = -0.65 feet) (Top of PVC elev. = 3103.93)

Depth, ft.			Diameter, in.	Material	Description
From	20	to 5	2"	PVC	#10 slot screen
From	5	to 0.65	2"	PVC	Sch. 40 riser
From		to			
From		to			

Annulus Backfill:

Depth, ft.			Diameter, in.	Material	Description
From	20	to 3	8"	SAND	#10-20 COLORADO SILICA
From	3	to 1	8"	BENTONITE	VOLCLAY "CRUMBLES"
From	1	to 0.65	8"	CONCRETE	SAKCRETE
From		to			
From		to			
From		to			

Protection: 9" DROP LID MANHOLE, LOCKED PACKER

Driller, Firm: BRAUN ENGINEERING
" , Person: WILLIAM H. NEFF
Helper: EARL CUMMINGS

Monitoring Well Constructor
Bruce M. Thorson
Bruce M. Thorson, P.E.
License #MWC-001

M:94217

GW 4 filed 3-15-63 @ 12:32 P.M. -02

File No. 702929 Well #2 111 T 1N R 26 E 34AA

TRIPLICATE 111 01N 26E 34AAA YELLOWSTONE County Yellowstone

CHRIS RUBICH
County Clerk & Recorder
Deputy

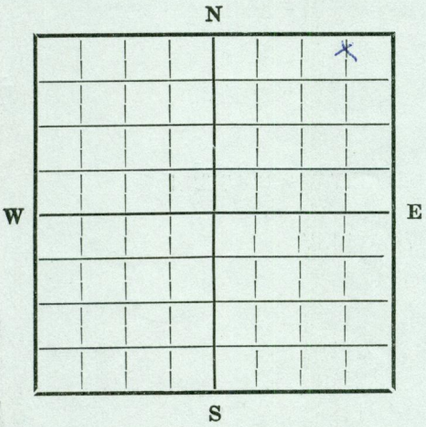
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

REC 016732
MAR 18 1963
Montana Bureau of Mines and Geology

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. LOCKWOOD WATER USERS ASSOCIATION, of P. O. BOX 93, BILLINGS
(Name of Appropriator) (Address) (Town)
County of YELLOWSTONE State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE 1/4 Sec. 34 T 1N R 26E

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Domestic water supply for Lockwood Community

3. Date or approximate date of earliest beneficial use; and how continuous the use has been January, 1957. Constant and continuous use since that date.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) Well #1: 350 gallons per minute. Well #2: 350 gallons per minute. Well Site#3: 500 gallons per minute. Total: ~~XX gallon~~ 1200 gallons per minute.

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof Some water used for gardens and lawns throughout community.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal ~~XX~~ By electric pumps.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater December, 1956.

8. The depth of water table 15' to 27' 27' bedrock.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater Well #1 furtherest north - 27' 8" casing slotted. Well #2 same, only 12" slotted casing. Well Site #3, 12" casing planned.

10. The estimated amount of groundwater withdrawn each year 25 to 30 million gallons

11. The log of formations encountered in the drilling of each well if available 0 to 5', river silt; 5' to 27' coarse gravel.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

LOCKWOOD WATER USERS ASSOCIATION

Signature of Owner By Earl B. Peters
PRESIDENT.

HG

Date March 4, 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11514

GW 4 filed 3-15-63 @ 12:32 P.M. -03

File No. 702929 Well #3 111 T 1N R 26 E 34A

TRIPLICATE 111 01N 26E 34A [redacted] YELLOWSTONE County of Yellowstone

CHRIS RUBICH
County Clerk & Recorder
Deputy

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

REC 016733
MAR 18 1963
Montana Bureau of Mines and Geology

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

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County of YELLOWSTONE State of MONTANA
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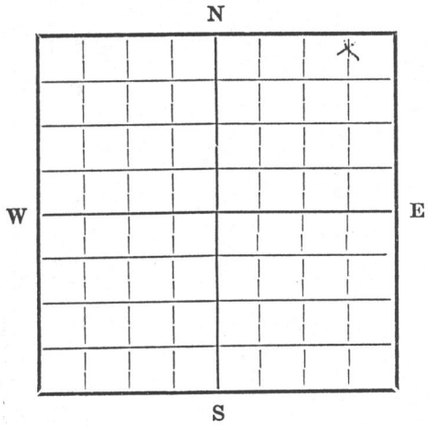

NE 1/4 Sec. 34 T 1N R 26E

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6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal ~~NA~~ By electric pumps.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater December, 1956.

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LOCKWOOD WATER USERS ASSOCIATION

Signature of Owner By Earl B. Peters
PRESIDENT.

HG

Date March 4, 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 11515

GW 4 filed 3-15-63 @ 12:30 PM 111 01N 26E 34A Yellowstone -01

File No. 702928

111 T 1N R 26E 34A

TRIPLICATE

County Yellowstone

CHRIS RUBICH
County Clerk & Recorder
By [signature] Deputy

(2)

STATE OF MONTANA #1
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

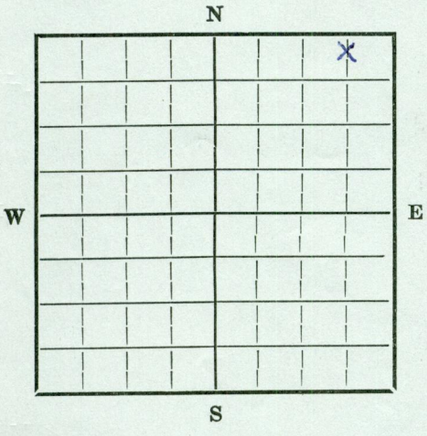
038392

RECEIVED
MAR 18 1963
Montana Bureau of Mines and Geology

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. LOCKWOOD WATER USERS ASSOCIATION, of P. O. BOX 93 BILLINGS
(Name of Appropriator) (Address) (Town)
County of YELLOWSTONE State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



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6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal By electric pumps.

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HG

LOCKWOOD WATER USERS ASSOCIATION
Signature of Owner By Carl B. Peters
PRESIDENT.
Date March 4, 1963.

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

m: 11517

CONTAMINATES

4.0

SAND, SILTY; SCATTERED SMALL GRAVELS, MOIST, LOOSE.

7/12 SAND, SILTY, CLAYEY SEAMS, MOIST, LOOSE

7.0

GRAVEL, SANDY: W/ LARGE GRAVEL, MOIST, DENSE. VERY MOIST @ 8.2'

2/23 SILT, SANDY; MOIST, LOOSE

8.5

26 GWL SAND, SILTY; WET, MODERATELY DENSE

76/22

12.2

90/06/6 GRAVEL, SANDY, MAX. SIZE 3/4" SATURATED

12.8

DH NO. 17
104.6

MANURE

9/16 CLAY SANDY, ORGANIC CONTAMINATES, MOIST

SAND SILTY; MOIST

50/4 GRAVEL SANDY, VERY DENSE DEFINITE AUGER REFUSAL @ 7.0' (CONE PENETROMETER USED BELOW 7.5')

DH NO. 18
ELEV. 103.4

0.5

MANURE

0/13 CLAY, SILTY; FINE SAND, SLIGHTLY MOIST

7.0

SAND, SILTY, UNIFORM, FINE GRAINED, MOIST

7.5

9/34 CLAY, SILTY, SALTS, MOIST, FIRM

9.1

76/24 GRAVEL, SANDY, WET, VERY DENSE

10.1

DH NO. 19
ELEV. 103.5

1.5

MANURE

CLAY, SILTY; FINE SAND, ORGANIC CONTAMINATES, MOIST.

5.0

Appendix D

1945 Carter Oil Company Map

Section A – 4100 Volt Primary To Substation No 2 & River Pump House
Section B – 220 Volt 3 Phase To Warehouse Bldg
Section C – 220 Volt 3 Phase To Pump House & Treating Plant Area
Section A1 – 220 Volt 3 Phase Secondary To Pole No 3 From Sub Sta No 1
Section A2 – 220 Volt 3 Phase Secondary Between Sub Sta No 2 & Pole No 7

BILLINGS REFINERY

THE CARTER OIL COMPANY

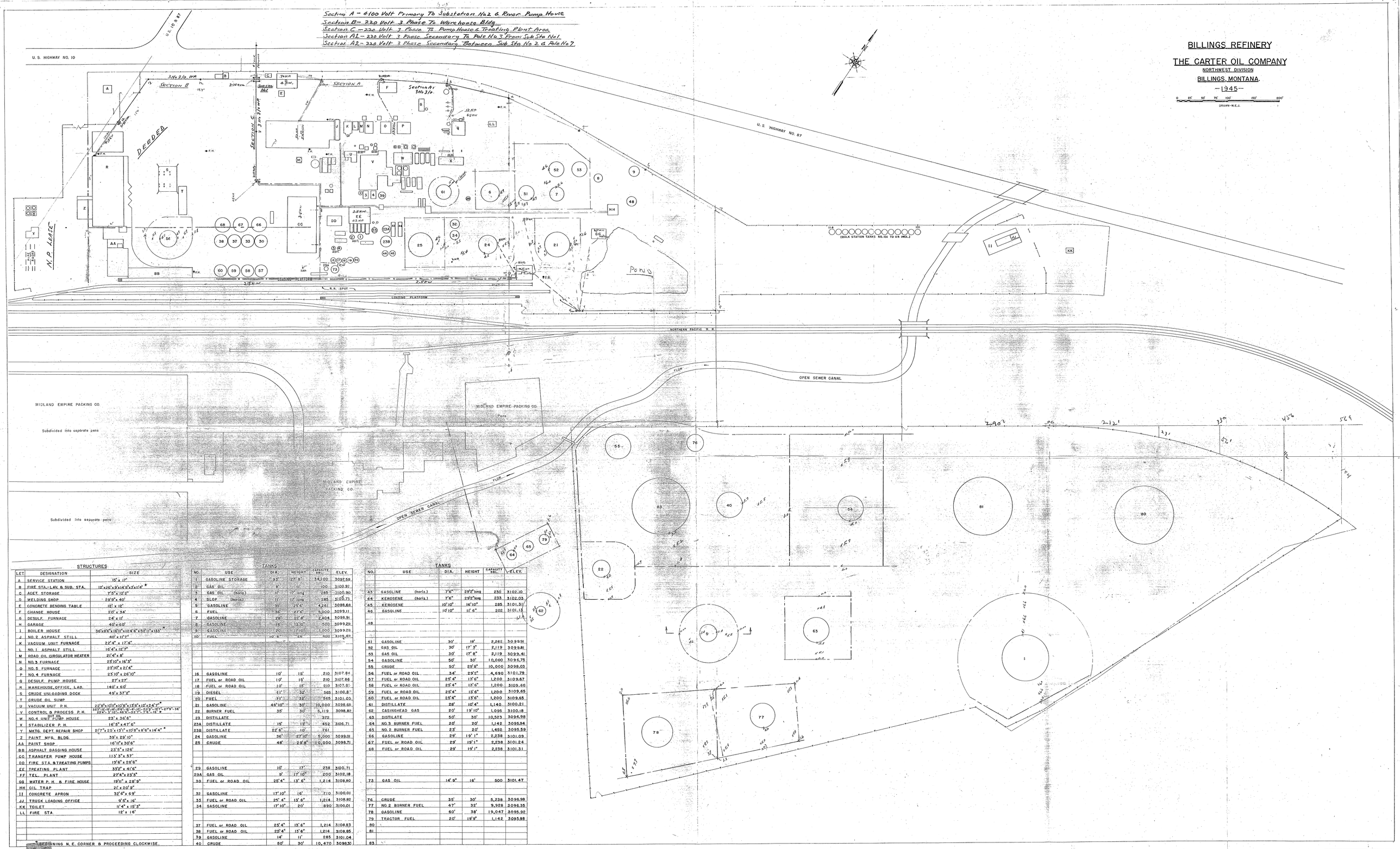
NORTHWEST DIVISION

BILLINGS, MONTANA.

—1945—

0 25' 50' 75' 100' 150' 200'

DRAWN—W.E.J.



STRUCTURES

LET.	DESIGNATION	SIZE
A	SERVICE STATION	15' x 17'
B	FIRE STA.-LAV. & SUB. STA.	12'x26'x9'x18'8"x5'x11'4" *
C	ACET STORAGE	7'5" x 10'2"
D	WELDING SHOP	29'9" x 40'
E	CONCRETE BENDING TABLE	12' x 12'
F	CHANGE HOUSE	20' x 34'
G	DESULF. FURNACE	24' x 11'
H	GARAGE	40' x 60'
I	BOILER HOUSE	36'8"x16'1" x 12'4" x 5'2" 1" x 133' *
J	NO. 2 ASPHALT STILL	40' x 11'7"
K	VACUUM UNIT FURNACE	22'4" x 17'4"
L	NO. 1 ASPHALT STILL	16'4" x 12'7"
M	ROAD OIL CIRCULATOR HEATER	21'4" x 8'
N	NO. 3 FURNACE	22'10" x 16'3"
O	NO. 5 FURNACE	23'10" x 21'4"
P	NO. 4 FURNACE	23'10" x 26'10"
Q	DESULF. PUMP HOUSE	27' x 27'
R	WAREHOUSE, OFFICE, LAB.	140' x 60'
S	CRUDE UNLOADING DOCK	49' x 37'2"
T	CRUDE OIL SUMP	
U	VACUUM UNIT P.H.	22'8"x10'10"x10'8"x13'8"x12'x24'7" *
V	CONTROL & PROCESS P.H.	332'-10"-15'-10"-8'-6"-10'-22'9"-17'7"-27'9"-36'
W	NO. 4 UNIT PUMP HOUSE	28'6"-3'10"-16'6"-33'7"-7'6"-15' *
X	STABILIZER P. H.	23' x 36'6"
Y	MKTG. DEPT. REPAIR SHOP	16'5" x 47'6"
Z	PAINT MFG. BLDG.	2'7"x 25'x 13'1" x 10'8"x 8'6"x 14'4" *
AA	PAINT SHOP	39' x 29'10"
BB	ASPHALT BAGGING HOUSE	16'11" x 30'6"
CC	TRANSFER PUMP HOUSE	23'5" x 126'
DD	FIRE STA. & TREATING PUMPS	113'3" x 57'
EE	TREATING PLANT	19'6" x 28'6"
FF	TEL. PLANT	33'2" x 41'6"
GG	WATER P. H. & FIRE HOUSE	27'4" x 23'3"
HH	OIL TRAP	19'11" x 28'9"
II	CONCRETE APRON	21' x 20'9"
JJ	TRUCK LOADING OFFICE	32'6" x 69'
KK	TOILET	9'5" x 16'
LL	FIRE STA.	11'4" x 15'3"
		12' x 16'

* BEGINNING N. E. CORNER & PROCEEDING CLOCKWISE.

TANKS

NO.	USE	DIA.	HEIGHT	CAPACITY BBL.	ELEV.
1	GASOLINE STORAGE	93'	27' 8"	34,100	3097.59
2	GAS OIL	8'	11'	100	3100.91
3	GAS OIL (horiz.)	11'	17' long	285	3100.90
4	SLOP (horiz.)	11'	17' long	285	3100.73
5	GASOLINE	35'	25' 6"	4,261	3098.68
6	FUEL	30'	27' 6"	5,000	3099.11
7	GASOLINE	28'	22' 6"	2,404	3099.91
8	GASOLINE	16'	13' 10"	500	3099.28
9	GASOLINE	22'	7' 10"	1,000	3099.28
10	FUEL	10' 6"	26'	400	3109.49
16	GASOLINE	10'	15'	210	3107.84
17	FUEL or ROAD OIL	10'	15'	210	3107.86
18	FUEL or ROAD OIL	10'	15'	210	3107.81
19	DIESEL	11'	32'	565	3100.87
20	FUEL	11'	32'	565	3101.03
21	GASOLINE	48' 10"	30'	10,000	3098.68
22	BURNER FUEL	35'	30'	5,119	3098.82
23	DISTILLATE			372	
23A	DISTILLATE	15'	12'	452	3105.71
23B	DISTILLATE	22' 6"	10'	761	
24	GASOLINE	36'	27' 10"	5,000	3099.01
25	CRUDE	48'	29' 8"	10,000	3098.71
29	GASOLINE	10'	17'	238	3100.71
29A	GAS OIL	9'	17' 10"	200	3102.18
30	FUEL or ROAD OIL	25' 4"	13' 6"	1,214	3108.80
32	GASOLINE	17' 10"	16'	710	3100.01
33	FUEL or ROAD OIL	25' 4"	13' 6"	1,214	3108.82
34	GASOLINE	17' 10"	20'	890	3100.01
37	FUEL or ROAD OIL	25' 4"	13' 6"	1,214	3108.83
38	FUEL or ROAD OIL	25' 4"	13' 6"	1,214	3108.85
39	GASOLINE	14'	11'	285	3101.04
40	CRUDE	50'	30'	10,470	3098.30

TANKS

NO.	USE	DIA.	HEIGHT	CAPACITY BBL.	ELEV.
43	GASOLINE (horiz.)	7' 6"	29' 2" long	230	3102.10
44	KEROSENE (horiz.)	7' 6"	29' 2" long	233	3102.03
45	KEROSENE	10' 10"	16' 10"	285	3101.31
46	GASOLINE	10' 10"	11' 6"	202	3101.13
51	GASOLINE	30'	18'	2,262	3099.91
52	GAS OIL	30'	17' 3"	2,119	3099.81
53	GAS OIL	30'	17' 8"	2,119	3099.41
54	GASOLINE	50'	30'	10,000	3096.75
55	CRUDE	50'	29' 8"	10,000	3098.03
56	FUEL or ROAD OIL	34'	29' 2"	4,690	3101.79
57	FUEL or ROAD OIL	25' 4"	13' 6"	1,200	3109.67
58	FUEL or ROAD OIL	25' 4"	13' 6"	1,200	3109.65
59	FUEL or ROAD OIL	25' 4"	13' 6"	1,200	3109.65
60	FUEL or ROAD OIL	25' 4"	13' 6"	1,200	3109.65
61	DISTILLATE	28'	10' 4"	1,140	3100.21
62	CASINGHEAD GAS	20'	19' 10"	1,095	3100.18
63	DISTILATE	50'	30'	10,523	3094.98
64	NO. 5 BURNER FUEL	20'	20'	1,142	3095.34
65	NO. 2 BURNER FUEL	23'	20'	1,452	3095.59
66	GASOLINE	29'	19' 1"	2,238	3101.09
67	FUEL or ROAD OIL	29'	19' 1"	2,238	3101.24
68	FUEL or ROAD OIL	29'	19' 1"	2,238	3101.31
73	GAS OIL	14' 9"	16'	500	3101.47
76	CRUDE	35'	30'	5,238	3096.98
77	NO. 2 BURNER FUEL	47'	32'	9,928	3096.35
78	GASOLINE	60'	38'	19,047	3095.92
79	TRACTOR FUEL	20'	19' 9"	1,142	3095.98
80					
81					
83					

39-03-01-08
Attachment D

Appendix E

Tract 2-B Title History Documents

SCHEDULE A

Order No.: CTBIL27-2326007611 Guarantee Number: 2326007611

Recorded Document Guarantee No.2326007611

Date of Guarantee: March 13, 2012 at 05:00-PM Fee: 235.50

The attached Application was executed on April 12, 2012 by the following named Applicant:

The assurances referred to on the face page are that, based on a search of the records indicated in the Application referred to on the face page hereof, the following identified and attached documents constitute all of the Designated Documents requested in the Application.

Designated Documents:

1. General Taxes for the year 2012 and subsequent years, which are a lien but not yet due or payable.

   General Taxes for the year 2011

   Tax ID No.: D05908A

   NOTE: Tax Assessment done at the State, no Assessment at the County level and no Assessment available at the County level.

2. Reservations contained in the Homstead Certificate No. 200

   From: The United States of America
   To: John Alderson
   Recording Date: Approximately May 1888
   Deed Book A, Page 32

   Recording of Transcript from Vol 1, Page 197 S. W_____ Recorder of the General Land Office.

3. Vesting Document missing

4. Quit Claim Deed

   From: Christian Yegen and Laura B. Yegen his wife to Peter Yegen
   Recording Date: June 20, 1907
   Book No.: X, Page 348

5. Warranty Deed

   From: Christian Yegen and Laura B. Yegen his wife and Peter Yegen and Margaret Yegen, his wife to Montana Realty & Loan Co.
   Recording Date: May 31, 1916
   Book No.: 55, Page 266

6. Warranty Deed

   From: Montana Realty & Loan Co. to Yegen Bros. Bankers, a Co-partnership
   Recording Date: February 28, 1920
   Book No.: 73, Page 574

SCHEDULE A
(Continued)

7. Receiver's Deed

From: G. C. Cisel, Receiver, for Yegen Bros., Bankers to Robert B. Brubeck and George F. Shea
Recording Date: May 8, 1929
Book No.: 147, Page 628

8. Quit Claim Deed

From: Robert B. Brubeck and Eva Mae Brubeck, his wife and George Shea and Maud Shea, his wife to F. C. Pierce
Recording Date: May 8, 1929
Book No.: 147, Page 629

9. Warranty Deed

From: F. C. Pierce and Carrie E. Pierce to Pierce Packing Co.
Recording Date: November 18, 1931
Book No.: 160, Page 234

10. Right of Way Contract

From: Pierce Packing Company to Yale Oil Pipelines, Inc.
Recording Date: January 20, 1945
Book No.: 268, Page 483

11. Right of Way Grant

From: City of Billings to Interstate Oil Pipe Line Company, a Delaware corporation
Recording Date: March 17, 1949
Book No.: 338
Document No.: 448224

12. Right of Way Grant

From: Pierce Packing Company to Interstate Oil Pipe Line Company, a Delaware corporation
Recording Date: March 17, 1949
Book No.: 338
Document No. 448225

13. Assignment

From: Interstate Oil Pipe Line Company, a Delaware corporation, to Fred Goodstein
Recording Date: May 17, 1951
Book No.: 396, Page 433

and

Release and Relinquishment of Right of Way

From: Fred Goodstein and Interstate Oil Pipe Line Company, a Delaware corporation
Recording Date: May 17, 1957
Book No.: 396, Page 425

SCHEDULE A
(Continued)

14. Right of Way Easement

From: Pierce Packing Company to The Montana Power Company
Recording Date: January 4, 1952
Book No.: 411
Document No.: 485909

15. Right of Way Easement

From: Pierce Packing Company, a Montana corporation, and Oil Basin Pipeline Company, a Delaware corporation
Recording Date: September 13, 1954
Book No.: 497
Document No.: 529818

16. Right of Way Contract Option

From: City of Billings, Montana, and Oil Basin Pipeline Company, a Delaware corporation
Recording Date: September 22, 1954
Book No.: 497, Page 499
Document No.: 530349

17. Right of Way Agreement

From: City of Billings, Montana, to Continental Pipe Line Company, a Delaware corporation
Recording Date: November 28, 1960
Book No.: 712, Page 168
Document No.: 652226

18. Assignment of Easements and Rights-of-Way

From: Oil Basin pipeline Company, a Delaware corporation, to Farmers Union Central Exchange Incorporated, a Minnesota corporation
Recording Date: December 27, 1960
Book No.: 712, Page 689
Document No.: 653914

19. Assignment of Rights of Way

From: Continental Pipeline Company to Glacier Pipeline Company
Recording Date: October 24, 1961
Book No.: 731
Document No.: 671307

20. Right of Way Agreement

From: The City of Billings, State of Montana to Continenal Pipe Line Company, a Delaware corporation
Recording Date: June 13, 1963
Book No.: 765
Document No.: 708888

SCHEDULE A
(Continued)

21. Resolution Designation of Controlled Access Highway

    Recording Date: December 18, 1963
    Document No.: 720336

22. Easement

    From: State of Montana, acting by and through the State Highway Commission of the State of Montana, to Humble Pipe Line Company, a Delaware corporation
    Recording Date: October 20, 1964
    Book No.: 801
    Document No.: 741046

23. Easement

    From: State of Montana, acting by and through the State Highway Commission of the State of Montana, to Farmers Union Central Exchange, Incorporated, a Minnesota corporation
    Recording Date: January 7, 1965
    Book No.: 807
    Document No.: 745982

24. Right-of-Way Easement

    From: Pierce Packing Company to The Montana Power Company
    Recording Date: February 16, 1965
    Book No.: 810
    Document No.: 748479

25. Warranty Deed

    From: Pierce Packing Co., to The City of Billings
    Recording Date: April 16, 1965
    Book No.: 813
    Document No.: 752869

26. Right of Way Agreement

    From: County of Yellowstone to Continental Pipe Line Company, a Delaware corporation
    Recording Date: November 6, 1967
    Book No.: 870, Page 21
    Document No.: 808970

27. Right of Way Agreement

    From: City of Billings, State of Montana, to Continental Pipe Line Company, a Delaware corporation
    Recording Date: December 14, 1967
    Book No.: 870
    Document No.: 811259

28. Right of Way Agreement

    From: County of Yellowstone to Continental Pipe Line Company, a Delaware corporation
    Recording Date: December 14, 1967
    Book No.: 870
    Document No.: 811256

SCHEDULE A
(Continued)

29. Affidavit

From: County of Yellowstone to Public
Recording Date: February 17, 1972
Document No.: 900982

30. Warranty Deed

From: Pierce Packing Company, a Montana corporation, to Security Bank, N.A., a Montana corporation
Recording Date: December 12, 1976
Book No.: 1129
Document No.: 1036646

31. Estoppel Affidavit and Certificate

Recording Date: December 13, 1976
Book No.: 1129
Document No.: 1036647

32. Warranty Deed

From: Security Bank, N.A., to Patrick K. Goggins
Recording Date: January 4, 1978
Book No.: 1186
Document No.: 1075448

33. Bill of Sale and Assignment

From: Security Bank N.A.. to The City of Billings
Recording Date: January 4, 1978
Book No.: 1186
Document No.: 1075449

34. Quitclaim Deed

From: Western Livestock Reporter, a Montana corporation, to Patrick K. Goggins
Recording Date: January 4, 1978
Book No.: 1186
Document No.: 1075451

35. Recitals, notes, sanitary restrictions, ordinances, resolutions, easements, dedications and covenants as contained or referred to on Certificate of Survey No. 2000. Reference is hereby made to the survey for more particulars.

36. Right-of-Way Easement

From: Patrick K. Goggins and Florence Goggins to City of Billings
Recording Date: April 9, 1980
Book No.: 1217, Page 1973
Document No.: 1161836

SCHEDULE A
(Continued)

37. Agreement

From: City of Billings to Patrick K. Goggins and Florence Goggins, husband and wife
Recording Date: April 9, 1980
Book No.: 1217, Page 1977
Document No.: 1161837

38. Affidavit

Recording Date: June 6, 1980
Book No.: 1218
Document No.: 1166906

39. Right-of-Way Easement

From: Patrick K. Goggins to City of Billings
Recording Date: November 13, 1981
Book No.: 1232
Document No.: 1214148

40. Recitals, notes, sanitary restrictions, ordinances, resolutions, easements, dedications and covenants as contained or referred to on Amended Tract 2 of Certificate of Survey No. 2000. Reference is hereby made to the survey for more particulars.

41. Notice of Lease

From: Patrick K. Goggins to Conoco, Inc.
Recording Date: September 6, 1990
Book No.: 1352
Document No.: 1572444

42. Deed of Easement

From: Patrick K. Goggins and Florence M. Goggins to Agri Systems, a Montana corporation
Recording Date: June 4, 1991
Book No.: 1361
Document No.: 1597197

43. Electric Powerline Easement

From: Patrick K. Goggins to Northwestern Corporation, a Delaware corporation
Recording Date: August 4, 2004
Document No.: 3299453

44. Warranty Deed

From: Patrick K. Goggins and ConcoPhillips Pipe Line Company
Recording Date: July 12, 2005
Document No.: 3339844

45. Right of Way Easement

From: Signal Peak Energy, LLC and Fergus Electric Cooperative, Inc., a corporation
Recording Date: November 5, 2009
Document No.: 3530220

Property Record Card

Summary

Primary Information

Property Category: RP
Subcategory: Real Property
Geocode: 03-1033-34-3-03-01-0000
Assessment Code: 000D05908A
Primary Owner:
CONOCO PHILLIPS PIPE LINE CO
PO BOX 7500
BARTLESVILLE, OK 74004-0001
PropertyAddress:
COS Parcel: 2B
NOTE: See the Owner tab for all owner information
Certificate of Survey: 2000
Subdivision:
Legal Description:
S34, T01 N, R26 E, C.O.S. 2000, PARCEL 2B, AMD TR 2 (23.679 ACRES)
Last Modified: 11/29/2011 3:12:43 PM

General Property Information

Neighborhood: 400
Property Type: CN - Centrally Assessed Non-Valued Property
Living Units: 0
Levy District: 03-1965UF-O2-UF
Zoning: HI
Ownership %: 100
Linked Property:
No linked properties exist for this property
Exemptions:
No exemptions exist for this property
Condo Ownership:
General: 0
Limited: 0

Property Factors

Topography: 1
Fronting: 0 - None
Utilities: 0
Parking Type: 1 - Off Street
Access: 0
Parking Quantity: 3 - Abundant
Location: 7 - Industrial Site
Parking Proximity: 3 - On Site

Land Summary

Land Type	Acres	Value
Grazing	0.000	00.00
Fallow	0.000	00.00
Irrigated	0.000	00.00
Continuous Crop	0.000	00.00
Wild Hay	0.000	00.00
Farmsite	0.000	00.00
ROW	0.000	00.00
NonQual Land	0.000	00.00
Total Ag Land	0.000	00.00
Total Forest Land	0.000	00.00
Total Market Land	0.000	00.00

Deed Information:

Deed Date	Book	Page	Recorded Date	Document Number	Document Type

7/12/2005	0033	39844			

Owners

Party #1

Default Information: CONOCO PHILLIPS PIPE LINE CO
PO BOX 7500
Ownership %: 100
Primary Owner: "Yes"
Interest Type: Conversion
Last Modified: 11/6/2007 9:25:03 PM

Other Names

Name	Type

Other Addresses

Appraisals

Appraisal History

No data available for the parcel selected

Market Land

Market Land Item #1

Method: Acre
Type: 1 - Primary Site
Width:
Depth:
Square Feet: 00
Acres: 23.679

Valuation

Class Code: 2153
Value:

Dwellings

Existing Dwellings

No dwellings exist for this parcel

Other Buildings/Improvements

Outbuilding/Yard Improvements

No other buildings or yard improvements exist for this parcel

Commercial

Existing Commercial Buildings

No commercial buildings exist for this parcel

Ag/Forest Land

Ag/Forest Land

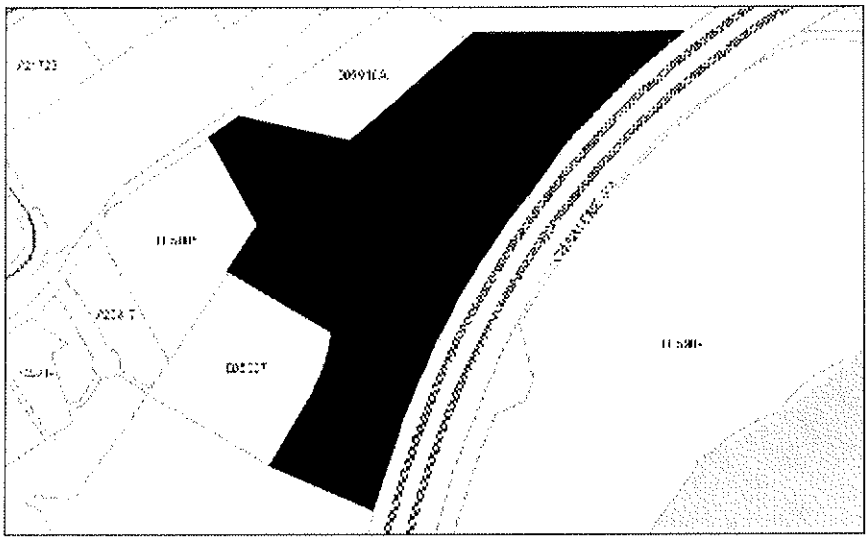
No ag/forest land exists for this parcel

Conservation Easements

Grantee:	Date:
Acres:	Book/Page:

Address : 217 North 27th Street, Billings (Address, City) Locate

Yellowstone County Interactive Mapping Site



Lon:-108.476 Lat:45.790

Legend

Results

Parcels Roads Structures PLSS Fire Areas RSIDs Zoning Schools Elections Levy Districts Traffic Counts

Census Tracts - 2010

Total features returned: 1

TaxID	GEOCODE	Owner (Click on Owner Name for Tax Page)	Subdivision	Block	Lot	COS	Tract	Property Address
D05908A (show)	03103334303010000	CONOCO PHILLIPS PIPE LINE CO	Null	Null	Null	2000	2B	

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Deeds F 52

belonging or in anywise appertaining to the said parties of the second part their heirs and assigns Forever. And the said P. W. McAdow party of the first part for himself his heirs executors and administrators does covenant with the said parties of the second part their heirs and assigns that he is well seized in fee of the lands and premises aforesaid and has good right to sell and convey the same in manner and form aforesaid: that the same are free from all incumbrance: and the above bargained and granted lands and premises in the quiet and peaceable possession of the said parties of the second part their heirs and assigns against all persons lawfully claiming or to claim the whole or any part thereof the said party of the first part will warrant and defend.

In testimony Whereof the said party of the first part hereunto set his hand and seal the day and year first above written.

Signed sealed and delivered in presence of
Fred H. Foster
P. L. Van Cleve

P. W. McAdow (Seal)

Territory of Montana } s.s.
County of Custer }

I Athanasius J. Granelle a Notary Public within and for said County do hereby certify that on this 10th day of June A.D. 1882 personally came before me P. W. McAdow to me well known as the same person described in and who executed the foregoing deed and acknowledged that he executed the same freely and voluntarily.

Athanasius J. Granelle
Notary Public (Seal)

The United States of America.

To all to whom these presents shall come Greeting:

Homestead Certificate No. 200
Application 63 ——

Whereas There has been deposited in the General Land Office of the United States a certificate of the Register of the Land Office at Bozeman, Montana Territory whereby it appears that pursuant to the act of Congress approved 20th May 1862 "To secure Homesteads to actual settlers on the Public Domain" and the acts supplemental

1172-A
6118-A

lished, and duly consummated, in conformity to law for the southwest quarter of the northwest quarter the northwest quarter of the southwest quarter and the lots numbered three and four of section thirty four in township one north of range twenty six east of Montana meridian in Montana Territory containing one hundred and twenty one acres and thirty six hundredths of an acre according to the official Plat of the survey of the said Land returned to the General Land Office by the Surveyor General.

Now know ye, That there is therefore granted by the United States unto the said John Alderson the tract of Land above described, To have and to hold the said tract of Land with the appurtenances thereunto the said John Alderson and to his heirs and assigns forever.

Subject to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts, and also subject to the right of the proprietor of a vein or lode to extract and remove his ore therefrom should the same be found to penetrate or intersect the premises hereby granted, as provided by law.

In testimony whereof I, James A. Garfield President of the United States of America, have caused these letters to be made Patent, and the seal of the General Land Office to be hereunto affixed.

Given under my hand, at the city of Washington, the twentieth day of August, in the year of our Lord one thousand eight hundred and eighty one, and of the Independence of the United States the one hundred and sixth.

By the President: James A. Garfield

By W. H. Crook, Secretary

(Seal)

Recorded Vol 1 page 197 S. W. Clark Recorder of the General Land Office

X-348

Alonzo P. Hart (SEAL)

Dora E. Hart (SEAL)

WITNESSES:

Charles F. Burton

W. T. Donnisten

STATE OF MONTANA)

County of Yellowstone) ss.

On this 22 day of May A. D. 1907 before me Charles F. Burton, Notary Public in and for said County, came Alonzo P. Hart and Dora E. Hart (his wife) who are personally known to me to be the persons described in and who executed the foregoing instrument, and who acknowledged to me that they executed the same freely and voluntarily, and for the uses and purposes therein mentioned.

(L.S.)

Charles F. Burton
Notary Public in and for Yellowstone County, Montana.

Filed for record this 20th day of June A. D. 1907 at 1:10 o'clock P. M.

F. E. Williams, Deputy.

Ira L. Whitney, County Recorder.

CHRISTIAN YEGEN AND WIFE

TO

PETER YEGEN

QUITCLAIM DEED.

7357

THIS INDENTURE, Made the 3rd day of April in the year of our Lord one thousand nine hundred and seven between Christian Yegen and Laura B. Yegen his wife, both of the city of Billings, County of Yellowstone and state of Montana, the parties of the first part, and Peter Yegen of the same place, party of the second part, WITNESSETH, That the said parties of the first part for and in consideration of the sum of one Dollar currency of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged do by these presents remise, release and forever quit claim unto the said party of the second part, and to his heir and assigns the following described real estate, lying and being situate in the County of Yellowstone, in the State of Montana, and more particularly described as follows, to-wit: An undivided one-half interest in and to lots seventeen, eighteen, nineteen and twenty in block numbered A: lots six, seven and eight in block One Hundred and Nineteen: lots thirteen to twenty four inclusive, in block one hundred and fifty seven: lots one to seven inclusive in block One hundred and fifty eight: lots five to eight inclusive in block one hundred and fifty nine: lots thirteen to eighteen inclusive in block one hundred and seventy three: lot seven in Block One hundred and seventy four: lots Three to Twenty four inclusive, in block One hundred and seventy five: lots One to Twenty four inclusive in block One Hundred and seventy six The north Twenty Feet of lot Twenty three in block one hu[illegible] and ninety: lot Twelve and Fifteen in block One hundred and Ninety one: lots One to Twelve inclusive in block One hundred and Ninetynine lots one to Twenty four in blockk Two hundred and Seven: lots Seven to Twelve inclusive in Block Two hundred and Twelve: all in

the Original town (now City) of Billings, according to the platt thereof, as same appears of record and on file in the office of the county clerk and recorder of said county of Yellowstone, and State of Montana.

An undivided one-half interest in and to the following real estate: towit: All of lot Nineteen and the north half (½) of lot Twenty in Block numbered Three in Yegens addition: All of lots Thirteen to Eighteen inclusive in block Five: All the lots thirteen to Seventeen inclusive in block Seven: All of the lots Thirteen to Twenty two inclusive in block nine, in Yegens second addition to the city of Billings, according to the plat of Yegens second addition to the city of Billings, of record and on file in the office of the county clerk and recorder of said county of Yellowstone, and and State of Montana.

An undivided One-half interest in and to lots Eight to Seventeen inclusive in block Twelve: All of Block 15 All of lots one to nine, lots Thirteen to Twenty four inclusive in block Sixteen All of block Seventeen All of block Eighteen, lots Eight to Seventeen inclusive in block Nineteen, lots Eight to Seventeen inclusive in block Twenty Three: All of block Twenty four All of block Twenty five all of block twenty six: All of block Twenty six: All of block Twenty Eight Lots Eight to Seventeen inclusive in block Twenty nine, All in the Highland addition to the city of Billings according to the plat of the said Highland Addition to the city of Billings, of record and on file at the office of the county clerk and recorder of the said county of Yellowstone, and state of Montana Also an undivided half interest in and to lots one to Twelve inclusive, being Twenty Fourand one half acres, in that part of the Suburban Subdivision lying south of the Northern Pacific railway Co. Right of Way in the Southeast Quarter of section Four, Township one South range 26 East M. P. M. in Yellowstone County. An undivided interest in and to the East half of the northeast Quarter of Section Twentyone One South Range twentyfive east containing One Hundred Sixty Acres, The Southwest quarter of the northwest quarter, the Northwest quarter of the North west quarter and lots Two Three and Four and gray Road House being a peice of land 330 by 330 ft all in section thirty four Township One North Range twenty six East containing about 1.42 acres All of the South half of the South west quarter and the south half of the South East QuarterSection 26 Township 5 north, Range, 21 East, containing 160 acres, the West half of the Southeast Quarter of Section twenty six township 5, north range 26 East 80 acres, the southwest quarter of section 10 Township5, Range 26 East 160 acres, in Yellowstone County Montana, as well as an undivided onehalf interest in and to any and all water, water rights, certificates of ownership of any irrigation ditch stockright of way, flumes, laterals and any and all irrigation projects of any and all kinds appertaining in any manner to the above described lands, togetherwith all and singular tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining and the reversion and reversions, remainder and remainders, rents issues and profits thereof: and also all the estate right, title and interest dower and right of dower property, possessions, claim and demand what so ever, as well as in law as in equity, of the said parties of the first part of or in the said premises, and every part and parcel thereof with appurtenances.

TO HAVE AND TO H

appurtenances, unto the sa

forever.

IN WITNESS WHERE

hand and seals the day and y

Signed and Sealed and Deliv

in the presence of

Fred J. Hashaw

STATE OF MONTANA
COUNTY OF YELLOWSTONE —

On

J. Hashaw a Notary Public i

Christian Yegen and Laura Y

are subscribed to the withi

the same.

In witness wheree

Seal the day and y

(L.S.)

Filed for record this 20th

F. E. Williams,

Deputy.

CHRISTIAN YEGEN AND WIFE

TO

JULIUS ZYWERT

WHEREAS,

District Court of the Thirte

the County of Yellowstone, du

adjudged and decreed that Chr

convey unto Julius Zywert, th

within the County of Yellowst

asfollows, to-wit: Beginning

Half (½) of Section Thirty-fo

East intersects the South line

South Fifty-six (56) degrees

of Four Hundred Eighty-nine (

distance of Three Hundred Eigh

East a distance of Six Hundred

(400) feet, to the place of be

more or less: and

WHEREAS, the said Ch

same appears
county of

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the said
thereof

TO HAVE AND TO HOLD, All and singular the said premises, together with the appurtenances, unto the said party of the second part and to his heirs and assigns forever.

IN WITNESS WHEREOF, The said parties of the first part have set their hands and seals the day and year first above written.

Christian Yegen (SEAL)

Laura B. Yegen (SEAL)

Signed and Sealed and Delivered

in the presence of

Fred J. Mashaw

STATE OF MONTANA
COUNTY OF YELLOWSTONE ---

On the 3rd day of April, in the year 1907 before me Fred J. Mashaw a Notary Public in and for the said county and State, personally appeared Christian Yegen and Laura Yegen his wife, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In witness whereof I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

L.S.

Fred J. Mashaw
Notary Public, in and for the said county
of Yellowstone, State of Montana.

Filed for record this 20th day of June A. D. 1907 at 1:14 o'clock P. M.

F. E. Williams, Deputy. Ira L. Whitney, County Recorder.

CHRISTIAN YEGEN AND WIFE

TO

JULIUS ZYSWET

WARRANTY DEED.

WHEREAS, on the 26th day of March, A. D. 1907, the Honorable District Court of the Thirteenth Judicial District of the State of Montana in and for the County of Yellowstone, duly made and entered its decree whereby it was ordered, adjudged And decreed that Christian Yegen and Laura B. Yegen, his wife, grant and convey unto Julius Zyswet, that certain piece and parcel of land situate, lying and being within the County of Yellowstone, State of Montana, and more particularly described asfollows, to-wit: Beginning at a point where the line between the North and South Half (½) of Section Thirty-four (34) Township One (1) North, Range Twenty-six (26) East intersects the South line of the Northern Pacific railway Right-of-way, thence South Fifty-six (56) degrees West along the South line of said right-of-way a distance of Four Hundred Eighty-nine (489) feet: thence South Seventy-six (76) degrees East a distance of Three Hundred Eighty Five (385) feet, thence North Forty-seven (47) degrees East a distance of Six Hundred (600) feet: thence due West a distance of Four Hundred (400) feet, to the place of beginning: containing three and One Tenths (3 1/10) acres, more or less: and

WHEREAS, the said Christian Yegen and Laura B. Yegen his wife, are desirous

and now existing over and across any part of the premises.

Together with the hereditaments and appurtenances thereunto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, The said lands and appurtenances, unto the grantee his heirs and assigns, forever.

The grantor will forever Warrant and Defend the title to the premises, except as against liens, charges and incumbrances originating after the date of the aforesaid contract of sale.

IN WITNESS WHEREOF, The grantor has caused these presents to be sealed with its corporate seal, and signed by its President, the day and year first above written.

Signed, Sealed and Delivered in the Presence of

E.C. Wattimore
J.M. McIlrath.

NORTHERN PACIFIC RAILWAY COMPANY,
By Julo M. Hannaford, President.

Attest R.H. Wells
Assistant Secretary

STATE OF MINNESOTA, :
:ss.
County of Ramsey. :

On this 25th day of May in the year 1916, before me B.K. Lloyd a Notary Public, personally appeared Julo M. Hannaford to me known to be the President of the Northern Pacific Railway Company, the corporation which executed the foregoing instrument, and who being duly sworn did say, that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and the said Julo M. Hannaford acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office, in the City of St. Paul, the day and year last aforesaid.

B.K. Lloyd,
Notary Public, Ramsey County, Minnesota.
My Commission expires Oct. 27, 1922.

Filed for record on the 29th day of May A.D. 1916 at 2.12 o'clock P.M.
76732 M. C. Pierson, Deputy. T. E. Williams, County Recorder

CHRISTIAN YEGEN ET AL.,

to

WARRANTY DEED.

MONTANA REALTY & LOAN CO.

THIS INDENTURE, Made the Twenty-sixth day of May, in the year of our Lord one thousand nine hundred and sixteen, BETWEEN Christian Yegen and Laura B. Yegen, his wife, and Peter Yegen and Margaret Yegen, his wife, all of Billings, Yellowstone County, Montana, the parties of the first part, and Montana Realty & Loan Co., a corporation organized and existing under and by virtue of the laws of the State of Montana, and as such doing business with its principal office at Billings, in the County of Yellowstone, in said state, the party of the second part,

W I T N E S S E T H: That the said parties of the first part, for and in consideration of the sum of One and no/100 Dollars, currency of the United States of America, to them in hand paid by the party of the second part, the receipt of which is hereby acknowledged, do by these presents, grant, bargain, sell, convey and confirm unto the said party of the second part, and to its successors and assigns forever, the following described real estate, lying and being situate in the County of Yellowstone, in the State of Montana, and more particularly described as follows, to wit:- The Southwest quarter of the Northwest quarter (SW¼NW¼); the Northwest quarter of the Southwest quarter (NW¼SW¼), and Lots numbered Three (3) and Four (4), of Section numbered Thirty-four (34), in Township numbered One (1) North of Range numbered Twenty-six (26) East of the Montana Principal Meridian; which said above described land and premises has formerly been known and described as Alderson's Addition to the original Town (Now City) of Billings, Yellowstone County, Montana; excepting and excluding from said land, however, the following

particular pieces or parcels, towit: What is known, and was platted, as fractional Block Thirteen (13), and Blocks numbered Fourteen (14), Fifteen (15), Sixteen (16), and Seventeen (17) of said Alderson's Addition to the original Town (Now City) of Billings, Yellowstone County, Montana; also beginning at a point where the line between the North and South half (½) of Section Thirty-four (34), Township One (1) North of Range Twenty-six (26) East intersects the South line of the Northern Pacific Railway right of way, thence South Fifty-six (56) degrees West along the South line of said right of way a distance of 489 feet, thence South Seventy-six (76) degrees East a distance of 385 feet, thence North Forty-seven (47) degrees East a distance of 600 feet, thence due West a distance of 400 feet to the place of beginning, containing Three and 1/10 (3 1/10) acres, more or less; also that tract or parcel lying and being in Section Two (2), Township One (1) South, Range Twenty-six (26) East, and Section Thirty-four (34), Township One (1) North of Range Twenty-six (26) East, County of Yellowstone, State of Montana, with all necessary rights of ingress and egress thereto, and described as follows: Beginning at an iron pin set in the ground, South Thirty-four degrees 50' East 2270 feet from the Southwest corner of Section Thirty-four, Township One North, Range Twenty-six East, Montana Principal Meridian, and embracing all that portion of land lying between the following described line and the Yellowstone River; thence North 17 degrees 25' West 224 feet, North 2 degrees 30' West 500 feet; N.0 degrees 30' East 340 feet; N. 7 degrees 15' E 200 feet; N 22 degrees 30' E. 100 feet; N 32 degrees 15' E. 400 feet; N 24 degrees 0' E. 375 feet; N 16 degrees 0' E. 289 feet; N. 8 degrees 30' E. 400 feet; N. 22 degrees 45' E. 508 feet; N. 26 degrees 15' E. 669 feet; N. 19 degrees 0' E. 327 feet; N. 25 degrees 30' E. 147 feet; N. 40 degrees 0' E. 600 feet; N. 42 degrees 30' E. 810 feet to a point on the meander line of the Government survey; thence due East about 400 feet to the main channel of the Yellowstone River, and following the said main channel of the Yellowstone River upstream about 5700 feet to a point due East of the place of beginning, thence due West to the place of beginning;

TOGETHER with all and singular the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

TO HAVE AND TO HOLD, All and singular the above mentioned and described premises, together with the appurtenances, unto the said party of the second part, and to its successors and assigns forever.

AND the said parties of the first part, and their heirs, the said premises, in the quiet and peaceable possession of the said party of the second part, its successors and assigns, against the said parties of the first part, and their heirs and assigns, against all and every person or persons whomsoever, lawfully claiming or to claim thesame, shall and will WARRANT and by these presents ever Defend.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hands and seals the day and year first above written.

Witnesses:	Christian Yegen	(Seal)
.....	Laura B. Yegen	(Seal)
.....	Peter Yegen	(Seal)
	Margaret Yegen	(Seal)

STATE OF MONTANA, :
: ss.
COUNTY OF YELLOWSTONE. :

On this Twentysixth day of May, A.D. 1916, before me, M.C. McDowell, a Notary Public in and for the State of Montana, personally appeared Christian Yegen and Laura B. Yegen, his wife, and Peter Yegen and Margaret Yegen, his wife, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, the day and year in this certificate first above written.

M.G. McDowell,
Notary Public for the State of Montana,
Residing at Billings, Montana.
My commission expires June 1st, 1917.

Filed for record on the 31st day of May, A.D. 1916, at 3:52 o'clock P.M.

F.E. Williams,
County Recorder.

By Verne Johnson,
Deputy.

76735
FRANK KOLBLE ET UX.,
to
W. H. HOGSED.

QUIT CLAIM DEED.
($1.00 in documentary revenue stamps affixed and cancelled)

THIS INDENTURE, Made the 22nd day of May, in the year of our Lord one thousand nine hundred and Sixteen, between Frank Kolble and Minnie R. Kolble, his wife, of Bozeman, Gallatin County, State of Montana, the parties of the first part and W.H. Hogsed, of Fraser, Montana, the party of the second part, W I T N E S S E T H, that the said parties of the first part, for and in consideration of the sum of Five Hundred and fifty Dollars, lawful money of the United States, to them in hand paid by the said party of the second part, the receipt of which is hereby acknowledged, do remise, release and forever quitclaim unto the said party of the second part, and to his heirs and assigns, the following described real estate, situated in the County of Yellowstone, and State of Montana, to-wit:

The South half and the Northeast quarter, and Lots Nos. One, Two, Three, Four, Five, and Six, all in Section Nineteen, Township One North of Range Twenty-nine East, M.P.M., Yellowstone County, State of Montana.

Together with all the tenements, hereditaments and appurtenances thereunto belonging, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and also all the estate, right, title, interest, in and to the above described property, possession, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in or to the said premises and every part and parcel thereof.

TO HAVE AND TO HOLD, All and singular, the said premises, with the appurtenances unto the said party of the second part, his heirs and assigns, forever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered in the Presence of
John H. Dawes

Frank Kolble (Seal)
Minnie R. Kolble (Seal)

STATE OF MONTANA, :
County of Gallatin. : ss.
:

On this 22nd day of May, in the year one thousand nine hundred and sixteen, before me John H. Dawes, a Notary Public for the State of Montana, personally appeared Frank Kolble and Minnie R. Kolble, his wife, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

John H. Dawes,
Notary Public for the State of Montana residing at Bozeman, Montana. My commission expires July 27, 1918.

Filed for record on the 31st day of May, A.D. 1916, at 4:00 o'clock P.M.

F.E. Williams,
County Recorder.

By M.C. Noonan,
Deputy.

water rights, as may be recognized and acknowledged by the local customs, laws, and decisions of courts; but excepting, nevertheless, and reserving unto the United States, rights of way over, across, and through said lands for canals and ditches constructed, or to be constructed, by its authority, all in the manner prescribed and directed by the Act of Congress approved August 30, 1890 (26 Stat.,391). To secure payment to the United States or its successors in the ownership or control of the works constituting and appertaining to the said reclamation project, of all sums due or to become due the United States or its successors in control of said reclamation project in connection with said land and water rights, a lien prior and superior to all other liens, claims, or demands whatsoever upon the lands herein and hereby described and conveyed, upon all water rights thereto appurtenant, and upon the right to receive and use water from the reservoirs and canals ~~of said canals~~ of said reclamation project, is expressly reserved.

IN TESTIMONY WHEREOF, I Woodrow Wilson, President of the United States of America have caused these letters to be made Patent, and the Seal of the General Land Office to be hereunto affixed. Given under my hand, at the City of Washington, the Thirteenth day of October in the year of our Lord one thousand nine hundred and nineteen and of the Independence of the United States the one hundred and Forty-fourth.

BY the President: Woodrow Wilson.

By M. P. LeRoy, Secretary

L. Q. C. Lamar, Recorder of the General Land Office.

Recorded: Patent Number 712659.

Filed for record on this 28th day of February, A.D. 1930 at 9:44 o'clock A.M.

By Verne Johnson, Deputy. F. E. Williams, County Recorder.

132566. ($137.00 U.S. Documentary Internal Revenue Stamps attached and cancelled.)

MONTANA REALTY & LOAN CO

TO WARRANTY DEED.

YEGEN BROS., BANKERS

THIS INDENTURE, Made the 30th day of December in the year of Our Lord one Thousand nine hundred and nineteen between Montana Realty & Loan Co., a corporation incorporated, existing and doing business under the laws of the State of Montana, in the City of Billings, County of Yellowstone, State of Montana, the party of the first part and Yegen Bros., Bankers, a Co-partnership, doing business in the same City, County and State, the parties of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of One and no/100 Dollars, lawful money of the United States of America, to it in hand paid by the said parties of the second part, the receipt whereof is hereby acknowledged, does by these presents Grant, Bargain, Sell, Convey and Confirm, unto the said parties of the second part, and to their heirs and assigns forever, the following described real estate, lying and being situate in the County of Yellowstone, State of Montana, and more particularly described as follows, to-wit:-

Lots number Seven (7), Eight (8), Nineteen (19), Twenty (20), Twenty-one (21) Twenty-two (22), Twenty-three (23) and Twenty-four (24) of Block "A" of "A" Addition to the Original Town of Billings;

Lots Nine (9) to Twelve (12) both inclusive of Block Seventy-eight (78) of the Original Town of Billings;

Lots Thirteen (13) to Sixteen (16), both inclusive, of Block Seventy-eight (78) of the Original Town of Billings; Lots Thirteen (13) to Twenty-four (24), both inclusive, of Block One Hundred Twenty-seven (127) of the Original Town of Billings;

Lots Eighteen (18) of Block One hundred twenty-eight (128) of the Original Town of Billings;

Lots Five (5), to Twelve (12) both inclusive and Lots Seventeen (17), Eighteen (18) and Twenty-two (22), of Block One Hundred Thirty-two (132) of the Original Town of Billings;

Lots Fifteen (15) Sixteen (16) Seventeen (17), Nineteen (19), Twenty (20), and Twenty-one (21) of Block One Hundred Forty-eight (148) of the Original Town of Billings;

Lots One (1) to Six (6), both inclusive and Lots thirteen (13) to Eighteen (18), both inclusive, of Block One Hundred Forty-nine (149) of the Original Town of Billings;

Lots Sixteen (16) to Twenty-four (24), both inclusive, of Block One Hundred Fifty-five (155) of the Original Town of Billings;

Lots One (1) to Twenty-four (24), both inclusive, of Block one hundred fifty-seven (157) of the Original Town of Billings;

Lots one (1) to Six (6), both inclusive, of Block one hundred Fifty-eight (158) of the Original Town of Billings;

Lots Five (5) to Eight (8), both inclusive and Lots Fifteen (15) to Twenty (20) both inclusive of Block One Hundred Fifty-nine (159) of the original Town of Billings.

Lots One (1) to Four (4), both inclusive, of Block One Hundred Sixty-eight (168) of the Original Town of Billings;

Lots Three (3) to Ten (10). both inclusive, of Block One Hundred Seventy-three (173) of the Original Town of Billings;

Lots one (1) to Seven (7) both inclusive of Block one hundred Seventy-four (174) of the Original Town of Billings;

Lot Twelve (12) of Block One Hundred Eighty-nine (189) of the Original Town of Billings;

Lot Twenty-two (22) and the North Twenty (20) feet of lot twenty-three (23) of Block One hundred Ninety (190) of the Original Town of Billings;

Lots Seven (7) to Twelve (12) both inclusive, of Block One hundred Ninety-two (192), of the Original Town of Billings;

Lots One (1) to Twelve (12), both inclusive of Block One Hundred Ninety-nine (199) of the Original Town of Billings;

Lots Seven (7) to Twelve (12) both inclusive, of Block Two Hundred Twelve (212) of the Second Addition to the Original Town of Billings;

Lots Seven (7) to Eight (8) of Block One Hundred Thirty-five (135) of the Original Town of Billings.

Lot Twenty-two (22) of Block One Hundred Thirty-nine (139) of the Original Town of Billings;

Lot Fifteen (15) of Block One Hundred Forty (140) of the Original Town of Billings;

Lots Twenty-three (23) and Twenty-four (24) of Block number Seven (7) of Yegen's Second Addition to the Original Town of Billings.

Lots Twenty-one (21) and Twenty-two (22) of Block Nine (9) of Yegen's Second Addition to the Original Town of Billings;

Also the following real estate lying and being situate in Highland Addition to the Original Town of Billings, according to the Amended Plat thereof;

Lots Ten (10) Eleven (11) and Twelve (12) of Block Twelve (12)

Lots Five (5) to Ten (10) both inclusive, and Lots Fifteen (15) to Eighteen (18), both inclusive, and Lots Twenty-one (21) to Twenty-four, (24), both inclusive, of Block Fifteen (15)

Lots Thirteen (13) to Twenty-four (24) both inclusive, of Block Sixteen (16)

Lots One (1) to Four (4), both inclusive, and Lots Thirteen (13) to Twenty-four (24), both inclusive, of Block Eighteen (18)

Lots Eight (8) to Seventeen (17), both inclusive, of Block Nineteen (19);

Lots Ten (10), Eleven (11) and Twelve (12), of Block Twenty-three (23);

Lots One (1), Two (2), Five (5), Six (6), Fifteen (15) and Sixteen (16), of Block Twenty-four (24);

Lots One (1) To Six (6), both inclusive, and Lots Nineteen (19) to Twenty-four (24), both inclusive, of Block Twenty-eight (28);

Lots Five (5) to Ten (10), both inclusive and Lots Eighteen (18) to Twenty-one (21), both inclusive, of Block Twenty-six (26);
Lots Eight (8) to Seventeen (17) both inclusive of Block Twenty-nine (29);
Lots Eleven (11) to Twenty-four (24) both inclusive, of Block Seventeen (17) of the Montana Subdivision of Block Seventeen (17) of the Highland Addition to the City of Billings, according to the official Plat thereof;

Also; Lots Twenty (20) and Twenty-one (21) of Block Thirty-nine (39) of Foster's Addition to the Original Town of Billings;

All of said Lots and Blocks being described according to to the Official Plats thereof, on file and of record in the office of the County Clerk and Recorder of Yellowstone County, Montana.

All that part of Lot 2 and 3 and 4 and the Northwest quarter (NW¼) of the Southwest quarter (SW¼) of Section 34, Township 1 north, Range 26 east, M.P.M., lying south of the right-of-way of the Northern Pacific Railway Co., excepting and reserving, however, those pieces, parcles or tracts of land described as follows:

Beginning at a point on the south line between Sections 33 and 34 in Township 1 North, Range 26 east, where south boundary line of Northern Pacific Railway Co.'s right-of-way crosses said section line, thence along said section line south 10.28 chains, thence south 74 degrees 15 minutes east 2.02 chains, thence south 85 degrees 11 minutes east 2.02 chains, thence north 31 degrees 25 minutes east 1.01 chains, thence north 35 degrees 42 minutes east 4.02 chains, thence north 32 degrees 42 minutes east 12.04 chains, thence north 29 degrees 24 minutes west 5.16 chains, to point on the south boundary line of the Northern Pacific Railway Co.'s right-of-way, thence along said boundary line south 54 degrees 25 minutes west 13.37 chains, to the place of beginning, containing 13.62 acres, more or less.

Also, beginning at the point where line between the North half and the south half of Section 34, Township 1 north, Range 26 east, intersects the south line of the Northern Pacific Railway Co.'s right-of-way, thence running south 56 degrees along the south line of said right-of-way a distance of 489 feet, thence running south 76 degrees east a distance of 385 feet, thence running north 47 degrees east, a distance of 600 feet, thence running due west a distance of 400 feet to the place of beginning, containing 3.1 acres, more or less.

Also, beginning at a point on the east and west section line of said Section 34,

Township 1 north, Range 26 east, at the intersection with the southerly line of the right-of-way of the Northern Pacific Railway Co., thence running due east on said quarter section line for a distance of 341 feet, thence north 56 degrees east for a distance of 295.6 feet, thence north 34 degrees west 190 feet to the southerly line of said right-of-way, thence south 56 degrees west 586.4 feet to place of beginning, containing 1.88 acres.

Also, beginning at a point on the southerly line of the right-of-way of the Northern Pacific Railway Co., which is located 56 degrees east 586.4 feet from the point where the east and west quarter section line of section 34, Township 1 north, Range 26 east, intersects the southerly line of the right-of-way of said railway company, thence south 34 degrees east 190 feet, thence north 56 degrees east 254.4 feet, thence north 34 degrees 10 minutes west 455.6 feet, to the southerly line of said right-of-way, Thence south 56 degrees west along said right-of-way line 645.4 feet to the place of beginning, containing 1.69 acres, more or less.

Also excepting and reserving any and all public highways, irrigation ditches or power lines, as now established or existing affecting premises described.

TO HAVE AND TO HOLD, All and singular, the above mentioned and described property, together with all of the appurtenances, unto the said parties of the second part their heirs and assigns forever. And the said party of the first part and its successors, legal representatives and assigns the said premises, in the quiet and peaceable possession of the said parties of the second part, their heirs and assigns, against the said party of the first part and its successors, legal representatives and assigns and against all and every person whomsoever, lawfully claiming or to claim the same, shall and will Warrant, and by these presents ever Defend.

IN WITNESS WHEREOF, the said Montana Realty & Loan Co. has caused these presents to be signed by its President attested by its secretary, and its corporate seal to be affixed the day and year first above written.

Montana Realty & Loan Co

(Seal) By P. Yegen, President.

Attest:

Peter Yegen JR.
Secretary.

State of Montana)
ss
County of Yellowstone)

On this 30th day of December, in the year 1919, before me L. E. Torrence, a Notary Public for the State of Montana, personally appeared P. Yegen known to me to be the President of the Corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, the day and year in this certificate written.

L. E. Torrence

Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires April 18, 1921.

Filed for record on this 28th day of February, A.D. 1920 at 11:32 o'clock A.M.

By Verne Johnson, Deputy. F. E. Williams, County Recorder.

Pacific Railway Company; thence in a northwesterly direction along the north line of said right-of-way to intersection of said right-of-way with the west line of said Section Thirty-Four (34); thence south on the west line of Section Thirty-Four (34), to the place of Beginning, containing [illegible] acres, as shown on plat [illegible]: Beginning at a point where the south line of the right-of-way of the Northern Pacific Railway Company intersects with the west line of Section Thirty-Four (34), Township One (1) North, Range Twenty-six (26) East, M.P.M.; thence north [illegible] west section line a distance of 678.40 feet; thence south 54°[illegible] East a distance of [illegible] feet; thence South 88°31' East a distance of 116.[illegible] feet; thence North 38°[illegible] West a distance of 68.[illegible] feet; thence north 35°42' East a distance of 206.[illegible] feet; thence North [illegible] West a distance of 79[illegible].44 feet; thence North 57°34' West a distance of 242.[illegible] feet, more or less, to the intersection of the south line of the right-of-way of Northern Pacific Railway Company; thence South 64°20' West on said south line of the right-of-way, a distance of [illegible] feet, to the place of Beginning. Also, Beginning at a point where the east and west center line of Section Thirty-Four (34), Township One (1) North, Range Twenty-six (26) East, M.P.M., intersects with the south line of the right-of-way of the Northern Pacific Railway Company; thence South 36°00' West along said South line of the right-of-way a distance of 460 feet; thence north 70°30' East a distance of 400 feet; thence north 47°00' East a distance of 400 feet; thence due west 400 feet to the place of Beginning, said last two described tracts contain 16.60 acres, together with all the estate, right, title and interest of the said Christian Yegen and Peter Yegen, co-partners, conducting a private bank at Billings, Montana, under the firm name and style of Yegen Bros., Bankers, in and to the said premises and every part and parcel thereof.

To Have And To Hold, all and singular, the said premises, together with the appurtenances thereunto belonging, unto the said Grantee of the second part, and to their heirs and assigns.

In Witness Whereof, The said party of the first part has hereunto set his hand and seal the day and year first above written.

G. C. Graef
As Receiver for Christian Yegen and Peter Yegen, co-partners, conducting a private bank at Billings, Montana, under the firm name and style of Yegen Bros., Bankers.

STATE OF MONTANA)
) ss.
County of Yellowstone)

On this 17th day of April, 1929, before me, M. J. Lee, a Notary Public for the State of Montana, personally appeared G. C. Graef, known to me to be the Receiver for Christian Yegen and Peter Yegen, co-partners, conducting a private bank within the state of Montana, at Billings, Montana, under the firm name and style of Yegen Bros., Bankers, and whose name as such Receiver is subscribed to the within instrument, and acknowledged to me that he, as such Receiver, executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

(SEAL)

M. J. Lee
Notary Public for the State of Montana,
Residing at Billings, Montana.
My Commission expires January 11th 1930.

Filed for record on this 8th day of May A. D. 1929, at 8:16 o'clock P. M.
By D. G. Boschoff, Deputy.

Verne Johnson, County Recorder.

237175

ROBERT H. ANDREW AND OTHERS
TO
E. C. PIERCE

QUIT CLAIM DEED

This Indenture, Made the 17th day of April, in the year of our Lord one thousand nine

hundred and twenty-nine, between Robert B. Brubeck and Eva Mae Brubeck, his wife, and George F. Shea and Maud D. Shea, his wife, of Billings, Montana, the parties of the first part, and F. C. Pierce, of Billings, Montana, the party of the second part, Witnesseth:

That the said parties of the first part, for and in consideration of the sum of One Dollar Dollars, to them in hand paid by the said party of the second part, the receipt of which is hereby acknowledged, do hereby release and forever quit claim unto the said party of the second part, and to his heirs and assigns, the following described real estate situate in the County of Yellowstone, State of Montana, to-wit:

A tract of land in Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M.P.M., more particularly bounded and described as follows: Beginning at the Southwest corner of said Section Thirty-four (34), township and range aforesaid; thence running east on the south line of said Section to the intersection with the west line of a tract of land or easement of the Montana Power Company, as shown by deed recorded in Book 29, of Deeds, Page 214, of the records of Yellowstone County, Montana; thence following the courses as shown in said deed before mentioned, in a northeasterly direction to intersection with the east and west center line of said section; thence running west on said east and west center line to intersection with the south line of the right-of-way of the Northern Pacific Railway Company; thence in a southwesterly direction along the south line of said right-of-way to intersection of said right-of-way with the west line of said Section Thirty-four (34); thence south on the west line of Section Thirty-four (34) to the place of beginning, excepting therefrom the following two described tracts of land, to-wit: Beginning at a point where the north line of the right-of-way of the Northern Pacific Railway Company intersects with the west line of Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East M.P.M., thence running south on said west section line a distance of 678.48 feet; thence south 74°15' East a distance of 133.32 feet; thence South 85°11' East a distance of 132.32 feet; thence North 32°26' east a distance of 66.66 feet; thence north 35°42' east a distance of 265.32 feet; thence north 32°43' east a distance of 794.64 feet; thence north 29°24' west a distance of 340.56 feet, more or less, to the intersection of the south line of the right-of-way of Northern Pacific Railway Company; thence South 54°25' West on said south line of the right-of-way a distance of 882.44 feet, to the place of beginning. Also, beginning at a point where the east and west center line of Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M.P.M., intersects with the south line of the right-of-way of the Northern Pacific Railway Company; thence South 56°00' west along said south line of the right-of-way a distance of 489 feet; thence south 76°00' east a distance of 385 feet; thence north 10°00' east a distance of 500 feet; thence due west 400 feet to the place of beginning, said last two described tracts contain 16.62 acres.

Together with all the estate, right, title and interests of the said parties of the first part, of, in or to the said premises and every part and parcel thereof.

To Have And To Hold, all and singular the said premises, together with the appurtenances thereto belonging, unto the said party of the second part, and to his heirs and assigns.

In Witness Whereof, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

Robert B. Brubeck (Seal)
Eva Mae Brubeck (Seal)
Geo. F. Shea (Seal)
Maud D. Shea (Seal)

State of Montana
County of Yellowstone } ss.

On this 17th day of April, nineteen hundred and twenty-nine, before me, Beatrice A. Berry, a Notary Public for the State of Montana, personally appeared Robert B. Brubeck and

ava Mae Brubeck, his wife, and George F. Shea and Maud D. Shea, his wife, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my Official Seal the day and year in this Certificate first above written.

(SEAL)

Beatrice A. Murray

Notary Public for the State of Montana.
Residing at Billings, Montana.
My Commission expires Feb. 11-1931.

Filed for record on this 8th day of May A. D. 1929, at 2:18 o'clock P. M.

By D. G. Backhoff, Deputy.

Verne Johnson, County Recorder.

237104

JACOB KEMBEL AND WIFE
TO
FRED VOGEL

WARRANTY DEED

This Indenture, Made the sixth day of May in the year of our Lord one thousand nine hundred and Twenty-nine Between Jacob Kembel and Mrs. Mary Kembel, his wife, parties of first part, and Fred Vogel, party of the second part, all of Laurel, County of Yellowstone, State of Montana, the party of the second part:

Witnesseth: That the said parties of the first part, for and in consideration of the sum of One Dollars, currency of the United States of America, to them in hand paid by the said party of the second part, the receipt of which is hereby acknowledged, do by these presents, grant, bargain, sell, convey, and confirm unto the said party of the second part, and to his heirs and assigns forever, the following described real estate, lying and being situate in the County of Yellowstone, in the State of Montana, and more particularly described as follows, to-wit:

All of Lot number twenty (20) in Block twenty-two (22), in the East Yellowstone Subdivision to East Laurel, according to the official plat thereof on file and of record, in the office of the County Clerk and Recorder, in and for the said County of Yellowstone, and State of Montana.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

To Have And To Hold, All and singular the above mentioned and described premises, together with the appurtenances, unto the said party of the second part and to his heirs and assigns forever. And the said parties of the first part and their heirs, the said premises, in the quiet and peaceable possession of the said party of the second part his heirs and assigns, against the said parties of the first part and their heirs and assigns, against all and every person and persons whomsoever, lawfully claiming or to claim the same, shall and will Warrant and by these presents ever Defend.

In Witness Whereof, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

Witnesses:.....

Jacob Kembel (Seal)
Mrs. Mary Kembel (Seal)

STATE OF MONTANA }
County of Yellowstone } ss.

On this sixth day of May in the year 1929, before me, R. J. Williams, a Notary Public in and for said State, personally appeared Jacob Kembel and Mrs. Mary Kembel, his wife, known to me to be the persons whose

east of the Montana Meridian in Montana, together with the tenements, hereditaments and appurtenances thereunto belonging.

This deed is executed and delivered for the purpose of complying with said order of court and to cure any defect there may be in deed from Virginia Fenske to the estate of Charles A. Railsback, deceased, executed February 5, 1924, and recorded February 6, 1924 in Book 110 of deeds, at page 99 thereof in the office of the County Clerk of Yellowstone County, Montana.

In Witness Whereof, said first party has hereunto set her hand the day and year first above written.

Pearl Ross
As executrix of the last will of Virginia Fenske, deceased.

STATE OF MONTANA, :
:ss.
County of Yellowstone:

On this 8th day of May, 1929, before the undersigned, a Notary Public in and for the state of Montana, personally appeared Pearl Ross, known to me to be the same person who signed the foregoing instrument as executrix of the last will of Virginia Fenske, deceased, and acknowledged to me that she, as such executrix, executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

H. C. Crippen

Notary Public for the state of Montana
Residing at Billings
My commission expires Nov-26-1929.

Filed for record on this 8th day of May A. D. 1929, at 2:12 o'clock P. M.
By D. G. Backhoff, Deputy. Verne Johnson, County Recorder.

13918B

237174

G. C. GIGEL, RECEIVER
TO
ROBERT S. BRUBECK AND GEORGE F. SHEA

RECEIVER'S DEED

This Indenture, Made the 17th day of April, 1929, between G. C. Gigel, as Receiver for Christian Yegen and Peter Yegen, co-partners, conducting a private bank within the State of Montana, at Billings, Montana, under the firm name and style of Yegen Bros., Bankers, the party of the first part, and Robert S. Brubeck and George F. Shea, of Billings, Montana, the parties of the second part.

Witnesseth: That the said party of the first part, for and in consideration of the sum of Fifteen Hundred Twenty-five & no/100 ($1525.00) Dollars, to him in hand paid by said parties of the second part, the receipt of which is hereby acknowledged, does hereby release and forever quit claim unto the said parties of the second part, and to their heirs and assigns, the following described real estate, situate in the County of Yellowstone, State of Montana, to-wit:

A tract of land in Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M. P. M., more particularly bounded and described as follows: Beginning at the Southwest corner of said Section Thirty-four (34), township and range aforesaid; thence running east on the south line of said Section to the intersection with the west line of a tract of land or easement of the Montana Power Company, as shown by deed recorded in Book 99 of deeds, at Page 214, of the records of Yellowstone County, Montana; thence following the courses as shown in said deed before mentioned, in a northeasterly direction to intersection with the east and west center line of said section; thence running west on said east

616-A

Pacific Railway Company; thence in a southwesterly direction along the south line of said right-of-way to intersection of said right-of-way with the west line of said Section Thirty-four (34); thence south on the west line of Section Thirty-four (34), to the place of beginning, excepting therefrom the following two described tracts of land, to-wit: Beginning at a point where the south line of the right-of-way of the Northern Pacific Railway Company intersects with the west line of Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M.P.M.; thence running south on said west section line a distance of 678.48 feet; thence south 74°15' East a distance of 133.32 feet; thence South [illegible] East a distance of 133.32 feet; thence North 32°26' east a distance of 66.66 feet; thence North 35°42' East a distance of 265.32 feet; thence north 32°43' East a distance of 752.44 feet; thence north 29°24' West a distance of 340.56 feet, more or less, to the intersection of the south line of the right-of-way of Northern Pacific Railway Company; thence South 24°[illegible] West on said south line of the right-of-way, a distance of 882.44 feet, to the place of beginning. Also, beginning at a point where the east and west center line of Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M.P.M., intersects with the south line of the right-of-way of the Nothern Pacific Railway Company; thence South 56°00' West along said South line of the right-of-way a distance of 489 feet; thence south 76°30' east a distance of 385 feet; thence north 47°00' east a distance of 600 feet; thence due west 400 feet to the place of beginning, said last two described tracts contain 16.63 acres, together with all the estate, right, title and interest of the said Christian Yegen and Peter Yegen, co-partners, conducting a private bank at Billings, Montana, under the firm name and style of Yegen Bros., Bankers, [illegible] to the said premises and every part and parcel thereof.

To Have And To Hold, all and singular, the said premises, together with the appurtenances thereunto belonging, unto the said parties of the second part, and to their heirs and assigns.

In Witness Whereof, The said party of the first part has hereunto set his hand and seal the day and year first above written.

G. C. Cisel
As Receiver for Christian Yegen and Peter Yegen, co-partners, conducting a private bank at Billings, Montana, under the firm name and style of Yegen Bros., Bankers.

STATE OF MONTANA }
}ss.
County of Yellowstone }

On this 17th day of April, 1929, before me, M. J. Lamb, a Notary Public for the State of Montana, personally appeared G. C. Cisel, known to me to be the Receiver for Christian Yegen and Peter Yegen, co-partners, conducting a private bank within the State of Montana, at Billings, Montana, under the firm name and style of Yegen Bros., Bankers, and whose name as such Receiver is subscribed to the within instrument, and acknowledged to me that he, as such Receiver, executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

M. J. Lamb

Notary Public for the State of Montana.
Residing at Billings, Montana.
My Commission expires January 14th 1932.

Filed for record on this 8th day of May A. D. 1929, at 8:16 o'clock P. M.

By D. S. Lachhoff, Deputy. Verne Johnson, County Recorder.

23717a

Book 18 B

267389

F. D. PIERCE AND WIFE
TO
PIERCE PACKING CO.

WARRANTY DEED

This Indenture, Made the 15th day of November A. D., one thousand nine hundred and Thirty BETWEEN F. D. PIERCE and CARRIE E. PIERCE, husband and wife of Billings, Montana, parties of the FIRST PART and PIERCE PACKING CO., a Montana corporation, of Billings, Montana, the party of the SECOND PART; WITNESSETH that the said parties of the FIRST PART, for and in consideration of the sum of One and no/100 Dollars ($1.00) lawful money of the United States of America to them in hand paid by said party of the SECOND PART, the receipt whereof is hereby acknowledged; do by these presents grant, bargain, sell, convey, warrant and confirm unto the said party of the SECOND PART, and to its successors and assigns forever, the hereinafter described real estate situated in the city or town of County of Yellowstone, and State of Montana, to-wit:

A tract of land in Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M. P. M., more particularly bounded and described as follows: Beginning at the Southwest corner of said Section Thirty-four (34), Township and range aforesaid; thence running east on the south line of said Section to the intersection with the west line of a tract of land or easement of the Montana Power Company, as shown by deed recorded in Book 26, of deeds, Page 214, of the records of Yellowstone County, Montana; thence following the courses as shown in said deed before mentioned, in a northeasterly direction to intersection with the east and west center line of said Section; thence running east on said east and west center line to intersection with the south line of the right-of-way of the Northern Pacific Railway Company; thence in a southwesterly direction along the south line of said right-of-way to intersection of said right-of-way with the west line of said Section Thirty-four (34); thence south on the west line of Section Thirty-four (34) to the place of beginning, excepting therefrom the following two described tracts of land, to-wit: Beginning at a point where the south line of the right-of-way of the Northern Pacific Railway Company intersects with the west line of Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M. P. M.; thence running south on said west section line a distance of 678.46 feet; thence south 74°15' East a distance of 134.32 feet; thence south 53°11' East a distance of 135.32 feet; thence North 32°26' east a distance of 67.26 feet; thence north 30°42' East a distance of 266.32 feet; thence north 32°43' East a distance of 724.64 feet; thence north 29°34' West a distance of 340.56 feet, more or less, to the intersection of the south line of the right-of-way of Northern Pacific Railway Company; thence South 74°25' West on said south line of the right-of-way a distance of [illegible]9.44 feet, to the place of beginning. Also, beginning at a point where the east and west center line of Section Thirty-four (34), Township One (1) North, Range Twenty-six (26) East, M. P. M., intersects with the south line of the right-of-way of the Northern Pacific Railway Company; thence South [illegible] west along said south line of the right-of-way a distance of 489 feet; thence South 74°19' east a distance of 385 feet; thence north 47°[illegible]' east a distance of [illegible] feet; thence [illegible] east 490 feet to the place of beginning. Said last two described tracts contain 16.63 acres.

TOGETHER with all and singular the hereinbefore described premises together with all buildings, and fixtures, and appurtenances thereto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof; and also all the estate, right, title, interest, right of dower and right of home-[illegible] and demand whatsoever, as well in law as in equity, of the said

Show on page (294) 6168-A

above mentioned and described premises unto the said party of the SECOND PART, and to his successors and assigns forever. And the said parties of the FIRST PART, and their heirs, do hereby covenant that they will forever WARRANT and DEFEND all right, title and interests in and to the said premises and the quiet and peaceful possession thereof, unto the said party of the SECOND PART, his successors and assigns, against all acts and deeds of the said parties of the FIRST PART, and all and every person and persons whomsoever lawfully claiming or to claim the same. IN WITNESS WHEREOF, the said parties of the FIRST PART have hereunto set their hands and seals the day and year first hereinbefore written.

Signed, Sealed and Delivered in the Presence of..... F. J. Pierce (SEAL)

Carrie E. Pierce (SEAL)

STATE OF MONTANA,)
)ss.
County of Yellowstone)

On this 14th day of November in the year nineteen hundred and Thirty before me the undersigned, a Notary Public for the State of Montana, personally appeared F. J. Pierce and Carrie E. Pierce, husband and wife known to me (or proved to me on oath of...) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

R. E. Cooke

Notary Public for the State of Montana.
Residing at Billings, Montana.
My Commission expires Feb. 20th 1931.

Filed for record on this 18th day of November A. D. 1931, at 2:22 o'clock P. M.

By J. E. Beckhoff, Deputy. Verne Johnson, County Recorder.

217399

CHAS. J. ELLIOTT
TO
FIRST NATIONAL BANK AND TRUST CO. OF FARGO

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: That Charles J. Elliott a single man of Branchville, New Jersey, in consideration of One Dollar and other good and valuable consideration, the receipt whereof is hereby admitted, does hereby grant, bargain, sell, convey, warrant and confirm unto the First National Bank and Trust Company of Fargo, a corporation of Fargo, North Dakota and to its successors and assigns, FOREVER, the following described real property, situated in the County of Madison, and State of Montana, to-wit:

All of Fractional Section Nineteen (19), Township Two (2), South, Range Five (5) West. and all that property situated in the County of Yellowstone and State of Montana, to-wit:

All of Section Twenty-nine (29), Township Three (3), North, Range Twenty-Four (24) East
All of Section Thirty-one (31), Township Three (3), North, Range Twenty-Four (24) East.
All of Fractional Section One (1), Township Three (3), North, Range Twenty-Six (26) East.
An undivided one-eighth interest in and to the above described realty.

Together with all and singular the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining. And the said grantor hereby covenants that it will forever warrant and defend all right, title, and interest in and to an undivided one-eighth interest in and to said premises, and the quiet and peaceable possession thereof, unto the said grantee, First National Bank & Trust Co. of Fargo, its successors and assigns against the acts and deeds of said grantor, and all and every person and persons whomsoever lawfully claiming or to claim the same. Witness my hand and seal this 29th day of October,

successors and assigns until said easements be exercised, and so long thereafter as the same shall be useful for the above named purposes.

It is understood that the person securing this grant is without authority from the Grantor to make any agreement in respect of the subject matter hereof not herein expressed.

This agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

Executed this 17 day of April, 1945.

IN THE PRESENCE OF:

Chas. F. Lynch

Eva Mae Prubeck individually and as administratrix of Estate Robert Prubeck deceased

STATE OF Montana)
)ss.
County of Yellowstone)

On this 6th day of November, 1945, before me the undersigned, a Notary Public in and for said county and state, personally appeared Eva Mae Prubeck individually and as administratrix of the estate of Robert Prubeck, deceased known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that she executed the same.

WITNESS my hand and notarial seal the day and year in this certificate written.

D. W. Streeter

Notary Public for the State of Montana
Residing at Billings Montana
My Commission expires Sept. 4, 1947

Recording Fee Paid $1.75

Filed for record on this 27th day of January, A.D. 1948, at 12:20 o'clock P.M.

By Hilden Kuntz, Deputy.

George J. Estes, County Recorder.

NC

397867

PIERCE PACKING COMPANY
TO
YALE OIL PIPELINES, INC.

RIGHT OF WAY CONTRACT

FOR AND IN CONSIDERATION of the sum of Five Hundred Sixty Four Dollars and no/100 Dollars, in hand paid, the receipt of which is hereby acknowledged, PIERCE PACKING COMPANY, a corporation, with an office at Billings, Montana, hereinafter referred to as Grantor, does hereby grant unto YALE OIL PIPELINES, INC., a corporation with an office at Billings, Montana, hereinafter referred to as Grantee, its successors and assigns, a right of way thirty-two feet in width, thereon to lay, maintain, operate and remove a pipe line, or pipe lines, for the transportation of oil and/or gas, and the products and by-products thereof, together with such equipment and appurtenances as shall be reasonably necessary, proper or convenient to insure to the Grantee the complete enjoyment of the rights hereby granted, over, through, upon, under and across the following described land in Yellowstone County, Montana, to-wit:

Southwest quarter of southwest quarter, northeast quarter of southwest quarter, and southeast quarter of southwest quarter of Section Thirty-four, in Township 1 North of Range 26 East; for a distance of 128 rods in length.

Together with the rights of ingress and egress to and from said line or lines, or any of them, for the purpose aforesaid. Grantor to have the right to fully use and enjoy the above described premises, except as to the rights hereinbefore granted.

Payment made as hereinabove recited is for said right of way and for damages thereto during the period of original construction. Any damage done to any land of Grantor adjacent to said right of way, or any crops, pasturage or improvements thereon, during the construction period, and any damage done to the surface of said right of way or any other land of Grantor adjacent thereto, or to any crops, pasturage or improvements thereon, arising after completion

6168-A

TO HAVE AND TO HOLD said easement, rights, and rights of way unto the said Grantee, its successors and assigns, until said easements be exercised, and so long thereafter as the same shall be useful for the above named purposes.

This grant is made upon condition that the Grantee shall repair and replace fences, gates, drainage and irrigation ditches in as good condition of order and repair as the same are now in, and shall compact back-fill so that it is level. All to the end that the land is left as nearly as possible in its present condition.

Grantee further agrees to indemnify and hold the Grantor harmless against any claim for damages suffered by any other person or persons for damages to livestock or other personal property which may be caused by the construction or maintenance of said pipeline.

This agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

Dated this 20th day of April, 1948.

PIERCE PACKING COMPANY

By F. C. Pierce
Its President

Attest:

Paul McCormick
Its Secretary

YALE OIL PIPELINES, INC.

By J. G. Dyer
Its Vice-President

Attest:

A. A. Anderson
Its Ass't. Secretary

STATE OF MONTANA, (
(ss.
County of Yellowstone, (

On this 8th day of November 1948, before the undersigned Notary Public for the State of Montana, personally appeared FRED C. PIERCE, known to me to be the President of Pierce Packing Company, the corporation which executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate above written.

D. W. Streeter

Notary Public for the State of Montana.
Residing at Billings, Montana
My commission expires Sept. 4, 1947

STATE OF MONTANA, (
(ss.
County of Yellowstone, (

On this 20th day of April, 1948, before the undersigned Notary Public for the State of Montana, personally appeared FRED C. PIERCE, known to me to be the President of Pierce Packing Company, the corporation which executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate above written.

Notary Public for the State of Montana
Residing at Billings, Montana. My commission expires March 21, 1946

Paul C. McCormick

Notary Public for the State of Montana.
Residing at Billings, Montana
My commission expires .....

Recording Fee Paid $2.00

Filed for record on this 20th day of January, A.D. 1948, at 12:21 o'clock P.M.

By Hilda Kuntz, Deputy.

George G. Osten, County Recorder.

RIGHT OF WAY GRANT
MONTANA (REV. 1-49)

448 225
338

588

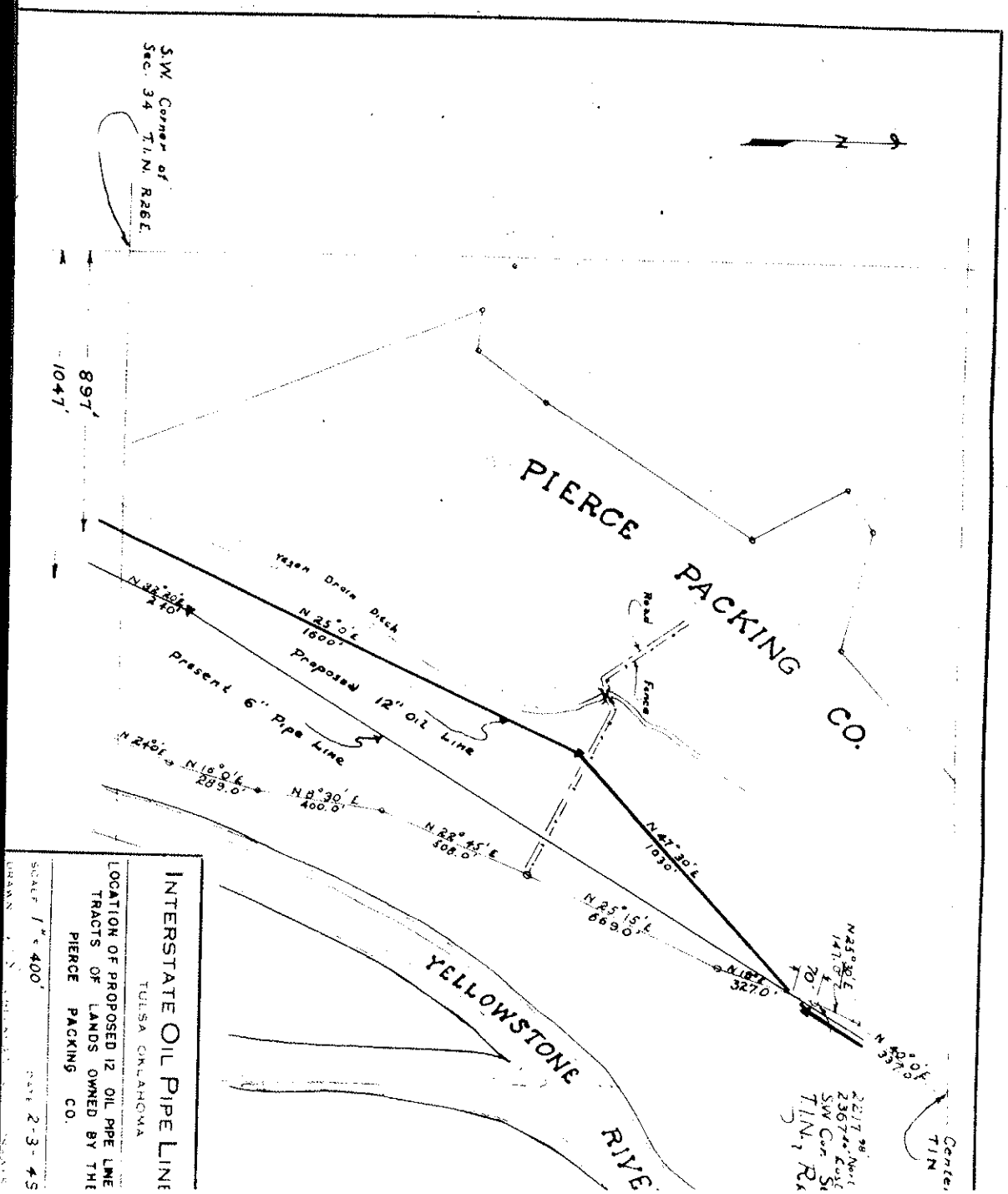
KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, hereinafter called "Grantor", whether one or more, for and in the consideration of

One Hundred Eighty Eight and no/100 - ($188.00), Dollars cash in hand paid, receipt of which is hereby acknowledged, does hereby grant and convey unto INTERSTATE OIL PIPE LINE COMPANY, a Delaware corporation, having its principal office at Tulsa, Oklahoma, hereinafter called "Grantee", its successors and assigns, a right of way and easement for the purpose of laying, maintaining, operating, patrolling (including aerial patrol), altering, repairing, renewing and removing in whole or in part a pipe line for the transportation of crude petroleum, its products and derivatives, whether liquid or gaseous, and/or mixtures thereof, together with the necessary fixtures, equipment and appurtenances, ~~including telephone and telegraph lines, or either of them, with necessary poles, equipment, guy wires and anchors,~~ over, through, ~~[illegible]~~ under and across the following described land situated in

Yellowstone County, State of Montana, to-wit:

East 1/2, Southwest 1/4, Southwest 1/4 and West 1/2, Northwest 1/4, Southeast 1/4, Southwest 1/4 and Southwest 1/4, Northeast 1/4 Southwest 1/4 and Northwest 1/4, Southeast 1/4, Northeast 1/4, Southwest 1/4 and West 1/2, Northeast 1/4, Northeast 1/4, Southwest 1/4 as per attached sketch, all in

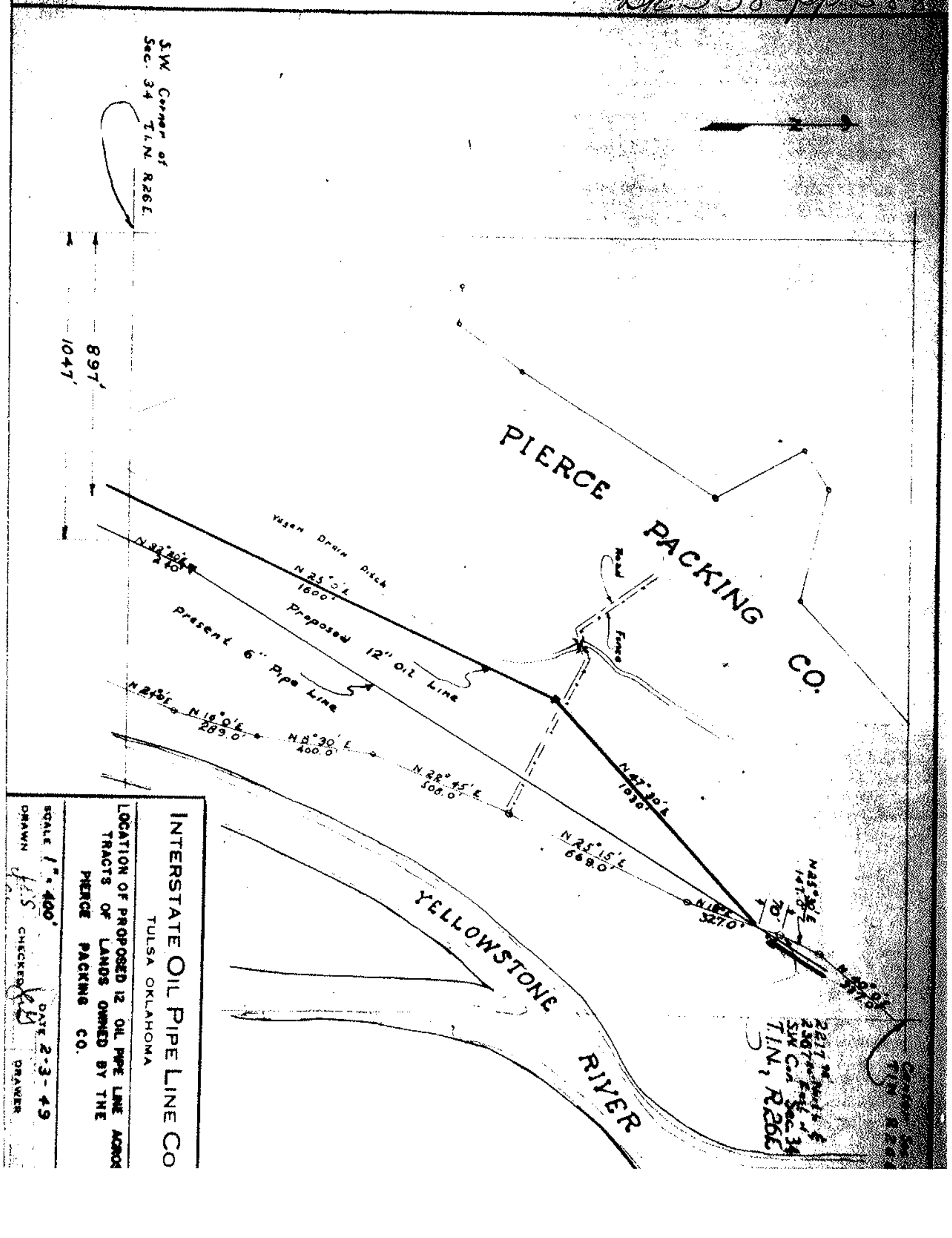


...hat the undersigned, hereinafter called "Grantor", whether one or more, for and in the consideration of
... Hundred Eighty Eight and no/100 - - - - - - - - - - - - - - - - - - - ($188.00) Dollars
...sh in hand paid, receipt of which is hereby acknowledged, does hereby grant and convey unto INTERSTATE OIL PIPE ...INE COMPANY, a Delaware corporation, having its principal office at Tulsa, Oklahoma, hereinafter called "Grantee", ...s successors and assigns, a right of way and easement for the purpose of laying, maintaining, operating, patrolling (includ...ing aerial patrol), altering, repairing, renewing and removing in whole or in part a pipe line for the transportation of ...crude petroleum, its products and derivatives, whether liquid or gaseous, and/or mixtures thereof, together with the necessary fixtures, equipment and appurtenances, ... through, ... under and across the following described land situated in

Yellowstone County, State of Montana, to-wit:

East 1/2, Southwest 1/4, Southwest 1/4 and West 1/2, Northwest 1/4, Southeast 1/4, Southwest 1/4 and Southwest 1/4, Northeast 1/4 Southwest 1/4 and Northwest 1/4, Southeast 1/4, Northeast 1/4, Southwest 1/4 and West 1/2, Northeast 1/4, Northeast 1/4, Southwest 1/4 as per attached sketch, all in

#448225
Bk 338-pp 58...



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338

588

1/2, Northeast 1/4, Nor...

Section 34, Township 1-N, Range 26-E

together with the right to clear the right of way and remove or trim trees and brush [redacted] for a sufficient distance along both sides of said pipe line so as to prevent damage or interference with its efficient operation and patrol, and together with the right of ingress and egress to and from said right of way through and over said above described land for any and all purposes necessary to the exercise by Grantee of the rights herein granted.

Grantor covenants with Grantee that he is the lawful owner of the aforesaid lands, that he has the right and authority to make this grant, and that he will forever warrant and defend the title thereto against all claims whatsoever. Said warranty, however, shall be limited to a return of the consideration paid for this grant, including damages.

~~Grantor, its successors and assigns, may at any time lay additional lines of pipe upon payment of like consideration per rod for each additional line so laid and subject to the same conditions.~~

TO HAVE AND TO HOLD the said right of way or easement unto said INTERSTATE OIL PIPE LINE COMPANY, its successors and assigns.

The Grantee, by the acceptance hereof, agrees to bury said pipe lines through cultivated land so that they will not interfere with the ordinary cultivation thereof and also to pay any damage to crops, fences and timber which may arise from laying, maintaining, operating and removing said lines. Said damage, if not mutually agreed upon, shall be ascertained and determined by three disinterested persons, one to be appointed by Grantor, one by Grantee, its successors and assigns, and the third by the two persons aforesaid; and the award of such three arbitrators or any two of them, in writing, shall be final and conclusive. The cost of such arbitration shall be borne equally by Grantor and Grantee.

The undersigned Grantor reserves the right to the full use and enjoyment of said premises except as the same may be necessary for the purposes herein granted; provided that said Grantor shall not erect over any line or lines of Grantee any improvement of a nature such as to interfere with the rights hereby granted.

Grantor hereby surrenders and releases all rights of dower and homestead in the premises herein described, in so far as said rights of dower and homestead may in any way affect the purposes for which this grant is made as recited herein.

Grantee further agrees to relocate said pipe line should said line interfere with any future construction of buildings. Grantee further agrees to bury said pipe line with at least three feet of coverage.

This instrument shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

EXECUTED THIS 15 day of February, 1949

ATTESTED:
Paul McCormick
Secretary-Treasurer

PIERCE PACKING COMPANY
By: R. H. Pierce
Vice-President

INDIVIDUAL ACKNOWLEDGMENT FORM

(FOR USE WHEN LANDS ARE IN MONTANA)

STATE OF Montana
COUNTY OF Yellowstone

On this _____ day of _____, in the year 19____, before me, the undersigned, a Notary Public, personally appeared _____, known to me to be the person ____ whose name _____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires:

_____ Notary Public for the State of _____ residing at _____

Name of line Silver Tip - Billings 12" D/L
Pipe line number
A. F. E. Number 1328

188 Rods 12 Inch
Yellowstone County

448225
338

INDIVIDUAL ACKNOWLEDGMENT FORM

(FOR USE WHEN LANDS ARE IN MONTANA)

STATE OF .....
COUNTY OF .....

On this ..... day of ....., in the year 19....., before me, the undersigned, a Notary Public, personally appeared .....

known to me to be the person ..... whose name ..... subscribed to the within instrument and acknowledged to me that ..... executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires:

.....

..... Notary Public for the State of

..... residing

at .....

CORPORATION ACKNOWLEDGMENT FORM

(FOR USE WHEN LANDS ARE IN MONTANA)

STATE OF Montana
COUNTY OF Yellowstone

On this 15th. day of February, 19 49, before me U. S. Cowan, a Notary Public, personally appeared C. P. Pierce, known to me to be the Vice President of the corporation which executed the within instrument and acknowledged to me that such corporation executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires: NOTARY PUBLIC for the State of Montana
Residing at Billings, Montana
My Commission Expires January 18, 1952

U S Cowan
Notary Public for the State of

..... residing

at .....

448225
[illegible] Packing Company
To
[illegible] Oil Corp
[illegible] Company
Lt of Way Grant

ATE OF MONTANA }
unty of Yellowstone } ss.
hereby certify that the within
rument was filed in my office for
rd on this 17th
of March 1949
1/2 o'clock A. M. and in
r recorded in Book 338 of
eeds on Page
(Witness my hand and official seal
Earle Bragget
Earl Bragget
County Recorder
By [illegible]

Grantee
Box 1297 - Bilgs

OP-NO-226-A

RIGHT OF WAY GRANT

MONTANA (REV. 1-40)

#6224 338

586

66392

KNOW ALL MEN BY THESE PRESENTS:

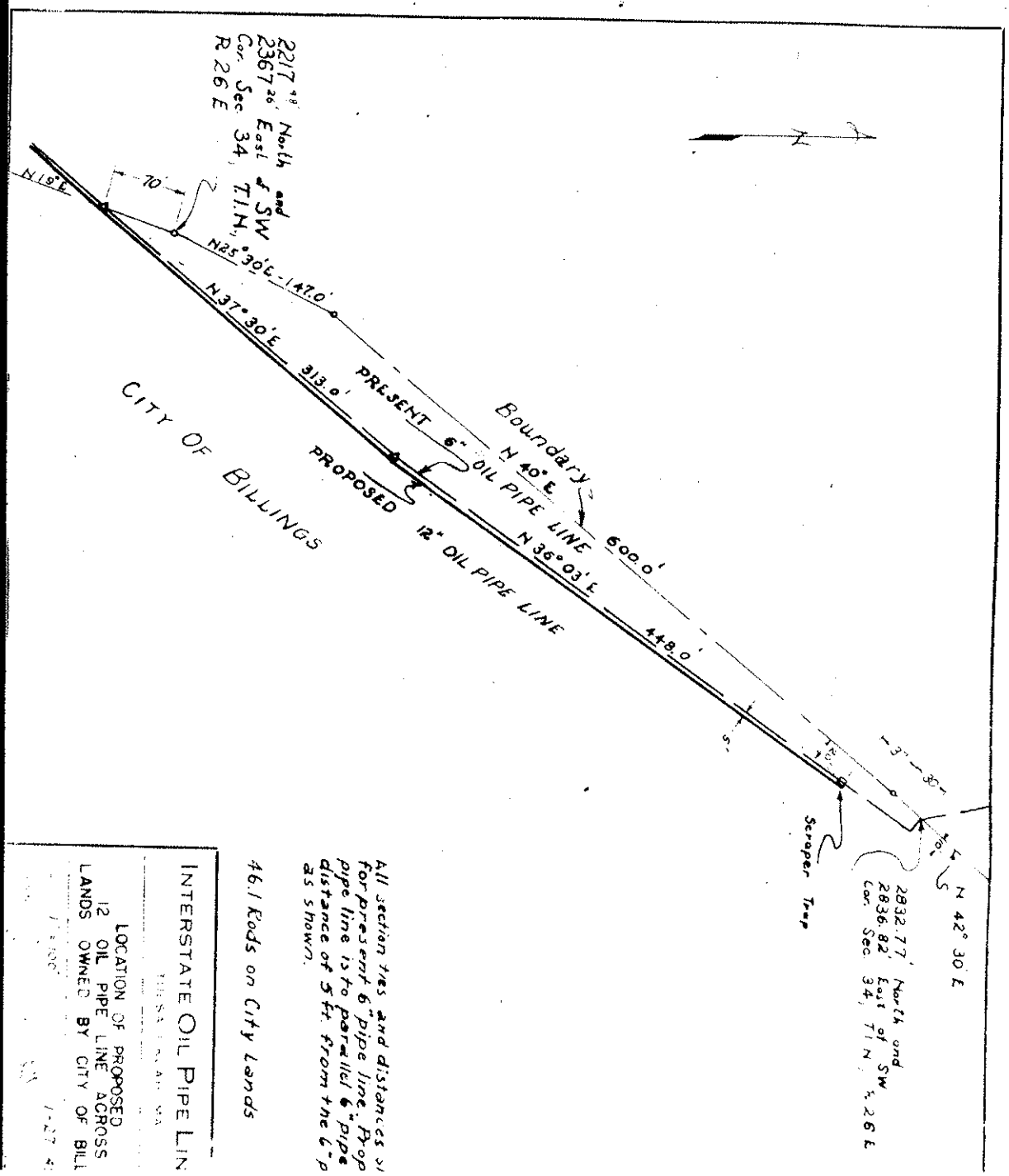
That the undersigned, hereinafter called "Grantor", whether one or more, for and in the consideration of

One and no/100 - ($ 1.00), Dollars

cash in hand paid, receipt of which is hereby acknowledged, does hereby grant and convey unto INTERSTATE OIL PIPE LINE COMPANY, a Delaware corporation, having its principal office at Tulsa, Oklahoma, hereinafter called "Grantee", its successors and assigns, a right of way and easement for the purpose of laying, maintaining, operating, patrolling (including aerial patrol), altering, repairing, renewing and removing in whole or in part a pipe line for the transportation of crude petroleum, its products and derivatives, whether liquid or gaseous, and/or mixtures thereof, together with the necessary fixtures, equipment and appurtenances, including telephone and telegraph lines, or either of them, with necessary poles, equipment, guy wires and anchors, over, through, upon, under and across the following described land situated in

Yellowstone County, State of Montana, to-wit:

As per the attached plat.



SW¼NE¼

NE¼SW¼

448224
338

586

Section 34, Township 1-N, Range 26-E

together with the right to clear the right of way and remove or trim trees and brush and remove other obstructions for a sufficient distance along both sides of said pipe line so as to prevent damage or interference with its efficient operation and patrol, and together with the right of ingress and egress to and from said right of way through and over said above described land for any and all purposes necessary to the exercise by Grantee of the rights herein granted.

Grantor covenants with Grantee that he is the lawful owner of the aforesaid lands, that he has the right and authority to make this grant, and that he will forever warrant and defend the title thereto against all claims whatsoever. Said warranty, however, shall be limited to a return of the consideration paid for this grant, including damages.

Grantee, its successors and assigns, may at any time lay additional lines of pipe upon payment of like consideration per rod for each additional line so laid and subject to the same conditions.

TO HAVE AND TO HOLD the said right of way or easement unto said INTERSTATE OIL PIPE LINE COMPANY, its successors and assigns.

The Grantee, by the acceptance hereof, agrees to bury said pipe lines through cultivated land so that they will not interfere with the ordinary cultivation thereof and also to pay any damage to crops, fences and timber which may arise from laying, maintaining, operating and removing said lines. Said damage, if not mutually agreed upon, shall be ascertained and determined by three disinterested persons, one to be appointed by Grantor, one by Grantee, its successors and assigns, and the third by the two persons aforesaid; and the award of such three arbitrators or any two of them, in writing, shall be final and conclusive. The cost of such arbitration shall be borne equally by Grantor and Grantee.

The undersigned Grantor reserves the right to the full use and enjoyment of said premises except as the same may be necessary for the purposes herein granted, provided that said Grantor shall not erect over any line or lines of Grantee any improvement of a nature such as to interfere with the rights hereby granted.

Grantor hereby surrenders and releases all rights of dower and homestead in the premises herein described, in so far as said rights of dower and homestead may in any way affect the purposes for which this grant is made as recited herein.

This instrument shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

EXECUTED THIS 3rd day of Feb., 1949

CITY OF BILLINGS

By: H. E. Biddinger
Mayor

Attest: [illegible]
City Clerk

INDIVIDUAL ACKNOWLEDGMENT FORM

(FOR USE WHEN LANDS ARE IN MONTANA)

STATE OF Montana
COUNTY OF Yellowstone

On this 3rd day of February, in the year 19 49, before me, the undersigned, a Notary Public, personally appeared H. E. Biddinger, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires:
August 26th, 1951

Velma R. [illegible]
Notary Public for the State of Montana residing at Billings, Montana

Name of line Silvertip-Blgs. 12" D/L
Pipe line number
A. F. E. Number Req. #92 AFE #1328

46.1 Rods 12" Inch
Yellowstone County

N 42 30 7

448224
338

INDIVIDUAL ACKNOWLEDGMENT FORM

(FOR USE WHEN LANDS ARE IN MONTANA)

STATE OF _____
COUNTY OF _____

On this _____ day of _____, in the year 19____, before me, the undersigned, a Notary Public, personally appeared _____ known to me to be the person ____ whose name _____ subscribed to the within instrument and acknowledged to me that _____ executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires: _____

_____ Notary Public for the State of _____ residing at _____

CORPORATION ACKNOWLEDGMENT FORM

(FOR USE WHEN LANDS ARE IN MONTANA)

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 19____, before me _____, a Notary Public, personally appeared _____, known to me to be the _____ of the corporation which executed the within instrument and acknowledged to me that such corporation executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires: _____

_____ Notary Public for the State of _____ residing at _____

29

448224

City of Billings
To
Interstate Oil Pipe
Line Company

Right of Way Grant

STATE OF MONTANA }
County of Yellowstone } ss.
I hereby certify that the within instrument was filed in my office for record on this 1st day of March 1947 at 9:10 o'clock A. M. and is duly recorded in Book 338 of Deeds on Page _____
Witness my hand and official seal
Earle Fraught
County Recorder
By Carl P. Gray
Deputy

2.35

Grantee
Box 1297 - Blgs

ASSIGNMENT

BOOK 396 PAGE 433

KNOW ALL MEN BY THESE PRESENTS:

For a good and valuable consideration, the receipt of which is hereby acknowledged, INTERSTATE OIL PIPE LINE COMPANY, a Delaware Corporation, does hereby bargain, sell, assign, set over and convey unto FRED GOODSTEIN, OF CASPER, WYOMING, an individual, his heirs, executors, administrators, successors and assigns, all of the right, title and interest of said INTERSTATE OIL PIPE LINE COMPANY, to and under right of way grants, easements, agreements and contracts covering lands located in the County of Yellowstone and State of Montana, a schedule of which is hereto attached, made a part hereof, and marked "Exhibit A."

TO HAVE AND TO HOLD the same unto said FRED GOODSTEIN, his heirs, executors, administrators, successors and assigns forever, subject, nevertheless, to the terms, conditions and provisions of said right of way grants, agreements and contracts respectively.

IN WITNESS WHEREOF, said INTERSTATE OIL PIPE LINE COMPANY has caused these presents to be executed on its behalf by its duly authorized officers, and its corporate seal to be hereunto affixed, this 20 day of February, 1962.

INTERSTATE OIL PIPE LINE COMPANY

By [signature]
Vice President

ATTEST:

[signature]
Secretary

* * * * * * * *

STATE OF OKLAHOMA }
COUNTY OF TULSA } SS:

On this 20 day of February, 1962, before me [illegible], a Notary Public personally appeared [illegible] to me to be the Vice President of the corporation which executed the within instrument and acknowledged to me that such corporation executed the same.

Witness my hand and notarial seal the date last aforesaid.

My Commission Expires:

My Commission Expires May 28, 1963

Notary Public for the State of [illegible]
residing at [illegible]

477904

BOOK 396 PAGE 434

5

EXHIBIT "A"

SCHEDULE OF RIGHTS OF WAY IN YELLOWSTONE COUNTY, MONTANA

DATE	NAME	DESCRIPTION	SEC.	TWP.	RANGE	RECORDED BOOK	RECORDED PAGE
Apr. 27, 19[illegible]	O.L. & Christine Avery	SW SE	10	2-6	2[illegible]E	[illegible]	[illegible]
Apr. [illegible], 19[illegible]	Anna F. Smith	N½ NW	15	2-6	2[illegible]E	[illegible]	[illegible]
Apr. 8, 19[illegible]	Florence A. Thornton	NE	16	2-6	2[illegible]E	[illegible]	[illegible]
May [illegible], 19[illegible]	John & Amanda Allwin	SW NE West of Railroad	16	2-6	2[illegible]E	[illegible]	[illegible]
Apr. [illegible], 19[illegible]	Nellie E. Rife	W½ SW SW SW	10	1-6	2[illegible]E	[illegible]	[illegible]
Apr. [illegible], 19[illegible]	John W. & Elna Mae Carlson	SW SW SW & NE SW SW	10	1-6	2[illegible]E	[illegible]	[illegible]
Apr. 8, 19[illegible]	Josephine Forquer	SW NW SW	10	1-6	2[illegible]E	[illegible]	[illegible]
Apr. 8, 19[illegible]	Virgil & Margaret Fuller	NW SW NE SW	10	1-6	2[illegible]E	[illegible]	[illegible]
Apr. [illegible], 19[illegible]	Bernard & Mary Vande Veegate	NE NE SW	10	1-6	2[illegible]E	[illegible]	[illegible]
Apr. 18, 19[illegible]	James S. & Lilliuokalani Sanders	NW NE SW	10	1-6	2[illegible]E	[illegible]	[illegible]
[illegible], 19[illegible]	Wallis & Lillian Heidekoper	Lot 1[illegible] & S½ Lots 1 & 2	11	1-6	2[illegible]E	[illegible]	[illegible]
Apr. 8, 19[illegible]	[illegible] Wilhelm	a 2 acre tract of land in the NW corner of the NW¼ NW¼ NW	11	1-6	2[illegible]E	[illegible]	[illegible]
Apr. [illegible], 19[illegible]	Gladys Winter Yegen & Christian Yegen, Jr.	SW SW & NW SW & NE SW	[illegible]	1-6	2[illegible]E	[illegible]	[illegible]
[illegible], 19[illegible]	Eva Mae Prubeck individually and as Administratrix of the Estate of Robert Prubeck, deceased.	SE NW & Lots 1 & 2	[illegible]	1-6	2[illegible]E	[illegible]	[illegible]
[illegible], 19[illegible]	City of Billings		[illegible]	1-6	2[illegible]E		
[illegible], 19[illegible]	Pierce Packing Company	SW SW & NE SW & SE SW	[illegible]	1-6	[illegible]		

470677

5-11-5

RELEASE AND RELINQUISHMENT OF RIGHT OF WAY

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS THE UNDERSIGNED FRED GOODSTEIN, OF CASPER, NATRONA COUNTY, WYOMING, ACQUIRED FROM INTERSTATE OIL PIPE LINE COMPANY, A DELAWARE CORPORATION, ALL OF THE RIGHT, TITLE AND INTEREST OF SAID CORPORATION TO AND UNDER CERTAIN RIGHT OF WAY GRANTS, EASEMENTS, AGREEMENTS AND CONTRACTS COVERING LANDS LOCATED IN YELLOWSTONE COUNTY, MONTANA, WHICH LANDS ARE IDENTIFIED IN THE FOLLOWING SCHEDULE BY THE NAME OF THE GRANTOR, THE DESCRIPTION OF THE SUBDIVISION AFFECTED AND THE BOOK AND PAGE IN YELLOWSTONE COUNTY, MONTANA RECORDS WHERE THE GRANTS THEREOF APPEAR OF RECORD, TO WIT:

NAME	DESCRIPTION	SEC.	TWP.	RANGE	RECORDED BOOK	RECORDED PAGE
G. L. & CHRISTINE AVERY	SW SE	10	2-S	24E	265	[illegible]
ANNA F. SMITH	N½NW	15	2-S	24E	265	[illegible]
FLORENCE A. THORNTON	NE	15	2-S	24E	265	[illegible]
JOHN & AMANDA ALWIN	SW NE WEST OF RAILROAD	15	2-S	24E	265	[illegible]
[illegible] E. RICE	W½SW SW SW	10	1-S	26E	265	[illegible]
ALBERT W. & ELNA MAE CARLSON	SW SW SW & NE SW SW	10	1-S	26E	[illegible]	[illegible]
JOSEPHINE FORBUER	SW NW SW	10	1-S	26E	[illegible]	[illegible]
[illegible] & MARGARET FULLER	NW SW NE SW	10	1-S	26E	[illegible]	[illegible]
BERNARD & MARY VANDE VEEGATE	NE NE SW	10	1-S	26E	[illegible]	[illegible]
JAMES S. & LILIUOKALANI SANDERS	NW NE SW	10	1-S	26E	[illegible]	
WALLIS & LILLIAN HUIDEKOPER	LOT 14 & S½LOTS 1 & 2	11	1-S	26E	[illegible]	[illegible]
HILDA MILHEIM	A 2 ACRE TRACT OF LAND IN THE NW CORNER OF THE NW¼NW¼NW	[illegible]	1-S	[illegible]	[illegible]	[illegible]
GLADYS WINTER YEGEN & CHRISTIAN YEGEN, JR.	SW SW & NW SW & NE SW	2	1-S	26E	[illegible]	[illegible]
EVA MAE BRUBECK, INDIVIDUALLY AND AS ADMINISTRATRIX OF THE ESTATE OF ROBERT BRUBECK, DECEASED	SE NW & LOTS 1 & 2	2	1-S	[illegible]	[illegible]	[illegible]
PIERCE PACKING COMPANY	SW SW & NE SW & SE SW	24	1-N	26E	[illegible]	[illegible]

906774

AND

WHEREAS THE SAID FRED GOODSTEIN HAS REMOVED AND RECLAIMED THE [illegible] AND OTHER MATERIALS FORMERLY USED IN CONNECTION WITH SAID RIGHT OF WAY AND NOW DESIRES TO RELEASE AND RECONVEY TO THE PRESENT OWNERS OF RECORD ANY AND ALL RIGHTS ACQUIRED BY THE UNDERSIGNED FRED GOODSTEIN IN AND TO SAID PROPERTY;

NOW, THEREFORE, IN CONSIDERATION OF THE PREMISES, SAID FRED GOODSTEIN HAS RELEASED AND RELINQUISHED AND DOES HEREBY RELEASE AND RELINQUISH TO THE RESPECTIVE OWNERS OF RECORD AND OR OTHER PARTIES ENTITLED THERETO, [illegible] RIGHT OF WAY GRANTS, EASEMENTS, AGREEMENTS AND [illegible] OVER AND UPON THE ABOVE DESCRIBED LANDS OR ANY PART THEREOF ACQUIRED BY THE [illegible] FROM [illegible] PIPELINE COMPANY DATED FEBRUARY [illegible], TO HAVE AND TO HOLD [illegible] TO SAID OWNERS, THEIR HEIRS, SUCCESSORS AND ASSIGNS FOREVER SO THAT NEITHER [illegible] FRED GOODSTEIN NOR ANY PERSON CLAIMING BY, THROUGH OR UNDER HIM SHALL [illegible] OR ASSERT ANY RIGHT WHATSOEVER IN AND TO SAID LANDS BY [illegible] RIGHT OF WAY GRANTS, EASEMENTS AND AGREEMENTS ABOVE MENTIONED.

[illegible] SIGNED AT CASPER, WYOMING, [illegible]

M P 145-1M-3-46

RIGHT OF WAY EASEMENT

Pierce Packing Company, a corporation, of Billings, in consideration of One and no/100 - - - ($1.00) Dollars, and other good and valuable consideration, in hand paid, the receipt of which is hereby acknowledged, grants, conveys, and warrants to THE MONTANA POWER COMPANY, a corporation, whose postoffice address is Butte, Montana, the right to construct, maintain, operate and remove an electric transmission system and telephone system as now surveyed and located over, along and across that certain real property, located in Yellowstone County, Montana, and particularly described as follows, to-wit:

Lots three (3) and four (4), located in SW¼ Sec. 34, Twp. 1 North, Range 26 E., M.P.M.

IN WITNESS WHEREOF, the Corporation grantor has caused these presents to be signed in its name by its Vice President, and attested by its Secretary, and its Corporate Seal affixed, on this 20th day of June, A. D., 19 51.

ATTEST: Jane O. McCormick Secretary.

PIERCE PACKING COMPANY, By [signature] Its Vice President.

STATE OF Montana
County of Yellowstone } ss.

On this 20th day of June, in the year 19 51, before me, R. F. Cooke, Notary Public in and for the State aforesaid, personally appeared known to me to be the Vice President & Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal on the day and year in this certificate first above written.

R. F. Cooke

Notary Public for the State of Montana.
Residing at Billings, Montana.
My Commission Expires Jan. 2, 1954.

185909
RIGHT OF WAY EASEMENT
Pierce Pkg. Co.
TO
THE MONTANA POWER CO.

Transmission Line

STATE OF MONTANA
County of Yellowstone } ss.

Filed for Record at Request of THE MONTANA POWER CO.

On the 4 day of June, 1952 at 0 minutes past 11 A. M., and recorded in Volume 411 of Deeds, Pages inclusive Records of Yellowstone County.

Carl B. Knight County Recorder.
By D. W. Nicholl Deputy.
30

Indexed
Recorded
Compared
Parcel

X 397

2 blank 68899 6165-A

529818
49m

R/W No. MT-1
Rods

RIGHT OF WAY EASEMENT

KNOW ALL MEN BY THESE PRESENTS: That PIERCE PACKING COMPANY, a Montana corporation with an office at Billings, Montana, in consideration of the sum of $100.00 and other valuable considerations to it in hand this day paid by OIL BASIN PIPELINE COMPANY, a Delaware corporation with an office at 120 South LaSalle Street, Chicago, Illinois, Grantee herein, the receipt whereof is hereby acknowledged, does hereby warrant and convey unto said Grantee, its successors and assigns, the right to construct, maintain, inspect, operate, protect, repair, replace, change the size of, or remove a pipe line for the transportation of oil, gas, and the products thereof, over and through the following described lands, of which the Pierce Packing Company, Grantor herein, warrants that it is the owner in fee simple, situated in Yellowstone County, Montana, to-wit:

Part of SW¼ (which includes Lots 3 & 4) of Sec. 34, Twp. 1 N., Rge. 26 E., M.M., in Yellowstone County, Montana, described as follows:

Beginning at the southwest corner of said Sec. 34, 1N-26E, thence running East on the south line of said section to the intersection with the west line of a tract of land or easement of the Montana Power Company, as shown by deed recorded in Book 29 of Deeds, page 214, of the records of Yellowstone County, Montana, thence following courses as shown in said Deed aforesaid mentioned in a northeasterly direction to intersection with the east and west center line of said section; thence running west on the east and west center line to intersection with south line of right of way of Northern Pacific Railway Company; thence in a southwesterly direction along the south line of said right of way to intersection of said right of way with west line of said Section 34; thence south on west line of Section 34 to place of beginning.

Excepting therefrom the following three tracts of land, to-wit:

First Exception: Beginning at a point where the south line of the right of way of Northern Pacific Railway Company intersects with the west line of Section 34, 1N-26E, M.P.M., thence running south on said west section line a distance of 678.48 feet; thence south 74°15' east a distance of 133.32 feet; thence south 85°11' east a distance of 133.32 feet; thence north 32°26' east a distance of 66.66 feet; thence north 35°42' east a distance of 265.32 feet; thence north 32°43' east a distance of 794.64 feet; thence north 29°24' west a distance of 340.56 feet,

more or less to the intersection of the south line of the right of way of the Northern Pacific Railway Company; thence south 54°25' west on said south line of the right of way a distance of 882.44 feet to place of beginning.

Second Exception: Beginning at a point where the east and west center line of Section 34, 1N-26E, intersects with the south line of the right of way of the Northern Pacific Railway Company; thence south 56°00' west along said south line of right of way a distance of 489 feet; thence south 76°00' east a distance of 385. feet; thence north 47°00' east a distance of 600 feet; thence due west 400 feet to place of beginning.

Third Exception: Beginning at a point 678.48 feet south of the point where the south line of the right of way of the Northern Pacific Railway Company intersects with the west line of Section 34, 1N-26E, M.P.M., thence running south 74°15' east a distance of 133.32 feet; thence east of south on a straight line a distance of 1100 feet, more or less, to the northeast corner of the NW¼ of Section 2, 1S-26E, M.P.M.; thence west on the north line of the NW¼ of Sec. 2, 1S-26E, 628 feet more or less to the southwest corner of Sec. 34, 1N-26E; thence north on the west line of Sec. 34, 1N-26E, a distance of 1050 feet, more or less, to the place of beginning.

together with the right of ingress and egress to and from said pipe line for the purposes aforesaid.

It is understood and agreed that said pipe line shall be constructed and installed and maintained over and across said property along a line parallel to and not more than 16 feet distant in a southerly direction from the pipe line of Interstate Pipe Line Company over and across said land.

The pipe line constructed by said Grantee across the lands above described shall, at the time of the construction thereof, be buried to such depth as will not interfere with the use of the surface of said land.

Grantor shall have the right to fully use and enjoy the above described premises, except as to the right hereby granted, and it is understood and agreed between the parties, and this conveyance is made upon the condition, that if Grantor shall at any time in the future desire to erect any building or structure of any kind

over the route of said pipe line, or shall desire to use said premises for any purpose not consistent with the maintenance of said pipe line, Grantee shall at its own expense after one hundred twenty days notice in writing remove said pipe line to some other location upon the premises above described, which shall be furnished free of cost by Grantor for that use.

If a pipe line is installed of greater diameter than eight inches, Grantee shall pay the sum of $3000.00 to Grantor as additional consideration for this easement. Said payment shall be made prior to the installation of said larger than eight inch pipe line.

Grantee agrees to pay Grantor any damages which may arise to said premises or to any buildings or improvements located thereon, by reason of such construction, installation, maintenance or other exercise of the rights herein granted, said damages, if not mutually agreed upon, to be ascertained and determined by three disinterested persons, one thereof to be appointed by Grantor, one by Grantee, and the third by the two so appointed, and the award of such persons shall be final and conclusive.

This easement shall terminate if its use for pipe line purposes is abandoned by Grantee for period of five years.

The terms, conditions and provisions of this contract shall extend to and be binding upon the successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the Grantor has caused its corporate name to be hereunto subscribed by its officers thereunto duly authorized, this 30 day of August, 1954.

PIERCE PACKING COMPANY

By [signature]
Vice President

Attest:
[signature]
Secretary

DOCUMENTARY
55 CENTS

STATE OF MONTANA }
County of Yellowstone } ss.

On this 30 day of August, 1954, before me, the undersigned Notary Public, personally appeared C. P. Pierce known to me to be the Vice President of PIERCE PACKING COMPANY, the corporation which executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate written.

Sidney P. Kurth
Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires April 8, 1957

529913

Pierce Packing Co.
To
Oil Basin Pipe Line Co.
R/W Easement.

STATE OF MONTANA } ss.
County of Yellowstone }
I hereby certify that the within instrument was filed in my office for record on this 13 day of Sept 1954 at 9:05 o'clock A. M. and is duly recorded in Book 497 of Deeds on Page
Witness my hand and official seal
Clayton Buck
County Recorder
By Clayton Buck Deputy
$2.65
Return to
P. C. McCormick

530 349
499

RIGHT OF WAY CONTRACT OPTION

8 KNOW ALL MEN BY THESE PRESENTS: That the CITY OF BILLINGS, MONTANA, a municipal corporation of Yellowstone County, Montana, hereinafter referred to as "Grantor", for and in consideration of the sum of One Dollar and other valuable consideration to it in hand this day paid by OIL BASIN PIPELINE COMPANY, A Delaware corporation with an office at 120 South LaSalle Street, Chicago, Illinois, hereinafter referred to "Grantee", the receipt whereof is hereby acknowledged, does hereby warrant and convey unto the Grantee, its successors and assigns, the right to construct, maintain, inspect, operate, protect, repair, replace, change the size of, or remove a pipeline for the transportation of oil, gas and the products thereof, along a route indicated on the plat hereunto annexed and hereof made a part, over and through the following described tract of land situated in Yellowstone County, Montana, to-wit:

> Part of Lots 2, 3 and 4 of Section 34, T1N R 26E, contained within the following:
>
> Beginning at an iron pin set in the ground south 34° 50' East 2270 feet from the southwest corner of said Sec. 34, and embracing all that portion of land lying between the following line and the Yellowstone River: thence north 17° 25' west 224 feet; thence north 2° 30' west 500 feet; thence north 0° 30' east 340 feet; thence north 7° 15' east 200 feet; thence north 22° 30' east 100 feet; thence north 32° 15' east 400 feet; thence north 24° east 375 feet; thence north 16° east 289 feet; thence north 8° 30' east 400 feet; thence north 22° 45' east 508 feet; thence north 25° 15' east 669 feet; thence north 19° east 327 feet; thence north 25° 30' east 147 feet; thence north 40° east 600 feet; thence north 42° 30' east 810 feet to a point on the meander line of the Government Survey; thence due east about 400 feet to the main channel of the Yellowstone River; thence following the said main channel of the Yellowstone River upstream about 5700 feet to a point due east of the place of beginning thence due west to the place of beginning.

Together with the right of ingress and egress to and from said pipeline for the purposes aforesaid.

67 402
464-a

Grantor to have the right to fully use and enjoy the above described premises, except as to the rights herein granted, and Grantor agrees not to build, create or construct, or permit to be built, created or constructed, any obstruction, building, engineering works or other structure over said pipeline.

Grantee hereby agrees to pay to Grantor any damage to said Grantor from the exercise of the rights herein granted, said damages, if not mutually agreed upon, to be ascertained and determined by three disinterested persons, one thereof to be appointed by the Grantor, one by the Grantee, and the third by the two so appointed, and the written award of such three persons shall be final and conclusive.

The pipe line to be constructed by said Grantee across said lands shall, at the time of the construction thereof, be buried to a depth of not less than thirty inches from the bottom of said pipe line.

Grantee agrees to protect and save harmless the Grantor from any and every claim of damages which may be made by any third person, which shall arise out of the construction, maintenance, operation, repair or replacement of said pipe line.

The terms, conditions and provisions of this contract shall extend to and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the Grantor has caused this instrument to be executed by its officials hereunto duly authorized, this 14th day of September, 1954.

THE CITY OF BILLINGS

By Earle Knight
Its Mayor

ATTEST:

Wm. Fraser
Its City Clerk

530347
497

STATE OF MONTANA, }
County of Yellowstone. } ss.

On this 14th day of September, 1954, before the undersigned Notary Public, personally appeared EARLE KNIGHT, known to me to be the Mayor of the City of Billings, the municipal corporation which executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate written.

Notary Public for the State of Montana
Residing at Billings, Montana.
My commission expires _____

(Seal)

NOTARY PUBLIC for the State of Montana
Residing at Billings, Montana
My Commission Expires August 27, 1956

3

530349

City of Billings
To.
Yellowstone Basin Pipe Line Co.
R/W Easement Option

STATE OF MONTANA }
County of Yellowstone }
I hereby certify that the within instrument was filed in my office for record on this 22 day of Sept. 1954 at 9:36 o'clock A.M. and duly recorded in Book 497 of Deeds on Page _____
Witness my hand and official seal
Cora Fisher
County Recorder
By Clayton Walters
Fee $2.00
R. O. M. Crawford

477905

RELEASE AND RELINQUISHMENT OF RIGHT OF WAY

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS THE UNDERSIGNED FRED GOODSTEIN, OF CASPER, NATRONA COUNTY, WYOMING, ACQUIRED FROM INTERSTATE OIL PIPE LINE COMPANY, A DELAWARE CORPORATION, ALL OF THE RIGHT, TITLE AND INTEREST OF SAID CORPORATION TO AND UNDER CERTAIN RIGHT OF WAY GRANTS, EASEMENTS, AGREEMENTS AND CONTRACTS COVERING LANDS LOCATED IN YELLOWSTONE COUNTY, MONTANA, WHICH LANDS ARE IDENTIFIED IN THE FOLLOWING SCHEDULE BY THE NAME OF THE GRANTOR, THE DESCRIPTION OF THE SUBDIVISION AFFECTED AND THE BOOK AND PAGE IN YELLOWSTONE COUNTY, MONTANA RECORDS WHERE THE GRANTS THEREOF APPEAR OF RECORD, TO-WIT:

NAME	DESCRIPTION	SEC.	TWP.	RANGE	RECORDED: BOOK	PAGE
G. L. & CHRISTINE AVERY	SW SE	10	2-S	24E	268	486
ANNA F. SMITH	N½NW	15	2-S	24E	268	488
FLORENCE A THORNTON	NE	16	2-S	24E	268	287
JOHN & AMANDA ALLWIN	SW NE WEST OF RAILROAD	16	2-S	24E	268	489
NELLIE E. RIFE	W½SW SW SW	10	1-S	26E	268	472
JOHN W. & ELNA MAE CARLSON	SW SW SW & NE SW SW	10	1-S	26E	268	473
JOSEPHINE FORQUER	SW NW SW	10	1-S	26E	268	475
VIRGIL & MARGARET FULLER	NW SW NE SW	10	1-S	26E	268	476
BERNARD & MARY VANDE VEEGATE	NE NE SW	10	1-S	26E	268	478
JAMES S. & LILIUOKALANI SANDERS	NW NE SW	10	1-S	26E	319	57
WALLIS & LILIAN HUIDEKOPER	LOT 1 & S½LOTS 1 & 2	11	1-S	26E	268	479
HILDA MILHEIM	A 2 ACRE TRACT OF LAND IN THE NW CORNER OF THE NW¼NW¼NW	11	1-S	26E	268	480
GLADYS WINTER YEGEN & CHRISTIAN YEGEN, JR.	SW SW & NW SW & NE SW	2	1-S	26E	268	481
EVA MAE BRUBECK, INDIVIDUALLY AND AS ADMINISTRATRIX OF THE ESTATE OF ROBERT BRUBECK, DECEASED	SE NW & LOTS 1 & 2	2	1-S	26E	268	482
PIERCE PACKING COMPANY	SW SW & NE SW & SE SW	34	1-N	26E	268	483

AND

WHEREAS THE SAID FRED GOODSTEIN HAS REMOVED AND RECLAIMED THE PIPE AND OTHER MATERIALS FORMERLY USED IN CONNECTION WITH SAID RIGHT OF WAY AND NOW DESIRES TO RELEASE AND RECONVEY TO THE PRESENT OWNERS OF RECORD ANY AND ALL RIGHTS ACQUIRED BY THE UNDERSIGNED FRED GOODSTEIN IN AND TO SAID PROPERTY,

NOW, THEREFORE, IN CONSIDERATION OF THE PREMISES, SAID FRED GOODSTEIN HAS RELEASED AND RELINQUISHED AND DOES HEREBY RELEASE AND RELINQUISH TO THE RESPECTIVE OWNERS OF RECORD AND/OR OTHER PARTIES ENTITLED THERETO, ALL OF HIS RIGHT, TITLE AND INTEREST IN AND TO ALL RIGHT OF WAY GRANTS, EASEMENTS, AGREEMENTS AND CONTRACTS COVERING THE ABOVE DESCRIBED LANDS OR ANY PART THEREOF ACQUIRED BY THE ASSIGNMENT FROM INTERSTATE OIL PIPE LINE COMPANY DATED FEBRUARY 10, 1950, TO HAVE AND TO HOLD THE SAME TO SAID OWNERS, THEIR HEIRS, SUCCESSORS AND ASSIGNS FOREVER SO THAT NEITHER THE SAID FRED GOODSTEIN NOR ANY PERSON CLAIMING BY, THROUGH OR UNDER HIM SHALL HEREAFTER CLAIM OR ASSERT ANY RIGHT WHATSOEVER IN AND TO SAID LANDS BY VIRTUE OF THE RIGHT OF WAY CONTRACTS, GRANTS, EASEMENTS AND AGREEMENTS ABOVE MENTIONED.

DATED AND SIGNED AT CASPER, WYOMING, THIS 16th DAY OF MAY, 1951

M. D. Gillespie
WITNESS

Fred Goodstein
FRED GOODSTEIN

STATE OF WYOMING)
: SS
COUNTY OF NATRONA)

ON THIS 16th DAY OF MAY, 1951, BEFORE ME PERSONALLY APPEARED FRED GOODSTEIN TO ME KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE ACT AND DEED.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THE DAY AND YEAR FIRST IN THIS CERTIFICATE WRITTEN.

Dorothy A. Roark
NOTARY PUBLIC

MY COMMISSION EXPIRES:
My Commission expires November 6, 1951

177905

Fred Goodstein

D. E. Mason

Robert Alley

STATE OF MONTANA }
County of Yellowstone }
I hereby certify that the within instrument was filed in my office for record on this 17 day of May 1957 at 10 o'clock A. M. and is duly recorded in Book 396 Page 435 Records of Natrona County, Wyoming. Witness my hand and official seal.
Cecil Bergman
County Recorder
By Thelma Bullock Deputy

Box 1699 Casper, Wyo.

lighter

BOOK 712 PAGE 168

RIGHT OF WAY AGREEMENT
(STANDARD FORM)

FOR AND IN CONSIDERATION of the sum of Two Hundred Twenty and 00/100 Dollars ($220.00), in hand paid, the receipt of which is hereby acknowledged City of Billings, Montana, hereinafter referred to as Grantor, does hereby grant unto Continental Pipe Line Company, a Delaware corporation having offices in Ponca City, Oklahoma, hereinafter referred to as Grantee, its successors and assigns, the right to lay, maintain, inspect, alter, repair, operate, protect, remove and relay a pipe line or pipe lines, for the transportation of oil and gas and products and by-products thereof, water and other substances, and such drips, valves, fittings, meters and other equipment and appurtenances as may be necessary or convenient for such operations and, if necessary, to construct, maintain, operate, remove and replace communication and control facilities upon, over, through and under the following described land situated in Yellowstone County, State of Montana, to wit:

That portion of Government Lot 1, lying within the following described tract of land.
That portion of Lots 1 and 4 of Section 3, Township 1 South, Range 26 East, and of Lots 2, 3, 4, of Section 34, in Township 1 North of Range 26 East, Yellowstone County, Montana, described as follows, to-wit:
Beginning at an iron pin set in the ground south 34° 50' East, 2270 feet from the southwest corner of said Section 34, and embracing all that portion of land lying between the following line and the Yellowstone River; thence North 17° 25' West 234 feet; thence North 2° 30' West 500 feet; thence North 6° 30' East 340 feet; thence North 7° 15' East 200 feet; thence North 22° 30' East, 100 feet; thence North 32° 15' East, 400 feet; thence North 24° East, 275 feet; thence North 15° East 200 feet; thence North 8° 30' east, 400 feet; thence North 22° 45' East, 500 feet; thence North 25° 15' East, 440 feet, thence North 19° East, 327 feet; thence North 25° 30' East, 147 feet, thence North 40° East 600 feet; thence North 42° 30' East, 810 feet to a point on the meander line of the Government Survey; thence due East about 400 feet to the main channel of the Yellowstone River; thence following the said main channel of the Yellowstone River upstream about 5700 feet to a point due East of the place of beginning; thence due West to the place of beginning, excepting therefrom a portion of the following described tract of land:
That part of Government Lot 2 which is within the boundaries of the following described land situated in Section 34, Township 1 North, Range 26 East, of the Principal Meridian, Yellowstone County, Montana:
Beginning at a point on the East and West center line of Section 34, Township 1 North, Range 26 East, which point is due East along said East and West center line a distance of Three Hundred Forty (340) feet from the intersection of the Southeastern boundary of the Northern Pacific Company right of way and the East and West center line of said section 34;
thence North 56 degrees East a distance of 550 feet;
thence North 24 degrees 10 minutes East a distance of 455.5....to the Southeastern boundary line of the Northern Pacific Company right of way;
thence Northeasterly along the Southeastern boundary of said Northern Pacific Company right of way to a point which point is North 26 degrees 57 minutes west a distance of 905.2 feet from a point on the East and West center line of section 34 which is due East along said East and West center line of section 34 2903.9 feet from the West quarter corner of section 34;
thence South 26 degrees 57 minutes East a distance of 905.2 feet to the point on the East and West center line of said section 34 which point is due East along said East and West center line of said section 34; a distance of 2903.9 feet from the West quarter corner of section 34;
thence due West along said East and West center line of section 34 to the point of beginning.

together with the rights of ingress and egress to and from said line or lines, or any of the [illegible] aforesaid, hereby releasing and waiving for the purpose of this grant all rights under and by virtue of the dower, homestead and homestead exemption laws, if any, of said state.

Grantor shall have the right to fully use and enjoy the said premises except [illegible] sary for the purposes herein granted to the said Grantee; and Grantee hereby agrees to pay [illegible] may arise to crops, pasturage, fences or buildings of said Grantor from the exercise of the rights granted. Grantee shall have the right to change the size of its pipes, the [illegible] change to be paid to the said Grantee. Grantor agrees not to build, create or construct or [illegible] roads or other structures over said pipe line or lines without prior permit from Grantee [illegible]

Any pipe line or lines constructed by Grantee across lands under cultivation [illegible] structure thereof, be buried to such depth as will not interfere with such cultivation, except [illegible] Grantee any such line may be placed above any stream, ravine, ditch, or other [illegible]

Should more than one line be laid under this grant at one time, an additional [illegible] on the same basis per lineal rod as the consideration hereinabove recited shall be [illegible] after the first line.

This Right of Way Agreement may be assigned by Grantee, its successors and [illegible] part, vesting in any other person, firm or corporation the ownership of one or more pipe [illegible] interests therein and or communication lines, with full rights of ingress and egress for the [illegible] operation, replacement and removal thereof.

darker

BOOK 712 PAGE 106

RIGHT OF WAY AGREEMENT
(STANDARD FORM)

FOR AND IN CONSIDERATION of the sum of: Two Hundred Twenty and NO/100 Dollars ($220.00), in hand paid, the receipt of which is hereby acknowledged City of Billings, Montana, hereinafter referred to as Grantor, does hereby grant unto Continental Pipe Line Company, a Delaware corporation having offices in Ponca City, Oklahoma, hereinafter referred to as Grantee, its successors and assigns, the right to lay, maintain, inspect, alter, repair, operate, protect, remove and relay a pipe line or pipe lines, for the transportation of oil and gas and products and by-products thereof, water and other substances, and such drips, valves, fittings, meters and other equipment and appurtenances as may be necessary or convenient for such operations and, if necessary, to construct, maintain, operate, remove and replace communication and control facilities upon, over, through and under the following described land situated in Yellowstone County, State of Montana, to wit:

That portion of Government Lot 1, lying within the following described tract of land.

That portion of Lots 1 and 4 of Section 3, Township 2 South, Range 26 East, and of Lots 2, 3, 4, of Section 34, in Township 1 North of Range 26 East, Yellowstone County, Montana, described as follows, to-wit: Beginning at an iron pin set in the ground south 24° 56' East, 2270 feet from the southwest corner of said Section 34, and embracing all that portion of land lying between the following line and the Yellowstone River; thence North 17° 25' West 294 feet; thence North 2° 30' West 360 feet; thence North 6° 26' East 340 feet; thence North 7° 15' East 306 feet; thence North 22° 36' East, 100 feet; thence North 32° 18' East, 400 feet; thence North 34° East, 375 feet; thence North 18° East 300 feet; thence North 8° 30' east, 400 feet; thence North 22° 45' East, 300 feet; thence North 15° East, 400 feet, thence North 19° East, 300 feet; thence North 25° 15' East, 400 feet, thence North 40° East 187 feet; thence North 26° 30' East, 147 feet, thence North 42° 30' East, 310 feet to a point on the meander line of the Government Survey; thence due East about 400 feet to the main channel of the Yellowstone River; thence following the said main channel of the Yellowstone River upstream about 2700 feet to a point due East of the place of beginning; thence due West to the place of beginning; excepting therefrom a portion of the following described tract of land:

That part of Government Lot 2 which is within the boundaries of the following described land situated in Section 34, Township 1 North, Range 26 East, of the Principal Meridian, Yellowstone County, Montana: Beginning at a point on the East and West center line of Section 34, Township 1 North, Range 26 East, which point is due East along said East and West center line a distance of Three Hundred Forty (340) feet from the intersection of the Southeastern boundary of the Northern Pacific Company right of way and the East and West center line of said section 34;

thence North 24 degrees East a distance of 250 feet;

thence North 24 degrees 19 minutes East a distance of 455.5....to the Northeastern boundary line of the Northern Pacific Company right of way; thence Northwesterly along the Northeastern boundary of said Northern Pacific Company right of way to a point which point is North 24 degrees 19 minutes West a distance of 264.2 feet from a point on the East and West center line of section 34 which is due East along said East and West center line of section 34 2303.9 feet from the West quarter corner of section 34;

thence South 24 degrees 19 minutes East a distance of 295.2 feet to a point on the East and West center line of said section 34 which point is due East along said East and West center line of said section 34 a distance of 2303.9 feet from the West quarter corner of section 34; thence due West along said East and West center line of section 34 to the point of beginning.

together with the rights of ingress and egress to and from said pipe or lines, or any of them, for the purposes aforesaid, hereby releasing and waiving for the purpose of this grant all rights under any homestead to dower, homestead and homestead exemption laws, if any, of said state.

Grantor shall have the right to fully use and enjoy the said premises except as the same may be necessary for the purposes herein granted to the said Grantee; and Grantee hereby agrees to pay any damages which may arise to crops, pasturage, fences or buildings of said Grantor from the exercise of the rights herein granted. Grantee shall have the right to change the size of its pipes, the damages, if any, to be based on the change to be paid by the said Grantee. Grantor agrees not to build, create or construct any obstruction, engineering works, or other structure over said pipe line or lines nor permit same to be done by others.

Any pipe line or lines constructed by Grantee across lands under cultivation shall at the time of construction thereof, be buried to such depth as will not interfere with such cultivation, except that at the option of Grantee any such line may be placed above any stream, ravine, ditch, or other obstructions.

Should more than one line be laid under this grant at any time, an additional consideration, based on the same basis per lineal rod as the consideration hereinabove recited, shall be paid for each line laid after the first line.

This Right of Way Agreement may be assigned by Grantee, its successors and assigns, in whole or in part, vesting in any other person, firm or corporation the ownership of one or more pipe lines or any interest therein and/or communication lines, with full rights of ingress and egress for the purposes of operation, replacement and removal thereof.

The terms, conditions and [redacted] administrators, personal representatives, successors and assigns of the parties hereto.

WITNESS the execution hereof the [illegible] day of [illegible]

In the presence of:

[illegible]

[illegible]

Carl J. Clevadetscher, Mayor

Tract No. [illegible]
No. of Rods [illegible]
Check, No. [illegible]
Charge [illegible]

APPROVED BY CITY COUNCIL
[illegible] day of [illegible] 196[illegible]
[illegible]
City Clerk

STATE OF MONTANA
COUNTY OF YELLOWSTONE } ss.

MONTANA ACKNOWLEDGMENT -- CORPORATE

On this 15th day of November, 1960, before me Paul E. Romine personally appeared Carl J. Clevadetscher known to be the Mayor of the City of Billings, Montana, a municipal corporation executed the within instrument and acknowledged to me that such corporation executed the same.

Given under my hand and seal this 15th day of November 1960.

My commission expires June 15, 1963

Paul E. Romine
Notary Public

Billings, Montana.
Residence

652226

City of Billings

Continued Page Five

[illegible]

[illegible] 28 60

[illegible] 9 00 [illegible]

[illegible]

Filed [illegible]

Recorded [illegible]

CLERK AND RECORDER, County Recorder

By [illegible] Deputy

[illegible]

City Clerk

#653914

ASSIGNMENT OF EASEMENTS AND RIGHTS-OF-WAY

OIL BASIN PIPELINE COMPANY, a Delaware corporation, of Chicago, Illinois, hereinafter called "Grantor", for and in consideration of the sum of One Dollar and other valuable consideration, the receipt of which is hereby acknowledged, does hereby convey and assign to FARMERS UNION CENTRAL EXCHANGE, INCORPORATED, a Minnesota corporation, with its principal office at St. Paul, Minnesota, hereinafter called "Grantee", all of grantor's right, title and interest in and to the easements and rights-of-way described in Exhibit "A", attached hereto and hereof made a part, and to the lands described therein, all located in Yellowstone County, Montana.

TO HAVE AND TO HOLD THE SAME, together with all the hereditaments and appurtenances thereunto belonging or in anywise appertaining, to Grantee, its successors and assigns, subject to the terms and conditions of the documents under which Oil Basin Pipeline Company acquired its interest, and subject to a Mortgage and Deed of Trust dated June 1, 1954, wherein Oil Basin Pipeline Company is mortgagor, and The First National Bank of Chicago, as Trustee, is mortgagee, recorded in Book 520 of Mortgages, Page 90, and Supplemental Indenture No. 1, dated June 22, 1960, between the same parties, recorded in Book 704 of Mortgages, Page 27, in the office of the Clerk and Recorder of Yellowstone County, Montana.

Oil Basin covenants and agrees that it has not impaired or encumbered its titles to the property herein described and that it is free of liens and encumbrances, except as above stated.

BOOK 712 PAGE 690

IN WITNESS WHEREOF, Oil Basin has caused these presents to be executed and its corporate seal affixed this 30th day of June, 1960.

OIL BASIN PIPELINE COMPANY,
a Delaware corporation

By Leo Doheny
President

Attest:

Bernice P. Wing
Secretary

(CORPORATE SEAL)

STATE OF MONTANA }
County of Yellowstone } ss.

On this 30th day of June, 1960, before me, the undersigned Notary Public for the State of Montana, personally appeared LEO DOHENY, known to me to be the President of OIL BASIN PIPELINE COMPANY, the corporation which executed the foregoing instrument, and acknowledged to me that said corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this Certificate first above written.

Taylor Jones
Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires April 30, 1962

(NOTARIAL SEAL)

18. C. A. Watson and Marie Watson, his wife, dated July 5, 1954, recorded in Book 492, Page 17.

19. Thomas Halstvedt and Maye Halstvedt, his wife, Contract Purchaser, R. A. O'Donnel, also known as Robert A. O'Donnell and Mary E. O'Donnell, his wife, dated June 11, 1954, recorded in Book 489, Deeds, Page 147.

20. F. W. Bowen and Isabel Bowen, his wife, dated June 11, 1954, recorded in Book 489, Deeds, Page 163.

21. Minnie Noermann, a widow, dated June 28, 1954, recorded in Book 492, Page 19.

22. F. W. Bowen and Isabel Bowen, his wife, dated June 17, 1954, recorded in Book 489, Deeds, Page 161.

23. Lyle J. Seavy and Cecile H. Seavy, his wife, dated June 15, 1954, recorded in Book 489, Deeds, Page 165.

24. Enos J. Erb and Kathleen Burgess Erb, his wife, dated July 12, 1954, recorded in Book 492, Page 21.

25. Lula Clarke, a widow, dated July 6, 1954, recorded in Book 492, Page 23.

26. William Nafts and Katie Nafts, his wife, dated June 15, 1954, recorded in Book 489, Deeds, Page 167.

27. Martin Tachida, a single man, dated June 17, 1954, recorded in Book 489, Deeds, Page 169.

28. Emma Bell Bollinger, a widow; Dale Wayne Bollinger and Norine J. Bollinger, his wife; John Donald Bollinger and Mary Ann Bollinger, his wife, dated August 10, 1954, recorded in Book 494, Deeds, Page 65.

29. Clatus R. Sherrodd and Marjorie Sherrodd, his wife, dated June 19, 1954, recorded in Book 489, Deeds, Page 153.

30. Ruth Bohl, a widow, individually and as guardian of Thomas Lee Bohl, a minor, Lawrence Peter Bohl and Dorothy J. Bohl, his wife; James Allen Bohl, Tamra Lee Bohl, Dona Rose Bohl, dated August 10, 1954, recorded in Book 494, Deeds, Page 254.

31. Albert S. Grawe and Dorris M. Grawe, his wife, dated August 4, 1954, recorded in Book 492, Deeds, Page 460.

32. Earl Witzel and Katherine Witzel, his wife, dated July 6, 1954, recorded in Book 492, Page 25.

33. Seth T. Anderson and Leola M. Anderson, his wife, dated July 6, 1954, recorded in Book 492, Page 27.

34. Lloyd R. Anderson and Mary A. Anderson, his wife, dated July 6, 1954, recorded in Book 492, Page 29.

35. Bernice Jensen and William Jensen, her husband, dated July 12, 1954, recorded in Book 492, Page 31.

36. Everett E. Chesterman, a single man, dated July 29, 1954, recorded in Book 492, Deeds, Page 291.

37. Everett E. Chesterman, a single man, dated July 10, 1954, recorded in Book 492, Page 13.

EXHIBIT A

In each of the following instruments OIL BASIN PIPELINE COMPANY is Grantee and the following names are Grantors, all recorded in the office of the Clerk and Recorder of Yellowstone County, Montana:

1. Farmers Union Central Exchange, Inc., dated July 22, 1954, recorded in Book 492, Deeds, Page 289.

2. Harry W. Schaff and Katherine Schaff, his wife; John Strauch and Dorothy Strauch, his wife, dated June 18, 1954, recorded in Book 489, Deeds, Page 149.

3. William Magelssen, a single man, dated June 22, 1954, recorded in Book 489, Deeds, Page 151.

4. A. W. Richardson and Emily Richardson, his wife; Audre Freund and Norman Freund, her husband; Mildred Sheets and Homer Sheets, her husband; Thelma Freeman and Henry Freeman, her husband, dated June 18, 1954, recorded in Book 489, Deeds, Page 155.

5. A. W. Richardson and Emily Richardson, his wife, dated June 18, 1954, recorded in Book 489, Deeds, Page 157.

6. Frank P. Mackey and Frances M. Mackey, his wife, dated June 24, 1954, recorded in Book 489, Deeds, Page 159.

7. Mildred Tarrant, dated July 24, 1954, recorded in Book 492, Deeds, Page 293.

8. Bina Emery, a widow; Adrelia C. Hill and R. Lee Hill, her husband, also known as Adrele C. Hill, dated July 13, 1954, recorded in Book 492, Deeds, Page 100.

9. City of Billings, dated August 10, 1954, recorded in Book 494, Deeds, Page 115.

10. Continental Oil Company, dated October 11, 1954, recorded in Book 503, Deeds, Page 313.

11. Pierce Packing Company, dated August 30, 1954, recorded in Book 497, Deeds, Page 214.

12. City of Billings, dated September 14, 1954, recorded in Book 497, Deeds, Page 499.

13. The Carter Oil Company, dated November 3, 1954, recorded in Book 503, Deeds, Page 317.

14. State of Montana, dated December 29, 1954, recorded in Book 513, Deeds, Page 185.

15. Frank M. Orchowski and Helen V. Orchowski, his wife, dated September 11, 1954, recorded in Book 497, Deeds, Page 295.

16. Bruce M. Cady, Dorothy V. Cady, his wife; Russell B. Toland, Olive L. Toland, his wife; Edward Franklin Toland, Dorothy H. Toland, his wife; dated July 30, 1954, recorded in Book 492, Deeds, Page 458.

17. Joseph J. Kiedrowski and Edna P. Kiedrowski, his wife; Donald E. Kiedrowski, a single man, dated July 1, 1954, recorded in Book 492, Page 15.

18. C. A. Watson and Marie Watson, his wife, dated July 5, 1954, recorded in Book 493, Page 17.

19. Thomas Halstvedt and Faye Halstvedt, his wife, Contract Purchaser, R. A. O'Donnell, also known as Robert A. O'Donnell and Mary E. O'Donnell, his wife, dated June 11, 1954, recorded in Book 489, Deeds, Page 147.

20. F. W. Bowen and Isabel Bowen, his wife, dated June 11, 1954, recorded in Book 489, Deeds, Page 163.

21. Minnie Rosemann, a widow, dated June 28, 1954, recorded in Book 492, Page 19.

22. F. W. Bowen and Isabel Bowen, his wife, dated June 17, 1954, recorded in Book 489, Deeds, Page 161.

23. Lyle J. Seavy and Cecile H. Seavy, his wife, dated June 15, 1954, recorded in Book 489, Deeds, Page 165.

24. Enos J. Erb and Kathleen Burgess Erb, his wife, dated July 12, 1954, recorded in Book 492, Page 21.

25. Lula Clarke, a widow, dated July 6, 1954, recorded in Book 492, Page 23.

26. William Nafts and Katie Nafts, his wife, dated June 15, 1954, recorded in Book 489, Deeds, Page 167.

27. Martin Tschida, a single man, dated June 17, 1954, recorded in Book 489, Deeds, Page 169.

28. Emma Bell Bollinger, a widow; Dale Wayne Bollinger and Norine J. Bollinger, his wife; John Donald Bollinger and Mary Ann Bollinger, his wife, dated August 10, 1954, recorded in Book 494, Deeds, Page 65.

29. Clatus E. Sherrodd and Marjorie Sherrodd, his wife, dated June 19, 1954, recorded in Book 489, Deeds, Page 153.

30. Ruth Bohl, a widow, individually and as guardian of Thomas Lee Bohl, a minor, Lawrence Peter Bohl and Dorothy J. Bohl, his wife; James Allen Bohl, Tomas Lee Bohl, Dona Rose Bohl, dated August 10, 1954, recorded in Book 494, Deeds, Page 254.

31. Albert S. Grewe and Dorris M. Grewe, his wife, dated August 4, 1954, recorded in Book 492, Deeds, Page 460.

32. Earl Witzel and Katherine Witzel, his wife, dated July 6, 1954, recorded in Book 492, Page 25.

33. Seth T. Anderson and Leola M. Anderson, his wife, dated July 6, 1954, recorded in Book 492, Page 27.

34. Lloyd R. Anderson and Mary A. Anderson, his wife, dated July 6, 1954, recorded in Book 492, Page 29.

35. Bernice Jansen and William Jansen, her husband, dated July 12, 1954, recorded in Book 492, Page 31.

36. Everett E. Chesterman, a single man, dated July 29, 1954, recorded in Book 492, Deeds, Page 291.

37. Everett E. Chesterman, a single man, dated July 10, 1954, recorded in Book 492, Page 13.

38. M. S. Doss and Meek Lane Doss, his wife, dated July 23, 1954, recorded in Book 492, Deeds, Page 185.

39. M. S. Doss and Meek Lane Doss, his wife, dated July 23, 1954, recorded in Book 492, Deeds, Page 20.

40. Albert Juhl and Sophie Juhl, his wife, dated July 13, 1954, recorded in Book 492, Page 11.

41. Lucy A. Van Houten, a widow, dated July 19, 1954, recorded in Book 492, Page 9.

42. Gladys G. Van Houten and Loar J. Houten, her husband, dated July 19, 1954, recorded in Book 492, Page 7.

43. Blanche C. Steele, a widow, William E. Steele and Maxine Steele, his wife, dated June 29, 1954, recorded in Book 492, Page 33.

44. Clifford R. Fowler, a single man, Phillip Hansen, a single man, dated June 25, 1954, recorded in Book 492, Page 35.

45. W. E. St. John and Dora St. John, his wife, dated June 24, 1954, recorded in Book 492, Page 37.

46. Ethel Bender and Walter Bender, her husband, dated June 24, 1954, recorded in Book 492, Page 39.

47. Lars J. Sjostrom and Sadie L. Sjostrom, his wife, dated July 1, 1954, recorded in Book 492, Page 41.

48. Lars J. Sjostrom and Sadie L. Sjostrom, his wife, dated September 11, 1954, recorded in Book 497, Deeds, Page 301.

49. Yellowstone County, Montana, dated February 8, 1958, recorded in Book 627, Deeds, Page 323.

50. William S. Lehman (also known as Wm. S. Lehman) and Mary E. Lehman, his wife, dated April 27, 1960, recorded in Book 698, Deeds, Page 173.

51. State of Montana, dated December 29, 1954, recorded in Book 513, Deeds, Page 187.

52. Everett E. Chesterman, a single man, dated April 17, 1958, recorded in Book 634, Page 131.

53. Blanche Lyons and Helen Williams, dated September 24, 1955, recorded in Book 541, Page 455.

54. Mildred Tarrant, dated August 25, 1955, recorded in Book 538, Page 326.

And all right, title and interest of Grantors in and to all easements or rights-of way for constructing, maintaining, inspecting, operating, protecting, repairing, replacing, changing the size of or moving a pipe line or pipe lines, for the transportation of oil, gas and other products thereof, and any licenses, easements, franchises or grants for said purposes possessed or enjoyed by Grantor in Yellowstone County, Montana, not heretofore specifically described.

Filed
Old Baker Pipeline Co
To
Frances Ann Butler
Galveston Tex
Assign & Rel. of
STATE OF MONTANA
County of Yellowstone
I hereby certify that the within instrument was filed for record
27 day of May 1965
at 8:00 o'clock A.M. and recorded in Book 712 of Records, page 689
Witness my hand and seal of said County the day and year last above written.
CLERK AND RECORDER
By Deputy
Return Rocky Mt Bankers
422 N Broadway

671307
731

93

114-A
(pge 2)

2910-A
(1)
~~2~~
4924A
6483A

ASSIGNMENT OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY

KNOW ALL MEN BY THESE PRESENTS:

That CONTINENTAL PIPE LINE COMPANY, a Delaware corporation, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable considerations paid by GLACIER PIPE LINE COMPANY, a Delaware croporation having offices in Ponca City, Oklahoma, the receipt and sufficiency of which is hereby acknowledged, does, without warranty or covenant of title, express or implied, hereby bargain, sell, transfer, convey, assign, and set over into Glacier Pipe Line Company all of Continental Pipe Line Company's right, title, and interest in and to all those certain rights of way located in Yellowstone County, Montana, more particularly described in that certain schedule of pipe line right of way agreements and contracts, consisting of seven (7) pages, numbered one (1) to seven (7), inclusive, marked Exhibit "A", attached hereto, and for all purposes made a part hereof.

TO HAVE AND TO HOLD the same unto Glacier Pipe Line Company, its successors and assigns.

IN WITNESS WHEREOF, these presents are executed by Continental Pipe Line Company through its officers duly authorized thereto this 1st day of March, 1961.

ATTEST:

Asst. Secretary

CONTINENTAL PIPE LINE COMPANY

By N. B. Mannix
Vice President

STATE OF OKLAHOMA)
) SS.
COUNTY OF KAY)

Before me a Notary Public in and for said state, on this 7th day of Sept., 1961, personally appeared N. B. Mannix, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its Vice President, and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.

Delma Jackson
Notary Public

My commission expires:

9-23-62

Residing at: Ponca City, Okla.

SCHEDULE OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
Peter Tones, et ux	That part of SE¼ SW¼ South of Railroad described as follows: Beginning at a point 30 feet north of the South Quarter corner or SE corner of SW¼ of Section 26, thence west on a line parallel to the south line of said Section 26, a distance of 398 feet, thence north on a line parallel to the North and South Quarter Section line, a distance of 270 feet more or less, to a point of intersection with the southerly right of way line of the Northern Pacific Railway Co., thence north 58° 06' east along said right of way line to its intersection with the North and South Quarter Section line of said Section 26 at a point which is 550 feet north of the South Quarter corner of SE corner of the SW¼ of said Section 26, thence south along said North and South Quarter Section line a distance of 520 feet to the point of beginning, Section 26, Township 1 North, Range 26 East, except for that portion of the NE corner of above described land described as follows: That irregularly shaped tract of the dimensions (Continued on next page)	November 16, 1960	Book 714, Page 31, Doc. #654040, on December 29, 1960.

671301

EXHIBIT "A"

SCHEDULE OF RIGHT OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
Peter Tonos, et ux (Cont'd from Page 1)	of 214 feet X 115 feet X 143 feet, more particularly described in Book 471, Page 26, Doc. #517069.		
Peter Tonos, et al	That irregularly shaped tract of the dimensions of 214 feet X 115 feet X 143 feet, in Section 26, Township 1 North, Range 26 East, as described in Book 471, Page 26, Doc. #517069.	November 21, 1960	Book 716, Page 584, Doc. #658501, on March 8, 1961.
Paul S. Smith, et al	That part of NW¼ NE¼ described as follows: Beginning on the North and South Quarter Section line of said Section 35 which is located 30 feet south of the North Quarter corner of said Section; thence east at right angles to said quarter Section line 112.00 feet; and thence south parallel to said quarter section line, a distance of 775.00 feet; thence West 112.00 feet to an intersection with said quarter section line; thence North on said quarter section line a distance of 775.00 feet to the point of beginning, all in Township 1 North, Range 26 East.	November 21, 1960	Book 714, Page 33, Doc. #654041, on December 29, 1960.

EXHIBIT "A"

SCHEDULE OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
Lockwood Irrigation District	Number 1 pipe line crossing located approximately 856 feet South and 32 feet East of the Northwest corner of the NE¼ of Section 35, Township 1 North, Range 26 East. Number 2 pipe line crossing located approximately 1455 feet South and 32 feet East of the Northwest corner of the NE¼ of Section 35, Township 1 North, Range 26 East.	December 19, 1960	Book 714, Page 516, Doc. #655525, on January 24, 1961.
Rita M. Harrison, et al	That part of the NW¼ NE¼ of Section 35, Township 1 North, Range 26 East described as follows: Beginning at a point 775 feet South of the NW¼ corner of the NW¼ of the NE¼ of said Section 35; thence running East a distance of 224 feet; thence running South a distance of 194 feet; thence running West a distance of 224 feet; thence running North a distance of 194 feet to the point of beginning.	December 8, 1960	Book 714, Page 531, Doc. #655532, on January 24, 1961.
M. J. McFarland, et ux	Twp. 1 N., Rge. 26 E., Sec. 35: Block 1, Lots 1,2 & 3 NW¼ NE¼ (Wooten Subdivision)	November 22, 1960	Book 714, Page 35, Doc. #654042, on December 29, 1960.

6483-A

671307

EXHIBIT "A"

SCHEDULE OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
A. Sievertsen, et ux	That part of SW¼ NE¼ described as follows: Beginning at the NW corner of the SW¼ of the NE¼ of Sec. 35, going due South 1320 feet, East 300 feet, North 1320 feet, West 300 feet to the point of beginning, Twp. 1 N., Rge 26 E.	November 14, 1960	Book 712, Page 186, Doc. #652240, on November 28, 1960.
Elenora Snook	S½ of Government Lot 6 of Sec. 34, Twp. 1 N., Rge. 26 E. except that portion conveyed to the State of Montana, recorded in Book 700, page 407, and S½ SW¼ NW¼ and S½ SE¼ NW¼ of Sec. 35, Twp. 1 N., Rge. 26 E.	October 19, 1960	Book 712, Page 188, Doc. #652241, on November 28, 1960
Coulson Water Users Association	Pipe line crossing approximately 1320 feet West and 210 feet North of the East Quarter Corner of Section 34, Twp. 1 N., Rge. 26 E.	December 15, 1960	Book 714, Page 518, Doc. #655526, on January 24, 1961
City of Billings, Montana	That portion of Govt. Lot 1, lying within the following described tract of land, that portion of Lots 1 and 4 of Section 2, Township 1 South, Range 26 East, and of Lots 2, 3, and 4 of Section 34, in Township 1 North of Range 26 East,	November 15, 1960	Book 712, Page 168, Doc. #652226, on November 28, 1960

(Cont'd on Page 5)

2984

EXHIBIT "A"

SCHEDULE OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
City of Billings, Montana (Cont'd from page 4)	described as follows: to wit: Beginning at an iron pin set in the ground South 34° 50' East, 2270 feet from the Southwest corner of said Section 34, and embracing all that portion of land lying between the following line and the Yellowstone River; thence North 17° 25' West 224 feet; thence North 2° 30' West 500 feet; thence North 0° 30' East 340 feet; thence North 7° 15' East 200 feet; thence North 22° 30' East, 400 feet; thence North 24° East, 375 feet; thence North 16° East 289 feet; thence North 8° 30' East 400 feet; thence North 22° 45' East, 508 feet; thence North 35° 15' East, 660 feet; thence North 19° East, 327 feet; thence North 25° 30' East, 147 feet; thence North 40° East 600 feet; thence North 42° 30' East, 810 feet to a point on the meander line of the Government Survey; thence due East about 400 feet to the main channel of the Yellowstone River; thence following the said main channel of the Yellowstone River upstream about 5700 feet to a point due East of the place of beginning; thence due west to the place of beginning, excepting (Cont'd on page 6)		

671307

SCHEDULE OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
City of Billings, Montana (Cont'd from page 5)	therefrom, that part of Govt. Lot 2 which is within the boundaries of the following described land; Beginning at a point on the East and West center line of Sec. 34, Township 1 North, Range 26 East, which point is due East along said East and West center line a distance of Three Hundred Forty (340) feet from the intersection of the Southeastern boundary of the Northern Pacific Right of Way and the East and West center line of said Section 34; thence North 56 degrees East a distance of 550 feet; thence North 34 degrees 10 minutes East a distance of 455.5... to the Southeastern boundary line of the Northern Pacific Company right of way to a point which point is North 36 degrees 57 minutes West a distance of 805.2 feet from a point on the East and West center line of Section 34 which is due East along said East and West center line of Section 34, 2903.9 feet from the West Quarter Corner of Section 34; thence South 36 degrees 57 minutes East a distance of 805.2 feet to the point on the East and West center line of said Section 34 which point is due East along said East and West center line of said Section 34; a (Cont'd on Page 7)		

EXHIBIT "A"

SCHEDULE OF RIGHTS OF WAY
CARTER REFINERY TO CONTINENTAL REFINERY
YELLOWSTONE COUNTY, MONTANA

GRANTOR	DESCRIPTION	DATE OF CONTRACT OR AGREEMENT	RECORDED IN
City of Billings, Montana (Cont'd from Page 6)	distance of 2993.9 feet from the West quarter corner of Section 34; thence due West along said East and West center line of Section 34 to the point of beginning.		
Eva Mae Brubeck	That part of Government Lots 1 & 2 and Southeast Quarter Northwest Quarter (SE¼ NW¼) of Section 2, Township 1 South, Range 26 East, described as follows: A tract of land in section 2, Township 1 South, Range 26 East, more particularly described as follows: Beginning at a point which is 982 feet West of the center of Section 2, Township 1 South, Range 26 East, thence East 880 feet; thence North 88° 23' 30" East 378 feet; thence North 600 feet; thence South 87° 55' East 730 feet; thence North 2° 30' West 450.45 feet; thence North 2° 2' East 828.9 feet; thence North 2° 18' West 728.4 feet; thence North 8° 58' East 341.1 feet; thence West 451 feet; thence South 31° West 2534 feet; thence South 25° 56' West 570 feet; thence South 34° 36' 30" East 21 feet to the point of beginning.	November 7, 1960	Book 712, Page 190, Doc. #652242, on November 28, 1960.

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Contract Copy

[illegible]

[illegible]

[illegible]

[illegible]

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RIGHT OF WAY AGREEMENT
(STANDARD FORM)

FOR AND IN CONSIDERATION of the sum of Three Hundred Seventy-nine and no/100 - - - - Dollars ($ 379.00), in hand paid, the receipt which is hereby acknowledged THE CITY OF BILLINGS, STATE OF MONTANA, hereinafter referred to as Grantor es hereby grant unto Continental Pipe Line Company, a Delaware corporation having offices in Ponca City, klahoma, hereinafter referred to as Grantee, its successors and assigns the right to lay, maintain, inspect, ter, repair, operate, protect, remove and relay a pipe line or pipe lines, for the transportation of oil and gas nd products and by-products thereof, water and other substances, and such drips, valves, fittings, meters nd other equipment and appurtenances as may be necessary or convenient for such operations and, if necesary, to construct, maintain, operate, remove and replace communication and control facilities upon, over, hrough and under the following described land situated in YELLOWSTONE County, tate of MONTANA, to wit:

Pipelines are to be located on and across City of Billings lands in Sec. 34, T. 1 N., R. 26 E., and Sec. 2, T. 1 S., R. 26 E., as shown on Exhibits "A" and "B", attached hereto and made a part hereof.

gether with the rights of ingress and egress to and from said line or lines, or any of them, for the purposes foresaid, hereby releasing and waiving for the purpose of this grant all rights under and by virtue of the ower, homestead and homestead exemption laws, if any, of said state.

Grantor shall have the right to fully use and enjoy the said premises except as the same may be necesary for the purposes herein granted to the said Grantee; and Grantee hereby agrees to pay any damages which ay arise to crops, pasturage, fences or buildings of said Grantor from the exercise of the rights herein ranted. Grantee shall have the right to change the size of its pipes, the damages, if any, in making such hange to be paid by the said Grantee. Grantor agrees not to build, create or construct any obstruction, engieering works, or other structure over said pipe line or lines nor permit same to be done by others.

Any pipe line or lines constructed by Grantee across lands under cultivation shall, at the time of conruction thereof, be buried to such depth as will not interfere with such cultivation, except that at option of rantee any such line may be placed above any stream, ravine, ditch, or other watercourse.

~~Should more than one line be laid under this grant at any time an additional consideration calculated the same basis per rod as the consideration herein above recited shall be paid for each line so laid for the first line~~

This Right of Way Agreement may be assigned by Grantee, its successors and assigns, in whole or in art, vesting in any other person, firm or corporation the ownership of one or more pipe lines or an undivided terest therein and/or communication lines, with full rights of ingress and egress for the maintenance, repair, peration, replacement and removal thereof.

The terms, conditions and provisions hereof shall extend to and be binding upon the heirs, executors, dministrators, personal representatives, successors and assigns of the parties hereto.

WITNESS the execution hereof the 4th day of June 1963.

~~The presence of~~ ATTEST

Wm. J. Bryan
Clerk

CITY OF BILLINGS

By William G. Swan
Mayor

ract No. YB-5, Y-5, Y-10
o. of Rods 379
heck No. 22833
harge AFE 3127 JC 1789 (258.55)
JC 1783 (121.05)

Pd by Dec 34 AOW - Dec 34 1N-26E - amt. Pd by Dec 1-5 Dec 6 Dec 3 1S-26E (Pasadena) 2989-A 4186-A

STATE OF MONTANA)
) ss
COUNTY OF YELLOWSTONE)

On this 4th day of June, 1963, before me, Velma F. Shepard, a Notary Public, personally appeared Willard E. Fraser, known to me to be the Mayor of the City of Billings, Montana, a Municipal Corporation ~~of the corporation~~ that executed the within instrument and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

My commission expires:
August 26, 1963

Velma F. Shepard
Notary Public for the state of Montana residing at Billings, Mont.

County, _____, on this day personally appeared _____

known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowled to me that they executed the same for the purposes and consideration therein expressed.

Also before me on this day personally appeared _____

wife of _____, known to me to be the person whose name is subscri to the foregoing instrument, and having been examined by me privily and apart from her husband,

having the same fully explained to her, she, the said _____, acknowled such instrument to be her act and deed, and declared that she had willingly signed the same for the purp and consideration therein expressed, and that she did not wish to retract it.

Given under my hand and seal of office, this _____ day of _____ A.D., 19__
My commission expires:

_____ *Notary Public in and for* _____
County, _____

STATE OF _____ } ss.
COUNTY OF _____ }

(Colorado For

The foregoing instrument was acknowledged before me this _____ day of _____ 19____, by _____

Witness my hand and official seal.
My commission expires:

_____ *Notary Public*

708888

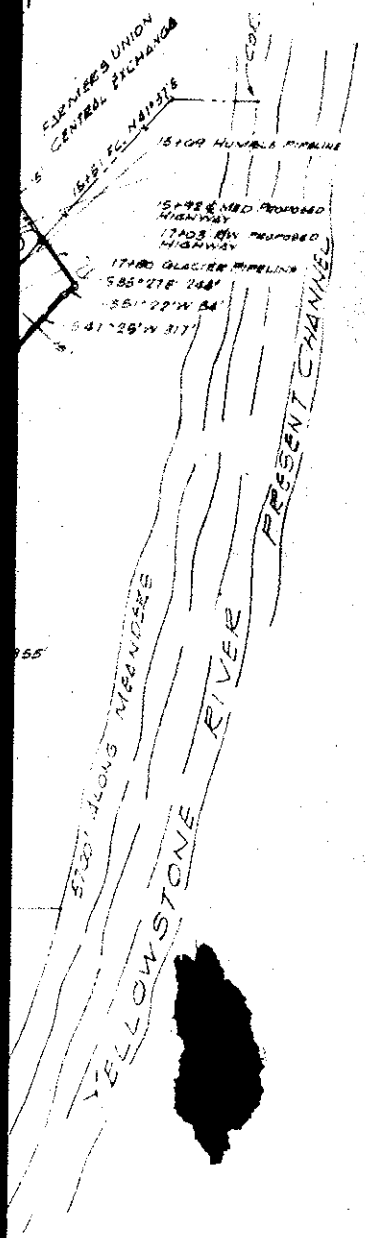
City of Billings

Rental pipe line

Willard E. Fraser

STATE OF MONTANA } ss.
County of Yellowstone
I hereby certify that the within instrument was filed in my office for record on this 13 day of June 1963 at 8:50 o'clock A M., and is recorded in Book 765 of Deeds on Page
Witness my hand and official seal
CHRIS RURICH, County Recorder
By Merrill Sherry Deputy

Rental pipe line



CENTER-LINE DESCRIPTION OF 8" PIPELINE
YELLOWSTONE PUMP STATION TO CONTINENTAL REFINERY
CROSSING THE CITY OF BILLINGS PROPERTY IN
LOTS 2, 3, & 4, SECTION 34, T. 1 N., R. 26 E., AND LOT
1, SECTION 2, T. 1 S., R. 26 E., YELLOWSTONE COUNTY, MONTANA

Beginning at a point on a common property line of the City of Billings and Farmers Union Central Exchange properties in Lot 2, Section 34, T. 1 N., R. 26 E., Yellowstone County, Montana, Said point being N. 41° 37' E., 15.2 feet from a common corner of said City of Billings and Farmers Union Central Exchange properties, Said corner being the most Southerly corner of said Farmers Union Central Exchange Property. Thence S. 35° 27' E., 244.0 feet to a point; Thence S. 51° 22' W. 54.0 feet to a point; Thence S. 41° 25' W., 317.0 feet to a point; Thence S. 25° 01' W., 639.0 feet to a point; Thence S. 20° 20' W., 569.0 feet to a point; Thence S. 13° 47' W., 355.0 feet to a point; Thence S. 29° 19' W. 1523 feet to a point; Thence N. 81° 58' W., 23.1 feet to the point of ending, Said point being S. 31° 22' W., 269.1 feet from a property corner of said City of Billings property, Said point also being South 3122.8 feet and East 7416.8 ft. from West Quarter corner of Said Section 34, T. 1 N., R. 26 E.

CENTER-LINE DESCRIPTION OF 8" PIPELINE
BILLINGS, MONTANA TO SINCLAIR, WYOMING
CROSSING THE CITY OF BILLINGS PROPERTY IN
LOTS 2, 3, & 4, SECTION 34, T. 1 N., R. 26 E., AND LOTS 1 & 4,
SECTION 2, T. 1 S., R. 26 E., YELLOWSTONE COUNTY, MONTANA

Beginning at a point on a common property line of the City of Billings and Farmers Union Central Exchange properties in Lot 2, Section 34, T. 1 N., R. 26 E., Yellowstone County, Montana, Said point being N. 41° 37' E., 15.2 feet from a common corner of said City of Billings and Farmers Union Central Exchange properties, Said corner being the most Southerly corner of said Farmers Union Central Exchange Property. Thence S. 35° 27' E., 244.0 feet to a point; Thence S. 51° 22' W., 54.0 feet to a point; Thence S. 41° 25' W., 317.0 feet to a point; Thence S. 25° 01' W., 639.0 feet to a point; Thence S. 20° 20' W., 569.0 feet to a point; Thence S. 13° 47' W., 355.0 feet to a point; Thence S. 29° 19' W., 1791.5 feet to the point of ending, Said point being S. 6° 22' W., 32.8 feet from a property corner of said City of Billings property, Said point also being South 3359.5 feet and East 1308.2 feet from the West Quarter corner of said Section 34, T. 1 N., R. 26 E.

EXHIBIT "A"

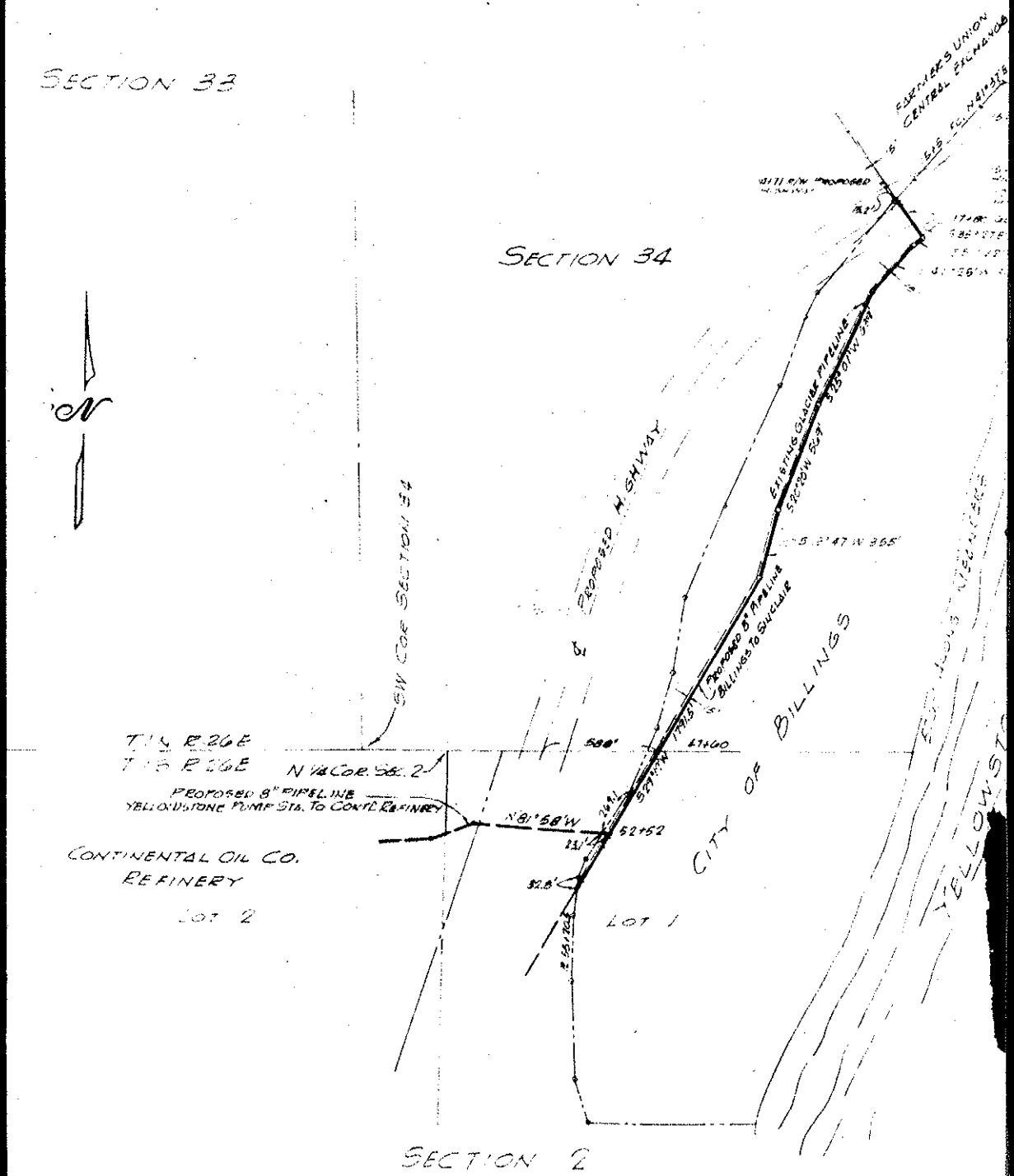
ISSUE	DATE	SOURCE-DESCRIPTION	BY	CHKD
ORIG.				

CONTINENTAL PIPE LINE COMPANY
PONCA CITY OKLAHOMA

PROPOSED 8" PRODUCTS PIPE LINE
[illegible]
YELLOWSTONE [illegible]
CROSSING THE CITY OF BILLINGS PROPERTY
LOTS 2, 3 & 4, SEC. 34, T. 1 N., R. 26 E.
AND LOTS 1 & 4, SEC. 2, T. 1 S., R. 26 E.
YELLOWSTONE CO. MONTANA
SCALE: 1" = [illegible] ISSUE:

APPROVED: [illegible] DWR. [illegible]
DATE: [illegible] Nº [illegible]

888801


SECTION 33
SECTION 34
N
SW COR SECTION 34
PROPOSED HIGHWAY
EXISTING GLACIER PIPELINE
PROPOSED 8" PIPELINE BILLINGS TO SINCLAIR
CITY OF BILLINGS
T1S R26E
T1S R26E
N ¼ COR. SEC. 2
PROPOSED 8" PIPEL. LINE YELLOWSTONE PUMP STA. TO CONTL REFINERY
N81°58'W
CONTINENTAL OIL CO. REFINERY
LOT 2
LOT 1
YELLOWSTONE
SECTION 2

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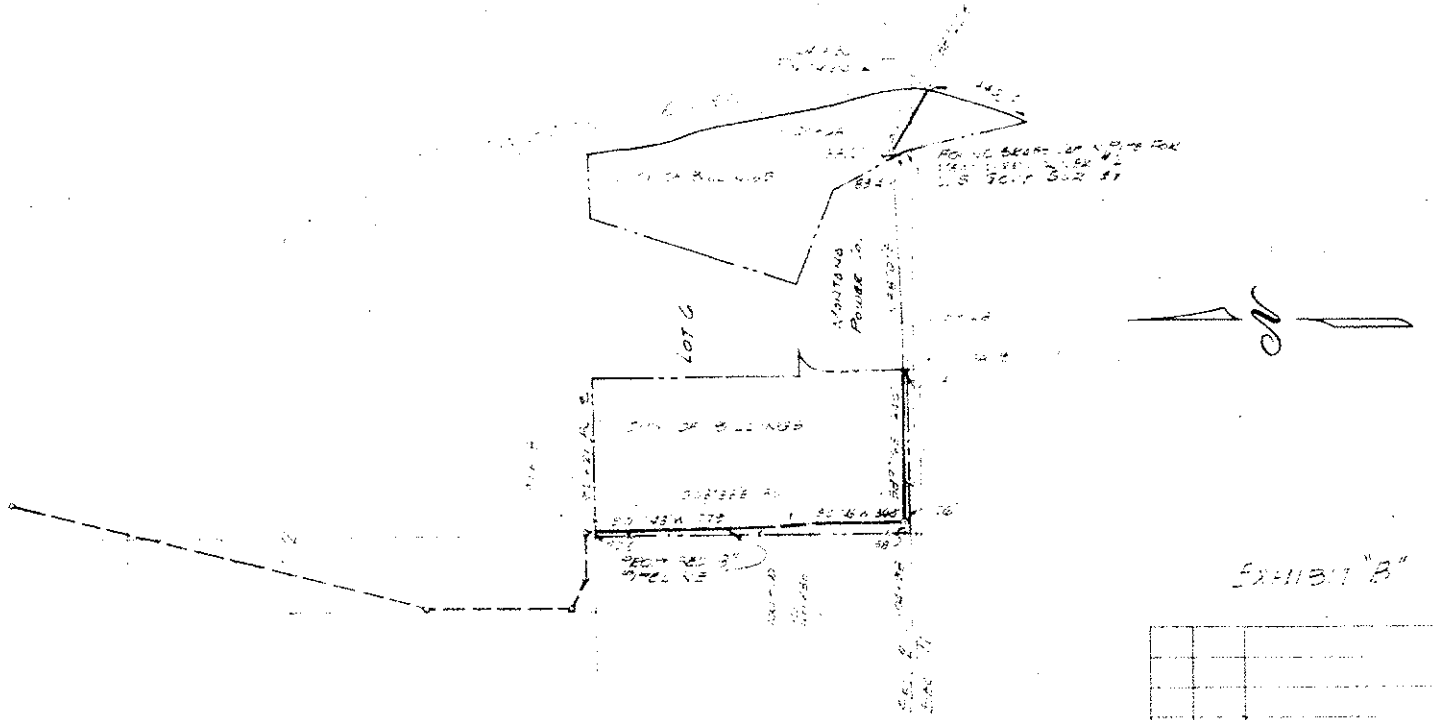

EXHIBIT "B"

CENTER-LINE DESCRIPTION OF [illegible] PIPELINE
BILLINGS, MONTANA TO SINCLAIR, WYOMING
CROSSING CITY OF BILLINGS PROPERTY
IN THE WEST HALF OF LOT 6, SECTION 2, T1S.,R.26E
YELLOWSTONE COUNTY, MONTANA

Beginning at a point in the North line of Lot 6, Section 2, T. 1 S., R. 26 E., Yellowstone County, Montana, Said point being 22.5 feet East from the Northwest corner of said Lot 6, Thence S. 1° 43' W., 779 feet to a point, Thence S. 3° 33' E., 130 feet to a point, Thence S. 1° 45' W., 368 feet to a point, Said point being North 26 feet and East 38 feet from the Southwest corner of City of Billings property, Thence S. 89° 16' E., 640 feet to the point of ending, Said point being North 14 feet from the Southeast corner of Said City of Billings property.

CENTER-LINE DESCRIPTION OF [illegible] PIPELINE
BILLINGS, MONTANA TO SINCLAIR, WYOMING
CROSSING CITY OF BILLINGS PROPERTY
IN THE EAST HALF OF LOT 6, SECTION 2, T1S.,R26E.
YELLOWSTONE COUNTY, MONTANA

Beginning at a point on a common property line of the City of Billings and Montana Power Company properties, Said point being N. 29° 00' W., 81.4 feet from U. S. Government Survey meander corner No. 2, Thence N. 88° 01' E., 70.2 feet to a point; Thence S. 58° 22' E., 100 feet to the point of ending on the North bank of the Yellowstone River, Said point being 440 feet, plus or minus, from the point of intersection of said bank with the meander line as established by Said U. S. Government Survey.

ORIG. ISSUE	DATE	SOURCE DESCRIPTION	BY	CHKD

CONTINENTAL PIPE LINE COMPANY
PONCA CITY, OKLAHOMA

[illegible]

SCALE [illegible] ISSUE

APPROVED [illegible]
DATE [illegible]

DWR. [illegible]
No. [illegible]

108898

Courthouse

7203336

RESOLUTION

DESIGNATION OF CONTROLLED ACCESS
HIGHWAY

PROJECT NO. I 90-8(5)433

YELLOWSTONE COUNTY, MONTANA

WEST BILLINGS INTERCHANGE TO U. S. HIGHWAY 87

Mimeo'd

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5224-A
6089-A
6168-A
6515-A
6566-A
7600

The State Highway Commission of the State of Montana, in regular meeting assembled, does hereby find and resolve:

THAT there has been surveyed, mapped, planned and designed by duly qualified employees of this Commission a portion of State Highway known as Montana State Highway Project No. I 90-8(5)433, which said portion of highway is a part of the National System of Interstate Highways; and,

THAT said portion of highway so planned and designed has been approved for construction as a State Highway by this Commission and an agreement has been entered into between this Commission and the Bureau of Public Roads of the United States Department of Commerce whereby Federal funds will be expended to aid the State of Montana in the construction of said highway; and,

THAT such surveys, maps, plans and designs have been approved by this Commission and the Bureau of Public Roads of the United States Department of Commerce; and,

THAT it is a requirement of the Bureau of Public Roads of the United States Department of Commerce that access to said portion of Interstate Highway designated as Project No. I 90-8(5)433 be controlled; and,

THAT this Commission has found and determined, and does hereby find and determine, that for the purpose of facilitating the flow of traffic and to promote the public safety it is necessary and desirable that the owners or occupants of the lands abutting said Interstate Highway Project No. I 90-8(5)433, or other persons, have no easement of access, or only a limited easement of access, light, air or view, to and from said Interstate Highway Proj No. I 90-8(5)433, by reason of the fact that their prope abuts upon such highway, or for any other reason; and,

THAT this Commission has found and determined that unrestricted easements to access, light, air and view to said Inter-state Highway Project No. I 90-8(5)433 would impede the flow of traffic upon said Interstate Project and hinder the public safety; and,

THAT this Commission has found and determined and does hereby find and determine that it is necessary and desirable that th rights of and easements to access, light, air and view be acquired b the State so as to prevent said portions of Interstate Highway Proje No. I 90-8(5)433 from becoming unsafe for or impeded by unrestricted access of traffic from intersecting streets, alleys, public and private roads or ways of traffic.

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the following described portion of Interstate Highway designated as Montana State Highway Project No. I 90-8(5)433 be, and the same is hereby, designated a "Controlled Access Highway" which said Controll Access Highway is located in Yellowstone County, Montana, and is 6.615 miles in length and is more particularl described in the "Description of Route" which is attached hereto as Exhibit "A" and hereby made a part hereof; and,

THAT the owners or occupants of the abutting land and all other persons shall have no easement of access or only such a limit easement of access, light, air or view upon such Controlled Access

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Highway as may hereafter be granted; and,

THAT the State of Montana shall acquire such rights of access, light, air and view as exist to and from said Project No. I 90-8(5)433 so as to prevent such portion of Interstate Highway from becoming unsafe for or impeded by unrestrictive access of traffic from intersecting streets, alleys and public or private roads or ways of passage; and,

THAT access to, from or across the above-described portion of Interstate Highway shall be limited as shown on the official plans heretofore approved by this Commission.

DATED this 23 day of September, 1962.

STATE HIGHWAY COMMISSION
STATE OF MONTANA

Roy L. Ferris
Chairman

Member

Member

Member

Member

ATTEST:

Secretary

(SEAL)

See Atlas for Map

"DESCRIPTION OF ROUTE"

PROJECT NO. I 90-8(5)433 -- WEST BILLINGS INTERCHANGE TO U. S. HIGHWAY 87

YELLOWSTONE COUNTY, MONTANA

Survey Station 635+33.1 to Survey Station 1001+55.0

Beginning at Engineer's Station 635+33.1 on median center line of the Montana Interstate Highway Project No. I 90-8(5)433, which is a point on the west line of the NE¼, Section 17, Township 1 South, Range 26 East, M.P.M., Yellowstone County, Montana; thence from the said point of beginning North 89° 39' East through said NE¼, Section 17, N½, Section 16, and the N½, Section 15, 8708.2 feet; thence continuing easterly along a curve to the left of 6366.7 feet radius through said N½, Section 15, SE¼SE¼, Section 10, W½, Section 11, 9969.4 feet; thence North 0° 04' 30" West through said W½, Section 11 and the E½SW¼, Section 2, 447.1 feet; thence continuing northerly along a curve to the right of 5730.0 feet radius through said E½SW¼, 1752.1 feet; thence North 17° 26' 46" East through said E½SW¼, E½NW¼, and the W½NE¼, Section 2, Township 1 South, Range 26 East, and through Section 34, Township 1 North, Range 26 East, 4221.0 feet; thence continuing northeasterly along a curve to the right of 2865.0 feet radius through said Section 34, 2983.9 feet; thence North 71° 07' 30" East through said Section 34, 18.7 feet; thence North 71° 09' 30" East through said Section 34, and the N½ Section 35, 3518.7 feet; thence continuing northeasterly along a curve to the left of 5730.0 feet radius through said N½, Section 35, 1094.2 feet; thence North 60° 13' East through said N½, Section 35, and the S½SE¼, Section 26, Township 1 North, Range 26 East, 2213.9 feet to Engineer's Station 1001+55.0 on said median center line, which said Station is North 475.0 feet and East 1703.0 feet, more or less, from the south quarter corner of said Section 26, and being 6.615 miles in length and will be known as the Montana Interstate Highway Project No. I 90-8(5)433.

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

I, the undersigned, [illegible], Secretary of the State Highway Commission of the State of Montana, and being the legal keeper and custodian of [illegible] of the State Highway Commission of Montana, do hereby certify that the above resolution and each and [illegible] thereof [illegible] and correct copy of the original [illegible] Helena, Montana, and which [illegible] at a meeting of said State [illegible] 23rd day of [illegible] Montana.

WITNESS my [illegible]

16 day of December [illegible]

7203336

Montana Highway

Recorded

Filed

741096
801

357

E A S E M E N T

KNOW ALL MEN BY THESE PRESENTS: That the State of Montana, acting by and through the State Highway Commission of the State of Montana of Helena, Montana, hereinafter referred to as "GRANTOR", in consideration of the sum of One Dollar ($1.00) and other valuable considerations cash in hand paid this date by Humble Pipe Line Company, a Delaware Corporation, with the principal offices in Houston, Texas, hereinafter referred to as "GRANTEE", receipt of which is hereby acknowledged, does hereby grant, lease, warrant, and convey unto Grantee, its successors and assigns, the right to construct, maintain, operate, repair, replace, change the size of, and remove a pipe line for the transportation of oil, gas, other petroleum derivatives or any substance which can be transported by pipe line, over, under and through the following described lands:

The North Sixteen (16') feet of the lands between engineer's station 878+50 and engineer's station 914+00 and the North Twelve (12') feet of the lands between engineer's station 914+00 and engineer's station 916+30, said lands being conveyed to the State Highway Commission of Montana by the following conveyances:

From Pierce Packing Company by instrument dated June 26, 1964, recorded in Book 795, Page 165. (Parcel #184, 878+50 to 910+44); 735301

From Midland Empire Packing Company by instrument dated May 7, 1964, recorded in Book 791, Page 478. (Parcel #185, 908+10 to 912+85.9) and 733120

From Farmers Union Central Exchange, Inc., by instrument dated June 22, 1964, recorded in Book 795, Page 256. (Parcel 186, 912+70 to 914+79) all in Section 34, Township 1 North, Range 26 East, Yellowstone County, Montana. 735754

Together with the right of ingress and egress to and from said pipe lines for the purposes aforesaid. However, it is specifically understood and agreed that said right of ingress and egress does not permit ingress and egress on that portion of the Grantor's property that is specifically designated as controlled access.

2989A
6168A

046

It is understood and agreed that this easement is granted for a period of Twenty (20) years from the date hereof and that the Grantee shall be specifically allowed the right of renewal on the same rental basis as is herein set out.

It is specifically agreed that the consideration for this lease and easement is to compensate the Grantee for damages to the existing easements that they now have with Pierce Packing Company, a Montana corporation of Billings, Montana, which said right of way easement is recorded in Book 338, Page 589, Deed Records of Yellowstone County, Montana, and in addition, the Grantee agrees to pay to the Grantor in advance the sum of Ten Dollars ($10.00) per year.

Grantor shall have the right to fully use and enjoy the above described premises except as to rights hereby granted and leased to Grantee and this conveyance is made upon the condition that if the Grantor shall at any time in the future desire to use the property over the route of said pipe line for purposes not consistent with the maintenance of said pipe line, the Grantee shall remove said pipe line to some other location designated by the Grantor and that the parties will share the cost of removal and reconstruction of a new pipe line in proportion as prescribed by law at the time of the request made by Grantor to the Grantee to remove the same. A minimum of One Hundred Twenty (120) days notice must be given by the Grantor to Grantee if said Grantor desires to have said pipe line removed.

Said easement shall terminate if its use for pipe line purposes is abandoned by Grantee for a period of Five (5) years.

The terms, conditions and provisions of this contract shall extend to and be binding upon the parties hereto and their respective

2

successors and assigns.

IN WITNESS HERETO the parties hereto have executed this agreement this 2nd day of October, 1964.

STATE HIGHWAY COMMISSION OF MONTANA

By Lewis M. Chittim
Lewis M. Chittim, Right of Way Engr.

STATE OF MONTANA)
ss.
COUNTY OF LEWIS & CLARK)

On this 2nd day of October, A.D., 1964, before me John P. Porter, A Notary Public in and for the State of Montana, personally appeared Lewis M. Chittim known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

Notarial Seal

John P. Porter
Notary Public for the State of Montana
Residing at Helena, Montana.
My commission expires August 13, 1967

CERTIFICATION OF AUTHORITY

The State Highway Commission of the State of Montana, in regular meeting duly assembled on the 29th day of January, 1963, at Helena, Montana, unanimously approved the following motion:

> "Upon motion by Gosman, seconded by Halvorson and unanimously approved, Lewis Chittim, Right-of-Way Engineer, was authorized to sign all Right-of-Way documents."

STATE OF MONTANA)
; ss.
County of Lewis & Clark)

I, the undersigned, John D. Wheeler, Secretary of the State Highway Commission of the State of Montana, and being the legal keeper and custodian of the resolutions, motions and minutes of the State Highway Commission of Montana do hereby certify that the above motion and each and all thereof is a full, true and correct copy of the motion filed in my office in Helena, Montana, and which was passed and adopted at a meeting of said State Highway Commission of Montana held on the 29th day of January, 1963, at Helena, Montana.

WITNESS my hand and seal of said Commission this 7 day of October, 1964.

J. D. Wheeler
Secretary, State Highway Commission of the State of Montana.

046

741046

State Highway Comm

to

Lewis & Clark Co

Exec

STATE OF MONTANA
County of Yellowstone

I hereby certify that the within instrument was filed for record on the 6 day of Oct A.D. 19 64 at 3:12 o'clock P M, and was duly recorded in Book 841 of Mortgages on Page

Witness my hand and official seal

Edmund S. Redding,
County Clerk & Recorder

By [illegible] Deputy

745 982
807

184

EASEMENT

KNOW ALL MEN BY THESE PRESENTS: That the STATE OF MONTANA, acting by and through the State Highway Commission of the State of Montana of Helena, Montana, hereinafter referred to as "GRANTOR", in consideration of the sum of One Dollar ($1.00) and other valuable considerations cash in hand paid this date by FARMERS UNION CENTRAL EXCHANGE, INCORPORATED, a Minnesota Corporation, with its principal office at St. Paul, Minnesota, hereinafter referred to as "GRANTEE", receipt of which is hereby acknowledged, does hereby grant, lease, warrant, and convey unto Grantee, its successors and assigns, the right to construct, maintain, operate, repair, replace, change the size of, and remove a pipe line for the transportation of oil, gas, other petroleum derivatives or any substance which can be transported by pipe line, over, under and through the following described lands:

> The North Sixteen (16') feet of the lands between engineer's station 878+50 and engineer's station 914+00 and the North Twelve (12') feet of the lands between engineer's station 914+00 and engineer's station 916+30, said lands being conveyed to the State Highway Commission of Montana by the following conveyances:
>
> > From Pierce Packing Company by instrument dated June 26, 1964, recorded in Book 795, Page 165. (Parcel #184, 878+50 to 910+44);
> >
> > From Midland Empire Packing Company by instrument dated May 7, 1964, recorded in Book 791, Page 478. (Parcel #185, 908+10

982

2989-A

See 34-1N-26

to 912+85.9) and,

From Farmers Union Central Exchange, Inc., by instrument dated June 22, 1964, recorded in Book 795, Page 256. (Parcel 186, 912+70 North , Range 26 East, Yellowstone County, Montana

Together with the right of ingress and egress to and from said pipe lines for the purposes aforesaid. However, it is specifically understood and agreed that said right of ingress and egress does not permit ingress and egress on that portion of the Grantor's property that is specifically designated as controlled access.

It is understood and agreed that this easement is granted for a period of Twenty (20) years from the date hereof and that the Grantee shall be specifically allowed the right of renewal on the same rental basis as is herein set out.

It is specifically agreed that the consideration for this lease and easement is to compensate the Grantee for damages to the existing easements that they now have with Pierce Packing Company, a Montana corporation of Billings, Montana, which said right of way easement is recorded in Book 338, Page 589, Deed Records of Yellowstone County, Montana, and in addition, the Grantee agrees to pay to the Grantor in advance the sum of Ten Dollars ($10.00) per year.

Grantor shall have the right to fully use and

enjoy the above described premises except as to rights hereby granted and leased to Grantee and this conveyance is made upon the condition that if the Grantor shall at any time in the future desire to use the property over the route of said pipe line for purposes not consistent with the maintenance of said pipe line, the Grantee shall remove said pipe line to some other location designated by the Grantor and that the parties will share the cost of removal and reconstruction of a new pipe line in proportion as prescribed by law at the time of the request made by Grantor to the Grantee to remove the same. A minimum of One Hundred Twenty (120) days notice must be given by the Grantor to Grantee if said Grantor desires to have said pipe line removed.

Said easement shall terminate if its use for pipe line purposes is abandoned by Grantee for a period of Five (5) years.

The terms, conditions and provisions of this contract shall extend to and be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS HERETO the parties hereto have executed this agreement this 30th day of October, 1964.

STATE HIGHWAY COMMISSION OF MONTANA

By Lewis M. Chittim
Lewis M. Chittim, Right of Way Engr.

STATE OF MONTANA :
: ss
County of Lewis & Clark :

On this 30th day of October, A. D. 1964, before me, John P. Poston, a Notary Public for the State of Montana, personally appeared LEWIS M. CHITTIM, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

John P. Poston
Notary Public for the State of Montana
Residing at Helena, Montana
My commission expires August 13, 1967.

(SEAL)

982

745982

State Highway Comm

to

Farmers Union Exchange

R/W Easement

STATE OF MONTANA, I
County of Yellowstone, ss.
I hereby certify that the within instrument was filed in my office for record on this 7 day of Jan 1965 at 1:30 o'clock P. M., and is duly recorded in Book 807 of Deeds on Page

Witness my hand and official seal
Edmon S. Redding,
County Clerk & Recorder
By Ted Cameron Deputy

Farmers Union Central

748479
810

63

CORPORATE

RIGHT-OF-WAY EASEMENT

Pierce Packing Company, a Corporation in consideration of $1.00, and other good and valuable consideration, in hand paid, the receipt of which is hereby acknowledged, grants, conveys, and warrants to THE MONTANA POWER COMPANY, a corporation, whose post-office address is Butte, Montana, and to its successors, assigns and permittees, the right to construct, maintain, operate and remove

an electric power line and communication system

~~XXXXXXXXXXXXXX~~

over, along and across that certain real property, located in Yellowstone County, Montana and particularly described as follows, to-wit:

Govt. Lot 4, Section 34 T.1N.-R.26E. and Govt. Lot 3, Section 34 T.1N.-R.26E. M.P.M.

Line as described on The Montana Power Company drawing 106-B, alternate No. 2

Together with the right of access to said right of way over and along existing roads and trails and the right to clear and remove all timber and brush from the right of way 20 feet on each side of said transmission lines and to cut and remove such trees outside of such right of way which may endanger said line or lines.

Dated this 12th day of February, 1965.

(SEAL)

Pierce Packing Co.

Attest: Rodney Smith
Secretary

By F C Pierce II
Vice President

STATE OF Montana
COUNTY OF Yellowstone } ss.

On this 12th day of February, 1965, before me personally appeared F C Pierce II to me personally known to be the Vice President of the corporation that executed the within and foregoing instrument; who, duly sworn, on oath did say: that he is the Vice President of the corporation that executed the within and foregoing instrument; that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said Vice President acknowledged said instrument to be the free act and deed of said corporation for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal this the day and year first in this my certificate written.

Richard A. Brecheen
Notary Public for The State of Montana, residing at Billings, Montana, therein.
My commission expires August 7, 1967

Project Highway Reroute I-90-8(5)433
Charge No. 12371-33
Map No. 106-B
Distance

748479

Prince Packing Co

to

Mont Power Co

Right of Way Easement

STATE OF MONTANA }
County of Yellowstone } ss.

I hereby certify that the within instrument was filed in my office for record on the [illegible] day of Feb 19 65 at 10:10 [illegible] A M., and is recorded in Book 810 of Deeds [illegible]

Witness my hand and official seal
Ida Jon
County Clerk & Recorder

By Paul Tesh Deputy

12.00

Return to Mont Power Billings

Filed for record this.....day of.....

NO. 8A — WARRANTY DEED — Corporation — Short Form.

752869
813

Know All Men by These Presents: 752869

535

That PIERCE PACKING CO.,

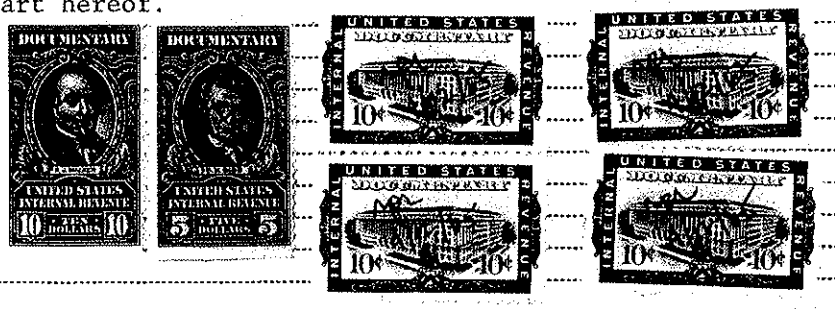
a corporation, organized and existing under the laws of the State of Montana,

in consideration of the sum of Ten and no/100ths ---------- Dollars ($10.00), the receipt whereof is hereby admitted, does hereby grant, bargain, sell, convey and confirm unto THE CITY OF BILLINGS, a municipal corporation,

and to its successors and assigns, FOREVER, the following described real property, situated in the city or town of

County of Yellowstone, State of Montana, to-wit:

The lands described in Schedule A attached hereto and made a part hereof.



TOGETHER, with all and singular the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining.

And the said GRANTOR hereby covenants that it will forever WARRANT and DEFEND all right, title, and interest in and to said premises, and the quiet and peaceable possession thereof, unto the said GRANTEE, its successors and assigns, against the acts and deeds of said grantor, and all and every person and persons whomsoever lawfully claiming or to claim the same.

IN WITNESS WHEREOF, said GRANTOR has caused its corporate name to be subscribed and its corporate seal to be affixed, by its proper officers, thereunto duly authorized, on this 12th day of April A. D. 19 65.

PIERCE PACKING CO.

ATTEST:

By [signature]
Vice President.

[signature]
Secretary.

STATE OF MONTANA,
County of Yellowstone } ss.

On this 12th day of April in the year 19 65, before me the undersigned, a Notary Public for the State of Montana, personally appeared

(~~known to me or proved to me on the oath of~~)

to be the vice president of the corporation that executed the within instrument and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year in this certificate first above written.

1668-A

?

SCHEDULE A

That part of the following described principal tract of land, to-wit:

Beginning at a point that is located S89°21'45"E along the south line of Section 34, T-1N, R-26E, M.P.M., a distance of 617.93 feet; thence N25°00'30"W a distance of 1161.08 feet; thence S83°50'E a distance of 133.32 feet; thence N33°47'E a distance of 66.66 feet; thence N37°03'E a distance of 265.32 feet; thence N34°04'E a distance of 794.64 feet; thence N28°03'W a distance of 342.40 feet; thence N55°46'E a distance of 124.05 feet; thence S76°14'E a distance of 385.00 feet; thence N49°46'E a distance of 563.64 feet; thence S89°37'E a distance of 1028.41 feet; thence S40°23'W a distance of 350.47 feet; thence S25°53'W a distance of 147.00 feet; thence S19°23'W a distance of 327.00 feet; thence S25°38'W a distance of 669.00 feet; thence S23°08'W a distance of 508.00 feet; thence S08°53'W a distance of 400.00 feet; thence S16°43' W a distance of 289.00 feet; thence S24°43' W a distance of 177.72 feet to an intersection with the south line of said Section 34, thence N89°21'45"W along said south line of Section 34 a distance of 950.01 feet to the point of beginning, containing 83.796 acres; lying south and east of that certain right-of-way for Interstate 90 heretofore conveyed by Grantor to the State of Montana by deed dated June 26, 1964, recorded on July 20, 1964 in Book 795 of Deeds, Page 165, under Document No. 735307, records of Yellowstone County, Montana,

Reserving to Grantor all of said principal tract of land lying north and west of said right-of-way of Interstate 90;

And further reserving to Grantor, its successors and assigns, a perpetual easement over, across and under the lands hereby conveyed, for the purpose of operating, repairing, maintaining, constructing and reconstructing that certain industrial water supply system now existing on said lands and to be substantially reconstructed pursuant to that certain written agreement between Grantor and Grantee, dated March 15, 1965 and approved by the City Council of the City of Billings on the 12th day of April, 1965.

752869

Warranty Deed - Corporation
(S. F.)

Rouse Broadcasting Co.

TO

City of Billings

Dated ....., 19....

STATE OF MONTANA, } ss.
County of Yellowstone

Filed for Record this 16 day of February, A. D. 19 65
at 11:15 o'clock A.M., and
recorded in Book 613 of Deeds
Page ..... of the Records of
Yellowstone County,
State of Montana

EDMON S. REDDING
County Recorder.
By ..... Deputy.

Fees, $ 7.00

City Clerk

QM - U - WZ

RIGHT OF WAY AGREEMENT

FOR AND IN CONSIDERATION of the sum of One Hundred Dollars ($100.00), in hand paid, the receipt of which is hereby acknowledged, COUNTY OF YELLOWSTONE, hereinafter referred to as Grantor, does hereby grant unto CONTINENTAL PIPE LINE COMPANY, a Delaware corporation having offices in Ponca City, Oklahoma, hereinafter referred to as Grantee, its successors and assigns, the right to lay, maintain, inspect, alter, repair, operate, protect, remove and relay a pipe line for the transportation of oil and gas and products and by-products thereof, water and other substances, and such drips, valves, fittings, meters and other equipment and appurtenances as may be necessary or convenient for such operations and, if necessary, to construct, maintain, operate, remove and replace communication and control facilities under the following described land situated in Yellowstone County, State of Montana, to-wit:

> The land over which the pipeline is to extend and the location of the line are shown on Exhibits "A" and "B", consisting of plats attached hereto and made a part hereof,

together with the rights of ingress and egress to and from said line for the purposes aforesaid.

Grantor shall have the right to fully use and enjoy the said premises except as the same may be necessary for the purposes herein granted to the said Grantee; and Grantee hereby agrees to pay any damages which may arise to crops, pasturage, fences or buildings of said Grantor from the exercise of the rights herein granted. Grantee shall have the right to change the size of its pipes, the damages, if any, in making such change to be paid by the said Grantee.

Any pipe line constructed by Grantee across lands under cultivation shall, at the time of construction thereof, be buried to such depth as will not interfere with such cultivation, except that at the option of grantee any such line may be placed above any stream, ravine, ditch, or other watercourse.

Grantee shall indemnify and save harmless the Grantor against all claims and liability which may arise in favor of third persons or parties by reason of the construction, maintenance or operation of the pipe line.

Grantor shall give Grantee prompt notice of any such claim presented to Grantor.

Grantee agrees that in the event the Grantor desires to construct buildings or other substantial improvements over the pipe line, then the Grantee will relocate the pipe line so as to permit such construction. Grantor shall, however, provide the necessary right of way within the Fair Ground property for the relocation of the line. Such right of way shall permit construction, maintenance and operation of the pipe line in accordance with good standard engineering practices.

Grantee shall erect such signs as may be reasonably necessary to show the location of the pipe line. .

Grantee shall not conduct any construction operations on fairgrounds during fair week, except in the case of emergency.

Grantee shall, after construction, promptly clean up the surface and restore the same as near as reasonably possible to its original condition.

It is understood that the block valves shown on the plats attached hereto require an area approximately 30 feet by 60 feet for operation and when and if such valves are installed, Grantee shall have the right to fence such areas, notwithstanding any other provisions of this agreement. It is further understood that although the plats attached hereto describe a 12 inch pipe line, such line may in fact be larger.

The total number of rods of pipe line actually to be located on Grantor's premises is approximately 198. Plat "A" describes principally the location of the line on railway right of way, but also shows incursion of such line on Grantor's premises.

This Right of Way Agreement may be assigned by Grantee, its successors and assigns, in whole or in part, vesting in any other person, firm or corporation the ownership of one or more pipe lines or an undivided interest therein and/or communication lines, with full rights of ingress and egress for the maintenance, repair, operation, replacement and removal thereof.

The terms, conditions and provisions hereof shall extend to and be binding upon the heirs, executors, administrators, personal representatives, successors and assigns of the parties hereto.

WITNESS the execution hereof the 15th day of September, 1967.

COUNTY OF YELLOWSTONE

By _____
County Commissioner

_____
County Commissioner

ATTEST:

_____
County Commissioner

_____
County Clerk and Recorder

CONTINENTAL PIPE LINE COMPANY

ATTEST:

By _____
President

_____
Secretary

STATE OF MONTANA)
) ss.
County of Yellowstone)

On this 26th day of Sept, 1967, before me, the undersigned, a Notary Public for the State of Montana, personally appeared MIKE McCLINTOCK, ~~A.~~ S. "BUD" ROBERTS and E. F. "SWEDE" CARLSON, known to me to be the County Commissioners of Yellowstone County, Montana, the county which executed the foregoing instrument, and acknowledged to me that such county executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

_____
Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires April 15, 1970

Midland Empire Fair Commission does hereby adopt, ratify, join in and confirm the foregoing right of way agreement with Continental Pipe Line Company, to which agreement this ratification is attached as a rider to be made a part thereof.

Dated: _____

MIDLAND EMPIRE FAIR COMMISSION

By _____
Its President, hereunto duly authorized by resolution of the said Commission

STATE OF MONTANA)
) ss.
County of Yellowstone)

On this _____ day of _____, 1967, before me, the undersigned, a Notary Public for the State of Montana, personally appeared _____, known to me to be the President of the MIDLAND EMPIRE FAIR COMMISSION, the Commission which executed the foregoing instrument, and acknowledged to me that such Commission executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

_____
Notary Public for the State of Montana
Residing at Billings, Montana
My Commission expires _____

(Seal)

BOOK 870 PAGE 25

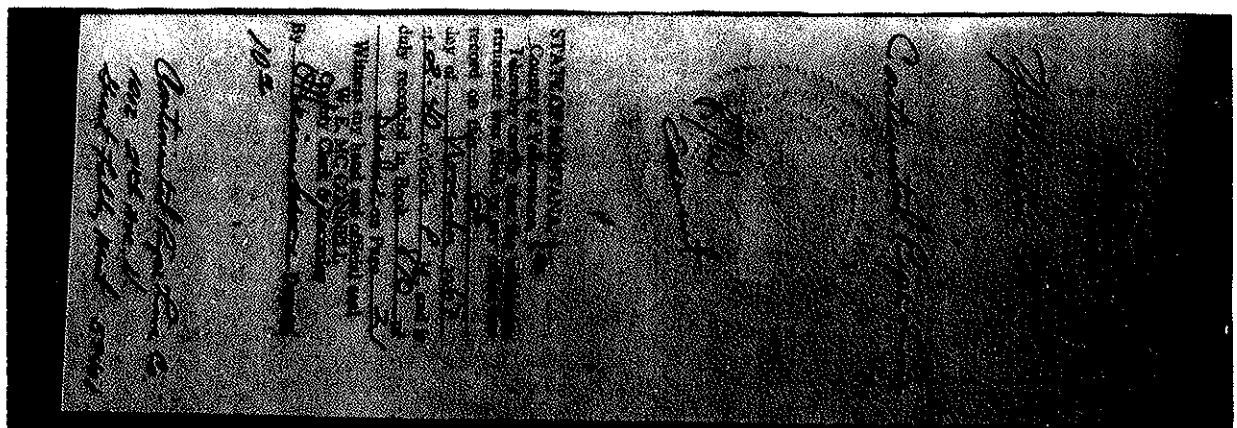
STATE OF OKLAHOMA }
County of KAY } ss.

On this 15th day of September, 1967, before me, the undersigned, a Notary Public for the State of Oklahoma, personally appeared W. L. KYGAR, known to me to be the President of CONTINENTAL PIPE LINE COMPANY, the corporation which executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Karen Taylor
Notary Public for the State of Oklahoma
Residing at Ponca City, Oklahoma
My commission expires May 14, 1971

(Seal)



808970

Exhibit "A" - attached to Yellowstone County Easement

ISU	DATE	DESCRIPTION	BY	CKD	APD
1	[illegible]	[illegible]	[illegible]	[illegible]	
1	5-25-67	Field Survey - Simpson, N.G. & Proff	D.L.P.	AED	

CONTINENTAL PIPE LINE COMPANY

PONCA CITY, OKLAHOMA

PROPOSED 12-INCH CRUDE OIL PIPE LINE ON BILLINGS & CENTRAL MONTANA RY CO'S R.O.W.

Secs 26 & 27, T1N - R25E, Yellowstone Co., Montana

USE BORDER SCALE: 1" = 200'

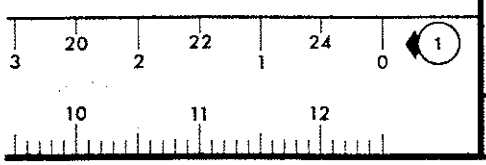
APPD:

DATE:

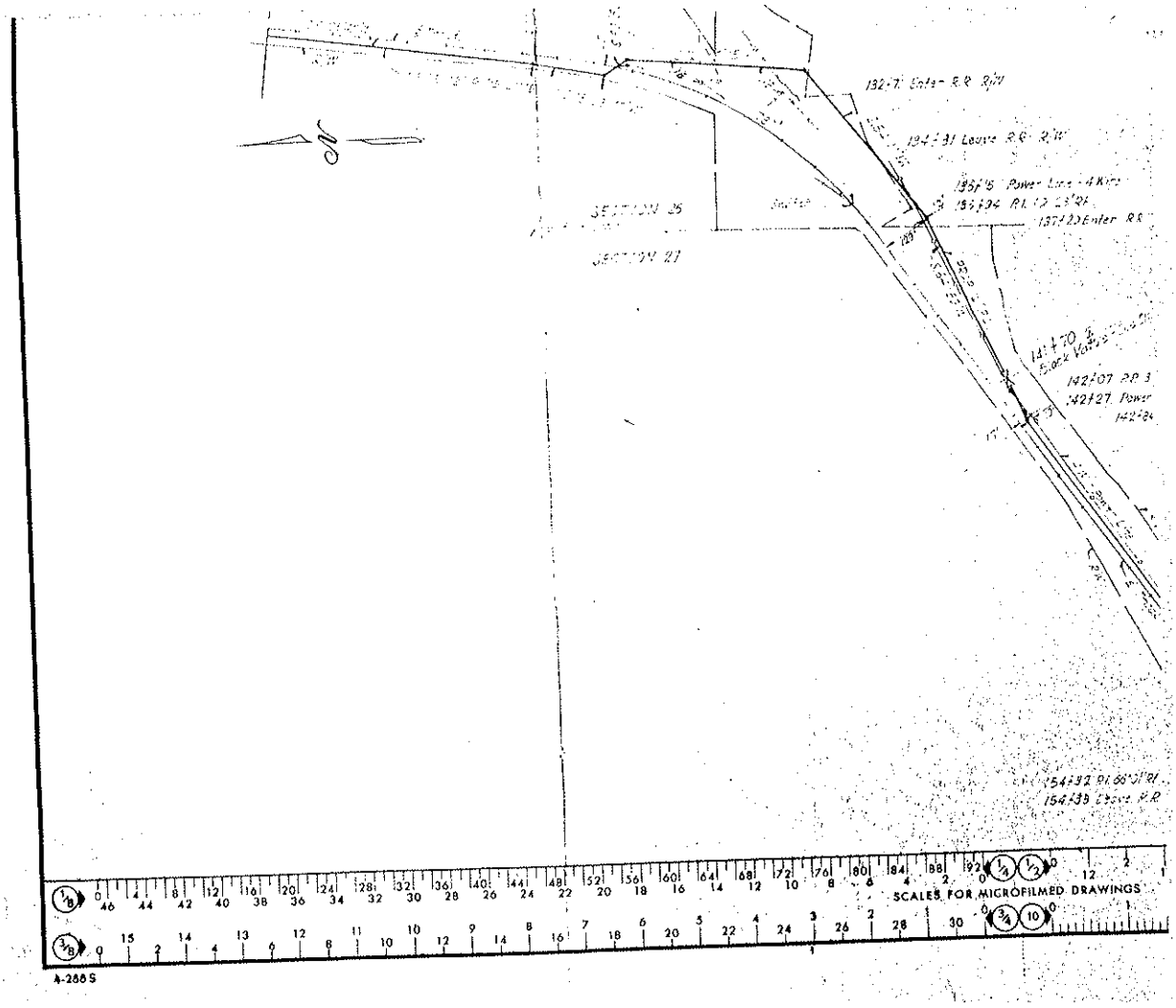
No. M-12-323

DWR. CPL-20

SHEET 2 OF 2

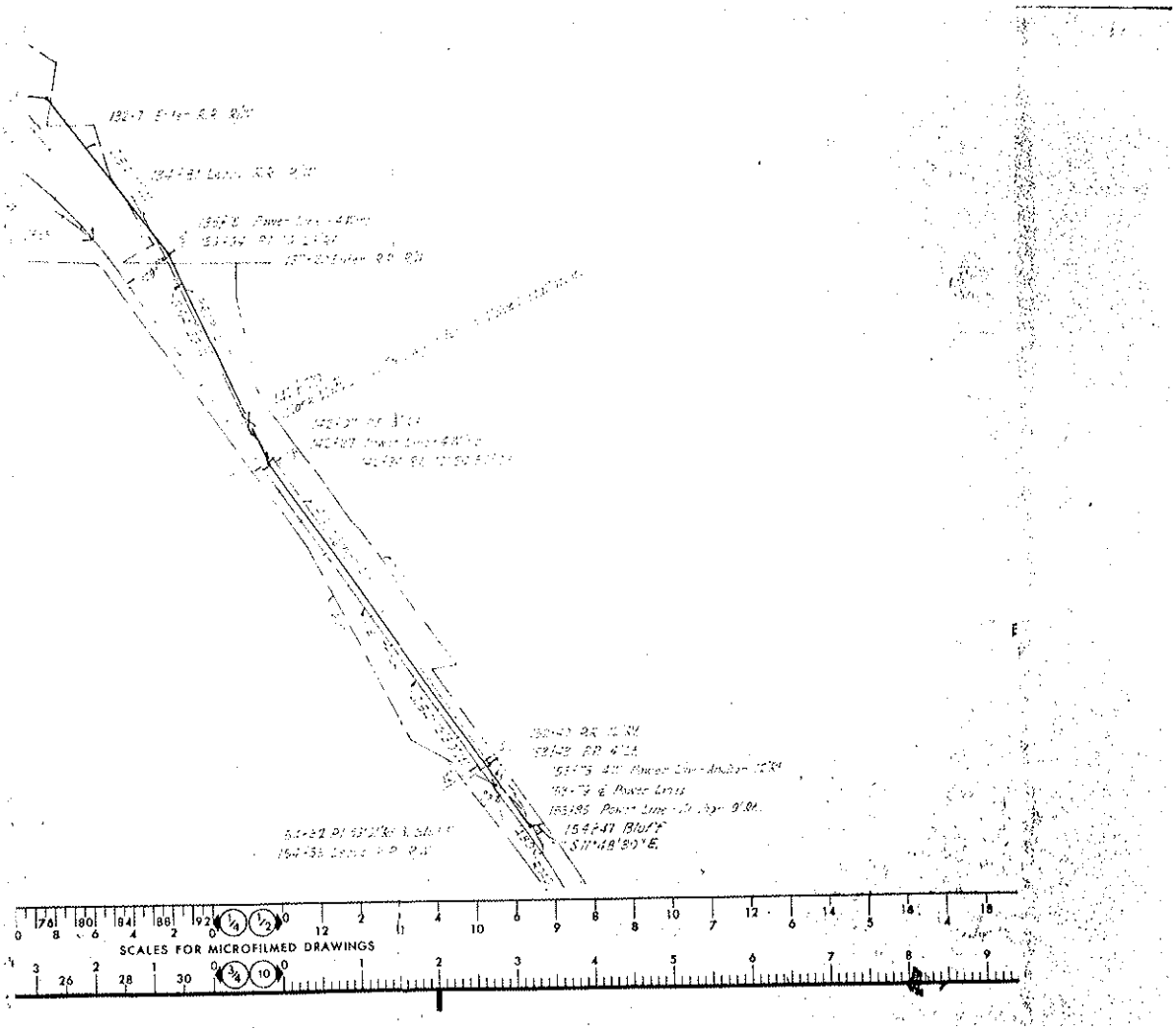


808970

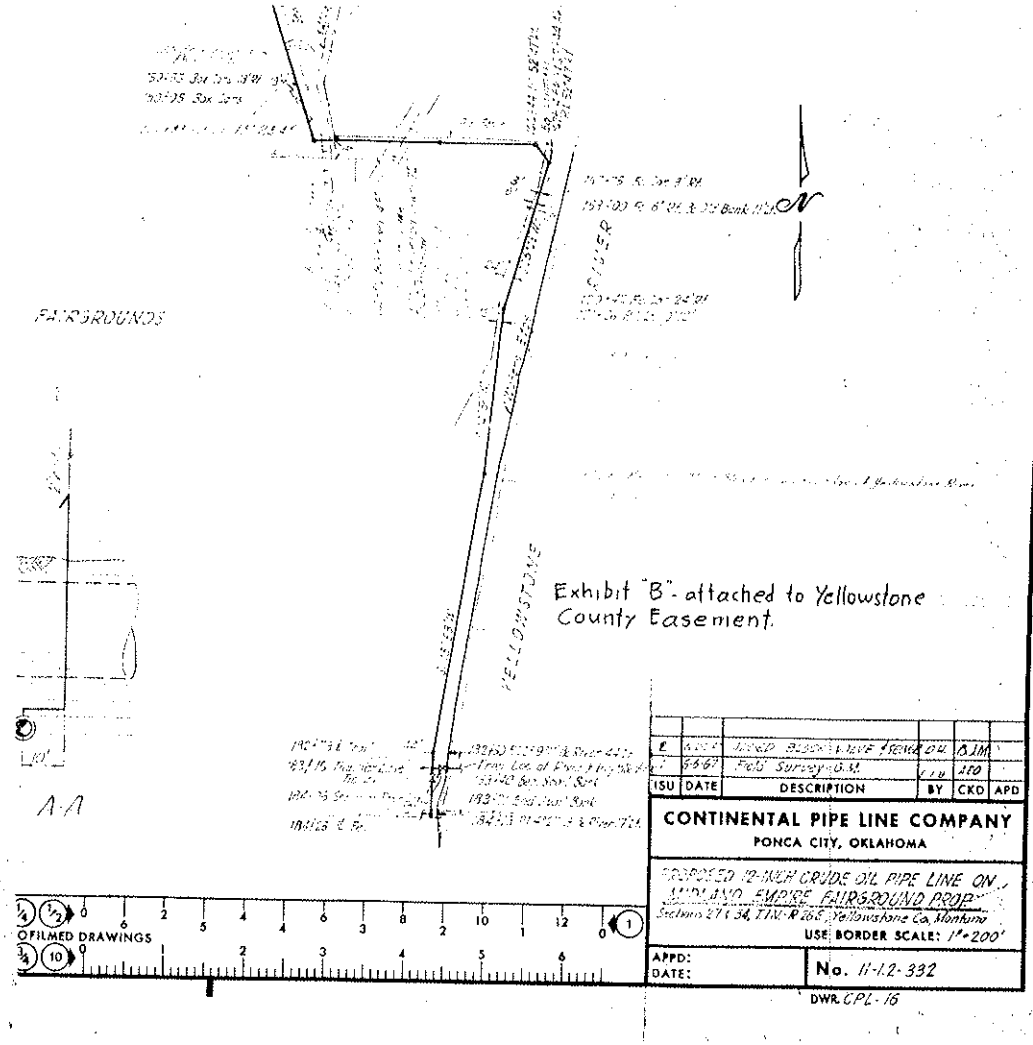

132+71 Enter R.R. R/W
194+31 Leave R.R. R/W
195+15 Power Line - 4 Wire
137+22 Enter R.R.
SECTION 26
SECTION 27
142+07 PP 3
142+27 Power
154+32 PI 66°31'RI
154+35 Leave R.R.
SCALES FOR MICROFILMED DRAWINGS
A-2565

008970

808970



808970


FAIRGROUNDS
YELLOWSTONE
A-A
Exhibit "B"- attached to Yellowstone County Easement.
ISU DATE DESCRIPTION BY CKD APD
CONTINENTAL PIPE LINE COMPANY
PONCA CITY, OKLAHOMA
PROPOSED 12-INCH CRUDE OIL PIPE LINE ON
MIDLAND EMPIRE FAIRGROUND PROP.
USE BORDER SCALE: 1"=200'
APPD:
DATE:
No. 11-12-332
DWR. CPL-16
OFILMED DRAWINGS

108970

2182

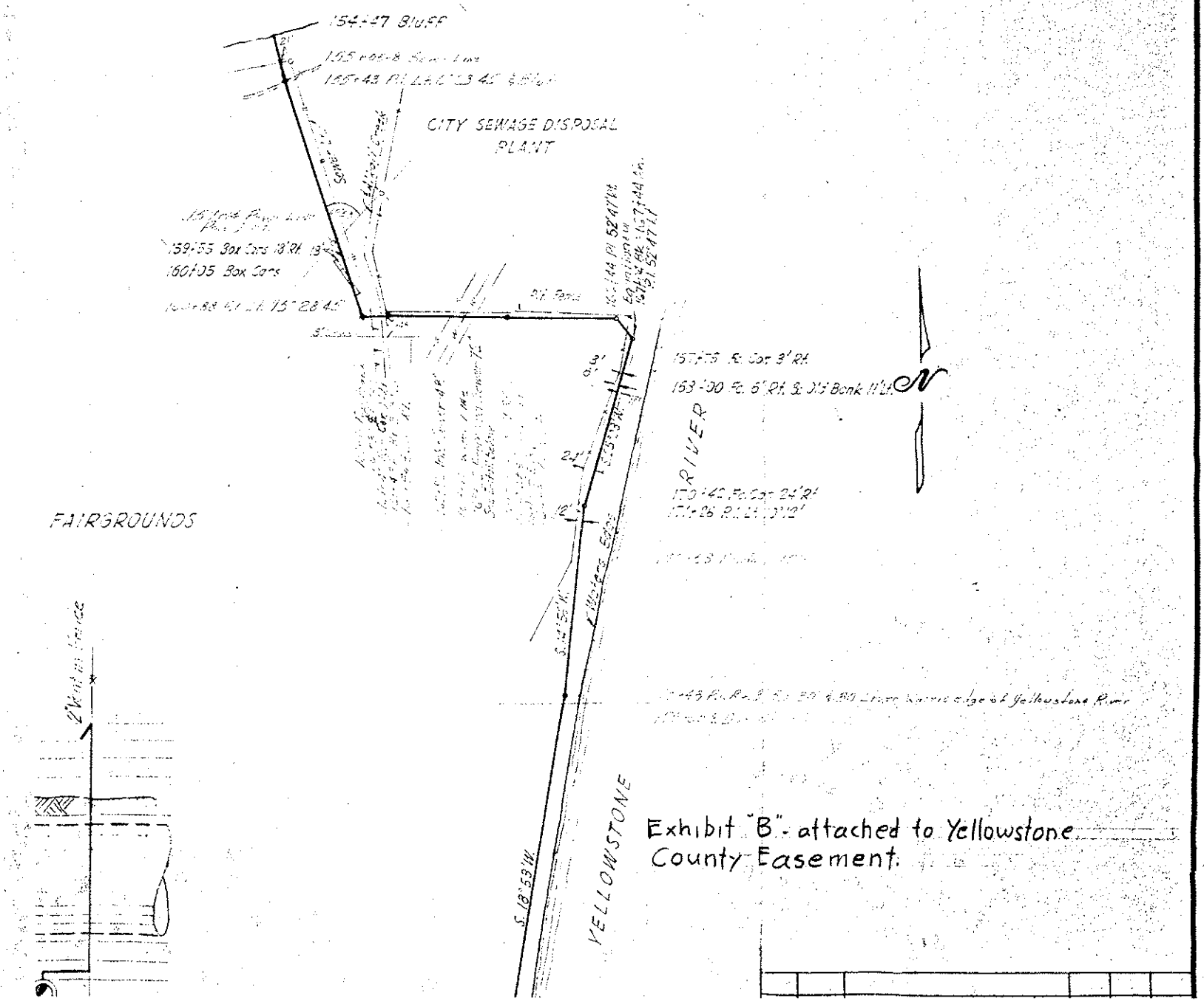
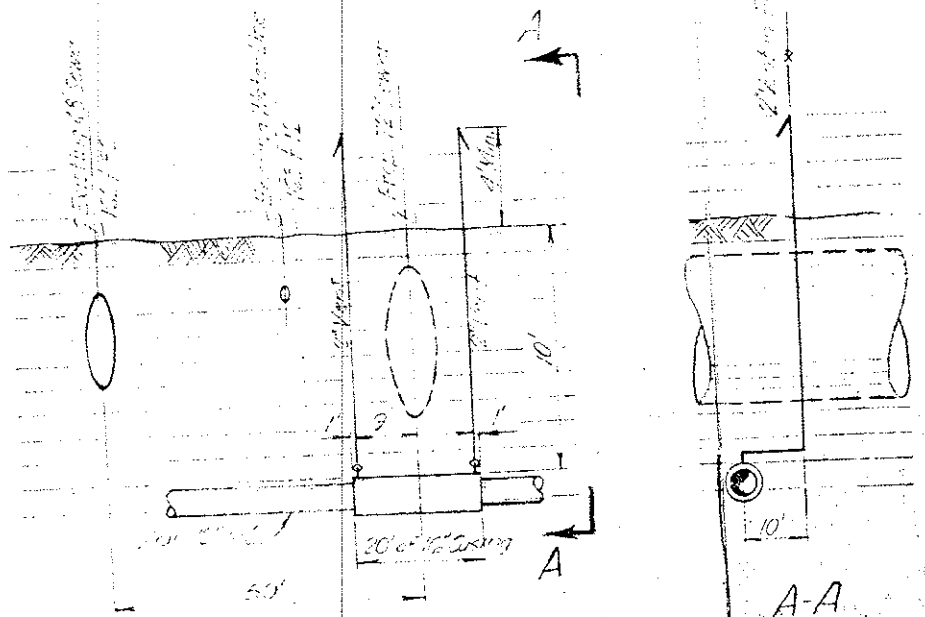


Exhibit "B" - attached to Yellowstone County Easement.

2181

159+55
160+05

FAIRGROUNDS



PROP. SEWER LINE X-ING

SCALES FOR MICROFILMED DRAWINGS

4-287 S

811239
870

646

7-2-8
REV. 3-1-64

RIGHT OF WAY AGREEMENT
(STANDARD FORM)

FOR AND IN CONSIDERATION of the sum of Two Hundred Fifty and no/100- - - - Dollars ($ 250.00), in hand paid, the receipt of which is hereby acknowledged CITY OF BILLINGS, STATE OF MONTANA, hereinafter referred to as Grantor does hereby grant unto Continental Pipe Line Company, a Delaware corporation having offices in Ponca City, Oklahoma, hereinafter referred to as Grantee, its successors and assigns, the right to lay, maintain, inspect, alter, repair, operate, protect, remove and relay a pipe line or pipe lines, for the transportation of oil and gas and products and by-products thereof, water and other substances, and such drips, valves, fittings, meters and other equipment and appurtenances as may be necessary or convenient for such operations and, if necessary, to construct, maintain, operate, remove and replace communication and control facilities upon, over, through and under the following described land situated in Yellowstone County, State of Montana to wit:

Pipe line to be located on and across CITY OF BILLINGS lands in Section 34, Township 1 North, Range 26 East, as shown on Plat marked Exhibit "A" Attached hereto and made a part hereof.

together with the rights of ingress and egress to and from said line or lines, or any of them, for the purposes aforesaid, hereby releasing and waiving for the purpose of this grant all rights under and by virtue of the dower, homestead and homestead exemption laws, if any, of said state.

Grantor shall have the right to fully use and enjoy the said premises except as the same may be necessary for the purposes herein granted to the said Grantee; and Grantee hereby agrees to pay any damages which may arise to crops, pasturage, fences or buildings of said Grantor from the exercise of the rights herein granted. Grantee shall have the right to change the size of its pipes, the damages, if any, in making such change to be paid by the said Grantee. Grantor agrees not to build, create or construct any obstruction, engineering works, or other structure over said pipe line or lines nor permit same to be done by others.

Any pipe line or lines constructed by Grantee across lands under cultivation shall, at the time of construction thereof, be buried to such depth as will not interfere with such cultivation, except that at option of Grantee any such line may be placed above any stream, ravine, ditch, or other watercourse.

Should more than one line be laid under this grant at any time, an additional consideration, calculated on the same basis per lineal rod as the consideration hereinabove recited, shall be paid for each line so laid after the first line.

It is agreed that any payment due hereunder may be made direct to said Grantors or any one of them.

This Right of Way Agreement may be assigned by Grantee, its successors and assigns, in whole or in part, vesting in any other person, firm or corporation the ownership of one or more pipe lines or an undivided interest therein and/or communication lines, with full rights of ingress and egress for the maintenance, repair, operation, replacement and removal thereof.

The terms, conditions and provisions hereof shall extend to and be binding upon the heirs, executors, administrators, personal representatives, successors and assigns of the parties hereto.

WITNESS the execution hereof the 13th day of November 19 67

~~In the presence of~~ ATTEST

Clerk

CITY OF BILLINGS

By:

Mayor

Tract No. 1-1-16

State of Ohio)
County of Lawrence)

On this 13th day of November, 1967, before me, Wm. B. Bjornson, a Notary Public, personally appeared Willard E. Fraser, known to me to be the Mayor of the City of Billings, Montana who executed the within instrument and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

My Commission expires

NOTARY PUBLIC for the State of Montana
Residing at Billings, Montana
My Commission Expires August 27, 1968

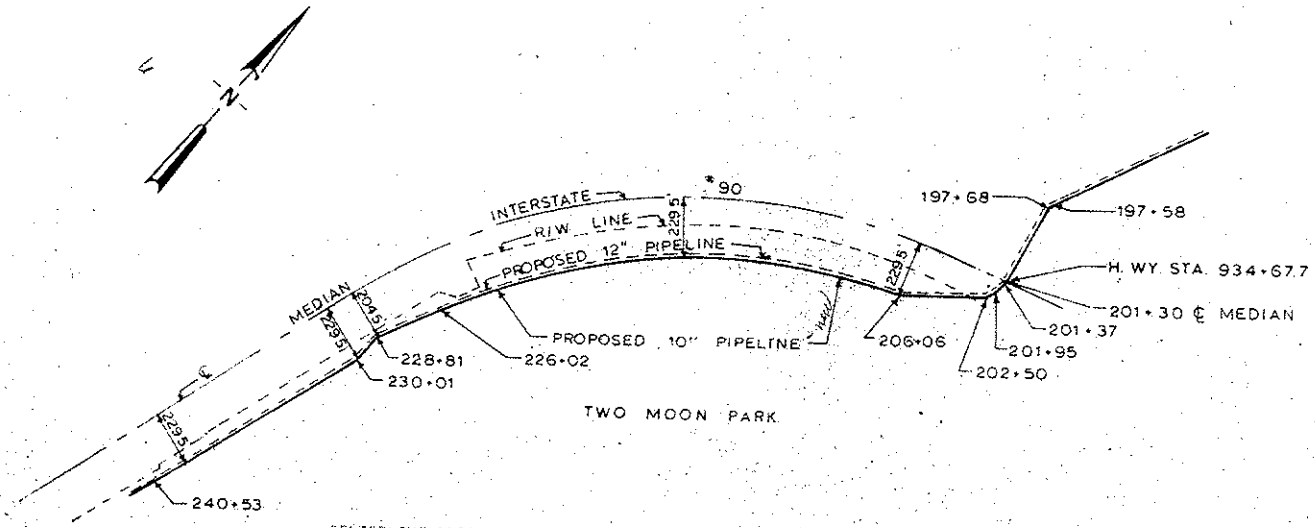
Wm. B. Bjornson
Notary Public for the State of Montana
Residing at Billings, Mont.

311459

City of Billings
To
Continental Pipe Line Co.

R/W Easement

STATE OF MONTANA, ss.
Filed for record the 14 day of Dec 1967 at 8:30 o'clock A M
Merrill Kluesel
County Clerk and Recorder
By Deputy



CENTERLINE DESCRIPTION OF 10" PIPELINE
BILLINGS, MONTANA, TO CANADIAN LINE
CROSSING THE CITY OF BILLINGS PROPERTY IN
SECTION 34, T.1N., R.26E., P.M.M.
YELLOWSTONE COUNTY, MONTANA

Beginning at a point on the centerline median of Interstate Hwy. 90 at Highway Station 934+67.7, thence from said point of beginning S13°01'E a distance of 7.6 feet; thence S13°01'E a distance of 55.0 feet; thence S24°00'E a distance of 55.0 feet; thence S40°[illegible] a distance of 356.0 feet; thence along a 1410'30" curve on a line parallel to and a distance of 229.5 feet from the centerline of the median of Interstate Hwy. 90 a distance of 1996 feet; thence S27°31'46"W a distance of 279 feet; thence S06°11'46"W a distance of 130.0 feet; thence S17°26'[illegible] a distance of 1057 feet.

ALSO BEGINNING at a point on the centerline median of Interstate Hwy. 90 at Highway Station 934+67.7; thence from said point of beginning [illegible] a distance of 36.0 feet; thence N27°00'W a distance of [illegible] feet to Station [illegible] which is the northerly property line of the City of Billings, Montana.

EXHIBIT "A"

ISSUE	DATE	SOURCE - DESCRIPTION	BY	CHKD
ORIG.	10/27/67	MUELLER ENGINEERING	JLW	

CONTINENTAL PIPE LINE COMPANY
PONCA CITY, OKLAHOMA

[illegible] DESCRIPTION OF [illegible] PROPERTY

SCALE: ISSUE:

APPROVED: DWR.
DATE: №

7 RIGHT OF WAY AGREEMENT

FOR AND IN CONSIDERATION of the sum of ONE HUNDRED DOLLARS ($100.00), in hand paid, the receipt of which is hereby acknowledged, COUNTY OF YELLOWSTONE, hereinafter referred to as Grantor, does hereby grant unto CONTINENTAL PIPE LINE COMPANY, a Delaware corporation having offices in Ponca City, Oklahoma, hereinafter referred to as Grantee, its successors and assigns, the right to lay, maintain, inspect, alter, repair, operate, protect, remove and relay a pipe line for the transportation of oil and gas and products and by-products thereof, water and other substances, and such drips, valves, fittings, meters and other equipment and appurtenances as may be necessary or convenient for such operations and, if necessary, to construct, maintain, operate, remove and replace communication and control facilities under the following described land situated in Yellowstone County, State of Montana, to-wit:

> The land over which the pipeline is to extend and the location of the line are shown on Exhibits "A" and "B", consisting of plats attached hereto and made a part hereof,

together with the rights of ingress and egress to and from said line for the purposes aforesaid.

Grantor shall have the right to fully use and enjoy the said premises except as the same may be necessary for the purposes herein granted to the said Grantee; and Grantee hereby agrees to pay any damages which may arise to crops, pasturage, fences or buildings of said Grantor from the exercise of the rights herein granted. Grantee shall have the right to change the size of its pipes, the damages, if any, in making such change to be paid by the said Grantee.

Any pipe line constructed by Grantee across lands under cultivation shall, at the time of construction thereof, be buried to such depth as will not interfere with such cultivation, except that at the option of grantee any such line may be placed above any stream, ravine, ditch, or other watercourse.

Grantee shall indemnify and save harmless the Grantor against all claims and liability which may arise in favor of third persons or parties by reason of the construction, maintenance or operation of the pipe line.

Check # 52312
Tract T-3
~~Unit [illegible]~~
T 1N R 26E

256
870
811256

Grantor shall give Grantee prompt notice of any such claim presented to Grantor.

Grantee agrees that in the event the Grantor desires to construct buildings or other substantial improvements over the pipe line, then the Grantee will relocate the pipe line so as to permit such construction. Grantor shall, however, provide the necessary right of way within the Fair Ground property for the relocation of the line. Such right of way shall permit construction, maintenance and operation of the pipe line in accordance with good standard engineering practices.

Grantee shall erect such signs as may be reasonably necessary to show the location of the pipe line.

Grantee shall not conduct any construction operations on fairgrounds during fair week, except in the case of emergency.

Grantee shall, after construction, promptly clean up the surface and restore the same as near as reasonably possible to its original condition.

The total number of rods of pipe line actually to be located on Grantor's premises is approximately [illegible]. Plat "A" [illegible] generally the location of the line on railway right of way, but also shows incursion of such line on Grantor's premises.

This Right of Way Agreement may be assigned by Grantee, its successors and assigns, in whole or in part, vesting in any other person, firm or corporation the ownership of one or more pipe lines or an undivided interest therein and/or communication lines, with full rights of ingress and egress for the maintenance, repair, operation, replacement and removal thereof.

The terms, conditions and provisions hereof shall extend to and be binding upon the heirs, executors, administrators, personal representatives, successors and assigns of the parties hereto.

7 WITNESS the execution hereof the 14th day of November, 1967.

COUNTY OF YELLOWSTONE

By M. E. McClintock
County Commissioner

A. S. Roberts
County Commissioner

E. F. Carlson
County Commissioner

ATTEST:

County Clerk and Recorder

Midland Empire Fair Commission does hereby adopt, ratify, join in and confirm the foregoing right of way agreement with Continental Pipe Line Company, to which agreement this ratification is attached as a rider to be made a part thereof.

Dated: November 14, 1967

MIDLAND EMPIRE FAIR COMMISSION

By

Its President, hereunto duly authorized by resolution of the said Commission

STATE OF MONTANA
ss.
County of Yellowstone

On this 14 day of Nov, 1967, before me, the undersigned, a Notary Public for the State of Montana, personally appeared M. E. McClintock, A. S. Roberts, and E. F. Carlson known to me to be the County Commissioners of Yellowstone County, Montana, the county which executed the foregoing instrument, and acknowledged to me that such county executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires

NOTARY PUBLIC for the State of Montana
Residing at Billings, Montana
My Commission Expires Sept. 22, 1969

STATE OF MONTANA

ss.

County of Yellowstone

On this 14th day of November, 1967, before me, the undersigned, a Notary Public for the State of Montana, personally appeared Peter Yegen III, known to me to be the President of the MIDLAND EMPIRE FAIR COMMISSION, the Commission which executed the foregoing instrument, and acknowledged to me that such Commission executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Paul E. Romine
Notary Public for the State of Montana
Residing at Billings, Montana
My Commission expires Dec 19, 1969

811256

County of Yellowstone

To

Continental Resources Co

Easement

Filed Dec 14 67
8:21 A
Clerk
Deputy

8:21

811256

Exhibit "A"

ISU	DATE	DESCRIPTION	BY	CKD	APD
4	10-30-67	10" BLK. VALVE-MUELLER ENGRG.	R.L.S.		
3	7-25-67	Prop. Second Line Added	AEO		
2	6-20-67	ADDED BLOCK VALVE	O.H.	B.M.	
1	5-26-67	Field Survey-Simpson, NG & Proff	D.L.P.	AEO	

CONTINENTAL PIPE LINE COMPANY

PONCA CITY, OKLAHOMA

PROPOSED 10&12 INCH CRUDE OIL PIPELINE ON BILLINGS & CENTRAL MONTANA RY CO'S R.O.W.

Sec's 26 & 27, T1N - R26E, Yellowstone Co, Montana

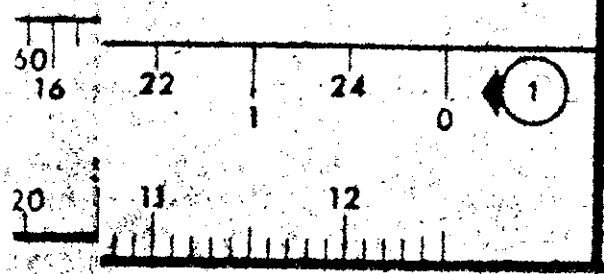
USE BORDER SCALE: 1" = 200'

APPD:

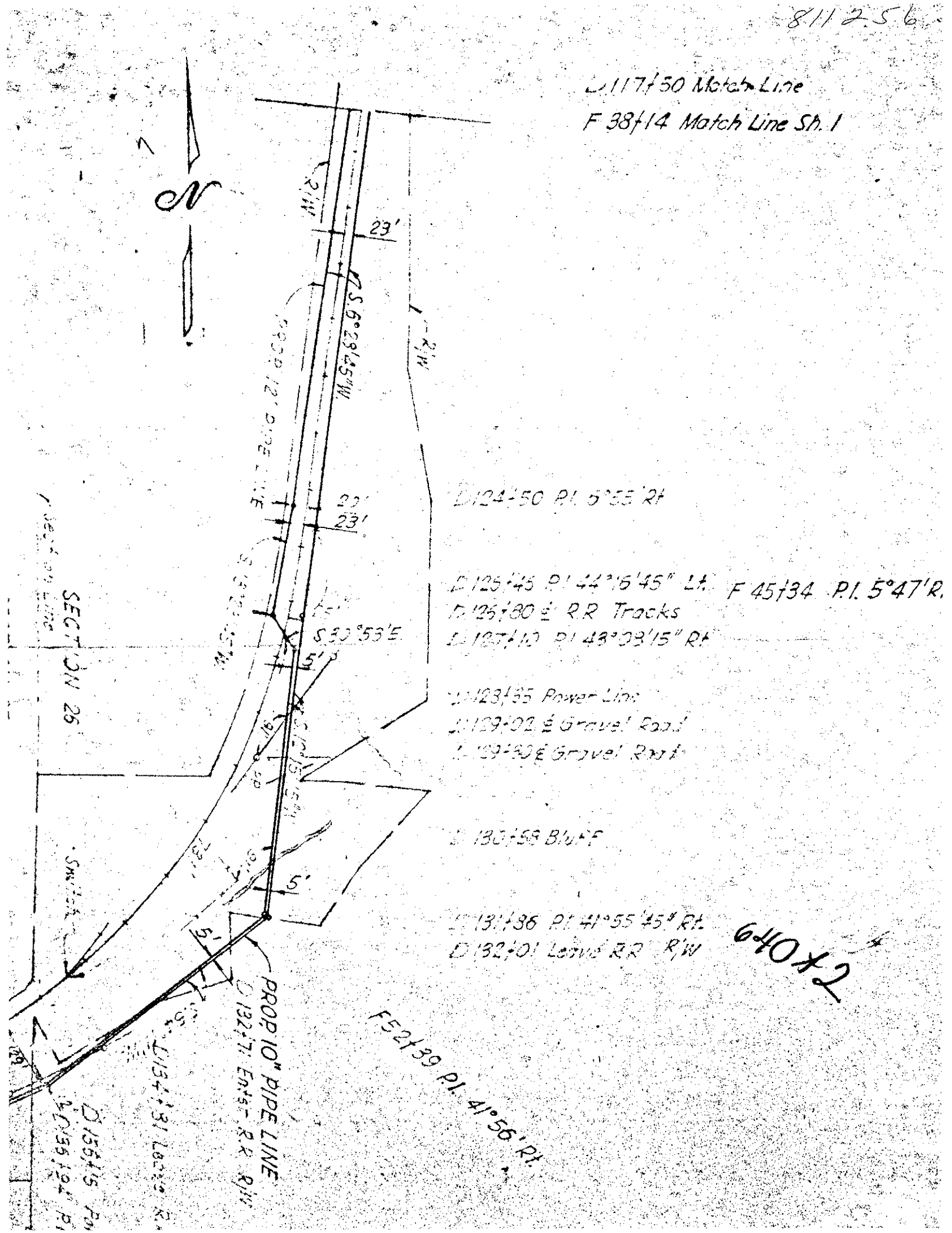
DATE:

No. 11-12-323 A

DWG. CPL-20



811256


L 117+50 Match Line
F 38+14 Match Line Sh. 1
N
21' W
23'
S 69°29'45" W
PROP. 12" GAS LINE
L 124+50 P.I. 5°55' Rt
L 125+45 P.I. 44°16'45" Lt.
F 45+34 P.I. 5°47' R.
L 125+80 ± R.R. Tracks
L 127+10 P.I. 43°03'15" Rt
S 30°53' E
5'
L 128+55 Power Line
L 129+02 ± Gravel Road
L 129+30 ± Gravel Road
L 130+59 Bluff
L 131+36 P.I. 41°55'45" Rt.
L 132+01 Leave R.R. R/W
640 x 2
PROP. 10" PIPE LINE
L 132+71 Enter R.R. R/W
F 52+39 P.I. 41°56' Rt.
SECTION 26

640+2

640A3

F 52+39 P.I. 41°56' Rt.

PROP. 10" PIPE LINE

132+7 Enter R.R. R/W

134+31 Leave R.R. R/W

F 57+50 P.I. 10°28' Rt.

135+15 Power Line - 4 Wire

155+94 P.I. 10°23' Rt.

137+20 Enter R.R. R/W

811256

129

S.64°39'W.

22'-0" Pipe

TROCHE

5'

D 141+70 ℄ 10" & 12" BLOCK VALVES

See Std Dwg of Typical Valve Installation

F 63+39 P.I. 10°27' Lt.

D 142+07 P.P. 3' Rt

D 142+27 Power Line - 4 Wire

D 142+94 P.I. 10°26'30" Lt

17'

5'

5'

Power Line

E. TRUCK

5'

S.54°12'30"W.

12'

D 152+40 R.R. 12' Rt

D 153+43 P.P. 4' Lt.

D 153+73 4W. Power Line - Anchor - 12' Rt

D 153+73 ℄ Power Lines

D 153+95 Power Line - Anchor - 9' Rt.

D 154+47 Bluff

S 11°48'30" E.

TRUCK ROAD

F 74+84 P.I. 66°01' Lt.

F 75+30 Leave R.R. R/W

D 154+32 P.I. 66°01' Lt. ℄ Bluff

D 154+83 Leave R.R. R/W

811 256

D [illegible] P.L. S 33°30" & 30' Lt. to bank edge of Yellowstone River
D [illegible]

NOTES
10" P.L. Parallels 12" P.L. 4' C-C.
Use 12" P.L. survey as reference for 10" P.L.

YELLOWSTONE

S 18°53'W

D182+73 ℄ Trail 44'
D182+15 Trailer Line Tie-in
D184+06 Service Pipe Line
D184+23 ℄ Fe.

D182+50 P.L. L 9°11' & River 44' Lt
℄ Prop. Loc. of River X-ing Blk. Valve
D183+40 Beg. Spoil Bank
D183+71 End Spoil Bank
D184+13 P.L. 4°27' Lt & River 17' Lt.

Exhibit "B"

ISU	DATE	DESCRIPTION	BY	CKD	A
3	10-31-67	ADD 10" P.L.-MUELLER ENGRG.	E.J.A.		
2	6-20-67	ADDED BLOCK VALVE & SEWER	D.H.	B.J.M.	
1	6-6-67	Field Survey - G.M.	E.F.B.	AEO	

CONTINENTAL PIPE LINE COMPAN
PONCA CITY, OKLAHOMA

PROPOSED 10-INCH CRUDE OIL PIPE LINE ON
MIDLAND EMPIRE FAIRGROUND PROP
Sections 27 & 34, T.1N.-R.26E., Yellowstone Co., Montana
USE BORDER SCALE: 1"=200

APPD:
DATE:

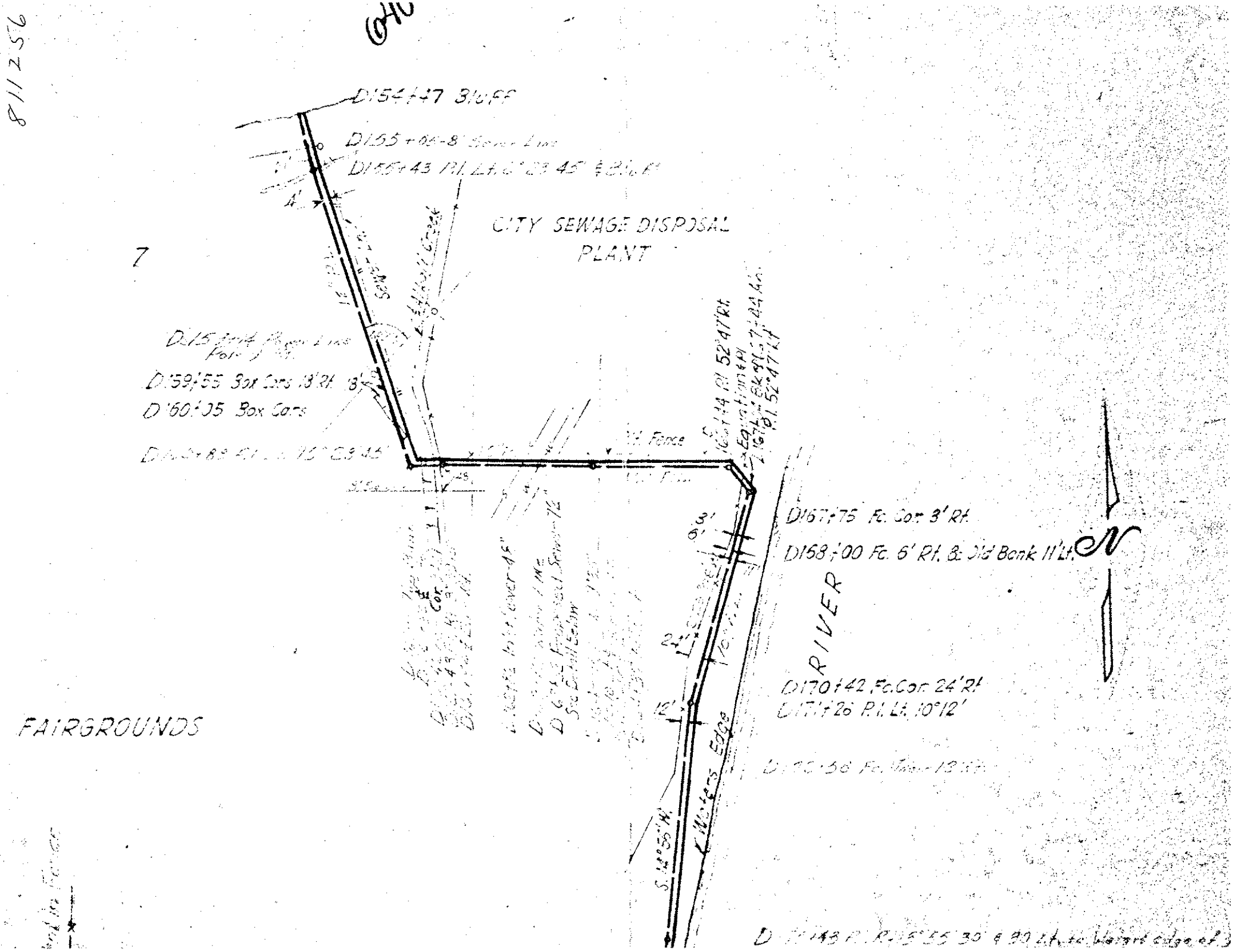
No. 11-12-332

DWR. CPL-16

GS

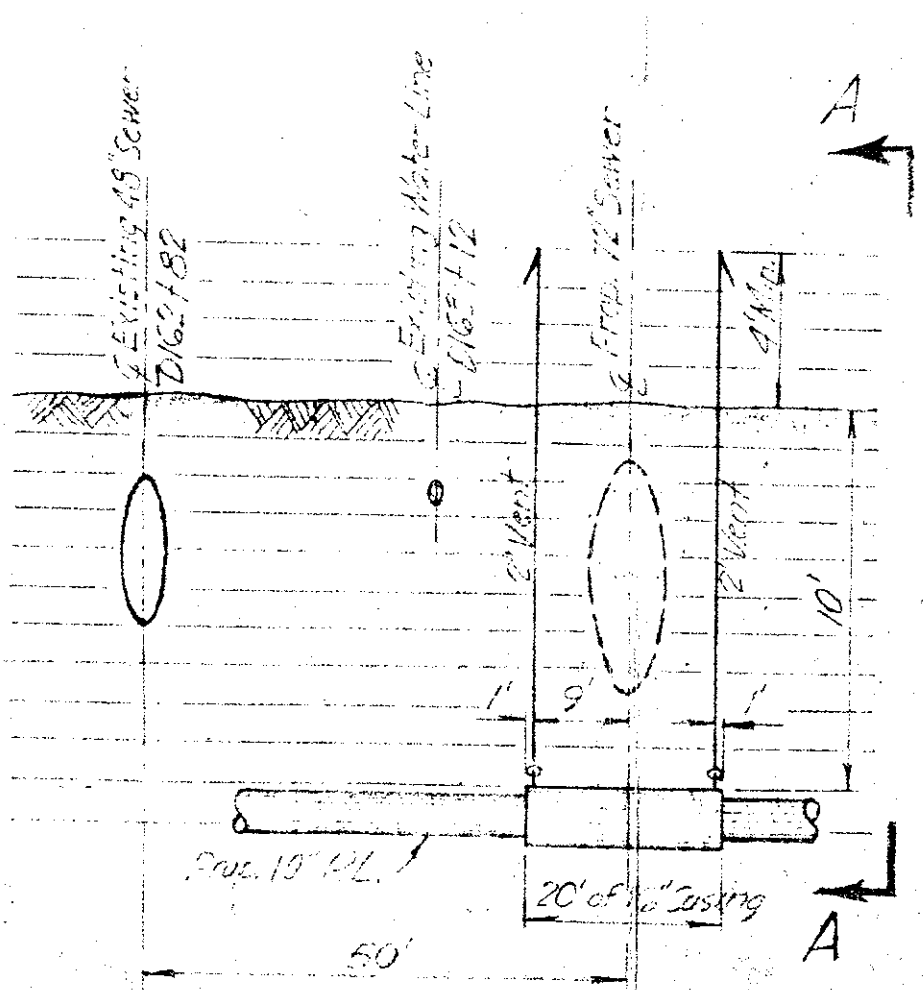
8/1/2 256

7


D154+47 Bluff
D155+04-8' Sewer Line
D155+43 Rt. Lt. 6°23'45" & 216.8'
CITY SEWAGE DISPOSAL PLANT
D159+55 Box Cors 18' Rt. 8'
D160+05 Box Cors
Wire Fence
52°47' Rt.
D167+75 Fc. Cor. 3' Rt.
D168+00 Fc. 6' Rt. & Old Bank 11' Lt.
RIVER
D170+42 Fc. Cor. 24' Rt.
D171+26 Rt. Lt. 10°12'
FAIRGROUNDS
Edge
S. 14°55' W.

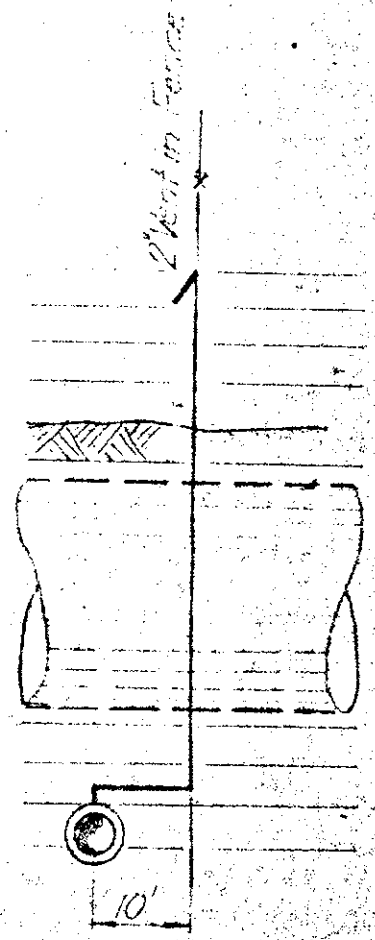
8/12/56

FAIRGROUNDS



PROP. SEWER LINE X-ING

Scale: Vert 1"=5'
Horiz. 1"=20'



A-A

BLIE BLOCK VALVES

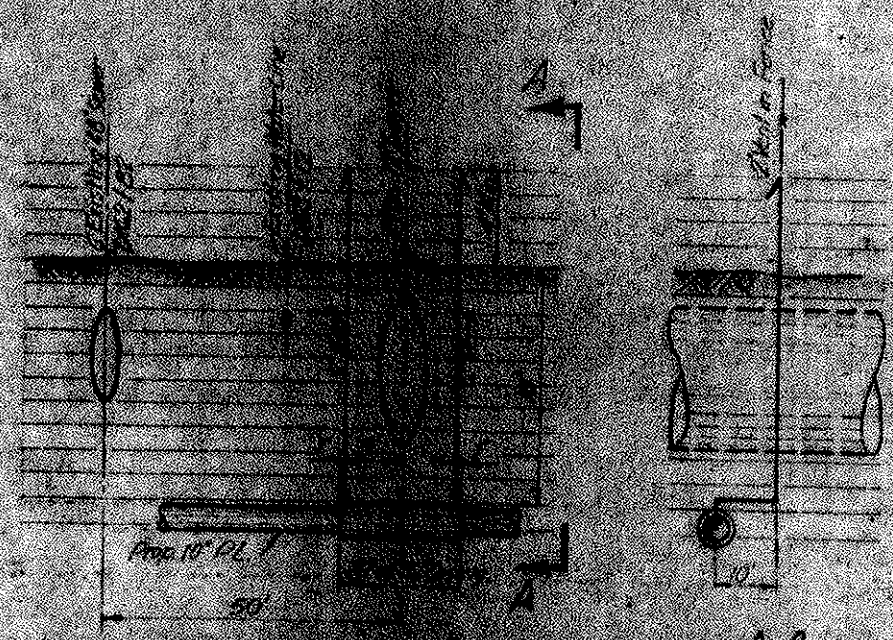
6 of 7
F 38+14 Match Line Sta. 1
N
23'
23'
F 45+94 P.I. 5°47' Rt.
R.R. Tracks
SECTION 26
SECTION 27

04081

D159155 Box Culv

D160105 Box Cul

FAIRGROUNDS



PROP SEWER CROSSING

Sewer Box

SCALE FOR ACCOMPANIED DRAWINGS

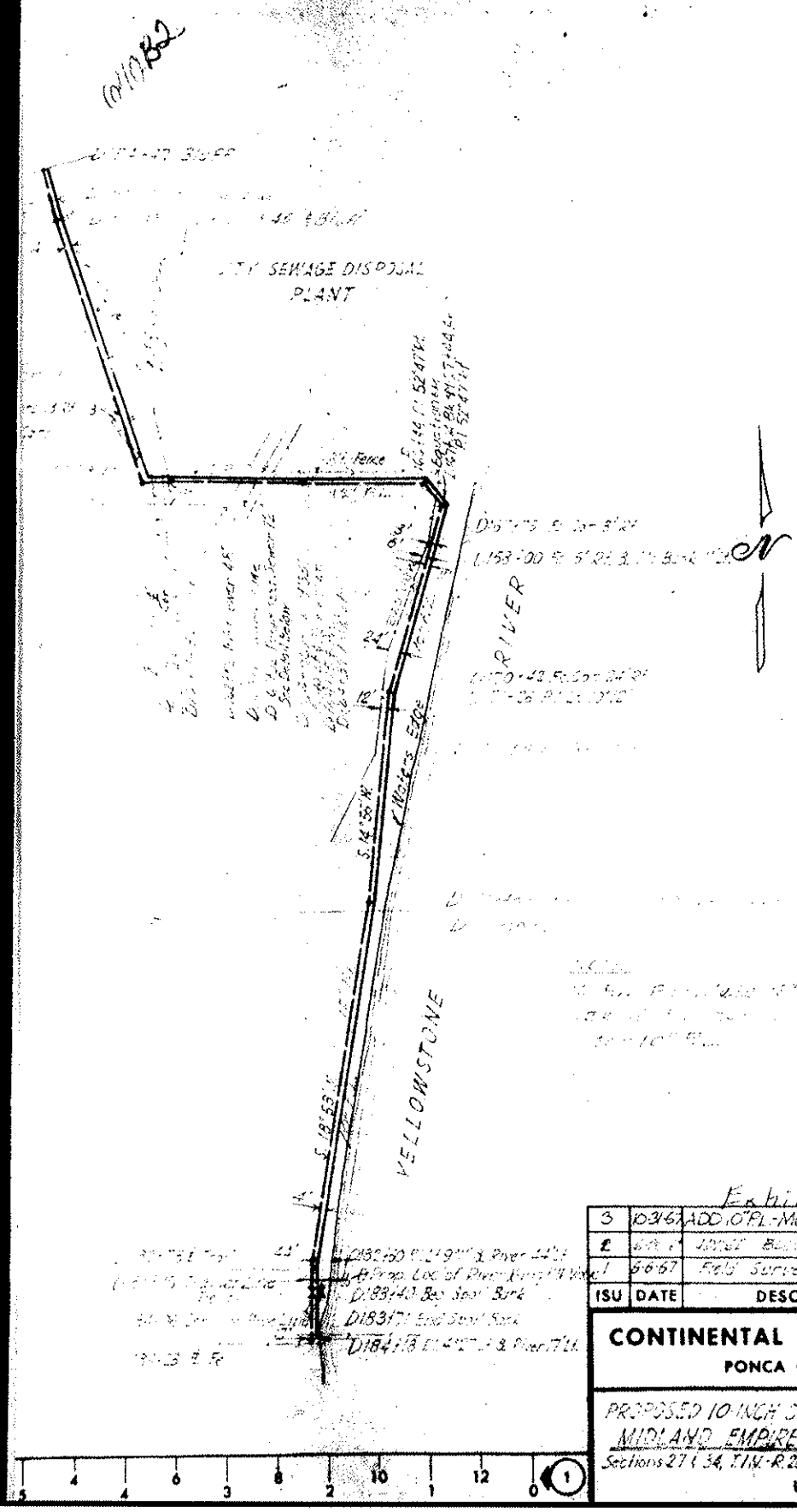


Exhibit "B"

ISU	DATE	DESCRIPTION	BY	CKD	A
3	10-3-67	ADD 10" PL-MUELLER ENGRG.	E.L.A.		
2	[illegible]	[illegible]	[illegible]	R.J.M.	
1	6-6-67	Field Survey-3.4	[illegible]	AED	

CONTINENTAL PIPE LINE COMPAN'

PONCA CITY, OKLAHOMA

PROPOSED 10-INCH CRUDE OIL PIPE LINE ON
MIDLAND EMPIRE FAIRGROUND PROP
Sections 27 & 34, T1N-R26E, Yellowstone Co, Montana

USE BORDER SCALE: 1"=200'

AFFIDAVIT

STATE OF MONTANA)
) ss
COUNTY OF YELLOWSTONE)

CLARE LOGAN, being first duly sworn, deposes and says:

1. That affiant is the tax equalization officer of the County of Yellowstone, State of Montana;

2. That affiant commenced working for the County of Yellowstone in 1935 and has either held his present position or has been employed in the County Assessor's Office during all of said time;

3. That affiant has kept and used and examined the assessment records of the County of Yellowstone and has examined various real properties in said County and assessed the same or made reports to the County for the purposes of assessment.

4. That affiant is familiar with that certain real property located in the SW 1/4 of Section 34 and comprising part of lots 3 and 4 and part of the NW 1/4 SW 1/4 of said Section 34, Township 1 North, Range 26 East, M.P.M., owned by Pierce Packing Co., and for approximately forty years occupied by said Pierce Packing Co., and in the past used for the purposes of growing crops and feeding cattle;

5. That affiant has examined the records of the County of Yellowstone, State of Montana, for the purpose of determining the area of assessment and the method of assessment of said property; that affiant has examined the records back to the year 1917; that affiant was able to determine from said examination of the assessment records of Yellowstone County that the property has been assessed

to Pierce Packing Co., and to its predecessors in interest, at least as far back as 1917 on an acreage basis; that affiant is aware of the plat of Alderson Addition to the City of Billings and of the fact that said Alderson Addition was vacated by action of the County Commissioners of Yellowstone County on November 15, 1902; that the tract of land now assessed to and owned by Pierce Packing Co., in said Section 34, Township 1 North, Range 26 East, M.P.M., is part of the lands underlying the plats of Alderson Addition to the City of Billings and the plat of the Town of Coulson; that affiant, by his search of the records of Yellowstone County and of the County Assessor's Office has determined that at no time from and after the year 1917, was there ever any assessment or exclusion from assessment of any of the lands platted for streets and alleys under said subdivisions, but rather that said lands were always assessed and taxed on an acreage basis and that said assessment was of the complete lands, including those portions of streets and alleys covered by said plats which would otherwise have been excluded from assessment as public lands; that from said search of said records, affiant states that the assessment for taxes on said lands has been on an acreage basis for more than fifty years last past and that any and all taxes paid during said period would have been paid on all of the lands equally without any exclusion for streets, alleys or public ways.

Done and dated this 11th day of February, 1972.

Clare Logan

Clare Logan

Subscribed and sworn to before me this 11th day of February, 1972.

Robert E. Lyons

Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires: June 30, 1974

900982

AFFIDAVIT

Clare Logan

[illegible]

[illegible]

[illegible]

STATE OF MONTANA
County of [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

1036646
1129
721

WARRANTY DEED

FOR A VALUABLE CONSIDERATION, Receipt of which is hereby acknowledged, the undersigned - - -

PIERCE PACKING COMPANY, a Montana corporation, with its principal office at Billings, Montana, hereby grants unto - - -

SECURITY BANK, N.A., a Montana corporation, with its principal office at Billings, Montana, real property in Yellowstone County, Montana, described as follows:

That part of Lots 3 and 4, and the NW¼SW¼ of Section 34, Township 1 North, Range 26 East, P.M.M., Yellowstone County, Montana, described as follows:

Beginning at a point on the South line of Section 34, Township 1 North, Range 26 East, P.M.M., which is located S89°33'45"E a distance of 617.93 feet from the Southwest corner of said Section 34; thence from said point of beginning, S89°33'45"E along the section line a distance of 353.35 feet to the Northwesterly right-of-way line of U.S. Interstate Highway I-90; thence following said Highway right-of-way, N17°50'E a distance of 10.21 feet; thence N03°48'E a distance of 41.23 feet; thence N17°50'E a distance of 992.00 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured at right angles to said centerline at Highway Station T.S. 888 + 92.0 (tangent point of Spiral Curve); thence N18°50'17"E a distance of 305.72 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured along the extended radius line (bearing N69°09'52.15"W) at Highway Station S.C. 891 + 92.0 (tangent point of Spiral curve to circular curve): thence following a circular curve to the right with a radius of 2,975.0 feet a distance of 1,046.70 feet to a point where the radius line bears N49°00'21.45"W; thence N27°51'52"E a distance of 42.79 feet to a point of curve where the radius line bears N48°12'21.66"W; thence following a circular curve to the right with a radius of 2,985.0 feet a distance of 576.90 feet to a point on the East-West mid-section line of said Section 34 where the radius line bears N37°07'57.42"W; thence along the mid-section line N89°37'W a distance of 710.04 feet; thence S49°46'W along the Southeasterly line of Certificate of Survey No. 1037 a distance of 563.55 feet; thence N76°14'W along the Southerly line of Certificate of Survey No. 1037 a distance of 385.0 feet to the Southeasterly right-of-way line of the Burlington-Northern Railway; thence S55°46' W along said right-of-way a distance of 124.95 feet; thence following the Southerly and Easterly lines of Tract 3, 2 and 1 of Certificate of Survey No. 960, Amended and of Old Spur Subdivision, S28°03'E a distance of 342.40 feet; thence S34°04'W a distance of 794.62 feet; thence S37°03'W a distance of 265.32 feet; thence S33°47'W a distance of 66.66 feet; thence N83°50'W a distance of 133.32 feet; thence S25°00'30"E a distance of 1,161.08 feet to the point of beginning and containing 50.291 acres.

21

SUBJECT, to reservations and exceptions in any patent, rights of way, and easements, building and use restrictions, taxes and assessments for this and subsequent years, including installments of special improvement assessments due for past years. Except with respect to these items, the deed will be given with the usual covenants set forth in Section 74-110, R.C.M., 1947.

DATED this 29th day of October, 1976.

PIERCE PACKING COMPANY

By: _____
President

Attest:

_____
Secretary

STATE OF MONTANA)
: ss.
County of Yellowstone)

On this 29th day of October, 1976, before me, the undersigned, a Notary Public for the State of Montana, personally appeared FRED C. PIERCE, II, known to me to be the President of PIERCE PACKING COMPANY, the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

(S E A L)

_____
Notary Public for the State of Montana;
Residing at Billings, Montana.
My Commission expires: 6-23-78

21

1035646

Pierce Packing Co.
to
Sec. Bank, NA.

Wtty

STATE OF MONTANA } ss.
County of Yellowstone }
Filed for record this DEC 12 1976
at 4:09 P.M. and recorded in Book 1129 of Mortgages, page 1 records thereof.
Witness my hand and official seal
Clerk and Recorder
By G. Sullivan Deputy

Dan Johnson
Aug 2 2:29

21

1036647
1129
724

ESTOPPEL AFFIDAVIT AND CERTIFICATE

STATE OF MONTANA)
: ss.
County of Yellowstone)

FRED C. PIERCE, II, of Billings, Montana, who is the president of PIERCE PACKING COMPANY, a corporation, being first duly sworn, for and on behalf of said corporation, deposes and says:

1. That on January 28, 1974, Pierce Packing Company made, executed and delivered to Security Trust & Savings Bank, a corporation, now known as Security Bank, N.A., a Mortgage in writing on eight tracts of land in Yellowstone County, Montana, including what was described therein as Tract 8 consisting of approximately 50.291 acres in Lots 3 and 4, and the NW¼SW¼ of Section 34, Township 1 North, Range 26 East, Yellowstone County, Montana, which tract is more particularly described in Exhibit A attached hereto. Said Mortgage was recorded on January 30, 1974 in Book 1021 of Mortgages at page 389, records of Yellowstone County, Montana.

2. Said Mortgage was given to secure two promissory notes previously made, executed and delivered to said bank by Pierce Packing Company, in the respective amounts of $5,750,000 and $3,000,000, together with contemplated future advances in the amount of $150,000,000.

3. That Pierce Packing Company, as grantor, has made, executed and delivered to Security Bank, N.A., a Warranty Deed dated October 29th, 1976, conveying to the bank the real estate described in Exhibit A. Affiant, for and on behalf of Pierce Packing Company, hereby acknowledges, agrees and certifies that such deed was and is an absolute conveyance of all the right, title and interest of Pierce Packing Company in and to said real estate, and that such deed also conveys, transfers and assigns to said bank Pierce Packing Company's right of possession, and equity of redemption in and to the premises.

4. That affiant agrees, for and on behalf of Pierce Packing Company, that the fair market value of said real estate as of the date of its conveyance to said bank was $553,000, affiant further acknowledging that Pierce Packing Company is to receive a credit in the amount of said $553,000 against the principal balance of $5,750,000 owing from Pierce Packing Company to said bank under the first promissory note referred to above.

5. That affiant, for and on behalf of Pierce Packing Company, agrees and acknowledges that the remaining lands described in the Mortgage shall continue to be security for the payment of the obligations referred to in said Mortgage, and the conveyance by Pierce Packing Company shall not be deemed in any manner to be a release by bank of its security interest in said remaining lands.

30

6. That said deed was given voluntarily by Pierce Packing Company, in good faith, without any fraud, misrepresentation, duress or undue influence whatsoever, or any misunderstanding on the part of Pierce Packing Company or said bank; that Pierce Packing Company is not insolvent and that the conveyance of said real property is made in good faith to satisfy a portion of the amount due on said Mortgage and the notes secured thereby without any design to hinder, delay or defraud creditors; such conveyance by said deed shall be and is hereby intended and understood to be an absolute conveyance and unconditional sale with extinguishment of Pierce Packing Company's right, title and interest of every character in and to said real estate.

7. This affidavit is made for the protection and benefit of said bank, and its successors, and all other parties hereafter dealing with or who may acquire an interest in the property, and shall bind the respective successors and assigns of Pierce Packing Company.

FRED C. PIERCE, II

Subscribed and sworn to before me this 30th day of November, 1976.

Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires April 8, 1978

(SEAL)

STATE OF MONTANA)
: ss.
County of Yellowstone)

On this 30th day of November, 1976, before me, a Notary Public for the State of Montana, personally appeared FRED C. PIERCE, II, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same.

Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires April 8, 1978

33

That part of Lots 3 and 4, and the NW¼SW¼ of Section 34, Township 1 North, Range 26 East, P.M.M., Yellowstone County, Montana, described as follows:

Beginning at a point on the South line of Section 34, Township 1 North, Range 26 East, P.M.M., which is located S89°33'45"E a distance of 617.93 feet from the Southwest corner of said Section 34; thence from said point of beginning, S89°33'45"E along the section line a distance of 353.35 feet to the Northwesterly right-of-way line of U.S. Interstate Highway I-90; thence following said Highway right-of-way, N17°50'E a distance of 10.24 feet; thence N03°48'E a distance of 41.23 feet; thence N17°50'E a distance of 992.00 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured at right angles to said centerline at Highway Station T.S. 888 + 92.0 (tangent point of Spiral Curve); thence N18°50'17"E a distance of 305.72 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured along the extended radius line (bearing N69°09'52.15"W) at Highway Station S.C. 891 + 92.0 (tangent point of Spiral curve to circular curve): thence following a circular curve to the right with a radius of 2,975.0 feet a distance of 1,046.70 feet to a point where the radius line bears N49°00'21.45"W; thence N27°51'52"E a distance of 42.79 feet to a point of curve where the radius line bears N48°12'21.66"W; thence following a circular curve to the right with a radius of 2,985.0 feet a distance of 576.90 feet to a point on the East-West mid-section line of said Section 34 where the radius line bears N37°07'57.42"W; thence along the mid-section line N89°37'W a distance of 710.04 feet; thence S49°46'W along the Southeasterly line of Certificate of Survey No. 1037 a distance of 563.55 feet; thence N76°14'W along the Southerly line of Certificate of Survey No. 1037 a distance of 385.0 feet to the Southeasterly right-of-way line of the Burlington-Northern Railway; thence S55°46' W along said right-of-way a distance of 124.95 feet; thence following the Southerly and Easterly lines of Tract 3, 2 and 1 of Certificate of Survey No. 960, Amended and of Old Spur Subdivision, S28°03'E a distance of 342.40 feet; thence S34°04'W a distance of 794.62 feet; thence S37°03'W a distance of 265.32 feet; thence S33°47'W a distance of 66.66 feet; thence N83°50'W a distance of 133.32 feet; thence S25°00'30"E a distance of 1,161.08 feet to the point of beginning and containing 50.291 acres.

33

Exhibit A

1036647

Fred C Pace II

Affidavit

Estoppel - Certificate

STATE OF MONTANA, } ss.
County of [illegible]
I hereby [illegible] that the within instrument was [illegible] office for
record [illegible] DEC 13 1976
day of [illegible] 19[illegible]
at 4:10 [illegible] M. and is
duly recorded in Book 1129 of
[illegible] on Page [illegible]
Witness my hand and official seal
[illegible] MANDT
[illegible] Clerk & Recorder
By [illegible] Deputy

33

6a.

Dave Johnson

Box 2525

1075449
1:86

BILL OF SALE AND ASSIGNMENT

Security Bank, N.A. ("Bank"), the assignor herein, is the owner of an industrial water supply system consisting of a well, casing, pump, pump house, pipe, and related equipment, with respect to lands in Section 34, Township 1 North, Range 26 East, which system transmits water from lands previously conveyed by Pierce Packing Co. ("Pierce") to The City of Billings, wherein Pierce reserved a perpetual easement for an industrial water supply system, and thence the water is transmitted through a 24" pipe under Interstate 90, to real property on the west of Interstate 90 which realty and the perpetual easement is being concurrently transferred by Bank to assignee.

For a valuable consideration, Bank does hereby sell, assign, transfer and set over unto Patrick K. Goggins, of Billings, Montana, the industrial water supply system (including the well, casing, pump, pump house, pipe, and related equipment), the right of use as granted by the Montana State Highway Commission with respect to the 24" pipe under Interstate 90 at approximately station 885 + 70, and all water rights with respect to the industrial water supply system, warranting and defending in the said assignee the ownership and title of said property against the claims and demands of any third persons.

X 4582 4554

DATED: December 29, 1977.

SECURITY BANK, N.A.

By David R. Calahan
Vice-President

STATE OF MONTANA)
) ss
COUNTY OF YELLOWSTONE)

On this 29th day of December, 1977, before me, a Notary Public for the State of Montana, personally appeared David R. Calahan, known to me to be the Vice-President of Security Bank, N.A., the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Ella T. Mugh
Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires June 17, 1980.

1075449

See Bk

Patrick K Goggins

Billy Sale

STATE OF MONTANA, } ss.
County of Yellowstone.

JAN 4 1978

10:57 A.M. 1186

Deputy

700

1075448
1186

WARRANTY DEED

FOR A VALUABLE CONSIDERATION, the receipt of which is acknowledged, the undersigned,

SECURITY BANK, N.A., a national banking association, of Billings, Montana,

hereby grants unto

PATRICK K. GOGGINS, whose mailing address is P. O. Box 30758, Billings, Montana 59107,

real property in Yellowstone County, Montana, described in Exhibit A attached hereto, which is hereby incorporated by reference, together with that certain perpetual easement previously reserved by Pierce Packing Co., contained in Warranty Deed to The City of Billings, dated April 12, 1965, recorded April 16, 1965, in Book 813, page 535, records of Yellowstone County, as follows:

"And further reserving to Grantor, its successors and assigns, a perpetual easement over, across and under the lands hereby conveyed, for the purpose of operating, repairing, maintaining, constructing and reconstructing that certain industrial water supply system now existing on said lands and to be substantially reconstructed pursuant to that certain written agreement between Grantor and Grantee, dated March 15, 1965, and approved by the City Council of the City of Billings on the 12th day of April, 1965."

4541
4528
4528

TO HAVE AND TO HOLD unto the Grantee, his heirs, successors and assigns, forever, subject, however, to:

(a) All reservations and exceptions in patents from the United States or the State of Montana;

(b) All existing easements and rights of way;

(c) All building, use, zoning, sanitary and environmental restrictions; and

(d) Taxes and assessments for 1978 and subsequent years.

EXCEPT with reference to the items referred to in paragraphs (a) to (d) inclusive, this deed is given with the usual covenants expressed in Section 74-110, R.C.M. 1947.

DATED: December 29, 1977.

SECURITY BANK, N.A.

Attest: David R. Calahan
Secretary

By Jerry LaDeur
Vice President

(Corporate Seal)

STATE OF MONTANA)
County of Yellowstone) : ss.

On this 22 day of December, 1977, before me, a Notary Public for the State of Montana, personally appeared [illegible] and [illegible], known to me to be the Vice President and Secretary of SECURITY BANK, N.A., the corporation that executed the foregoing instrument and acknowledged to me that said corporation executed the same.

(SEAL)

Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires [illegible]

That part of Lots 3 and 4, and the Northwest Quarter Southwest Quarter of Section 34, Township 1 North, Range 26 East, of the Principal Meridian, in Yellowstone County, Montana, described as follows:

Beginning at a point on the South line of said Section 34, which is located South 89°33'45" East a distance of 617.93 feet from the Southwest corner of said Section; thence from said point of beginning South 89°33'45" East along the section line a distance of 353.35 feet to the Northwesterly right of way line of U. S. Interstate Highway I-90; thence following said Highway right of way North 17°50' East a distance of 10.21 feet; thence North 03°48' East a distance of 41.23 feet; thence North 17°50' East a distance of 992.00 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured at right angles to said centerline at Highway Station T. S. 888 + 92.0 (tangent point of Spiral Curve); thence North 18°50'17" East a distance of 305.72 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured along the extended radius line (bearing North 69°09'52.15" West) at Highway Station S. C. 891 + 92.0 (tangent point of Spiral curve to circular curve) ; thence following a circular curve to the right with a radius of 2,975.0 feet a distance of 1,046.70 feet to a point where the radius line bears North 49°00'21.45" West; thence North 27°51'52" East a distance of 42.79 feet to a point of curve where the radius line bears North 48°12'21.66" West; thence following a circular curve to the right with a radius of 2,985.0 feet a distance of 576.90 feet to a point on the East-West mid-section line of said Section 34 where the radius line bears North 37°07'57.42" West; thence along the midsection line North 89°37' West a distance of 710.04 feet; thence South 49° 46' West along the Southeasterly line of Certificate of Survey No. 1037 a distance of 563.55 feet; thence North 76°14' West along the Southerly line of Certificate of Survey No. 1037 a distance of 385.0 feet to the Southeasterly right of way line of the Burlington Northern Railway; thence South 55°46' West along said right of way a distance of 124.95 feet; thence following the Southerly and Easterly lines of Tract 3, 2 and 1 of Certificate of Survey No. 960, Amended and of Old Spur Subdivision, South 28° 03' East a distance of 342.40 feet; thence South 34°04' West a distance of 794.62 feet; thence South 37°03' West a distance of 265.32 feet; thence South 33° 47' West a distance of 66.66 feet; thence North 83°50' West a distance of 133.32 feet; thence South 25°00'30" East a distance of 1,161.08 feet to the point of beginning.

Exhibit A attached to Warranty Deed dated December 29, 1977, from Security Bank, N.A., to Patrick K. Goggins.

1975443

Sec Bk

Patrick K. Goggins

Atty'd

STATE OF MONTANA, } ss.

JAN 4 1979

10:56 A.M.

11:46

Deputy

Ret mail Bk
at Rhoda

1075451
1186

QUITCLAIM DEED

FOR A VALUABLE CONSIDERATION, the receipt of which is acknowledged, the undersigned,

WESTERN LIVESTOCK REPORTER, a Montana corporation, of Billings, Montana,

does hereby remise, release and quitclaim unto

PATRICK K. GOGGINS, whose mailing address is P. O. Box 30758, Billings, Montana 59107,

real property in Yellowstone County, Montana, described in Exhibit A attached hereto, which is hereby incorporated by reference.

TO HAVE AND TO HOLD unto the Grantee, his heirs, successors and assigns, forever.

DATED: December 29, 1977.

WESTERN LIVESTOCK REPORTER

By Patrick K. Goggins
Patrick K. Goggins, President

X 45282
45541

Attest:

Norman W. Leischner
Norman W. Leischner, Secretary

(Corporate Seal)

STATE OF MONTANA)
: ss.
County of Yellowstone)

On this 29 day of December, 1977, before me, a Notary Public for the State of Montana, personally appeared PATRICK K. GOGGINS and NORMAN W. LEISCHNER, known to me to be the President and Secretary of Western Livestock Reporter, the corporation that executed the foregoing instrument and acknowledged to me that said corporation executed the same.

Susan L. Reimer
Notary Public for the State of Montana
Residing at Billings, Montana
My commission expires Oct 14 1980

(SEAL)

That part of Lots 3 and 4, and the Northwest Quarter Southwest Quarter of Section 34, Township 1 North, Range 26 East, of the Principal Meridian, in Yellowstone County, Montana, described as follows:

Beginning at a point on the South line of said Section 34, which is located South 89°33'45" East a distance of 617.93 feet from the Southwest corner of said Section; thence from said point of beginning South 89°33'45" East along the section line a distance of 353.35 feet to the Northwesterly right of way line of U. S. Interstate Highway I-90; thence following said Highway right of way North 17°50' East a distance of 10.21 feet; thence North 03°48' East a distance of 41.23 feet; thence North 17°50' East a distance of 992.00 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured at right angles to said centerline at Highway Station T. S. 888 + 92.0 (tangent point of Spiral Curve); thence North 18°50'17" East a distance of 305.72 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured along the extended radius line (bearing North 69°09'52.15" West) at Highway Station S. C. 891 + 92.0 (tangent point of Spiral curve to circular curve) ; thence following a circular curve to the right with a radius of 2,975.0 feet a distance of 1,046.70 feet to a point where the radius line bears North 49°00'21.45" West; thence North 27°51'52" East a distance of 42.79 feet to a point of curve where the radius line bears North 48°12'21.66" West; thence following a circular curve to the right with a radius of 2,985.0 feet a distance of 576.90 feet to a point on the East-West mid-section line of said Section 34 where the radius line bears North 37°07'57.42" West; thence along the midsection line North 89°37' West a distance of 710.04 feet; thence South 49° 46' West along the Southeasterly line of Certificate of Survey No. 1037 a distance of 563.55 feet; thence North 76°14' West along the Southerly line of Certificate of Survey No. 1037 a distance of 385.0 feet to the Southeasterly right of way line of the Burlington Northern Railway; thence South 55°46' West along said right of way a distance of 124.95 feet; thence following the Southerly and Easterly lines of Tract 3, 2 and 1 of Certificate of Survey No. 960, Amended and of Old Spur Subdivision, South 28° 03' East a distance of 342.40 feet; thence South 34°04' West a distance of 794.62 feet; thence South 37°03' West a distance of 265.32 feet; thence South 33° 47' West a distance of 66.66 feet; thence North 83°50' West a distance of 133.32 feet; thence South 25°00'30" East a distance of 1,161.08 feet to the point of beginning.

Exhibit A attached to Quitclaim Deed dated December 29, 1977, from Western Livestock Reporter, to Patrick K. Goggins.

1075451

Western Livestock Reporter

to

Patrick K. Goggins

QCD.

STATE OF MONTANA,
County of Yellowstone, } ss.
I hereby certify that the within instrument was filed in my office for record this JAN 4 1978
at 10:59 A. M. and is recorded in Book 1186 of
Clerk and Recorder
By J. Sullivan Deputy

4/00

Midland Natl Bank

1161837

AGREEMENT BOOK 1217 PAGE 1977

AGREEMENT made this 9th day of February, 198 0, between CITY OF BILLINGS, P. O. Box 30958, Billings, Montana 59111, and the undersigned, PATRICK K. GOGGINS and FLORENCE GOGGINS, husband and wife, of Billings, Montana;

IN CONSIDERATION OF the granting of a right-of-way easement of same date by the undersigned to the City of Billings, the parties agree:

1. That the undersigned herewith grant(s) to the City said right-of-way easement, a true copy of which is attached hereto and made a part hereof, in consideration of the agreements of the City.

2. In consideration of such easement grant, the City of Billings hereby waives, now and at any time in the future, the trunk sewer construction fee which would normally be assessed against property which seeks to hook on to the City sewer system and which has not heretofore paid a trunk sewer construction fee. That the present trunk sewer construction fee established by ordinance of the City is 2½ cents per square foot. That this waiver shall apply not only to the present 2½ cents per square foot fee, but to any revision of said trunk sewer construction fee charge from time to time made in the future by the City.

3. That the real property with respect to which said waiver shall apply is a tract owned by the undersigned and more fully described as set forth on attached Exhibit A, including a map or plat thereof, and which property is situated in Yellowstone County, Montana, and contains 50.29 acres, more or less. Assuming that if there were exactly 50.29 acres in said tract times 43,560 square feet per acre times 2½ cents per square foot (at the present trunk sewer construction fee rate), the amount currently being waived would be the sum of $49,289.00.

4. It is agreed that waiver of said trunk sewer construction fee does not in any manner waive any lateral fee charges that may be necessarily made according to City regulations and ordinances, nor does it provide the right to free sewer service to the said property, nor does such waiver involve any free connection as such to the sewer system. The only waiver made herein relates solely to the said 2½ cents trunk sewer construction fee charge.

5. In the event said property is platted or sold in parcels prior to any application for sewer service, it is agreed:

a. That the successor owner of any parcel shall be entitled to the waiver of charges herein agreed based upon the square footage of such parcel.

b. That prior to hookup any such owner must construct at his own cost any lateral sewers necessary to serve the property.

c. That any such lateral sewers so constructed must be so constructed as to meet all requirements of the City and all other authorities governing such construction.

6. It is further agreed between the parties that in the event sewer service is desired to serve the said property at any time in the future, the undersigned owner(s), his or their heirs, successors, or assigns, must make application for such connection and comply with all other applicable requirements and obtain approval subject to:

a. Compliance with Resolution 19807, as attached hereto, as Exhibit B.

b. Compliance with all of the rules, regulations, resolutions, policies, and ordinances of the Public Utilities Department, City Council, and the Yellowstone County Commissioners and any other lawful regulations.

7. It is agreed that the owner or his heirs, successors or assigns, shall be permitted, upon compliance with all applicable City and other regulations, to hook up a lateral sewer or lateral sewers at any appropriate manhole located on the proposed interceptor sewer or existing interceptor sewer. The cost of hook-up of the lateral shall be at the expense of the person constructing such lateral. All building services required to serve the property shall be connected with such lateral sewers so installed.

This constitutes an agreement by the City to provide treatment for domestic wastes only which originate within the above property. Nothing herein constitutes any agreement or commitment by the City to treat any non-domestic wastes originating within the above property or any part thereof.

This Agreement shall constitute a covenant running with the land and shall bind the heirs, successors, and assigns of the parties.

Patrick K Goggins

PATRICK K. GOGGINS

Address: Rt 3

Billings, Montana

Florence Goggins

FLORENCE GOGGINS

Address: Rt 3

Billings, Montana

Owner(s)

CITY OF BILLINGS

ATTEST:

Dorris J. Stock

City Clerk

By William A. Boff

Mayor

CITY OF BILLINGS SEAL YELLOWSTONE COUNTY, MONTANA

BOOK 1217 PAGE 1979

STATE OF MONTANA)
: ss.
County of Yellowstone)

ON THIS 9th day of February, 1980, before me, the undersigned notary public for the State of Montana, personally appeared PATRICK A. GUGGINS and FLORENCE GUGGINS known to me to be the person(s) whose name(s) ~~is~~/are subscribed to the within instrument and acknowledged to me that ~~he~~/they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Thomas W. Speedlin
Notary Public for State of Montana
Residing at Billings, Montana
My Commission expires January 21, 1982

(S E A L)

STATE OF MONTANA)
:
County of Yellowstone)

ON THIS _____ day of _____, 1980, before me, the undersigned notary public for the State of Montana, personally appeared
known to me to be the _____ of _____
corporation whose name (s) is/are subscribed to the within instrument and acknowledged to me that he/they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for State of Montana
Residing at Billings, Montana
My Commission expires_____

(S E A L)

STATE OF MONTANA)
County of Yellowstone) ss.

On this 17th day of March, 1980, before me, the undersigned, a Notary Public for the State of Montana, personally appeared William A. Fox and Bonnie Stark, known to me to be the Mayor and City Clerk, respectively, of the City of Billings, a municipal corporation, which executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my notarial seal the day and year in this certificate first above written.

Joyce B. Pirie
Notary Public for the State of Montana.
Residing at Billings, Montana.
My commission expires 11-27-81

Exhibit A

LEGAL DESCRIPTION OF PROPOSED
CERTIFICATE OF SURVEY NO._____

Being an unplatted tract of land located in the SW¼ of Section 34, T.1N., R.26E., P.M.M., Yellowstone County, Montana, said Tract being more particularly described as follows, to-wit:

Beginning at a point which is S89°33'45"E a distance of 617.93 feet from the southwest corner of Section 34, T.1N., R.26E., P.M.M., said point also being the southeast corner of Tract 1-B Certificate of Survey No. 960 Amended; thence from said true point of beginning, S89°33'45"E along the section line a distance of 353.35 feet to the northwesterly right-of-way line of U.S. Interstate Highway I-90; thence following said Highway right-of-way N17°50'E a distance of 10.21 feet; thence N03°48'E a distance of 41.23 feet; thence N17°50'E a distance of 992.00 feet to a point which is 110.0 feet distant from the centerline of Median of Highway I-90 when measured at right angles to said centerline at Highway Station T.S. 888 + 92.0 (tangent point of Spiral Curve); thence N18°50'17"E a distance of 305.72 feet to a point which is 110.00 feet distant from the centerline of Median of Highway I-90 when measured along the extended radius line (bearing N69°09'52.15"W) at Highway Station S.C. 891 + 92.0 (tangent point of Spiral curve to circular curve); thence, following a circular curve to the right with a radius of 2,975.0 feet, a distance of 1,046.70 feet to a point where the radius line bears N49°00'21.45"W; thence N27°51'52"E a distance of 42.79 feet to a point of curve where the radius line bears N48°12'21.66"W; thence, following a circular curve to the right with a radius of 2,985.0 feet, a distance of 576.90 feet to a point on the East-West midsection line of said Section 34 where the radius line bears N37°07'57.42"W; thence along the midsection line N89°37'W a distance of 710.04 feet; thence S49°46'W along the southeasterly line of Certificate of Survey No. 1037 a distance of 563.55 feet; thence N76°14'W along the Southerly line of Certificate of Survey No. 1037 a distance of 385.0 feet to the Southeasterly right-of-way line of the Burlington Northern Railway; thence S55°46'W along said right-of-way a distance of 124.95 feet; thence following the Southerly and Easterly lines of Tract 3, 2 and 1 of Certificate of Survey No. 960, Amended and of Old Spur Subdivision, South 28°03'East a distance of 342.40 feet; thence S34°04'W a distance of 794.64 feet; thence S37°03'W a distance of 265.32 feet; thence S33°47'W a distance of 66.66 feet; thence N83°50'W a distance of 133.32 feet; thence S25°00'30"E a distance of 1,161.08 feet to the point of beginning, containing 50.29 acres.

GM/bg

Exhibit B

RESOLUTION 10807

A RESOLUTION SETTING THE POLICY OF THE CITY COUNCIL OF THE CITY OF BILLINGS, MONTANA WITH RESPECT TO EXTENDING WATER AND SANITARY SEWER SYSTEMS TO SERVE PROPERTY OUTSIDE OF THE BOUNDARIES OF THE CITY.

The Billings City Council, on January 22, 1963, adopted Resolution No. 9741 setting forth the policy of the City Council of the City of Billings, Montana, with respect to extending water and sanitary sewer systems outside the boundaries of the City as follows:

> "WHEREAS, the Board of Water Commissioners has recommended that no further extensions be made to the water and sewer systems outside of the boundaries of the City of Billings and
>
> WHEREAS, in the judgment of the City Council it is for the best interest for the city and the inhabitants thereof to discontinue the extensions of said water and sewer systems,
>
> NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BILLINGS, MONTANA,
>
> that no further extensions be made to the water or sanitary sewer system except to the property wholly within the boundaries of the city, or within the boundaries of existing Rural Improvement Districts."

The City Council, upon the recommendation of its Public Works Committee, believes that this policy no longer meets with exigencies of the current situation on extensions outside the City limits, and such Resolution dated January 22, 1963, has now been repealed. The City Council believes that it should now be the policy of the City to allow extensions of water and sanitary sewer systems to serve property outside of the boundaries of the City upon the fulfillment by applicants of certain requirements:

The City Council of the City of Billings, Montana, does here resolve:

1) It shall be the city policy that city water and sanitary sewer systems shall be extended and city water sold outside of the boundaries of the City if the following conditions are met by applicants:
   a) All areas contiguous or nearly contiguous should be annexed or an attempt at annexation should be made first and before any such applications may be considered.

   b) The City is capable of providing the service requested.

   c) All costs and expenses of the improvements requested by applicants, shall be paid for by applicants either by private contract or by rural special improvement district. Maintenance districts must be created by applicants in order that all expenses and costs of maintenance shall be assessed against the area related to the application. The City will not pay for any of the costs and expenses of the requested improvements and the maintenance thereof. The City may pay for additional facilities ordered installed at the same time by the City.

   d) Applicants shall furnish waivers of annexation waiving the right of applicants to protest annexation of the area to the City when such annexation procedures are instituted by the City of Billings. Such waiver shall also include an agreement to be bound by the

provisions of this Section and subsections (d), (e), (f) and (g) below. Waivers must be legally binding, recorded with the County Clerk and Recorder, Yellowstone County, Montana, and a copy thereof filed with the City Clerk, and run with the land. For subdivisions created after the adoption of this Resolution, such waivers must be in the building restrictions for such subdivision. For subdivisions existing at the time of the adoption of this Resolution, waivers shall be in legal form, recorded as above, run with the land and shall be signed by the owners of the majority of the land area and by a majority of the land owners embraced in the application.

e) Prior to the construction of any residence, building or structure in the area covered by the application, a building permit for each such building, residence or structure must be obtained from the City at the going rate then charged therefor, and any such residence building or construction must abide by and comply with the terms and provisions of the city building code then in force.

f) All special improvements installed in the public rights-of-way to serve the property of the area of the application shall be subject to the supervision and inspection of the office of the City Engineer of the City and will be constructed in accordance with plans and specifications to be submitted to the City Engineer's office aforementioned and approved prior to the commencement of the construction.

g) Applicants for services in new subdivisions shall comply with Subdivision Control Ordinance No. 3206 concurrently with the extensions of city services. For subdivisions existing when this Resolution is adopted, compliance therefor shall be required on each street in such subdivision when buildings or improvements have been constructed on 33 1/3 percent of the lots on any such street.

h) The development of the area included in such application must be in accordance with the Comprehensive Plan of December, 1968.

2) In the event applications for services are submitted for existing subdivisions, and such subdivisions are unable to meet the above conditions, it shall be within the discretion of the City Council to allow extensions of services upon such other conditions and requirements as the Council shall establish.

Passed by the City Council and approved

by the Mayor this 19th day of January, 1970

APPROVED:

Mayor

ATTEST:

City Clerk

TMB Form 229.3 (Jan. '80)

RIGHT-OF-WAY EASEMENT

The Undersigned Hereby Grant(s) To The

BOOK 1217 PAGE 1983

CITY OF BILLINGS,
a Montana Municipal Corporation

A Permanent Right-of-Way Easement over the property hereafter described, in Yellowstone County, Montana:

See attached Schedule A.

This easement is a perpetual easement given as a charitable contribution to Grantee.

This Right-of-Way Easement grants the City of Billings a right-of-way for such sanitary sewer line or lines as it may deem appropriate now or anytime in the future on or near the ground surface or beneath the ground to any depth or depths and includes the right of ingress and egress over the surface for all purposes, including, without limitation, testing, surveying, siting, construction, maintenance, operation, re-installation, upgrading, and enlarging.

This easement is for a 20-foot wide permanent easement and for a 40-foot wide temporary easement for the period of construction. See attached description. The Grantee must restore the premises after construction to the same condition as prior to construction, as nearly as practicable.

By execution hereof the undersigned warrants that the undersigned owner has good right to convey, free and clear of all encumbrances, the above described interest in the real estate described, and warrants and defends.

DATED this 4 day of July, 19 80 .

Patrick K. Goggins
PATRICK K. GOGGINS

Florence Goggins
FLORENCE GOGGINS

STATE OF MONTANA)
County of Yellowstone) ss.

On this 6th day of February, 19 80, before me, the undersigned, a Notary Public for the State of Montana, personally appeared Patrick K. Goggins and Florence Goggins, known to me to be the person(s) whose name(s) is/are subscribed to the foregoing instrument, and acknowledged to me that he/they executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Notary Public for the State of Montana.
Residing at Billings, Montana.
My commission expires January 31, 1982

STATE OF MONTANA)
County of Yellowstone) ss.

On this _____ day of _____, 19____, before me, the undersigned, a Notary Public for the State of Montana, personally appeared _____, known to me to be the _____ of the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my notarial seal the day and year first above written.

My Commission expires:

_____

Notary Public for the State of Montana.
Residing at _____, Montana.

1161837

1217 PG 1365

AGREEMENT

Patrick K. Goggins et ux

To

City of Billings

Dated: February 9, 1980

3-16553

9th

April 80

1217

1977

Colton Law Firm
301 South 24th St. West
Billings, Montana 59102

RE:

1161836

PWD Form 220.3 (Jan. '80)

RIGHT-OF-WAY EASEMENT

BOOK 1217 PAGE 1973

The Undersigned Hereby Grant(s) To The

CITY OF BILLINGS,
a Montana Municipal Corporation

A Permanent Right-of-Way Easement over the property hereafter described, in Yellowstone County, Montana:

See attached Schedule A.

This easement is a perpetual easement given as a charitable contribution to Grantee.

This Right-of-Way Easement grants the City of Billings a right-of-way for such sanitary sewer line or lines as it may deem appropriate now or anytime in the future on or near the ground surface or beneath the ground to any depth or depths and includes the right of ingress and egress over the surface for all purposes, including, without limitation, testing, surveying, siting, construction, maintenance, operation, re-installation, upgrading, and enlarging.

This easement is for a 20-foot wide permanent easement and for a 40-foot wide temporary easement for the period of construction. See attached description. The Grantee must restore the premises after construction to the same condition as prior to construction, as nearly as practicable.

By execution hereof the undersigned warrants that the undersigned owner has good right to convey, free and clear of all encumbrances, the above described interest in the real estate described, and warrants and defends.

DATED this 9 day of Feb, 1980

Patrick K. Goggins
PATRICK K. GOGGINS

Florence Goggins
FLORENCE GOGGINS

STATE OF MONTANA)
County of Yellowstone) ss.

On this 9th day of February, 1980, before me, the undersigned, a Notary Public for the State of Montana, personally appeared Patrick K. Goggins and Florence Goggins, known to me to be the person(s) whose name(s) is/are subscribed to the foregoing instrument, and acknowledged to me that he/they executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Thomas H. Boucher
Notary Public for the State of Montana.
Residing at Billings, Montana.
My commission expires January 26, 1982

STATE OF MONTANA)
County of Yellowstone) ss.

On this _____ day of _____, 19____, before me, the undersigned, a Notary Public for the State of Montana, personally appeared _____, known to me to be the _____ of the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my notarial seal the day and year first above written.

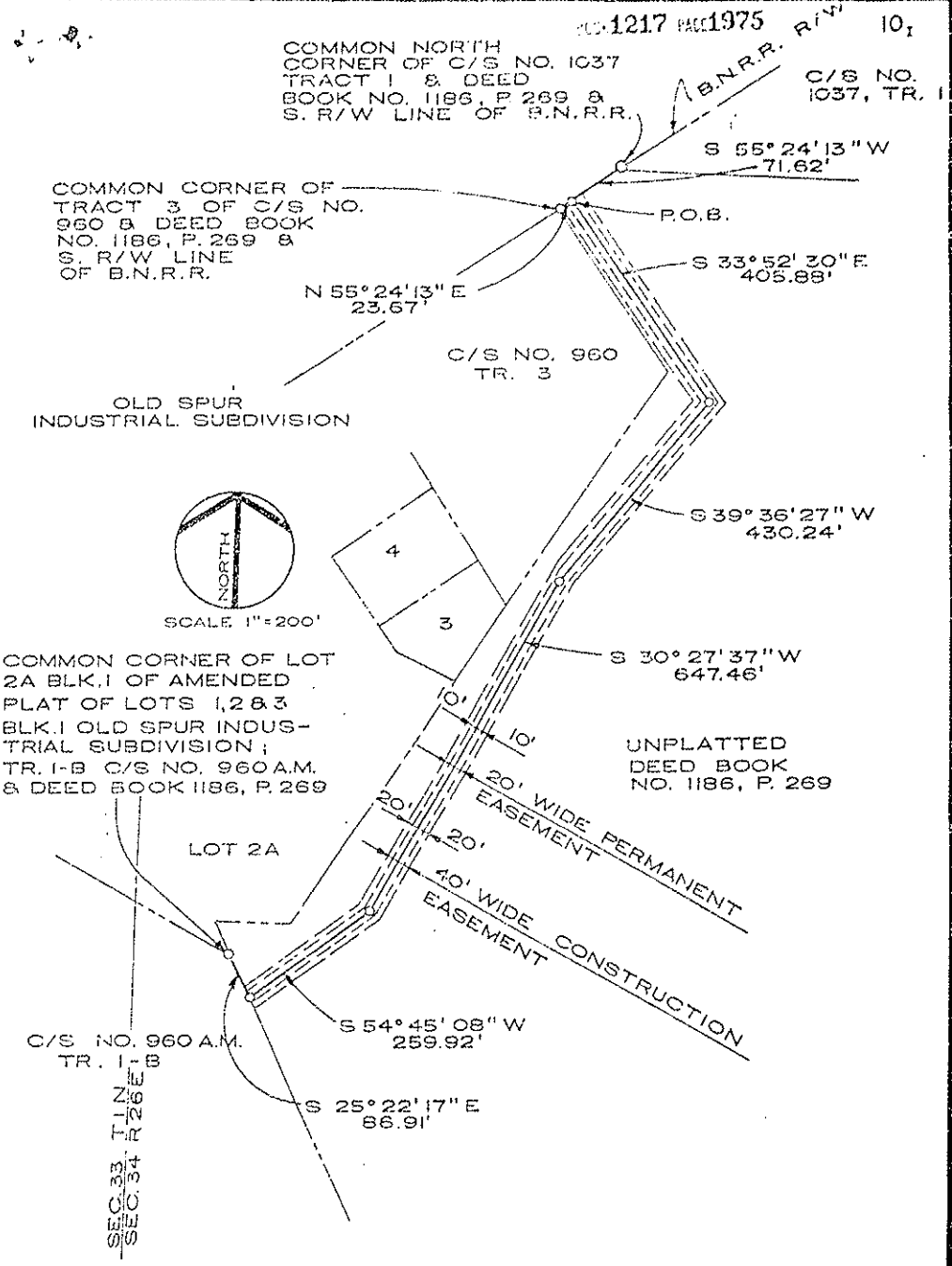
My Commission expires:

_____
Notary Public for the State of Montana.
Residing at _____, Montana.

SEWER EASEMENT THROUGH PROPERTY RECORDED IN BOOK 1186, PAGE 269
YELLOWSTONE COUNTY

Description of a Sewer Easement 20 feet wide located in Section 34, T.1N., R.26E., P.M.M., Yellowstone County, Montana and lying 10 feet on each side of the following described line, together with a temporary easement for construction purposes 40 feet wide lying 20 feet on each side of the following described line: Commencing at the Point of Beginning which is S55°24'13"W 71.62 feet from the common North corner of Certificate of Survey No. 1037 Tract 1 and Deed Book 1186, page 269 and located on the southerly right-of-way line of the Burlington Northern Railroad and N55°24'13"E 23.67 feet from the common North corner of Tract 3 of Certificate of Survey 960, and Deed Book 1186, page 269 and located on the southerly right-of-way line of the Burlington Northern Railway; thence S33°52'30"E 405.88 feet; thence S39°36'27"W 430.24 feet; thence S30°27'37"W 647.46 feet; thence S54°45'08"W 259.92 feet to the easterly line of Tract 1-B, Certificate of Survey No. 960 Amended; ending at a point which is S25°22'17"E 86.91 feet from the common corner of Lot 2A of Block 1 of Amended Plat of Lots 1, 2, & 3, Block 1, Old Spur Industrial Subdivision; Tract 1-B Certificate of Survey No. 960 Amended and Deed Book 1186.

SCHEDULE A


COMMON NORTH CORNER OF C/S NO. 1037 TRACT 1 & DEED BOOK NO. 1186, P 269 & S. R/W LINE OF B.N.R.R.
B.N.R.R. R/W
C/S NO. 1037, TR. 1
S 55° 24' 13" W 71.62'
COMMON CORNER OF TRACT 3 OF C/S NO. 960 & DEED BOOK NO. 1186, P. 269 & S. R/W LINE OF B.N.R.R.
P.O.B.
S 33° 52' 30" E 405.88'
N 55° 24' 13" E 23.67'
C/S NO. 960 TR. 3
OLD SPUR INDUSTRIAL SUBDIVISION
S 39° 36' 27" W 430.24'
NORTH
SCALE 1" = 200'
4
3
S 30° 27' 37" W 647.46'
COMMON CORNER OF LOT 2A BLK. 1 OF AMENDED PLAT OF LOTS 1, 2 & 3 BLK. 1 OLD SPUR INDUSTRIAL SUBDIVISION; TR. 1-B C/S NO. 960 A.M. & DEED BOOK 1186, P. 269
10'
10'
UNPLATTED DEED BOOK NO. 1186, P. 269
20' WIDE PERMANENT EASEMENT
20'
20'
40' WIDE CONSTRUCTION EASEMENT
LOT 2A
S 54° 45' 08" W 259.92'
C/S NO. 960 A.M. TR. 1-B
S 25° 22' 17" E 86.91'
SEC. 33 T-1-N
SEC. 34 R 26 E

1161836

BK 1217 PG 1976

RIGHT-OF-WAY EASEMENT

Patrick K. Goggins, et al

to

City of Billings

Dated: February 9, 1980

3-16533

9th

April 80

3:05 P.

1217

1973

Calton Law Firm
301 South 24th St. West
Billings, Montana 59102

rd

STATE OF MONTANA,)
)
) ss. AFFIDAVIT
)
County of Yellowstone)

PATRICK K. GOGGINS and FLORENCE GOGGINS, being first duly sworn depose and state:

That they are the grantors of that certain Right-of-Way Easement to the City of Billings, dated February 9, 1980 and recorded in Book 1217, Page 1973, Office of the Yellowstone County Clerk and Recorder.

That at Line 9 of the legal description of said Easement appears the number and word "23.67 feet", which should correctly read "53.33 feet". That this affidavit is for the purpose of correcting said defect and undersigned grantors further reaffirm said Easement as corrected.

Patrick K. Goggins
PATRICK K. GOGGINS

Florence Goggins
FLORENCE GOGGINS

Subscribed and sworn to before me this 8 day of May, 1980.

Jean McBride
Notary Public for the State of Montana
Residing at Billings, Montana
My Commission expires: May 19, 1981

1169906
1218

STATE OF MONTANA)
) ss.
County of Yellowstone)

On this 8 day of May, 1980, before me, a notary public for the State of Montana, personally appeared PATRICK K. GOGGINS and FLORENCE GOGGINS, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written

Jean McGirl

Notary Public for the State of Montana.
Residing at Billings, Montana.
My commission expires May 19, 1981

1166906

3-16533-1

AFFIDAVIT

Patrick K. Goggins, et al

RE: Description in Right-Of-Way Easement

Dated: May 8, 1980

Order No. 3-16533-1

STATE OF MONTANA, } SS.
County of Yellowstone, }

I hereby certify that the within instrument was filed in my office for record on the 6th day of June 19 80 at 3:38 o'clock P. M., and is duly recorded in Book 1218 Page

Witness my hand and official seal
MERRILL H. [illegible]
County Clerk & Recorder
By [illegible] Deputy
Fee: $ Pd. by Check
RETURN TO: [illegible]

Cal Calton
Attorney At Law
301 S. 24th Street West
Billings, Montana 59102

rd

CERTIFICATE OF SURVEY No. 2000

SITUATED IN THE S.W. 1/4 OF SECTION 34, T. 1N., R. 26 E., P.M.M.

YELLOWSTONE COUNTY, MONTANA

FOR: PAT GOGGINS
BY: SANDERSON/STEWART/GASTON ENGINEERING INC.

FEBRUARY, 1980
BILLINGS, MONTANA

CERTIFICATE OF SURVEY

STATE OF MONTANA)
County of Yellowstone) ss.

Kenneth P. Williams, RLS, Montana Registered Land Surveyor No. 5613-S, being first duly sworn, deposes and says that during the month of February, 1980, a survey was made under his supervision of a tract of land situated in the S.W. of Section 34, T.1N., R.26E., P.M.M., Yellowstone County, Montana, said tract being more particularly described as follows, to-wit:

Beginning at a point which is S89°33'45"E a distance of 617.53 feet from the Southwest corner of Section 34, T.1N., R.26E., P.M.M. which is also the southeast corner of Tract 1-B Certificate of Survey No. 960 amended; thence from said true point of beginning along the east line of said Certificate of Survey No. 960 amended N25°00'30"W a distance of 1161.08 feet to a point on the corner of lot 2-A of Old Spur Industrial Subdivision; thence along the south line of said Old Spur Industrial Subdivision and extended along the south line of Tract 3 Certificate of Survey No. 960 S83°50'00"E a distance of 133.32 feet, N32°47'00"E a distance of 66.66 feet, N37°03'00"E a distance of 265.32 feet, N34°04'00"E a distance of 794.64 feet to the southeast corner of said Tract 3 Certificate of Survey No. 960; thence along the east line of said Tract 3 Certificate of Survey No. 960 N28°03'00"W a distance of 342.40 feet to the southerly right-of-way line of the Burlington Northern Railroad; thence along said right-of-way line N55°44'00"E a distance of 124.95 feet to a point on the southerly line of Certificate of Survey No. 1037; thence along said line S76°14'00"E a distance of 385.00 feet, N49°46'00"E a distance of 563.55 feet, and S89°30'23"E a distance of 712.75 feet to the westerly right-of-way line of I-90; thence along said right-of-way line along a curve to the left with a radius of 2985.00 feet a distance of 564.31 feet, S27°44'59"W a distance of 42.79 feet along a curve to the left with a radius of 2975.00 feet a distance of 1046.70 feet, S15°30'48"W a distance of 305.72 feet, S17°50'32"W a distance of 992.00 feet, S03°48'18"W a distance of 41.23 feet, and S17°50'32"W a distance of 1.77 feet to a point on the south line of Section 34, T.1N., R.26E., P.M.M.; thence along said line N89°33'45"W a distance of 355.55 feet to the point of beginning, containing 50.4524 acres.

That iron monuments of suitable size were set at all intersection points as indicated on the plat by a mark ( ) thus; that said survey and the plat hereof shows true and correct dimensions, and that the plat conforms with the work on the ground.

Dated this 12TH day of JUNE, 1980.

Kenneth P. Williams
Kenneth P. Williams, RLS, Montana Registration No. 5613-S

Subscribed and sworn to before me, a Notary Public in and for State of Montana, this 12th day of June, 1980.

Deborah L. Heving
Notary Public in and for the State of Montana
Residing at Billings, Montana
My commission expires October 4, 1987

This tract 1 is being platted under provisions of Section 76-3-207 M.C.A. which provides for a single division of a parcel outside of platted subdivisions when the transaction is an occasional sale.

Patrick K. Goggins

STATE OF Montana
County of Yellowstone) ss.

On this 12 day of June, 1980, before me, a Notary Public in and for the State of Montana, personally appeared Patrick K. Goggins, known to me to be the person who signed the foregoing instrument and who acknowledged to me that they executed the same. Witness my hand and seal, the day and year herein above written.

Gary McBride
Notary Public in and for the State of Montana
Residing at Billings, Mont.
My commission expires May 19, 1981

RECORDED IN COUNTY SURVEYORS OFFICE
6-13-80 by RM

FULL BACK TAX DUE
AMOUNT DUE None
DOC. # 1167948

1167950

STATE OF MONTANA, ss.
Filed for record this JUN 18 1980 at 11 M.
Recorded in Book ___ of Plats
Page ___
Clerk & Recorder
By ___ Deputy

Rel - SANITARY RESTRICTIONS
Filed on ___ day of JUN 18 1980
19___ at 11 o'clock M. in book ___
Document No. 1167949

SHEET 2 OF 2

CERTIFICATE OF SURVEY No. 2000

SITUATED IN THE S.W. 1/4 OF SECTION 34, T. 1 N., R. 26 E., P.M.M.

YELLOWSTONE COUNTY, MONTANA

FOR: PAT GOGGINS

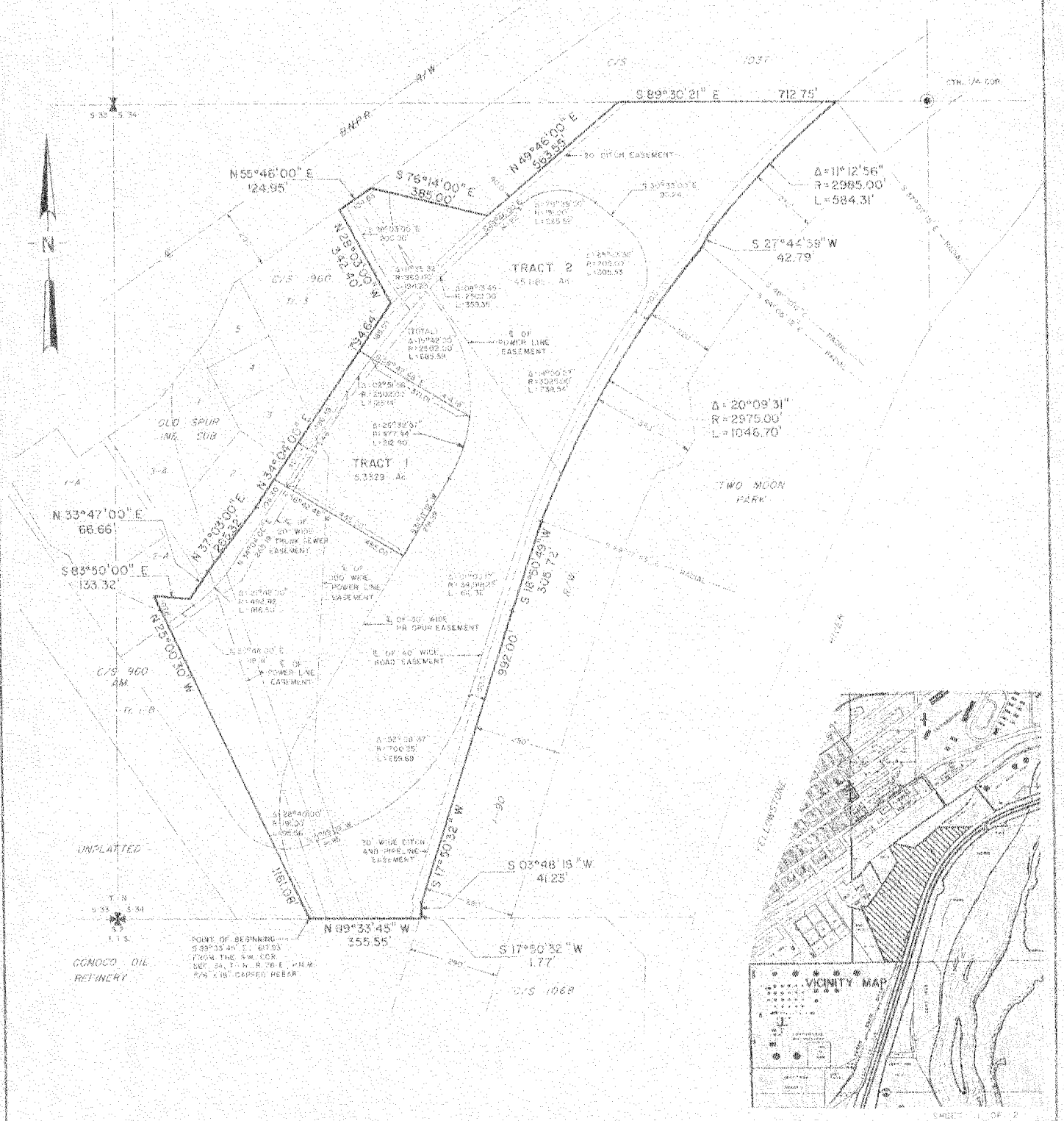
BY: SANDERSON/STEWART/GASTON ENGINEERING INC.

FEBRUARY 1980

BILLINGS, MONTANA

SCALE 1" = 200'

200 0 200 400



The Undersigned Hereby Grant(s) To The

CITY OF BILLINGS
a Montana Municipal Corporation

A Permanant Right-of-Way Easement over the property hereafter described in Yellowstone County, Montana:

See attached Schedule A-1, and A-2.

This easement is a perpetual easement given in consideration of the sum of $ 20,000.00 paid to grantor by the City of Billings.

This Right-of-Way Easement grants the City of Billings a right-of-way for such water line or lines as it may deem appropriate now or any time in the future on or near the ground surface or beneath the ground to any depth or depths and includes the right of ingress or egress over the surface for all purposes, including, without limitation, testing, surveying, siting, construction, maintenance, operation, re-installation, upgrading, and enlarging.

This easement is for a 20-foot wide permanent easement. See attached description. The Grantee must restore the premises after construction to the same condition as prior to construction, as nearly as practicable.

By execution hereof, the undersigned warrants that the undersigned owner has good right to convey, free and clear of all encumbrances, the above described interest in the real estate described, and warrants and defends.

DATED this 11 day of Nov, 1981.

By Patrick K. Goggins
PATRICK K. GOGGINS

STATE OF MONTANA)
: ss.
County of Yellowstone)

On this 11 day of November, 1981, before me, the undersigned, a Notary Public for the State of Montana, personally appeared Patrick K. Goggins known to me to be the President of the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Jean McGirl
Notary Public for State of Montana
Residing at Billings Montana
My commission expires May 19, 1984

(SEAL)

STATE OF MONTANA)
: ss
County of Yellowstone)

On this 11 day of November, 1981, before me, the undersigned a Notary Public for the State of Montana, personally appeared PATRICK K. GOGGINS, known to me to be the person(s) whose name(s) is/~~are~~ subscribed to the foregoing instrument, and acknowledged to me that he/they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year first above written.

Jean McGirl
Notary Public for State of Montana
Residing at Billings Montana
My commission expires May 19, 1984

(SEAL)

1321148

WATER MAIN EASEMENT THROUGH TRACT 2, CERTIFICATE OF SURVEY NO. 2000, YELLOWSTONE COUNTY, MONTANA

Description of a Water Main Easement 20 feet wide located in Section 34, T.1N.,R.26E., P.M.M., Yellowstone County, Montana, and lying 10 feet on each side of the following described line, together with a temporary easement for construction purposes 40 feet wide lying 20 feet on each side of the following described line: Commencing at the Point of Beginning which is S51°10'18"E a distance of 1849.68 feet from the ¼(one-quarter) corner common to Sections 33 & 34, T.1N.,R.26E., P.M.M., Yellowstone County, Montana, being also a point on a curve on the westerly right-of-way line of Interstate Highway No. 90, said point bears N66°12'15"W a distance of 2974.79 feet from the radius point of said curve; Thence N35°32'54"W a distance of 1073.84 feet to a point on the northwesterly line of said Tract 2, Certificate of Survey No. 2000, being also a point on the southerly right-of-way line of the Burlington Northern Railway located N55°21'43"E a distance of 108.68 feet from the northeast corner of Tract 3, Certificate of Survey 960 Amended, said point also being the end of said easement.

EXHIBIT A-1

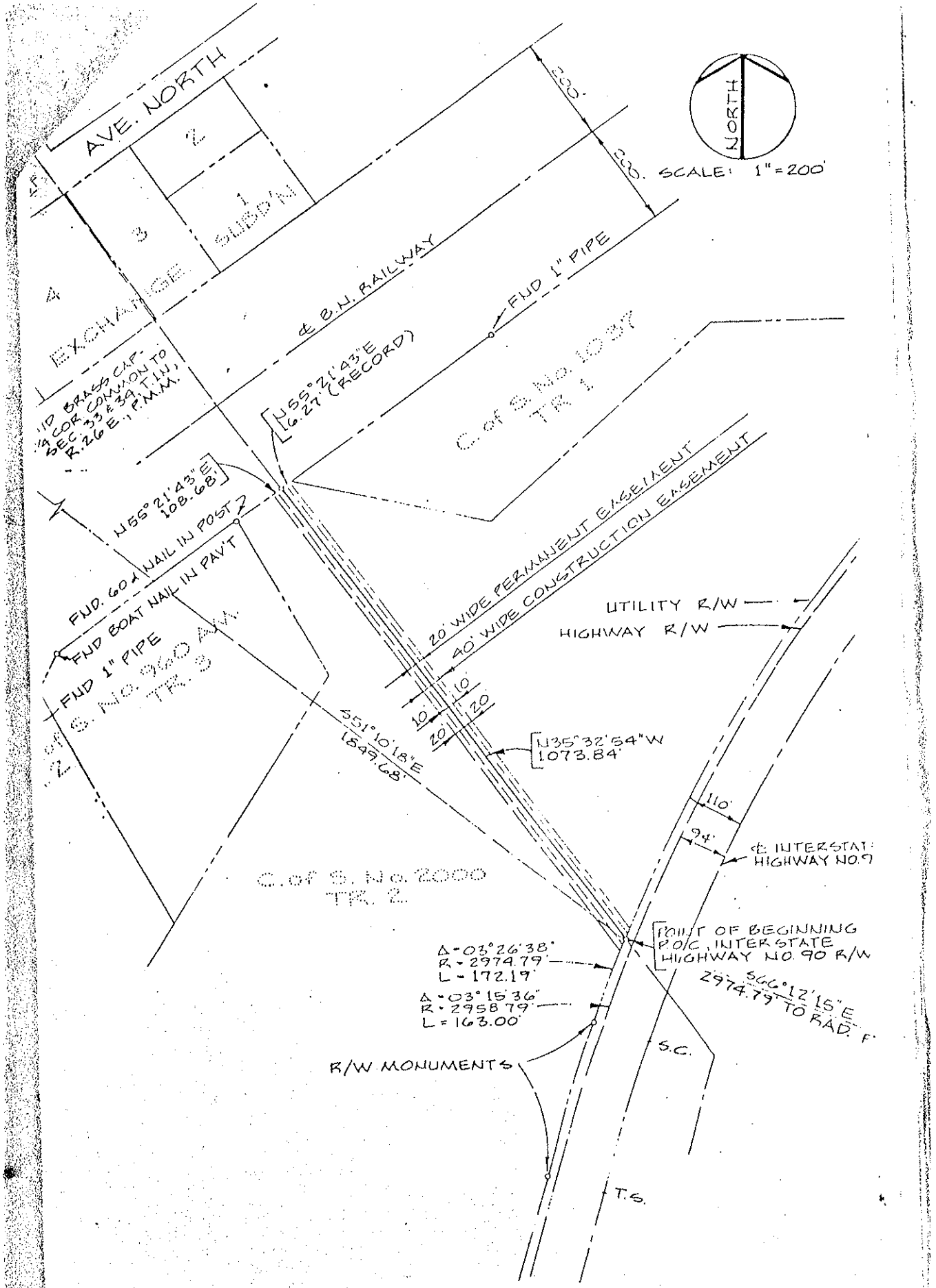

NORTH
SCALE: 1" = 200'
AVE. NORTH
2
1
SUBD'N
3
EXCHANGE
℄ B.N. RAILWAY
FND 1" PIPE
C. of S. No. 1037
TR. 1
N55°21'43"E
6.27' (RECORD)
N55°21'43"E
108.68'
NAIL IN POST
FND. 60d NAIL IN PAV'T
FND BOAT NAIL IN PAV'T
FND 1" PIPE
S. No. 960 A.M.
TR. 3
20' WIDE PERMANENT EASEMENT
40' WIDE CONSTRUCTION EASEMENT
UTILITY R/W
HIGHWAY R/W
S51°10'18"E
1549.68'
N35°32'54"W
1073.84'
110'
94'
℄ INTERSTATE HIGHWAY NO. 90
C. of S. No. 2000
TR. 2
POINT OF BEGINNING
P.O.C., INTERSTATE
HIGHWAY NO. 90 R/W
Δ = 03°26'38"
R = 2974.79'
L = 172.19'
Δ = 03°15'36"
R = 2958.79'
L = 163.00'
S66°12'15"E
2974.79' TO RAD. P.
R/W MONUMENTS
S.C.
T.S.

EXHIBIT A-2

1214148

RIGHT-OF-WAY EASEMENT

Patrick K. Goggins

TO:

City of Billings

Dated: November 11, 1981

3-20460

Order No. 3-20460

STATE OF MONTANA, }
County of Yellowstone, } ss.

I hereby certify that the within instrument was filed in my office for record on this 13th day of November 1981 at 2:50 o'clock P.M., and is recorded in Book 1232 Page

Witness my hand and official seal
MERRILL H. KLUNDT
County Clerk & Recorder

By [signature] Deputy

FEE $ ~~6.00~~ Pd. by Check

RETURN TO
Calton & Hamman
Attorneys at Law
301 South 24th Street West
Billings, MT 59102

dk

AMENDED TRACT 2 OF

CERTIFICATE OF SURVEY No. 2000

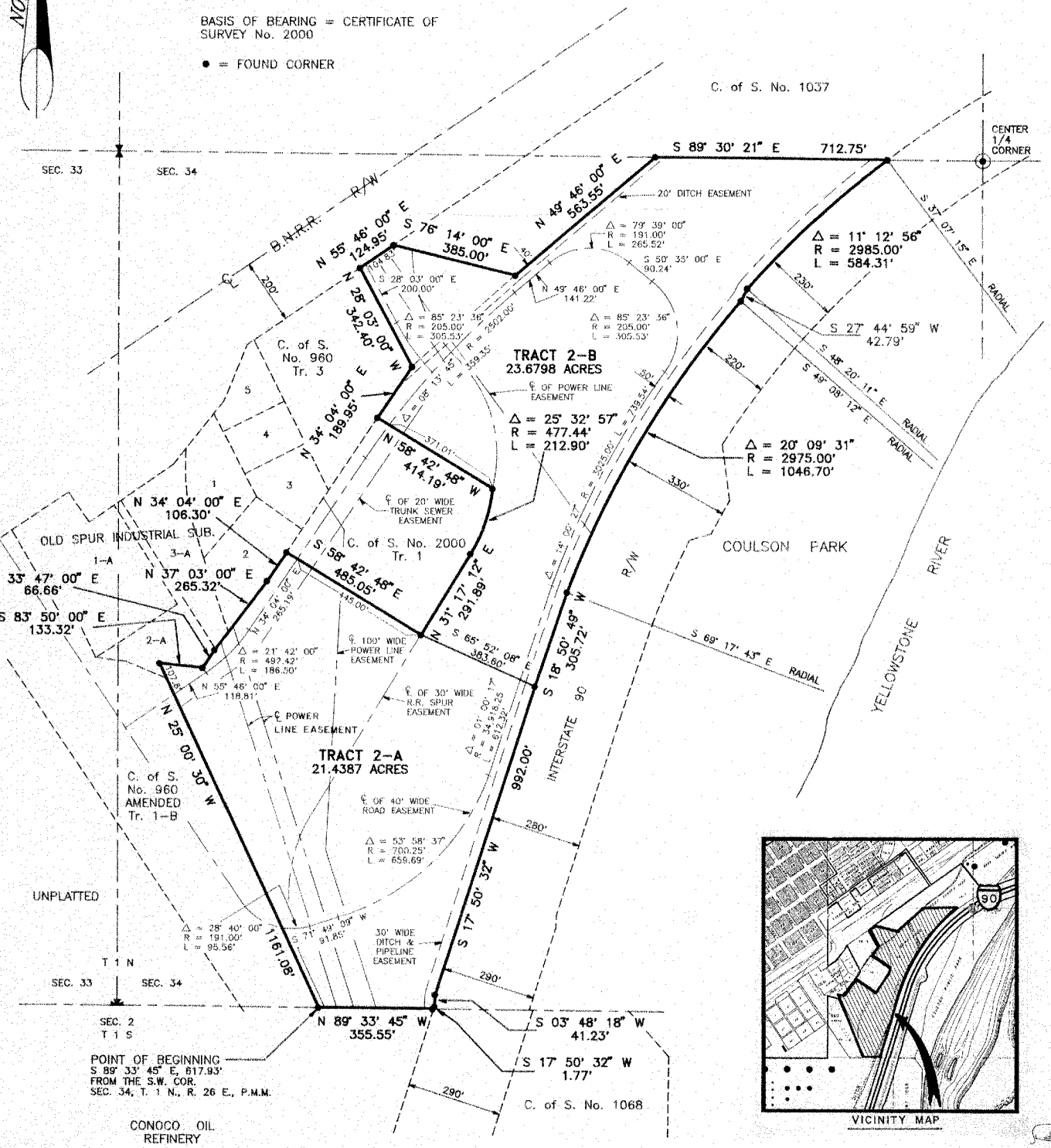
SITUATED IN THE S.W. 1/4 OF SECTION 34, T. 1 N., R. 26 E., P.M.M.

YELLOWSTONE COUNTY, MONTANA

PREPARED FOR : PAT GOGGINS
PREPARED BY : ENGINEERING, INC.
SCALE : 1" = 200'

MAY, 1990
BILLINGS, MONTANA

200 100 0 200 400



SHEET 1 OF 2
71-164-1

AMENDED TRACT 2 OF

CERTIFICATE OF SURVEY No. 2000

SITUATED IN THE S.W. 1/4 OF SECTION 34, T. 1 N., R. 26 E., P.M.M.

YELLOWSTONE COUNTY, MONTANA

PREPARED FOR : PAT GOGGINS
PREPARED BY : ENGINEERING, INC.

MAY, 1990
BILLINGS, MONTANA

CERTIFICATE OF SURVEY

STATE OF MONTANA)
: ss.
County of Yellowstone)

Peter B. Knapp, R.L.S., Montana Registered Land Surveyor Number 8377-S, being first duly sworn, deposes and says that during the month of May 1990, a survey was performed under his supervision of a tract of land situated in the SW¼ of Section 34, T.1N, R.26E., P.M.M., Yellowstone County, Montana, said tract being more particularly described as follows, to wit:

Beginning at a point which is situated S89°33'45"E a distance of 617.93 feet from the southwest corner of Section 34, T.1N, R.26E., P.M.M., which is also the southeast corner of Tract 1-B of Certificate of Survey No. 960 Amended; thence, from said point of beginning, along the east line of said Certificate of Survey No. 960 Amended, N25°00'30"W a distance of 1161.08 feet to a point on the corner of Lot 2-A of Old Spur Industrial Subdivision; thence, along the south line of said Old Spur Industrial Subdivision, S83°50'00"E a distance of 133.32 feet, N33°47'00"E a distance of 66.66 feet, N37°03'00"E a distance of 265.32 feet, N34°04'00"E a distance of 106.30 feet to the southwest corner of Tract 1, Certificate of Survey No. 2000; thence, along the southerly, easterly and northerly boundaries of said Tract 1, S58°42'48"E a distance of 485.05 feet, N31°17'12"E a distance of 291.89 feet, along a curve to the left with a radius of 477.44 feet a distance of 212.90 feet, and N58°42'48"W a distance of 414.19 feet to a point on the southeast boundary of Tract 3, Certificate of Survey No. 960; thence, along the boundary of said Tract 3, N34°04'00"E a distance of 189.95 feet, N28°03'00"W a distance of 342.40 feet to the southerly right-of-way line of the Burlington Northern Railroad; thence, along said right-of-way line, N55°46'00"E a distance of 124.95 feet to a point on the southerly line of Certificate of Survey No. 1037; thence, along the southerly line of said Certificate of Survey No. 1037, S76°14'00"E a distance of 385.00 feet, N49°46'00"E a distance of 563.55 feet, and S89°30'21"E a distance of 712.75 feet to the westerly right-of-way line of I-90; thence, along said right-of-way line, along a curve to the left with a radius of 2985.00 feet a distance of 584.31 feet, S27°44'59"W a distance of 42.79 feet, along a curve to the left with a radius of 2975.00 feet a distance of 1046.70 feet, S18°50'49"W a distance of 305.72 feet, S17°50'32"W a distance of 992.00 feet, S03°48'18"W a distance of 41.23 feet, and S17°50'32"W a distance of 1.77 feet to a point on the south line of Section 34, T.1N., R.26E., P.M.M.; thence, along said section line, N89°33'45"W a distance of 355.55 feet to the point of beginning, containing 45.1105 acres.

That iron monuments of suitable size were set at all intersection points as indicated on the plat by a mark ○ thus; that said survey and the plat hereof shows true and correct dimensions, and that the plat conforms with the work on the ground.

Dated this 27th day of July, 1990.

Peter B. Knapp
Peter B. Knapp, R.L.S., Montana Registration Number 8377-S

Subscribed and sworn to before me, a Notary Public in and for the State of Montana, this 27th day of July, 1990.

Frank W. Rasson
Notary Public in and for the State of Montana
Residing at BILLINGS MT
My commission expires JULY 5, 1992

REASON FOR SURVEY

The purpose of this survey is to create Tract 2-A which is an irregular parcel greater than 20 acres in size with Tract 2-B being the remainder. This survey has been prepared pursuant to Section 76-3-401 M.C.A.

Peter B. Knapp
Peter B. Knapp, Montana Registered Land Surveyor

Patrick K. Goggins
Patrick K. Goggins, owner

T. Kylander R.S. YCCHD
Acknowledged by Yellowstone County Sanitarian

I HEREBY CERTIFY THAT THE TAXES ARE CURRENT.
DATE August 21 1990
KEVAN BRYAN, CO. TREASURER
BY Vicky Grossman
DEPUTY

1571405

STATE OF MONTANA) ss.
County of Yellowstone)

I hereby certify that the annexed certificate of survey was filed for record in my office the 27th day of August, A.D. 1990, at 3:30 o'clock, P.m.

MERRILL H. KUNDY
County Clerk & Recorder
By Beryl J. Rudrich
Deputy
Yellowstone County Clerk and Recorder

CHECKED IN COUNTY SURVEYOR'S OFFICE
8/22/90 BY David E. Hagner

SHEET 2 OF 2
71-164-1

NOTICE OF LEASE

Patrick K. Goggins whose mailing address for purposes herein is P.O. Box 30758, Billings, Montana 59107 has entered into a lease of the real property hereinafter described under date of September 6, 1990 wherein he has agreed to lease such property to Conoco Inc., a Delaware corporation whose mailing address is P.O. Box 2548, Billings, Montana 59103; Attention: Refinery Manager. The real property which is the subject of the lease is described as:

> Tract 2B of amended Tract 2 of Certificate of Survey number 2000 according to the official plat on file in the office of the Clerk and Recorder of Yellowstone County, Montana under Document #1571405.

The lease is for an initial term of five (5) years with an option for an additional term of five (5) years. Rent is to be paid in advance. Conoco has the option, during the lease term, to purchase the property.

This is an abstract of the lease and nothing herein shall either enlarge or diminish the obligation or rights of any party to the same. A full and complete copy of the instrument abstracted will be furnished without cost upon request of any person by Patrick K. Goggins, P.O. Box 30758, Billings, Montana 59107.

DATED: September 6, 1990

PATRICK K. GOGGINS

CONOCO INC.

By

JAMES W. LEIGH
Its Duly Authorized Agent

34-1N-26

1352

STATE OF MONTANA)
:ss.
County of Yellowstone)

On this 6th day of September, 1990, before me, a Notary Public for the State of Montana, personally appeared PATRICK K. GOGGINS, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

Myles J. Thomas
Notary Public for the State of Montana
Residing at Billings
(SEAL) My commission expires 3-7-91

STATE OF MONTANA)
:ss.
County of Yellowstone)

On this 6th day of September, 1990, before me, a Notary Public for the State of Montana, personally appeared JAMES W. LEIGH known to me to be the Duly Authorized Agent of Conoco Inc., the corporation that executed the within instrument and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Myles J. Thomas
Notary Public for the State of Montana
Residing at Billings
(SEAL) My Commission expires 3-7-91

1572444

NOTICE OF LEASE

PATRICK K. GOGGINS

TO

CONOCO INC.

73173

STATE OF MONTANA
County of Yellowstone } ss.

I hereby certify that the within instrument was filed in my office for record on this 6th day of Sep't. 1 9 90 at 1:48 o'clock P. M., and is duly recorded in Book 1352 of on Page

Witness my hand and official seal

Merrill H. Klundt
County Recorder.

By Jackie Hatch Deputy

Fee 10.00 pd by ck

Return to:
Conoco Inc.
P.O. Box 2548
Billings, Montana 59103
Attn: Refinery Manager

CP

DEED OF EASEMENT MAY 24 1991

We, PATRICK K. GOGGINS and FLORENCE M. GOGGINS, of 4419 Vermillion Road, Billings, Montana, in consideration of One Dollar ($1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, hereby grant, bargain, sell and convey to AGRI SYSTEMS, a Montana corporation, of 1300 Minnesota Avenue, Billings, Montana, 59101, its successors, transferees, and assigns, an easement in, to and over the real property described on the attached Exhibit "A", part of Tract 2-B of Amended Tract 2 of Certificate of Survey No. 2000, Yellowstone County, Montana, according to the plat thereof on file in the office of the Clerk and Recorder of said county.

The easement granted by this deed is for the benefit of and appurtenant to the following described real property in the County of Yellowstone, State of Montana:

SE¼ 34-1N-26

Tract 1 of Certificate of Survey No. 2000, Yellowstone County, Montana, according to the plat thereof on file in the office of the Clerk and Recorder of said county;

or any portion of said Tract 1, C/S No. 2000, said tract being more particularly described by the attached Exhibit "B".

IN WITNESS WHEREOF, we have caused this Deed of Easement to be executed at Billings, Montana on the 26th day of April, 1991.

Patrick K. Goggins
PATRICK K. GOGGINS

Florence M. Goggins
FLORENCE M. GOGGINS

State of Montana)
: ss.
County of Yellowstone)

On this 26th day of April, 1991, before me, the undersigned, a Notary Public for the State of Montana, personally appeared PATRICK K. GOGGINS and FLORENCE M. GOGGINS, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

Myles J. Thomas
Notary Public for the State of Montana
Residing at Billings, Montana
My Commission expires 3-7-94

(NOTARIAL SEAL)

1597197

Exhibit "A"

A strip of land forty (40) feet wide, the center line of which begins at a point on the property line common to Tract 2-B of Amended Tract 2, Certificate of Survey No. 2000, records of Yellowstone County, Montana, document number 1571405, and the southeast line of the Burlington Northern Railroad (BNRR) right-of-way, said point being South 55° 46' 00" West 20.12 feet from the corner common to said Tract 2-B and Tract 3, Certificate of Survey No. 960, records of Yellowstone County, Montana, document number 725604; thence South 28° 03' 00" East 200.00 feet; thence southeasterly 194.23 feet along a curve concave to the northeast having a radius of 960.00 feet and a central angle of 11° 35' 32"; thence southwesterly 201.10 feet along a curve concave to the southeast having a radius of 2,502.00 feet and a central angle of 04° 36' 19" ending at the northeast property line of Tract 1, Certificate of Survey No. 2000, records of Yellowstone County, Montana, document number 1167948; the side lines of said strip to be shortened or lengthened to terminate at said beginning and ending property lines.

Exhibit "B"

Beginning at a point which is N21°30'07"E a distance of 1609.83 feet from the southwest corner of Section 34, T.1N., R.26E., P.M.M., which is also the south corner of Tract 3 of Certificate of Survey No. 960 Amended and the east corner of the Old Spur Industrial Subdivision; thence from said true point of beginning along the southeasterly line of Tract 3 of Certificate of Survey No. 960 Amended N34°04'00"E a distance of 366.33 feet; thence S58°42'48"E a distance of 414.19 feet to a point on the centerline of the Burlington Northern Railroad Spur Track; thence along the centerline of said track along a curve to the right with a radius of 477.44 feet a distance of 212.90 feet, S31°17'12"E a distance of 291.89 feet; thence N58°42'48"W a distance of 485.05 feet to a point on the south line of the Old Spur Industrial Subdivision; thence along said line N34°04'00"E a distance of 132.06 feet to the point of beginning, said tract containing 5.3329 acres.

1597137

Patrick K. Goggins
et al

to

Agri Systems

Easement.

STATE OF MONTANA. }
County of Yellowstone. }

I hereby certify that the within instrument was filed in my office for record on this JUN 4 1991 day of _____ 19____ at 1:46 o'clock P. M., and is duly recorded in Book 1361 of _____ on Page _____

Witness my hand and official seal
MERRILL H. KLEINDT
County Clerk & Recorder
By Beryl J. Rubich Deputy

10.00 Cash

Agri-Systems
1300 Minnesota Ave
Billings, Mt. 59101

Form No. 1198 11/02 OL

ELECTRIC POWERLINE EASEMENT

Patrick K. Goggins

P.O. Box 30758

of Billings, 59107, Montana, "Grantor", in consideration of $1.00 and other good and valuable consideration, in hand paid, the receipt of which is acknowledged, does grant and convey to **NORTHWESTERN CORPORATION,** a Delaware Corporation, of 40 East Broadway, Butte, MT 59701-9394, "Grantee", and to its successors, assigns and apportionees, an easement 8 feet in width upon which to construct, operate, maintain, replace, upgrade replace, upgrade and remove an electric powerline, communications system, and necessary appurtenances any guy wires, which may extend beyond the easement width over, under, along and across that certain real property located in Yellowstone County, Montana, and particularly described as follows:

TOWNSHIP 1 North, **RANGE** 26 East, **P.M.M.**

SECTION(S) 34: SW¼, A strip of land running along the Easterly side of Tract 2-B, Certificate of Survey 2000, Amended, said strip located 90 feet more or less, West of an existing fence located on the West side of Interstate 90, said strip running in a North-South direction for the full length of said Tract 2-B, more or less.

TOGETHER with reasonable right of access to and from the easement area over lands of the Grantor using existing roads and trails where practicable; the right to use and keep the easement area free and clear of any and all obstructions or structures, except fences; and the right to clear and remove all timber, brush or vegetation outside the easement area 4 feet on each side of the powerline and to cut and remove such timber, brush and vegetation outside of the easement that may in the Grantee's opinion endanger the powerline, communications system, necessary appurtenances or guy wires.

THE GRANTOR covenants with the Grantee that the Grantor is lawfully seized and possessed of the real estate above-described, and that the Grantor has a good and lawful right to convey it, or any part thereof.

DATED this 7th day of July 2004

Patrick K. Goggins

STATE OF Mt)
)ss.
COUNTY OF Yellowstone)

This instrument was acknowledged before me on July 7th, 2004, by Patrick K. Goggins

(NOTARY SEAL)

Signature: Steve McFarland

Print Name: Steve McFarland

Notary Public for the State of Mt

Residing at Billings, 59105

My Commission Expires June 12th 2007

Filed for record this _____ day of _____, 20 _____, at _____ o'clock _____. _____., and recorded in/on _____, _____ of the records of County of _____ State of Montana.

CLERK AND RECORDER

By _____

Project: OBIE BILLBOARD

Map No.: _____

Order No.: 23073781

Acquired by: Steve McFarland

RETURN TO:
NORTHWESTERN ENERGY
LANDS and PERMITTING DEPARTMENT
40 East Broadway
Butte, MT 59701-9394
Attention: Christine Hepola

Yellowstone County EASE 6.00 **3299453** Page: 1 of 1 08/04/2004 12:31P

After Recording Return To:
Conoco Phillips Pipe Line Co.
P.O. Box 7500 Attn: Manager RPA
Bartlesville, OK 74004-7500
B-77561E

Yellowstone County WD 11.00

3339844
Page: 1 of 1
07/12/2005 10:48A

WARRANTY DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged on this 11 day of July, 2005, the undersigned, PATRICK K. GOGGINS, of Billings, MT, hereby grants unto CONOCOPHILLIPS PIPE LINE COMPANY, of 810-C Plaza Office Building, Bartlesville, Oklahoma 74004, and to its successors and assigns forever, the hereafter described real estate situated in Yellowstone County, Montana, to-wit:

> Tract 2-B, of AMENDED TRACT 2, OF CERTIFICATE OF SURVEY NO. 2000, Yellowstone County, Montana, according to the official plat thereof on file and of record in the office of the Clerk and Recorder of said County, under Document No. 1571405.

TO HAVE AND TO HOLD unto the Grantee and to its successors and assigns forever, subject, however, to:

(a) All reservations, covenants, restrictions and exceptions in recorded conveyances or other recorded documents pertaining to said real estate, or any part thereof;

(b) All vested rights for easements and rights of way, all waivers or agreements given to or entered into with governmental entities, and zoning ordinances;

(c) Taxes, charges and assessments of any type imposed upon said real estate for the year 2005 and subsequent years;

(d) All prior conveyances, leases or transfers of any interest in minerals, mineral rights, metals, stone, methane, oil, gas, coal and other hydrocarbons, or easement rights or other matters relating thereto whether expressed or implied.

(e) The effect of State of Montana Department of Health and Environmental Sciences Certificate of Subdivision Plat Approval recorded January 18, 1980, under Document #1167949, records of Yellowstone County, Montana.

EXCEPT with reference to items referred to in paragraphs (a) through (e) above, this Deed is given with the usual covenants expressed in Section 30-11-110, Montana Code Annotated.

This conveyance is made and accepted upon the express agreement that the consideration paid constitutes an adequate and full consideration in money or money's worth.

IN WITNESS WHEREOF, the Grantor has executed this instrument the day and year first above written.

PATRICK K. GOGGINS

STATE OF MONTANA)
: ss.
County of Yellowstone)

This instrument was acknowledged before me on July 11, 2005, by PATRICK K. GOGGINS.

(print or type name of notary)
Notary Public for the State of Montana
Residing at Billings, Montana
My Commission Expires _____, 200__

KELLY MILLER
NOTARIAL (SEAL)
KELLY MILLER
NOTARY PUBLIC for the State of Montana
Residing at Billings, Montana
My Commission Expires July 25, 2010

Pedersen & Hardy
Attorneys At Law
1601 Lewis Avenue, Suite 205
Billings, Montana 59102

34002H-95

3530220
Page: 1 of 6
11/05/2009 12:16P
Yellowstone County EASE 62.00

RIGHT OF WAY EASEMENT

RETURN RECORDED DOCUMENT TO:

Fergus Electric Cooperative, Inc.
84423 U.S. Highway 87
Lewistown, MT 59457-2058
406-538-3465

Fergus Electric Cooperative, Inc.
LEWISTOWN, MT
Your Touchstone Energy® Partner

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

for a good and valuable consideration, the receipt whereof hereby is acknowledged, do hereby grant a perpetual easement which shall run with the land, proceeding through my property on a reasonable route, free of charge, for the extension of lines for service for Signal Peak Energy, LLC unto FERGUS ELECTRIC COOPERATIVE, INC., a corporation of Lewistown, Montana, and to its successors or assigns, the right to enter upon the lands of the undersigned , situated in the counties of Yellowstone and Musselshell, State of Montana, and more particularly described as follows:

Begin at NorthWestern Energy's Broadview Substation in Yellowstone County, Montana, and ending at the Signal Peak Coal Mine in Musselshell County, Montana, as shown in Exhibit 'A' which shows the line owned by Fergus Electric Cooperative, Inc.

and together with the right to place, construct, operate and maintain on the above-described lands and/or in or upon all streets, roads or highways abutting said lands, an electric transmission or distribution line or system, and to cut and trim trees and shrubbery to the extent necessary to keep them clear of said electric line or system and to cut down from time to time all dead, weak, leaning or dangerous trees that are tall enough to strike the wires in falling.

IN WITNESS WHEREOF, the undersigned have set their hands and seal this 24th day of September 2009.

Signal Peak Energy, LLC

by John M. DeMichiei (L.S.)
John M. DeMichiei, CEO/President

STATE OF MONTANA

County of Musselshell SS.

On this 24th day of September, 2009, before me the undersigned Notary Public for the above mentioned County and State, personally appeared John M. DeMichiei, CEO/President ~~and~~ of Signal Peak Energy, LLC, known to me to be the persons who executed the foregoing instrument and acknowledged to me that they and each of them executed the same.

DONALD D. CRISWELL
NOTARY PUBLIC for the
State of Montana
Residing at Roundup, Montana
My Commission Expires
April 1, 2010

NOTARIAL SEAL
STATE OF MONTANA

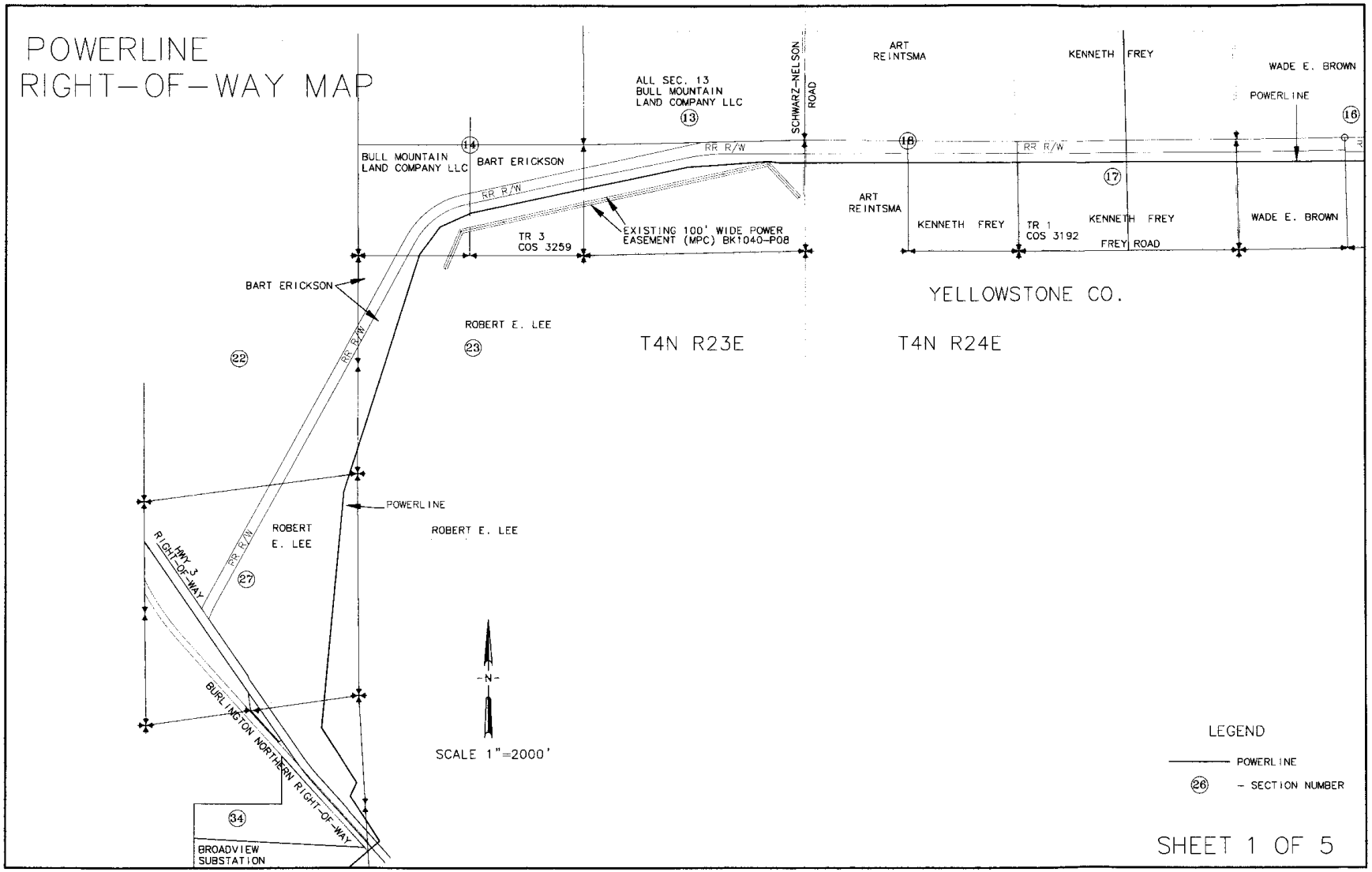
Signature of Notary Public for the State of Montana

Printed Name of Notary Public _____

Residing at _____, Montana

My Commission expires _____

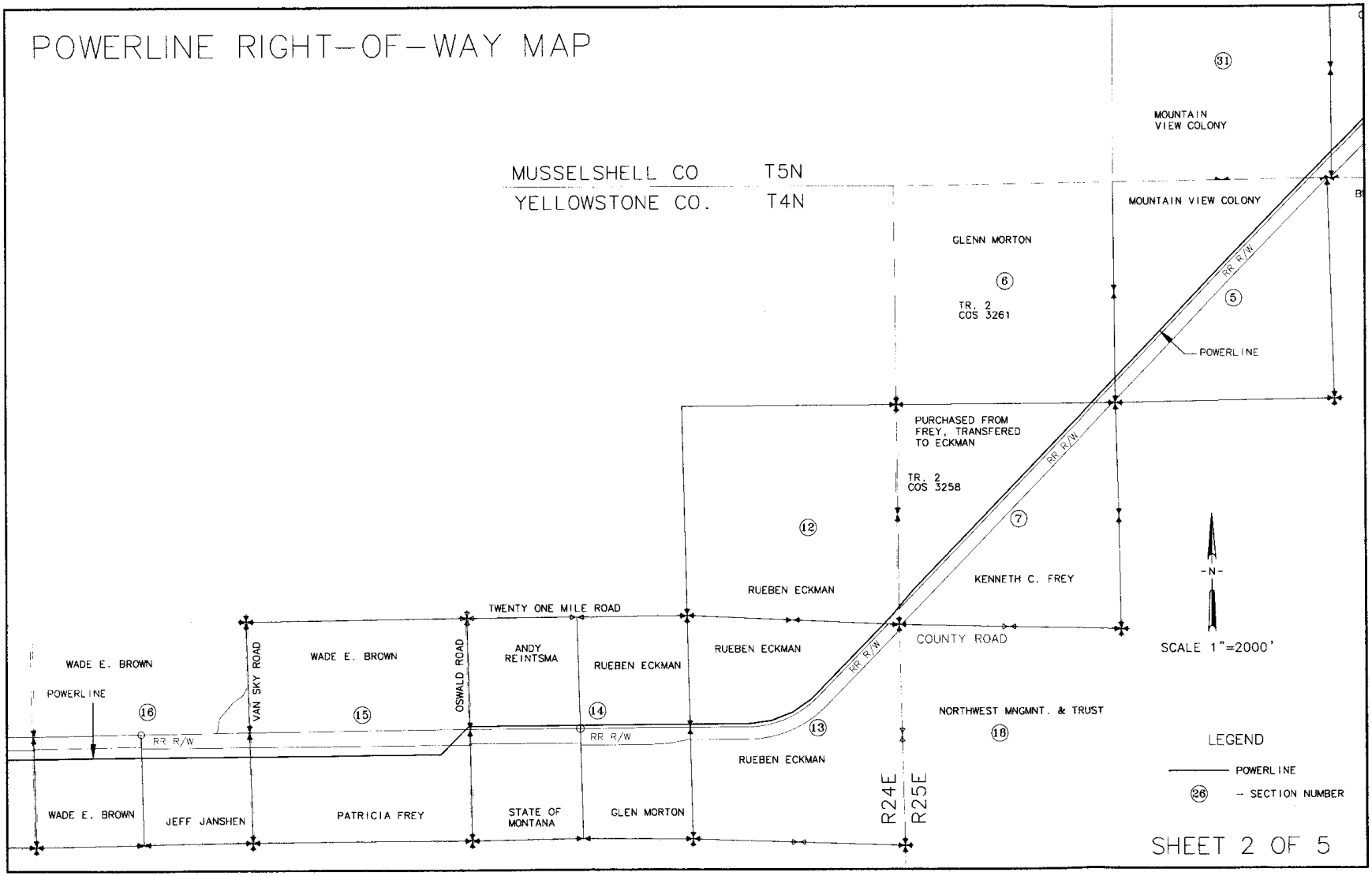
POWERLINE RIGHT-OF-WAY MAP



SHEET 1 OF 5

3530220
Page: 2 of 6
11/05/2009 12:16P
Yellowstone County EASE 62.00

POWERLINE RIGHT-OF-WAY MAP



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Page: 3 of 6
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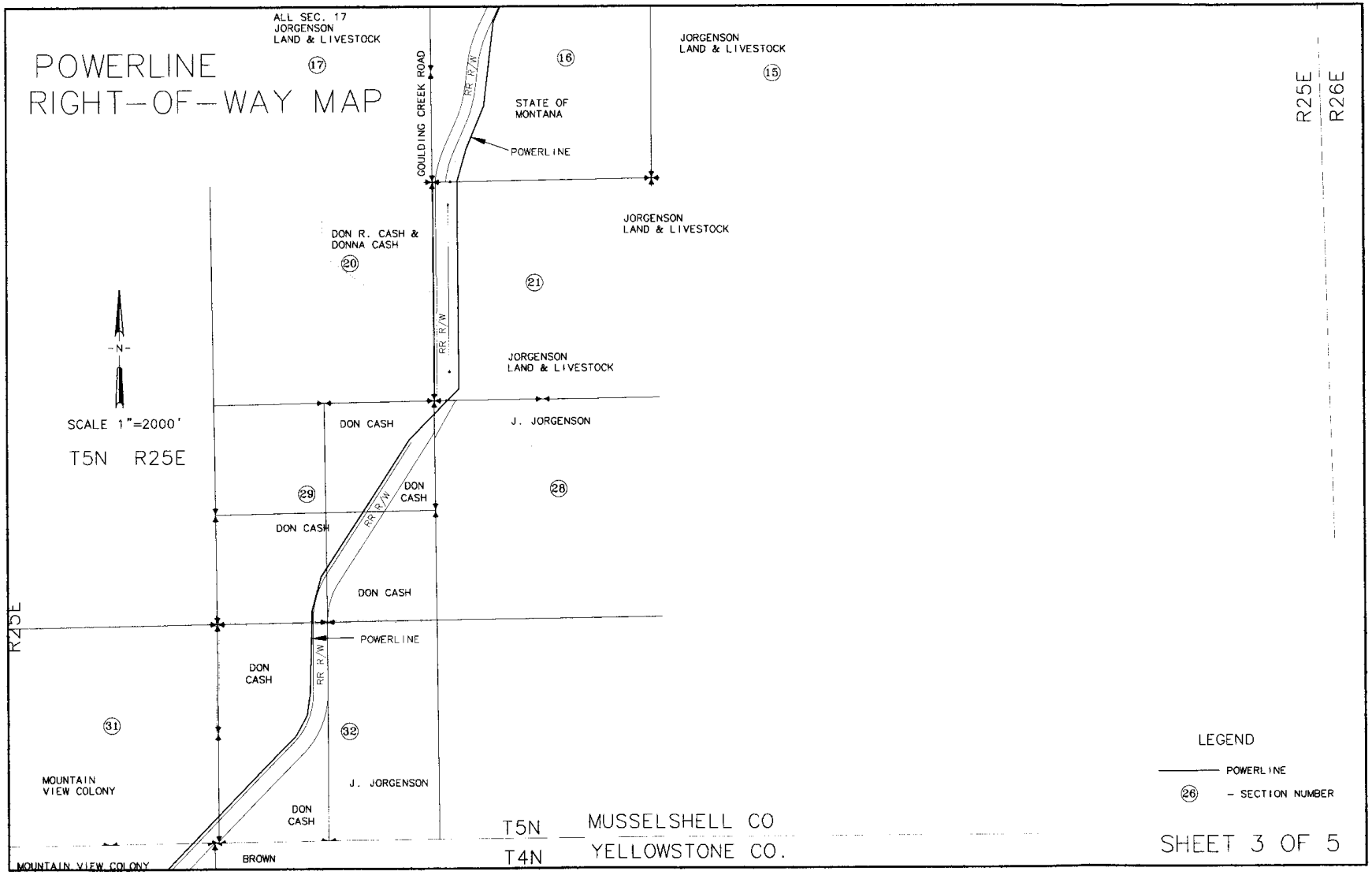
Yellowstone County ERSE 62.00

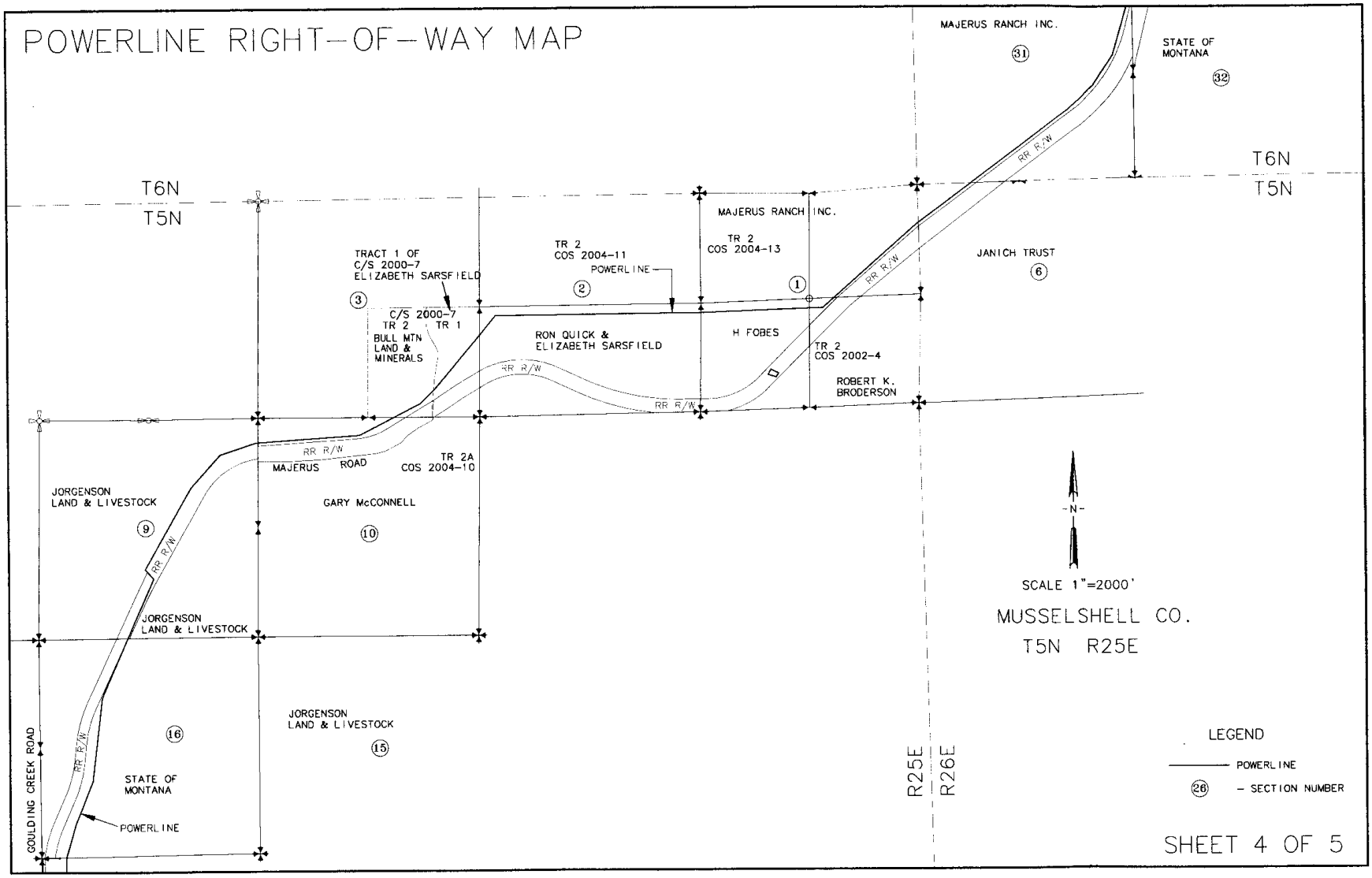
POWERLINE RIGHT-OF-WAY MAP



SHEET 3 OF 5

3530220
Page: 4 of 6
11/05/2009 12:16P
Yellowstone County EASE 62.00

POWERLINE RIGHT-OF-WAY MAP



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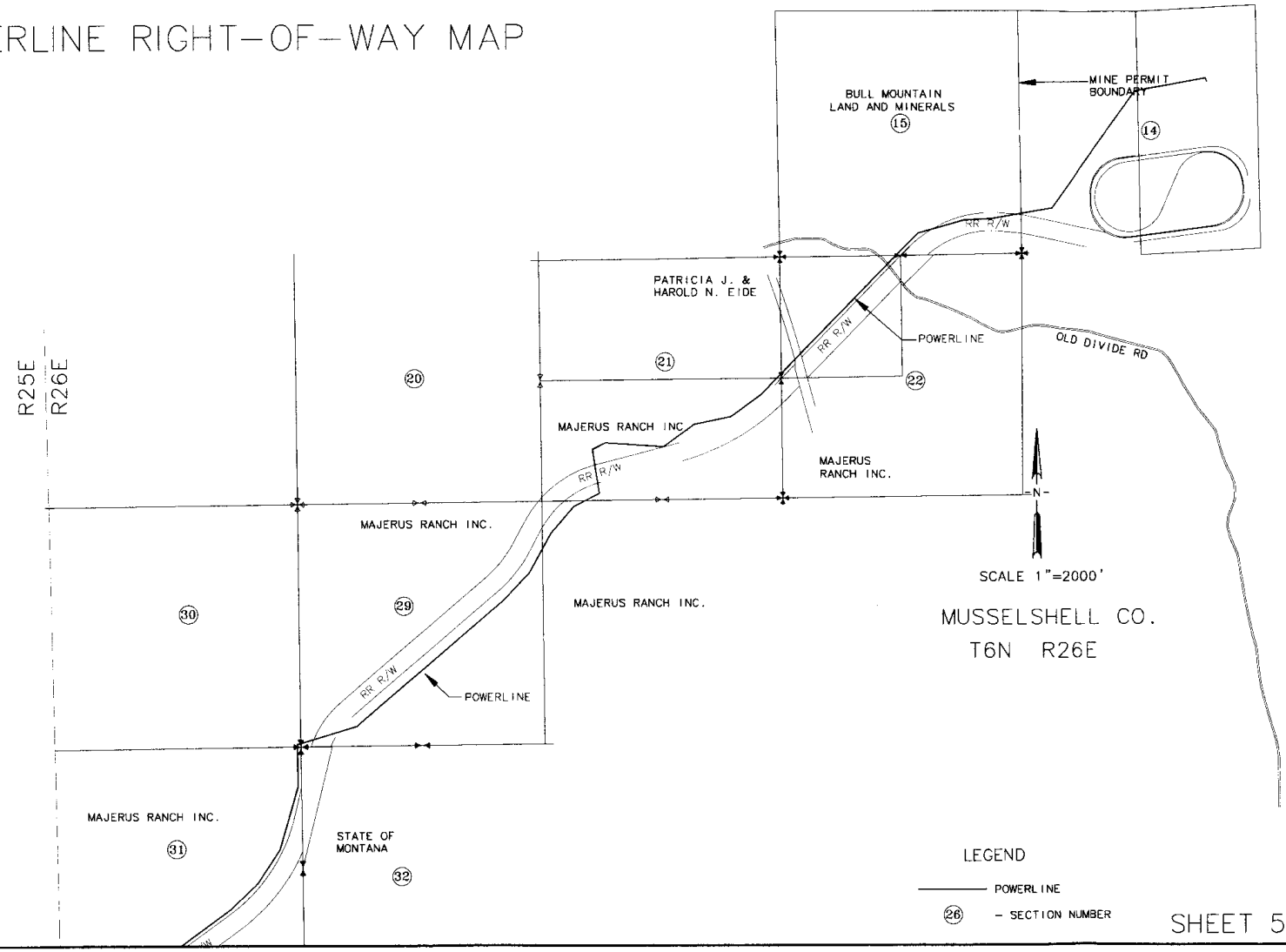
Page: 5 of 6
11/05/2009 12:16P
Yellowstone County EASE 62.00

POWERLINE RIGHT-OF-WAY MAP



SHEET 5 OF 5

3530220
Page: 6 of 6
11/05/2009 12:16P
Yellowstone County EASE 62.00