Kennedy/Jenks Consultants

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27 February 2007

Ms. Aimee Reynolds
Project Officer
Remediation Division
Montana Department of Environmental Quality
1100 North Last Chance Gulch
Helena, Montana 59601

Subject: 2006 Annual Update to Private and Public Well Inventory (Revision No. 1)
Burlington Northern Livingston Shop Complex - Livingston, Montana
K/J 0796021.16

Dear Ms. Reynolds:

On behalf of BNSF Railway Company (BNSF), Kennedy/Jenks Consultants is pleased to submit four hard copies of the 2006 annual update as replacement pages to the *Private and Public Well Inventory (Revision No. 1), Burlington Northern Livingston Shop Complex, Livingston, Montana* dated July 2006. A PDF version of the entire updated well inventory is also provided on the CD (attached).

The 2006 annual update was provided to Montana Department of Environmental Quality (DEQ) on 30 January 2007 in accordance with the Statement of Work for Spring 2005 Activities (Spring 2005 SOW). In a letter from DEQ dated 6 February 2007, DEQ requested "four hard copies of the update suitable for insertion into the 3-ring binder of the July 2006 final Well Inventory and one optimized PDF copy of the entire updated Well Inventory by February 28, 2007".

State databases (GWIC, DNRC, Cadastral) used in the preparation of the well inventory were reviewed to see if any new information and/or data updates have been posted since Revision No. 1 was submitted on 31 July 2006. Five additional wells have been identified in the GWIC database since the 31 July 2006 submittal and two additional wells have been identified in the DNRC database. New information and/or data updates are shaded yellow in the tables.

The next annual update of the Private and Public Well Inventory (Revision No. 1) will be submitted to DEQ by 31 January 2008, unless otherwise directed by DEQ.

Please contact us at (253) 874-0555 if you have questions regarding this submittal.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

John E. Norris, R.G.
Project Manager

Amanda J. Aldersley, L.G.
Assistant Project Manager

Enclosures

cc: Dave Smith, BNSF (w/o enclosures)
Catherine Laughner, Browning, Kaleczyc, Berry & Hoven (w/o enclosures)
Laura Vachowski, DEQ Legal (w/o enclosures)
Steve Caldwell, Park County Environmental Council (w/o enclosure)
Brian Blicker, RTI, Inc. (w/o enclosures)

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PRIVATE AND PUBLIC WELL INVENTORY (REVISION No. 1)
Burlington Northern Livingston Shop Complex

Tracking Form

Submittal Date	Version Date	Version No.	Pages to be Replaced	
8/3/06	July 2006	DEQ Revision	Binder Cover and Spine Internal Cover Title Page Pages 1-1 through 1-6 References R-1	DEQ's unilateral changes dated 20 July 2006 and DEQ's email dated 27 July 2006.
2/27/07	January 2007	DEQ Revision	Cover Letter Table 1 Table 2 Table 3 Table 4 Figure 1 Appendix A Appendix B (new well logs)	2006 Annual Update

Notes:

1) Insert this tracking form in the front of the *Private and Public Well Inventory (Revision No. 1)* currently dated July 2006.
2) Remove pages listed in the above table (shaded yellow) and insert replacement pages (attached). Add the new well logs into the appropriate "Township, Range, Section" portions of Appendix B.

Kennedy/Jenks Consultants

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31 July 2006

Ms. Aimee Reynolds
Project Officer
Remediation Division
Montana Department of Environmental Quality
1100 North Last Chance Gulch
Helena, Montana 59601

Subject: Private and Public Well Inventory (Revision No. 1)
Burlington Northern Livingston Shop Complex - Livingston, Montana
K/J 0696021.16

Dear Ms. Reynolds:

On behalf of BNSF Railway Company (BNSF), Kennedy/Jenks Consultants is pleased to submit four (4) hard copy replacement pages for the *Private and Public Well Inventory (Revision No. 1), Burlington Northern Livingston Shop Complex, Livingston, Montana* dated January 2006. One (1) electronic copy of the entire updated document is also included with this submittal. The replacement pages reflect the Montana Department of Environmental Quality (DEQ) unilateral changes to the above-referenced document in its letter to BNSF dated 20 July 2006. Changes made in this document by DEQ are underlined. Also included are a replacement binder cover page and spine, internal cover page, and title page, that notes that the document is the July 2006 version "with DEQ July 2006 Revisions".

The next annual update of the Private and Public Well Inventory will be submitted to DEQ by 31 January 2007, unless otherwise directed by DEQ.

Please contact us at (253) 874-0555 if you have questions regarding this submittal.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

John E. Norris, P.G.
Project Manager

Amanda J Aldersley

Amanda J. Aldersley, L.G.
Assistant Project Manager

Enclosures

cc: Dave Smith, BNSF
Catherine Laughner, Browning, Kaleczyc, Berry & Hoven
Laura Vachowski, DEQ Legal
Steve Caldwell, Park County Environmental Council
Brian Blicker, RTI, Inc.

PRIVATE AND PUBLIC WELL INVENTORY (REVISION No. 1)
Burlington Northern Livingston Shop Complex

Tracking Form

Submittal Date	Version Date	Version No.	Pages to be Replaced	
8/3/06	July 2006	DEQ Revision	Binder Cover and Spine Internal Cover Title Page Pages 1-1 through 1-6 References R-1	DEQ's unilateral changes dated 20 July 2006 and DEQ's email dated 27 July 2006.

Notes:

1) Insert this tracking form in the front of the *Private and Public Well Inventory (Revision No. 1)* currently dated January 2006. Note: Replacement pages include a new binder cover and spine, internal cover, and title page that notes that the document is the July 2006 version "with DEQ July 2006 Revisions".
2) Remove pages listed in the above table (shaded yellow) and insert replacement pages (attached).

Kennedy/Jenks Consultants

Engineers & Scientists

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FAX 253-952-3435

31 January 2006

Mr. Jarrett Keck
Project Officer
Remediation Division
Montana Department of Environmental Quality
1100 North Last Chance Gulch
Helena, Montana 59601

Subject: Private and Public Well Inventory (Revision No. 1)
Burlington Northern Livingston Shop Complex - Livingston, Montana
K/J 0696021.16

Dear Mr. Keck:

On behalf of BNSF Railway Company (BNSF), Kennedy/Jenks Consultants is pleased to submit four (4) hard copies and one (1) electronic copy of the *Private and Public Well Inventory (Revision No. 1), Burlington Northern Livingston Shop Complex, Livingston, Montana* dated January 2006. Revision No. 1 addresses comments in Montana Department of Environmental Quality's (DEQ's) letter dated 28 October 2005. The following table indicates how each comment is addressed.

DEQ Comment Number	Report Section Number	Report Section Title	Comment
1	1.1	Introduction	Text addressing dissolved-phase petroleum has been modified to reference Montana's *Tier 1 Risk-Based Corrective Action Guidance Document* dated October 2003.
2	1.1	Introduction	Text has been modified.
3	1.3	Inventory	Text has been added that well survey forms were mailed out before 15 December 2005, as required by DEQ's letter dated 28 October 2005.
4	1.4	Deliverables	Language has been added to the end of this section that periodic well inventory reviews and updates will also be conducted in the future under the Livingston SOW and that the periodic reviews will be conducted at least annually until a Controlled Groundwater Area is established pursuant to the *Record of Decision* (ROD).
--	--	References	Circular WQB-7, Montana Numeric Water Quality Standards and Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases have been added to the Reference section.

DEQ Comment Number	Report Section Number	Report Section Title	Comment
5a	–	Table 1 Figure 1	As stated in Footnote (a) in Table 1, the assigned well number (i.e., 02S/09E-12J01) is based on Township (i.e., 02S), Range (i.e., 09E), Section (i.e., 12) , 40-acre tract (i.e., J) and well sequence number within the tract (i.e., 01) according to U.S. Geological Survey well numbering system and as described in Appendix A. Table 1 has been modified to clarify which wells are in a particular Township, Range, and Section. See response to Comments #9b and #5c. On Figure 1, the well location is identified by the 40-acre tract (i.e., A, B, C etc) and well sequence number (i.e., 01, 02, 03 etc.) portion of the well number, since the Township, Range, Section numbers are identified on the figure (see green grid lines and numbers). Additional clarification language has been added to Figure 1. Note: To include the full well number on Figure 1 at each well location would make the figure unreadable; however, all information needed to relate the well numbers in the tables to the location on Figure 1 is presented on Figure 1 (i.e., Township, Range, Section, etc.).
5b	–	Table 1	Language in footnotes (c) and (d) formerly in italics has been removed from the respective footnotes and the corresponding information in Table 1 is no longer identified in italics. Information previously in italics in Table 1 has been assigned footnotes (j) through (r) to provide an explanation of how the water right or Envirocon name was assigned. Note: Language in Table 2 footnotes (c) and (d) and Table 3 footnote (d) formerly in italics have been removed from the respective footnotes and the corresponding information in Tables 2 and 3 are no longer identified in italics. This information is now provided in Table 1.
5c (optional)	–	Table 1	Well numbers in Table 1 and Figure 1 are comparable. See response to Comment #5a.
6	–	Table 2	See responses to Comments #5a, #5b, #5c. Note: Since Comments #4a, #4b, #4c do not exist, it has been assumed that this is a typographical error and the reference should be to Comments #5a, #5b, and #5c.

DEQ Comment Number	Report Section Number	Report Section Title	Comment
6a	–	Table 2	Where the GWIC database did not list one of the well use categories listed in footnote (f) under well use, the symbol "- -" was used in the USE column because the database provided no information. The symbol "- -" in the well use column has now been replaced with "UNK". The symbol "- -" is now used to represent other unknown information (as oppose to "UNK," which represents unknown well use) and the symbol "*" is now used to represent not applicable to distinguish between what is not known and what is not applicable. The term "UNK" is not being used to represent other unknown information because "UNK" is a specific well use category term used by GWIC. Table 2 and footnotes have been modified accordingly. Note: Corresponding changes to "- -" and "*" have also been made in Tables 1, 3, and 4 for consistency and table footnotes modified accordingly.
6b	–	Table 2	Language has been added attributing well use category definitions to GWIC. Note: Well use categories in Table 2 are defined by GWIC not DNRC as indicated in DEQ's letter dated 28 October 2005.
7	–	Table 3	See responses to Comments #5a, #5b, #5c, and #6a, #6b. Note: Since Comments #4a, #4b, #4c do not exist, it has been assumed that this is a typographical error and the reference should be to Comments #5a, #5b, and #5c.
8a	–	Table 4	See responses to Comments #5a and #5c. Note: Since Comments #4a and #4c do not exist, it has been assumed that this is a typographical error and the reference should be to Comments #5a and #5c.
8b	–	Table 4	Well use categories have been added to Table 4 as footnote (c).
8c	–	Table 4	See "Note" at end of response to Comment #6a.
9a	–	Appendix B	Replacement copies have been obtained for those well logs that were of poor copy quality. Appendix B contains the best available copies of well logs.
9b (optional)	–	Appendix B	Well logs are organized in the order they appear in Table 2. Dividers have been added that divide the well logs by Township/Range/Section. See response to Comment #5a.
–	–	Appendix C (new)	Copies of completed well surveys forms.

State databases (GWIC, DNRC, Cadastral) used in the preparation of this inventory were reviewed to see if any new information and/or data updates have been posted since May 2005. New information and/or data updates have been incorporated into this revision of the public and private well inventory. Eleven additional wells have been identified in the GWIC database since the well inventory was submitted in May 2005 and one additional well has been identified in the DNRC database. New information and/or data updates based on the periodic database review have been added to this revision. New information and/or data updates are shaded yellow in the tables.

In addition, a private well survey was conducted of properties located within the monitoring zone boundary identified on Figure 21 of the *Task F Stage 1 – Part 1 Remedial Action Plan for VOC-Containing Alluvial Aquifer Groundwater* dated May 2005 (Task F Stage I – Part 1 RA Plan). The well survey forms were mailed to property owners on or before 15 December 2005 as required by DEQ's letter dated 28 October 2005. DEQ was notified of the mailing in Kennedy/Jenks Consultants letter dated 15 December 2005. No additional wells were identified during the well survey based on completed survey forms received prior to preparation of this revision of the public and private well inventory; however, some confirmation of existing information was obtained. If new information from the well survey becomes available after submittal of this revision, it will be incorporated into subsequent revisions of this document that will be prepared under the *Statement of Work for Spring 2005 Activities* (Spring 2005 SOW) (DEQ 2005) and the Livingston SOW. Copies of the completed survey forms received to date are included in Appendix C.

Please contact us at (253) 874-0555 if you have questions regarding this submittal.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

John E. Norris, P.G.
Project Manager

Amanda J. Aldersley, L.G.
Assistant Project Manager

Enclosures

cc: Dave Smith, BNSF
Catherine Laughner, Browning, Kaleczyc, Berry & Hoven
Laura Vachowski, DEQ Legal
Steve Caldwell, Park County Environmental Council
Brian Blicker, RTI, Inc.

Private and Public Well Inventory (Revision No. 1)

Burlington Northern Livingston Shop Complex
Livingston, Montana

BNSF Railway Company

K/J 0696021.16
July 2006

with DEQ July 2006 Revisions

PRIVATE AND PUBLIC WELL INVENTORY
(REVISION No. 1)

Burlington Northern Livingston Shop Complex
Livingston, Montana

with DEQ July 2006 Revisions

Prepared for

BNSF RAILWAY COMPANY

K/J 0696021.16

July 2006

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1.0 WELL INVENTORY SUMMARY

1.1 INTRODUCTION

This Private and Public Well Inventory addresses the requirements of remedial design/remedial action (RD/RA) Tasks F and, G, and Supplemental Investigation Task L presented in the *Statement of Work for Spring 2005 Activities* dated August 2005 (Spring 2005 SOW) [Montana Department of Environmental Quality (DEQ) 2005].

The Burlington Northern (BN) Livingston Shop Complex site is being addressed under Montana's Comprehensive Environmental Cleanup and Responsibility Act (CECRA), which defines a "Facility" to include "any site or area where a hazardous or deleterious substance has been deposited, stored, disposed of, placed, or otherwise come to be located." [Section 75-10-701(4)(a)(ii), Montana Code Annotated (MCA)].

Consistent with this definition, the BN Livingston Shop Complex Facility (the Facility) includes the Livingston railyard and the surrounding area where hazardous or deleterious substances as defined under CECRA have been deposited, stored, disposed of, placed, or otherwise come to be located. The Facility is located in Park County, Montana with the majority of it within the City of Livingston. Livingston is located approximately 26 miles east of Bozeman, Montana and 100 miles west of Billings, Montana.

The DEQ has selected a remedial action for the Facility that is set forth in the *Record of Decision* (ROD) (DEQ 2001). DEQ and BNSF negotiated the Spring 2005 SOW to address requirements and activities for initiating high priority portions of the selected remedy. This private and public well inventory has been prepared to satisfy the requirements identified in the following sections of the ROD and Spring 2005 SOW:

- ROD Section X.E – Monitoring and Maintenance

- Spring 2005 SOW Section 3.1.6 – Task F: Alluvial Aquifer Groundwater Volatile Organic Compound (VOC) Cleanup

- Spring 2005 SOW Section 3.1.7 – Task G: Groundwater Dissolved-Phase Petroleum Cleanup

- Spring 2005 SOW Section 3.2.4 – Task L: Investigation of VOCs in Bedrock Aquifer(s).

Since the private and public well inventory is a requirement of several tasks, it has been prepared as a stand-alone document designed to be used in conjunction with the documents prepared for Tasks F, G and L (see Section 1.4).

The BNSF Railway Company (BNSF) has prepared this private and public well inventory to identify known domestic, commercial, industrial, irrigation, and monitoring wells within approximately one-half mile of:

- Alluvial aquifer groundwater containing chlorinated VOCs at or greater than the *Circular WQB-7, Montana Numeric Water Quality Standards for Human Health* (WQB-7 standard) required reporting limits

- Alluvial aquifer groundwater containing dissolved-phase petroleum concentrations at or greater than Montana's *Tier 1 Risk-Based Corrective Action Guidance Document* dated October 2003

- Chlorinated VOC concentrations at or greater than the WQB-7 standard required reporting limits in the bedrock aquifer(s), if present.

The search area for the well inventory was defined by using a rectangular area to represent an inner well search boundary. West of the Yellowstone River (i.e., to the approximate end of the Livingston railyard), the inner well search boundary generally encompasses the "approximate boundary of detectable contamination" defined by DEQ

on their figure (Alluvial Aquifer Groundwater Contaminant Plume Map for Tetrachloroethene, BNSF Livingston Shop Complex Facility, June 2003 dated October 2004) presented in Appendix E of the *Revised Annual Groundwater Sampling Report 2003* (Kennedy/Jenks Consultants 2004). The inner well search boundary rectangle was prolongated to the northeast, beyond the Yellowstone River, to approximately 500 feet northeast of the O'Hara well (02S/10E-5P01). Another rectangle (outer well search boundary) was placed one-half mile beyond the inner well search boundary. Known domestic, commercial, industrial, irrigation, and monitoring wells located within the outer well search boundary are included in this well inventory. The inner and outer well search boundaries are depicted on Figure 1.

1.2 AVAILABLE RESOURCES

The following available resources were used to the extent practicable to identify private and public wells located within the DEQ-defined boundary and compile the information presented in this document:

- Montana Bureau of Mines and Geology, Groundwater Information Center (GWIC) Database
- Montana Department of Natural Resources and Conservation (DNRC), Water Resources Division - Water Rights Database
- Montana Cadastral Mapping Project <http://gis.doa.state.mt.us/index.html>
- Envirocon, Inc. of Missoula, Montana (Envirocon).

1.3 INVENTORY

This private and public well inventory consists of summary tables, a well location map, and copies of well logs for wells included in the inventory.

Table 1 presents a summary of the current inventory. This table includes:

- A unique Kennedy/Jenks Consultants assigned well number based on Township, Range, Section, and 40-acre tract in accordance with the U.S. Geological Survey (USGS) well numbering system. This well number is used to identify approximate well locations on Figure 1. The USGS well numbering system is described in Appendix A.

- DNRC water right number.

- GWIC identification number.

- Envirocon name (this name was previously used by Envirocon to identify the well).

- Well or water right owner as listed in the GWIC database.

- Name and address of current owner, to extent reasonably available.

Tables 2, 3, and 4 provide additional well information i.e., driller, date drilled, static water level, well depth, well construction/design, and well use. Copies of the well logs (if available) for wells listed in Table 1 are included in Appendix B.

BNSF recognizes that the potential exists for the presence of unregistered wells. In order to identify potential unregistered private wells in the area potentially underlain by groundwater containing chlorinated VOC concentrations approaching the ROD-specified cleanup levels, BNSF has developed a private well survey form [presented in

Appendix H of *Task F Stage I – Part 1 Remedial Action Plan* (Kennedy/Jenks Consultants 2005)] that will be mailed to residents within the estimated area in which chlorinated VOC concentrations exceed the ROD-specified cleanup levels and a buffer zone around that area. The private well survey forms were mailed to property owners before 15 December 2005. No new well information was obtained from completed survey forms received by Kennedy/Jenks Consultants prior to preparation of this revision of the private and public well inventory. If additional information is obtained from the survey at a later date, it will be incorporated into the next update of the private and public well inventory.

1.4 DELIVERABLES

Preparation of this private and public well inventory is a requirement of the Task F Stage I – Part 1 RA Plan and Task G Stage I RA Plan; however, since these two plans were submitted to the DEQ concurrently with this document, no additional updates to the well inventory were necessary as part of the draft deliverables. Similarly, updating the well inventory is a requirement of the Task L supplemental investigation (SI) work plan; however, since this work plan will be submitted approximately one month after the submittal of this document, no additional updates to the well inventory will be necessary as part of the draft deliverable.

Periodic review and updates, if necessary, to this private and public well inventory will be conducted in the future as part of the following task deliverables and in accordance with the Spring 2005 SOW:

- Task F Stage I – Part 1 RA Report
- Task F Stage I – Part 2 RA Report

- Task G Stage I RA Report

- Task L Supplemental Investigation Report

- Annual reports.

Periodic review of the private and public well inventory will also be conducted in the future as required by DEQ and the inventory will be updated at least annually, as necessary. The periodic reviews will be conducted at least annually until a Controlled Groundwater Area is established pursuant to the ROD.

If the private and public well inventory requires updating (i.e., new wells identified), addenda to this document will be prepared and submitted to DEQ along with the aforementioned deliverables. If no new private and public well information is found during the periodic review(s), this information will be documented in the aforementioned deliverables.

REFERENCES

Kennedy/Jenks Consultants. 2004. Revised Annual Groundwater Sampling Report 2003, Livingston Railyard, Livingston, Montana. October 2004. Kennedy/Jenks Consultants, Federal Way, WA.

Kennedy/Jenks Consultants. 2005. Task F Stage I – Part 1 Remedial Action Plan for VOC-Containing Alluvial Aquifer Groundwater, Burlington Northern Livingston Shop Complex Facility, Livingston, Montana. May 2005. Kennedy/Jenks Consultants, Federal Way, WA.

Montana Department of Environmental Quality. 1999. Circular WQB-7, Montana Numeric Water Quality Standards, September 1999. Montana Department of Environmental Quality, Planning, Prevention and Assistance Division. Helena, Montana. The current numeric water quality standards are set forth in the February 2006 Circular DEQ-7. However, the 1999 reporting limits referenced in this document are consistent with the current reporting limits.

Montana Department of Environmental Quality. 2001. Record of Decision, Burlington Northern Livingston Shop Complex. Montana Department of Environmental Quality, Remediation Division, Helena, MT.

Montana Department of Environmental Quality. 2003. Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases. October 2003. Montana Department of Environmental Quality, Remediation Division, Helena, Montana.

Montana Department of Environmental Quality. 2005. Statement of Work for Spring 2005 Activities. BNSF Livingston Shop Complex, Park County, Montana. August 2005. Montana Department of Environmental Quality, Remediation Division, Helena, MT.

Tables

TABLE 1

PRIVATE AND PUBLIC WELL INVENTORY
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	GWIC ID[b]	DNRC WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OR WATER RIGHT OWNER[e]	CURRENT OWNER[f]	ADDRESS[f]	GEOCODE[f]
TOWNSHIP 02S, RANGE 09E, SECTION 12							
02S/09E-12J01	187084	115481	*[g]	WEIBERT DELLA	--[h]	--	--
02S/09E-12J02	96969	55219	BALDWIN	BALDWIN DELLA R.	FIRST AMERICAN CONSTRUCTION LL	N STREET	49080212425100000
02S/09E-12K01	*	107556[i]	*	LOGAN, JIM	--	--	--
02S/09E-12Q01	*	193382	COUNTS, S	COUNTS, JOHN H	SELKIRK DE VAROLD & DYVONNE J	809 E. GALLATIN STREET	49080212407200000
02S/09E-12Q02	*	*	RICCI	RICCI, G.	CONRADI DIANE	519 N. I	49080212407090000
02S/09E-12R01	133313	83241	*	SMITH JIM	SMITH JAMES R & JENNIFER C	1205 MONTANA STREET	49080212419170000
02S/09E-12R02	151239	*	*	BURLEY DAVID AND JEANNE	BURLEY DAVID E & JEANNIE E	1104 GALLATIN STREET	49080212405320000
02S/09E-12R03	*	82684	CIERI	CIERI, CARLO	BNSF RAILWAY COMPANY	408 N. K STREET	49080212404220000
02S/09E-12R04	230758	*	*	HILLMAN VINCE	--	--	--
TOWNSHIP 02S, RANGE 09E, SECTION 13							
02S/09E-13A01[i]	*	*	*	MW-1 (EAST SIDE CONOCO)	MONTANA RAIL LINK	--	--
02S/09E-13A02	*	*	*	MW-2 (EAST SIDE CONOCO)	MONTANA RAIL LINK	--	--
02S/09E-13E01	148799	93642	*	HILLMAN JEANETT	VIGUE JEANETTE	530 2nd STREET	49080213211320000
02S/09E-13H01	*	*	TAYLOR	TAYLOR	--	--	--
02S/09E-13J01	7129	*	*	ROY KINNE * C & GEYSER ST. LIVINGSTON MT.	KINNE ROY C	328 S C STREET	49080213412160000
02S/09E-13J02	96972	**194579**	D STREET	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/09E-13J03	96973	*	*	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/09E-13J04	213623	**30011317**	*	CHAPEL CAROLINE E.	CHAPEL CAROLINE E	314 C STREET	49080213412070000
02S/09E-13J05	124896	*	*	LIVINGSTON SCHOOL DIST. #4	SCHOOL DISTRICT #4	--	49080213455010000
02S/09E-13J06	124899	*	*	LIVINGSTON SCHOOL DIST. #4	SCHOOL DISTRICT #4	--	49080213455010000
02S/09E-13K01	96971	*	FARMERS CREAMERY	FARMERS CREAMERY	TOPP LARRY L & PHYLLIS J	116 LEWIS ST	49080213419010000
02S/09E-13K02	96974	*	*	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/09E-13K03	96975	3530	B STREET	CITY OF LIVINGSTON * WELL #5	CITY OF LIVINGSTON	--	--
02S/09E-13K04	*	58303	*	LIVINGSTON, CITY OF	CITY OF LIVINGSTON	--	--
02S/09E-13K05	*	*	CLINTS	CLINTS	--	--	--
02S/09E-13K06	89041	**58362**	INDUSTRIAL TOWEL	BIG SKY SERVICE CO	BIG SKY SERVICE CO	NOT LISTED	49080213417130000
02S/09E-13L01	147155	92558	*	EGELAND MARK AND HELEN	STEVENS TIMOTHY R & AMY O TITG	315 3rd STREET	49080213328150000
02S/09E-13L02	125754	**84017**	*	LIVINGSTON DEPOT CENTER	MONTANA RAIL LINK INC LIVINGSTON, CITY OF	PARK STREET	49080213390212000
02S/09E-13P01	*	95437	*	SANDBERG, ERNEST A	--	220 S YELLOSTONE	--
02S/09E-13Q01	96970	*	*	LINDBERG ERICK	--	--	--
02S/09E-13Q02	96976	*	*	CONNELLY'S CREAMERY	--	--	--
02S/09E-13Q03	133314	84760	*	LIVINGSTON ENTERPRISE	HORNBY WILLIAM & SULLIVAN JOHN C	401 S MAIN	49080213405310000
02S/09E-13Q04	138710	86498	*	NELSON FRED	NELSON MARY C & HEATH GARY W	409 2nd STREET	49080213404290000
02S/09E-13Q05	131456	**82666**	*	FLANIGAN RICHARD	LUCILLE I. FLANIGAN	428 3rd STREET	49080213402140000
02S/09E-13Q06	145447	90783	*	MURPHY RAE	MACKAY JAMES NEWTON	431 3rd STREET	49080213403170000

TABLE 1

PRIVATE AND PUBLIC WELL INVENTORY
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	GWIC ID[b]	DNRC WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OR WATER RIGHT OWNER[e]	CURRENT OWNER[f]	ADDRESS[f]	GEOCODE[f]
TOWNSHIP 02S, RANGE 09E, SECTION 13 (continued)							
02S/09E-13R01	96967	**6301**	*	PARK COUNTY H. S.	SCHOOL DISTRICT #4	--	49080213455010000
02S/09E-13R02	96977	*	PARK HIGH SCHOOL	SCHOOL DISTRICT #4	SCHOOL DISTRICT #4	--	49080213455010000
TOWNSHIP 02S, RANGE 09E, SECTION 14							
02S/09E-14A01	187085	**116497**	*	HAMMEREL JOHN	--	--	--
02S/09E-14G01	196558	**30005195**	*	PRINTZ JOHN R	PRINTZ JOHN R & GRACE L & PRINTZ	72 N 9TH STREET	49080214120010000
02S/09E14H01	211092	*****	*	PRINTZ, JOHN	PRINTZ JOHN R & GRACE L & PRINTZ	72 N 9TH STREET	49080214120010000
02S/09E-14J01	212427	**30011206**	*	NORSKOG JERRY	NORSKOG GERALD D & GWENDOLYN	527 7TH STREET	49080214423010000
02S/09E-14R01	96978	*	*	DAVIS LOUISA C.H.	--	--	--
02S/09E-14R02	96984	*	*	SCHOOL DISTRICT #4	WASHINGTON SCHOOL	315 N 8TH STREET	49080214414010000
TOWNSHIP 02S, RANGE 09E, SECTION 24							
02S/09E-24 (1)	97080	*	*	DUNN THELMA	--	--	--
02S/09E-24 (2)	174110	*	*	YOUNG PHILIP	--	--	--
02S/09E-24A01	97081	**194576**	*	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/09E-24A02	97082	**193766**	*	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/09E-24B01	97083	*	*	CITY OF LIVINGSTON *TEST WELL #1	CITY OF LIVINGSTON	--	--
02S/09E-24B02	97084	*	SACAGAWEA[k]	CITY OF LIVINGSTON	LIVINGSTON CITY OF	--	49080224101300000
02S/09E-24B03	97085	**194575**	*	CITY OF LIVINGSTON	LIVINGSTON CITY OF	--	49080224101300000
02S/09E-24C01	213626	*	*	REHDER MARK	REHDER MARK RICHARD	403/405/407 8TH STREET	49080224228320000/ 49080224228300000/ 49080224228290000
02S/09E-24C02	203491	**30006293**	*	GREGREY LENNY	GREGREY LENNY & FRANCES	105 CALENDAR ST	49080224227190000
02S/09E-24D01	172179	*	*	ROCKY MOUNTAIN OIL CO. *MW-1	--	--	--
02S/09E-24D02	97089	*	*	SHARPE TOM R. & DOLORES	--	--	--
02S/09E-24D03	133315	82690	*	SPELLMAN RICK	SPELLMAN RICHARD E	226 8TH STREET	49080224243140000
02S/09E-24D04	*	81824	*	E'DANNES CORP	--	--	--
02S/09E-24D05	97090	*	*	CITY OF LIVINGSTON *TEST WELL #2	CITY OF LIVINGSTON	--	--
02S/09E-24F01	212319	**30010472**	*	DEPUY DAVID	DEPUY DAVID W & SHIRLEY M	614 8TH STREET	49080224210320000
02S/09E-24F02	*	83238	*	DEPUY, DAVID W & SHIRLEY M	DEPUY DAVID W & SHIRLEY M	614 8TH STREET	49080224210320000
02S/09E-24F03	97093	**194577**	*	WATER WORKS *LAYNE WELL #4	CITY OF LIVINGSTON	--	--
02S/09E-24F04	230362	*	*	ANDERSON DON	--	--	--
02S/09E-24G01	97087	*	*	MCCOMB ALBERT L. & DORIS M.	--	--	--
02S/09E-24G02	199404	**30004502**	*	AQUATIC DESIGN CONSTRUCTION	SC ENTERPRISES LLC	2 9TH ST ISLAND DR	49080224107090000
TOWNSHIP 02S, RANGE 10E, SECTION 4							
02S/10E-4P01	204396	*	*	BOYD BOB	BOYD BOB TRUCKING INC	4 CHICKEN CREEK LANE	49080304301100000

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Burlington Northern Livingston Shop Complex

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TOWNSHIP 02S, RANGE 10E, SECTION 5							
02S/10E-5 (1)	97291	*	*	SHEPARD WARREN	--	--	--
02S/10E-5B01	97289	*	RUSTAD HOUSE	HEART K RANCH	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5C01	97292	20343	*	GORTON EDWARD L	GORTON VIRGINIA R	--	49080305101010DUP
02S/10E-5C02	133318	82685	*	TAYLOE HAL	VANGYTENBEEK RICHARD P & K ELI	150 OLD CLYDE PARK ROAD	49080305101011DUP
02S/10E-5C03	196808	**30003276**	*	TONNESEN RICHARD	--	--	--
02S/10E-5C04	*	75639[k]	*	BLATTER FAMILY TRUST	BLATTER JAMES D & SUSAN M FAMILY TRUST	--	49080305301050000
02S/10E-5C05	97290	5550	*	JOSEPH TOM	BLATTER JAMES D & SUSAN M FAMILY TRUST	--	49080305301050000
02S/10E-5D01	194955	*	*	BURNS JACK	--	--	--
02S/10E-5E01	168001	**106245**	*	CLARKE ELIZABETH	CLARKE ELIZABETH L	120 OLD CLYDE PARK ROAD	49080305201160000
02S/10E-5F01	*	8965	*	FISHER, JACK C	FISHER JACK C & JOANNE	126 OLD CLYDE PARK ROAD	49080305201180000
02S/10E-5G01	97286	*	*	RUSTAD HUBERT #C	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5G02	97287	*	*	RUSTAD HUBERT #B	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5G03	97288	*	*	RUSTAD HUBERT #1	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5G04	*	42234	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5G05	*	42235	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5G06	*	42236	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5J01	144886	*	*	CHURCH UNIVERSAL & TRIUMPHANT	--	--	49080305101010000
02S/10E-5J02	156117	111603	*	CHURCH UNIVERSAL & TRIUMPHANT	--	--	49080305101010000
02S/10E-5J03	213489	*	*	RG LUMBER CO	--	--	49080305101010000
02S/10E-5J04	221785	*	*	CHURCH UNIVERSAL AND TRIUMPHANT	--	--	49080305101010000
02S/10E-5K01	97296	*	*	DOUBLE A LUMBER CO.	--	--	49080305101010000
02S/10E-5K02	97297	*	*	DOUBLE A LUMBER CO	--	--	49080305101010000
02S/10E-5M01	97293	*	*	LAMM DARRELL	--	--	--
02S/10E-5M02	97294	18499	*	KITTS T L	BARNEY JAMES J & SHARI L	7 CALVERY ROAD	49080305301040000
02S/10E-5M03	97295	*	*	BARNEY JAMIE	BARNEY JAMES J & SHARI L	7 CALVERY ROAD	49080305301040000
02S/10E-5N01	12481	*	*	FORESTER RICHARD L	--	--	49080305101010000
02S/10E-5P01	149224	*	O'HARA	O'HARA TIM	O'HARA TIM	--	49080305101010000
02S/10E-5Q01	192238	117085	*	MYRSTOL POST AND POLE	--	05 RUSTAD LANE	49080305101010000
02S/10E-5Q02	*	122441	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000

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TOWNSHIP 02S, RANGE 10E, SECTION 5 (continued)							
02S/10E-5Q03	221768	*	*	RUSTAD RANCH	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	84 RUSTAD LANE	49080305101010000
02S/10E-5R01	144006	*	*	HERAUF NORBERT	--	--	49080305101010000
02S/10E-5R02	97298	*	*	BURKLAND STUDS INC.	--	--	49080305101010000
02S/10E-5R03	*	*	HUMANE SOCIETY	HUMANE SOCIETY	HUMANE SOCIETY OF PARK COUNTY	3 BOULDER BUSINESS PARK ROAD	49080308180020000
TOWNSHIP 02S, RANGE 10E, SECTION 6							
02S/10E-6H01	97302	*	*	PETERSON LORRIE	--	--	--
02S/10E-6H02	212320	**30022809**	*	PETERSON LORRIE	--	--	--
02S/10E-6J01	97299	23964	*	NEWLAND CHUCK	--	--	--
02S/10E-6J02	97312	*	*	PETERSON TERRY	--	--	--
02S/10E-6J03	147952	*	*	WATKINS CLIF & SHARON	--	--	--
02S/10E-6J04	176984	112499	*	BEFFERT VERNE	--	--	--
02S/10E-6J05	163685	*	*	HEARR JIM	HAERR JAMES E	2 DRIFTWOOD DRIVE	49080306401410000
02S/10E-6J06	215297	*	*	PETERSON HELEN	--	--	--
02S/10E-6J07	97313	*	*	DOLAN BOB	--	--	--
02S/10E-6J08	194249	**30020305**	*	MARTI STEVE	MARTI STEVEN H & MICHELLE M	6 ISLAND PARK DRIVE	49080306401090000
02S/10E-6J09	97314	58428	*	DOUGLAS HARDY	--	--	--
02S/10E-6Q01	97311	73743	*	BROWN RICHARD	--	--	--
02S/10E-6Q02	21565	26685	*	SIRONI MARTIN	--	--	--
02S/10E-6Q03	97301	*	*	HANDLE JIM	KIEFER, JACOB, JR. & JUNE H	13 RIVERSIDE DRIVE	49080306401170000
02S/10E-6Q04	147954	*	*	VIERS DON	WHITING MARY N REVOCABLE TRUST	2 ISLAND PARK DRIVE	49080306401070000
02S/10E-6Q05	170493	*	*	ASBURY MARK	--	--	--
02S/10E-6Q06	196495	*	*	HART PETE AND SALLY	HART PETER M & SALLY J	6 RIVERSIDE DRIVE	49080306401210000
02S/10E-6Q07	97315	**31178**	*	ZANDER BOB	--	--	--
02S/10E-6Q08	170494	**104765**	*	BAUMEISTER MARK	BAUMEISTER MARK ANTHONY TRUSTE BAUMEISTER MARK A REVO INTER V	10 DRIFTWOOD DRIVE	49080306401370000
02S/10E-6Q09	97300	**23183**	VISSCHER	ROSE JERRY	VISSCHER ROBERT W TRUSTEE VISSCHER LIVING TRUST	14 DRIFTWOOD DRIVE	49080306401350000
02S/10E-6Q10	97316	21499	HENDRICKSON	HENDRICKSON D	HENDRICKSON ROBERT DEAN & DEBORAH	15 DRIFTWOOD DRIVE	49080306401250000
02S/10E-6Q11	*	100826	*	BAUMEISTER, MARK TRUST	BAUMEISTER MARK ANTHONY TRUSTE BAUMEISTER MARK A REVO INTER V	10 DRIFTWOOD DRIVE	49080306401370000
02S/10E-6Q12	*	108940	*	DARNTON, BYRON T	--	--	--
02S/10E-6Q13	*	30025057	*	VONDRA, CHARLES	VONDRA KARI WAR & CHARLES	1 DRIFTWOOD DRIVE	49080306401290000
02S/10E-6R01	192244	*	*	SHUMAN MELVIN	SCHUMAN MELVIN D & KALEY A	7 RIVERSIDE DRIVE	49080306401150000
02S/10E-7B01	97324	**53174**	RUGGLES	RUGGLES LARRY	--	--	--
02S/10E-7B02	97338	**35270**	OLSON	OLSON RODNEY	OLSON RODNEY D & MARCIA B	605 ARBOR DRIVE	49080307130100000

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TOWNSHIP 02S, RANGE 10E, SECTION 7							
02S/10E-7B03	135189	**87267**	*	CARLSON HARRY	CARLSON HARRY W & BARBARA J	--	4908030713002DUP4
02S/10E-7B04	204083	*	*	GOODWINE MICHELLE	BECKER MICHELLE B (FKA) GOODWINE MICHELLE B	611 ARBOR DRIVE	4908030713002DUP5
02S/10E-7B05	215298	*	*	RICHARDSON SHARON OLSON	RICHARDSON SHARON L & OLSON RODNEY D	--	4908030713002DUP1
02S/10E-7B06	97321	99399	PARISI DAVE 2	NELSON PETER K	--	--	--
02S/10E-7B07	97322	*	STEIN	STEIN GEORGE	STEIN GEORGE R & ALMA K	407 ARBOR DRIVE	49080307130020000
02S/10E-7B08	97323	68277	PARISI DAVE	PARISI DAVE	PARISI DAVID J & LAVERN	509 ARBOR DRIVE	49080307130030000
02S/10E-7B09	140150	88114	*	MOULLETT DON OR CAROL	MOULLET DONALD E & CAROL W	--	49080307130150000
02S/10E-7B10	183908	114217	*	SCHOENEN JEFF	SCHOENEN JEFFREY A & PAMELA D	ARBOR DRIVE	49080307130200000
02S/10E-7B11	97325	**623**	MONICAL	MONICAL W.E.	--	--	--
02S/10E-7B12	97326	*	*	PROFFITT TOM #A	--	--	--
02S/10E-7B13	97327	*	*	PROFFITT TOM #B	--	--	--
02S/10E-7B14	97328	*	*	PYNN SPENCER	PYNN SPENCER L	604 ARBOR DRIVE	49080307125090000
02S/10E-7C01	142867	91502	*	SHINN RICHARD	YANG EULEE	21 OLD CLYDE PARK	49080307232050000
02S/10E-7C02	192251	117180	BELAND, S.	BELAND ROD	BELAND RODNEY G & CHARLET S	209 ARBOR DRIVE	49080307130010000
02S/10E-7C03	*	*	MARX	MARX, A.	--	--	--
02S/10E-7C04	97335	*	*	KRUSE JOHN	--	--	--
02S/10E-7C05	155377	*	*	GOLTZ TOM	GOLTZ THOMAS C	--	49080307232030000
02S/10E-7C06	164255	101920	*	REHMER RENA	REHMER ERIC B	203 ARBOR DRIVE	49080307235010000
02S/10E-7C07	*	*	RHEMER	REHMER	REHMER ERIC B	203 ARBOR DRIVE	49080307235010000
02S/10E-7C08	*	194597	PERRY	PERRY, ELSIE & H, CHARLES R	--	--	--
02S/10E-7C09	*	*	PORTER	PORTER, D.	--	--	--
02S/10E-7C10	*	*	WRIGHT	WRIGHT, D.	RICHARDS DAN S JR	207 ARBOR DRIVE	49080307235020000
02S/10E-7C11	*	110297	*	BULLOCK, DIXIE L & GEORGE O	--	--	--
02S/10E-7C12	97336	*	*	ANDERSON WALTER	--	--	--
02S/10E-7C13	192248	**117220**	*	SWINDLEHURST AND WELL USERS ASSOCIATION	HARRIS BEVERLY D & SANDBERG JEAN E &	--	49080307226100000
02S/10E-7C14	*	*	HUGHES	HUGHES	--	--	--
02S/10E-7C15	*	*	WORTHINGTON	WORTHINGTON, J.	WORTHINGTON JAMES & ANN	508 GARNIER AVE	49080307218050000
02S/10E-7C16	160010	*	*	MONTANA HOMES	MILLENER FRED T & LINDA H	605 HEFFERLIN AVE.	49080307226130000
02S/10E-7C17	176985	110106	*	MONTANA HOMES	--	--	--
02S/10E-7C18	192246	*	*	DAY WELL USERS ASSOCIATION	DAY NICHOLAS & ABBIGAIL	305 GRANDVIEW BLVD	49080307227010000
02S/10E-7C19	207333	30008547	*	LADUKE JULIE	LADUKE, JULIE	106 ARBOR DRIVE	49080307225010000
02S/10E-7C20	218713	*	*	COFFMAN LYNN	COFFMAN LYNN A & DIANE M	111 ARBOR DRIVE	49080307232020000
02S/10E-7C21	169351	104679	*	DOTSON ANNA LEE	WESTER TODD A & KRISTEN	303 ARBOR DRIVE	49080307235050000
02S/10E-7D01	97329	22413	*	BOOKONT LEONARD	--	--	--

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TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)							
02S/10E-7D02	97331	*	*	MASSEY GARTH	--	--	--
02S/10E-7D03	97332	*	*	GLASS DONALD	--	--	--
02S/10E-7D04	142868	87236	*	SHINN RICHARD	SHINN JOHN C & SHARON M	310 CHESNUT LANE	49080307232060000
02S/10E-7D05	**Well number not used**						
02S/10E-7D06	138870	*	*	KAISER JOHN	--	--	--
02S/10E-7D07	97333	*	*	O'ROURKE JOHN	--	--	--
02S/10E-7D08	97339	59736	PARK COUNTY	PARK COUNTY	PARK COUNTY	--	49080307214500000
02S/10E-7D09	151387	95431	*	CARUSO R A & DONNA	CARUSO RICHARD A & DONNA M & STEVEN A	--	49080307221160000
02S/10E-7D10	150529	93754	*	CIERI CARLO	CIERI CARLO M & ELSIE J	SPRUCE LANE	49080307215040000
02S/10E-7D11	221680	*	*	GORDON MIKE	GORDON MICHAEL J & BERGSING SANDRA I	45 MEIGS ROAD	4908030722201DUP1
02S/10E-7E01	*	1295	*	DAVIS DAVE E & CHRISTIANA	DAVIS DAVE E & CHRISTIANA	208 LLAMA LANE	49080307312120000
02S/10E-7E02	97317	*	NEAD[l]	NEAD BALFORD L	BEATTY DOUG	403 GARNIER AVE	49080307210010000
02S/10E-7E03	97319	*	SHULINS	SHULINS VICKIE & S.	SHULINS STEPHEN G & VICKIE F	--	49080307210070000
02S/10E-7E04	133982	85100	*	SMOKEY C.M. & GOLDNER DONNA	GOLDNER C M "SMOKEY" & DONNA B	203 BICKFORD LANE	49080307204050000
02S/10E-7E05	170496	**106243**	JUNHKE[m]	JUHNKE DAVE	JUHNKE DAVID T & GAIL LYNN	305 MAPLE STREET	49080307202010000
02S/10E-7E06	*	63729	*	JUHNKE, DONALD L	JUHNKE DONALD L & JOYCE M	301 & 313 MAPLE STREET	49080307202050000 & 49080307202100000
02S/10E-7E07	208513	*	*	HIMMELSPACH STEVE SR	JUHNKE DONALD L & JOYCE M	301 & 313 MAPLE STREET	49080307202050000 & 49080307202100000
02S/10E-7E08	213641	*	*	POLING GARY D. & ANNA M.	POLING GARY D & ANNA M	--	49080307312100000
02S/10E-7E09	*	14397	POLING	POLING, ANNA M	POLING GARY D & ANNA M	--	49080307312100000
02S/10E-7E10	*	*	BICKFORD	BICKFORD B.	BICKFORD DOUGLAS J & DIANA S	113 BICKFORD LANE	49080307204010000
02S/10E-7E11	97337	*	*	ROTH J.A.	--	--	--
02S/10E-7E12	97341	*	O'DELL	O'DELL KENNETH	O'DELL LYLE K & CAROL	102 LLAMA S	49080307312030000
02S/10E-7E13	142869	100677	*	AGLE ROBERT	AGLE ROBERT D & BARBARA A	212 GARNIER AVE	49080307331200000
02S/10E-7E14	*	*	MARONEY	MARONEY, G.	--	LLAMA LANE	--
02S/10E-7F01	97320	*	QUESENBERRY	JUHNKE OTTO	QUESENBERRY BOBBY B & DOROTHY	313 GARNIER AVE	49080307206110000
02S/10E-7F02	97334	**30001348**	POESCHL	POESCHL ROBERT	POESCHL HENRY M & POESCHL ANTHONY J	414 GARNIER AVE	49080307211090000
02S/10E-7F03	*	193629	*	POESCHL, TIMOTHY E	POESCHL TIMOTHY E	GARNIER AVE	49080307211050000
02S/10E-7F04	*	*	PERCIVAL	PERCIVAL, R.	PERCIVAL RONALD	--	49080307211010000
02S/10E-7F05	97330	35493	YARGER	COUNTS J.H.	--	--	--
02S/10E-7F06	97318	40135	HUDSON[n]	FRONTIER MOBLIE HOME PARK (LES HUDSON)	SKILLMAN ENTERPRISES INC	328 M STREET	49080307206010000
02S/10E-7F07	188587[o]	40134	*	FRONTIER MOBLIE HOME PARK	SKILLMAN ENTERPRISES INC	328 M STREET	49080307206010000
02S/10E-7F08	*	40133	*	SKILLMAN ENTERPRISES INC	SKILLMAN ENTERPRISES INC	--	49080307330150000
02S/10E-7F09	131459	*	*	BRUE GENE	NORTON GARY J & SHARI	GARNIER AVE	49080307207010000
02S/10E-7F10	135190	*	*	YARGER ART	--	--	--
02S/10E-7F11	*	*	PARISI	PARISI DENNIS	ROBERTS GREGORY L & BILLIE M	204 GARNIER AVE	49080307331010000

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WELL NUMBER[a]	GWIC ID[b]	DNRC WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OR WATER RIGHT OWNER[e]	CURRENT OWNER[f]	ADDRESS[f]	GEOCODE[f]
TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)							
02S/10E-7L01	97344	**194571**[k]	POTW 1[p]	LIVGSTN WASTE DISPSL	CITY OF LIVINGSTON	--	--
02S/10E-7L02	*	193767[k]	*	LIVINGSTON, CITY OF	CITY OF LIVINGSTON	--	--
02S/10E-7L03	97345	*	POTW 2[p]	LIVGSTN WATER WORKS	CITY OF LIVINGSTON	--	--
02S/10E-7L04	97340	**31228**	GARDNER	GARDNER CHARLES	GARDNER ROGER L & JANE M	105 MILLER STREET	49080307330250000
02S/10E-7L05	97343	10871	BROWN	TOWNSEND TERRY	GLASS MARLENE R & GARY L & TOWNSEND JUSTIN A & AARON JAME	102 MILLER STREET	49080307325170000
02S/10E-7L06	97346	38126	HANKS 2	HANKS RALPH R & P	BURLINGTON NORTHERN RAILROAD COMPANY	--	49080307327090000
02S/10E-7L07	*	*	HANKS 1	HANKS, R.	BURLINGTON NORTHERN RAILROAD COMPANY	--	49080307327090000
02S/10E-7L08	162186	*	*	RUGGLES LARRY & MARGIE	BNSF	331 BENNETT STREET	49080307308030000
02S/10E-7L09	205532	*	*	WET*MW3	BNSF	331 BENNETT STREET	49080307308030000
02S/10E-7L10	205536	*	*	WET*MW2	BNSF	331 BENNETT STREET	49080307308030000
02S/10E-7L11	205537	*	*	WET HALLETT (MW-1)	BNSF RAILWAY COMPANY	317 BENNETT STREET	49080307308100000
02S/10E-7M01	147917	*	*	LIVINGSTON KINGDOM HALL	LIVINGSTON MT CONGR OF JEHOVAH	1505 GALLATIN STREET	49080307316010000
02S/10E-7M02	170495	**104722**	*	JONES BILL	JONES WILLIAM T & JENNIFER LOU	103 LLAMA LANE	49080307316150000
02S/10E-7M03	*	104671	*	JONES, LETITIA A & GILBERT T	JONES GILBERT TRON & LETITIA A	201 MILES AVE	49080307316070000
02S/10E-7M04	188895	*	*	JONES WILLIAM SR. *WELL #2	JONES WILLIAM T & JENNIFER LOU	103 LLAMA LANE	49080307316150000
02S/10E-7M05	188906	**30003320**	*	JONES WILLIAM SR. *WELL #1	JONES WILLIAM T & JENNIFER LOU	103 LLAMA LANE	49080307316150000
02S/10E-7M06	188916	*	*	JONES SCOTT	JONES SCOTT EDWARD & BERTHA A	MILES LANE	49080307316100000
02S/10E-7M07	*	80012	*	QUESENBERRY, MAYNARD	--	--	--
02S/10E-7M08	*	*	BRUHA	BRUHA, D.	--	LLAMA LANE	--
02S/10E-7M09	*	*	NEVIN	NEVIN, B.	--	LLAMA LANE	--
02S/10E-7M10	205535	*	*	WET*MW4	--	--	--
02S/10E-7M11	97347	63768	O'CONNOR 1	O'CONNOR GREGORY	BURLINGTON NORTHERN SANTA FE R	GALLATIN STREET	49080307308042000
02S/10E-7M12	*	*	O'CONNOR 2	O'CONNER, G.	BURLINGTON NORTHERN SANTA FE R	GALLATIN STREET	49080307308042000
02S/10E-7M13	*	*	*	O'CONNER (MW-11)	BURLINGTON NORTHERN SANTA FE R	GALLATIN STREET	49080307308042000
02S/10E-7M14	*	*	*	O'CONNER (MW-12)	BURLINGTON NORTHERN SANTA FE R	GALLATIN STREET	49080307308042000
02S/10E-7N01	97342	20458	*	BURLINGTON NORTHERN	MONTANA RAIL LINK INC & ENVIROCON INC	GALLATIN STREET	49080307390012000
02S/10E-7N02	97348	*	*	CANYON VIEW LUMBR CO	MONTANA RAIL LINK INC	--	49080307390900000
02S/10E-7P01	*	*	RAINBOW	RAINBOW MOTEL (KEN STRONG)	BROWN WILLIAM E & HELEN	5574 US HIGHWAY 89 SOUTH	49080307305020000
02S/10E-7P02	*	*	*	KROHNE (MW-5)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P03	*	*	*	KROHNE (MW-4)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P04	*	*	*	KROHNE (MW-1)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P05	*	*	*	KROHNE (MW-2)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P06	*	*	*	KROHNE (MW-3)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P07	*	*	*	KROHNE (MW-6)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A

TABLE 1

PRIVATE AND PUBLIC WELL INVENTORY
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	GWIC ID[b]	DNRC WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OR WATER RIGHT OWNER[e]	CURRENT OWNER[f]	ADDRESS[f]	GEOCODE[f]
TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)							
02S/10E-7P08	*	*	*	KROHNE (MW-7)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P09	*	195139	TONNESON	TONNESEN, SHERRY L & RICHARD G	TONNESEN RICHARD G & SHARON L	1 HARRIS PL	49080307305040000
02S/10E-7P10	*	211166	KROHNE 2[g]	KROHNE, CHARLES B & JOHN D	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P11	*	211167	KROHNE 3[g]	KROHNE, CHARLES B & JOHN D	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P12	*	*	KROHNE 1	KROHNE, CHARLES B & JOHN D	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P13	*	*	KROHNE	KROHNE, CHARLES B & JOHN D	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P14	*	*	*	KROHNE (MW-8)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P15	*	*	*	KROHNE (MW-9)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7P16	*	*	*	KROHNE (MW-10)	KROHNE JOHN D	1500 E CALLENDAR ST	4908030730501000A
02S/10E-7Q01	196379	30002989	*	HARRIS ERLYNN	HARRIS ERLYNN J & ESTA M HARRIS ERLYNN J & WATERS BONNIE H	2 HARRIS PL --	49080307305050000 4908030730505DUP1
02S/10E-7Q02	218718	*	*	WATSON TED	WATSON TED J & GEORGANN	--	49080307401450000
02S/10E-7R01	218719	*	*	WATSON TED	WATSON TED J & GEORGANN	--	49080307401450000
TOWNSHIP 02S, RANGE 10E, SECTION 8							
02S/10E-8A01	**151256**	*	BOYD TRUCKING	BOYD BOB	--	--	--
02S/10E-8A02	164256	101960	*	YELLOWSTONE HOMES INC	--	--	--
02S/10E-8A03	165139	103071	GRAYBEALS APPLIANCE	GRAYBEAL DAVID G	GRAYBEAL DAVID G & DEBRA J	8 BUSINESS PARK ROAD	49080308180700000
02S/10E-8A04	170497	*	*	FRIENDS FOR LIFE - HUMANE SOCIETY PARK COUNTY	HUMANE SOCIETY OF PARK COUNTY	3 BOULDER BUSINESS ROAD	49080308180020000
02S/10E-8A05	221790	*	*	BERG MAX	BERG MAX & SUE ANNE	17 BUISNESS PARK ROAD	49080308180300000
02S/10E-8A06	218722	*	*	HILLMAN DRILLING INC.	FRIDLEY DEVELOPMENT LLC	25 BUSINESS PARK ROAD	49080308180500000
02S/10E-8A07	226374	*	*	FRIDLEY DEVELOPMENT	FRIDLEY DEVELOPMENT LLC	25 BUSINESS PARK ROAD	49080308180500000
02S/10E-8B01	217125	*	*	LEWIS ROY	LEWIS ROY S JR & TAMMY L	SWINGLEY ROAD	49080308160300000
02S/10E-8B02	97349	112476	YELLOWSTONE VET CLINIC	MURRAY JAMES	MURRAY JAMES O	5702 US HIGHWAY 89 SOUTH	49080308102020000
02S/10E-8B03	*	122440	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	--	49080308101100000
02S/10E-8B04	*	122442	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	--	49080308101100000
02S/10E-8B05	*	122443	*	RUSTAD LAND & LIVESTOCK	HEADWATERS WALKING HORSE RANCH & YELLOWSTONE COMMUNITY PARTNERSHIP	--	49080308101100000
02S/10E-8B06	*	*	PARK LUMBER	PARK LUMBER	--	--	--
02S/10E-8B07	153621	95517	HILLMAN	HILLMAN ED	HILLMAN EDWARD O & DONNA L	SWINGLEY ROAD	49080308160400000
02S/10E-8B08	151566	95430	KAISER/FRIDLEY	DEVELOPMENT FRIDLEY	FRIDLEY DEVELOPMENT LLC	10 INDUSTRIAL PARK ROAD	49080308160200000
02S/10E-8B09	*	30020465	*	PARK ELECTRIC COOPERATIVE INC	PARK ELECTRIC COOPERATIVE INC	--	49080308160010000
02S/10E-8F01	188926	*	*	WATSON TED	WATSON TED J & GEORGANN	--	49080308301200000

TABLE 1

PRIVATE AND PUBLIC WELL INVENTORY
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	GWIC ID[b]	DNRC WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OR WATER RIGHT OWNER[e]	CURRENT OWNER[f]	ADDRESS[f]	GEOCODE[f]
TOWNSHIP 02S, RANGE 10E, SECTION 8 (continued)							
02S/10E-8H01	230193	*	*	LOGAN AUCTION SERVICE INC.	LOGAN AUCTION SERVICES INC	--	49080308153010000
02S/10E-8H02	231197	*	*	RUGGLES EXCAVATION INC	RUGGLES KENNETH L & MARJORIE G	38 BUSINESS PARK ROAD	49080308157010000
02S/10E-8J01	*	47073	*	PARK COUNTY RANCHERS MARKETING ASSN	--	--	--
02S/10E-8N01	176825	107428	*	WATSON TED & GEOGANN #1	WATSON TED J & GEORGANN	--	49080308301200000
TOWNSHIP 02S, RANGE 10E, SECTION 18							
02S/10E-18B01	183907	*	*	WATSON TED	WATSON TED J & GEORGANN	--	4908031810101000F
02S/10E-18C01	97361	3531	Q STREET	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/10E-18C02	*	*	THOMPSON, J	THOMPSON, J.	BRAATEN HERMAN E & WILSON RENAE S	1506 E LEWIS	4908031821301DUP1
02S/10E-18C03	*	*	WOLF	WOLF D.	--	123 S. N	--
02S/10E-18C04	*	194598	TOSTOVERNIK	TOSTOVERNIK, RAYMOND L	TOSTOVERNIK RAYMOND	207 S M STREET	49080318213320000
02S/10E-18D01	97359	*	DEPUY 1	FOESS TOM	FRANCIS HORIEL	110 N N STREET	49080318228320000
02S/10E-18D02	*	193152	DEPUY 2	DEPUY, DAVID W	FRANCIS HORIEL	110 N N STREET	49080318228320000
02S/10E-18D03	*	*	ILKENHONS	ILKENHONS, G	MOENCH THOMAS	102 S. N	49080318220010000
02S/10E-18D04	*	*	JONES	JONES, W.	JONES WILLIAM T & JENNIFER L	110 N. O	49080318229320000
02S/10E-18D05	*	*	TOWNSEND	TOWNSEND, D.	TOWNSEND DONALD V	117 S. N	49080318221310000
02S/10E-18D06	21570	**33714**	*	POWERS MARION	--	109 N. K STREET	--
02S/10E-18D07	**Well number not used**						
02S/10E-18D08	*	49560	HARPER	POWERS, MARION	--	109 N. K STREET	--
02S/10E-18D09	*	194599	TOSTOVERNIK	TOSTOVERNIK, RAYMOND L	TOSTOVERNIK RAYMOND	N STREET or M STREET	49080318212010000 or 49080318212150000
02S/10E-18D10	*	*	FREDERICKS	FREDERICKS, D.	FREDERICK DAVID J & LEE A	113 S. L	49080318219320000
02S/10E-18D11	*	*	HANDL	HANDL	HANDL KENNETH C & CAROL E	127 S. M	49080318220200000
02S/10E-18E01	150530	93797	*	DUNLAP JR. STUART	DUNLAP STUART J JR & BARBARA J	320 or 322 K STREET	49080318205100000 or 49080318205120000
02S/10E-18E02	203494	*	*	SALACINSKI RICHARD	--	--	--
02S/10E-18E03	203496	*	*	CLAAR MARTY	CLAAR MARIETTA	326 K STREET	49080318205140000
02S/10E-18E04	97360	*	DUNCAN	DUNCAN PAUL & B	--	--	--
02S/10E-18E05	148803	92569	*	TILLET TERRY	TILLETT TERRY T & ROSMOND M	419 H STREET	49080318306240000
02S/10E-18E06	149091	108850	*	HEAPES ROBERT	--	--	--
02S/10E-18E07	97364	*	*	BOUCHER R. W.	--	--	--
02S/10E-18E08	97365	*	*	BOUCHER BEULAH	--	--	--
02S/10E-18E09	97366	*	*	MICHELS R. J.	--	--	--
02S/10E-18E10	97367	*	BURNS	BURNS FRED & N	BURNS ROBERT F TRUST & BURNS MARY ANN TRUST	1018 GEYSER STREET	49080318202010000
02S/10E-18F01	97358	92448	GEYSER	GEYSER TRAILER COURT	WARNER TIMOTHY C & MARGARET	--	49080318490150000
02S/10E-18F02	97362	**193768**	L STREET	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/10E-18F03	160011	*	*	BURNS BOB	BURNS ROBERT F & MARY A TRUST	421 K STREET	49080318202150000

TABLE 1

PRIVATE AND PUBLIC WELL INVENTORY
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	GWIC ID[b]	DNRC WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OR WATER RIGHT OWNER[e]	CURRENT OWNER[f]	ADDRESS[f]	GEOCODE[f]
TOWNSHIP 02S, RANGE 10E, SECTION 18 (continued)							
02S/10E-18F04	153622	*	*	BARNHART GARY	--	--	--
02S/10E-18F05	156118	*	*	BARNHART GARY	BARNHART HELEN M	EAST VERDE VISTA DRIVE	49080318490180000 OR 49080318290980000
02S/10E-18F06	176987	108897	*	BARNHART HELEN	BARNHART HELEN M	EAST VERDE VISTA DRIVE	49080318490180000 OR 49080318290980000
02S/10E-18F07	*	*	BARNHART	BARNHART, W.L.	BARNHART HELEN M	EAST VERDE VISTA DRIVE	49080318490180000 OR 49080318290980000
02S/10E-18M01	**Well number not used**						
02S/10E-18M02	*	*	BOUCHER	BOUCHER	--	--	--
02S/10E-18M03	97363	*	*	CITY OF LIVINGSTON	CITY OF LIVINGSTON	--	--
02S/10E-18M04	*	*	POWERS/BOYD	POWERS/BOYD	--	--	--
02S/10E-18M05	*	80699	*	ST MARYS CATHOLIC CHURCH	ST MARY'S CATHOLIC CHURCH & SC	511 S F STREET	49080318345010000
02S/10E-18M06	*	30014260	*	ST MARYS CATHOLIC CHURCH	ST MARY'S CATHOLIC CHURCH & SC	511 S F STREET	49080318345010000
02S/10E-18N01	97368	**103523**	LONG 1[r]	LONG JOHN	LONG JOHN E & AGNES	--	4908031830101000F
02S/10E-18N02	124023	77933	LONG 2[r]	LONG JOHN E	LONG JOHN E & AGNES	--	4908031830101000F
02S/10E-18N03	*	103525	*	LONG, JOHN E & AGNES C	LONG JOHN E & AGNES	--	4908031830101000F
02S/10E-18P01	*	193733	*	LIVINGSTON GOLF & COUNTRY CLUB	LIVINGSTON GOLF & COUNTRY CLUB	40 VIEW VISTA DRIVE	49080318490170000

Notes:

(a) Well number assigned by Kennedy/Jenks Consultants based on Township, Range, Section, and 40-acre tract according to U.S. Geological Survey.
(b) Well identification number from Groundwater Information Center (GWIC) Database, Montana Bureau of Mines and Geology (15 January 2007).
(c) Water right number from Montana Department of Natural Resources and Conservation (DNRC), Water Resources Division (15 January 2007).
Water right number shown in bold is inferred based on correlation between GWIC database and water right list.
(d) Well name assigned by Envirocon, Inc., of Missoula, Montana.
(e) Owner of well as listed in GWIC database. If well is not listed in GWIC database, owner of water right is shown.
(f) Data disseminated through the Montana Cadastral Mapping Project <http://gis.mt.gov/ >
(g) "*" denotes not applicable.
(h) "--" denotes not known.
(i) Water Right no longer exists.
(j) Monitoring wells are shaded gray.
(k) Well numbers 02S/09E-24B02 and 02S/09E-24B03. GWIC lists two wells at the same location (97084 and 97085); however, Envirocon identified only one well (SACAGEWEA) at this location. Because no other information was available, the Envirocon name SACAGEWEA was assigned to the first GWIC number (97084).
(l) Well number 02S/10E-7E02. GWIC lists one well (98317). The only information provided in GWIC is owner (Balford Nead) and location (Section 7, Tract 8). Envirocon identified a well as NEAD and identified its location on a map. Montana's cadastral site showed an owner (Nead B.L.F. Trust) at a similar location to the one shown on Envirocon's map. The Envirocon name (NEAD) was assigned to the GWIC number 98317.
(m) Well numbers 02S/10E-7E05 and 02S/10E-7E06. DNRC lists two wells at the same location (106243 and 63729); however, Envirocon identified only one well (JUNHKE) at this location. Because no other information was available, the Envirocon name JUNHKE was assigned to the first DNRC water right number (106243).
(n) Well numbers 02S/10E-7F06 and 02S/10E-7F07. GWIC lists two wells at the same location (97318 and 188587), and Envirocon identified only one well (HUDSON) at this location. Because no other information was available, the Envirocon name HUDSON was assigned to the first GWIC number (97318).
(o) Well numbers 02S/10E-7F07 and 02S/10E-7F08. DNRC lists two water rights at the same location (40133 and 40134), and GWIC lists one well at the same location (188587) at this location. Because no other information was available, the GWIC number 188587 was assigned to the DNRC water right 40134 .
(p) Well numbers 02S/10E-7L01 and 02S/10E-7L03. GWIC lists two wells at the same location (97344 and 97345), and Envirocon identified two wells as (POTW 1 and POTW 2) at this location. Because no other information was available, the Envirocon name POTW-1 was assigned to the first GWIC number (97344), and Envirocon name POTW-2 was assigned to the second GWIC number (97345).
(q) Well numbers 02S/10E-7P10 through 02S/10E-7P13. DNRC lists two wells at the same location (211166 and 211167); however, Envirocon identified four wells (KROHNE and KROHNE 1 through KROHNE 3) at this location. Because no othe information was available, the Envirocon names (KROHNE 2 and KROHNE 3) were assigned to the DNRC water right numbers (211166 and 211167), respectively.
(r) Well numbers 02S/10E-18N01 and 02S/10E-18N02. GWIC lists two wells at the same location (97368 and 124023), and Envirocon identified two wells as (LONG 1 and LONG 2) at this location. Because no other information was available, the Envirocon name LONG 1 was assigned to the first GWIC number (97368), and Envirocon name LONG 2 was assigned to the second GWIC number (124023).

Revision No. 1 updates based on periodic review of GWIC, DNRC, and Cadastral databases are shaded yellow.

TABLE 2

GROUNDWATER INFORMATION CENTER DATA
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	GWIC ID[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OWNER	TWN	RNG	SEC	Q SEC	AQUIFER[e]	TOTAL DEPTH	STATIC WATER LEVEL	PUMP DEPTH	YIELD	DRILLER	DATE	USE[f]	STATUS	OPEN FROM[g]	OPEN TO[g]	DESCRIPTION[g]
TOWNSHIP 02S, RANGE 09E, SECTION 12																				
02S/09E-12J01	187084	C115481-00	*[h]	WEIBERT DELLA	02S	09E	12	DA	--[i]	230	85	--	20	BRIDGER	3/6/2001	DM ST	--	170	230	PERFORATED CASING
02S/09E-12J02	96969	55219	BALDWIN	BALDWIN DELLA R.	02S	09E	12	DAB	211LVGS	60	47	60	10	HILLMAN	1/1/1984	DM	--	--	--	--
02S/09E-12R01	133313	83241	*	SMITH JIM	02S	09E	12	DD	--	40	22	35	20	HILLMAN	9/1/1992	IR	--	20	40	1/8IN DRILL HOLES
02S/09E-12R02	151239	*	*	BURLEY DAVID AND JEANNE	02S	09E	12	DDD	--	49	26	45	19	HAYES	3/4/1995	DM	--	29	49	3/8X3/8IN DRILL
02S/09E-12R04	230758	*	*	HILLMAN VINCE	02S	09E	12	DDB	--	60	26	--	35	HILLMAN DRILLING	6/25/2006	IR	NEW WELL	40	60	1/8IN DRILL HOLES
TOWNSHIP 02S, RANGE 09E, SECTION 13																				
02S/09E-13A01[j]	*	*	*	MW-1 (EAST SIDE CONOCO)	02S	09E	13	AAD	--	30	23	--	--	HILLMAN	5/3/2000	MON	--	19	29	0.020 FACTORY SLOTTED PVC
02S/09E-13A02	*	*	*	MW-2 (EAST SIDE CONOCO)	02S	09E	13	AAD	--	31	23	--	--	HILLMAN	5/3/2000	MON	--	18.8	28.8	0.020 FACTORY SLOTTED PVC
02S/09E-13E01	148799	93642	*	HILLMAN JEANETT	02S	09E	13	BCA	--	180	83	175	10	HILLMAN	3/3/1995	IR	--	120	180	DRILLED HOLES
02S/09E-13J01	7129	*	*	ROY KINNE * C & GEYSER ST. LIVINGSTON MT.	02S	09E	13	DACC	211CODY	100	10	--	15	--	--	RES	--	--	--	--
02S/09E-13J02	96972	**194579**	D STREET	CITY OF LIVINGSTON	02S	09E	13	DACA	110ALVM	33	7	17	500	LAYNE WATER WORKS	2/1/1955	PWS	--	22	32	SS LOUVER SCREEN
02S/09E-13J03	96973	*	*	CITY OF LIVINGSTON	02S	09E	13	DACC	211CODY	100	20	82	35	HILLMAN	1/1/1978	MON	--	--	--	--
02S/09E-13J04	213623	**30011317**	*	CHAPEL CAROLINE E.	02S	09E	13	DACB	--	39	13	--	60	HAYES	5/3/2004	IR	--	37	39	OPEN BOTTOM
02S/09E-13J05	124896	*	*	LIVINGSTON SCHOOL DIST. #4	02S	09E	13	DAD	--	28	5	25	95	HILLMAN	8/21/1991	IR	--	28	28	OPEN BOTTOM *
02S/09E-13J06	124899	*	*	LIVINGSTON SCHOOL DIST. #4	02S	09E	13	DAD	--	30	5	25	95	HILLMAN	8/21/1991	DM IR	--	--	--	--
02S/09E-13K01	96971	*	FARMERS CREAMERY	FARMERS CREAMERY	02S	09E	13	--	110ALVM	43	20	22	50	VAN DYKEN	1/1/1964	CM IN	--	38	40	--
02S/09E-13K02	96974	*	*	CITY OF LIVINGSTON	02S	09E	13	DB	110ALVM	73	20	24	210	--	1/1/1971	MON	--	54	56	--
02S/09E-13K03	96975	3530	B STREET	CITY OF LIVINGSTON * WELL #5	02S	09E	13	DBAB	110ALVM	73	20	38	508	LAYNE-MINNESOTA	7/24/1974	PWS	--	40	60	.150 SCREEN
02S/09E-13K06	89041	**58362**	INDUSTRIAL TOWEL	BIG SKY SERVICE CO	02S	09E	13	DCB	211CODY	260	10	260	30	HILLMAN	6/12/1984	UNK	--	--	--	--
02S/09E-13L01	147155	92558	*	EGELAND MARK AND HELEN	02S	09E	13	CAB	--	52	25	46	35	HAYES	4/28/1994	DM	--	--	--	--
02S/09E-13L02	125754	**84017**	*	LIVINGSTON DEPOT CENTER	02S	09E	13	CA	--	42	16	38	75	VAN DYKEN	9/26/1991	IR	--	--	--	--
02S/09E-13Q01	96970	*	*	LINDBERG ERICK	02S	09E	13	--	110ALVM	--	40	--	--	--	1/1/1955	IR	--	--	--	--
02S/09E-13Q02	96976	*	*	CONNELLY'S CREAMERY	02S	09E	13	DC	211CODY	--	18	23	30	VAN DYKEN	1/1/1960	PWS	--	--	--	--
02S/09E-13Q03	133314	84760	*	LIVINGSTON ENTERPRISE	02S	09E	13	DCA	--	160	9	155	35	HILLMAN	9/3/1992	IR	--	60	160	1/8IN DRILL HOLES
02S/09E-13Q04	138710	86498	*	NELSON FRED	02S	09E	13	DCA	--	100	13	90	15	HILLMAN	9/2/1992	IR	--	40	100	DRILLED HOLES
02S/09E-13Q05	131456	**82666**	*	FLANIGAN RICHARD	02S	09E	13	DCC	--	20	10	18	15	HILLMAN	8/4/1992	IR	--	20	20	OPEN BOTTOM *
02S/09E-13Q06	145447	90783	*	MURPHY RAE	02S	09E	13	DCD	--	20	12	15	18	HILLMAN	6/1/1994	IR	--	20	20	OPEN BOTTOM *
02S/09E-13R01	96967	**6301**	*	PARK COUNTY H. S.	02S	09E	13	--	110ALVM	16	6	10	--	EGGAR	1/1/1963	IR	--	--	--	--
02S/09E-13R02	96977	*	PARK HIGH SCHOOL	SCHOOL DISTRICT #4	02S	09E	13	DD	110ALVM	--	12	--	300	--	1/1/1961	DM IR	--	--	--	--
TOWNSHIP 02S, RANGE 09E, SECTION 14																				
02S/09E-14A01	187085	**116497**	*	HAMMEREL JOHN	02S	09E	14	AA	--	180	120	--	15	BRIDGER	7/16/2000	DM IR	--	140	180	.025X/1.5 SLOTTED FACTORY
02S/09E14H01	211092	*	*	PRINTZ, JOHN	02S	09E	14	ADCC	211CKDL	105.7	42	--	12	--	--	DM	--	--	--	--
02S/09E-14G01	196558	**30005195**	*	PRINTZ JOHN R	02S	09E	14	A	--	280	78	--	20	VAN DYKEN	5/10/2002	DM OTHER	--	260	280	DRILLED HOLES
02S/09E-14J01	212427	**30011206**	*	NORSKOG JERRY	02S	09E	14	ADD	--	160	61	--	10	HILLMAN	5/26/2004	IR	--	120	160	DRILLED HOLES
02S/09E-14R01	96978	*	*	DAVIS LOUISA C.H.	02S	09E	14	--	110TRRC	68	30	--	--	--	1/1/1936	DM	--	--	--	--
02S/09E-14R02	96984	*	*	SCHOOL DISTRICT #4	02S	09E	14	D	112TRRC	74	70	--	30	HENWOOD HOBSON	3/18/1955	IR	--	74	74	OPEN BOTTOM *

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TOWNSHIP 02S, RANGE 09E, SECTION 24																				
02S/09E-24 (1)	97080	*	*	DUNN THELMA	02S	09E	24	A	110ALVM	39	6	20	20	--	1/1/1968	DM	--	--	--	--
02S/09E-24 (2)	174110	*	*	YOUNG PHILIP	02S	09E	24	--	--	38	--	--	15	YOST	9/2/1973	DM	--	33	38	SLOTS
02S/09E-24A01	97081	**194576**	*	CITY OF LIVINGSTON	02S	09E	24	AAA	110ALVM	18	10	--	100	--	12/7/1961	IR	--	--	--	--
02S/09E-24A02	97082	**193766**	*	CITY OF LIVINGSTON	02S	09E	24	AAB	110ALVM	33	33	--	100	--	12/14/1961	IR	--	33	33	OPEN BOTTOM *
02S/09E-24B01	97083	*	*	CITY OF LIVINGSTON *TEST WELL #1	02S	09E	24	AB	211CKDL	133	7	40	40	VAN DYKEN	2/17/1971	TW	--	--	--	--
02S/09E-24B02	97084	*	SACAGAWEA	CITY OF LIVINGSTON	02S	09E	24	ABC	111ALVM	30.5	6.5	11.5	300	VAN DYKEN	7/20/1966	IR	--	5	29	3X5/16 SLOTS
02S/09E-24B03	97085	**194575**	*	CITY OF LIVINGSTON	02S	09E	24	ABC	111ALVM	10	4	--	300	--	5/1/1951	IR	--	--	--	--
02S/09E-24C01	213626	*	*	REHDER MARK	02S	09E	24	BABD	--	41	16	--	80	HAYES	6/25/2004	IR	--	38	41	OPEN HOLE
02S/09E-24C02	203491	**30006293**	*	GREGREY LENNY	02S	09E	24	BAD	--	40	22	--	25	HILLMAN	4/2/2003	IR	--	40	40	OPEN BOTTOM
02S/09E-24D01	172179	*	*	ROCKY MOUNTAIN OIL CO. *MW-1	02S	09E	24	BB	--	39	33	--	--	MAXIM	5/4/1999	MON	--	28.5	38.5	PVC
02S/09E-24D02	97089	*	*	SHARPE TOM R. & DOLORES	02S	09E	24	B	110ALVM	41	16.5	41	20	JONES	12/13/1967	DM	--	41	41	OPEN BOTTOM *
02S/09E-24D03	133315	C082690-00	*	SPELLMAN RICK	02S	09E	24	BBA	--	38	18	35	30	HILLMAN	7/30/1992	DM IR	--	38	38	OPEN BOTTOM *
02S/09E-24D05	97090	*	*	CITY OF LIVINGSTON *TEST WELL #2	02S	09E	24	BB	110ALVM	115	20	26	100	VAN DYKEN	3/15/1971	TW	--	32	39	1/2X3 SLOTS
02S/09E-24F01	212319	**30010472**	*	DEPUY DAVID	02S	09E	24	BDA	--	20	6	--	50	HILLMAN	4/1/2004	IR	--	18	20	OPEN BOTTOM
02S/09E-24F03	97093	**194577**	*	WATER WORKS *LAYNE WELL #4	02S	09E	24	BDB	110ALVM	53.7	11.2	39.7	1040	LAYNE-MINNESOTA	6/6/1965	PWS	--	43	53	--
02S/09E-24F04	230362	*	*	ANDERSON DON	02S	09E	24	BDA	--	38	17	--	50	HILLMAN DRILLING	10/12/2006	IR	NEW WELL	40	40	OPEN BOTTOM *
02S/09E-24G01	97087	*	*	MCCOMB ALBERT L. & DORIS M.	02S	09E	24	AC	110ALVM	8	--	--	--	OVERFELT	2/1/1948	DM IR ST	--	8	8	OPEN BOTTOM *
02S/09E-24G02	199404	**30004502**	*	AQUATIC DESIGN CONSTRUCTION	02S	09E	24	ACCB	--	20	8	--	25	HILLMAN	8/28/2002	DM IR	--	20	20	OPEN BOTTOM
TOWNSHIP 02S, RANGE 10E, SECTION 4																				
02S/10E-4P01	204396	*	*	BOYD BOB	02S	10E	4	CDC	--	60	18	--	12	HILLMAN	6/23/2003	DM	--	40	60	1/8 IN DRILL HOLE
TOWNSHIP 02S, RANGE 10E, SECTION 5																				
02S/10E-5 (1)	97291	*	*	SHEPARD WARREN	02S	10E	5	B	211BMCK	59	8	59	12	JONES	9/25/1967	DM	--	51	59	1X1/16
02S/10E-5B01	97289	*	RUSTAD HOUSE	HEART K RANCH	02S	10E	5	ABD	211BMCK	100	5	100	50	HILLMAN	7/22/1985	DM	--	80	100	5/8 HOLE
02S/10E-5C01	97292	C020343-00	*	GORTON EDWARD L	02S	10E	5	BA	211BMCK	50	8	30	45	HILLMAN	8/7/1978	DM	--	10	90	1/8 DRILLED HOLE
02S/10E-5C02	133318	C082685-00	*	TAYLOE HAL	02S	10E	5	BAA	--	90	17	84	35	HILLMAN	8/5/1992	DM	--	70	90	1/8IN DRILL HOLES
02S/10E-5C03	196808	**30003276**	*	TONNESEN RICHARD	02S	10E	5	BAA	--	40	7	--	80	HILLMAN	5/28/2002	IR	--	40	40	OPEN BOTTOM
02S/10E-5C05	97290	C005550-00	*	JOSEPH TOM	02S	10E	5	B	211BMCK	107	17	92	12	VAN DYKEN	7/30/1974	DM	--	57	107	1/16
02S/10E-5D01	194955	*	*	BURNS JACK	02S	10E	5	BBD	--	160	36	--	18	HILLMAN	12/7/2001	DM	--	100	160	1/8X1/8IN DRILL PERFS
02S/10E-5E01	168001	**106245**	*	CLARKE ELIZABETH	02S	10E	5	BCA	--	100	33	60	11	HAYES	5/4/1998	DM	--	40[80]	60[100]	DRILL
02S/10E-5G01	97286	*	*	RUSTAD HUBERT #C	02S	10E	5	A	111ALVM	10	5	--	--	--	1/1/1900	DM ST	--	--	--	--
02S/10E-5G02	97287	*	*	RUSTAD HUBERT #B	02S	10E	5	A	111ALVM	10	5	--	--	--	1/1/1900	DM ST	--	--	--	--
02S/10E-5G03	97288	*	*	RUSTAD HUBERT #1	02S	10E	5	A	111ALVM	10	5	--	--	--	1/1/1958	DM ST	--	--	--	--
02S/10E-5J01	144886	*	*	CHURCH UNIVERSAL & TRIUMPHANT	02S	10E	5	DAA	--	100	15	50	670	HILLMAN	4/22/1994	FP	--	82[94]	68[100]	100 TIMCO SCR
02S/10E-5J02	156117	C111603-00	*	CHURCH UNIVERSAL & TRIUMPHANT	02S	10E	5	DAB	--	60	15	55	30	HILLMAN	4/25/1996	DM	--	20	60	1/8 HOLE
02S/10E-5J03	213489	*	*	RG LUMBER CO	02S	10E	5	DACD	--	16	12.35	--	16.6	--	--	DM	--	--	--	--
02S/10E-5J04	221785	*	*	CHURCH UNIVERSAL AND TRIUMPHANT	02S	10E	5	DADD	--	20	8	--	--	HAYES DRILLING CO	7/5/2005	MON	--	5	20	FACTORY SLOTTED
02S/10E-5K01	97296	*	*	DOUBLE A LUMBER CO.	02S	10E	5	D	112TRRC	28	10	28	--	--	1/1/1962	IN	--	10	28	--
02S/10E-5K02	97297	*	*	DOUBLE A LUMBER CO	02S	10E	5	D	110TRRC	28	10	28	--	JONES	2/8/1962	IN	--	10	28	10 DOUBLE LOUVER
02S/10E-5M01	97293	*	*	LAMM DARRELL	02S	10E	5	CB	211LVGS	60	19	45	25	--	3/20/1971	DM	--	50	60	SLOTS
02S/10E-5M02	97294	C018499-00	*	KITTS T L	02S	10E	5	CB	211LVGS	28	19	19	16	HILLMAN	1/4/1978	DM	--	--	--	--
02S/10E-5M03	97295	*	*	BARNEY JAMIE	02S	10E	5	CB	211LVGS	185	17	--	12	VAN DYKEN	8/29/1989	DM	--	105	185	DRILLED HOLES
02S/10E-5N01	12481	*	*	FORESTER RICHARD L	02S	10E	5	CC	211MRCK	105	36	105	7.5	ESD	2/26/1991	DM	--	85	105	SLOTS
02S/10E-5P01	149224	*	O'HARA	O'HARA TIM	02S	10E	5	DCB	--	39	14	35	45	HAYES	12/27/1994	DM	--	--	--	--
02S/10E-5Q01	192238	C117085-00	*	MYRSTOL POST AND POLE	02S	10E	5	DCCC	--	41	16	--	110	HAYES	8/1/2001	DM	--	41	43	OPEN HOLE

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TOWNSHIP 02S, RANGE 10E, SECTION 5 (continued)																				
02S/10E-5Q03	221788	*	*	RUSTAD RANCH	02S	10E	5	DCAB	--	25	8	--	--	HAYES DRILLING CO	7/5/2005	MON	--	6.5	21.5	FACTORY SLOTTED
02S/10E-5R01	144006	*	*	HERAUF NORBERT	02S	10E	5	DD	--	26	13	26	35	ENVIRONMENTAL	8/30/1990	UNK	--	26	26	OPEN BOTTOM *
02S/10E-5R02	97298	*	*	BURKLAND STUDS INC.	02S	10E	5	D	112TRRC	30	18	--	83	--	--	IN	--	--	--	--
TOWNSHIP 02S, RANGE 10E, SECTION 6																				
02S/10E-6H01	97302	*	*	PETERSON LORRIE	02S	10E	6	AD	211BMCK	52	3	27	30	VAN DYKEN	10/13/1971	ST	--	--	--	--
02S/10E-6H02	212320	**30022809**	*	PETERSON LORRIE	02S	10E	6	ADD	--	60	23	--	75	HILLMAN	4/5/2004	DM	--	40	60	DRILLED HOLES
02S/10E-6J01	97299	C023964-00	*	NEWLAND CHUCK	02S	10E	6	--	211LVGS	40	--	--	--	HILLMAN	4/25/1979	DM	--	--	--	--
02S/10E-6J02	97312	*	*	PETERSON TERRY	02S	10E	6	DA	211BMCK	60	15	45	9	HILLMAN	8/22/1979	DM	--	--	--	--
02S/10E-6J03	147952	*	*	WATKINS CLIF & SHARON	02S	10E	6	DA	--	46	14	44	50	HAYES	8/11/1994	DM	--	32	46	3.8IN DRILLHOLES
02S/10E-6J04	176984	**112499**	*	BEFFERT VERNE	02S	10E	6	DAA	--	85	8	--	60	HAYES	8/9/1999	UNK	--	25[65]	45[85]	.025 FACTORY SLOTTED
02S/10E-6J05	163685	*	*	HEARR JIM	02S	10E	6	DAB	--	120	22	115	25	HILLMAN	5/30/1997	DM	--	20	100	1/8 HOLE DRILL
02S/10E-6J06	215297	*	*	PETERSON HELEN	02S	10E	6	DABD	--	203	20	--	23	HAYES	8/31/2004	DM	--	120[180]	140[200]	FACTORY SLOTTED
02S/10E-6J07	97313	*	*	DOLAN BOB	02S	10E	6	DAC	211BMCK	69	35	40	45	VAN DYKEN	9/19/1980	UNK	--	40	69	1/6 PVC SLOTS
02S/10E-6J08	194249	**30020305**	*	MARTI STEVE	02S	10E	6	DACA	--	140	20	--	12	HAYES	12/20/2001	DM	--	100	140	.025 FACT SLOT PVC SCREEN
02S/10E-6J09	97314	C058428-00	*	DOUGLAS HARDY	02S	10E	6	DAD	211BMCK	58	15	57	20	VAN DYKEN	3/28/1985	DM	--	38	58	1/16 HOLES
02S/10E-6Q01	97311	C073743-00	*	BROWN RICHARD	02S	10E	6	D	211LVGS	75	27	--	20	BEVEN	4/4/1990	DM	--	55	75	SLOTS
02S/10E-6Q02	21565	C026685-00	*	SIRONI MARTIN	02S	10E	6	DA	211BMCK	40	18	28	30	HILLMAN	9/25/1979	DM	--	--	--	--
02S/10E-6Q03	97301	*	*	HANDLE JIM	02S	10E	6	--	211LVGS	52	21	45	30	HILLMAN	8/28/1979	DM	--	--	--	--
02S/10E-6Q04	147954	*	*	VIERS DON	02S	10E	6	DC	--	50	17	45	35	HAYES	4/6/1994	DM	--	40	50	3/8IN DRILLHOLES
02S/10E-6Q05	170493	*	*	ASBURY MARK	02S	10E	6	DCA	--	185	15	180	23	HAYES	7/7/1998	DM	--	40	160	3/8 INX3/8 IN DRILL
02S/10E-6Q06	196495	*	*	HART PETE AND SALLY	02S	10E	6	DCAA	--	135	18	--	60	HAYES	4/3/2002	DM	--	115	135	SCREEN-PVC
02S/10E-6Q07	97315	**31178**	*	ZANDER BOB	02S	10E	6	DCC	211LVGS	64	24	40	30	POTTS	12/13/1980	UNK	--	50	64	1/8x6
02S/10E-6Q08	170494	**104765**	*	BAUMEISTER MARK	02S	10E	6	DCC	--	155	38	150	42	HAYES	5/6/1998	DM	--	95	155	0.025 IN FACTORY SLOTS
02S/10E-6Q09	97300	**23183**	VISSCHER	ROSE JERRY	02S	10E	6	--	211LVGS	102	35	100	24	HILLMAN	4/25/1979	DM	--	--	--	--
02S/10E-6Q10	97316	C021499-00	HENDRICKSON	HENDRICKSON D	02S	10E	6	DCDA	211LVGS	79	21	25	50	VAN DYKEN	12/15/1978	DM	--	39	79	PLASTIC
02S/10E-6R01	192244	*	*	SHUMAN MELVIN	02S	10E	6	DDBB	--	140	20	--	25	HAYES	7/27/2001	DM	--	80	140	SCREEN-PVC
TOWNSHIP 02S, RANGE 10E, SECTION 7																				
02S/10E-7B01	97324	**53174**	RUGGLES	RUGGLES LARRY	02S	10E	7	ABB	211LVGS	93	18	88	15	HAYES	4/16/1983	DM	--	53	63	DRILLED HOLES
02S/10E-7B02	97338	**35270**	OLSON	OLSON RODNEY	02S	10E	7	ABA	211MRCK	90	13	89	30	H & L	6/29/1980	UNK	--	32[87]	35[90]	DRILLED HOLES
02S/10E-7B03	135189	**87267**	*	CARLSON HARRY	02S	10E	7	ABA	--	40	20	35	18	HILLMAN	5/5/1993	DM	--	20	40	DRILL 1/8HOLE
02S/10E-7B04	204083	*	*	GOODWINE MICHELLE	02S	10E	7	ABAA	--	120	20	--	15	HAYES	5/3/2003	IR	--	40[100]	60[120]	3/8X3/8IN DRILL PERF
02S/10E-7B05	215298	*	*	RICHARDSON SHARON OLSON	02S	10E	7	ABAB	--	160	18	--	20	HAYES	9/1/2004	DM	--	20[120]	60[160]	PERFORATED CASING
02S/10E-7B06	97321	C099399-00	PARISI DAVE 2	NELSON PETER K	02S	10E	7	ABB	211MRCK	60	15	60	19	HILLMAN	7/19/1979	DM	--	20	60	OPEN BOTTOM *
02S/10E-7B07	97322	*	STEIN	STEIN GEORGE	02S	10E	7	A	211MRCK	100	15	100	10	HILLMAN	7/20/1979	DM	--	100	100	OPEN BOTTOM *
02S/10E-7B08	97323	C068277-00	PARISI DAVE	PARISI DAVE	02S	10E	7	AB	211MRCK	85	20	--	20	HILLMAN	4/12/1988	DM	--	65	85	SLOTS
02S/10E-7B09	140150	C088114-00	*	MOULLETT DON OR CAROL	02S	10E	7	ABB	--	123	28	118	25	VAN DYKEN	8/13/1993	DM	--	23	123	DRILLED HOLES
02S/10E-7B10	183908	C114217-0	*	SCHOENEN JEFF	02S	10E	7	ABB	--	145	25	--	90	HAYES	7/10/2000	DM	--	125	145	--
02S/10E-7B11	97325	**623**	MONICAL	MONICAL W.E.	02S	10E	7	ABC	211MRCK	100	35	50	25	DIGGER	8/10/1973	DM	--	60	100	--
02S/10E-7B12	97326	*	*	PROFFITT TOM #A	02S	10E	7	ABC	211MRCK	85	40	--	30	--	1/1/1949	DM ST	--	60	100	SLOTS
02S/10E-7B13	97327	*	*	PROFFITT TOM #B	02S	10E	7	ABC	211MRCK	92	85	--	5	--	1/1/1947	ST	--	--	--	--
02S/10E-7B14	97328	*	*	PYNN SPENCER	02S	10E	7	ABC	211MRCK	90	20	--	25	VAN DYKEN	10/9/1989	DM	--	30	90	DRILLED HOLES
02S/10E-7C01	142867	C091502-00	*	SHINN RICHARD	02S	10E	7	BAA	--	83	17	77	60	VAN DYKEN	7/1/1993	DM	--	23	83	DRILLED HOLES
02S/10E-7C02	192251	C117180-00	BELAND, S.	BELAND ROD	02S	10E	7	BAAB	--	120	30	--	43	HAYES	8/31/2001	DM	--	80	120	.025 SLOTTED PVC
02S/10E-7C04	97335	*	*	KRUSE JOHN	02S	10E	7	BA	110ALVM	92	52	--	40	--	1/1/1958	DM ST	--	--	--	--
02S/10E-7C05	155377	*	*	GOLTZ TOM	02S	10E	7	B	--	103	28	95	45	VAN DYKEN	10/25/1995	DM	--	23	103	DRILLED HOLES
02S/10E-7C06	164255	C101920-00	*	REHMER RENA	02S	10E	7	BAB	--	120	28	115	25	HILLMAN	6/5/1997	DM	--	40	120	1/8 DRILL HOLE

TABLE 2

GROUNDWATER INFORMATION CENTER DATA
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WELL NUMBER[a]	GWIC ID[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	WELL OWNER	TWN	RNG	SEC	Q SEC	AQUIFER[e]	TOTAL DEPTH	STATIC WATER LEVEL	PUMP DEPTH	YIELD	DRILLER	DATE	USE[f]	STATUS	OPEN FROM[g]	OPEN TO[g]	DESCRIPTION[g]
TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)																				
02S/10E-7C12	97336	*	*	ANDERSON WALTER	02S	10E	7	BA	110ALVM	90	--	--	1	--	1/1/1951	DM IR	--	--	--	--
02S/10E-7C13	192248	**117220**	*	SWINDLEHURST AND WELL USERS ASSOCIATION	02S	10E	7	BA	--	140	30	--	50	BRIDGER	7/10/2001	DM	--	120	140	.025X 1.25 SLOTTED PVC
02S/10E-7C16	160010	*	*	MONTANA HOMES	02S	10E	7	BA	--	130	44	--	38	BRIDGER	12/12/1996	DM	--	29	130	FACTORY SLOTTED
02S/10E-7C17	176985	C110106-00	*	MONTANA HOMES	02S	10E	7	BA	--	140	63	--	45	BRIDGER	4/14/1999	UNK	--	60	140	DRILLED HOLES
02S/10E-7C18	192246	*	*	DAY WELL USERS ASSOCIATION	02S	10E	7	BA	--	120	30	56	55	BRIDGER	7/11/2001	DM	--	100	120	.025X1.25 SLOTTED PVC
02S/10E-7C19	207333	**30008547**	*	LADUKE JULIE	02S	10E	7	BA	--	160	41.5	125.5	78	RED TIGER	10/13/2003	PWS	--	90[130]{150}	97[138]{155}	HOLTE PERFORATOR SLOTS
02S/10E-7C20	218713	*	*	COFFMAN LYNN	02S	10E	7	BABB	--	184	41	--	40	HAYES	3/16/2005	DM	--	124	184	FACTORY SLOTTED
02S/10E-7C21	169351	C104679-00	*	DOTSON ANNA LEE	02S	10E	7	BBA	--	80	31	--	20	HILLMAN	6/10/1998	DM	--	40	80	1/8 PERFS
02S/10E-7D01	97329	C022413-00	*	BOOKONT LEONARD	02S	10E	7	B	211MRCK	55	32	45	15	HILLMAN	10/13/1978	DM	--	--	--	--
02S/10E-7D02	97331	*	*	MASSEY GARTH	02S	10E	7	B	211MRCK	67	42	--	--	--	11/7/1957	DM	--	67	67	OPEN BOTTOM *
02S/10E-7D03	97332	*	*	GLASS DONALD	02S	10E	7	B	211MRCK	--	42	--	--	--	7/6/1957	DM	--	--	--	--
02S/10E-7D04	142868	C087236-00	*	SHINN RICHARD	02S	10E	7	BBA	--	120	32	115	60	VAN DYKEN	6/30/1993	DM	--	40	120	DRILLED HOLES
02S/10E-7D06	138870	*	*	KAISER JOHN	02S	10E	7	BBB	--	80	39	75	15	HILLMAN	4/9/1993	DM	--	40	80	DRILLED HOLES
02S/10E-7D07	97333	*	*	O'ROURKE JOHN	02S	10E	7	B	211MRCK	140	--	--	40	--	1/1/1941	DM ST	--	--	--	--
02S/10E-7D08	97339	C059736-00	PARK COUNTY	PARK COUNTY	02S	10E	7	BB	211MRCK	135	60	130	100	VAN DYKEN	5/2/1985	PWS	--	95	135	SLOTS
02S/10E-7D09	151387	C095431-00	*	CARUSO R A & DONNA	02S	10E	7	BBBC	--	210	58	205	45	HAYES	5/4/1995	DM	--	109	210	.025X1IN FACTORY
02S/10E-7D10	150529	C093754-00	*	CIERI CARLO	02S	10E	7	BBDC	--	119	55	115	45	HAYES	4/19/1995	IR	--	90	119	2X.025IN FACTORY
02S/10E-7D11	221680	*	*	GORDON MIKE	02S	10E	7	BB	--	100	42	--	23	VAN DYKEN	9/8/2005	UNK	--	80	100	PERFORATED CASING
02S/10E-7E02	97317	*	NEAD	NEAD BALFORD L	02S	10E	7	--	211LVGS	--	--	--	--	--	1/1/1946	DM	--	--	--	--
02S/10E-7E03	97319	*	SHULINS	SHULINS VICKIE & S.	02S	10E	7	--	211LVGS	50	29	50	50	HILLMAN	10/11/1984	DM	--	35	50	PVC
02S/10E-7E04	133982	C085100-00	*	SMOKEY C.M. & GOLDNER DONNA	02S	10E	7	BC	--	205	35	--	15	BRIDGER	7/9/1992	DM	--	160	205	1/2IN ROUND DRILL
02S/10E-7E05	170496	**106243**	JUNHKE	JUHNKE DAVE	02S	10E	7	BCC	--	225	43	220	20	HAYES	8/6/1998	DM	--	100[200]	180[220]	3/8 INX3/8 IN DRILL
02S/10E-7E07	208513	*	*	HIMMELSPACH STEVE SR	02S	10E	7	BCBB	--	244	55	--	27	HAYES	12/8/2003	DM	--	164	244	SCREEN-CONTINUOUS-PVC
02S/10E-7E08	213641	*	*	POLING GARY D. & ANNA M.	02S	10E	7	BCCD	--	205	44	--	30	HAYES	6/1/2004	IR	--	63[163]	123[203]	FACTORY SLOTTED
02S/10E-7E11	97337	*	*	ROTH J.A.	02S	10E	7	BA	110ALVM	49	30	--	20	--	1/1/1949	DM ST	--	--	--	--
02S/10E-7E12	97341	*	O'DELL	O'DELL KENNETH	02S	10E	7	BBB	211MRCK	65	40	65	12	HILLMAN	11/28/1980	UNK	--	--	--	--
02S/10E-7E13	142869	C100677-00	*	AGLE ROBERT	02S	10E	7	BDC	--	57.5	22	47	10	POTTS	7/29/1993	DM	--	52.5	57.5	1/8X4 PERFS
02S/10E-7F01	97320	*	QUESENBERRY	JUHNKE OTTO	02S	10E	7	--	211LVGS	74	37	58	10	--	1/1/1972	DM	--	54	74	--
02S/10E-7F02	97334	**30001348**	POESCHL	POESCHL ROBERT	02S	10E	7	B	211MRCK	50	30	--	17	--	1/1/1930	DM	--	--	--	--
02S/10E-7F05	97330	35493	YARGER	COUNTS J.H.	02S	10E	7	B	211MRCK	42	29	25	245	CLOUSE	1/1/1944	DM ST	--	32	42	--
02S/10E-7F06	97318	C040135-00	HUDSON	FRONTIER MOBLIE HOME PARK (LES HUDSON)	02S	10E	7	BCDD	211LVGS	160	21	160	16	JONES	8/15/1973	PWS	--	160	160	OPEN BOTTOM
02S/10E-7F07	188587	40134	*	FRONTIER MOBLIE HOME PARK	02S	10E	7	BCDD	--	160	21	--	16	--	1/1/1975	PWS	--	--	--	--
02S/10E-7F09	131459	*	*	BRUE GENE	02S	10E	7	--	--	65	23	43	20	HULBERT	10/29/1971	DM	--	48	65	1/8X1 SLOTS
02S/10E-7F10	135190	*	*	YARGER ART	02S	10E	7	BDC	--	50	37	45	15	HILLMAN	5/4/1993	DM	--	30	50	DRILL 1/8HOLE
02S/10E-7L01	97344	**194571**	POTW 1	LIVGSTN WASTE DISPSL	02S	10E	7	CA	211LVGS	62	6	12	40	VAN DYKEN	10/12/1960	DM	--	24	25	3/8 SLOTS
02S/10E-7L03	97345	*	POTW 2	LIVGSTN WATER WORKS	02S	10E	7	CA	112TRRC	53	3	19	100	VAN DYKEN	6/17/1970	PWS	--	30	34	1/4X3 SLOTS
02S/10E-7L04	97340	**31228**	GARDNER	GARDNER CHARLES	02S	10E	7	BBB	211MRCK	65	40	60	30	HILLMAN	11/21/1980	UNK	--	40	--	OPEN BOTTOM (40-60)
02S/10E-7L05	97343	C010871-00	BROWN	TOWNSEND TERRY	02S	10E	7	C	211LVGS	78	21	71	12	VAN DYKEN	9/23/1976	DM	--	78	78	OPEN BOTTOM *
02S/10E-7L06	97346	C038126-00	HANKS 2	HANKS RALPH R & P	02S	10E	7	CAC	211LVGS	70	25	50	20	POTTS	9/11/1973	UNK	--	--	--	--
02S/10E-7L08	162186	*	*	RUGGLES LARRY & MARGIE	02S	10E	7	C	--	102	17	95	15	VAN DYKEN	12/20/1996	DM	--	22	102	DRILLED HOLES
02S/10E-7L09	205532	*	*	WET*MW3	02S	10E	7	ACAC	--	21.5	14	--	--	HAYES	7/15/2003	MON	--	11.5	21.5	FACTORY SCREEN
02S/10E-7L10	205536	*	*	WET*MW2	02S	10E	7	DCAC	--	35	22.5	--	--	HAYES	7/14/2003	MON	--	--	--	--
02S/10E-7L11	205537	*	*	WET	02S	10E	7	BDAC	--	29	6	--	--	HAYES	7/14/2003	MON	--	9	29	FACTORY SCREEN
02S/10E-7M01	147917	*	*	LIVINGSTON KINGDOM HALL	02S	10E	7	CBDA	--	60	50	55	50	HILLMAN	4/19/1994	PWS	--	30	60	1/8 DRILLED HOLES

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TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)																				
02S/10E-7M02	170495	**104722**	*	JONES BILL	02S	10E	7	CBA	--	55	35	50	35	HAYES	6/1/1998	DM	--	40	55	DRILLED HOLES
02S/10E-7M04	188895	*	*	JONES WILLIAM SR. *WELL #2	02S	10E	7	CBAA	--	160	28	--	14	HAYES	5/14/2001	DM	--	40[140]	80[160]	DRILLED HOLES [.025 FACTORY SLOTTED PVC]
02S/10E-7M05	188906	**30003320**	*	JONES WILLIAM SR. *WELL #1	02S	10E	7	CBAB	--	100	27	--	15	HAYES	5/11/2001	DM	--	40[80]	60[100]	.025 FACTORY SLOTTED PVC
02S/10E-7M06	188916	*	*	JONES SCOTT	02S	10E	7	CBAB	--	159	26	--	18	HAYES	5/16/2001	DM	--	80[140]	120[160]	.025 FACTORY SLOTTED PVC
02S/10E-7M10	205535	*	*	WET*MW4	02S	10E	7	CCBC	--	30	15	--	--	HAYES	7/15/2003	MON	--	20	30	FACTORY SCREEN
02S/10E-7M11	97347	C063768-00	O'CONNOR 1	O'CONNOR GREGORY	02S	10E	7	CBD	112TRRC	35	22	35	40	HILLMAN	8/4/1986	DM	--	35	35	OPEN BOTTOM *
02S/10E-7M13	*	*	*	O'CONNER (MW-11)	02S	10E	7	CCD	--	65	28.5	--	--	RUEN	4/3/1989	MON	--	51	61	0.020 FACTORY SLOTTED PVC
02S/10E-7M14	*	*	*	O'CONNER (MW-12)	02S	10E	7	CCD	--	65	26.98	--	--	RUEN	4/4/1989	MON	--	55	65	0.020 FACTORY SLOTTED PVC
02S/10E-7N01	97342	C020458-00	*	BURLINGTON NORTHERN	02S	10E	7	C	211LVGS	40	--	30	30	HILLMAN	8/21/1978	IN	--	--	--	--
02S/10E-7N02	97348	*	*	CANYON VIEW LUMBR CO	02S	10E	7	CD	111ALVM	90	20	--	4	--	1/1/1961	OTHER	--	--	--	--
02S/10E-7P02	*	*	*	KROHNE (MW-5)	02S	10E	7	CDA	--	17.5	5.56	--	--	RUEN	3/30/1989	MON	--	2.5	17.5	0.020 FACTORY SLOTTED PVC
02S/10E-7P03	*	*	*	KROHNE (MW-4)	02S	10E	7	CDB	--	15	3.75	--	--	RUEN	3/29/1989	MON	--	2	12	0.020 FACTORY SLOTTED PVC
02S/10E-7P04	*	*	*	KROHNE (MW-1)	02S	10E	7	CCD	--	30.5	6.01	--	--	RUEN	3/28/1989	MON	--	20.5	30.5	0.020 FACTORY SLOTTED PVC
02S/10E-7P05	*	*	*	KROHNE (MW-2)	02S	10E	7	CDC	--	15	5.87	--	--	RUEN	3/28/1989	MON	--	5	15	0.020 FACTORY SLOTTED PVC
02S/10E-7P06	*	*	*	KROHNE (MW-3)	02S	10E	7	CDC	--	15	3.72	--	--	RUEN	3/29/1989	MON	--	2	11	0.020 FACTORY SLOTTED PVC
02S/10E-7P07	*	*	*	KROHNE (MW-6)	02S	10E	7	CDC	--	15	5.85	--	--	RUEN	3/30/1989	MON	--	5	15	0.020 FACTORY SLOTTED PVC
02S/10E-7P08	*	*	*	KROHNE (MW-7)	02S	10E	7	CDC	--	15	7.02	--	--	RUEN	3/29/1989	MON	--	5	15	0.020 FACTORY SLOTTED PVC
02S/10E-7P14	*	*	*	KROHNE (MW-8)	02S	10E	7	CDD	--	35	8.09	--	--	RUEN	3/31/1989	MON	--	24.5	34.5	0.020 FACTORY SLOTTED PVC
02S/10E-7P15	*	*	*	KROHNE (MW-9)	02S	10E	7	CDD	--	15	8.19	--	--	RUEN	3/31/1989	MON	--	5	15	0.020 FACTORY SLOTTED PVC
02S/10E-7P16	*	*	*	KROHNE (MW-10)	02S	10E	7	CDD	--	15	8.46	--	--	RUEN	4/1/1989	MON	--	5	15	0.020 FACTORY SLOTTED PVC
02S/10E-7Q01	196379	C30002989	*	HARRIS ERLYNN	02S	10E	7	DCC	--	40	7	--	80	AMERICAN	5/16/2002	IR	--	40	40	OPEN BOTTOM
02S/10E-7Q02	218718	*	*	WATSON TED	02S	10E	7	DCDA	--	35	11	--	50	HAYES	4/11/2005	ST	--	25	35	FACTORY SLOTTED
02S/10E-7R01	218719	*	*	WATSON TED	02S	10E	7	DDAA	--	185	13	--	85	HAYES	4/8/2005	ST	--	140	180	FACTORY SLOTTED
TOWNSHIP 02S, RANGE 10E, SECTION 8																				
02S/10E-8A01	151256	*	BOYD	BOYD BOB	02S	10E	8	AA	--	27	--	27	30	ESD	7/31/1995	DM	--	27	27	OPEN BOTTOM *
02S/10E-8A02	164256	C101960-00	*	YELLOWSTONE HOMES INC	02S	10E	8	AAA	--	125	21	120	8	HAYES	5/9/1997	DM	--	45[85]	65[125]	DRILLED HOLES
02S/10E-8A03	165139	C103071-00	GRAYBEAL	GRAYBEAL DAVID G	02S	10E	8	AAB	--	58	8	55	400	HILLMAN	8/14/1997	DM	--	58	58	OPEN BOTTOM *
02S/10E-8A04	170497	*	*	FRIENDS FOR LIFE - HUMANE SOCIETY PARK COUNTY	02S	10E	8	AAB	--	40	14	--	180	HILLMAN	9/24/1998	DM	--	40	40	OPEN BOTTOM *
02S/10E-8A05	221790	*	*	BERG MAX	02S	10E	8	AABD	--	184	14	--	20	HAYES	6/29/2005	DM	--	144	184	FACTORY SLOTTED
02S/10E-8A06	218722	*	*	HILLMAN DRILLING INC.	02S	10E	8	AAD	--	60	29	--	75	HILLMAN	4/22/2005	DM	--	40	60	DRILLED HOLES
02S/10E-8A07	226374	*	*	FRIDLEY DEVELOPMENT	02S	10E	8	AAD	--	60	17	--	350	HILLMAN	3/14/2006	DM	--	60	60	OPEN BOTTOM *
02S/10E-8B01	217125	*	*	LEWIS ROY	02S	10E	8	ABA	--	80	16	--	60	HILLMAN	2/1/2005	DM	--	60	80	DRILLED HOLES
02S/10E-8B02	97349	C112476-00	YELLOWSTONE VET CLINIC	MURRAY JAMES	02S	10E	8	ABB	110TRRC	34	10	12	40	VAN DYKEN	7/7/1970	MED ST	--	34	34	OPEN BOTTOM *
02S/10E-8B07	153621	C095517-00	HILLMAN	HILLMAN ED	02S	10E	8	ABC	--	27	10	--	20	ESD	7/28/1995	DM	--	--	--	--
02S/10E-8B08	151566	C095430-00	KAISER/FRIDLEY	DEVELOPMENT FRIDLEY	02S	10E	8	ABD	--	60	10	60	20	ESD	1/23/1996	DM	DEEPENED	60	60	OPEN BOTTOM *
02S/10E-8F01	188926	*	*	WATSON TED	02S	10E	8	BDDC	--	33.5	15	--	70	HAYES	5/8/2001	ST	--	33.5	36	OPEN BOTTOM

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TOWNSHIP 02S, RANGE 10E, SECTION 8 (continued)																				
02S/10E-8H01	230193	*	*	LOGAN AUCTION SERVICE INC.	02S	10E	8	ADB	--	123	17	--	18	RED TIGER	10/6/2006	DM	--	103	123	0.025 IN FACTORY SLOTTED
02S/10E-8H02	231197	*	*	RUGGLES EXCAVATION INC	02S	10E	8	ABDD	--	302	22	--	22	HAYES	10/18/2006	DM	--	262	302	0.02 IN FACTORY SLOTTED
02S/10E-8N01	176825	C107428-00	*	WATSON TED & GEOGANN #1	02S	10E	8	CCB	--	23	12	20	60	HAYES	1/8/1999	UNK	--	23	23	OPEN BOTTOM *
TOWNSHIP 02S, RANGE 10E, SECTION 18																				
02S/10E-18B01	183907	*	*	WATSON TED	02S	10E	18	ABAD	--	105	12	--	60	HAYES	8/1/2000	DM	--	45[85]	65[105]	--
02S/10E-18C01	97361	C003531-00	Q STREET	CITY OF LIVINGSTON	02S	10E	18	BAA	111ALVM	43	7	34	490	LAYNE-MINNESOTA	7/15/1974	PWS	--	33	43	0.1" SLOTS
02S/10E-18D01	97359	*	DEPUY 1	FOESS TOM	02S	10E	18	--	111ALVM	30	15	20	30	HILLMAN	11/29/1978	IN	--	30	30	OPEN BOTTOM *
02S/10E-18D06	21570	**33714**	*	POWERS MARION	02S	10E	18	BBC	110TRRC	42	25	30	30	LINDSAY	7/17/1974	DM	--	42	42	OPEN BOTTOM *
02S/10E-18E01	150530	C093797-00	*	DUNLAP JR. STUART	02S	10E	18	BCB	--	20	6	15	60	HILLMAN	2/24/1995	IR	--	--	--	--
02S/10E-18E02	203494	*	*	SALACINSKI RICHARD	02S	10E	18	BCB	--	20	6	--	30	HILLMAN	6/4/2003	IR	--	18	20	OPEN BOTTOM
02S/10E-18E03	203496	*	*	CLAAR MARTY	02S	10E	18	BCC	--	20	6	--	35	HILLMAN	5/3/2003	DM IR	--	18	20	OPEN BOTTOM
02S/10E-18E04	97360	*	DUNCAN	DUNCAN PAUL & B	02S	10E	18	B	111ALVM	--	6	--	--	--	1/1/1954	DM	--	--	--	--
02S/10E-18E05	148803	C092569-00	*	TILLET TERRY	02S	10E	18	BCC	--	20	7	15	50	HILLMAN	7/11/1994	IR	--	--	--	--
02S/10E-18E06	149091	C108850-00	*	HEAPES ROBERT	02S	10E	18	BCC	--	20	6	13	40	HILLMAN	2/6/1995	IR	--	--	--	--
02S/10E-18E07	97364	*	*	BOUCHER R. W.	02S	10E	18	CBA	110TRRC	11	5	--	--	--	1/1/1958	IR	--	--	--	--
02S/10E-18E08	97365	*	*	BOUCHER BEULAH	02S	10E	18	CBA	110TRRC	6	5	--	50	--	1/1/1953	DM	--	--	--	--
02S/10E-18E09	97366	*	*	MICHELS R. J.	02S	10E	18	CBA	110TRRC	6	5	--	--	--	1/1/1958	IR	--	--	--	--
02S/10E-18E10	97367	*	BURNS	BURNS FRED & N	02S	10E	18	CBA	110TRRC	6	5	--	--	--	1/1/1923	IR	--	--	--	--
02S/10E-18F01	97358	P092448-00	GEYSER	GEYSER TRAILER COURT	02S	10E	18	BDBB	111ALVM	32	32	--	--	--	5/22/1961	PWS	--	--	--	--
02S/10E-18F02	97362	**193768**	L STREET	CITY OF LIVINGSTON	02S	10E	18	BD	110TRRC	41	5	10	500	LAYNE-MINNESOTA	2/1/1955	PWS	--	30	40	STAINLESS
02S/10E-18F03	160011	*	*	BURNS BOB	02S	10E	18	BAA	--	18	6	15	30	HILLMAN	10/18/1996	IR	--	18	18	OPEN BOTTOM *
02S/10E-18F04	153622	*	*	BARNHART GARY	02S	10E	18	BDB	--	18	9	15	50	HILLMAN	5/2/1995	IR	--	18	18	OPEN BOTTOM *
02S/10E-18F05	156118	*	*	BARNHART GARY	02S	10E	18	BDC	--	18	5	15	60	HILLMAN	3/12/1996	ST	--	18	18	OPEN BOTTOM *
02S/10E-18F06	176987	C108897-00	*	BARNHART HELEN	02S	10E	18	BDCA	--	24	6	--	30	HAYES	6/17/1999	UNK	--	--	--	--
02S/10E-18M03	97363	*	*	CITY OF LIVINGSTON	02S	10E	18	CB	110ALVM	47	7	9	90	VAN DYKEN	3/16/1971	MON	--	27	35	1/4X3 SLOTS
02S/10E-18N01	97368	**103523**	LONG 1	LONG JOHN	02S	10E	18	CC	211CLRD	50	18	38	30	VAN DYKEN	10/11/1971	DM	--	30	50	1/16X2
02S/10E-18N02	124023	C077933-00	LONG 2	LONG JOHN E	02S	10E	18	CC	--	32	10	30	520	ESD	2/28/1991	IR	--	15	30	1/4X3 PERS

Notes:

(a) Well number assigned by Kennedy/Jenks Consultants based on Township, Range, Section, and 40-acre tract according to U.S. Geological Survey.
(b) Well identification number from Groundwater Information Center (GWIC) Database, Montana Bureau of Mines and Geology (15 January 2007).
(c) Water right number from Montana Department of Natural Resources and Conservation (DNRC), Water Resources Division.
Water right number shown in bold is inferred based on correlation between GWIC database and water right list.
(d) Well name assigned by Envirocon, Inc., of Missoula, Montana.
(e) Aquifer designations as follows:

110ALVM	Quaternary Alluvium
110TRRC	Quaternary-Tertiary Terrace Deposits
111ALVM	Holocene Alluvium
112TRRC	Pleistocene Terrace Deposits
211BMCK	Billman Creek Formation (of Livingston Group)
211CKDL	Cokedale Formation (of Livingston Group)
211CLRD	Colorado Shale or Formation (of Colorado Group)
211CODY	Cody Shale
211EGLE	Eagle Sandstone
211LVGS	Upper Cretaceous Livingston Group
211MRCK	Miner Creek Formation (of Livingston Group)

Revision No. 1 updates based on periodic review of GWIC, DNRC, and Cadastral databases are shaded yellow.

(f) Well use categories as defined by GWIC.

CM	Commercial
DM	Domestic
FP	Fire protection
IN	Industrial
IR	Irrigation
MED	Medical
MON	Monitoring
OTHER	Other
PWS	Public water supply
RES	Research
ST	Stockwater
TW	Test well
UNK	Unknown

(g) "[]" denotes second completion.
"{}" denotes third completion.
(h) "*" denotes not applicable.
(i) "--" denotes not known.
(j) Monitoring wells are shaded gray.

TABLE 3

WATER RIGHT INFORMATION[a]
Burlington Northern Livingston Shop Complex

WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 09E, SECTION 12																			
02S/09E-12J01	115481	*[h]	WEIBERT, DELLA	G	WELL	43B	GWC	ST	20	GPM	0.26	0.26	--[i]	3/16/2001	1	NESE	12	2 S	9 E
02S/09E-12J02	55219	BALDWIN	BALDWIN, DELLA R	G	WELL	43B	GWC	DM	10	GPM	1.5	1.58	--	6/26/1984	1	NWNESE	12	2 S	9 E
02S/09E-12J02	55219	BALDWIN	BALDWIN, DELLA R	G	WELL	43B	GWC	ST	10	GPM	0.08	1.58	--	6/26/1984	1	NWNESE	12	2 S	9 E
02S/09E-12K01	107556[j]	*	LOGAN, JIM	G	WELL	43A	GWC	MD	25	GPM	4.89	4.89	--	6/9/1999	1	NWNWSE	12	2 S	9 E
02S/09E-12Q01	193382	COUNTS, S	COUNTS, JOHN H	G	WELL	43B	SOC	DM	30	GPM	1.5	1.5	--	5/1/1955	1	--	**12**	2 S	9 E
02S/09E-12R01	83241	*	SMITH, JAMES R	G	WELL	43B	GWC	LG	20	GPM	0.43	0.43	0.17	9/16/1992	1	N2SESE	12	2 S	9 E
02S/09E-12R03	82684	CIERI	CIERI, CARLO	G	WELL	43B	ER	DM	150	GPM	1	4.75	1.5	7/31/1939	1	SWSWSW	12	2 S	9 E
02S/09E-12R03	82684	CIERI	CIERI, CARLO	G	WELL	43B	ER	LG	150	GPM	3.75	4.75	1.5	7/31/1939	1	SWSWSW	12	2 S	9 E
TOWNSHIP 02S, RANGE 09E, SECTION 13																			
02S/09E-13E01	93642	*	HILLMAN, JEANETTE	G	WELL	43B	GWC	DM	10	GPM	1.63	1.63	--	3/13/1995	1	NESWNW	13	2 S	9 E
02S/09E-13J02	194579	D STREET	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	1.16	CFS	805	805	--	2/28/1955	1	SWNESE	13	2 S	9 E
02S/09E-13J04	30011317	*	CHAPEL CAROLINE E	G	WELL	43B	GWC	LG	--	--	--	--	--	7/8/2004	1	SWNESE	13	2 S	10 E
02S/09E-13K03	3530	B STREET	LIVINGSTON, CITY OF	G	WELL	43B	PRP	MC	450	GPM	485.81	485.81	--	9/6/1974	1	N2NWSE	13	2 S	9 E
02S/09E-13K04	58303	*	LIVINGSTON, CITY OF	G	WELL	43B	PRP	MC	130	GPM	140.35	140.35	--	12/20/1984	1	N2NWSE	13	2 S	9 E
02S/09E-13K06	58362	INDUSTRIAL TOWEL	BIG SKY SERVICE CO	G	WELL	43B	GWC	CM	55	GPM	20.74	20.74	--	2/15/1985	1	NWSWSE	13	2 S	9 E
02S/09E-13L01	92558	*	TITGEMEIER-STEVENS, AMY O	G	WELL	43B	GWC	DM	15	GPM	1.63	1.63	--	1/26/1995	1	NWNESW	13	2 S	9 E
02S/09E-13L02	84017	*	LIVINGSTON DEPOT CENTER	G	WELL	43B	PRP	LG	50	GPM	2.5	2.5	1	11/9/1993	1	SWNESW	13	2 S	9 E
02S/09E-13P01	95437	*	SANDBERG, ERNEST A	G	WELL	43B	GWC	LG	20	GPM	0.25	0.25	0.1	8/9/1995	1	NESESW	13	2 S	9 E
02S/09E-13Q03	84760	*	LIVINGSTON ENTERPRISE WR	G	WELL	43B	GWC	CM	12	GPM	5.6	6	0.16	1/22/1993	1	NESWSE	13	2 S	9 E
02S/09E-13Q03	84760	*	LIVINGSTON ENTERPRISE WR	G	WELL	43B	GWC	LG	12	GPM	0.4	6	0.16	1/22/1993	1	NESWSE	13	2 S	9 E
02S/09E-13Q04	86498	*	NELSON, FRED E	G	WELL	43B	GWC	LG	10	GPM	0.25	0.25	0.1	6/4/1993	1	NESWSE	13	2 S	9 E
02S/09E-13Q05	82666	*	FLANIGAN, LUCILLE I	G	WELL	43B	GWC	LG	10	GPM	0.48	0.48	0.19	8/6/1992	1	SWSWSE	13	2 S	9 E
02S/09E-13Q05	82666	*	FLANIGAN, RICHARD F	G	WELL	43B	GWC	LG	10	GPM	0.48	0.48	0.19	8/6/1992	1	SWSWSE	13	2 S	9 E
02S/09E-13Q06	90783	*	MURPHY, H RAE	G	WELL	43B	GWC	LG	18	GPM	0.43	0.43	0.17	7/5/1994	1	SESWSE	13	2 S	9 E
02S/09E-13Q06	90783	*	MURPHY, WINIFRED B	G	WELL	43B	GWC	LG	18	GPM	0.43	0.43	0.17	7/5/1994	1	SESWSE	13	2 S	9 E
02S/09E-13R01	6301	*	LIVINGSTON SCHOOL DIST 1	G	WELL	43B	SOC	IR	85	GPM	19	19	5	10/10/1963	1	SESESE	13	2 S	9 E
TOWNSHIP 02S, RANGE 09E, SECTION 14																			
02S/09E-14A01	116497	*	HAMMEREL, JANICE L	G	WELL	43B	GWC	LG	15	GPM	0.63	0.63	0.25	7/16/2001	1	NENE	14	2 S	9 E
02S/09E-14A01	116497	*	HAMMEREL, JOHN L	G	WELL	43B	GWC	LG	15	GPM	0.63	0.63	0.25	7/16/2001	1	NENE	14	2 S	9 E
02S/09E-14G01	30005195	*	PRINTZ GRACE L	G	WELL	43B	GWC	MD	--	--	--	--	--	1/31/2003	1	NE	14	2 S	10 E
02S/09E-14G01	30005195	*	PRINTZ JOHN R	G	WELL	43B	GWC	MD	--	--	--	--	--	1/31/2003	1	NE	14	2 S	10 E
02S/09E-14J01	30011206	*	NORSKOG GERALD D	G	WELL	43B	GWC	LG	--	--	--	--	--	6/23/2004	1	SESENE	14	2 S	10 E
02S/09E-14J01	30011206	*	NORSKOG GWENDOLYN J	G	WELL	43B	GWC	LG	--	--	--	--	--	6/23/2004	1	SESENE	14	2 S	10 E
TOWNSHIP 02S, RANGE 09E, SECTION 24																			
02S/09E-24A01	194576	*	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	0.22	CFS	50	50	--	12/7/1961	1	NENENE	24	2 S	9 E
02S/09E-24A02	193766	*	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	0.22	CFS	50	50	--	12/14/1961	1	NWNENE	24	2 S	9 E
02S/09E-24B03	194575	*	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	0.67	CFS	76.7	76.7	--	5/31/1951	1	SWNWNE	24	2 S	9 E

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WATER RIGHT INFORMATION[a]
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WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 09E, SECTION 24 (continued)																			
02S/09E-24C02	30006293	*	GREGREY FRANCES	G	WELL	43B	GWC	LG	--	--	--	--	--	5/30/2003	1	SENENW	24	2 S	10 E
02S/09E-24C02	30006293	*	GREGREY LENNY	G	WELL	43B	GWC	LG	--	--	--	--	--	5/30/2003	1	SENENW	24	2 S	10 E
02S/09E-24D03	82690	*	SPELLMAN, RICHARD E	G	WELL	43B	GWC	LG	10	GPM	0.33	1.33	0.13	8/28/1992	1	NENWNW	24	2 S	9 E
02S/09E-24D03	82690	*	SPELLMAN, RICHARD E	G	WELL	43B	GWC	DM	10	GPM	1	1.33	0.13	8/28/1992	1	NENWNW	24	2 S	9 E
02S/09E-24D04	81824	*	E'DANNES CORP	G	WELL	43B	GWC	LG	20	GPM	0.7	0.7	0.28	6/11/1992	1	NENWNW	24	2 S	9 E
02S/09E-24F01	30010472	*	DEPUY DAVID W	G	WELL	43B	GWC	DM	--	--	--	--	--	4/22/2004	1	NESWNW	24	2 S	10 E
02S/09E-24F01	30010472	*	DEPUY SHIRLEY M	G	WELL	43B	GWC	DM	--	--	--	--	--	4/22/2004	1	NESWNW	24	2 S	10 E
02S/09E-24F02	83238	*	DEPUY, DAVID W	G	WELL	43B	GWC	LG	10	GPM	0.8	0.8	0.32	9/3/1992	1	NESENW	24	2 S	9 E
02S/09E-24F02	83238	*	DEPUY, SHIRLEY M	G	WELL	43B	GWC	LG	10	GPM	0.8	0.8	0.32	9/3/1992	1	NESENW	24	2 S	9 E
02S/09E-24F03	194577	*	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	2.45	CFS	1546	1546	--	7/20/1965	1	NWSENW	24	2 S	9 E
02S/09E-24G02	30004502	--	AQUATIC DESIGN & CONSTRUCTION INC	G	WELL	43B	GWC	IR	--	--	--	--	--	11/18/2002	1	NWSWNE	24	2S	9E
TOWNSHIP 02S, RANGE 10E, SECTION 5																			
02S/10E-5C01	20343	*	GORTON, EDWARD L	G	WELL	43B	GWC	DM	18	GPM	1.5	1.5	--	9/19/1978	1	NENENW	5	2 S	10 E
02S/10E-5C01	20343	*	GORTON, VIRGINIA	G	WELL	43B	GWC	DM	18	GPM	1.5	1.5	--	9/19/1978	1	NENENW	5	2 S	10 E
02S/10E-5C02	82685	*	VANGYTENBEEK RICHARD P	G	WELL	43B	GWC	DM	14	GPM	1	1.33	0.11	12/7/1992	1	NENENW	5	2 S	10 E
02S/10E-5C02	82685	*	VANGYTENBEEK K ELIZABETH	G	WELL	43B	GWC	DM	14	GPM	1	1.33	0.11	12/7/1992	1	NENENW	5	2 S	10 E
02S/10E-5C02	82685	*	VANGYTENBEEK RICHARD P	G	WELL	43B	GWC	ST	14	GPM	0.05	1.33	0.11	12/7/1992	1	NENENW	5	2 S	10 E
02S/10E-5C02	82685	*	VANGYTENBEEK K ELIZABETH	G	WELL	43B	GWC	ST	14	GPM	0.05	1.33	0.11	12/7/1992	1	NENENW	5	2 S	10 E
02S/10E-5C02	82685	*	VANGYTENBEEK RICHARD P	G	WELL	43B	GWC	LG	14	GPM	0.28	1.33	0.11	12/7/1992	1	NENENW	5	2 S	10 E
02S/10E-5C02	82685	*	VANGYTENBEEK K ELIZABETH	G	WELL	43B	GWC	LG	14	GPM	0.28	1.33	0.11	12/7/1992	1	NENENW	5	2 S	10 E
02S/10E-5C03	30003276	--	TONNESEN RICHARD	G	WELL	43B	GWC	LG	--	--	--	--	1	8/26/2002	1	NENENW	5	2S	10E
02S/10E-5C04	75639[i]	*	BLATTER FAMILY TRUST	G	WELL	43B	GWC	DM	12	GPM	1	3.6	1	11/15/1990	1	SENENW	5	2 S	10 E
02S/10E-5C04	75639[i]	*	BLATTER FAMILY TRUST	G	WELL	43B	GWC	LG	12	GPM	2.5	3.6	1	11/15/1990	1	SENENW	5	2 S	10 E
02S/10E-5C04	75639[i]	*	BLATTER FAMILY TRUST	G	WELL	43B	GWC	ST	12	GPM	0.1	3.6	1	11/15/1990	1	SENENW	5	2 S	10 E
02S/10E-5C05	5550	*	BLATTER FAMILY TRUST	G	WELL	43B	GWC	DM	12	GPM	--	--	--	5/27/1975	1	NW	5	2 S	10 E
02S/10E-5E01	106245	*	CLARKE, ELIZABETH L	G	WELL	43B	GWC	DM	11	GPM	1.63	1.63	--	2/3/1999	1	SWNW	5	2 S	10 E
02S/10E-5F01	8965	*	FISHER, JACK C	G	WELL	43B	SOC	DM	12	GPM	1.5	1.5	--	6/21/1973	1	NWSENW	5	2 S	10 E
02S/10E-5G04	42234	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	GWC	DM	30	GPM	1.5	1.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5G04	42234	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	GWC	DM	30	GPM	1.5	1.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5G05	42235	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	GWC	DM	30	GPM	1.5	1.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5G05	42235	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	GWC	DM	30	GPM	1.5	1.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5G06	42236	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	GWC	ST	30	GPM	3	4.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5G06	42236	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	GWC	ST	30	GPM	3	4.5	--	12/28/1981	1	SENWNE	5	2 S	10 E

TABLE 3

WATER RIGHT INFORMATION[a]
Burlington Northern Livingston Shop Complex

WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 10E, SECTION 5 (continued)																			
02S/10E-5G06	42236	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	GWC	DM	30	GPM	1.5	4.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5G06	42236	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	GWC	DM	30	GPM	1.5	4.5	--	12/28/1981	1	SENWNE	5	2 S	10 E
02S/10E-5J02	111603	*	CHURCH UNIVERSAL & TRIUMPHANT INC	G	WELL	43B	GWC	CM	12	GPM	0.54	0.54	--	3/10/2000	1	NWNESE	5	2 S	10 E
02S/10E-5M02	18499	*	BARNEY, SHARI L	G	WELL	43B	GWC	DM	18	GPM	1.5	1.5	--	5/1/1978	1	NWSW	5	2 S	10 E
02S/10E-5M02	18499	*	BARNEY, JAMES J	G	WELL	43B	GWC	DM	18	GPM	1.5	1.5	--	5/1/1978	1	NWSW	5	2 S	10 E
02S/10E-5Q01	117085	*	MYRSTOL POST & POLE CO	G	WELL	43B	GWC	DM	23	GPM	1	2.25	0.5	8/28/2001	1	SWSWSW	5	2 S	10 E
02S/10E-5Q01	117085	*	MYRSTOL POST & POLE CO	G	WELL	43B	GWC	LG	23	GPM	1.25	2.25	0.5	8/28/2001	1	SWSWSW	5	2 S	10 E
02S/10E-5Q02	122441	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	SOC	CM	12	GPM	1.5	1.5	--	11/30/1956	1	SESWSE	5	2 S	10 E
02S/10E-5Q02	122441	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	SOC	CM	12	GPM	1.5	1.5	--	11/30/1956	1	SESWSE	5	2 S	10 E
TOWNSHIP 02S, RANGE 10E, SECTION 6																			
02S/10E-6H02	30022809	--	PETERSON JEANNETTE R	G	WELL	43B	GWC	DM	--	--	--	--	--	4/28/2006	1	SESENE	6	2S	10E
02S/10E-6J01	23964	*	O'DONNELL, EDWARD J	G	WELL	43B	GWC	DM	8	GPM	1.5	1.5	--	8/8/1979	1	NESE	6	2 S	10 E
02S/10E-6J04	112499	*	BEFFERT, VERNE H	G	WELL	43B	GWC	LG	25	GPM	5	6	2	5/12/2000	1	NENESE	6	2 S	10 E
02S/10E-6J04	112499	*	BEFFERT, VERNE H	G	WELL	43B	GWC	DM	25	GPM	1	6	2	5/12/2000	1	NENESE	6	2 S	10 E
02S/10E-6J08	30020305	--	MARTI STEVE	G	WELL	43B	GWC	DM	--	--	--	--	--	3/29/2006	1	SE	6	2S	10E
02S/10E-6J09	58428	*	HARDY, CINDY J	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	4/19/1985	1	SENESE	6	2 S	10 E
02S/10E-6J09	58428	*	HARDY, DOUGLAS R	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	4/19/1985	1	SENESE	6	2 S	10 E
02S/10E-6Q01	73743	*	PETTERSON, ANITA M	G	WELL	43B	GWC	DM	12	GPM	1.5	1.5	--	4/11/1990	1	E2SE	6	2 S	10 E
02S/10E-6Q01	73743	*	PETTERSON, TIM L	G	WELL	43B	GWC	DM	12	GPM	1.5	1.5	--	4/11/1990	1	E2SE	6	2 S	10 E
02S/10E-6Q02	26685	*	JOHNSON, CHARLIE G	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	2/26/1980	1	NESWSE	6	2 S	10 E
02S/10E-6Q02	26685	*	JOHNSON, SUSAN M	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	2/26/1980	1	NESWSE	6	2 S	10 E
02S/10E-6Q07	31178	*	ZANDER, MARIAN V	G	WELL	43B	GWC	IR	30	GPM	1.05	2.55	1.8	1/13/1981	1	SWSWSE	6	2 S	10 E
02S/10E-6Q07	31178	*	ZANDER, MARIAN V	G	WELL	43B	GWC	DM	30	GPM	1.5	2.55	1.8	1/13/1981	1	SWSWSE	6	2 S	10 E
02S/10E-6Q07	31178	*	ZANDER, ROBERT E	G	WELL	43B	GWC	DM	30	GPM	1.5	2.55	1.8	1/13/1981	1	SWSWSE	6	2 S	10 E
02S/10E-6Q07	31178	*	ZANDER, ROBERT E	G	WELL	43B	GWC	IR	30	GPM	1.05	2.55	1.8	1/13/1981	1	SWSWSE	6	2 S	10 E
02S/10E-6Q08	104765	*	BAUMEISTER, MARK TRUST	G	WELL	43B	GWC	DM	18	GPM	1	3.5	1	8/27/1998	1	SWSWSE	6	2 S	10 E
02S/10E-6Q08	104765	*	BAUMEISTER, MARK TRUST	G	WELL	43B	GWC	LG	18	GPM	2.5	3.5	1	8/27/1998	1	SWSWSE	6	2 S	10 E
02S/10E-6Q09	23183	VISSCHER	VISSCHER, JOAN M	G	WELL	43B	GWC	DM	15	GPM	1.5	1.5	--	6/19/1979	1	S2SE	6	2 S	10 E
02S/10E-6Q09	23183	VISSCHER	VISSCHER, ROBERT W	G	WELL	43B	GWC	DM	15	GPM	1.5	1.5	--	6/19/1979	1	S2SE	6	2 S	10 E
02S/10E-6Q10	21499	HENDRICKSON	HENDRICKSON, DEBORAH M	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	1/9/1979	1	NESESWSE	6	2 S	10 E
02S/10E-6Q10	21499	HENDRICKSON	HENDRICKSON, ROBERT D	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	1/9/1979	1	NESESWSE	6	2 S	10 E
02S/10E-6Q11	100826	*	BAUMEISTER, MARK TRUST	G	WELL	43B	GWC	LG	22	GPM	2.5	3.5	1	10/24/1997	1	SESWSE	6	2 S	10 E
02S/10E-6Q11	100826	*	BAUMEISTER, MARK TRUST	G	WELL	43B	GWC	DM	22	GPM	1	3.5	1	10/24/1997	1	SESWSE	6	2 S	10 E
02S/10E-6Q12	108940	*	DARNTON, BYRON T	G	WELL	43B	GWC	DM	20	GPM	1	3.5	1	9/10/1999	1	SESWSE	6	2 S	10 E

TABLE 3

WATER RIGHT INFORMATION[a]
Burlington Northern Livingston Shop Complex

WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 10E, SECTION 6 (continued)																			
02S/10E-6Q12	108940	*	DARNTON, BYRON T	G	WELL	43B	GWC	LG	20	GPM	2.5	3.5	1	9/10/1999	1	SESWSE	6	2 S	10 E
02S/10E-6Q13	30025057	--	VONDRA CHARLES	G	WELL	43B	GWC	DM	--	--	--	--	--	10/30/2006	1	SE	6	2S	10E
TOWNSHIP 02S, RANGE 10E, SECTION 7																			
02S/10E-7B01	53174	RUGGLES	GOODWINE, MICHELLE B	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	11/9/1983	1	NENWNE	7	2 S	10 E
02S/10E-7B01	53174	RUGGLES	GOODWINE, ROBERT G	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	11/9/1983	1	NENWNE	7	2 S	10 E
02S/10E-7B02	35270	OLSON	OLSON, RODNEY D	G	WELL	43B	GWC	DM	30	GPM	1.5	1.5	--	8/14/1981	1	NENWNE	7	2 S	10 E
02S/10E-7B02	35270	OLSON	OLSON, MARCIA B	G	WELL	43B	GWC	DM	30	GPM	1.5	1.5	--	8/14/1981	1	NENWNE	7	2 S	10 E
02S/10E-7B03	87267	*	CARLSON, HARRY W	G	WELL	43B	GWC	DM	18	GPM	1	4.75	1.5	8/11/1993	1	NENWNE	7	2 S	10 E
02S/10E-7B03	87267	*	CARLSON, BARBARA J	G	WELL	43B	GWC	DM	18	GPM	1	4.75	1.5	8/11/1993	1	NENWNE	7	2 S	10 E
02S/10E-7B03	87267	*	CARLSON, BARBARA J	G	WELL	43B	GWC	LG	18	GPM	3.75	4.75	1.5	8/11/1993	1	NENWNE	7	2 S	10 E
02S/10E-7B03	87267	*	CARLSON, HARRY W	G	WELL	43B	GWC	LG	18	GPM	3.75	4.75	1.5	8/11/1993	1	NENWNE	7	2 S	10 E
02S/10E-7B06	99399	PARISI DAVE 2	NELSON, EMMA D	G	WELL	43B	GWC	DM	15	GPM	1	2.88	0.75	9/20/1996	1	NENENW	7	2 S	10 E
02S/10E-7B06	99399	PARISI DAVE 2	NELSON, PETER K	G	WELL	43B	GWC	LG	15	GPM	1.88	2.88	0.75	9/20/1996	1	NENENW	7	2 S	10 E
02S/10E-7B06	99399	PARISI DAVE 2	NELSON, PETER K	G	WELL	43B	GWC	DM	15	GPM	1	2.88	0.75	9/20/1996	1	NENENW	7	2 S	10 E
02S/10E-7B06	99399	PARISI DAVE 2	NELSON, EMMA D	G	WELL	43B	GWC	LG	15	GPM	1.88	2.88	0.75	9/20/1996	1	NENENW	7	2 S	10 E
02S/10E-7B08	68277	PARISI DAVE	PARISI, DAVE	G	WELL	43B	GWC	DM	15	GPM	1.5	1.5	--	7/21/1988	1	N2NWNE	7	2 S	10 E
02S/10E-7B08	68277	PARISI DAVE	PARISI, LAVERN	G	WELL	43B	GWC	DM	15	GPM	1.5	1.5	--	7/21/1988	1	N2NWNE	7	2 S	10 E
02S/10E-7B09	88114	*	MOULLET, CAROL	G	WELL	43B	GWC	DM	23	GPM	1	1.63	0.25	12/15/1993	1	NWNWNE	7	2 S	10 E
02S/10E-7B09	88114	*	MOULLET, CAROL	G	WELL	43B	GWC	LG	23	GPM	0.63	1.63	0.25	12/15/1993	1	NWNWNE	7	2 S	10 E
02S/10E-7B09	88114	*	MOULLET, DON	G	WELL	43B	GWC	LG	23	GPM	0.63	1.63	0.25	12/15/1993	1	NWNWNE	7	2 S	10 E
02S/10E-7B09	88114	*	MOULLET, DON	G	WELL	43B	GWC	DM	23	GPM	1	1.63	0.25	12/15/1993	1	NWNWNE	7	2 S	10 E
02S/10E-7B10	114217	*	SCHOENEN, JEFF	G	WELL	43B	GWC	DM	30	GPM	1	3.5	1	11/17/2000	1	NWNWNE	7	2 S	10 E
02S/10E-7B10	114217	*	SCHOENEN, PAMELA D	G	WELL	43B	GWC	DM	30	GPM	1	3.5	1	11/17/2000	1	NWNWNE	7	2 S	10 E
02S/10E-7B10	114217	*	SCHOENEN, PAMELA D	G	WELL	43B	GWC	LG	30	GPM	2.5	3.5	1	11/17/2000	1	NWNWNE	7	2 S	10 E
02S/10E-7B10	114217	*	SCHOENEN, JEFF	G	WELL	43B	GWC	LG	30	GPM	2.5	3.5	1	11/17/2000	1	NWNWNE	7	2 S	10 E
02S/10E-7B11	623	MONICAL	MONICAL, WALTER E	G	WELL	43B	GWC	DM	20	GPM	--	--	--	10/9/1973	1	SWNWNE	7	2 S	10 E
02S/10E-7C01	91502	*	YANG, EULEE	G	WELL	43B	GWC	DM	20	GPM	1	4.75	1.5	10/19/1994	1	NENENW	7	2 S	10 E
02S/10E-7C01	91502	*	YANG, EULEE	G	WELL	43B	GWC	LG	20	GPM	3.75	4.75	1.5	10/19/1994	1	NENENW	7	2 S	10 E
02S/10E-7C02	117180	BELAND,S	BELAND, ROD	G	WELL	43B	GWC	DM	35	GPM	1.63	1.63	--	10/10/2001	1	NENENW	7	2 S	10 E
02S/10E-7C06	101920	*	REHMER, RENA E	G	WELL	43B	GWC	DM	20	GPM	1	3.81	1.12	7/31/1997	1	NWNENW	7	2 S	10 E
02S/10E-7C06	101920	*	REHMER, RENA E	G	WELL	43B	GWC	LG	20	GPM	2.81	3.81	1.12	7/31/1997	1	NWNENW	7	2 S	10 E
02S/10E-7C08	194597	PERRY	PERRY, ELSIE H	G	WELL	43B	SOC	DM	32	GPM	3	3	1.25	12/31/1948	1	NWNENW	7	2 S	10 E
02S/10E-7C08	194597	PERRY	PERRY, CHARLES R	G	WELL	43B	SOC	DM	32	GPM	3	3	1.25	12/31/1948	1	NWNENW	7	2 S	10 E
02S/10E-7C11	110297	*	BULLOCK, DIXIE L	G	WELL	43B	SOC	DM	25	GPM	2	2	0.5	10/13/1939	1	--	7	2 S	10 E
02S/10E-7C11	110297	*	BULLOCK, GEORGE O	G	WELL	43B	SOC	DM	25	GPM	2	2	0.5	10/13/1939	1	--	7	2 S	10 E
02S/10E-7C13	117220	*	SWINDLEHURST WELL ASSN	G	WELL	43B	GWC	LG	32	GPM	1.2	1.2	0.48	11/16/2001	1	NENW	7	2 S	10 E

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TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)																			
02S/10E-7C17	110106	*	MONTANA HOMES	G	WELL	43B	GWC	DM	7	GPM	1.63	1.63	--	12/15/1999	1	NENW	7	2 S	10 E
02S/10E-7C19	30008547	*	LADUKE JULIE	G	WELL	43B	PRP	MD	57	GPM	13.68	1.47	--	11/10/2003		NW	7	2 S	10 E
02S/10E-7C21	104679	*	WESTER,TODD A	G	WELL	43B	GWC	DM	20	GPM	1.63	1.63	--	7/7/1998	1	NENWNW	7	2 S	10 E
02S/10E-7C21	104679	*	WESTER, KRISTEN	G	WELL	43B	GWC	DM	20	GPM	1.63	1.63	--	7/7/1998	1	NENWNW	7	2 S	10 E
02S/10E-7D01	22413	*	BOOKOUT, LEONARD M	G	WELL	43B	GWC	DM	15	GPM	1.5	1.5	--	4/18/1979	1	NW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, JOHN C	G	WELL	43B	GWC	DM	30	GPM	1	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, SHARON M	G	WELL	43B	GWC	IR	30	GPM	5	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, SHARON M	G	WELL	43B	GWC	LG	30	GPM	2.5	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, SHARON M	G	WELL	43B	GWC	ST	30	GPM	0.09	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, JOHN C	G	WELL	43B	GWC	ST	30	GPM	0.09	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, JOHN C	G	WELL	43B	GWC	LG	30	GPM	2.5	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, JOHN C	G	WELL	43B	GWC	IR	30	GPM	5	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D04	87236	*	SHINN, SHARON M	G	WELL	43B	GWC	DM	30	GPM	1	8.59	3	7/23/1993	1	NENWNW	7	2 S	10 E
02S/10E-7D08	59736	PARK COUNTY	PARK, COUNTY OF	G	WELL	43A	GWC	IR	97	GPM	7.5	7.5	3	7/5/1985	1	S2NWNW	7	2 S	10 E
02S/10E-7D09	95431	*	CARUSO, DONNA M	G	WELL	43B	GWC	LG	25	GPM	1.1	1.1	0.44	8/4/1995	1	W2NWNW	7	2 S	10 E
02S/10E-7D09	95431	*	CARUSO, RICHARD A	G	WELL	43B	GWC	LG	25	GPM	1.1	1.1	0.44	8/4/1995	1	W2NWNW	7	2 S	10 E
02S/10E-7D10	93754	*	CIERI, CARLO	G	WELL	43B	GWC	IR	30	GPM	0.83	1.66	0.66	5/10/1995	1	SWNWNW	7	2 S	10 E
02S/10E-7D10	93754	*	CIERI, CARLO	G	WELL	43B	GWC	LG	30	GPM	0.83	1.66	0.66	5/10/1995	1	SWNWNW	7	2 S	10 E
02S/10E-7E01	1295	*	DAVIS DAVE E	G	WELL	43B	GWC	DM	12	GPM	--	--	--	1/9/1974	1	SWNW	7	2 S	10 E
02S/10E-7E01	1295	*	DAVIS CHRISTIANA	G	WELL	43B	GWC	DM	12	GPM	--	--	--	1/9/1974	1	SWNW	7	2 S	10 E
02S/10E-7F02	30001348	--	POESCHL ANTHONY L	G	WELL	43B	ER	DM	17	GPM	--	3.5	--	3/9/1959	1	SW	7	2S	10E
02S/10E-7F02	30001348	--	POESCHL ANTHONY L	G	WELL	43B	ER	LG	17	GPM	--	3.5	--	3/9/1959	1	SW	7	2S	10E
02S/10E-7F02	30001348	--	POESCHL HENRY M	G	WELL	43B	ER	DM	17	GPM	--	3.5	--	3/9/1959	1	SW	7	2S	10E
02S/10E-7F02	30001348	--	POESCHL HENRY M	G	WELL	43B	ER	LG	17	GPM	--	3.5	--	3/9/1959	1	SW	7	2S	10E
02S/10E-7E04	85100	*	GOLDNER, C M SMOKEY	G	WELL	43B	GWC	DM	15	GPM	1	1	--	3/11/1993	1	SWNW	7	2 S	10 E
02S/10E-7E04	85100	*	GOLDNER, DONNA B	G	WELL	43B	GWC	DM	15	GPM	1	1	--	3/11/1993	1	SWNW	7	2 S	10 E
02S/10E-7E05	106243	JUHNKE	JUHNKE, DAVID	G	WELL	43B	GWC	DM	20	GPM	1.63	1.63	--	2/1/1999	1	SWNWNW	7	2 S	10 E
02S/10E-7E05	106243	JUHNKE	JUHNKE, GAIL	G	WELL	43B	GWC	DM	20	GPM	1.63	1.63	--	2/1/1999	1	SWNWNW	7	2 S	10 E
02S/10E-7E06	63729	*	JUHNKE, DONALD L	G	WELL	43A	ER	DM	25	GPM	1.76	--	--	12/31/1948	1	NWSWNW	7	2 S	10 E
02S/10E-7E06	63729	*	JUHNKE, JOYCE M	G	WELL	43A	ER	DM	25	GPM	1.76	--	--	12/31/1948	1	NWSWNW	7	2 S	10 E
02S/10E-7E06	63729	*	JUHNKE, JOYCE M	G	WELL	43A	ER	ST	25	GPM	--	--	--	12/31/1948	1	NWSWNW	7	2 S	10 E
02S/10E-7E06	63729	*	JUHNKE, DONALD L	G	WELL	43A	ER	ST	25	GPM	--	--	--	12/31/1948	1	NWSWNW	7	2 S	10 E
02S/10E-7E09	14397	POLING	POLING, ANNA M	G	WELL	43B	SOC	DM	5.5	GPM	1.5	1.5	--	6/30/1951	1	SWSWNW	7	2 S	10 E
02S/10E-7E09	14397	POLING	POLING, GARY D	G	WELL	43B	SOC	DM	5.5	GPM	1.5	1.5	--	6/30/1951	1	SWSWNW	7	2 S	10 E
02S/10E-7E13	100677	*	AGLE, BARBARA A	G	WELL	43B	GWC	DM	10	GPM	1	2.25	0.5	1/23/1997	1	SWSENW	7	2 S	10 E
02S/10E-7E13	100677	*	AGLE, ROBERT D	G	WELL	43B	GWC	DM	10	GPM	1	2.25	0.5	1/23/1997	1	SWSENW	7	2 S	10 E

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WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)																			
02S/10E-7E13	100677	*	AGLE, BARBARA A	G	WELL	43B	GWC	LG	10	GPM	1.25	2.25	0.5	1/23/1997	1	SWSENW	7	2 S	10 E
02S/10E-7E13	100677	*	AGLE, ROBERT D	G	WELL	43B	GWC	LG	10	GPM	1.25	2.25	0.5	1/23/1997	1	SWSENW	7	2 S	10 E
02S/10E-7F03	193629	*	POESCHL, TIMOTHY E	G	WELL	43B	SOC	DM	25	GPM	1.5	1.5	0.74	4/18/1959	1	--	7	2 S	10 E
02S/10E-7F05	35493	YARGER	YARGER, ARTHUR L	G	WELL	43B	SOC 2	DM	24.5	GPM	1.5	1.5	0.5	1/1/1944	1	SWSENW	7	2 S	10 E
02S/10E-7F05	35493	YARGER	YARGER, BEVERLY J	G	WELL	43B	SOC 2	DM	24.5	GPM	1.5	1.5	0.5	1/1/1944	1	SWSENW	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	HUDSON, LESLIE N	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	PARLOVA, ALEXIS	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	PARLOVA, JANET	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	SKILLMAN ENTERPRISES INC	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	PARLOVA, ALEXIS	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	PARLOVA, JANET	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	WOODRIFF, R L	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	HUDSON, LESLIE N	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	SKILLMAN ENTERPRISES INC	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F06	40135	HUDSON	WOODRIFF, R L	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	HUDSON, LESLIE N	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	SKILLMAN ENTERPRISES INC	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	PARLOVA, ALEXIS	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	SKILLMAN ENTERPRISES INC	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	HUDSON, LESLIE N	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	PARLOVA, JANET	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	WOODRIFF, R L	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	WOODRIFF, R L	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	PARLOVA, JANET	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F07	40134	*	PARLOVA, ALEXIS	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	HUDSON, LESLIE N	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	SKILLMAN ENTERPRISES INC	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	PARLOVA, JANET	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	PARLOVA, ALEXIS	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	WOODRIFF, R L	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	SKILLMAN ENTERPRISES INC	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	HUDSON, LESLIE N	G	WELL	43B	GWC	LG	16	GPM	5	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	PARLOVA, JANET	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	PARLOVA, ALEXIS	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7F08	40133	*	WOODRIFF, R L	G	WELL	43B	GWC	CM	16	GPM	24	29	2	11/19/1981	1	W2	7	2 S	10 E
02S/10E-7L01	194571[i]	POTW 1	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	0.22	CFS	159	159	--	10/12/1960	1	SWNESW	7	2 S	10 E

TABLE 3

WATER RIGHT INFORMATION[a]
Burlington Northern Livingston Shop Complex

WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)																			
02S/10E-7L02	193767[(i)]	*	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	20	GPM	32.34	32.34	--	12/31/1960	1	SWNESW	7	2 S	10 E
02S/10E-7L04	31228	GARDNER	GARDNER JANE M	G	WELL	43B	GWC	DM	30	GPM	1.5	2.35	1	1/14/1981	1	NESW	7	2 S	10 E
02S/10E-7L04	31228	GARDNER	GARDNER ROGER L	G	WELL	43B	GWC	DM	30	GPM	1.5	2.35	1	1/14/1981	1	NESW	7	2 S	10 E
02S/10E-7L04	31228	GARDNER	GARDNER ROGER L	G	WELL	43B	GWC	IR	30	GPM	0.64	2.35	1	1/14/1981	1	NESW	7	2 S	10 E
02S/10E-7L04	31228	GARDNER	GARDNER ROGER L	G	WELL	43B	GWC	ST	30	GPM	0.21	2.35	1	1/14/1981	1	NESW	7	2 S	10 E
02S/10E-7L04	31228	GARDNER	GARDNER JANE M	G	WELL	43B	GWC	ST	30	GPM	0.21	2.35	1	1/14/1981	1	NESW	7	2 S	10 E
02S/10E-7L04	31228	GARDNER	GARDNER JANE M	G	WELL	43B	GWC	IR	30	GPM	0.64	2.35	1	1/14/1981	1	NESW	7	2 S	10 E
02S/10E-7L05	10871	BROWN	TOWNSEND, TERRY	G	WELL	43B	GWC	DM	13	GPM	--	--	--	1/3/1977	1	N2SW	7	2 S	10 E
02S/10E-7L06	38126	HANKS 2	HANKS, PATRICIA H	G	WELL	43B	ER 2	DM	20	GPM	1.5	1.5	--	12/31/1935	1	SWNESW	7	2 S	10 E
02S/10E-7L06	38126	HANKS 2	HANKS, RALPH R	G	WELL	43B	ER 2	DM	20	GPM	1.5	1.5	--	12/31/1935	1	SWNESW	7	2 S	10 E
02S/10E-7M02	104722	*	JONES, WILLIAM T	G	WELL	43B	GWC	DM	35	GPM	1	2.91	0.75	8/3/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M02	104722	*	JONES, WILLIAM T	G	WELL	43B	GWC	LG	35	GPM	1.88	2.91	0.75	8/3/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M02	104722	*	JONES, WILLIAM T	G	WELL	43B	GWC	ST	35	GPM	0.03	2.91	0.75	8/3/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M03	104671	*	JONES, LETITIA A	G	WELL	43B	GWC	DM	9	GPM	1	6	2	7/1/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M03	104671	*	JONES, GILBERT T	G	WELL	43B	GWC	DM	9	GPM	1	6	2	7/1/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M03	104671	*	JONES, LETITIA A	G	WELL	43B	GWC	LG	9	GPM	5	6	2	7/1/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M03	104671	*	JONES, GILBERT T	G	WELL	43B	GWC	LG	9	GPM	5	6	2	7/1/1998	1	NENWSW	7	2 S	10 E
02S/10E-7M05	30003320	--	JONES WILLIAM	G	WELL	43B	GWC	DM	--	--	--	--	--	8/30/2002	1	NWNENWSW	7	2S	10E
02S/10E-7M05	30003320	--	JONES WILLIAM	G	WELL	43B	GWC	LG	--	--	--	--	0.39	8/30/2002	1	NWNENWSW	7	2S	10E
02S/10E-7M07	80012	*	QUESENBERRY, MAYNARD	G	WELL	43B	GWC	LG	10	GPM	0.4	0.4	0.16	1/2/1992	1	NWNWSW	7	2 S	10 E
02S/10E-7M11	63768	O'CONNOR 1	DOWDEN, GREGORY	G	WELL	43B	GWC	DM	12	GPM	1.5	1.5	--	1/9/1987	1	SENWSW	7	2 S	10 E
02S/10E-7M11	63768	O'CONNOR 1	O CONNOR, ELIODA M	G	WELL	43B	GWC	DM	12	GPM	1.5	1.5	--	1/9/1987	1	SENWSW	7	2 S	10 E
02S/10E-7N01	20458	*	BNSF RAILWAY CO	G	WELL	43B	GWC	IN	40	GPM	1	1	--	9/28/1978	1	SW	7	2 S	10 E
02S/10E-7P09	195139	TONNESON	TONNESEN, RICHARD G	G	WELL	43B	SOC	IR	68	GPM	12	12	4	12/31/1952	1	SESESW	7	2 S	10 E
02S/10E-7P09	195139	TONNESON	TONNESEN, SHERRY L	G	WELL	43B	SOC	IR	68	GPM	12	12	4	12/31/1952	1	SESESW	7	2 S	10 E
02S/10E-7P10	211166	KROHNE 2	KROHNE, CHARLES B	G	WELL	43B	SOC	DM	25	GPM	1.5	1.5	--	7/22/1901	1	SESESW	7	2 S	10 E
02S/10E-7P10	211166	KROHNE 2	KROHNE, JOHN D	G	WELL	43B	SOC	DM	25	GPM	1.5	1.5	--	7/22/1901	1	SESESW	7	2 S	10 E
02S/10E-7P11	211167	KROHNE 3	KROHNE, CHARLES B	G	WELL	43B	SOC	ST	30	GPM	--	--	--	1/1/1930	1	SESESW	7	2 S	10 E
02S/10E-7P11	211167	KROHNE 3	KROHNE, JOHN D	G	WELL	43B	SOC	ST	30	GPM	--	--	--	1/1/1930	1	SESESW	7	2 S	10 E
02S/10E-7Q01	30002989	*	HARRIS, ERLYNN J	G	WELL	43B	GWC	LG	30	GPM	0.73	0.73	0.29	7/22/2002	1	SWSWSE	7	2 S	10 E
TOWNSHIP 02S, RANGE 10E, SECTION 8																			
02S/10E-8A02	101960	*	YELLOWSTONE HOMES	G	WELL	43B	GWC	CM	8	GPM	0.02	0.02	--	8/28/1997	1	NENENE	8	2 S	10 E
02S/10E-8A03	103071	GRAYBEALS APPLIANCE	GRAYBEAL, DAVID G	G	WELL	43B	GWC	CM	10	GPM	0.06	0.06	--	10/31/1997	1	NWNENE	8	2 S	10 E
02S/10E-8B02	112476	YELLOWSTONE VET CLINIC	MURRAY, JAMES O	G	WELL	43B	GWC	DM	25	GPM	1	6.38	2	5/8/2000	1	NWNWNE	8	2 S	10 E

TABLE 3

WATER RIGHT INFORMATION[a]
Burlington Northern Livingston Shop Complex

WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 10E, SECTION 8 (continued)																			
02S/10E-8B02	112476	YELLOWSTONE VET CLINIC	MURRAY, JAMES O	G	WELL	43B	GWC	LG	25	GPM	5	6.38	2	5/8/2000	1	NWNWNE	8	2 S	10 E
02S/10E-8B02	112476	YELLOWSTONE VET CLINIC	MURRAY, JAMES O	G	WELL	43B	GWC	ST	25	GPM	0.38	6.38	2	5/8/2000	1	NWNWNE	8	2 S	10 E
02S/10E-8B03	122440	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	SOC	IN	300	GPM	242.57	242.57	--	3/7/1959	1	NWNWNE	8	2 S	10 E
02S/10E-8B03	122440	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	SOC	IN	300	GPM	242.57	242.57	--	3/7/1959	1	NWNWNE	8	2 S	10 E
02S/10E-8B04	122442	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	SOC	CM	12	GPM	1.5	1.5	--	3/31/1957	1	NWNWNE	8	2 S	10 E
02S/10E-8B04	122442	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	SOC	CM	12	GPM	1.5	1.5	--	3/31/1957	1	NWNWNE	8	2 S	10 E
02S/10E-8B05	122443	*	HEADWATERS WALKING HORSE RANCH LLC	G	WELL	43B	SOC	IN	12	GPM	1.5	1.5	--	2/8/1962	1	NWNENW	8	2 S	10 E
02S/10E-8B05	122443	*	YELLOWSTONE COMMUNITY PARTNERS LLC	G	WELL	43B	SOC	IN	12	GPM	1.5	1.5	--	2/8/1962	1	NWNENW	8	2 S	10 E
02S/10E-8B07	95517	HILLMAN	HILLMAN, EDWARD O	G	WELL	43B	GWC	DM	15	GPM	1.63	1.63	--	9/21/1995	1	SWNWNE	8	2 S	10 E
02S/10E-8B08	95430	KAISER/FRIDLEY	MYRSTOL, CONNIE	G	WELL	43B	GWC	DM	15	GPM	1.63	1.63	--	8/2/1995	1	SENWNE	8	2 S	10 E
02S/10E-8B08	95430	KAISER/FRIDLEY	MYRSTOL, ROCKY	G	WELL	43B	GWC	DM	15	GPM	1.63	1.63	--	8/2/1995	1	SENWNE	8	2 S	10 E
02S/10E-8B09	30020465	--	PARK ELECTRIC COOPERATIVE INC	G	WELL	43B	GWC	DM	--	--	--	--	--	3/24/2006	1	NE	8	2S	10E
02S/10E-8J01	47073	*	PARK COUNTY RANCHERS MARKETING ASSN	G	WELL	43B	GWC	ST	20	GPM	32.25	32.25	--	4/29/1982	1	NWNESE	8	2 S	10 E
02S/10E-8N01	107428	*	WATSON, TED J	G	WELL	43B	GWC	ST	10	GPM	3.83	3.83	--	2/24/1999	1	NWSWSW	8	2 S	10 E
02S/10E-8N01	107428	*	WATSON, GEORGANN	G	WELL	43B	GWC	ST	10	GPM	3.83	3.83	--	2/24/1999	1	NWSWSW	8	2 S	10 E
TOWNSHIP 02S, RANGE 10E, SECTION 18																			
02S/10E-18C01	3531	*	LIVINGSTON, CITY OF	G	WELL	43B	PRP 2	MC	422	GPM	327	327	--	9/6/1974	1	NENENW	18	2 S	10 E
02S/10E-18C04	194598	TOSTOVERNIK	TOSTOVERNIK, RAYMOND L	G	WELL	43B	SOC	IR	29.75	GPM	5	5	1.75	6/30/1948	1	SWNENW	18	2 S	10 E
02S/10E-18D02	193152	DEPUY 2	DEPUY, DAVID W	G	WELL	43B	SOC	CM	100	GPM	80.86	80.86	--	12/31/1947	1	NENWNW	18	2 S	10 E
02S/10E-18D06	33714	*	POWERS, MARION	G	WELL	43B	GWC	DM	10	GPM	1.5	1.5	--	6/12/1981	1	SWNWNW	18	2 S	10 E
02S/10E-18D08	49560	HARPER	POWERS, MARION	G	WELL	43B	GWC	DM	20	GPM	1.5	1.5	--	4/19/1982	1	SWNWNW	**18**	2 S	10 E
02S/10E-18D09	194599	TOSTOVERNIK	TOSTOVERNIK, RAYMOND L	G	WELL	43B	SOC	IR	17	GPM	3	3	1	6/30/1948	1	SENWNW	18	2 S	10 E
02S/10E-18E01	93797	*	DUNLAP, STUART J	G	WELL	43B	GWC	LG	20	GPM	0.25	0.25	0.1	6/7/1995	1	NWSWNW	18	2 S	10 E
02S/10E-18E05	92569	*	TILLETT, TERRY T	G	WELL	43B	GWC	LG	20	GPM	0.43	0.43	0.17	2/1/1995	1	SWSWNW	18	2 S	10 E
02S/10E-18E06	108850	*	MARINO, COYOTE J	G	WELL	43B	GWC	LG	35	GPM	0.63	0.63	0.25	7/28/1999	1	SWSWNW	18	2 S	10 E
02S/10E-18F01	92448	GEYSER	WARNER, TIMOTHY C	G	WELL	43B	PRP	CM	30	GPM	14	14	--	11/21/1994	1	NWSENW	18	2 S	10 E
02S/10E-18F01	92448	GEYSER	WARNER, MARGARET	G	WELL	43B	PRP	CM	30	GPM	14	14	--	11/21/1994	1	NWSENW	18	2 S	10 E
02S/10E-18F02	193768	L STREET	LIVINGSTON, CITY OF	G	WELL	43B	SOC	MC	1.14	CFS	821	821	--	2/28/1955	1	SWSENW	18	2 S	10 E
02S/10E-18F06	108897	*	BARNHART, HELEN	G	WELL	43B	GWC	LG	27	GPM	0.63	0.63	0.25	8/23/1999	1	SWSENW	18	2 S	10 E
02S/10E-18M05	80699	*	ST MARYS CATHOLIC CHURCH	G	WELL	43B	PRP	IR	70	GPM	5	5	2	2/26/1992	1	SWNWSW	18	2 S	10 E
02S/10E-18M06	30014260	*	ST MARYS CATHOLIC CHURCH	G	WELL	43B	GWC	LG	--	--	--	--	--	2/24/2005		SWNWSW	18	2 S	10 E
02S/10E-18N01	103523	LONG 1	LONG, JOHN E	G	WELL	43B	SOC	ST	30	GPM	--	--	--	10/11/1971	1	SESWSW	18	2 S	10 E
02S/10E-18N01	103523	LONG 1	LONG, AGNES C	G	WELL	43B	SOC	ST	30	GPM	--	--	--	10/11/1971	1	SESWSW	18	2 S	10 E
02S/10E-18N02	77933	LONG 2	LONG, JOHN E	G	WELL	43B	PRP	IR	500	GPM	80	81.4	32	6/21/1991	1	SWNWSW	18	2 S	10 E
02S/10E-18N02	77933	LONG 2	LONG, AGNES C	G	WELL	43B	PRP	IR	500	GPM	80	81.4	32	6/21/1991	1	SWNWSW	18	2 S	10 E

TABLE 3

WATER RIGHT INFORMATION[a]
Burlington Northern Livingston Shop Complex

WELL NUMBER[b]	WATER RIGHT NUMBER[c]	ENVIROCON NAME[d]	OWNER	SOURCE[e]	SOURCE TYPE	BASIN	WATER RIGHT TYPE[f]	USE[g]	FLOW RATE	UNIT OF FLOW	USE VOLUME (ACRE FEET)	MAXIMUM VOLUME (ACRE FEET)	MAXIMUM ACRES IRRIGATED	PRIORITY DATE	POD #	TRACT	SECTION	TOWN-SHIP	RANGE
TOWNSHIP 02S, RANGE 10E, SECTION 18 (continued)																			
02S/10E-18N02	77933	LONG 2	LONG, JOHN E	G	WELL	43B	PRP	ST	500	GPM	0.56	81.4	32	6/21/1991	1	SWNWSW	18	2 S	10 E
02S/10E-18N02	77933	LONG 2	LONG, AGNES C	G	WELL	43B	PRP	ST	500	GPM	0.56	81.4	32	6/21/1991	1	SWNWSW	18	2 S	10 E
02S/10E-18N03	103525	*	LONG, JOHN E	G	WELL	43B	SOC	DM	30	GPM	2	2	0.25	10/11/1971	1	SWSW	18	2 S	10 E
02S/10E-18N03	103525	*	LONG, AGNES C	G	WELL	43B	SOC	DM	30	GPM	2	2	0.25	10/11/1971	1	SWSW	18	2 S	10 E
02S/10E-18P01	193733	*	LIVINGSTON GOLF & COUNTRY CLUB	G	WELL	43B	SOC	IR	673.2	GPM	300	300	30	03/15/1953	1	SWNESW	18	2 S	10 E

Notes:

(a) Water right details from Montana Department of Natural Resources and Conservation (DNRC), Water Resources Division (15 January 2007).
(b) Well number assigned by Kennedy/Jenks Consultants based on Township, Range, Section, and 40-acre tract according to U.S. Geological Survey.
(c) DNRC water right number.
(d) Well name assigned by Envirocon, Inc., of Missoula, Montana.
(e) "G" denotes groundwater.
(f) Water right type denoted as follows:
- SOC Statement of Claim
- GWC Ground Water Certificate
- PRP Provisional Permit
- ER Exempt Right

Revision No. 1 updates based on periodic review of GWIC, DNRC, and Cadastral databases are shaded yellow.

(g) Well use categories as defined by DNRC.
- CM Commercial
- DM Domestic
- IN Industrial
- IR Irrigation
- LG Lawn and garden
- MC Municipal
- MD Multiple domestic
- ST Stock

(h) "*" denotes not applicable.
(i) "--" denotes not known.
(j) Water Right no longer exists.

TABLE 4

ENVIROCON WELL INVENTORY INFORMATION
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	ENVIROCON NAME[b]	WELL OWNER	ADDRESS	WELL USE[c]	WELL DEPTH (FEET)	WELL DIAMETER (INCHES)	WELL CONSTRUCTION
TOWNSHIP 02S, RANGE 09E, SECTION 12							
02S/09E-12J02	BALDWIN	BALDWIN	ONLY MAP LOCATION	UNK	--[d]	--	--
02S/09E-12Q01	COUNTS, S	COUNTS, S	608 E. GALLATIN	NOT USED	24	--	--
02S/09E-12Q02	RICCI	RICCI,S	519 N. I	NOT USED	--	--	--
02S/09E-12R03	CIERI	CIERI, C.	408 N. K	NOT USED	27	--	HAND DUG
TOWNSHIP 02S, RANGE 09E, SECTION 13							
02S/09E-13H01	TAYLOR	TAYLOR	ONLY MAP LOCATION	UNK	--	--	--
02S/09E-13J02	D STREET	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
02S/09E-13K01	FARMERS CREAMERY	FARMERS CREAMERY	ONLY MAP LOCATION	UNK	--	--	--
02S/09E-13K03	B STREET	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
02S/09E-13K05	CLINTS	CLINTS	ONLY MAP LOCATION	UNK	--	--	--
02S/09E-13K06	INDUSTRIAL TOWEL	INDUSTRIAL TOWEL	PO BOX 1217	NOT USED	260	8	OPEN-ENDED
02S/09E-13R02	PARK HIGH SCHOOL	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
TOWNSHIP 02S, RANGE 09E, SECTION 24							
02S/09E-24B02	SACAGAWEA	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
TOWNSHIP 02S, RANGE 10E, SECTION 5							
02S/10E-5B01	RUSTAD HOUSE	RUSTAD	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-5P01	O'HARA	O'HARA	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-5R03	HUMANE SOCIETY	HUMANE SOCIETY	ONLY MAP LOCATION	UNK	--	--	--
TOWNSHIP 02S, RANGE 10E, SECTION 6							
02S/10E-6Q09	VISSCHER	VISSCHER, R.	RT. 85, BOX 4152	DR DM	--	6	--
02S/10E-6Q10	HENDRICKSON	HENDRICKSON, R.	DRIFTWOOD DR. LONE ISLAND SUB	DR DM IR	--	--	--
TOWNSHIP 02S, RANGE 10E, SECTION 7							
02S/10E-7B01	RUGGLES	RUGGLES, K.	SEAMAN LANE	DR DM IR	93	4.5	PERFORATED WITH ½" HOLES AT 53'
02S/10E-7B02	OLSON	OLSON, R.	33 SEAMAN LANE	DR DM IR	90	6	PERFORATED IN BEDROCK (32'-35' & 87'-90')
02S/10E-7B06	PARISI DAVE 2	PARISI, DENNIS	--	DM	60	6	PERFORATED (20' - 60')
02S/10E-7B07	STEIN	STEIN, G.	SEAMAN LANE	DR DM IR	100	6	OPEN-ENDED
02S/10E-7B08	PARISI DAVE	PARISI, DAVE	31 SEAMAN LANE	DR DM IR	85	6 (0'-26') 4.5(25'-85')	¼" SLOTS (65' - 85')
02S/10E-7B11	MONICAL	MONICAL, W.	P.O. BOX 1178	DR DM	99.7	6	PERFORATED (60' -100')
02S/10E-7C02	BELAND, S.	BELAND, S.	SEAMAN LANE	UNK	--	--	--
02S/10E-7C03	MARX	MARX, A.	RT. 85, BOX 4136	DR DM IR	67	6	--
02S/10E-7C07	RHEMER	RHEMER, R.	SEAMAN & RT. 85	DR DM	95	6	OPEN-ENDED

TABLE 4

ENVIROCON WELL INVENTORY INFORMATION
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	ENVIROCON NAME[b]	WELL OWNER	ADDRESS	WELL USE[c]	WELL DEPTH (FEET)	WELL DIAMETER (INCHES)	WELL CONSTRUCTION
TOWNSHIP 02S, RANGE 10E, SECTION 7 (continued)							
02S/10E-7C08	PERRY	PERRY	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-7C09	PORTER	PORTER, D	RT. 85	DR DM IR	--	--	--
02S/10E-7C10	WRIGHT	WRIGHT, D	SEAMAN LANE	DR DM IR	--	6	--
02S/10E-7C14	HUGHES	HUGHES	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-7C15	WORTHINGTON	WORTHINGTON, J	RT. 85, BOX 4177 A	DR DM IR	--	6	--
02S/10E-7D08	PARK COUNTY	PARK COUNTY	GREEN ACRE PARK	IR	137	--	--
02S/10E-7E02	NEAD	NEAD, W	RT. 85, BOX 4066	DR DM IR	--	6	--
02S/10E-7E03	SHULINS	SHULINS, V	RT. 85, BOX 1347	DR DM IR	50	6	PERFORATED (35'-50')
02S/10E-7E05	JUNHKE	JUNHKE	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-7E09	POLING	POLING, G	PO BOX 416	DR DM	60	--	OPEN-ENDED
02S/10E-7E10	BICKFORD	BICKFORD, B	RT. 85, BOX 4007	DR DM IR	--	6	--
02S/10E-7E12	O'DELL	O'DELL,L	LLAMA LANE	DR DM IR	65	6 (0'-40') OPEN HOLE (40'-65')	OPEN-ENDED
02S/10E-7E14	MARONEY	MARONEY, G	LLAMA LANE	DR DM IR	--	6	--
02S/10E-7F01	QUESENBERRY	QUESENBERRY, B	RT. 85, BOX 4058	DR DM IR	74	6	1/16" x 2" SLOTS (54' - 74')
02S/10E-7F02	POESCHL	POESCHL, B	RT. 85, BOX 4068	DR DM IR	50	--	--
02S/10E-7F04	PERCIVAL	PERCIVAL, R	RT. 85, BOX 4064	DR DM IR	--	--	--
02S/10E-7F05	YARGER	YARGER, A	RT. 85, BOX 4055	DR DM ST	32	6	OPEN-ENDED
02S/10E-7F06	HUDSON	HUDSON, L	RT. 85 LOT 13 BLOCK 5 MONTAGUE ADDITION	DR DM IR	--	--	--
02S/10E-7F11	PARISI	PARISI, DENNIS	--	UNK	--	--	--
02S/10E-7L01	POTW 1	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-7L03	POTW 2	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-7L04	GARDNER	GARDNER, C	RT. 85, BOX 4022	DR DM IR	65	6	OPEN-ENDED
02S/10E-7L05	BROWN	BROWN, B	RT. 90 MONTAGUE ADDITION	DR DM	78	6	--
02S/10E-7L06	HANKS 2	HANKS, R	PO Box 764	NOT USED	70	6	OPEN-ENDED
02S/10E-7L07	HANKS 1	HANKS, R	PO Box 764	NOT USED	~37	6	OPEN-ENDED
02S/10E-7M08	BRUHA	BRUHA, D	LLAMA LANE	DR DM IR	78.6	6	OPEN-ENDED
02S/10E-7M09	NEVIN	NEVIN, B	LLAMA LANE	NOT USED	--	6	--
02S/10E-7M11	O'CONNOR 1	O'CONNER, G	RT. 85, BOX 4011	DM	35	6	OPEN-ENDED
02S/10E-7M12	O'CONNOR 2	O'CONNER, G	RT. 85, BOX 4011	UNK	--	--	--
02S/10E-7P01	RAINBOW	RAINBOW MOTEL (KEN STRONG)	RT. 85, BOX 4333	IR	24	8	OPEN-ENDED
02S/10E-7P09	TONNESON	TONNESON	--	UNK	--	--	--
02S/10E-7P10	KROHNE 2	KROHNE	1500 E. CALLENDAR	UNK	55	6	OPEN-ENDED
02S/10E-7P11	KROHNE 3	KROHNE	1500 E. CALLENDAR	UNK	24	6	OPEN-ENDED
02S/10E-7P12	KROHNE 1	KROHNE	1500 E. CALLENDAR	UNK	--	18	OPEN-ENDED
02S/10E-7P13	KROHNE	KROHNE	1500 E. CALLENDAR	UNK	--	--	--
TOWNSHIP 02S, RANGE 10E, SECTION 8							
02S/10E-8A01	BOYD TRUCKING	BOYD TRUCKING	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-8A03	GRAYBEALS APPLIANCE	GRAYBEALS APPLIANCE	ONLY MAP LOCATION	UNK	--	--	--

TABLE 4

ENVIROCON WELL INVENTORY INFORMATION
Burlington Northern Livingston Shop Complex

WELL NUMBER[a]	ENVIROCON NAME[b]	WELL OWNER	ADDRESS	WELL USE[c]	WELL DEPTH (FEET)	WELL DIAMETER (INCHES)	WELL CONSTRUCTION
TOWNSHIP 02S, RANGE 10E, SECTION 8 (continued)							
02S/10E-8B02	YELLOWSTONE VET CLINIC	YELLOWSTONE VET CLINIC	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-8B06	PARK LUMBER	PARK LUMBER	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-8B07	HILLMAN	HILLMAN	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-8B08	KAISER/FRIDLEY	KAISER/FRIDLEY	ONLY MAP LOCATION	UNK	--	--	--
TOWNSHIP 02S, RANGE 10E, SECTION 18							
02S/10E-18C01	Q STREET	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18C02	THOMPSON, J	THOMPSON, J	1506 E. LEWIS	UNK	--	--	--
02S/10E-18C03	WOLF	WOLF, D	123 S. N	IR	--	6	--
02S/10E-18C04	TOSTOVERNIK	TOSTOVERNIK	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18D01	DEPUY 1	DEPUY, D (WELL 1)	110 N. N	DM	30	6	OPEN-ENDED
02S/10E-18D02	DEPUY 2	DEPUY, D (WELL 2)	110 N. N	DM	--	6	--
02S/10E-18D03	ILKENHONS	ILKENHONS, G	102 S. N	IR	17.9	6	OPEN-ENDED
02S/10E-18D04	JONES	JONES, W	110 N. O	IR	--	6 (PVC)	--
02S/10E-18D05	TOWNSEND	TOWNSEND, D	117 S. N	IR	--	36	HAND DUG
02S/10E-18D08	HARPER	HARPER, H	121 N. K	DM IR	34	6	OPEN-ENDED
02S/10E-18D09	TOSTOVERNIK	TOSTOVERNIK	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18D10	FREDERICKS	FREDERICKS, D	113 S. L	IR	--	2	--
02S/10E-18D11	HANDL	HANDL	127 S. M	IR	28	--	--
02S/10E-18E04	DUNCAN	DUNCAN	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18E10	BURNS	BURNS, F	423 S. K	IR	--	--	--
02S/10E-18F01	GEYSER	QUISETL, T	GEYSER TRAILER COURT	DR DM IR	--	6	--
02S/10E-18F02	L STREET	CITY OF LIVINGSTON	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18F07	BARNHART	BARNHART, W.L.	EAST VERDE VISTA DR.	NOT USED	44.9	6	OPEN-ENDED
02S/10E-18M02	BOUCHER	BOUCHER	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18M04	POWERS/BOYD	POWERS/BOYD	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18N01	LONG 1	LONG	ONLY MAP LOCATION	UNK	--	--	--
02S/10E-18N02	LONG 2	LONG	ONLY MAP LOCATION	UNK	--	--	--

Notes:

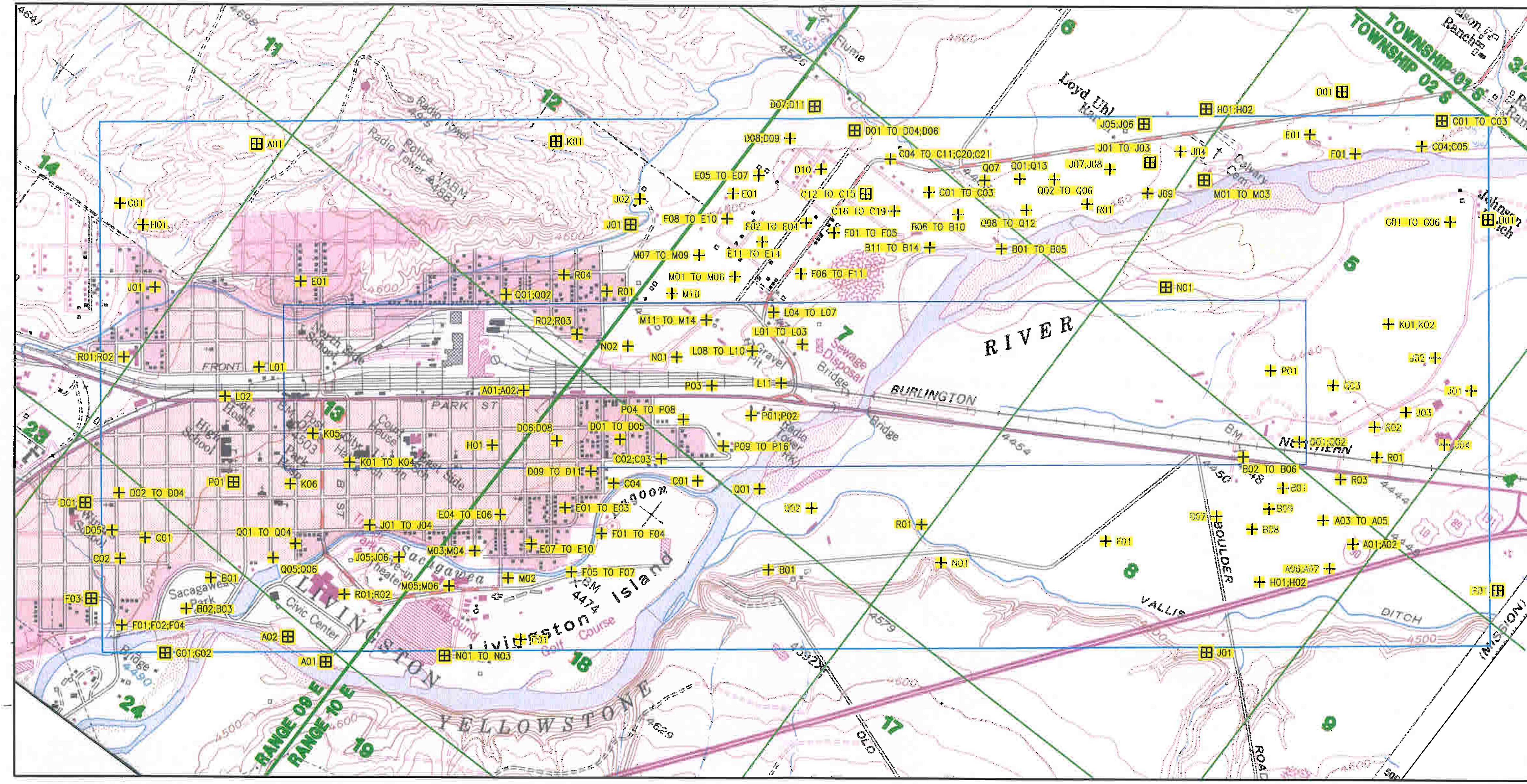
(a) Well number assigned by Kennedy/Jenks Consultants based on Township, Range, Section, and 40-acre tract according to U.S. Geological Survey.
(b) Well name assigned by Envirocon, Inc., of Missoula, Montana.
(c) Well use categories as defined by Envirocon.

DR	Drinking
DM	Domestic
IR	Irrigation
ST	Stock
UNK	Unknown

(d) "--" denotes not known.

Revision No. 1 updates based on periodic review of GWIC, DNRC, and Cadastral databases are shaded yellow.

Figure



LEGEND

⊞	PRIVATE/PUBLIC WELL LOCATION
+	APPROXIMATE PRIVATE/PUBLIC WELL LOCATION
▭	APPROXIMATE INNER WELL SEARCH BOUNDARY
▭	1/2 MILE RADIUS FROM INNER WELL SEARCH BOUNDARY
⌃	SECTION BOUNDARY
24	SECTION NUMBER

NOTE:

40–ACRE TRACT AND SEQUENCE NUMBER CORRESPONDS TO THE LAST PORTION OF THE WELL NUMBER SHOWN IN TABLE 1. FOR EXAMPLE, WELL F03 LOCATED IN TOWNSHIP 02S, RANGE 09E AND SECTION 24, IS DESIGNATED 02S/09E–24F03.

0 700 1400

APPROXIMATE SCALE IN FEET

N

Kennedy/Jenks Consultants

BURLINGTON NORTHERN LIVINGSTON SHOP COMPLEX – LIVINGSTON, MT

PRIVATE AND PUBLIC WELL LOCATIONS

0796021.16/WS/P07SK001

1/07 (Revision No. 1)

FIGURE 1

Appendix A

U.S. Geological Survey - Well Numbering System

APPENDIX A

U.S. GEOLOGICAL SURVEY
WELL NUMBERING SYSTEM

The U.S. Geological Survey (USGS) well numbering system is based on the geographic location of the wells. Wells located within the United States are identified by the well numbering system used in the State of Washington.

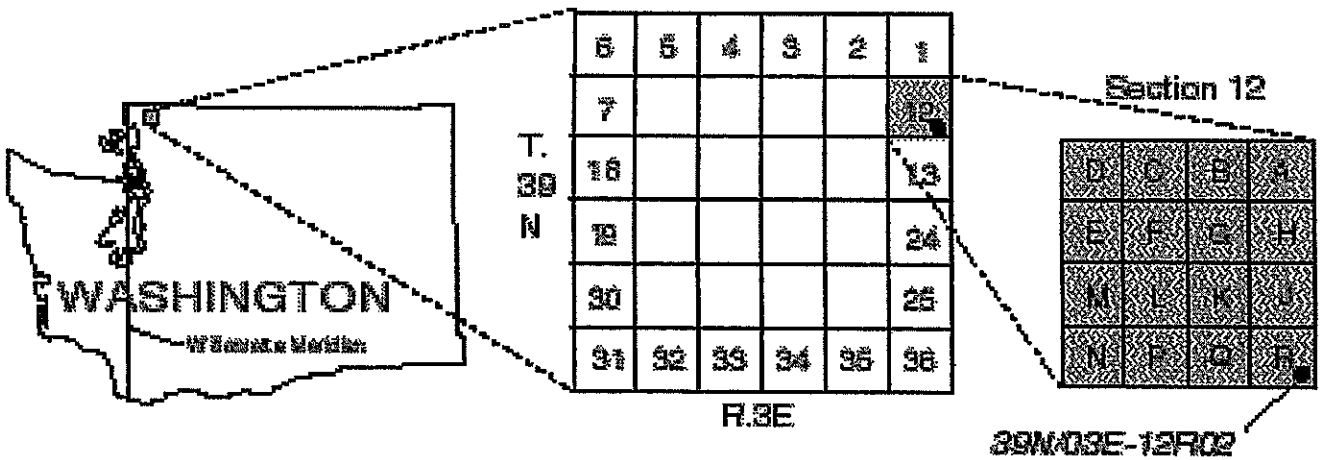
The well numbering system used in the State of Washington is based on the rectangular grid system of the Public Land Survey. The Willamette Meridian and baseline form the basis of a grid system that indicates Township, Range, Section, and 40-acre tract. The well number is created by first listing the number of the Township and Range followed by the Section number and letter representing the 40-acre subsection. For example (as shown on the attached figure), well 39N/03E-12R02 is located in Township 39 north and Range 3 east, which is north and east of the Willamette Meridian and baseline. Following the hyphen, the two-digit number indicates that the well is in Section 12. The letter “R” indicates the appropriate 40-acre tract within the section. The last number “02” is the sequence number and indicates that this is the second well in this tract.

The Montana Principal Meridian and baseline were used to identify Township, Range, Section, and 40-acre tract in the City of Livingston and surrounding area.

REFERENCES

<http://wa.water.usgs.gov/projects/wria01/data/textGW1.html>
<http://wa.water.usgs.gov/projects/wria01/images/wellnos.sm.gif>

(a) State of Washington well-numbering system



Source: <http://wa.water.usgs.gov/projects/wria01/images/wellnos.sm.gif>

Appendix B

Well Logs

Township 02S, Range 09E, Section 12

Well Logs

025 09E 12 DDB

MONTANA WELL LOG REPORT

Form No. 503 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: Vince Hillman
Mailing address: P.O. Box 1855
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ SE ¼ SE ¼ ____ ¼, Section 12
Township 2 ☐ N/S Range 9 ☒ E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☒ Yes ☐ No
Latitude 45 40.28N Longitude 110 33.13W
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. 6 in. from 0 ft. to 60 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 +2 ft. to 33 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4 1/2 in. from 30 ft. to 60 ft.

Perforations/Slotted Pipe:
Type of perforator used Mill
Size of perforations/slots 1/8 in. by 1 1/2 in.
____ no. of perforations/slots from 40 ft. to 60 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 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 26 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*
35 gpm with drill stem set at 58 ft. for 1 hours
Time of recovery 1/2 hrs/min. Recovery water level 26 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 reservoir of the well casing.*

7. WELL LOG: HB

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	Tan Clay
15	32	Sand & Gravel
32	60	Brown Shale

☐ ADDITIONAL SHEETS ATTACHED

RECEIVED
NOV 06 2006
M.B.M.G.

8. DATE WELL COMPLETED: 6/25/06

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) Hillman Drilling
Address P.O. Box 1855 Liv
Signature [illegible]
Date 8/9/06 License no. 436

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MBMG ID# 230758

BUREAU OF MINES COPY

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 43B-C115481

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: Della Weibert
Mailing address: P.O. Box 1241
Livingston MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ SE ¼, Section 12
Township 2 N/S Range 9 E/W County Park
Lot ____, Tract/Blk 1 Subdivision Name ____
Well Address C.O.S. # 634
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. 6 in. from 0 ft. to 230' ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☒ Welded
Dia. 6 5/8" in. from -2' ft. to 18' ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from 170' ft. to 230' ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from 170' ft. to 230' 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 Bentonite Grout
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 85' 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* 20 gpm with drill stem set at 210' ft. for 1 hours
Time of recovery 1 0 hrs/min. Recovery water level 85' 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: HB

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	17	Sandy Shale
17	106	Hard Gray Sandstone
106	153	Shale Sandstone (Gray)
153	230	Sandstone light Gray

RECEIVED
MAR 0 9 2001
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 3-6-01

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) Bridger Drilling Inc.
Address P.O. Box 4087 Bozeman MT 59772
Signature ____
Date 3-6-01 License no. 425

Form No. 603 R8/83 JUL 10 1984 067 025 04E 12DAB DNR# Park

File No. 55219

BOZEMAN

MONT. DEPT. of NATURAL RESOURCES & CONSERVATION

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completio 024237

1. WELL OWNER
Name Della R. Baldwin

2. CURRENT MAILING ADDRESS
600 N. A
Liv. Mt. 59047

3. WELL LOCATION
County Park
Township 2 N/S Range 9 E/W
NW ¼ NE ¼ SE ¼ Section 12
Lot _____ Block _____
Subdivision _____
See attached

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

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	6" 17lb	0	55			

Was casing left open end? _____ Yes X 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? _____
Material used in grouting _____
Well head completion: Pitless adapter
X Yes _____ No
Top of casing 12 in. or greater above grade
X Yes _____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
_____ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 47 feet below land surface
If flowing; closed-in pressure _____ psi
_____ gpm
Controlled by: _____ valve, _____ reducers, _____ other, (specify) _____

9. WELL TEST DATA _____ pump _____ bailer
X other, (specify) air
Pumping water level below land surface:
60 ft. after 1 hrs. pumping 10 gpm
_____ ft. after _____ hrs. pumping _____ gpm

10. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

11. DATE COMPLETED 6/13/84

12. WELL LOG

Depth (ft.) From	To	Formation
0	55	Sand, gravel & clay
55	60	Sandstone

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

6/13/84
Date

[signature] Drilling
Firm Name

Livingston, Mt.
Address

[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**

32 SOUTH EWING HELENA, MONTANA 59620 449-3962

STATE PUBLISHING CO., HELENA, MONT.

M: 96969

DEPARTMENT - BUREAU COPY

96969

2509 E 1200

Park

WELL LOG REPORT

File No. 43B-83241

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

095459

1. WELL OWNER
Name Jim Smith

2. CURRENT MAILING ADDRESS
1205 E Montana
Livingston MT 59047

3. WELL LOCATION
N2 SE ¼ SE ¼ Section 12
Township 2 N/S Range 9 E/W County PA
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name City of Livingston
Tract Number 1205 E Montana

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. 6 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 5/8 from +2 ft. to 26 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 10 ft. to 40 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations ½ hole in. by _____ in.
_____ perforations from 20 ft. to 40 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 22 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 40
d) The pumping rate: 20 gpm.
e) Pumping water level 25 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 22 ft. at ½ 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

Depth (ft.) From	To	Formation
0	4	Topsoil
4	18	Sand + Gravel
18	24	Blue Clay
24	40	Blue Shale

RECEIVED
SEP 09 1992
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

+13

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 9/1/92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
9/1/92
Date
Vance Hillman Drilling
Firm Name
6 Lancelot Lane Bozeman
Address
Signature
4136
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

Send To
DNRC
11 N Tracy
Bozeman MT
59715

DEPARTMENT—BUREAU COPY

M: 133313

FORM NO. 603 (R 6-94)

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: DAVID & JEANNE BURLEY

2. CURRENT MAILING ADDRESS
1104 E. GALLATIN ST
LIVINGSTON MT 59047

3. WELL LOCATION
SE ¼ SE ¼ SE ¼ Section 12
Township 2 N/S Range 9 E/W County PARK
Govn't Lot _____, or Lot 29, Block _____
Subdivision Name LIVINGSTON - MINN ADD.
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☒
Other ☐ specify _____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 49 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 21 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness .250
Casing; Plastic Dia. 4½ from 9 ft. to 49 ft.
Weight 160# Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
100 perforations from 29 ft. to 49 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? 20 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION: N/A
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed) N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 26 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 45
d) The pumping rate: 19 gpm.
e) Pumping water level 45 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 26 ft. at ½ 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

Depth (ft.) From	To	Formation
0	6	DARK HEAVY CLAYS - MOIST STICKY - SOME GRAVEL
6	18	GRAVEL & COBBLES
18	49	SANDSTONE - VERY HARD BLUISH GREEN TO GRAY SOME THIN BEDS OF SHALE - VERY HARD - REDDISH GRAY
		(35-38 - 14 gpm)
		(45-46 - 5 gpm)

RECEIVED
MAY 12 1995
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 3-4-95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3-4-95
Date
HAYES DRILLING
Firm Name
511 N MONTANA AVE #A BOZEMAN 59715
Address
Signature
361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

MAY 31 1995

M: 151239

Township 02S, Range 09E, Section 13

Well Logs

ENVIROCON WELL LOG

Well: MW1

Project: JONES OIL

Owner: MRL

Location: 13' W. of office & 2' S. of office S. wall

Project No: 14174

Diameter: 4"

Date Drilled: 05-03-00

Total Depth: 29'

Initial WL: ~23' bgs

Surface Elev:

Elevation TOC:

Slot Size: .020"

Screen Dia: 4"

Length: 10'

Type: PVC

Casing Dia: 4"

Length:

Drilling Co: Hillman

Drilling Method: Air Rotary

Driller: Roy Lewis

Logged By: Dan McCaffery

DEPTH (ft)	SAMPLE NO.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0–6	6–12	12–18	Recovery in inches	U.S.C.S SOIL TYPE	Const.	DESCRIPTION/SOIL CLASSIFICATION (Color, Texture, Structures)
									GP		Sandy cobbles
											1'6"
5'											
											3/8" Bentonite
10'											
											No odors in off-gas No stained Soils.
13'											
15'											
											16'6"
											@18.5' strong odors, slightly stained soils.
19'	MW1-19'	GRAB	19	19.5							19'
20'											
23'	MW1-23'	GRAB	23	23.5							Sand (moist/wet)
25'											
											29' Total Depth of Well Casing
30'											30' Total Depth of Boring
35'											

ENVIROCON WELL LOG

Well: MW2

Project: JONES OIL

Owner: MRL

Location: 30' W. of office/garage & 8' S. of N. edge of office

Project No: 14174

Diameter: 4"

Date Drilled: 05-02-00

Total Depth: 28'8"

Initial WL: 23' bgs

Surface Elev:

Elevation TOC:

Slot Size: .020"

Screen Dia: 4"

Length: 10'

Type: PVC

Casing Dia: 4"

Length:

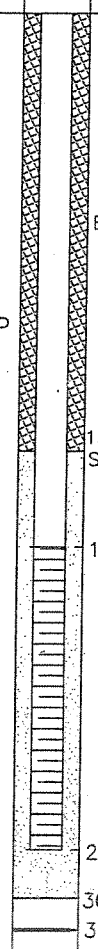
Drilling Co: Hillman

Drilling Method: Air Rotary

Driller: Roy Lewis

Logged By: Dan McCaffery

DEPTH (ft)	SAMPLE NO.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0–6	6–12	12–18	Recovery in inches	U.S.C.S SOIL TYPE	DESCRIPTION/SOIL CLASSIFICATION (Color, Texture, Structures)
5'										
10'										
10.5'	MW2-10'	GRAB	10	10.5				6"	GP	Tan grey sands, lg. cobbles
15'			15	16				NA		
19'	MW2-19'	GRAB	19					NA		Ground-up cobbles, probably GP. Soils stained, strong petroleum odor
20'										
25'										
30'										
35'										



Bozeman

25 9E 10 DC

File No. 43B-93642

110255

WELL LOG REPORT

FORM NO. 603 (R 6-94)

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: Jeanett Hillman

2. CURRENT MAILING ADDRESS
Rte 62 Box 3114
Livingston, MT 59047

3. WELL LOCATION
NE ¼ SW ¼ NW ¼ Section 13
Township 2 N/S Range 9 E/W County Park
Govn't Lot ____, or Lot 31, Block 27
Subdivision Name CITY OF LIVINGSTON
Tract Number ____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☒
Other ☐ specify ____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 180 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 58 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 40 ft. to 180 ft.
Weight 160 Dia. ____ from ____ ft. to ____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations ⅛ Hole in. by ____ in.
____ perforations from 120 ft. to 180 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 83 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 180
d) The pumping rate: 10 gpm.
e) Pumping water level 175 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 83 ft. at ½ 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

Depth (ft.) From	To	Formation
0	1	Topsoil
1	56	Sand Gravel + Clay
56	180	Blue Shale

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ____

14. DATE COMPLETED 3/3/95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 3/8/95
Firm Name: Vince Hillman Drilling
Address: 1030 Mary Rd Bozeman
Signature: [signature] License No. 436

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610

DEPT OF NATURAL RESOURCES
AND CONSERVATION
601 NICKLES, STE #2
BOZEMAN MT 59715

DEPARTMENT COPY
DRILLER: Please give this copy to the well owner to complete the
OWNER: Complete reverse side and send to DNRC when the well is completed
and the water has been used beneficially for the intended purpose.

M-148799

WELL LOG NOT AVAILABLE

M:7129

BOZEMAN

067 T 2 S R 9 E 13 DA

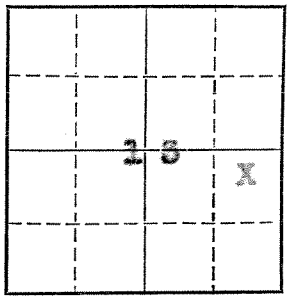
County PARK 033298

Montana Bureau of Mines and Geology

MONTANA BUREAU OF MINES AND GEOLOGY

Butte, Montana

WATER WELL LOG "D" Street



Owner City of Livingston, Municipal Water Works Address Livingston, Mont.

Driller Layne - Minnesota Address Minneapolis, Minn.

Date Started Nov. 1954 Date Completed Feb. 1955

Location: Sec. 13 T 2 S R 9 E ¼ sec. NE¼, SE¼

Type of well Drilled (Dug, driven, bored, or drilled) Equipment used Cable Tool (Churn drill, rotary, other)

Water use: Domestic ☐ Municipal ☒ Stock ☐ Irrigation ☐

Industrial ☐ Drainage ☐ Other:

Casing: 0 ft. to 32'7" ft. Type Steel Size 16 "

Casing: 0 ft. to 19' ft. Type " Size 48 "

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 22 to ft. 32 Ft. to ft.

Type of screen or perforations Stainless Steel Shutter

Static Water level, for non-flowing well: 6' 10" feet.

Shut-in pressure, for flowing well: lb./sq. in. on: (date)

Pumping water level 17 feet at 600 gal. per min.

How tested: Test Pumped, 500 G P M -

Length of test 10 Hrs.

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

Double Gravel Packed. Top 20' Grouted

(over)

M:96972

96972

Form No. 603 (Rev. 7/76)

STATE OF MONTANA

25 09E 13DACC

Department of Natural Resources and Conservation

File No. _____

White-Department
Yellow-Department
Pink-Well Owner
Gold-Driller

WELL LOG REPORT

033799

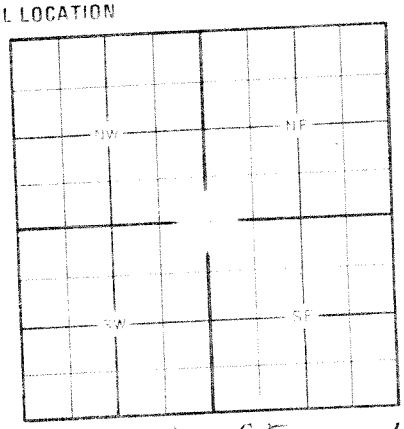
State law requires that this form be filed by the water well driller within 60 days after completion of the well, ~~and Form 602, Notice of Completion of Groundwater Development~~, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name City of Livingston

2. CURRENT MAILING ADDRESS
414 E Callender
Livingston Mont 59047

3. PROPOSED USE ____ domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) Geothermal test

4. WELL LOCATION



SW ¼ SW ¼ NE ¼ SE ¼ Section 13
T. 2 S ~~N~~ or S R. 9 E E or ~~W~~
OR, Lot 14 Block 109
Subdivision ____
City Livingston County Park
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"	6" 19#	0	44			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
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.) ____

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) air
Pumping level below land surface:
82 ft. after 1/2 hrs. pumping 35 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes ____ No
If yes, how? ____

10. DATE STARTED ____
DATE COMPLETED ____

11. WELL LOG

Depth (ft.) From	To	Formation
0	38	Gravel & Sand
38	100	Blue shale

(use separate sheet if necessary)

RECEIVED
FEB 1 1979

12. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

12/22/78
Date

Sullivan Drilling
Firm Name

Rt 85 Livingston MT 59047
Address

Ed Sullivan 258
Signature License No.

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 817

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 Caroline E. Chapel
MAILING ADDRESS 314 S. C Street
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ SW ¼ NE ¼ SE ¼, Section 13
Township 2S N/S Range 9E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 316 S. C St., Livingston
GPS [X] Yes [ ] No
Latitude 0534714 Longitude 5006186
Error as reported by GPS locator (± feet) 34
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [X] Irrigation
[ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 39 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 37 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 [X] No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 13 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch

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*
60+ gpm with drill stem set at 35 ft. for 1 hours
Time of recovery 1/2 hr. hrs/min. Recovery water level 13 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: HB

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	39	Sand, gravel & small boulders

RECEIVED
AUG 3 1 2004
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 05/03/2004

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 05/13/2004 License no. 361/074

MBMG ID# 213623

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

Bureau

Bozeman

2S09E13 DAD

Form No. 603 (R 2-89)

#1

WELL LOG REPORT

File No. T078761-43B

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

084004

1. WELL OWNER
Name Livingston School Dist. #4

2. CURRENT MAILING ADDRESS
132 South B.
Livingston MT 59047

3. WELL LOCATION
SE ¼ NE ¼ SE ¼ Section 13
Township 2 ~~S~~/S Range 9 E/~~W~~ County Park
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. 6 in. from 0 ft. to 30 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 28 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type 453B 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 _____
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? 20 ft.
Material used in grouting Cont fed Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 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 30
d) The pumping rate: 95 gpm.
e) Pumping water level 25 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 5 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 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

Depth (ft.) From	To	Formation
0	3	Sand + Gravel

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8/21/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8/21/91
Date

Vince Hillman Drilling
Firm Name

6 Lancelot Lane Bozeman
Address

Vince Hillman 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 124896

DEPARTMENT — BUREAU COPY

Bozeman

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 78762-43B

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

084044

1. WELL OWNER
Name Livingston School Dist. #4

2. CURRENT MAILING ADDRESS
132 South B
Livingston MT 59047

3. WELL LOCATION
SE ¼ NE ¼ SE ¼ Section 13
Township 2 N/S Range 9 E/W County Park
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. 6 in. from 0 ft. to 30 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 28 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B 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 _____
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? 20 ft.
Material used in grouting Cont. fed Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 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 90
d) The pumping rate: 45 gpm.
e) Pumping water level 25 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 5 ft. at ½ 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

Depth (ft.) From	To	Formation
0	30	Sand + Gravel

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8/21/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8/21/91
Date

Vince Hillman Drilling
Firm Name

6 Lancelot Lane Bozeman
Address

[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

DEPARTMENT — BUREAU COPY

M: 124899

BOZEMAN

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—41933

T 2S R 9E 13

File No.

County Park

TRIPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER
OFFICE OF STATE ENGINEER

033296

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level 4495.31)

0' — 25' Sand and gravels.

25' — 34'6" Claybound sand and gravels, (dry)

34' 6" — 40' Sand and fine gravels. (water)

40' — 43' Clean coarse sand and gravels. (water)

T.D. 43'

Owner Farmers Creamery Address Livingston, Mont.

Driller Van Dyken Drilling Co. Address Bozeman, Mont.

Date of Notice of Appropriation of Groundwater none

Date well started April 23/64 Date Completed April 28/64

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)
6"	6 5/8" O.D. 19½ [illegible] Prime steel	0	43'	½"x3" slots	38'	40'

Static Water Level for non-flowing Well 20' feet.

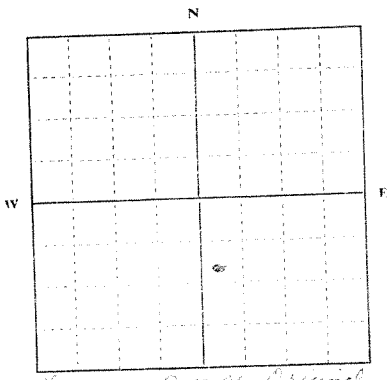
Shut-in Pressure for Flowing Well none

Pumping Water Level 22' feet at 50 gal. per minute.

Discharge in gal. per min. of flowing well none

How Tested Bailer Length of Test 1hrs.

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)



N

W E

Lot One Block 96 Original Townsite

¼ Sec. 13 T. 2S R. 9E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

License No 1

Driller's License Number

Bert Van Dyken

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.

M:96971

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.

BOZEMAN 067 02S 09E 13DB PARK

3 GW 2 Revised 1969
13—3M—10/69

County PARK

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

RECEIVED 1971

DRILLER'S 033300

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 CITY OF LIVINGSTON TEST WELL AT CITY SHOPS.

Address LIVINGSTON, MONT.

Date well started Nov.2/70

completed Nov.30/71

For Administrator's Use

File

GW 1

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used Cable tools. (Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

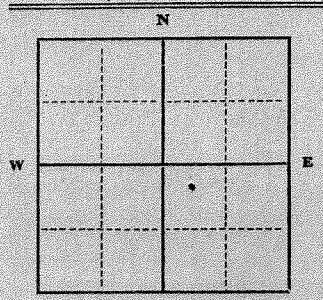
*Describe 6" test well located by the city shops.

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6/5/8" O.D.	0	73'	¼x3" Slots.	54 67	56 72

N W E S



NW ¼ SE ¼ Sec. 13

T. 2S N/S R. 9E E/W

Static water level 20 ft.*

Pumping water level 24'4" ft.*

at 210 gallons per minute, measured 120 minutes after pumping began.

*Measured from ground level.

Well developed by Surging for 4 hours.

Power Pump HP

Remarks: (Gravel packing, cementing, packers, type of shutoff) after testing casing was pulled. P&A.

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature VAN DYKEN DRILLING CO. Bert Van Dyken

Driller's Address BOZEMAN, MONTANA

LICENSE NO. 1

Indicate the characteristics of strata such as soil, clay, 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)	
0	7	Clays.
7	10	Sand and gravels. fine to coarse with clay binder.
10	15	Claybound sand and gravels.
15	20	Sand with gravels fine to coarse with clays.
20	25	Sand with gravels, fine to coarse.
25	30	Sand, fine, dirty.
30	32	Sand and gravels, fine to coarse.
32	40	Sand, fine to coarse dirty, water.
40	44	Sand and gravels. fine to coarse. Some clay lenses.
44	45	Sand, fine to coarse.
45	65	Sand and gravels. fine to coarse. water, dirty.
65	70	Sand and gravels. fine to coarse. more water.
70	73	Fine dirty sands.
73	7	Hard brown clays.

* 73' Show exact depth of bottom

96974

FORM No. 603 New 7-73

RECEIVED

AUG 12 1974

MONT. DEPT. OF NATURAL RESOURCES & CONSERVATION

File No. 25 30

43B

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PINK — BUREAU
CANARY — WELL OWNER
GOLDENROD — DRILLER

033795

WELL LOG REPORT

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 CITY OF LIVINGSTON Address LIVINGSTON, MONTANA

2. WELL LOCATION: County PARK "B" & LEWIS STREETS - WELL No. 5 ; NW¼ NW¼ SE¼, Sec. 13, Twp. 2 N-S, Rg. 9 E-W

3. PROPOSED USE: ___ Domestic ___ Stock x Municipal ___ Industrial ___ Lawn and Garden ___ Irrigation ___ Other (*if other, specify*)

4. METHOD DRILLED: ___ Cable ___ Bored ___ Forward Rotary ___ Reverse Rotary ___ Jetted x Other (*if other, specify*) POWER AUGER

5. WELL CONSTRUCTION:
Diameter of hole 42 inches. Depth 60 ft.
Casing: x Steel ___ Plastic ___ Concrete ___ Threaded x Welded ___ Other (*if other, specify*)

Pipe Weight:	Dia.:	From:	To:
190.7 lb/ft.	48 inches	0 feet	30 feet
78.6 lb/ft.	20 inches	+2'6" feet	40 feet
___ lb/ft.	___ inches	___ feet	___ feet

Was perforated pipe used? ___ Yes x No
Length of pipe perforated -- feet
Was casing left open end? ___ Yes x No
Was a well screen installed? x Yes ___ No
Material STAINLESS STEEL Dia. 20 inches (*stainless steel, bronze, etc.*)
Perforation type: x slots ___ holes
Size 0.150 set from 40 feet to 60 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? x Yes ___ No
To what depth? 30' feet
Material used in grouting CONCRETE
Well head completion: Pitless adapter ___
12" above grade x Other ___
(*If other, specify*)
Was the well disinfected? x Yes ___ No

6. WATER LEVEL:
Static water level 20 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: x Pump ___ Bailer ___ Other (*If other, specify*)
Pumping level below land surface:
38 ft. after 12 hrs. pumping 508 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	5	SAND & SMALL GRAVEL
5	20	COARSE GRAVEL (DRY)
20	40	COARSE SAND AND BOULDERS
40	48	COARSE SAND & GRAVEL (LOOSE)
48	60	GRAVEL AND BOULDERS (TIGHT)
60	73	GRAY CLAY
		Lat 45°39'43" Long 110°33'34"
	Alt	4500

(*Use separate sheet if necessary*)

9. DATE STARTED: APRIL 18, 1974

10. DATE COMPLETED: JULY 24, 1974

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.

LAYNE MINNESOTA COMPANY 76
Driller's or Firm Name *License No.*

3147 CALIFORNIA ST. N.E. MPLS, MINN. 55418
Address

Signed by D. C. VRY AUGUST 8, 1974
Date

M: 96975

Form No. 603 R8/83

JUL 10 1984 067 23 4C 13 000

MONT. DEPT. of NATURAL RESOURCES & CONSERVATION

File No. 080394

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 Big Sky Service Co

2. CURRENT MAILING ADDRESS
Box 1217
Livingston Mt. 59047

3. WELL LOCATION
County Park
Township ____ N/S Range ____ E/W
____ ¼ ____ ¼ ____ ¼ Section ____
Lot 13 Block 94
Subdivision City

4. PROPOSED USE Domestic ☐ Stock ☐ Irrigation ☐
Other ☐ specify ____

5. DRILLING METHOD ____ cable, ____ bored,
X 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)
8"	8" 19	0	35			

Was casing left open end? ____ Yes X No
Was a packer or seal used? ____ Yes X No
If so, what material ____
Was the well gravel packed? ____ Yes X No
Was the well grouted? ____ Yes X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter
X Yes ____ No
Top of casing 12 in. or greater above grade
X Yes ____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
____ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 10' feet below land surface
If flowing; closed-in pressure ____ psi
____ gpm
Controlled by: ____ valve, ____ reducers,
____ other, (specify) ____

9. WELL TEST DATA ____ pump ____ bailer
X other, (specify) air
Pumping water level below land surface:
260 ft. after 2 hrs. pumping 50 gpm
____ ft. after ____ hrs. pumping ____ gpm

10. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

11. DATE COMPLETED 6/12/84

12. WELL LOG

Depth (ft.) From	To	Formation
0	35	Sand Gravel & Clay
35	260	Blue Shale

HB

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

6/13/84
Date

Hillman Drilling
Firm Name

Rte 84 Box 4286 Livingston
Address

Dennis Hillman 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
32 SOUTH EWING HELENA, MONTANA 59620 449-3962 **DNRC**

TATE PUBLISHING CO., HELENA, MONT.

DEPARTMENT - BUREAU COPY

M: 89041

Bozeman

025 048 13 CHD

WELL LOG REPORT

File No. 43B-92558

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.

108737

1. WELL OWNER
Name: MARK & HELEN EGELAND

2. CURRENT MAILING ADDRESS
315 NORTH 3RD
LIVINGSTON MT 59047

3. WELL LOCATION
NW ¼ NE ¼ SW ¼ Section 13
Township 2 N/S Range 9 E/W County PARK
Govn't Lot ____, or Lot 14, Block 44
Subdivision Name ORIGINAL TOWNSITE OF
Tract Number LIVINGSTON

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ Specify LAWN + GARDEN

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6" in. from 0 ft. to 51' 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 51 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A-53 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 ____
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? 20 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No N/A

9. PUMP (if installed) N/A
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 25' ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 46'
d) The pumping rate: 35 gpm.
e) Pumping water level 26' ft. at 2 hrs. after pumping began.
f) Duration of test: Pumping time 2 hrs.
g) Recovery time 1min hrs.
h) Recovery water level 25' ft. at ½ 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

Depth (ft.) From	To	Formation
0	3	TOPSOIL
3	9	DARK LOAMY CLAY
9	38	SAND, GRAVEL + COBBLES.
38	52	GRAVELS, COBBLES SOME SAND. - CLAYBOUND
		LIGHT AT 38'
		LOT OF CLAY AT 52'
		BUT GOOD FLOW

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4-28-94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 4/28/94
Firm Name HAYES DRILLING
Address 5805 BOXWOOD DR. BOZEMAN MT 59715
Signature [signature] License No. 361

RECEIVED
JUL 01 1994 HB
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

M: 47155

2 S 09 E 13 CA

Bozeman

WELL LOG REPORT

File No. 085382

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: Livingston Depot Center

2. CURRENT MAILING ADDRESS
P.O. Box 1319
Livingston, MT 59047

3. WELL LOCATION
NE ¼ SW½ ¼ ¼ Section 13
Township 2S / N/S Range 9E E/W County Park
Govn't Lot ____, or Lot ____, Block ____
Subdivision Name Judson Park Well
Tract Number ____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☒
Other ☐ specify ____

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐x
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 42 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6" from +18" ft. to 38½ ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type 17# 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 ____
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? 20+ ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No

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 x Pump ____ Bailer ____
b) Static water level immediately before testing 16 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 38
d) The pumping rate: 75 gpm.
e) Pumping water level 38 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 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

Depth (ft.) From	To	Formation
0	5	top soil & sand
5	40	gravel & sand
40	42	shale

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 9/26/91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
10/8/91
Date
Van Dyken Drilling
Firm Name
P.O. Box 3745 Bozeman, MT 59772
Address
380
License No.
Signature

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

M:125754

DEPARTMENT BUREAU COPY

M:125754

033196

~~not~~ coded

067 T. 2 S. R. 9 E. 13

County Park

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner: Erick M & Clara Lindberg Address: Box 286 (408 S. Main)

Driller: Hobson Henwood Address: Clyde Park

Date Started: July 25, 1954 Date Completed: Jan. 27, 1955

Location: Sec. 13 T. 2 S. R. 9 E. ¼ sec. 13

Type of well: Drilled (Dug, driven, bored, or drilled) Equipment used: Not rotary (Churn drill, rotary, other)

Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☑

Industrial ☐ Drainage ☐ Other:

Casing: 29 ft. to ft. Type: pipe Size: 6 inch

Casing: ft. to ft. Type: Size:

Casing: ft. to ft. Type: Size:

Perforated or Screened: Ft. to ft. Ft. to ft.

Type of screen or perforations: copper

Static Water level, for non-flowing well: 40 feet.

Shut-in pressure, for flowing well: 40 lb./sq. in. on: (date)

Pumping water level feet at gal. per min.

How tested:

Length of test

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

We have an electric pump attached and housed in with a burried connection to the garage

(over)

M: 96970

GL 970

RECEIVED
AUG 14 1961
Montana Bureau of
Mines and Geology

T. [illegible] R. 9 E 13 DC

County Park

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner Connelley & Livingston Creamery Address 422 S 2nd

Driller Van Dyken Address Bozeman, Mont

Date Started August 25, 1960 Date Completed August 25, 196

Location: Sec. 13 T. [illegible] R. 9 E ¼ sec. SW¼ SE¼

Type of well driven (Dug, driven, bored, or drilled) Equipment used Churn drill (Churn drill, rotary, other)

Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☒ Drainage ☐ Other:

Casing: ft. to ft. Type ~~[illegible]~~ steel Size 6"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. to ft. Ft. to ft.

Type of screen or perforations Open end casing

Static Water level, for non-flowing well: 18 ft feet.

Shut-in pressure, for flowing well: lb./sq. in. on: (date)

Pumping water level 23 feet at 30 gal. per min. 30

How tested: Dip test

Length of test ten minutes

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

(over)

96976

Bozeman 2S09E13DCA Park 43B-84760

WELL LOG REPORT

File No. 43B-84760

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.

0955/A

1. WELL OWNER
Name Livingston Enterprise

2. CURRENT MAILING ADDRESS
P.O. Box 665
Livingston MT 59047

3. WELL LOCATION
NE 1/4 SW 1/4 SE 1/4 Section 13
Township 2 N/S Range 9 E/W County PARK
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name City of Livingston
Tract Number 401 S Main

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. 6 in. from 0 ft. to 160 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 27 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. _____ from _____ ft. to _____ ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 hole in. by _____ in.
_____ perforations from 60 ft. to 160 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 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 160
d) The pumping rate: 35 gpm.
e) Pumping water level 155 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 9 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

Depth (ft.) From	To	Formation
0	4	Topsoil
4	20	Sand + Gravel
20	160	Blue Clay + Shale

RECEIVED
OCT 01 1992
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

H13

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 9/3/92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
9/3/92
Date
Vince Hillman Drilling
Firm Name
6 Lancelot Lane Bozeman
Address
Vince Hillman
Signature
436
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 133314

Fozaman 25 09E 13 Dcd Tank

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-864

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

100387

1. WELL OWNER
Name Fred Nelson

2. CURRENT MAILING ADDRESS
409 S 2nd
Livingston MT 59047

3. WELL LOCATION
NE ¼ SW ¼ SE ¼ Section 13
Township 2 N/S Range 9 E/W County PARK
Govn't Lot ____ or Lot 5 Block 20
Subdivision Name City of Livingston
Tract Number 409 S 2nd

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☒
Other ☐ specify ____

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

OK

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 100 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 28 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type 453B Wall Thickness 250
Casing; Plastic Dia. 4 1/2 from 20 ft. to 100 ft.
Weight 160 Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 Hole in. by ____ in.
____ perforations from 40 ft. to 100 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 13 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 100
d) The pumping rate: 15 gpm.
e) Pumping water level 90 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 13 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 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

Depth (ft.) From	To	Formation
0	10	Topsoil
10	25	Sand & Gravel
25	30	Blue Clay
30	100	Blue Shale

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 9/2/92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 9/2/92
Firm Name Vince Hillman Drilling
Address 6 Lancelot Lane Bozeman
Signature [signature] License No. 436

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

Send To:
DNRC
111 N Tracy
Bozeman MT
59715

DEPARTMENT COPY
DRILLER: Please give this copy to the well owner to complete reverse side.
OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended purpose.

M.138710

Bozeman 2S 09E 13 DCC MARK

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.~~ 092609

1. WELL OWNER
Name Richard Flanigan

2. CURRENT MAILING ADDRESS
428 S Third
Livingston MT 59047

3. WELL LOCATION
SW ¼ SW ¼ SE ¼ Section 13
Township 2 N/S Range 9 E/W County Park
Govn't Lot _____, or Lot 14, Block 119
Subdivision Name City of Livingston
Tract Number 428 S Third

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. 6 in. from 0 ft. to 20 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 20 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B 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 _____
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? 20 ft.
Material used in grouting Cont-pro Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 10 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: 15 gpm.
e) Pumping water level 18 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 10 ft. at ½ 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

Depth (ft.) From	To	Formation
0	2	Topsoil
2	9	Tan Clay
9	20	Sand Gravel + Boulders

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8/4/92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
8/4/92
Date
Vince Hillman Drilling
Firm Name
6 Lancelot Lane Bozeman
Address
Vince Hillman 436
Signature License No.

RECEIVED
AUG 11 1992
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

DNRC
111 N Tracy
Bozeman MT
59715

M:131456

DEPARTMENT—BUREAU COPY

M:131456

Bozeman

2S09E13 DCD

Park

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 90783-G43E

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well. 0993

1. WELL OWNER
Name Rae Murphy

2. CURRENT MAILING ADDRESS
431 S 3rd
Livingston, MT 59047

3. WELL LOCATION
SE ¼ SW ¼ SE ¼ Section 13
Township 2 N/S Range 9 E/W County PARK
Govn't Lot ____ or Lot 21 Block 20
Subdivision Name City of Livingston
Tract Number 431 S. 3rd

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. 6 in. from 0 ft. to 20 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6⅝ from +2 ft. to 20 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type ASTM 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 ____
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? 18 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 12 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: 18 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 12 ft. at ½ 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

Depth (ft.) From	To	Formation
0	20	Sand + Gravel

HB

RECEIVED
JUN 09 1994
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 6/1/94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
6/1/94
Date
Vince Hillman Drilling
Firm Name
1625 So. Rouse
Address
Signature
436
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 145447

Bozeman

GW 2

067 12S R4E 12 PARK

Approved Stock Form—State Publishing Co., Helena, Montana 59089

File No.

TRIPLICATE

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NOV 18 1963
Montana Bureau of Mines and Geology

T. 2-S R. 9 E 12

County Park

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER
OFFICE OF STATE ENGINEER

033297

Top of Ground

(Elev. above sea level 4590)

old well
5 foot flow
10 foot [illegible]
Geo Grad
4597

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: Park County High School Address: Box [redacted] Livingston

Driller: Eggar Brothers Address: Livingston

Date of Notice of Appropriation of Groundwater: Sept. 17

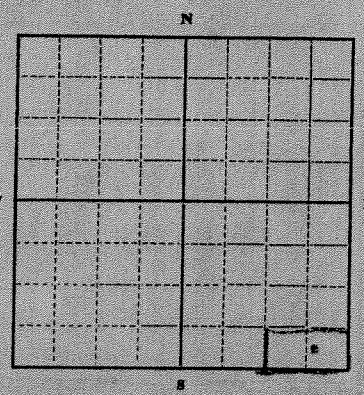
Date well started: Sept 1 Date Completed: Sept 2 1963

Type of well: dug (dug, driven, bored or drilled) Equipment Used: Clam (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)
4 foot	4 foot reinforced concrete	0	16	none		



S ¼ Sec. 12 T. 2-S R. 9-E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Static Water Level for non-flowing Well: 4534 = 6' feet.

Shut-in Pressure for Flowing Well: no

Pumping Water Level: 4580 = 10' feet at 250 gal. per minute.

Discharge in gal. per min. of flowing well:

How Tested: Length of Test:

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) 20

A large hole was dug. 4 foot curbing is installed and gravel packed around the well

Show exact depth of bottom.

location doesn't match school loc.

792-C
Driller's License Number

Jack D Eggar
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.

96967

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, 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 SCHOOL DISTRICT #4

Address McLEOD ISLAND
LIVINGSTON, MONTANA 59047

Date well started April, 1961
completed May, 1961

For Administrator's Use
File
GW 1

Type of well Dug with a backhoe (Dug, driven, bored or drilled)

Equipment used Backhoe (Churn drill, rotary or other)

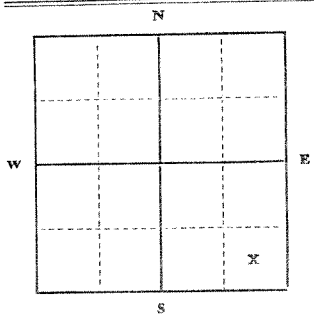
Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Other ☐* ~~Garden~~/Lawn ☒

*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).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
3' dia.	3' dia Concrete	22' depth				



SE ¼ SE ¼ Sec. 13
T. 2 South R. 9 East

Static water level 12 ft.*
Pumping water level 9 ft.*
at 300 gallons per minute,
measured minutes after pumping began.
*Measured from ground level.
Well developed by
for hours.
Power 15 HP Pump 200' head HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) 15 HP motor
Max. 200' head, 225 gals/minute-minimum 125' head
300 gallons per minute

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature

Driller's Address

LICENSE NO.

County

DRILLER'S L 033198

Indicate the character, ness of strata such as soil, clay, 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)	

Show exact depth of bottom

M:96977

Township 02S, Range 09E, Section 14

Well Logs

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: John Hammerich
Mailing address: 727 North Yellowstone St.
Livingston MT. 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ NE ¼, Section 14
Township 2 N/S Range 9 E/W County Park
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. 6 in. from 0 ft. to 180' ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. 6 5/8 O.D. in. from -1½ ft. to 38½ 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 Slotted Casing
Size of perforations/slots .025 in. by 1½ in.
____ no. of perforations/slots from 140' ft. to 180' 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 Bentonite Grout
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 120' 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 175' ft. for 1 hours
Time of recovery 10 hrs/min. Recovery water level 120 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: HB

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	31	Sandy Clay
31	180	Sandy Shale & Sandstone

RECEIVED
MAR 0 9 2001
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 7-16-00

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) Bridger Drilling Inc.
Address PO Box 4287 Bozeman MT 59772
Signature ____
Date 7/31/01 License no. 425

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 187085

DEPARTMENT—BUREAU COPY

WELL LOG NOT AVAILABLE

M:211092

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 are in italics.*** Record additional information in the REMARKS section.

1. WELL OWNER:
Name JOHN R. PRINTZ
Mailing address 72 N 9TH
LIVINGSTON, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ ____ ¼ ____ ¼ ____ ¼, Section 14
Township 2S N/S Range 9E County PARK
Lot ____ *Tract/Blk* ____ *Subdivision Name* ____
Well Address SAME AS ABOVE
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: shop

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 280 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: .250 Wall thickness ☐ Threaded ☒ Welded
Dia. 6 in. from +18" ft. to 18 1/2 ft.
Dia. ____ in. from ____ ft. to ft.

Plastic: Pressure Rating 160 lbs. ☒ Threaded ☐ Welded
Dia. 4 in. from 10 ft. to 280 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots 3/8"HOLES ____ in.
____ no. of perforations/slots from 260 ft. to 280 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: BENTONITE
Depth from ____ ft. to ____ ft. OR ☒ Continuos Feed

6. WELL TEST DATA:
A well test is required for all wells. *(See details on well log report cover.)*
☒ Static water level 78 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*
20 gpm with drill stem set at 275 ft. for 1 hours
Time of recovery ____ hrs/min. Recovery water level 78 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 reservoir of the well casing.*

7. WELL LOG: HB

Depth, Feet From	To	Material: Color/rock and type/descriptor (example: blue/shale/hard, or brown gravel/water, or brown/sand/heaving)
0	1	TOP SOIL
1	8	CLAY
8	10	SANDSTONE
10	40	SHALE
40	43	CLAY
43	95	SHALE
95	170	SANDSTONE
170	180	SANSTONE & SOFT SHALE
180	215	SANDSTONE
215	220	SANDSTONE & SOFT SHALE
220	250	SANDSTONE
250	260	SANDSTONE & SOFT SHALE
260	280	SANDSTONE

☐ ADDITIONAL SHEETS ATTACHED
8. DATE WELL COMPLETED 5/10/02
9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION: M: 196558
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) VAN DYKEN DRILLING INC.
Address P.O. BOX 3745 BOZEMAN, MT 59772
Signature [signature]
Date 5/28/02 License no. 380

MBMG ID #
____

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

M: 196558

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: Jerry Norskog
Mailing address: 527 N 7TH ST
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ SE ¼ NE ¼ ____ ¼, Section 14
Township 2 ☒S Range 9 E/☐W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☒Yes ☐No
Latitude 45° 39.75N Longitude 110° 34.35W
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. 6 in. from 0 ft. to 160 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 +2 ft. to 58 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐Threaded ☐Welded
Dia. 4 1/2 in. from 50 ft. to 160 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 1/8 Hole in.
____ no. of perforations/slots from 120 ft. to 160 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 Bentonite
Depth from ____ ft. to ____ ft. OR ☒Continuous feed

WELL TEST DATA:
A well test is required for all wells. (*See details on well log report cover.*)
☐ Static water level 61 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*
10 gpm with drill stem set at 158 ft. for 1 hours
Time of recovery 1/2 hrs/min. Recovery water level 61 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: HB

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	Topsoil
7	56	Sand Gravel & Tan Clay
56	160	Blue Shale

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/26/04

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) Hillman Drilling Inc
Address 1030 Mary Rd Bozeman
Signature [signature]
Date 6/11/04 License no. 436

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 212427

DEPARTMENT - BUREAU COPY

GW 4

File No.

TRIPLICATE

coded

067

033199

T 2S R 9E 14

County Park

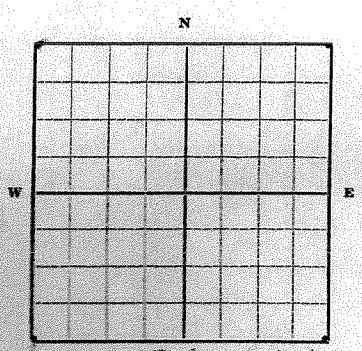
RECEIVED
JAN 10 1962
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Louisa C. H. Davis (Name of Appropriator), of Livingston (Address) (Town)
County of Park State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



Lot 4 Block 40
Palace Addition
Livingston
¼ Sec. T R

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 household

3. Date or approximate date of earliest beneficial use; and how continuous the use has been from 1936 - 1962

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 150 000 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 garden 25 feet by 140 feet

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal pump garden and household

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Spring of 1936

8. The depth of water table about 30 feet depth of well 68 feet

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 dug well about 4 feet by 4 feet

10. The estimated amount of groundwater withdrawn each year 150 000 gallons

11. The log of formations encountered in the drilling of each well if available about 35 feet of dirt and about 32 feet 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

Signature of Owner Louisa C. H. Davis

Date JAN - 5 1962

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.

M: 96978

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

M: 96978

GW 4—Helena Independent Record

067 02S 09E 14D PARK 033200

File No. 3 067 T. 2 S R. 9 E 14 D

TRIPLICATE

County Park

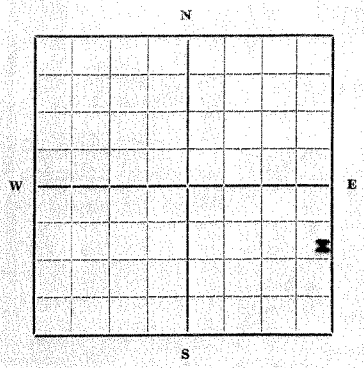
RECEIVED
FEB 15
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. School District No. Four (4) (Name of Appropriator), of Box 669 (Address) Livingston (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW¼ Sec. 14 T. 2S R. 9E

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 Irrigation of public school grounds

3. Date or approximate date of earliest beneficial use; and how continuous the use has been The well has not been used to date
Well drilled in April, 1955

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 30 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 One and one-half (1½) acres, Washington School Grounds, owned by School District #4, Livingston, Mont.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Would be by pump in well on Washington School grounds. (No pump has been installed as of this date)

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater April, 1955

8. The depth of water table 70 (Seventy) feet

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 drilled well, six (6) inch casing, to depth of 74 feet.

10. The estimated amount of groundwater withdrawn each year None so far to this date

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 This well was drilled on the grounds of the Washington School within the city limits of Livingston, Mont., north of Front Street, between 8th and 9th Sts., south of Chinock St., Block 49 in Palace Add

School District #4, Park Co.

Signature of Owner By: L. Gleason Clerk

Date February 14, 1962

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: 96984

.8 23924

Ground

above sea level 44 50)

02 S04 E14 D

MONTANA STATE BOARD OF HEALTH

Division of Sanitary Engineering

Helena, Montana

WELL DRILLER'S REPORT

Driller's Registration No. 202

Driller Hobson Henwood Address Wilsall Mont

Owner of Well School District No. 4

Exact Location of Well Washington school West Side of Bldg.

Nearest Post Office Livingston County Park

Water to be Used for irrigation water for Lawn

Drilling Begun Mar 8, 1955 Well Finished Mar. 18, 1955

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.

Clay 28 ft

First water at 52 ft

Sand 25 ft

Water stand 40 ft deep in well

Hard pan 12 ft

Second water at 65 ft

course gravel 9 ft

Casing Record

Size of Pipe	Kind and Weight of Material Used	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6 in	20 lb. Black Iron Casing	From top of ground To 74 ft with drive shoe on bottom			none	

Describe the type of joints in casing Electric Welded

Describe any screens used none

Capacity of Well 1500 [illegible] (In Gallons or Barrels)

How Determined Bailer (Pump, Bailer, Weir, Etc.)

Signed Hobson Henwood

Date Mar 2[illegible] 1955

(Law and Regulations on Reverse Side)

Show exact depth of bottom.

ORIGINAL – TO BE SENT TO THE STATE BOARD OF HEALTH

M: 96984

Page 2 of 2

Township 02S, Range 09E, Section 24

Well Logs

02S 09E 24 BDA

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 Don Anderson
Mailing address 515 S 11TH ST
LIVINGSTON, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ SE ¼ NW ¼ ___ ¼, Section 24
Township 2 ☐N/S Range 9 ☐E/W County Park
Lot ___, Tract/Blk ___ Subdivision Name
Well Address
GPS ☒Yes ☐No
Latitude 45°39.05N Longitude 110°33.58W
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. 6 in. from 0 ft. to 40 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 +2 ft. to 38 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 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 17 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*
50 gpm with drill stem set at 38 ft. for 1 hours
Time of recovery 1/2 hrs/min. Recovery water level 17 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: HB

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	Topsoil
3	40	Sand & Gravel

RECEIVED
OCT 17 2006
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 10/12/06

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) Hillman Drilling
Address P.O. BOX 1855 Livingston
Signature
Date 10/12/06 License no. 436

Montana Bureau of Mines & Geology
The University of Montana
1300 West Park Street
Butte, MT 59701

MBMG ID# 2303162

BUREAU OF MINES COPY

WELL LOG NOT AVAILABLE

M:97080

FORM E. S. 26

02504E24

[135649

(Elev. above sea level 4500)
Top of Ground

MONTANA STATE DEPARTMENT OF HEALTH
Division of Environmental Sanitation
Helena, Montana

WELL DRILLER'S REPORT

Driller's Registration No. 247

Driller Irvin Yost Address Livingston

Owner of Well Philip Young

Exact Location of Well Lot 5 & 4 Sec 24 twp 2 S Rg 9E

Nearest Post Office Livingston County Park

Water to be Used for Domestic

Drilling Begun 8-25-73 Well Finished 9-2-73

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.

13 Water Level
med Dense Br Silty Clay
19.5
Very Dense - Gray Cement Gravel
36.0
38.0 med Dense Br Sand w/water
Bottom hole same

HB

Casing Record

Size of Pipe	Kind and Weight of Material Used	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	Steel 17#	0.0'	38.0	1/16" slots	33.0	38.0

Describe the type of joints in casing Welded

Describe any screens used

Capacity of Well 15 G.P.M
(In Gallons or Barrels)

How Determined Pump - Bailer
(Pump, Bailer, Weir, Etc)

Signed Irvin Yost

Date 9-2-73

ORIGINAL—TO BE SENT TO THE STATE DEPARTMENT OF HEALTH

Show exact depth of bottom.

M:174110

DOZEMAN
GW 4—Helena Independent Record

067 02S 09E 24 AAA PARK

File No.

TRIPLICATE

RECEIVED
Montana Bureau of Mines and Geology

RECEIVED
Montana Bureau of Mines and Geology

067 (1) T 2S R 9E 24 AA

County Park

033341

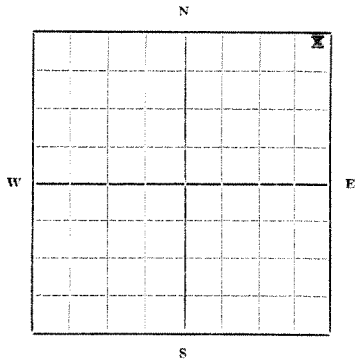
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

GEO: 211 GERD
BULL

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. City of Livingston (Name of Appropriator), of (Address) Livingston (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼ NE¼ NE¼ ¼ Sec. 24 T 2S R 9E

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
To be used for Irrigation purposes

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
When weather conditions permit and have mater

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 100 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 10 acres

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
6" Prime Steel Perforated Casing by pump
Located in Miles Park

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
Started on Dec. 4, 1961 and completed Dec. 7, 1961

8. The depth of water table 10' to 18'

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
Drilled Well; 6 5/8" O.D.; Depth 18'

10. The estimated amount of groundwater withdrawn each year 1,920,000 Gallons

11. The log of formations encountered in the drilling of each well if available
0' to 3' soils; 3' to 18' gravels; 18' to 30' yellow gritty handpan;
30' to 37' Colorado blue shale

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

Signature of Owner [signature]
City Clerk

Date Jan. 30, 1962

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: 97081

GW 4—Helena Independent Record

067 02S 09E 24AAB PARK

File No. 067 T. 2S R. 9E 24 AA

TRIPLICATE

County Park

RECEIVED

Montana Mines

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

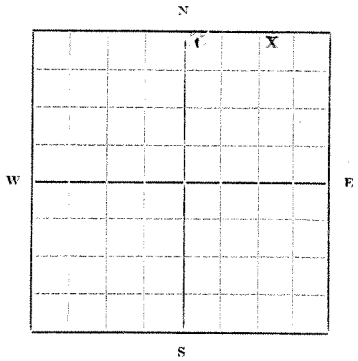
2

033342

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. City of Livingston (Name of Appropriator), of Livingston (Town) (Address)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW¼, NE¼
NE¼ ¼ Sec. 24 T2S R. 9E

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
To be used for irrigation purposes

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
When irrigation season starts in June

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 100 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
10 acres

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
6" Prime Steel Perforated Casing by pump
Located in Miles Park

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
Started on Dec. 8, 1961 and completed Dec. 14, 1961

8. The depth of water table 33'

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
Drilled Well; 6 58" O.D.; Depth 33'

10. The estimated amount of groundwater withdrawn each year 1,920,000 gallons

11. The log of formations encountered in the drilling of each well if available
0' to 3' top soils; 3' to 10' gravels; 10' to 17' gravels;
17' to 30' sands, coarse & fine; 30' to 33' coarse assorted gravels

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

Signature of Owner [signature]
City Clerk
Date Jan. 30, 1962

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: 97082

BOZEMAN

3 GW 2 Revised 1969
13—3M—10/69

061 T2S R9E-2

County PARK

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 CITY OF LIVINGSTON, MONT. TEST WELL NO. 1

Address City of Livingston, Livingston Mont.

Date well started 2/17/71

completed 2/17/71

For Administrator's Use
File
GW 1

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used Rotary (Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

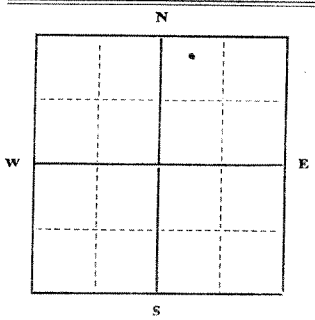
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*Describe Test well no. 1 located in Sacajawea Park in Livingston, Mont.

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17#	0	50		none	



NW ¼ NE ¼ Sec. 24

T. 2S N/S R. 9E E/W

Static water level 7 ft.*

Pumping water level 40 ft.*

at 60 gallons per minute, measured 60 minutes after pumping began. From 51' to 53'

*Measured from ground level.

Well developed by Air

for 3 hours.

Power Gas Pump 200 HP

Remarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings shutoff outside of casing.

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature VAN DYKEN DRILLING CO. Robert Vandyken

Driller's Address BOZEMAN, MONTANA

LICENSE NO. 1

DRILLER'S LOG

Indicate the characteristics of strata such as gravel, shale, sandstone, etc., depth at which water is found and height to which water rises in well

033342

Top of Ground (Elev. above sea level)

From (Feet)	To (Feet)	
0	5	Top soil.
5	22	Coarse and fine sand and gravels. Boulders at 15' to 19'.
22	28	Fine to coarse sands. Standing water level 7'
28	30	Fine sands. Little water.
30	31	Fine sands to coarse sands. Little water
31	32	Sand and gravels up to 2" gravels. Little mor water.
32	33	Heaving fine sands. Little water.
33	35	Claybound sands. Fine to coarse. Heaves.
35	51	Yellow hard clay. Dry
51	53	Hard sandstone. 40 GPM. total.
53	57	Gray claybound sand Wet.
57	58	Black tight fine sand Wet.
58	130	Gray and buff shale with some hard small lenses. Dry.
130	133	Blue shales. Water. Water smells like sulphur. 100 GPM. total.
		Well was drilled with rotary with air and made 140 GPM. of water while drilling from 51' to 53' and from 130' to 133'.
		Well was plugged after test from 133' back up to 54'
		Well to be used for irrigation in the park.

Was 133' Show exact depth of bottom

M:97083

GW 2 BOZEMAN 067 025 09E 24ABC PARK

Approved Stock Form—State Publishing Co., Helena, M

(1) 06 T. 2 S. R. 9 E. 24 ABC

File No.....

County PARK

TRIPLICATE

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level.....)

0'-1' Top soils and clays.

1'-4' Sands. dry.

4'-30'6" All sands and gravels, with some boulders. lots of water.

T.D. 30'6"

Show exact depth of bottom.

Owner City of Livingston Address LIVINGSTON, MONTANA

Driller VAN DYKEN DRILLING CO. Address BOZEMAN, MONTANA

Date of Notice of appropriation of groundwater NONE

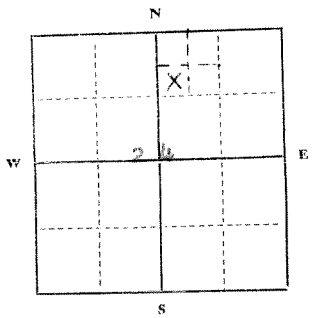
Date well started July 12/66 Date completed July 20/66

Type of well Drilled (Dug, driven, bored or drilled) Equipment used Cable tools. (Churn drill, rotary or other)

Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☒ Industrial ☐ Drainage ☐ Other ☐

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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
12"	12 3/4" O.D. 34# per ft. P.X.	0'	30'6"	5/16" x 3" long 16slots per ft.	5'	29'



Static Water Level for non-flowing well 6'6" feet.

Shut-in Pressure for Flowing Well none

Pumping Water Level 11'6" feet at 300 gal. per minute.

Discharge in gal. per min. of flowing well none

How Tested Centrifical pump

Length of Test 4 Hrs.

Remarks: (Gravel packing, cementing, packers, type of shutoff) none

SW¼ NW¼ ~~NE~~ ¼ Sec. 24 T. 2S. R. 9E.

Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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).

City park lawn sprinkling.

" Sacajawea Park "

LICENSE NO. 1

Driller's License Number

Driller's Signature. M. 97084

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, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

BOZEMAN

067 02S 09E 24ABC PARK

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana—

3 067

T 2 S R 9 E 24 ABC

File No.

County PARK

TRIPLICATE

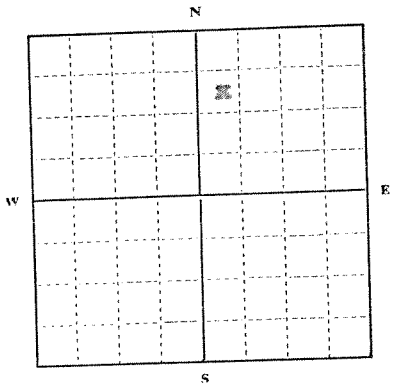
RECEIVED
OCT 10 1963
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. City of Livingston (Name of Appropriator), of (Address) (Sacajawea Park) (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW, NW, NE, Sec. 24 T 2S R 9 E
1/4

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 Park Irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been Continuous since 1951, Seasonal

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 300 GPM

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 15 Acres. Lawns, Shrubry, Trees, etc. City of Livingston, Park Dept.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Low Head Pump and Motor

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Started and Completed May 1951

8. The depth of water table 4' to 7'

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

10. The estimated amount of groundwater withdrawn each year 25 Million Gallons

11. The log of formations encountered in the drilling of each well if available 12" Top Soil, 10' Sand and Gravel. (up to 3½ & 4 ")

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

Signature of Owner [signature]
City Clerk
Date October 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.

M: 97085

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.

025 04E 24 BABU

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 839

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 Mark Rehder
MAILING ADDRESS 403 S. 8th St.
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ NW ¼ NE ¼ NW ¼, Section 24
Township 2S N/S Range 9E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0534031 Longitude 5055520
Error as reported by GPS locator (± feet) 36
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [X] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 40 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 38 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 [X] No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 0 ft. to 20 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] Static water level 16 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
80 gpm with drill stem set at 34 ft. for 2 hours
Time of recovery 1/2 hr. hrs/min. Recovery water level 16 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: HB

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	10	Sandy clays & topsoil
10	28	Sand, gravel & large cobbles
28	36	Sandy gravels
36	40	Sand, gravels & cobbles
40	41	Fractured sandstone

RECEIVED
AUG 31 2004
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 06/25/2004

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 07/23/2004 License no. 361/074

MBMG ID# 2136260

025 09E 24 75AW

MONTANA WELL LOG REPORT

Well ID# _____

Form No. 603 R2-99

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: Leany Gregory
Mailing address: 429 S 9TH ST.
Livingston MT 59047

2. WELL LOCATION List ¼ from smallest to largest
___ ¼ SE ¼ NE ¼ NW ¼, Section 24
Township 2 N/S Range 9 E/W County Park
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. 6 in. from 0 ft. to 40 ft.
Dia. ___ in. from ___ ft. to ___ ft.
Dia. ___ in. from ___ ft. to ___ ft.

Casing:
Steel: Wall thickness .25 ☐ Threaded ☒ Welded
Dia. 6 1/8 in. from +2 ft. to 40 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 Bentonite
Depth from 0 ft. to 20 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 22 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*
25 gpm with drill stem set at 39 ft. for 1 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: HB

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	1	Topsoil
1	10	Sandy Clay Gravel
10	40	Sand Gravel

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 4-2-03

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) Hillman Drilling Of Montana
Address P.O. Box 865 Livingston, MT 59047
Signature ___
Date 5-25-03 License no. 608

MBMG ID# 203491

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT - BUREAU COPY

02S04E24BB

MONTANA WELL LOG REPORT

[134228]

Form No. 603 R2-99

Well ID# 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 Rocky Mountain Oil Company
Mailing address PO Box 1224
Minneapolis, MN 55440

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NW ¼ NW ¼, Section 24
Township 2 N/S Range 9 E/W County Park
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. 8½" in. from 0 ft. to 39' ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness N/A ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating WPPSI 280 lbs. ☒ Threaded ☐ Welded
Dia. 2" in. from 0 ft. to 39 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 SJ 40
Dia. 2" Slot size 0.010 from 38½ ft. to 28½ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☒ Yes ☐ No
Size of gravel 10/20 Silica Sand
Gravel placed from 39 ft. to 26 ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite chips
Depth from 26' 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 33 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc N/A

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 ____ 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:

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"	2'	Light Brown Sand + gravel Base course
2'	24	Med Brown Silty clay
24	39	Med Brown Sandy gravel

HB

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/4/99

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) Maxim Technologies
Address Box 30615 Billings MT 59107
Signature Paul Bracy
Date 5/5/99 License no. MMWC #3144

MONTANA DNRC

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 172179

DEPARTMENT BUREAU COPY

GW 2 Bozeman 061 02S 09E 24B PARK 033348

Approved Stock Form—State Publishing Co., Helena, M

File No.

(1)

T. 2S R. 9E 24B

TRIPLICATE

County PARK

LOG

Top of Ground

(Elev. above sea level 4457±)

Clay

Static water level

Gravel

Sand

Sandy Clay

Sand & Fine Gravel

Bottom of well

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Owner Tom R & Dolores Sharpe Address P.O. Box 736 Livingston, Mont.

Driller [illegible] Address [illegible]

Date of Notice of appropriation of groundwater

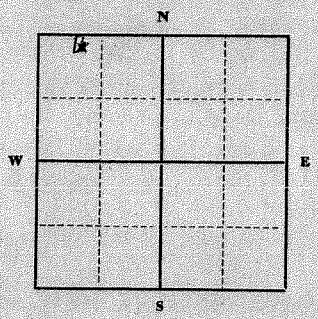
Date well started Dec 11 1962 Date completed Dec 13 1962

Type of well Drilled (Dug, Driven, bored or drilled) Equipment used [illegible] (Churn drill, rotary or other)

Water use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐ Industrial ☐ Drainage ☐ Other ☐

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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6 in	6 5/8" OD 19#	[illegible] Ground	41	—	—	—



Static Water Level for non-flowing well [illegible] feet.

Shut-in Pressure for Flowing Well

Pumping Water Level 41 feet at 30 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested [illegible]

Length of Test [illegible]

Remarks: (Gravel packing, cementing, packers, type of shutoff)

NW 1/4 Sec 24 T 2S R 9E

Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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).

Domestic incl two residences; irrigation of plot .55A (1/2+A)

RECEIVED
FEB 21 1969
Montana Bureau of Geology

Show exact depth of bottom.

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, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

17
Driller's License Number

[illegible]
Driller's Signature

M: 97089

Bozeman

2S09E24BBA

File No. 43B-82690

WELL LOG REPORT

Form No. 603 (R 2-89)

095350

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: Rick Spellman

2. CURRENT MAILING ADDRESS
226 S 8th
Livingston MT 59047

3. WELL LOCATION
NE ¼ NW ¼ NW ¼ Section 24
Township 2 N/S Range 9 E/W County Park
Govn't Lot ____ or Lot 13 Block 88
Subdivision Name City of Livingston
Tract Number 226 S 8th

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☒
Other ☐ specify ____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 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 5/8 from +2 ft. to 38 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A53B 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 ____ Model No. ____
Type ____
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? 20 ft.
Material used in grouting Cont fed Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 18 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 40
d) The pumping rate: 30 gpm.
e) Pumping water level 35 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 18 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 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

Depth (ft.) From	To	Formation
0	10	Brown Clay
10	40	Sand + Gravel

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7/30/92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 7/30/92
Firm Name: Vince Hillman Drilling
Address: 6 Lancelot Lane Bozeman
Signature: Vince Hillman
License No. 436

RECEIVED
AUG 11 1992
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

DNRC
111 N Tracy
Bozeman MT
59715

M:133315

M:133315

BOZEMAN

061

County Park

DRILLER'S L 033347

3 GW 2 Revised 1969
13—3M—10/69

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 CITY OF LIVINGSTON. TEST WELL NO. 2

Address CITY OF LIVINGSTON LIVINGSTON, MONTANA

Date well started 2/26/71

completed 3/15/71

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used Rotary and Cable tools. (Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

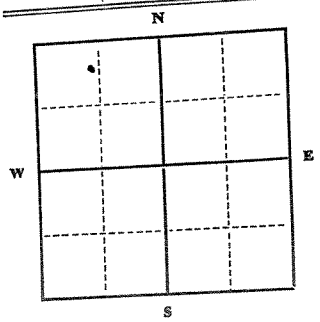
*Describe Test well No. 2 located on Geyser and 9th streets.

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).

For Administrator's Use
File
GW 1

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per Ft.	0	50	1/8"X3" Slots.	32'	39'



NW ¼ NW ¼ Sec 24
T. 2S N/S R. 9E E/W

Static water level 20 ft.*
Pumping water level 26 ft.*
at 100 gallons per minute,
measured 30 minutes after pumping began.
*Measured from ground level.
Well developed by air
for 1 hours.
Power gas Pump 200 HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings shutoff outside of casing.

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature VAN DYKEN DRILLING CO. Bert Van Dyken

Driller's Address BOZEMAN, MONTANA

LICENSE NO. 1

Indicate the character, kind of strata such as soil, clay, 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)	
0	10	Clays.
10	37	Fine to coarse sand and pea size gravels. Slightly claybound. Some water.
37	39	Cleaner fine sand and pea size gravels. Standing water level 20'. Bailed @ 30 GPM. with 9' drawdown.
39	44	Hard shale. Dry.
44	45	Fine sand and gravels. Water.
45	75	Blue shales. Dry.
75	110	Sandstone. Water. @60' 30GPM. 30' drawdown. @100' 45" 25' " @ 110' 60 " 60' "
110	115	Buff color shales. Dry.
		Test pump from 50' to 115' open hole 110 GPM. 20' drawdown. 145 " 26' "
		Pacific yeild 5½ GPM. per ft. of drawdown.
		Plugged hole from 50' to 115', then perforated casing from 32' to 39' then test pumped wel at 100 GPM. with 6' of drawdown. Pacific yield of 17 GPM. per ft. of drawdown.

Was 115' Show exact depth of bottom

M:97090

02S09E24BDA

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 David DePuy
Mailing address P.O. Box 487
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ SE ¼ NW ¼ ____ ¼, Section 24
Township 2 N/S Range 9 E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name _____
Well Address _____
GPS ☒ Yes ☐ No
Latitude 45° 39.08N Longitude 110° 33.73W
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. 6 in. from 0 ft. to 20 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 +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 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 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*
50 gpm with drill stem set at 18 ft. for 1 hours
Time of recovery ½ hrs/min. Recovery water level 6 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: HB

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	1	Topsoil
1	20	Sandy Gravel

RECEIVED
MAY 12 2004
M.B.M.G

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 4/1/04

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) Hillman Drilling
Address 1030 Mary Rd Bozeman
Signature [signature]
Date 4/1/04 License no. 436

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 212314

DEPARTMENT - BUREAU COPY

BOZEMAN 061 023 09E 24BDD PARK

GW 2

Approved Stock Form—State Publishing Co., Helena, Mon.

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JUL 21 1965
Montana Bureau of Mines and Geology

File No.

TRIPLICATE

1

06 T 2 S R 9 E 24B

County Park

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Layne Well No. 4

Owner Municipal Water Works Address Livingston, Mont

Driller Layne-Minn. Co. Address Minneapolis, Minn.

Date of Notice of Appropriation of Groundwater June, 1965

Date well started April 12, '65 Date Completed June 6, 1965

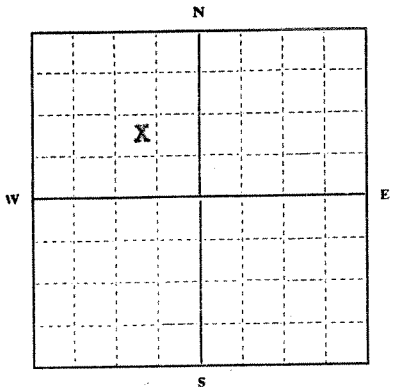
Type of well Drilled (dug, driven, bored or drilled) Equipment Used Caisson Rig (Churn, drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Other ☐ Irrigation ☐ Industrial ☐ Drainage ☐ Stock ☐

Indicate on the diagram the character and thickness of the differen 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.

Depth	Top of Ground
3	Top Soil (Elev. above sea level)
6	Gravel & Rock
	Sandy Clay & Rock
10	Sand, rock & boulders
12	boulders
14	Clay & Hard rock
18	Boulders & sand
21	
	Rock & tight sand
30	Rock
33	
	Rock & Sand
50'4"	Silt, Rock &
52'8"	Fine Sand
	Static Water Level 11'2"

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
52" Min. Dia.	52" OD #7	0	20	(Cemented	in 60"	Hole)
	24" 3/8 wall	0	42'8"			
	24" Stainless Steel Layne Shutter Screen			#3	42'8"	52'88



NW ¼ Sec. 24 T 2S R 9E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

Static Water Level for non-flowing Well 11'2" feet

Shut-in Pressure for Flowing Well Not Applicable

Pumping Water Level 38'8" feet at 1040 gal. per minute

Discharge in gal. per min. of flowing well Not applicable

How Tested Turbine Pump Length of Test 16 hrs

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) Double gravel wall well with outer casing shown cemented in place above

#76
Driller's License Number

Layne-Minnesota Co.

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.

M: 97093

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.

067 025 09E 24AC PARK 033250

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Montana Bureau of Mines and Geology

T. 2 S. R. 9 E. 24 AC

County PARK

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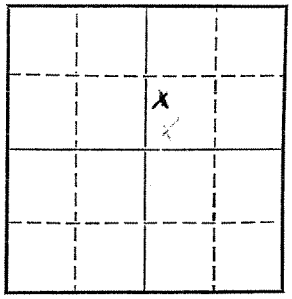
JAN - 1 1962
Montana Bureau of Mines and Geology

MONTANA BUREAU OF MINES AND GEOLOGY

Butte, Montana

WATER WELL LOG



Owner ALBERT L. & DORIS M. McCOMB Address LIVINGSTON, MONT.

Driller GLENN OVERFELT Address

Date Started FEB. 1948 Date Completed FEB. 1948

Location: Sec. 24 T. 2S R. 9E ¼ sec. SW¼NE¼

Type of well DUG (Dug, driven, bored, or drilled) Equipment used OTHER (Churn drill, rotary, other)

Water use: Domestic [X] K Municipal [ ] Stock [X] Irrigation [X]

Industrial [ ] Drainage [ ] Other:

Casing: 2 ft. to 8 ft. Type REINFORCED CONCRETE Size 24"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. to ft. Ft. to ft.

Type of screen or perforations

Static Water level, for non-flowing well: feet.

Shut-in pressure, for flowing well: NONE lb./sq. in. on: (date)

Pumping water level feet at gal. per min.

How tested:

Length of test

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

(over)

M: 97087

M: 97087

02S 09E 24 ACB

MONTANA WELL LOG REPORT

Well ID# _____

Form No. 603 R2-99

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: Aquatic Design & Construction
Mailing address: P.O. Box 582
Livingston MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
___ ¼ NW ¼ SW ¼ NE ¼, Section 24
Township 2 N/S Range 9 E/W County PARK
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. 6 in. from 0 ft. to 20 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 +2 ft. to 20 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 Bentonite
Depth from 0 ft. to 20 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*
25 gpm with drill stem set at 18 ft. for 1 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: HB

Depth Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	10	Sand Gravel + Clay
10	20	Sand + Gravel

RECEIVED NOV 13 2002 D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8-28-02

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) Hillman Drilling Of Montana
Address P.O. Box 865 Livingston, MT 59047
Signature ___
Date 11-11-02 License no. 6-8

MBMG ID# 199404

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT - BUREAU COPY

Township 02S, Range 10E, Section 4

Well Logs

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: Bob Boyd
Mailing address: P.O. Box 77
Clyde Park, MT 59018

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ SE ¼ SW ¼ ____ ¼, Section 4
Township 2 N/S Range 10 E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☒ Yes ☐ No
Latitude 45° 41.02 N Longitude 110° 29.98 W
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. 6 in. from 0 ft. to 60 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 +2 ft. to 22 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4 1/2 in. from 10 ft. to 40 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots Y8 ~~in. by~~ Hole in.
____ no. of perforations/slots from 40 ft. to 60 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 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 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*
12 gpm with drill stem set at 60 ft. for 1 hours
Time of recovery ½ hrs/min. Recovery water level 18 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: HB

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	11	Tan Clay
11	22	Sand & Gravel
22	60	Blue Shale

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JUL 15 2003
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/23/03

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) Hillman Drilling
Address 1030 Mary Rd Bozeman
Signature [signature]
Date 7/7/03 License no. 436

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 204396

DEPARTMENT ___ BUREAU COPY

Township 02S, Range 10E, Section 5

Well Logs

BOZEMAN 067 02S 10E 05B PARK 034816

GW 2

Approved Stock Form—State Publishing Co., Helena, Mo

File No.

067 T. 2S R. 10E -5 B

DUPLICATE

County Park

(2)

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION 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)

LOG

Top of Ground

Clay

(Elev. above sea level)

2, 3, 4, 6, 7½, 8, 10, 12, 13, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 45½, 46, 48, 50, 52, 54, 55, 56, 58, 59

static water level

Gravel

Clay (Red)

Clay (Grey)

Clay (Red)

Layers of Shale & Clay

Sandstone

Bottom of well

Show exact depth of bottom.

Owner Warren Shepard Address Shields Rt. Livingston, Mt.

Driller Donald C. Jones Address 2107 Bridger Dr. Bozeman, Mont.

Date of Notice of appropriation of groundwater

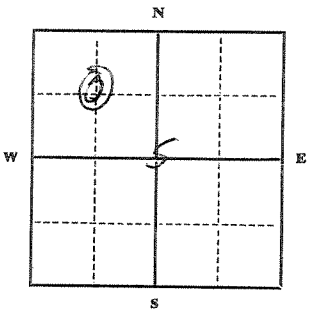
Date well started Sept. 20, 1967 Date completed Sept. 25, 1967

Type of well Drilled (Dug, driven, bored or drilled) Equipment used Churn Drill (Churn drill, rotary or other)

Water use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐ Industrial ☐ Drainage ☐ Other ☐

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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6 in.	6 5/8" OD 19#	2' above Ground	43'			
	5" Galv. Liner	42'	59	1" x 1/16"	51'	59'



Static Water Level for non-flowing well 7½ feet.

Shut-in Pressure for Flowing Well —

Pumping Water Level 59 feet at 12 gal. per minute.

Discharge in gal. per min. of flowing well —

How Tested Pump

Length of Test 1 hr.

Remarks: (Gravel packing, cementing, packers, type of shutoff)

C NW/4 Sec. 5 T. 2S R. 10E

Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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).

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, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

17
Driller's License Number

Donald C. Jones
Driller's Signature

97291

061
Form No. 603 (R 6-84)
BOZEMAN

ZSDESABD

File No. _____

WELL LOG REPORT

024272

State law requires that this form be filed by the water well driller within 60 days after completio

1. WELL OWNER
Name Heart R Ranch

2. CURRENT MAILING ADDRESS
Box 1311
Livingston, MT

3. WELL LOCATION
County Park
Township 2S N/S Range 10E E/W
SE ¼ NW ¼ NE ¼ Section 5
Lot _____ Block _____
Subdivision _____

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. DRILLING METHOD _____ cable, _____ bored,
X 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 X and/or Screen: Kind Size	From (feet)	To (feet)
6	6" 17 lb per ft	0	60			
	4½" PVC	50	100	5/8 hole	80	100

Was casing left open end? _____ Yes X No
Was a packer or seal used? _____ Yes X No
If so, what material _____
Was the well gravel packed? _____ Yes X No
Was the well grouted? _____ Yes X No
To what depth? _____
Material used in grouting _____
Well head completion: Pitless adapter
X Yes _____ No
Top of casing 12 in. or greater above grade
X Yes _____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
_____ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 5 feet below land surface
If flowing; closed-in pressure _____ psi
_____ gpm
Controlled by: _____ valve, _____ reducers,
_____ other, (specify) _____

9. WELL TEST DATA _____ pump _____ bailer
X other, (specify) air
Pumping water level below land surface:
100 ft. after 1 hrs. pumping 50 gpm
_____ ft. after _____ hrs. pumping _____ gpm

10. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

11. DATE COMPLETED 7/22/85

12. WELL LOG

Depth (ft.) From	To	Formation
0	3	Topsoil
3	33	Sand & Gravel
33	50	Blue Clay
50	100	Blue Shale

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

7/22/85
Date

Hillman Drilling
Firm Name

Rte. 85 Box 4286 Livingston
Address

Vince Hillman 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59620 444-6610

DEPARTMENT — BUREAU COPY

97289

Form No. 603 (Rev. 7/76)

Bozeman code

STATE OF MONTANA

File No. _____

Department of Natural Resources and Conservation

067 02S 10E 05 BA Park

WELL LOG REPORT

033453

Pink-Well Owner
Gold-Driller

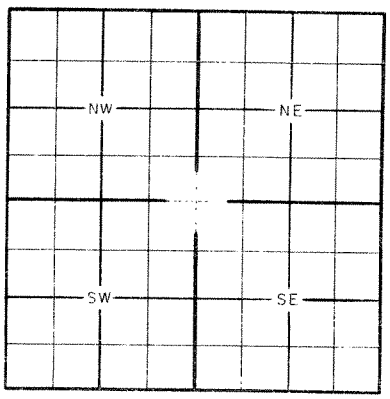
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name Edward L Gosten

2. CURRENT MAILING ADDRESS
Rte 85
Livingston Mont
59047

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



NW NE SW SE

____ ¼ ____ ¼ NE ¼ NW ¼ Section 5
T. 2 S R. 10 E
~~N~~ or S E or ~~W~~
OR, Lot ____ Block ____
Subdivision ____
City Livingston County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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"	6" 17#	0	50			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 8 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) air
Pumping level below land surface:
30 ft. after 1 hrs. pumping 45 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 8/7/78
DATE COMPLETED 8/7/78

11. WELL LOG

Depth (ft.) From	To	Formation
0	23	gravel
23	45	Clay
45	50	Shale

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M: 97292
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8/7/78
Date

Firm Name: Hillman Drilling

Address: Rt. 85 Livingston

Signature: Ed Hillman License No. 258

97297

Bozeman 2S10E05 0AA Park

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-8268

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

095515

1. WELL OWNER
Name Hal Taylor's

2. CURRENT MAILING ADDRESS
2111 Academy Lane
Newport News Virginia 23602

3. WELL LOCATION
NE ¼ NE ¼ NW ¼ Section 5
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 90 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 30 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4 1/2 from 20 ft. to 80 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 Hole in. by _____ in.
_____ perforations from 70 ft. to 90 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? 20 ft.
Material used in grouting Cont. pd. Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 17 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 90
d) The pumping rate: 55 gpm.
e) Pumping water level 84 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 17 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 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

Depth (ft.) From	To	Formation
0	4	Topsoil
4	21	Sand + Gravel
21	90	Blue Clay + shale

RECEIVED
AUG 11 1992
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB-Irr

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8/5/92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
8/5/92
Date
Vince Hillman Drilling
Firm Name
6 Lancelot Lane Bozeman
Address
Vince Hillman 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

DNRC
111 N Tracy
Bozeman MT
59715

DEPARTMENT—BUREAU COPY

M:133318

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 Richard Tunnesen
Mailing address Box 774
Livingston MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ NW ¼ NW ¼ NW ¼, Section 5
Township 2 N/S Range 1 E/W County Park
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. 6 in. from 0 ft. to 40 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 72 ft. to 40 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 Bentonite
Depth from ____ 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 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*
80 gpm with drill stem set at 79 ft. for 1 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: HB

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	TOPSOIL
1	40	SANDY GRAVEL

RECEIVED
JUL 15 2002
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5-28-02

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) Hinman Drilling of MT
Address PO Box 865 Livingston MT 59047
Signature ____
Date 7/11/02 License no. 608

MBMG ID# 196808

FORM No. 603 - New 7-73

Bozeman

RECEIVED
AUG 5 1975
Montana Bureau of Mines and Geology

067-T2S-R10E-5B PARK

File No. 5550 943B

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT

WELL LOG REPORT

033452

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 TOM JOSEPH Address Box 1026 LIVINGSTON, MONTANA

2. WELL LOCATION: County PARK ; ¼ ¼ NW ¼, Sec. 5, Twp. 2 N-S, Rg. 10 E-W

3. PROPOSED USE: x Domestic ___ Stock ___ Municipal ___ Industrial x Lawn and Garden ___ Irrigation ___ Other (*if other, specify*)

4. METHOD DRILLED: x Cable ___ Bored ___ Forward Rotary ___ Reverse Rotary ___ Jetted ___ Other (*if other, specify*)

5. WELL CONSTRUCTION:
Diameter of hole 6 inches. Depth 107 ft.
Casing: x Steel x Plastic ___ Concrete ___ Threaded x Welded ___ Other (*if other, specify*)
Pipe Weight: Dia.: From: To:
17 lb/ft. 6 inches 0 feet 45 feet
Plastic lb/ft. 4 inches 27 feet 107 feet
___ lb/ft. ___ inches ___ feet ___ feet
Was perforated pipe used? x Yes ___ No
Length of pipe perforated 60 feet
Was casing left open end? ___ Yes x No
Was a well screen installed? ___ Yes x No
Material ___ Dia. ___ inches (*stainless steel, bronze, etc.*)
Perforation type: ___ slots ___ holes
Size 1/16 set from 57 feet to 107 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 ___ Graveled
Was the well grouted? ___ Yes x No
To what depth? ___ feet
Material used in grouting ___
Well head completion: Pitless adapter ?
12" above grade x Other ___
(*If other, specify*)
Was the well disinfected? ___ Yes x No

6. WATER LEVEL:
Static water level 17 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 X Bailer ___ Other
(*If other, specify*)
Pumping level below land surface:
92 ft. after 2 hrs. pumping 12 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG: ~~[illegible]~~ 211BMCK

Depth (ft.) From	To	Formation
0	22	Clays, sand, gravels and boulders.
22	67	Soft and hard lenses of shale. Blue color.
67	69	Sandstone 6 GPM. total.
69	94	Blue shales.
94	99	Maroon color shales.
99	105	Hard and medium hard blue shales.
105	107	Soft shales. Water.

(*Use separate sheet if necessary*)

9. DATE STARTED: 7/24/74

10. DATE COMPLETED: 7/30/74

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.

VAN DYKEN DRILLING CO. 1
Driller's or Firm Name *License No.*

BOZEMAN, MONTANA
Address

M 97290

[signature]
Signed by *Date*

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 JACK BURNS
Mailing address 25 ALDER LANE
LIVINGSTON MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ SE ¼ NW ¼ NW ¼, Section 5
Township 2 N/S Range 10 E/W County PARK
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. 6 in. from 0 ft. to 160 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 +2 ft. to 45 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☒ Welded
Dia. 4 1/2 in. from 20 ft. to 160 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 1/8 in. by 1/8 in.
____ no. of perforations/slots from 100 ft. to 160 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 Bentonite
Depth from 0 ft. to 20 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 36 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*
18 gpm with drill stem set at 155 ft. for 1 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: HB

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	TOPSOIL
1	8	SANDY CLAY
8	35	SAND + GRAVEL
35	43	SILTSTONE GRAY
43	47	GRAY SANDSTONE
47	53	TAN SILTSTONE
53	62	GRAY SANDSTONE
62	65	TAN SANDSTONE + CLAY
65	81	GRAY SHALE + CLAY
81	88	GRAY SANDSTONE / HARD
88	92	RED SHALE
92	117	GRAY SHALE + CLAY
117	125	GRAY SANDSTONE
125	160	SHALE + CLAY

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12-7-01

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) Hillman Drilling of Mt, Inc
Address PO Box 867 Livingston MT 59047
Signature ____
Date 2-15-02 License no. 608

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 194955

02S 10E 05 BCA

[129259]

Form No. 603 R2-97

WELL LOG REPORT

File No. 43B-C106245

1. WELL OWNER
Name ELIZABETH CLARKE

2. CURRENT MAILING ADDRESS
P.O. BOX 691
BIG TIMBER MT 59011

3. WELL LOCATION
NE ¼ SW ¼ NW ¼ Section 5
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____
Latitude _____ Longitude _____

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. 6 in. from 0 ft. to 100 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 in. from +2 ft. to 43 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type A-53-B Wall Thickness .250
Casing; Plastic Dia. 4 1/2 in. from 20 ft. to 100 ft.
Threaded ☐ Welded ☐ Dia. _____ in. from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
100 perforations from 40 ft. to 60 ft.
100 perforations from 80 ft. to 100 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? 20+ ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter Yes ☐ No ☐ N/A

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 33 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour 60 ft.
d) Recovery level 33 ft. Time of recovery 1 min/hrs.
e) Pumping rate 11 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.
N/A

11. PUMP INSTALLATION INFORMATION
Installation depth _____
Actual pumping rate N/A
Manufacturer's name _____
Type _____ Model No. _____ H.P. _____

12. WAS WELL PLUGGED OR ABANDONED? Yes ☐ No ☒
If yes, how? _____

13. WELL LOG
Depth (ft.) HB

From	To	Formation
0	5	SOFT GRAY CLAYS
5	10	GRAVELS & CLAY
10	15	SAND, GRAVEL & COBBLES
15	21	SOFT BROWN CLAY
21	29	WEATHERED SANDSTONE & CLAY
29	33	SOFT CLAY-GRAY
33	39	SHALE - GRAY - HARD
39	52	SANDSTONE - HARD - GRAY
52	58	" SOFT - GRAY
		(50-54 11 gpm)
58	72	SOFT CLAYS - STICKY - RED
72	91	SHALE & CLAYS - GRAY
91	100	SANDSTONE - HARD - BRO/GRAY

RECEIVED
MAY 18 1998
DNRC - BOZEMAN
REGIONAL OFFICE

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 5-4-98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 5-14-98
HAYES DRILLING CO.
Firm Name
2403 PAR COURT BOZEMAN MT 59715
Address
Will Cayer
Signature
361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MONTANA DNRC

JUN 1998

M: 168001

DEPARTMENT — BUREAU COPY

M: 168001

067 025 10E 00A PARK

#C 061 T 2S R 10E 5A

GW 4—Helena Independent Record

File No.

TRIPLICATE

County Park

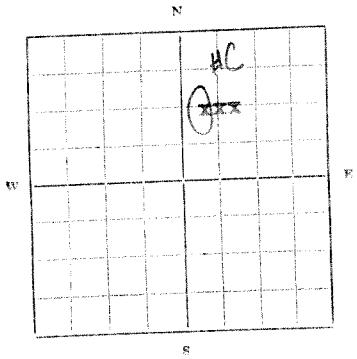
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Hubert Rustad (Name of Appropriator), of Box 973 (Address) Livingston (Town)

County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE ¼ Sec. 5 T. 2S R 10E

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 and stock watering

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 2 wells since about 1900, and one since 1958. Used continuously.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) Unknown

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 Hand dug wells, with electric pumps.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 2 in 1900, and other in 1958.

8. The depth of water table About 5 feet.

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 Wells have various types of pipe, rock and tile. Wells are about 10 feet deep.

10. The estimated amount of groundwater withdrawn each year Unknown

11. The log of formations encountered in the drilling of each well if available None

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

Signature of Owner

Date December 12, 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.

M:97286

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.

067 02S 10E 05A

GW 4—Helena Independent Record

#B 061 T. 2S R. 10E 5A

File No.

County Park

TRIPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

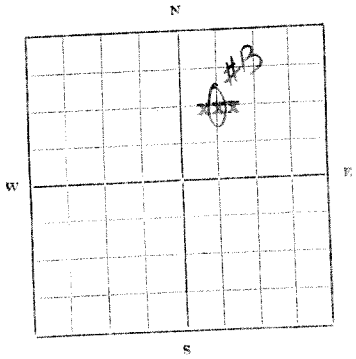
DEC 13 1963
Bureau of Mines and Geology

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Hubert Rustad (Name of Appropriator), of Box 973 (Address) Livingston (Town)

County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE ¼ Sec. 5 T. 2S R. 10E

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 and stock watering

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 2 wells since about 1900, and one since 1958. Used continuously.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) Unknown

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 Hand dug wells, with electric pumps.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 2 in 1900, and other in 1958.

8. The depth of water table About 5 feet.

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 Wells have various types of pipe, rock and tile. Wells are about 10 feet deep.

10. The estimated amount of groundwater withdrawn each year Unknown

11. The log of formations encountered in the drilling of each well if available None

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

Signature of Owner [signature]

Date December 12, 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. M:97287

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.

067 025 102 ...

GW 4—Helena Independent Record

#1 067 T 2S R 10E 5 A

File No.

(4) (4) (4)

County Park

TRIPLICATE

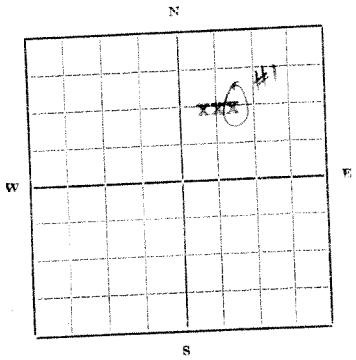
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

DEC 13 1963
Montana Bureau of Mines and Geology

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Hubert Rustad (Name of Appropriator), of Box 973 (Address) Livingston (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE ¼ Sec. 5 T 2S R 10E
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 and stock watering

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 2 wells since about 1900, and one since 1958. Used continuously.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) Unknown

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 Hand dug wells, with electric pumps.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 2 in 1900, and other in 1958.

8. The depth of water table About 5 feet.

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 Wells have various types of pipe, rock and tile. Wells are about 10 feet deep.

10. The estimated amount of groundwater withdrawn each year Unknown

11. The log of formations encountered in the drilling of each well if available None

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

Signature of Owner Hubert Rustad

Date December 12, 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.

M:97288

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: 97288

Bozeman

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 106630

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: Church Universal + Triumphant

2. CURRENT MAILING ADDRESS
P. O. Box 5000
Corwin Springs, MT 59030

3. WELL LOCATION
NE 1/4 NE 1/4 SE 1/4 Section 5
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify Fire protection

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 12 in. from 0 ft. to 100 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 12 3/4 from +2 ft. to 28 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness 250
Casing; Plastic Dia. 10 from _____ ft. to _____ ft.
Weight Sch 40 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 Timco
Type PVC Sch 40 Model No. _____
Dia. 10" Slot size 100 from 100 ft. to 94 ft.
Dia. _____ Slot size _____ from 82 ft. to 68 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 N/A
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 15 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 70
d) The pumping rate: 6 70 gpm.
e) Pumping water level 50 ft. at ½ hrs. after pumping began.
f) Duration of test: Pumping time 6 hrs.
g) Recovery time 5 min hrs.
h) Recovery water level 15 ft. at 5 min 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

Depth (ft.) From	To	Formation
0	27	Sand & Gravel
27	75	Blue Shale
75	82	Fractured Sandstone
82	100	Blue Shale
		(95-100 Hard Shale)

HB

RECEIVED
JUN 09 1994
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/22/94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
4/27/94
Date
Vince Hillman Drilling
Firm Name
1625 So. Rouse Bozeman
Address
Signature _____ License No. 436

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 144886

2S10E05DAB

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 116967

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 Church Universal & Triumphant

2. CURRENT MAILING ADDRESS
P.O. Box 5000
Corwin Springs, MT 59030

3. WELL LOCATION
NW ¼ NE ¼ SE ¼ Section 5
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 60 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6⅝ from +2 ft. to 30 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 20 ft. to 60 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations ½ Hole in. by _____ in.
_____ perforations from 20 ft. to 60 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 15 ft. If flowing; closed-in pressure _____ psi. _____ gpm. Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____.
c) Depth at which pump is set for test 60
d) The pumping rate: 30 gpm.
e) Pumping water level 55 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 5 ft. at ½ 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 HB

Depth (ft.) From	To	Formation
0	3	Topsoil
3	28	Sand & Gravel
28	34	Sandstone
34	60	Shale

RECEIVED
APR 25 1996
DNRC - BOZEMAN
REGIONAL OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 4/25/96

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
4/26/96
Date
Vince Hillman Drilling Inc.
Firm Name
1030 Mary Rd Bozeman
Address
Vince Hillman 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M: 156117
APR 03 1996

M: 156117

WELL LOG NOT AVAILABLE

M:213489

UTAH CO 301 CNO

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 941

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 Church Universal & Triumphant
MAILING ADDRESS c/o David Otis - P.O. Box 5000
Corwin Springs, MT 59030

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ SE ¼ NE ¼ SE ¼, Section 5
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 45.68747 Longitude 110.50824
Error as reported by GPS locator (± feet) 18
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [X] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 20 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 Sch 40 lbs. [X] Threaded [ ] Welded
Dia. 2 in. from 0 ft. to 20 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 2 Slot size .025 from 5 ft. to 20 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [X] Yes [ ] No
Size of gravel 10-20 Colo Silica
Gravel placed from ____ ft. to ____ ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 0 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.)
[X] 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 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*
NA 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: HB

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	Sand, gravel & small boulders
8" Manhole Completion		

RECEIVED
SEP 16 2005
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED
8. DATE WELL COMPLETED: 7/5/2005
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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 7/27/2005 License no. 361/074

MBMG ID# 221785

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

Bureau

WELL LOG NOT AVAILABLE

M:97296

GW2 Bozeman 2S 10E 05 D

File No.

TRIPLICATE

3

067 T ~~1 S~~ R ~~9 E 05 DBA~~

County Park

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level.....)

RECEIVED
MAR 22 1962
Montana Bureau of Mines and Geology

2
4
6
8
10
12
14
16
18
20
22
24
26
28

GRAVEL

Owner Double A Lumber Co., Livingston Division of Donna Timber, Inc. Address Livingston, Montana

Driller Jones Welding & Drilling Co. Address Bozeman, Montana

Date of Notice of Appropriation of Groundwater

Date well started Feb. 6, 1962 Date Completed Feb. 8, 1962

Type of well Drilled (dug, driven, bored or drilled) Equipment Used Churn Drill (Churn, drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐ Industrial ☒ Drainage ☐ Other ☐

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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
12"	10" ID	7'	28'	10" Double Louver	10'	28'

Static Water Level for non-flowing Well 10 feet

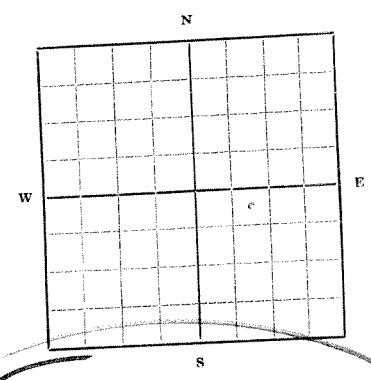
Shut-in Pressure for Flowing Well

Pumping Water Level 28 feet at gal. per minute

Discharge in gal, per min. of flowing well

How Tested Length of Test

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) Pit 2' above surface to 10' below surface.



SE ¼ Sec. 5 T 2S R 10E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

17
Driller's License Number

Milton E. Jones
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.

M: 97297

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.

97297

BOZEMAN

067 T2S R10E-5CB

3 GW 2 Revised 1969
STATE PUBLISHING COMPANY

(1)

RECEIVED
MAR 29 1971
Bureau of Geology

County PARK

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 DARRELL LAMM

Address SHIELDS ROUTE
LIVINGSTON MONT

Date well started 3-19-71

completed 3-20-71

Type of well DRILLED
(Dug, driven, bored or drilled)

Equipment used ROTARY
(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).

ESTIMATED ANNUAL WITHDRAWAL 30,000 GAL

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)
7 7/8	6 DIA	0	60	1/8 SLOTS	50	60

N
W E
S

LOT 7
NW 1/4 SW 1/4 Sec. 5
T. 2 ~~N~~ S R. 10 E ~~W~~

Static water level 19 ft.*
Pumping water level 27.5 ft.*
at 25 gallons per minute,
measured 90 minutes after pumping began.
*Measured from ground level.
Well developed by BAILING
for 3 hours.
Power N.A. Pump N.A. HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) PACKER
@ 1/4 FT CONCRETE
TOP

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature J. J. Bo...

Driller's Address 420 SIXTH AVE
Billings Mont

LICENSE NO. 197

DRILLER'S LOG

033454

Indicate the character of strata such as clay, 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)	
0	3	TOP SOIL
3	13	GRAVEL
13	30	SILTSTONE
30	34	SANDSTONE
34	60	RED SHALE
		WATER @ 35 FT
		WATER LEVEL 27 FT

60 Show exact depth of bottom

97293

Bozeman 067 02S 10E 05 CB PARK

Form No. 603 (Rev. 7/76)

STATE OF MONTANA

File No. _____

Department of Natural Resources and Conservation

CODED

034817

WELL LOG REPORT

Gold-Driller

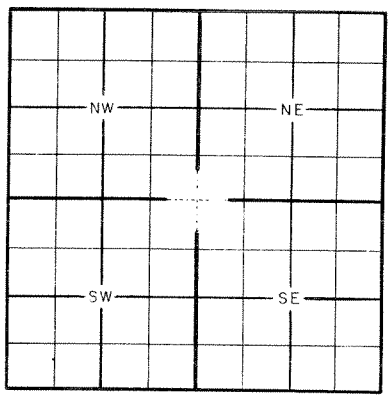
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name T. L. Kitts

2. CURRENT MAILING ADDRESS
111 So 8th
Livingston Mont 5904

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



NW NE SW SE

____ ¼ ____ ¼ NW ¼ SW ¼ Section 5
T. 2 S R. 10 E
N or S E or W
OR, Lot ____ Block ____
Subdivision ____
City ____ County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD X 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"	6" 17#	0	20			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter X
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower 1/2, pump type Sub
Pump intake level 22 feet below land surface
Power (electric, diesel, etc.) Elec

7. WATER LEVEL
Static water level 19 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 X bailer ____ other
(if other, specify) ____
Pumping level below land surface:
19 ft. after 1 hrs. pumping 16 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 1/4/78
DATE COMPLETED 1/4/78

11. WELL LOG

Depth (ft.) From	To	Formation
0	20	clay
20	28	red shale

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M: 97294
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

3/21/78
Date

Hellman Drilling
Firm Name

[illegible]
Address

[illegible] 258
Signature License No.

97294

Bozeman U61 2S 10E 05 CD Park

Form No. 603 (R 6-87) NOV 06 1989

File No. _____

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of

063603

1. WELL OWNER
Name Jamie Barney

2. CURRENT MAILING ADDRESS
Sheilds Rt
Livingston, MT 59047

3. WELL LOCATION
County Park
Township 2S N/S Range 10E E/W
NW ¼ SW ¼ Section 5
Lot _____ Block _____
Subdivision _____
Tract Number _____

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. DRILLING METHOD _____ cable, x air rotary, _____ forward rotary, _____ reverse rotary, _____ jetted, _____ other (specify) _____

6. WELL LOG

Depth (ft.) From	To	Formation
0	2	top soil
2	15	clay
15	34	sandstone
34	35	clay
35	105	hard shale
105	185	hard shale - layers of sandstone

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 _____ and/or Screen _____ Kind Size	From (feet)	To (feet)
8"	8"	0	30			
6"	6" 17#	0	38			
6"	4½" PVC	38	185	3/8" holes	105	185

Was casing left open end? x Yes _____ No
Was a packer or seal used? x Yes _____ No
If so, what material cement
Was the well gravel packed? _____ Yes x No
To what depth was the well grouted? 20+ ft
Material used in grouting Bentonite
Well head completion: Pitless adapter _____ 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 x Pump _____ Bailer _____
b) Static water level immediately before testing 17 ft. If flowing; closed-in pressure _____ psi _____ gpm
Controlled by: _____ valve, x reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 180
d) The pumping rate and means of discharge (i.e., bailing, airlift, pumping) 11½ gpm
e) Maximum drawdown during the test 163 ft
f) Duration of test: Pumping time 1 hrs
Recovery time _____ hrs
g) Recovery water level 17 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 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.

9. WAS WELL PLUGGED OR ABANDONED? _____ Yes x No
If yes, how? _____

10. DATE COMPLETED 8/29/89

11. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

9/29/89
Date

VanDyken Drilling
Firm Name

P.O. Box 3745
Address

Bozeman, MT 59772
Signature

License No. 380

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

97295

Bozeman

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. [illegible]

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

080287

1. WELL OWNER
Name Richard L Foerster FORESTER

2. CURRENT MAILING ADDRESS
Box 238
Clyde Park Mt.

3. WELL LOCATION
_____ ¼ SW ¼ SW ¼ Section 5
Township 2 S N/S Range 10 E E/W County Park
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. 6" in. from 0 ft. to 105 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6" from +2 ft. to 28 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 4½" from 25 ft. to 105 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☐ No ☐
Type of perforator used _____
Size of perforations _____ in. by _____ in.
slotted perforations from 85 ft. to 105 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? continuous ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No

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 36 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: 75 gpm.
e) Pumping water level 105 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 125 hrs.
h) Recovery water level 36 ft. at 25 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

Depth (ft.) From	To	Formation
0	3	Topsoil
3	27	Clay
27	105	Shale & Sandstone
		4
		HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2-26-91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

2-26-91
Date

ESD Inc
Firm Name

RT 85 Box 4286 Livingston
Address

[illegible] 258
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

DEPARTMENT — BUREAU COPY

M: 12481

BOZEMAN 02S 10E 05DCB PARK

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 110

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 TIM O'HARA

2. CURRENT MAILING ADDRESS
RT 62 BOX 3132 B
LIVINGSTON MT 59047

3. WELL LOCATION
NW ¼ SW ¼ SE ¼ Section 5
Township 2 N/S Range 10 E/W County PARK
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. 6 in. from 0 ft. to 39 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 37 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ 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 _____
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? 20 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No N/A

9. PUMP (if installed)
Manufacturer's name N/A
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 14 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 35
d) The pumping rate: 45 gpm.
e) Pumping water level 35 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ¼ hrs.
h) Recovery water level 14 ft. at ¼ 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

Depth (ft.) From	To	Formation
0	37½	GRAVEL, SAND, COBBLES
		A FEW SMALL
		BOULDERS
37½	39	RED CLAY - DRY

RECEIVED
FEB 14 1995
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 12-27-94

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
12-27-94
Date
HAYES DRILLING
Firm Name
511 N. MONTANA AVE #A BOZEMAN
Address
Signature
361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M: 149224

MAR 13 1995

DEPARTMENT BUREAU COPY M: 149224

20 10E 5 [illegible] 43B-C11/085

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 569

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 Myrstol Post & Pole
MAILING ADDRESS 5 Rustad Lane
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ SW ¼ SW ¼ SE ¼, Section 5
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0537627 Longitude 5058807
Error as reported by GPS locator (± feet) 43
Horizontal datum [X] NAD27 [ ] WGS84

ok

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 43 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 41 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 [X] No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 16 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
110 gpm with drill stem set at 39 ft. for 2 hours
Time of recovery 15 min. hrs/min. Recovery water level 16 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: HB

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	Sand, clay & gravel
6	41	Very sandy gravels & small boulders

RECEIVED
OCT 1 0 2001
MONTANA BOARD OF OIL

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 08/01/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 08/06/2001 License no. 361/074

MBMG ID# M:192238

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DNRC

02S 10E 05 DCAB

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 940

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 Rustad Ranch

MAILING ADDRESS 84 Rustad Lane
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NE ¼ SW ¼ SE ¼, Section 5
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 45.68634 Longitude 110.51416
Error as reported by GPS locator (± feet) 18
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [X] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 25 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 Sch 40 lbs. [X] Threaded [ ] Welded
Dia. 2 in. from 0 ft. to 22 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 2 Slot size .020 from 6.5 ft. to 21.5 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [X] Yes [ ] No
Size of gravel 10-20 Colo. Silica
Gravel placed from 5 ft. to 25 ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 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.)

[X] 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 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*
NA 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: HB

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	21	Sand, gravels, cobbles & small boulders
21	25	Very sandy gravels
		8 x 12 Manhole Completion

RECEIVED
SEP 16 2005
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 7/5/2005

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 7/26/2005 License no. 361/074

MBMG ID# 221788

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

Bureau

Bozeman

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 105556

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 Norbert Herauf
Name Norbert Herauf Mary Herauf

2. CURRENT MAILING ADDRESS
PO Box 1277
Livingston, MT. 59047

3. WELL LOCATION
_____ ¼ SE ¼ SE ¼ Section 5
Township 2 N/S Range 10 E/W County Park
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. _____ in. from _____ ft. to 26 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. 6" from +2 ft. to 26 ft.
Type A53 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 _____
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? continuous ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

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 13 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: 35 gpm.
e) Pumping water level 26 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time .25 hrs.
h) Recovery water level 13 ft. at .25 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

Depth (ft.) From	To	Formation
0	26	Sand & gravel

HB

RECEIVED
SEP 07 1990
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8-30-90

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 8/30/90
Firm Name Environmental Service Drilling
Address Pt 85 Box 4280 Livingston, MT. 59047
Signature [signature] License No. 258

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DEPARTMENT — BUREAU COPY

M:144006

GW 4—Helena Independent Record

067 02S 10E 05D PARK 033427

File No.

(4)

T 2 S R 10 E 5D

County Park

TRIPLICATE

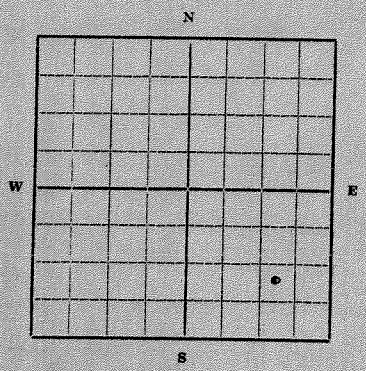
RECEIVED
MAR 22 1962
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Burkland Studs, Inc. (Name of Appropriator), of P. O. Box 498 (Address) Livingston, (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE ¼ Sec. 5 T 2 S R 10 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 industrial

3. Date or approximate date of earliest beneficial use; and how continuous the use has been approx. 3 years steady

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 5,000 Gallons per hour

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 pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater

8. The depth of water table 18'

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 10" x 30' Drilled Slots

10. The estimated amount of groundwater withdrawn each year 4,380,000 Gallons

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

BURKLAND STUDS, INC.

Signature of Owner [signature]

Date [illegible] 1962

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.

97298

Township 02S, Range 10E, Section 6

Well Logs

BOZEMAN

3 GW 2 Revised 1969
STATE PUBLISHING COMPANY

(1)

RECEIVED
FEB 23 1972
Montana Bureau of Geology

067 T2S R10E-6 AD

County PARK

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 LORRIE PETERSON

Address LIVINGSTON MONT.

Date well started Oct 11/71

completed Oct. 13/71

For Administrator's Use

File

GW 1

Type of well Drilled
(Dug, driven, bored or drilled)

Equipment used Cable tools.
(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).

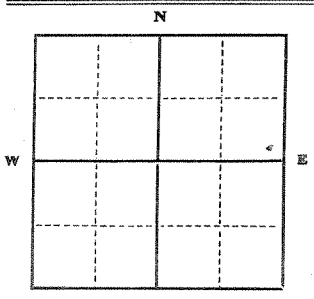
ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per ft.	0	36	none		

N

W E

S



SE ¼ NE ¼ Sec. 6

T. 2 ~~N~~ S R. 10 E ~~W~~

Static water level 3 ft.*

Pumping water level 27 ft.*

at 30 gallons per minute, measured 60 minutes after pumping began.

*Measured from ground level.

Well developed by surging for 2 hours.

Power Elect. Pump ½ HP

Remarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings shutoff outside of casing from 0' 35'

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Van Dyken Drilling

Driller's Address VAN DYKEN DRILLIND CO.

BOZEMAN, MONTANA Bert Van Dyken LICENSE NO. 1

DRILLER'S LOG

033458

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)	
0	20	Sand and gravels. Wet.
20	33	Medium hard shales. Dry.
33	52	Hard shales. Water.

52' Show exact depth of bottom

97302

025106017 UD

MONTANA WELL LOG REPORT

Well ID# _____

Form No. 603 R2-99

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: Lorrie Peterson
Mailing address: 83 old Clyde Park Rd
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ SE ¼ NE ¼ ____ ¼, Section 6
Township 2 ☒S Range 10 ☒E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☒Yes ☐No
Latitude 45° 41.51N Longitude 110° 31.96W
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. 6 in. from 0 ft. to 60 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 +2 ft. to 27 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐Threaded ☐Welded
Dia. 4 1/2 in. from 20 ft. to 60 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 1/8 Hole in.
____ no. of perforations/slots from 40 ft. to 60 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 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 23 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*
75 gpm with drill stem set at 60 ft. for 1 hours
Time of recovery 42 hrs/min. Recovery water level 23 ft.

OR Baller 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: HB

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	Topsoil
3	24	Sand Gravel & Boulders
24	27	Brown Clay
27	29	Blue Shale
29	35	Brown Shale
35	47	Grey Shale
47	60	Sand Stone

RECEIVED
MAY 12 2004
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 4/5/04

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) Hillman Drilling
Address 1039 Mary Rd Bozeman
Signature [signature]
Date 4/5/04 License no. 436

MBMG ID# 212320

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT - BUREAU COPY

Form No. 603 (Rev. 7/76)

BOZEMAN

STATE OF MONTANA

File No. [illegible]

Department of Natural Resources and Conservation

Coded

033455

WELL LOG REPORT

Gold-Driller

PARK

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 Chuck Newland
To Ron Huisenga, Contr.

2. CURRENT MAILING ADDRESS
[illegible]

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION

NW NE SW SE

____ ¼ ____ ¼ ____ ¼ ____ ¼ Section 6
T. 2 N or S R. 10 E or W
OR, Lot ____ Block ____
Subdivision Lone Island Sub
City ____ County PARK
Elevation ____ Accuracy: ___ ±10'; ___ ±50'; ___ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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"	1716 6	0	27			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level ____ 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) Air
Pumping level below land surface:
____ ft. after ____ hrs. pumping ____ gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes ____ No
If yes, how? ____

10. DATE STARTED 4-25-79
DATE COMPLETED 4-25-79

11. WELL LOG

Depth (ft.) From	To	Formation
0	7	Topsoil
7	20	Gravel
20	40	Sandstone

(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.

Date ____

Firm Name [illegible]

Address [illegible]

Signature [illegible] License No. [illegible]

97299

File No. _____

Form No. 603 (Rev. 7/76)

STATE OF MONTANA

2S10E06DA

Department of Natural Resources and Conservation

White-Department
Yellow-Department
Pink-Well Owner
Gold-Driller

033463

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.

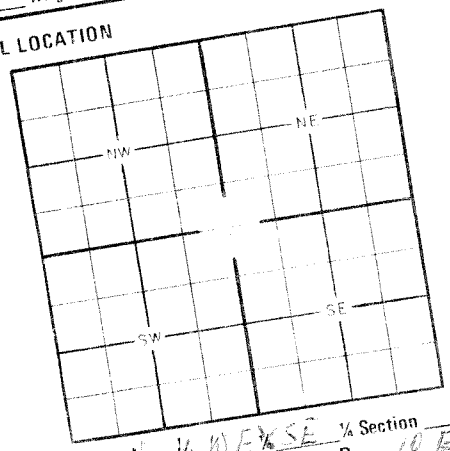
1. WELL OWNER
Name Terry Peterson

2. CURRENT MAILING ADDRESS
Rt 88
Livingston Mont

3. PROPOSED USE
_____ irrigation; _____ other (specify) _____ X domestic (includes lawn and garden); _____ stock; _____ municipal; _____ industrial;

4. WELL LOCATION

NW NE SW SE



¼ N ¼ NE ¼ SE ¼ Section 6
T. 2 S N or S R. 10 E E or W
OR, Lot _____ Block _____
Subdivision _____
City Livingston County Park
Elevation _____ Accuracy: ___ ±10'; ___ ±50'; ___ ±100';

5. DRILLING METHOD
X forward rotary, _____ cable, _____ bored,
_____ 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"	6" 17#	0	40			

Was casing left open end? X Yes, ___ No
Was a packer or seal used? ___ Yes, X No
If so, what material _____
Was the well gravel packed? ___ Yes, X No
Was the well grouted? ___ Yes, X No
To what depth? _____
Material used in grouting _____
Well head completion: Pitless adapter _____
12 in. above grade X, other _____
(if other, specify) _____
Pump horsepower _____, pump type _____
Pump intake level _____ feet below land surface
Power (electric, diesel, etc.) _____

7. WATER LEVEL
Static water level 15 feet below land surface
If flowing, closed-in pressure _____ psi
_____ gpm flow through _____ inch pipe
_____ valve, _____ reducers, _____ other

8. WELL TEST DATA ___ pump ___ bailer ___ other
(if other, specify) air
Pumping level below land surface:
45 ft. after 1 hrs. pumping 9 gpm
_____ ft. after _____ hrs. pumping _____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ___ Yes X No
If yes, how? _____

10. DATE STARTED 8/22/79
DATE COMPLETED 8/22/79

11. WELL LOG

Depth (ft.) From	To	Formation
0	20	gravel
20	60	red clay & shale

(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.

M: 97312

8/22/79
Date

Hollman Drilling
Firm Name

Rt 85 Livingston
Address

Ed Hollman 258
Signature License No.

M: 97312

Bozeman

022 10606 DN

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. 109703

1. WELL OWNER
Name CLIF & SHARON WATKINS

2. CURRENT MAILING ADDRESS
3916 W. SWEETWATER AVE
PHOENIX, AZ 85029

3. WELL LOCATION
_____ 1/4 NE 1/4 SE 1/4 Section 6
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name LONE ISLAND SUB.
Tract Number 8

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. 6' in. from 0 ft. to 46 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 31 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53 Wall Thickness .250
Casing; Plastic Dia. 4 1/2 from 26 ft. to 46 ft.
Weight 160 # Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
14' perforations from 32 ft. to 46 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? 20 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION: N/A
Pitless Adapter ☐ Yes ☐ No

9. PUMP (if installed) N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 14 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 44
d) The pumping rate: 50 gpm.
e) Pumping water level 44 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/4 hrs.
h) Recovery water level 14 ft. at 1/4 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	3	TOPSOIL & CLAY & COBBLES
3	14	SAND, GRAVEL & BOULDERS
14	30	SANDSTONE - WEATHERED
30	46	SANDSTONE. HARD
		(38 - 44 FRACTURED)
		50 gpm

RECEIVED
SEP 23 1994
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8-11-94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8-11-94
Date

HAYES DRILLING
Firm Name

511A N MONTANA AVE BOZEMAN
Address

[signature]
Signature

361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

M: 147952

025 106 06 DAH

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 43B-C112499

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 VERNE BEFFERT
Mailing address 1 ISLAND PARK DR
HUNGSTON MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
~~NW ¼ SE ¼ NE ¼ SE~~ NE NE SE ¼, Section 6
Township 2 N/S Range 10 E/W County PARK
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☒ Yes ☐ No
Latitude 0536515 Longitude 5059482
Error as reported by GPS locator (± feet) 117
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. 6 in. from 0 ft. to 85 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 +18' ft. to 39 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4 1/2 in. from 25 ft. to 85 ft.

Perforations/Slotted Pipe:
Type of perforator used FACTORY SLOTTED
Size of perforations/slots .025 in. by 1 in.
20' no. of perforations/slots from 25 ft. to 45 ft.
20' no. of perforations/slots from 65 ft. to 85 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 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 8 ft. below top of casing **or**
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc BUCKET
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*
60+ gpm with drill stem set at 80 ft. for 2 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.*

HB

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	19	SAND, GRAVEL & LARGE COBBLES
19	41	RED SHALE & CLAY
41	43	D. RED SANDSTONE - HARD - FRACTURED
		10 gpm
43	67	SHALE & CLAY - RED/GRAY
67	69	SANDSTONE - GREENISH BROWN - HARD
		10-12 gpm
69	73	RED SHALE & CLAY
73	85	GRAY SHALE & CLAY W/ THIN
		LAYERS OF BROWN SANDSTONE 2"-4"
		WATER - 30-40 gpm

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8-9-99

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) HAYES DRILLING CO
Address 2403 PAR CT BOZEMAN MT 59047
Signature [signature]
Date 8-9-99 License no. 361

MBMG ID# 176984

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DEPARTMENT—BUREAU COPY

02S 10E 06 DAB

File No. _____

WELL LOG REPORT

FORM NO. 603 (R 6-94)

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 Jim Hearr

2. CURRENT MAILING ADDRESS
616 Meadowlark LN
Livingston, MT 59047

3. WELL LOCATION
NW ¼ NE ¼ SE ¼ Section 6
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

OK

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. 6 in. from 0 ft. to 120 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 30 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness 250
Casing; Plastic Dia. 4 1/2 from 20 ft. to 120 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 Hole in. by _____ in.
_____ perforations from 20 ft. to 100 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 22 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 120
d) The pumping rate: 25 gpm.
e) Pumping water level 115 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 22 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 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

Depth (ft.) From	To	Formation
0	7	Topsoil
7	28	Gravel
28	120	Blue Shale

AH

RECEIVED
JUL 10 1997
DNRC - BOZEMAN
REGIONAL OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 5/30/97

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
7/10/97
Date
Vince Hillman Drilling Inc
Firm Name
1030 Mary Rd Bozeman
Address
Signature
436
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

JUL 1997

M: 163685

02S 10E 06 DABD

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 860

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 Helen Peterson
MAILING ADDRESS 69 Old Clyde Park Road
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ NW ¼ NE ¼ SE ¼, Section 6
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536384 Longitude 5059562
Error as reported by GPS locator (± feet) 40
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 203 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 32 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 20 ft. to 200 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 Screens
Dia. 4.5 Slot size .025 from 120 ft. to 140 ft.
Dia. 4.5 Slot size .025 from 180 ft. to 200 ft.
Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 0 ft. to 32 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] Static water level 20 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
23 gpm with drill stem set at 198 ft. for 1 hours
Time of recovery 1 hr. hrs/min. Recovery water level 20 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: HB

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	Topsoil
3	20	Sands & gravels
20	35	Red shales & clay (trace 30')
35	40	Brown sandstone
40	80	Gray shales & clays
80	83	Fractured brown sandstones
83	130	Red & gray shales & clay
130	140	Fractured red shales (7.5 gpm)
140	165	Red shales & clay
165	170	Brown & gray sandstones
170	190	Red shales & clays
190	195	Gray sandstone (15 gpm)
195	203	Coarse brown sandstone

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NOV 16 2004
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 08/31/2004

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)
Hayes Drilling Co
Address 2403 Bar Court - Bozeman, MT 59715
Signature Will Hayes
Date 09/16/2004 License no. 361/074

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 215297

Rivers

Form No. 603 R10/79 067 025 10E 06 DAC PARK

BOZEMAN coded

File No.

WELL LOG REPORT

RECEIVED DEC 9 1980 MONTANA DAMRICH BOZEMAN FIELD OFFICE

State law requires that this form be filed by the water well [illegible] days after complet[illegible]

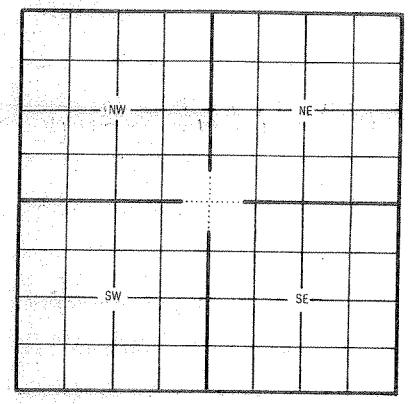
033464

1. WELL OWNER
Name Bob Dolan

2. CURRENT MAILING ADDRESS Rt 85 ~~[illegible] Spruce~~ Box 4074 Livingston, Mt. 59047

3. WELL LOCATION

NW NE SW SE



SW ¼ NE ¼ SE ¼ Section 6
Township 2 N/S Range 10 E/W
County Park
Lot Block
Subdivision Lone Island
Well Elevation
Accuracy: ± 10'; ± 50'; ± 100';

4. DRILLING METHOD X 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 X and/or Screen: Kind Size	From (feet)	To (feet)
6"	6" 19 lbs	0	68'6"	plastic 4" 1/16" slots	40	68'6"

Was casing left open end? X Yes No
Was a packer or seal used? X Yes No
If so, what material drill cuttings
Was the well gravel packed? Yes X No
Was the well grouted? Yes X No
To what depth?
Material used in grouting
Well head completion: Pitless adapter X
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 35 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 X bailer other
(if other, specify)
Pumping level below land surface:
40 ft. after 1 hrs. pumping 45 gpm
ft. after hrs. pumping gpm

8. WAS WELL PLUGGED OR ABANDONED? Yes X No
If yes, how?

9. DATE STARTED 9-16-80
DATE COMPLETED 9-19-80

10. WELL LOG

Depth (ft.) From	To	Formation
0	1	top soil
1	25	gravel
25	27	grey shale - soft.
27	38	purple soft shale
38	50	purple shale - soft.
50	55	grey shale - hard
55	59	purple shale hard
59	68'6"	purple shale - med hard

(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.

Oct 23, 1980
Date

Van Dyken Drilling
Firm Name

417 N. 6th Bozeman, Mt. 59715
Address

Mrs Klaas Andriesen 306
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

97313
WL - 4469

DEPARTMENT COPY

025 10E 06 DHCH

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 601

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 Steve Marti
MAILING ADDRESS 320 West Montana
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ SW ¼ NE ¼ SE ¼, Section 6
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536478 Longitude 5059381
Error as reported by GPS locator (± feet) 30
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 140 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 58 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 40 ft. to 140 ft.

Perforations/Slotted Pipe:
Type of perforator used n/a
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: [X] Yes [ ] No
Material Factory slotted Sch 40 PVC
Dia. 4 1/2 Slot size .025 from 100 ft. to 140 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 20 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
12 gpm with drill stem set at 120 ft. for 1.5 hours
Time of recovery 1 hr hrs/min. Recovery water level 20 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: HB

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	18	Sand, gravel & boulders
18	27	White clay
27	60	Red shale
60	95	Red & brown sandstone - hard (1 gpm)
95	102	Soft red shale & clay
102	105	Brown sandstone - hard
105	111	Red shale & clay
111	118	Reddish brown sandstone - hard (9 gpm)
118	125	Red shale & clay
125	128	Gray sandstone - hard (2 gpm)
128	132	Red clay
132	140	Gray shale & clay

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12/20/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 01/09/2002 License no. 361/074

MBMG ID# M: 194249

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DNRC

194249

BOZEMAN 067 25 10E 6 DAD

Form No. 603 R8/83

File No. C58428-43B

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of 024274

1. WELL OWNER
Name Douglas Hardy

2. CURRENT MAILING ADDRESS
504 W. Geyser
Livingston, Mt. 59047

3. WELL LOCATION
County Park
Township 2S N/S Range 10E E/W
SE ¼ NE ¼ Se ¼ Section 6
Lot 3 Block
Subdivision Lone Island Sub. # 26

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify

5. DRILLING METHOD ____ cable, ____ bored,
x 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 x and/or Screen: Kind Size	From (feet)	To (feet)
6"	6" 19#	0	58	1/16" holes in 4½" plastic	38	58

Was casing left open end? x Yes ____ No
Was a packer or seal used? x Yes ____ No
If so, what material drill cuttings
Was the well gravel packed? ____ Yes x No
Was the well grouted? ____ Yes x No
To what depth?
Material used in grouting
Well head completion: Pitless adapter
x Yes ____ No
Top of casing 12 in. or greater above grade
x Yes ____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
50 Degrees Fahrenheit
☐ Measured ☒ Estimated

8. WATER LEVEL
Static water level 15 feet below land surface
If flowing; closed-in pressure ____ psi
____ gpm
Controlled by: ____ valve, ____ reducers,
____ other, (specify)

9. WELL TEST DATA ____ pump ____ bailer
x other, (specify) air
Pumping water level below land surface:
57 ft. after 1 hrs. pumping 20 gpm
____ ft. after ____ hrs. pumping ____ gpm

10. WAS WELL PLUGGED OR ABANDONED? ____ Yes x No
If yes, how?

11. DATE COMPLETED 3/28/85

12. WELL LOG

Depth (ft.) From	To	Formation
0	2	top soil
2	34	claybound gravel
34	58	shale

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

4/15/85
Date

VanDyken Drilling
Firm Name

417 N. 6th Bozeman, Mt. 59715
Address

Mrs Klaas Andriesen 380
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59620 449-3962

STATE PUBLISHING CO., HELENA, MONT.

DEPARTMENT - BUREAU COPY

97314

Bozeman 067 22 10E 06 D Park

Form No. 603 (R 6-87)

File No. C 73743-43B

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion

021712

1. WELL OWNER
Name Richard Brown

2. CURRENT MAILING ADDRESS
615 Bluebird Ln
Livingston Montana

3. WELL LOCATION
County Park
Township 2S N/S Range 10 E E/W
EL 1/4 SE 1/4 Section 6
Lot 6 Block
Subdivision Lone Island Sub
Tract Number Plat 26

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify

5. DRILLING METHOD ✓ cable, ____ air rotary, ____ forward rotary, ____ reverse rotary, ____ jetted, ____ other (specify)

6. WELL LOG

Depth (ft.) From	To	Formation
0	1	top soil
1	12	River Rock
12	26	Sand & Gravel Small
26	48	Red Clay
48	53	Red & Gray Sandstone
53	75	Gray Sandstone

HB

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 ____ and/or Screen ____ Kind Size	From (feet)	To (feet)
6"	6" 280 Steel	+18	55	Slated Casing	55	75
4 1/2	160 PVC	35	75			

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
To what depth was the well grouted? 55 ft
Material used in grouting Bentonite
Well head completion: Pitless adapter ✓ Yes ____ No
Top casing 18 in. or greater above grade ✓ 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 ____ Bailer ____
b) Static water level immediately before testing 27 ft. If flowing; closed-in pressure ____ psi ____ gpm
Controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test ____
d) The pumping rate and means of discharge (i.e. bailing, airlift, pumping) 20 gpm
e) Maximum drawdown during the test 20 ft
f) Duration of test: Pumping time 1 hrs
Recovery time 1:10 hrs
g) Recovery water level 27 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 ✓ No
If yes, how? ____

10. DATE COMPLETED April 4 1990

11. DRILLER/CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

4-4-90
Date

Beven Drilling
Firm Name

Po Box 1187 Big timber mt
Address

Thomas O Bever 294
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

M: 97311

DEPARTMENT — BUREAU COPY

Form No. 603 (Rev. 7/76) 067

Bozeman

STATE OF MONTANA

PARK

File No.

RECEIVED 080407

Department of Natural Resources and Conservation

2S10E6DA

WELL LOG REPORT

OCT 01 1979

MONT. DEPT. OF NATURAL RESOURCES & CONSERVATION

White-Department
Yellow-Department
Pink-Well Owner
Gold-Driller

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 Marlin Sirgni
90 Wally O'Hara

2. CURRENT MAILING ADDRESS
Box 1213
Livingston, Mt 59047

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION

NW NE SW SE

____ ¼ ____ ¼ ____ ¼ ____ ¼ Section ____
T. ____ N or S R. ____ E or W

OR, Lot # 3 Block ____
Subdivision Lone Island Sub
City Livingston County Park
Elevation ____ Accuracy: ___ ±10'; ___ ±50'; ___ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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"	6" 17#	0	22			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 18 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) Air
Pumping level below land surface:
28 ft. after 1 hrs. pumping 30 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 9/25/79
DATE COMPLETED 9/25/79

11. WELL LOG HB

Depth (ft.) From	To	Formation
0	20	gravel & Sand
20	40	Red shale

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M: 21565
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 9/26/79
Firm Name Hillman Drilling
Address Pt 85 Livingston
Signature Ed Hillman
License No. 258

M: 21565

Form No. 603 (Rev. 7/76)

RECEIVED
NOV 27 1979
MONT. DEPT. of NATURAL RESOURCES & CONSERVATION

STATE OF MONTANA
02S10E06
Department of Natural Resources and Conservation

File No. _____

White-Department
Yellow-Department
Pink-Well Owner
Gold-Driller

WELL LOG REPORT

[033456]

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.

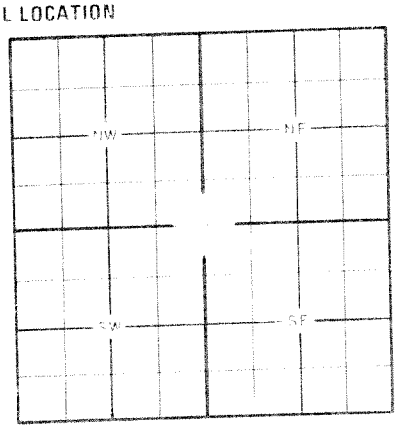
1. WELL OWNER
Name Jim Handle

2. CURRENT MAILING ADDRESS
Box 1263
Livingston Mont 59047

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION

NW NE SW SE



____ ¼ ____ ¼ ____ ¼ ____ ¼ Section 6
T. 2 R. 10
N or (S) (E) or W
(OR) Lot 3 Block 2
Subdivision Lone Island Sub
City Livingston County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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"	17lb	0	40			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 21 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 X other
(if other, specify) Air
Pumping level below land surface:
45 ft. after 1 hrs. pumping 30 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 8/28/79
DATE COMPLETED 8 28 79

11. WELL LOG

Depth (ft.) From	To	Formation
0	20	Gravel
20	50	Sandstone
50	52	Clay

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M:97301
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
9/3/79
Date

Hillman Drilling M:97301
Firm Name

Rt 85 Box 4284 Livingston Mt 59047
Address

Will P Clayton 361
Signature License No.

Bozeman

02S 10E 06DC

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: JON LIERS

2. CURRENT MAILING ADDRESS
BOX 1104
LIVINGSTON MT 59047

3. WELL LOCATION
SW ¼ SE ¼ Section 6
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____ or Lot 4, Block 2
Subdivision Name LOUE ISLAND
Tract Number _____

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6" in. from 0 ft. to 50 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 from +1½ ft. to 27½ ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness .250
Casing; Plastic Dia. 4½ from 25 ft. to 50 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 5/8 in. by 3/8 in.
200 perforations from 40 ft. to 50 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? 20 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No N/A

9. PUMP (if installed)
Manufacturer's name N/A
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 17 ft. If flowing; closed-in pressure _____ psi. _____ gpm. Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 45'
d) The pumping rate: 35 gpm.
e) Pumping water level 45 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1min - hrs.
h) Recovery water level 17 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 ☒ No
If yes, how? _____

12. WELL LOG

Depth (ft.) From	To	Formation
0	4	TOPSOIL + DARK CLAY
4	18	GRAVEL + BOULDERS
18	21	RED CLAY
21	27	BROWN HARD CLAY
27	31	SANDSTONE
31	38	RED - CLAY
38	48	SANDSTONE - FRACTURED - WATER
48	50	WHITE STICKY CLAY. BENTONITE.

HB

RECEIVED
JUL 01 1994
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4-6-94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
4-7-94
Date
HAYES DRILLING
Firm Name
5805 BOXWOOD DR BOZEMAN MT 59715
Address
Signature
361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:147954

4

02S 10E 06DCA

File No. _____

Form No. 603 R2-97

WELL LOG REPORT

1. WELL OWNER
Name: MARK ASBURY

2. CURRENT MAILING ADDRESS
1 DRIFTWOOD DRIVE
LIVINGSTON, MT 59047

3. WELL LOCATION
NE ¼ SW ¼ SE ¼ Section 6
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number 0536010-509238
Latitude _____ Longitude _____

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from +2 ft. to 185 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Threaded ☐ Welded ☒ Dia. 6 5/8 in. from +2 ft. to 39 ft.
Type A53: B Wall Thickness .0250 Dia. _____ in. from _____ ft. to _____ ft.
Casing; Plastic Threaded ☐ Welded ☐ Dia. 4.5 in. from 40 ft. to 185 ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
620 perforations from 40 ft. to 160 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? 18 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 ✓ Pump _____ Bailer _____
b) Static water level immediately before testing 15 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour 160 ft.
d) Recovery level 15 ft. Time of recovery 1 min/hrs.
e) Pumping rate 23 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 HB

Depth (ft.) From	To	Formation
0	17	cobbles & gravel
17	22	" sandy little H20
22	39	Brown & gray clay
39	40	Course shale easy gray
40	49	sandstone dark green easy
49	50	shale easy grayish brown
50	52	shale hard gray
52	57	blue sandstone hard course
57	60	clay green
60	74	brown clay easy
74	80	blue green shale easy
80	82	blue green sandstone easy
82	165	brown sandstone easy
165	180	brown & gray sand
180	185	blue shale easy

49 3gpm
80 5gpm
125 7gpm
145 3gpm
165 5gpm

RECEIVED
SEP 15 1998
DNRC - BOZEMAN
REGIONAL OFFICE

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 7.7.98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 7-7-98
Firm Name HAYES DRILLING
Address 2403 THE COURT BOZEMAN MT 59715
Signature Tony Kaunto License No. 97

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

M:170493

OCT 1998

DEPARTMENT — BUREAU COPY

M:170493

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 614

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 Pete & Sally Hart
MAILING ADDRESS PO Box 16
West Glacier, MT 59936

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ NE ¼ SW ¼ SE ¼, Section 6
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536236 Longitude 5059191
Error as reported by GPS locator (± feet) 47
Horizontal datum [X] NAD27 [ ] WGS84

ok

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 135 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 36 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 15 ft. to 135 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: [X] Yes [ ] No
Material Factory slotted SCH 40 PVC
Dia. 4 1/2 Slot size .025 from 115 ft. to 135 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] 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 Bucket/stopwatch
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*
60 gpm with drill stem set at 120 ft. for 1 hours
Time of recovery 30 min. hrs/min. Recovery water level 18 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: AB

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		Sand, gravel, cobbles & a few small
	18	boulders
18	48	Dark red shale - hard, some clay
48	53	Gray shale & clay - soft
53	80	Red shale - hard
80	105	Gray shales - some clay
105	115	Red shales
115		Brown sandstone - very hard (115-133' -
	133	60 gpm)
133	135	Gray & red shale

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 04/03/2002

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 04/24/2002 License no. 361/074

MBMG ID# M:196495

DNRC

Form No. 603 R10/79

File No. _____

add Bozeman

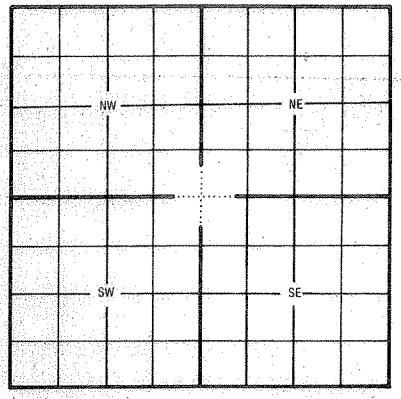
WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after comple 033466

1. WELL OWNER
Name Bob Zander

2. CURRENT MAILING ADDRESS
Box 1095
Livingston, Montana 59047

3. WELL LOCATION



SW ¼ SW ¼ SE ¼ Section 6
Township 2S N/S Range 10E E/W
County Park
Lot _____ Block _____
Subdivision _____
Well Elevation _____
Accuracy: ____ ± 10'; ____ ± 50'; ____ ± 100';

4. DRILLING METHOD x 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)
6"	6" 17#	0	42' 11"			
6"	5"	41	64	1/8x6	50	64

Was casing left open end? x Yes ____ No
Was a packer or seal used? ____ Yes x No
If so, what material _____
Was the well gravel packed? ____ Yes x No
Was the well grouted? ____ Yes x No
To what depth? _____
Material used in grouting _____
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 24 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 x pump x bailer ____ other
(if other, specify) _____
Pumping level below land surface:
40 ft. after 1 hrs. pumping 30 gpm
____ ft. after ____ hrs. pumping ____ gpm

8. WAS WELL PLUGGED OR ABANDONED? ____ Yes x No
If yes, how? _____

9. DATE STARTED Dec. 9,1980
DATE COMPLETED ~~Dec. 13,1980~~

10. WELL LOG

Depth (ft.) From	To	Formation
0	4	clay
4	26	gravels to caorse
26	28	shale
28	44	shale,firm
44	56	shale, gray,hard
56	63	shale,firm
63	64	shale,very hard,purple

RECEIVED
JAN 6 1981
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

(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.
January 2,1981
Date

Firm Name Potts Drilling and Developing
Address 80730 Gallatin Road Bozeman, Montana
Signature Herbert A Potts License No. 150

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

DEPARTMENT COPY

97315
WL - 5929

D2S 10E 06 DCC

File No. 43B-C104765

Form No. 603 R2-97

WELL LOG REPORT

1. WELL OWNER
Name: MARK BAUMEISTER

2. CURRENT MAILING ADDRESS
10 DRIFTWOOD DRIVE
LIVINGSTON MT 59047

3. WELL LOCATION
SW ¼ SW ¼ SE ¼ Section 6
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____
Latitude _____ Longitude _____

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 155 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 in. from +2 ft. to 38 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type ASTM Wall Thickness .250
Casing; Plastic Dia. 4½ in. from 15 ft. to 155 ft.
Threaded ☐ Welded ☐ Dia. _____ in. from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used FACTORY SLOTS
Size of perforations .025 in. by 1 in.
60 perforations from 95 ft. to 155 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? 20 + ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter Yes ☐ No ☐ N/A

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 38 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour 150 ft.
d) Recovery level 38 ft. Time of recovery 2 min/hrs.
e) Pumping rate 42 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. N/A
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 N/A
Manufacturer's name _____
Type _____ Model No. _____ H.P. _____

12. WAS WELL PLUGGED OR ABANDONED? Yes ☐ No ☒
If yes, how? _____

13. WELL LOG HB

Depth (ft.) From	To	Formation
0	18	SAND, GRAVEL & COBBLES
18	25	RED CLAYS
25	38	REDDISH GRAY SHALE & CLAY
38	55	SANDSTONE · HARD · REDDISH GRAY
55	63	SOFT REDDISH CLAYS & SHALE
63	65	BLUISH GRAY CLAYS & SHALE
65	71	D. RED SHALES · HARD
71	82	SANDSTONE · HARD · D. REDDISH GRAY
82	96	GRAY SHALES & S. CLAY
96		HARD, COURSE SANDSTONE
	100	BLUISH - GRAY
100	112	RED SHALE
112	155	SANDSTONE · HARD - SOME
		SMALL LENSES OF SHALE
		D. GRAY
		(116 - 118 26 gpm)
		(145 - 150 18 gpm)

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 5-6-98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 5-14-98
HAYES DRILLING CO.
Firm Name
2453 PAR COURT BOZEMAN 59715
Address
Signature _____ License No. 361

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

RECEIVED
JUL 14 1998
DNRC - BOZEMAN
REGIONAL OFFICE

M: 170494

AUG 1998

DEPARTMENT — BUREAU COPY

M: 170494

BOZEMAN
Form No. 603 (Rev. 7/76)

067 025 10E 06

STATE OF MONTANA

File No. _____

Department of Natural Resources and Conservation

RECEIVED
JUN 11 1979
MONT. DEPT. of NATURAL RESOURCES & CONSERVATION

033457

Pink-Well Owner
Gold-Driller

Coded

WELL LOG REPORT

Park

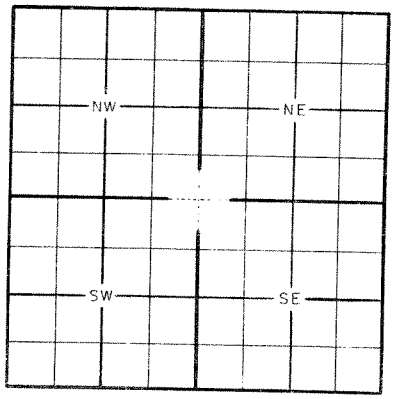
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name Jerry Rose

2. CURRENT MAILING ADDRESS
Rt. 85 Box 4076
Livingston MT 59047

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



____ ¼ ____ ¼ ____ ¼ ____ ¼ Section 6
T. 2 S R. 10 E
N or S E or W
OR, Lot 5 Block 4
Subdivision ____
City Livingston County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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"	17 lb	0'	50'			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 35 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) A.C
Pumping level below land surface:
90 ft. after 1 hrs. pumping 15 gpm
100 ft. after 1 hrs. pumping 24 gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 4 / 25 / 79
DATE COMPLETED 4 25 79

11. WELL LOG

Depth (ft.) From	To	Formation
0	21	Gravel
21	39	Clay + Soft Rock Sandstone
39	102	Hard Shale
	70	4 gpm
	90	5 gpm
	101	15 gpm
		24 gpm

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M1,97300
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date ____
Hellman Drilling
Firm Name
Rt 85 Liv
Address
Ed Hellman 258
Signature License No.

BOZEMAN

Form No. 603 (Rev. 7/76)

coded

067 028 10E 06 DCDA

Park

STATE OF MONTANA

Department of Natural Resources and Conservation

File No. _____

033465

WELL LOG REPORT

Fink-Well Owner
Gold-Driller

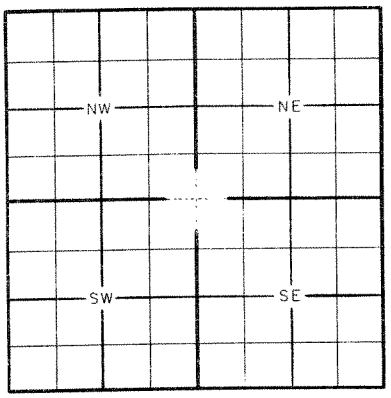
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name Dean Hendrickson

2. CURRENT MAILING ADDRESS
405 S. 13th Box 1061
Livingston, Mt. 59047

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



NE ¼ SE ¼ SW ¼ SE ¼ Section 6
T. ____ N or S R. 10E E or W
OR, Lot 3 Block 3
Subdivision Lone Island Park Sub.
City Livingston County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD X 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 X and/or Screen: Kind Size	From (feet)	To (feet)
6"	6" 19#					
steel casing		0	29'			
plastic casing (4") from 19' to 79'						
perforated from 39' to 79'						

Was casing left open end? X Yes, ____ No
Was a packer or seal used? X Yes, ____ No
If so, what material drill cuttings
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter X
12 in. above grade ____, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 21 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 X bailer ____ other
(if other, specify) ____
Pumping level below land surface:
25 ft. after 1 hrs. pumping 50 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 12/12/78
DATE COMPLETED 12/15/78

11. WELL LOG

Depth (ft.) From	To	Formation
0	3	top soil
3	18	boulders
18	64	purple shale - water at 49'
64	73	gray shale
73	79	purple shale

(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.

12/27/78
Date

Van Dyken Drilling
Firm Name

417 N. 6th Bozeman, Mt. 59715
Address

Mrs Klaas Andriesen 306
Signature License No.

97316

25 10E 6 DD 150

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 567

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 Melvin Shuman
MAILING ADDRESS PO Box 893
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NW ¼ SE ¼ SE ¼, Section 6
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536384 Longitude 5059276
Error as reported by GPS locator (± feet) 37
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 140 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 29.5 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 20 ft. to 140 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: [X] Yes [ ] No
Material Factory slotted PVC
Dia. 4 1/2 Slot size .025 from 80 ft. to 140 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 20 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
25 gpm with drill stem set at 135 ft. for 1 hours
Time of recovery 1/2 hr hrs/min. Recovery water level 20 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: HB

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	18	Sand, gravel & small boulders
18	56	Red clays & shale (2 gpm - 55')
56	59	White clays - sticky
59	63	Reddish brown sandstone
63	73	Dark gray shales & clay
73	78	Red shale
78	83	White clay & rock
83	85	Red shale
85	87	Black shale & clay
87	91	Red shale & clay (5 gpm - 87-89')
91	94	Gray shale & clay
94	98	Green clay & some shale
98	111	Red shale & gray clay
111	125	Red shale - hard (5 gpm)
125	134	Brown sandstone - hard (10 gpm)
134	140	Red shale

RECEIVED OCT 1 0 2001 MONTANA BOARD OF OIL & GAS CONSERVATION

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 07/27/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 08/05/2001 License no. 361/074

MBMG ID# M:192244

DNRC

Township 02S, Range 10E, Section 7

Well Logs

Form No. 603 R2/81 2S 10E 07 ADD Park File No. _____

BOZEMAN

WELL LOG REPORT

C05374 (According to Envirocon)

State law requires that this form be filed by the water well driller within 60 days after completi

024276

1. WELL OWNER
Name Larry Ruggles

2. CURRENT MAILING ADDRESS
Boxx 264
Livingston, MT 59047

3. WELL LOCATION
County Park
Township 2 S N/S Range 10 E E/W
NW ¼ NW ¼ NE ¼ Section 7
Lot _____ Block _____
Subdivision _____

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. DRILLING METHOD X cable, _____ bored, _____ forward rotary, _____ reverse rotary, _____ jetted, _____ other (specify) Redrill

6. WELL CONSTRUCTION AND COMPLETION

Size of drilled hole	Size and weight of casing	From (feet)	To (feet)	Perforations X and/or Screen: Kind Size	From (feet)	To (feet)
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~			
6"	4½" PVC well casing	8'	93'	⅜" holes one foot apart on 4 sides	53' 73'	63' 93'

Was casing left open end? X Yes ____ No
Was a packer or seal used? ____ Yes X No
If so, what material _____
Was the well gravel packed? ____ Yes X No
Was the well grouted? X Yes ____ No
To what depth? 30 feet
Material used in grouting cement
Well head completion: Pitless adapter
X Yes ____ No
Top of casing 12 in. or greater above grade
X Yes ____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
_____ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 18' feet below land surface
If flowing; closed-in pressure _____ psi
_____ gpm
Controlled by: _____ valve, _____ reducers, _____ other, (specify) _____

9. WELL TEST DATA ____ pump X bailer ____ other, (specify) _____
Pumping level below land surface:
88 ft. after 2 hrs. pumping 15 gpm
____ ft. after ____ hrs. pumping ____ gpm

10. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? _____

11. DATE COMPLETED April 16, 1983

12. WELL LOG

Depth (ft.) From	To	Formation
40	75	Blue Shale
75	83	Red Shale & Clay
83	93	Blue Shale
		REDRILL

Could not locate original well 2/88 Joan

RECEIVED
JUL 27 1983
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

April 20, 1983
Date

Hayes Drilling
Firm Name

Route 85 Box 4295 Livingston, MT
Address

Signature _____ License No. 361

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59620 449-3962

artcraft printers of missoula

DEPARTMENT COPY

97324

BOZEMAN 061 025 100 01 DNB PARK

Form No. 603 R10/79

File No. _____

WELL LOG REPORT

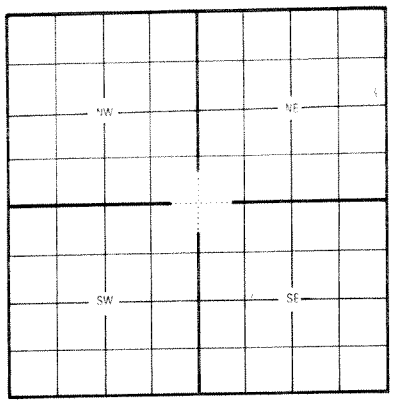
State law requires that this form be filed by the water well driller within 60 days after complet

033473

1. WELL OWNER
Name Rodney Olson

2. CURRENT MAILING ADDRESS
Box 876
Livingston MT.

3. WELL LOCATION



NE ¼ NW ¼ NE ¼ Section 7
Township 2 N/S Range 10 E/W
County Park
Lot _____ Block _____
Subdivision _____
Well Elevation _____
Accuracy: ____ ± 10'; ____ ± 50'; ____ ± 100';

4. DRILLING METHOD X 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)
6	6 5/8 17.2	0	16			
	4 1/2 PVC 160	16	90	4 1/2 Hole	32	35
				1/4	87	90

Was casing left open end? ____ Yes X No
Was a packer or seal used? ____ Yes ____ No
If so, what material _____
Was the well gravel packed? ____ Yes ____ No
Was the well grouted? X Yes ____ No
To what depth? 15
Material used in grouting Clay Slurry
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 13 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 X bailer ____ other
(if other, specify) _____
Pumping level below land surface:
89 ft. after 1 hrs. pumping 30 gpm
____ ft. after ____ hrs. pumping ____ gpm

8. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? _____

9. DATE STARTED June 27 1980
DATE COMPLETED June 29 1980

10. WELL LOG

Depth (ft.) From	To	Formation
0	4	Top Soil
4	23	Clay & gravel
23	29	Clay
29	90	Sand stone

(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.

July 25 1981
Date

H & L Drilling
Firm Name
Rt. 1 Box 301
Ph. 266-3035
Townsend, MT. 59644
Address

Harold Reed
Signature

334
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

97338

DEPARTMENT COPY

Bozeman

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. P081197-S431

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

097 11

1. WELL OWNER
Name Harry Carlson

2. CURRENT MAILING ADDRESS
611 N Third
Livingston MT 59047

3. WELL LOCATION
NE ¼ NW ¼ NE ¼ Section 7
Township 2 N/S Range 10 E/W County Park
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. 6 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 5/8 from +2 ft. to 23 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 20 ft. to 40 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations ½ hole in. by _____ in.
_____ perforations from 20 ft. to 40 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 20 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 40
d) The pumping rate: 18 gpm.
e) Pumping water level 35 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 20 ft. at ½ 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

Depth (ft.) From	To	Formation
0	3	Topsoil
3	18	Sand + Gravel
18	40	Blue Shale

RECEIVED
MAY 18 1993
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 5/5/93

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
5/5/93
Date
Vince Hillman Drilling
Firm Name
222 E Mason Bozeman
Address
[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

Send To:
DNRC
111 N Tracy
Bozeman MT
59715

M. 135189

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 293

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 Michelle Goodwine
MAILING ADDRESS 611 Arbor Drive
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ NE ¼ NW ¼ NE ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536230 Longitude 5058791
Error as reported by GPS locator (± feet) 50
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [X] Irrigation
[ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 120 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 18 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 15 ft. to 120 ft.
Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 3/8 in. by 3/8 in.
100 no. of perforations/slots from 40 ft. to 60 ft.
100 no. of perforations/slots from 100 ft. to 120 ft.
Screens: [ ] Yes [X] No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 0 ft. to 18 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] Static water level 20 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
15 gpm with drill stem set at 105 ft. for 1 hours
Time of recovery 1 hr hrs/min. Recovery water level 20 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 100 ft.
25 gpm pump rate with 70 ft. of drawdown after 3.5 hrs pumping
Time of recovery 30 min hrs/min. Recovery water level 24 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: HB

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	Brown clay & gravels
8	18	Small gravels
18	20	Brown sandstone
20	21	Dark brown clay
21	23	Dark brown shale
23	25	Brown sandstone
25	100	Gray shale
100	101	Gray sandstone
101	120	Gray shale

Well was started 6/02/98 but was not completed till 5/3/03 due to possible drilling deeper at later date. Pump test done 5/3/03 showed well producing 25 gpm. Well was pumped at about 35 gpm for first 1/2 hour and stabilized at about 90 feet at 25 gpm for next 3 hours

RECEIVED
JUN 26 2003
D.N.R.C.

[ ] ADDITIONAL SHEETS ATTACHED
8. DATE WELL COMPLETED: 05/03/2003
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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 05/16/2003 License no. 361/074

MBMG ID# 204083

02S10E07 H DAD

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 861

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 Sharon Olson Richardson
MAILING ADDRESS PO Box 876
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NE ¼ NW ¼ NE ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536103 Longitude 5058833
Error as reported by GPS locator (± feet) 34
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 160 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 22 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 20 ft. to 160 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: [X] Yes [ ] No
Material ____
Dia. 4.5 Slot size .025 from 20 ft. to 60 ft.
Dia. 4.5 Slot size .025 from 120 ft. to 160 ft.
Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 0 ft. to 22 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] 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 Bucket/Stopwatch
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*
20 gpm with drill stem set at 155 ft. for 1.5 hours
Time of recovery 1 hr. hrs/min. Recovery water level 18 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: HB

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	19	Sand, gravel & cobbles
19	27	Brownish gray sandstone - hard
27	29	Blue sandstone
29		Fractured brown sandstone (7gpm -
	36	dewatered to 5 gpm)
36	49	Red & gray shales & clay
49		Greenish gray sandstones (7 gpm - 50';
	96	13 gpm total)
96	120	Mixtured of green & red shales
120	130	Greenish gray sandstone (2 gpm - 125')
130	140	Red & green shales
140	149	Green sandstones (2-3 gpm)
149		Mixture of green sandstones & red shales
	160	(9 gpm - 150'-156')

RECEIVED
NOV 16 2004
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 09/01/2004

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 09/22/2004 License no. 361/074

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 215298

Bureau

Form No. 603 (Rev. 7/76)

STATE OF MONTANA

Department of Natural Resources and Conservation

WELL LOG REPORT

File No. 43B-099399

White-Department
Yellow-Department
Pink-Well Owner
Gold-Driller

033468

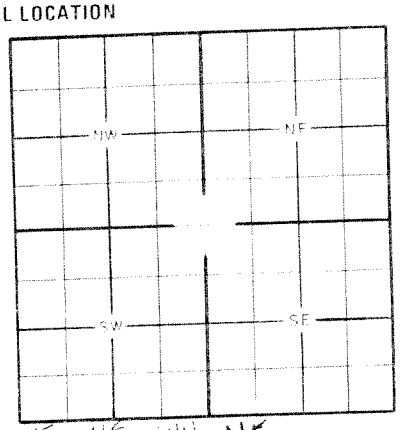
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name ~~Dave Davis~~ PETER K. NELSON

2. CURRENT MAILING ADDRESS 1104 MANDEVILLE LN BOZEMAN ~~503 N 7 Livingston Mont 59047~~ 59715

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



NE ¼ NE ¼ NW ¼ NE ¼ Section 7
T. 2 S N or S R. 10 E E or W
OR, Lot ____ Block ____
Subdivision PARISI TRACT COS# 386
City Livingston County Park
Elevation ____ Accuracy: ___ ±10'; ___ ±50'; ___ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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 40' and/or Screen: Kind Size	From (feet)	To (feet)
6"	17lb	0	30'			
4½"	Plastic Casing	20'	60			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 15' 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 X other
(if other, specify) Air
Pumping level below land surface:
60 ft. after 1 hrs. pumping 19 gpm
50 ft. after 1 hrs. pumping 17 gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 7/19/79
DATE COMPLETED 7/19/79

11. WELL LOG

Depth (ft.) From	To	Formation
0	30	Gravel + Sand
30	32	Clay
32	35	Shale
35	43	Clay - different colors
43	50	Sandstone
50	53	Clay
53	56	Sandstone
56	60	Clay

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M 97321
This well was drilled under my jurisdiction and this report is true to the best of my knowledge. 7/19/79 Date

Hillman Drilling
Firm Name

Box 4246 Livingston MT 59047
Address

Signature ____ License No. 361

Form No. 603 (Rev. 7/76)

File No. _____

STATE OF MONTANA

2S10E07A

Department of Natural Resources and Conservation

White-Department
Yellow-Department
Pink-Well Owner
Gold-Driller

WELL LOG REPORT

033469

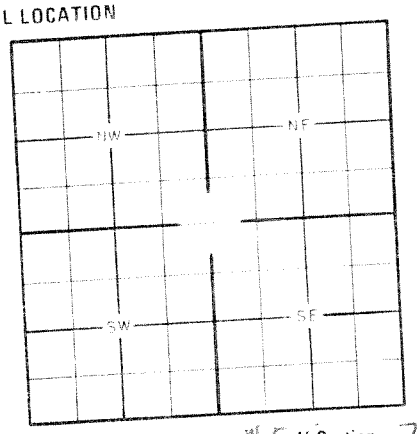
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name George Stein

2. CURRENT MAILING ADDRESS
405 13th South
Livingston Mont ~~59047~~ 59047

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



____ ¼ ____ ¼ ____ ¼ NE ¼ Section 7
T. 2 S N or S R. 10 E E or W
OR, Lot ____ Block ____
Subdivision ____
City ____ County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD ____ cable, ____ bored, X 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"	17lb	0	30			
4½"	Plastic Casing	20	100			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 15 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 X other
(if other, specify) Air
Pumping level below land surface:
100 ft. after 1 hrs. pumping 10 gpm
80 ft. after 1 hrs. pumping 8 gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED 7/20/79
DATE COMPLETED 7/20/79

11. WELL LOG

Depth (ft.) From	To	Formation
0	21	Gravel
21	100	Sandstone

(use separate sheet if necessary)

12. DRILLER'S CERTIFICATION M:97322
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
7/20/79
Date

Hillman Drilling
Firm Name

Rt 85 Box 4286 Livingston MT 59047
Address

Ed Hillman 258
Signature License No.

BOZEMAN 067 2S 10E 07 AB Park

Form No. 603 (R 6-87)

JUL. 1 2 1988

File No. C68217 43B

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of 039264

1. WELL OWNER
Name Dave Parisi (PARISI)

2. CURRENT MAILING ADDRESS
Rt 85 Box 4121
Livingston Mt 59047

3. WELL LOCATION
County Park
Township 2S N/S Range 10E E/W
NZ NW NE ¼ Section 7
Lot _____ Block
Subdivision _____
Tract Number Bk 2 C/S 727

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. DRILLING METHOD _____ cable, ✓ air rotary, _____ forward rotary, _____ reverse rotary, _____ jetted, _____ other (specify) _____

6. WELL LOG

Depth (ft.) From	To	Formation
0	2	clay
2	23	gravel & Sand
23	85	Shale

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 ¼" and/or Screen Slots: Kind Size	From (feet)	To (feet)
6"	6" 280	+18	26			
4½"	PVC 160#	25	85	¼" slots	65	85

Was casing left open end? X Yes ____ No
Was a packer or seal used? ____ Yes X No
If so, what material _____
Was the well gravel packed? ____ Yes X No
To what depth was the well grouted? required ft
Material used in grouting Bentonite
Well head completion: Pitless adapter ____ Yes X 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 ____ Bailer ____
b) Static water level immediately before testing 20 ft. If flowing; closed-in pressure ____ psi ____ gpm
Controlled by: ____ valve, ____ reducers, ____ other, (specify) _____
c) Depth at which pump is set for test _____
d) The pumping rate and means of discharge (i.e., bailing, airlift, pumping) 20 gpm
e) Maximum drawdown during the test 85 ft
f) Duration of test: Pumping time 1 hrs
Recovery time ½ hrs
g) Recovery water level 20 ft
Amount of time after pumping recovery level water data was taken ½ 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 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.

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? _____

10. DATE COMPLETED 4-12-88

11. DRILLER/CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

4-12-88
Date

Hellman Drilling
Firm Name

Rt 85 Livingston Mt
Address

[signature]
Signature

258
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

97323

DEPARTMENT BUREAU COPY

Bozeman

025 10E 07 ABB

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-88114

101676

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 Don or Carol Moullett

2. CURRENT MAILING ADDRESS
35 Seaman Lane
Livingston, MT 59047

3. WELL LOCATION
NW ¼ NW ¼ NE ¼ Section 7
Township 2S N/S Range 10E E/W County Park
Govn't Lot _____, or Lot ~~2 & 2A~~ 2A-2 Block _____
Subdivision Name C051243
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. 6 in. from 0 ft. to 123 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6" from +18" ft. to 38½ ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type 17# Wall Thickness 250
Casing; Plastic Dia. 4½ from 23 ft. to 123 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used _____
Size of perforations 3/8" holes in. by _____ in.
_____ perforations from 23 ft. to 123 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? 20+ ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name Myers 12 gpm
Type Sub Model No. S2J102-12 HP. 1

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 28 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 118
d) The pumping rate: 25 gpm.
e) Pumping water level 118 ft. at 1 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

Depth (ft.) From	To	Formation
0	1	top soil
1	27	gravel & sand
27	38	soft red shale
38	123	hard black shale w/ sandstone layers

RECEIVED
NOV 03 1993
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE
HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 8/13/93

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8/31/93
Date

Van Dyken Drilling
Firm Name

P.O. Box 3745 Bozeman, MT 59772
Address

[signature] 380
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:140150

M:140150

025 10E 07 ABB

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 43B-C114217

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 JEFF SCHOENEN
Mailing address 124 EAST CALENDAR
LIVINGSTON MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
~~NE~~ ¼ NW ¼ NW ¼ SE ¼, Section 7
Township 2 N/S Range 10 E/W County PARK
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. 6 in. from 0 ft. to 145 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☒ Welded
Dia. 5 5/8 in. from +2 ft. to 30 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4½ in. from 25 ft. to 145 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 FACTORY SLOTTED PVC
Dia. 4½ Slot size .025 from 125 ft. to 145 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 BENTONITE
Depth from 0 ft. to 20 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 25 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*
90 gpm with drill stem set at 140 ft. for 1½ hours
Time of recovery 1 hrs/min. Recovery water level 25 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: HB

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	TOPSOILS
3	19	SAND GRAVEL & COBBLES
19	26	WEATHERED SANDSTONE
26	29	BROWN SANDSTONE V HARD
29	34	GRAY SANDSTONE V HARD
34	48	GRAY SHALE & CLAY
48	59	BLUISH GRAY SANDSTONE
59	64	RED SHALE
64	73	GRAY SHALE & CLAY
73	97	L GRAY SANDSTONE HARD
97	108	RED TO GRAY SHALES
108	130	GREENISH GRAY SANDSTONE V HARD
130	138	RED SANDY SHALE
138	141	BLUE SANDSTONE
		(138-140 30 gpm)
141	145	RED SANDSTONE
		(141-145 40-50 gpm)

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 7-10-00

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) HAYES DRILLING CO
Address 2403 PAR CT BOZEMAN MT 59715
Signature [signature]
Date 7-11-00 License no. 361

FORM No. 603 New 7-73

File No. 623

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PINK — BUREAU
CANARY — WELL OWNER
GOLDENROD — DRILLER

WELL LOG REPORT

0334701

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 W. E. MONICAL Address BOX 1178 LIVINGSTON MONT

2. WELL LOCATION: County PARK ; SW¼ NW¼ NE¼, Sec. 7, Twp. 2 N-(S), Rg. 10 (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 8 inches. Depth 100 ft.
Casing: ___ Steel ✓ Plastic ___ Concrete ___ Threaded ✓ Welded ___ Other (*if other, specify*)

Pipe Weight	Dia.	From	To
160 lb/ft.	6⅝ inches	1+ feet	100 feet
___ lb/ft.	___ inches	___ feet	___ feet
___ lb/ft.	___ inches	___ feet	___ feet

Was perforated pipe used? ___ Yes ✓ No
Length of pipe perforated 40 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 ⅛" set from 60 feet to 100 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? 40 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 35 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:
50 ft. after 2 hrs. pumping 2.5 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	4	TOP SOIL
4	25	SAND & GRAVE
25	55	RED SHALE
55	70	LIME STREAKS GRAY
70	90	SHALE
90	100	LIME STREAKS

(*Use separate sheet if necessary*)

9. DATE STARTED: 8-9-73

10. DATE COMPLETED: 8-10-73

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
Address

J. J. Bass 8-10-73
Signed by *Date*

M: 97325

067 025 10E 07ABC

Approved Stock Form—State Publishing Co., Helena, Montana

GW 4

067 T 25 S R 10 E 7ABC

File No.

RECEIVED
Montana Bureau of Mines and Geology

County Park

TRIPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

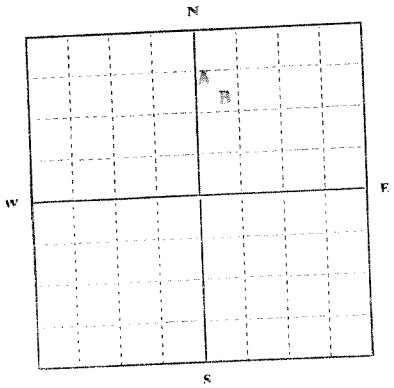
(4) (4) #A

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Tom Proffitt (Name of Appropriator), of Shields Route, Livingston (Address) (Town)

County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW¼NW ¼ NE¼ Sec. 7 T. 25 R. 10E

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 A - Stock and House; B - Stockwater

3. Date or approximate date of earliest beneficial use; and how continuous the use has been A - 1949 - Continuous Use
B - 1947 - Seasonal Use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) A - 20 gallons per minute
B - 5 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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal A - Electric Pump
B - Have used Electric Pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater A - 1949; B - 1947

8. The depth of water table A - 40 ft.; B - 85 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 A - 85 ft. depth, 6 inch casing, jet pump with 2 in and 2½ in pipe.
B - 92 ft. depth, 6 inch casing.

10. The estimated amount of groundwater withdrawn each year A - 108,000 gal. per year
B - Vacant Well without a pump

11. The log of formations encountered in the drilling of each well if available

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

Signature of Owner Tom Proffitt

Date December 20, 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.

M:97326

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.

97326

067 02S 10E 07ABC PARK 033441

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana

067 T. 25 S R. 10 E 7ABC

File No.

County Park

TRIPLICATE

RECEIVED
Montana Bureau of
Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

(4) (4) #13.

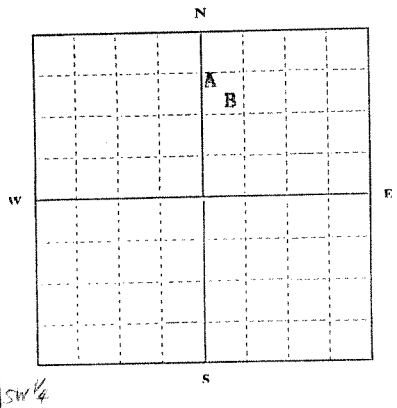
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Tom Proffitt (Name of Appropriator), of Shields Route, Livingston (Address) (Town)

County of Park State of Montana

have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4

NW 1/4 NE 1/4 Sec. 7 T. 25 R. 10E

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 A - Stock and House; B - Stockwater

3. Date or approximate date of earliest beneficial use; and how continuous the use has been A - 1949 - Continuous Use
B - 1947 - Seasonal Use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) A - 20 gallons per minute
B - 5 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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal A - Electric Pump
B - Have used Electric Pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater A - 1949; B - 1947

8. The depth of water table A - 40 ft.; B - 85 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 A - 85 ft. depth, 6 inch casing, jet pump with 2 in and 2½ in pipe.
B - 92 ft. depth, 6 inch casing.

0. The estimated amount of groundwater withdrawn each year A - 108,000 gal. per year
B - Vacant Well without a pump

1. The log of formations encountered in the drilling of each well if available

2. 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

Signature of Owner Tom Proffitt

Date December 20, 1963

ree copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

ease answer all questions. If not applicable, so state, otherwise the form will be returned.

M: 97327

iginal to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of

Form No. 603 (R 6-87)

File No. _____

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion o

053604

1. WELL OWNER
Name Spencer Fynn

2. CURRENT MAILING ADDRESS
Rt 85 Box 4121A
Livingston, MT 59047

3. WELL LOCATION
County Park
Township 3S N/S Range 10E E/W
SW ¼ NWNE ¼ Section 7
Lot _____ Block
Subdivision _____
Tract Number _____

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. DRILLING METHOD _____ cable, x air rotary, _____ forward rotary, _____ reverse rotary, _____ jetted, _____ other (specify) _____

6. WELL LOG

Depth (ft.) From	To	Formation
0	22	sand & gravel
22	35	sandstone
35	90	shale & sandstone

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 x and/or Screen: Kind Size	From (feet)	To (feet)
6"	6" 17#	0	29½			
6"	4½" PVC	29½	90	5/8" holes	30	90

Was casing left open end? x Yes _____ No
Was a packer or seal used? _____ Yes x No
If so, what material _____
Was the well gravel packed? _____ Yes x No
To what depth was the well grouted? 20+ ft
Material used in grouting Bentonite
Well head completion: Pitless adapter _____ 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 x Pump _____ Bailer _____
b) Static water level immediately before testing 20 ft. If flowing; closed-in pressure _____ psi _____ gpm
Controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 85
d) The pumping rate and means of discharge (i.e., bailing, airlift, pumping) 25 gpm
e) Maximum drawdown during the test 65 ft
f) Duration of test: Pumping time 1 hrs
Recovery time _____ hrs
g) Recovery water level 20 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 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.

9. WAS WELL PLUGGED OR ABANDONED? _____ Yes x No
If yes, how? _____

10. DATE COMPLETED 10/9/89

11. DRILLER/CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

10/12/89
Date

VanDyken Drilling
Firm Name

P.O. Box 3745
Address

Bozeman, MT 59772

Signature [signature] License No. 380

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DNRC

97328

DEPARTMENT — BUREAU COPY

Bozeman

02S 10E07BAA

Park

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-91502

10517

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 Richard Shinn

2. CURRENT MAILING ADDRESS
424 N 6th
Livingston, MT 59047

3. WELL LOCATION: 21 Old Clyde Park Rd
NE ¼ NE ¼ NW ¼ Section 7
Township 2S N/S Range 10E E/W County Park
Govn't Lot _____, or Lot 1, Block _____
Subdivision Name Shinn Minor Sub.
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. 6 in. from 0 ft. to 83 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6" from +18" ft. to 37 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type 17# Wall Thickness 250
Casing; Plastic Dia. 4½ from 23 ft. to 83 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used _____
Size of perforations 3/8"holes in. by _____ in.
_____ perforations from 23 ft. to 83 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? 20+ ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No

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 x Pump _____ Bailer _____
b) Static water level immediately before testing 17 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____.
c) Depth at which pump is set for test 77
d) The pumping rate: 60 gpm.
e) Pumping water level 77 ft. at 1 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

Depth (ft.) From	To	Formation
0	2	top soil
2	14	clay
14	23	gravel & sand
23	83	sandstone & shale layers

RECEIVED
AUG 31 1993
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7/1/93

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
7/6/93
Date
Van Dyken Drilling
Firm Name
P.O. Box 3745 Bozeman, MT 59772
Address
[signature] 380
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:142867

00 10E 1 15HMD C111180-00

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 581

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 Rod Beland
MAILING ADDRESS 209 Arbor Drive
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NE ¼ NE ¼ NW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535726 Longitude 5058721
Error as reported by GPS locator (± feet) 49
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 8 in. from 0 ft. to 77 ft.
Dia. 6 in. from 77 ft. to 120 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 77 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 40 ft. to 120 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: [X] Yes [ ] No
Material Factory Slotted PVC 160
Dia. 4 1/2 Slot size .025 from 80 ft. to 120 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 ft. to 77 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 30 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
43 gpm with drill stem set at 115 ft. for 1 hours
Time of recovery 1 hr. hrs/min. Recovery water level 30 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: HB

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	Gray & brown clay - hard
9	22	Sand, gravels & cobbles
22	24	Reddish brown clay - hard
24	30	Brown sandstone - very hard
30	35	Green sandstone - hard
35	40	White & brown rock - hard (35 gpm)
40	45	Red & white cemented rock
45	48	White & brown cemented rock
48	50	Gray & brown sandstone (20-30 gpm)
50	54	Dark gray sandstone & calcite - hard
54	58	Brown sandstone
58	60	Light gray shale & clay
60	75	Red shale - hard
75	94	Gray shale - hard (5-6 gpm - 75-80')
94	102	Red shale (5 gpm - 95')
102	110	Gray shale
110	114	Reddish brown sandstone - hard
114	120	Greenish gray sandstone - very hard (30 gpm - 110-115')

[ ] ADDITIONAL SHEETS ATTACHED

RECEIVED OCT 10 2001 MONTANA BOARD OF OIL & GAS CONS. - HELENA

8. DATE WELL COMPLETED: 08/31/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 09/02/2001 License no. 361/074

MBMG ID# M: 192251

DNRC

067 02S 10E 07BA

Approved Stock Form—State Publishing Co., Helena, M

GW 4

T. 2 So. R. 10 E. 7BA

File No.

County Park

DUPLICATE

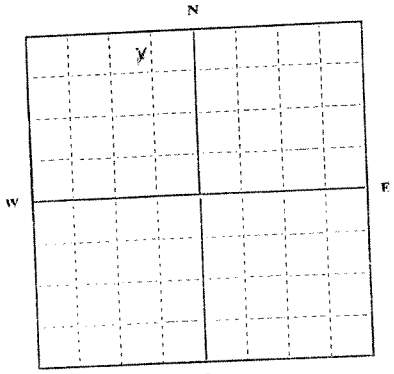
(3)

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. John Kruse (Name of Appropriator), of Shields Route (Address), Livingston (Town), County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



N ½ of NE 4 NW 4
¼ Sec. 7 T. 2S. R. 10E

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 Household, garden and Stock (some)

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1958 year Drilled with continous use since,

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 40 gals per min.

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 a little garden about 50'X50' watered for about 2 hrs each Day in summer. (When it rains no water used.)

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric Pump in basement, keeps 30 gal tank and 20 gal full at all times. When Pressure goes down to 20 Pump starts.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Drilled in 1958.

8. The depth of water table 40 ft. of Standing water in Well.

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 The well is 91½ ft Deep from the top of ground with steel Casing 6 in. and 2 Plastic Pipes down steel casing to water and a well seal around Plastic Pipes, to keep out dirt or other matter.

10. The estimated amount of groundwater withdrawn each year between 2000 to 3000 gals

11. The log of formations encountered in the drilling of each well if available Loam, Rock and sand

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 1963 Assessment Book Page K2, Line 4.

Signature of Owner John Kruse

Date 12-18-63.

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. M: 97335

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of

025 10E 07 B

FORM NO. 609 (R 6-94)

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 Tom Goltz

2. CURRENT MAILING ADDRESS
5 Old Clyde Park Rd.
Livingston, MT 59047

3. WELL LOCATION same as above
____ ¼ ____ ¼ NW ¼ Section 7
Township 2S N/S Range 10E E/W County Park
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. 6 in. from 0 ft. to 103 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6" from +18" ft. to 38½ ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type 17# Wall Thickness 250
Casing; Plastic Dia. 4½ from 23 ft. to 103 ft.
Weight 160 Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used ____
Size of perforations 3/8" holes in. by ____ in.
____ perforations from 23 ft. to 103 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? 20+ ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name Red Jacket 10 gpm
Type Sub Model No. 75CNSWL HP. 3/4
~~CNS12BC~~

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 28 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____.
c) Depth at which pump is set for test 95
d) The pumping rate: 45 gpm.
e) Pumping water level 95 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ____ hrs.
h) Recovery water level 28 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 HB

Depth (ft.) From	To	Formation
0	2	top soil
2	18	sticky brown shale w/some gravel
18	34	gravel & sand
34	36	soft white clay
36	52	hard reddish brown shale
52	54	softer light blue shale
54	103	hard blue shale w/brown sandstone layers

ATTACH ADDITIONAL SHEETS IF NECESSARY

RECEIVED
JAN 25 1996
DNRC - BOZEMAN
REGIONAL OFFICE

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ____

14. DATE COMPLETED 10/25/95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
11/21/95
Date
Van Dyken Drilling
Firm Name
P.O. Box 3745 Bozeman, MT 59772
Address
Signature 380
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M:155377
FEB 14 1996

OLD 10E 01 BAB

[125305]

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 43B-C10422

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 Rena Rehmer

2. CURRENT MAILING ADDRESS
203 arbor Dr.
Livingston, MT 59047

3. WELL LOCATION
NW ~~NE~~ ¼ ~~NW~~ NE ¼ NW ¼ Section 7
Township 2 ~~N~~/S Range 10 E/~~W~~ County Park
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. 6 in. from 0 ft. to 120 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 38 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 20 ft. to 120 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 Hole in. by _____ in.
_____ perforations from 40 ft. to 120 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 28 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 120
d) The pumping rate: 25 gpm.
e) Pumping water level 115 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 28 ft. at ½ hrs. after pumping stopped.
Wells intended to yield 100 gpm or more shall be tested for a period of hours or more. The test shall follow the development of the well, and shall b conducted continuously at a constant discharge at least as great as the i tended appropriation. In addition to the above information, water level da 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 a pressure gauge that will indicate the shut-in pressure of a flowing well. R movable 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	Topsoil
2	18	Brown Clay
18	31	Gravel
31	120	Blue shale + Sandsto

HB

RECEIVED
JUL 10 1997
DNRC - BOZEMAN
REGIONAL OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 6/5/97

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best o my knowledge.
6/5/97
Date
Vince Hillman Drilling
Firm Name
1030 Mary Rd Bozeman
Address
Signature
436
License No.

JUL 1997

M:164255

M:164255

067 02S 10E 07BA PARK

Approved Stock Form—State Publishing Co., Helena, M

GW 4

T 2 So. R 10 East. 7BA

County Park County.

File No.

TRIPLICATE

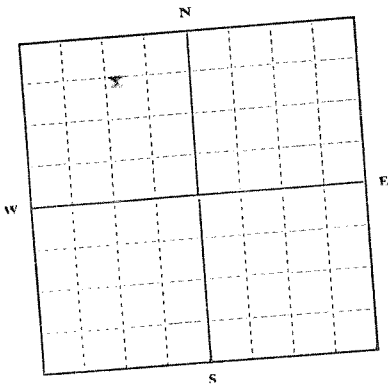
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Walter Anderson, (Name of Appropriator), of Livingston, (Address) (Town)
County of Park State of Montana.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼NW¼ Sec. 2 T2S R10E

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 and irrigation.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been June, 1951 and used continuously since.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 200 gallons per day.

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 2 acres, in NE¼ of NW¼ of Section 7, T2S, R10E.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric pump.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater June, 1951.

8. The depth of water table 90 feet.

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 6 inch casing for 30 feet, and rock and gravel for 60 feet.

10. The estimated amount of groundwater withdrawn each year 75,000.00 gallons.

11. The log of formations encountered in the drilling of each well if available No log.

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 no records.

Signature of Owner Walter Anderson

Date December 12, 1963.

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

M: 97336

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 ... Quadruplicate for the Appropriator.

97336

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: Spindlehurst Well Users Association
Name % Marian Gannon
Mailing address P.O. Box 1001
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ NW ¼, Section 7
Township 2 N/S Range 10 E/W County Park
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. 10 in. from 0 ft. to 20 ft.
Dia. 6 in. from 20 ft. to 140' ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☒ Welded
Dia. 6 5/8 in. from -2 ft. to 38' ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating SCH 40 lbs. ☐ Threaded ☐ Welded
Dia. 4 in. from 20 ft. to 140' ft.

Perforations/Slotted Pipe:
Type of perforator used .025 Slot PVC
Size of perforations/slots .025 in. by 1 1/4 in.
____ no. of perforations/slots from 120' ft. to 140' 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 Bentonite Grout
Depth from 0 ft. to 20' 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 30 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 N/A °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*
50 gpm with drill stem set at 130' ft. for 1 hours
Time of recovery 1 hrs/min. Recovery water level 30' 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 130' ft.
50 gpm pump rate with 22 ft. of drawdown after 8 hrs pumping
Time of recovery 15 hrs/min. Recovery water level 30 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: HB

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	1	Topsoil - Brown
1	10	Gravel & Sand
10	25	Gravel & Sandstone
25	40	Sandstone & Shale Brown
40	100	Sandstone & Siltstone layers
100	140	Sandstone Brown

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 7-10-01

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) Bridger Drilling Inc
Address P.O. Box 4287 Bozeman, MT 59772
Signature [signature]
Date 9-10-01 License no. 425

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 192248

02S10E07BA

121173

FORM NO. 603 (R 6-94)

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: Montana Homes

2. CURRENT MAILING ADDRESS
P.O. Box 834
Livingston, MT. 59047

3. WELL LOCATION
_____ ¼ NE ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot 11, Block 9
Subdivision Name Livingston Montage Sub.
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. 10 in. from 0 ft. to 20 ft.
Dia. 6 in. from 20 ft. to 130 ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 O.D. from -2½ ft. to 37½ ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. _____ from 70' ft. to 130' ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Factory Slotted
Size of perforations .025 in. by _____ in.
_____ perforations from ~~30' ft. to 130'~~ ft.
_____ perforations from 29' ft. to 130' 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? 20'+ ft.
Material used in grouting Bentonite Grout

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name Grundfos
Type SUB Model No. 40S50-12 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 44' ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 125
d) The pumping rate: 38 gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time 4 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 44' ft. at ½ 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.

121172

11. WAS WELL PLUGGED OR ABANDONED? _____ Yes X No
If yes, how? _____

12. WELL LOG

Depth (ft.) From	To	Formation
0	2	Sandy Topsoil/Clay
2	28	Clay/Sandy
28	66'	Shale
66'	130'	Sandstone with Shale layers

HB

RECEIVED
DEC 16 1996
DNRC - BOZEMAN
REGIONAL OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE N/A

14. DATE COMPLETED 12-12-96

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 12-12-96
Firm Name Bridger Drilling
Address Box 4287, Bozeman, MT. 59772
Signature J. E. Bick License No. #425

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

DEC 30 1996

M: 160010

Form No. 603 R2-99

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MONTANA WELL LOG REPORT

Well ID# 43B-C110106

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 Homes
Mailing address HC 87, Box 2140
Big Timber, MT 59011

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ NW ¼, Section 7
Township 2 N/S Range 10 E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name Groundview Addition
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. 6 in. from 0 ft. to 140 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☐ Welded
Dia. 6 5/8 O.D. in. from -1½ ft. to 38½ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating SCH 40 lbs. ☒ Threaded ☐ Welded
Dia. 4½ in. from 30' ft. to 140' ft.

Perforations/Slotted Pipe:
Type of perforator used ½" drill perf
Size of perforations/slots ½" in. by Round in.
____ no. of perforations/slots from 60' ft. to 140' 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 Bentonite
Depth from 0 ft. to 20' 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 63' 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*
45 gpm with drill stem set at 135' ft. for 1 hours
Time of recovery ¼ hrs/min. Recovery water level 63 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 135' ft.
55 gpm pump rate with 61 ft. of drawdown after 8 hrs pumping
Time of recovery ½ hrs/min. Recovery water level 63 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: HB

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	29	Sandy Gravel
29	36	Red Shale
36	71	Hard Shale, Red Tan Gray
71	140	Sandstone/Gray with Red layers

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 4-14-99

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) Bridger Drilling Inc.
Address P.O. Box 4287, Bozeman, MT 59772
Signature [signature]
Date 6-7-99 License no. #425

MONTANA DNRC

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 176985

DEPARTMENT—BUREAU COPY

2D 10E 7BA

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: Day Well Users Association
Name 40 Abby Day
Mailing address 120 Sunrise
Livingston, MT. 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ NW ¼, Section 7
Township 2 N/S Range 10 E/W County Park
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. 10 in. from 0 ft. to 20' ft.
Dia. 6 in. from 20' ft. to 120' ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☒ Welded
Dia. 6 in. from -2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating SCH 40 lbs. ☐ Threaded ☒ Welded
Dia. 4 in. from ____ ft. to ____ ft.

Perforations/Slotted Pipe:
Type of perforator used .025 Slotted PVC
Size of perforations/slots .025 in. by 1¼ in.
____ no. of perforations/slots from 100' ft. to 120' 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 Bentonite Grout
Depth from 0 ft. to 20' 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 30 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 N/A °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*
50 gpm with drill stem set at 110 ft. for 1 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 110' ft.
55 gpm pump rate with 26 ft. of drawdown after 8 hrs pumping
Time of recovery 2 hrs/min. Recovery water level 30 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: HB

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 - Brown
2	13	Gravel & Sand
13	25	Gravel & Sand Stone
25	35	Brown Sandstone
35	62	Brown Sandstone & Shale
62	120	Sandstone

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 7-11-01

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) Bridger Drilling Inc.
Address P.O. Box 4287 Bozeman, MT 59772
Signature [signature]
Date 9-10-01 License no. 425

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 192246

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 JULIE LADUKE
Mailing address 106 BARBER DRIVE
LIVINGSTON MT 59047

2. WELL LOCATION List ¼ from smallest to largest
____ ¼ ____ ¼ NE ¼ NW ¼, Section 7
Township 2 N/S Range 10 E/W County PARK
Lot ____, Tract/Blk 8 Subdivision Name MONTAGUE
Well Address _____
GPS ☐ Yes ☐ No
Latitude _____ Longitude _____
OK 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. 7.25 in. from 0 ft. to 160 ft.
Dia. 12 in. from 0 ft. to 90 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☒ Welded
Dia. 6 5/8 in. from +2 ft. to 160 ft.
Dia. 12 3/4 in. from 0 ft. to 20 ft.

Plastic: Pressure Rating ____ lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.

Perforations/Slotted Pipe:
Type of perforator used HOLTE
Size of perforations/slots 3/16 in. by 1 in.
140 no. of perforations/slots from 150 ft. to 155 ft.
224 no. of perforations/slots from 130 ft. to 138 ft.
196 90 97

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 3/8Chips/Pull 12" Csg
Depth from 0 ft. to 20 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 41 6" ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc FLOW METER
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 147 ft.
78 gpm pump rate with 84 ft. of drawdown after 24 hrs pumping
Time of recovery 24 hrs/min. Recovery water level 43'1" 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.*

RECEIVED NOV 17 2003 HB

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	Silt Clay/Top Soil
4	6	"
6	15	" /M Grav/Stringes Sand Stone & Shale
15	17	"
17	19	Hardsfractured shale
19	21	Silt Clay
21	37	Fine Sand/M Grav/Grav
37	45	Trac Fine Sand
45	53	Grn Shale w/ Red Strks
53	66	Red Shale w/trac of Quartz
66	70	Black Shale
70	73	Grn Shale
73	83	Dark Red w/Blk Stringes Shale
83	87	Blk w/Grn Strks Shale
87	90	Grn Sand Stone/Grn Shale
90	92	Brn Shale
92	98	Grn Sand Stone/Blk Shale
98	100	Blk Shale
100	108	Dark Red Shale
108	115	Grn Sand Stone
115	125	Gray Shale-Softer Shales

☒ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 10/13/03

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) Red Tiger Drilling Inc
Address PO Box 659 Manhattan MT 59741
Signature Duane L Hauser
Date 10/29/03 License no. 386

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 207333

Page 1 of 3

DEPARTMENT - BUREAU COPY

RED TIGER DRILLING

DATE OF TEST 10.17.03 OWNER OF WELL Julie Laduke

NAME OF PUMPING WELL _____ OBSERVATION WELL Julie Laduke's

1/4 _____ 1/4 NE 1/4 NW SEC 7 TSP 2 RG 10E COUNTY Park

DEPTH, PUMPING WELL 160' DEPTH, OBSERVATION WELL _____

STATIC WATER LEVEL 41'6" STATIC WATER LEVEL _____

PUMPING CONTRACTOR Brian B. Hauser DISTANCE TO PUMPING WELL _____

OBSERVER: William Smith Tel/FAX: 333-9040

Ending Hours/Generator: 5542.7

CLOCK TIME	ELAPSED TIME	AIRLINE PSI	PUMPING RATE/GPM	PUMPING LEVEL	MONITOR WELL	COMMENTS Suction: 152'
1:43 PM	'= min	N/A	50 GPM	55.8		START TEST
1:44 PM	1'		"	----		
1:45 PM	1'		"	58.8		
1:46 PM	1'		"	59.6		
1:47 PM	1'		"	60.0		
1:48 PM	1'		"	60.4		
1:49 PM	1'		"	----		
1:50 PM	1'		"	60.8		
2:00 PM	10'		"	64.4		
2:10 PM	10'		"	66.3		
2:20 PM	10'		"	69.2		Increased to 60 GPM
2:25 PM	5'		60 GPM	74.3		
2:30 PM	5'		"	76.9		Increased to 70 GPM
2:34 PM	4'		70 GPM	79.3		Increased to 80 GPM
2:39 PM	5'		80 GPM	80.5		
2:44 PM	5'		"	91.1		
2:55 PM	10'		78 GPM	106.5		Flow at discharge meter 78
3:00 PM	5'		"	107.1		
4:05 PM	1H 5'		"	112.1		
4:20 PM	15'		"	112.6		
4:40 PM	20'		"	113.1		
6:15 PM	1H 35'		"	114.6		
6:30 PM	15'		"	114.6	T.O.C.	Tape on D.D. METER
7:55 PM	1H 25'		"	114.9		Discharge flow decreased to
10:30 PM	2H 35'		75 GPM	115.8	T.O.C.	75 GPM-increased to 78 GPM.
1:40 AM	3H 15'		78 GPM	116.8		10.18.03 Saturday
6:50 AM	5H 10'		75 GPM	122.3	T.O.C.	Surging affect opened meter
8:45 AM	1H 55'		78 GPM	124		
9:55 AM	1H 10'		"	124.5		
11:00 AM	1H 5'		"	124.9		
1:00 PM	2H		"	125.3		
1:30 PM	30'		"	???		
1:50 PM	20'		"	124.6		
2:10 PM	20'		"	126.1		
2:30 PM	20'		"	126.0		Shut down Generator and checked recovery.

RECEIVED NOV 17 2003 M.B.M.G.

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☐ Static water level 41 6" ft. below top of casing or

☐ Closed-in artesian pressure _____ psi.

How was test flow measured:

bucket/stopwatch, weir, flume, flowmeter, etc FLOW METER

Yellowstone Controlled Groundwater Area - Water Temperature _____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

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) Red Tiger Drilling Inc

Address PO Box 659 Manhattan MT 59741

Signature Duane L Hauser

Date 10/29/03 License no. 386

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 207333

DEPARTMENT - BUREAU COPY

MONTANA WELL LOG REPORT CONTINUED
JULIE LADUKE

125	130	Red Shale w/Gray strks
138	150	Dark Gray Shale-Hard
150	160	Brn Shale-Hard & Fractured

RECEIVED
NOV 17 2003
M.B.M.G.

Le

6. WELL TEST DATA:

A well test is required for all wells. (*See details on well log report cover.*)

☐ Static water level 41 6" ft. below top of casing **or**

☐ Closed-in artesian pressure _____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc FLOW METER

Yellowstone Controlled Groundwater Area - Water Temperature _____ °F

☐ AQUIFER TEST DATA FORM ATTACHED

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) Red Tiger Drilling Inc

Address PO Box 659 Manhattan MT 59741

Signature Duane L Hauser

Date 10/29/03 License no. 386

025 10E 07 BABB

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 906

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 Lynn Coffman
MAILING ADDRESS 1304 W. Montana
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NW ¼ NE ¼ NW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 111 Arbor Drive, Livingston
GPS [X] Yes [ ] No
Latitude 0535498 Longitude 5058814
Error as reported by GPS locator (± feet) 17
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 184 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 24 ft. to 184 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 4.5 Slot size .025 from 124 ft. to 184 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 ft. to 30 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 41 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
40 gpm with drill stem set at 170 ft. for 2 hours
Time of recovery 1 hr. hrs/min. Recovery water level 41 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: HB

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	18	Soft clays
18	35	Sand, gravel & cobbles
35	57	Red & gray shales
57	90	Soft gray shales & clay
90	94	Dark reddish gray sandstone - hard
94	105	Brown & gray sandstone - hard (4-5 gpm)
105	109	Green sandstone - hard
109	113	Gray shales - hard
113	121	Dark brown shales - volcanics
121	137	Gray shale & clay
137	148	Blue shale & clay - soft
148	156	Gray shale
156		Light bluish gray shale (158' - 5-6 gpm;
	158	10 gpm total)
158	160	Dark gray shale
160		Dark reddish clay shale - hard (166' -
	166	5-6 gpm)
166	170	Green sandstone - hard
170	176	Gray shale - hard (water)
176	178	Dark gray shale & clay

[X] ADDITIONAL SHEETS ATTACHED

RECEIVED MAY 12 2005 M.B.M.G.

8. DATE WELL COMPLETED: 03/16/2005

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 03/24/2005 License no. 361/074

MBMG ID# 218 713

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

Bureau

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 906

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 Lynn Coffman
MAILING ADDRESS 1304 W. Montana
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NW ¼ NE ¼ NW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 111 Arbor Drive, Livingston
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 DETAIL:
Borehole:
Dia. ____ in. from ____ ft. to ____ 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. ____ 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 ____
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 ____ 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 ____ 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:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
178	184	Green sandstone & gray shale mix (6-7 gpm)

RECEIVED
MAY 12 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 03/16/2005

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 03/24/2005 License no. 361/074

MBMG ID#
218713
Page 2 of 2

Dept. of Natural Resources & Conservation
Bozeman Water Resources Regional Office
151 Evergreen Drive, Suite C
Bozeman, MT 59715
Form No. 603 R2-97

02S 10E 07 BBA

CORRECTED

WELL LOG REPORT

File No. 43B-C104679

131920

1. WELL OWNER
Name Anna Lee Dotson

2. CURRENT MAILING ADDRESS
HC 85 Box 4136
Livingston, MT 59047-9507

3. WELL LOCATION
NE ¼ NW ¼ NW ¼ Section 7
Township 2 ~~N~~/S Range 10 E/~~W~~ County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____
Latitude _____ Longitude _____

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. 6 in. from 0 ft. to 80 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 in. from +2 ft. to 40 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4 1/2 in. from 20 ft. to 80 ft.
Threaded ☐ Welded ☐ Dia. _____ in. from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used drill
Size of perforations 1/8 hole in. by _____ in.
_____ perforations from 40 ft. to 80 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? 20 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 31 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour _____ ft.
d) Recovery level _____ ft. Time of recovery _____ min/hrs.
e) Pumping rate 20 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 HB

Depth (ft.) From	To	Formation
0	12	Topsoil
12	30	Gravel
30	36	Clay
36	80	Shale

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 6/10/98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 6/12/98
Firm Name Hillman Drilling Inc
Address 1030 Mary Rd, Bozeman
Signature [signature] License No. 105

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MONTANA

M:169351

DEPARTMENT COPY
DRILLER: Please give this copy to the well owner to complete reverse side.
OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended purpose.

Form No. 603 (Rev. 7/76)

Bozeman

067 025 10E 07B

STATE OF MONTANA

File No. _____

Coded

Department of Natural Resources and Conservation

033471

WELL LOG REPORT

Park

Pink-Well Owner
Gold-Driller

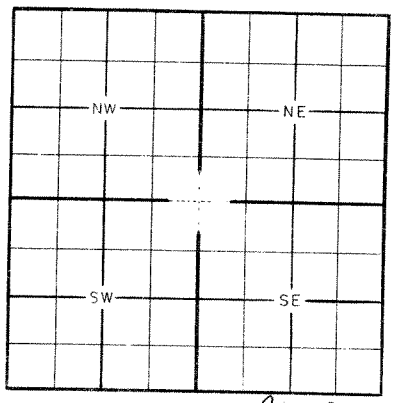
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name Leonard Bookont

2. CURRENT MAILING ADDRESS
Box 276
Livingston

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



____ ¼ ____ ¼ ____ ¼ NW Corner ¼ Section 7
T. 2 S R. 10 E
~~W~~ or S E ~~W~~

(OR) Lot ____ Block ____
Subdivision CERT OF SURVEY #360
City Livingston County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD X 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"	6" 17#	0	47	N/A		

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level 32 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 X bailer ____ other
(if other, specify) ____
Pumping level below land surface:
45 ft. after ____ hrs. pumping 15 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

10. DATE STARTED Oct 12 1978
DATE COMPLETED Oct 13 1978

11. WELL LOG
Depth (ft.)

From	To	Formation
0	40	Gray Clay
40	45	Sand Clay
45	55	Brown Clay Sand Gravel Water

(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.

11/14/78
Date

Hillman Drilling Co
Firm Name

Shields Rte #85
Address

Ed Hillman
Signature

M: 97329
258
License No.

067 02S 10E 01D

Approved Stock Form—State Publishing Co., Helena, Montana—41921

GW 4

(4)

T 2S R 10E

7B

File No.

County PARK

033436

TRIPLICATE

RECEIVED
DEC 31 1963
Montana Bureau of
Mines and Geology

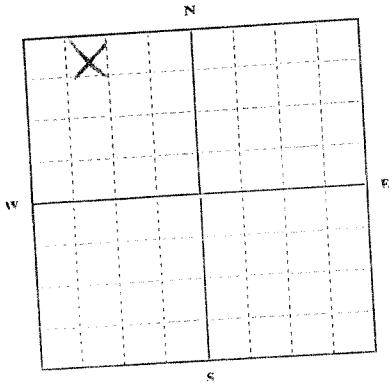
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. GARTH MASSEY (Name of Appropriator), of BOX 412 (Address) LIVINGSTON (Town)

State of MONTANA County of PARK have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW ¼ Sec. 7 T2S R. 10E

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 household

3. Date or approximate date of earliest beneficial use; and how continuous the use has been November, 1957

4. The amount of groundwater claimed (in miner's inches or gallons per minute) not known

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 none

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater November 1, 1957 to November 7, 1957

8. The depth of water table 42 feet.

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 Drilled well, 6 inch diameter, depth 67 Ft.

10. The estimated amount of groundwater withdrawn each year unknown

11. The log of formations encountered in the drilling of each well if available not available

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 no other information.

Signature of Owner Garth Massey

Date December 20, 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.

M:97331

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology; Quadruplicate for the Appropriator.

067 02S 10E 01B

Approved Stock Form—State Publishing Co., Helena, Montana—42234

7B

GW 4

T. 2S R. 10E

County Park 033435

File No.

TRIPLICATE

RECEIVED DEC 31 1963 Montana Bureau of Mines and Geology

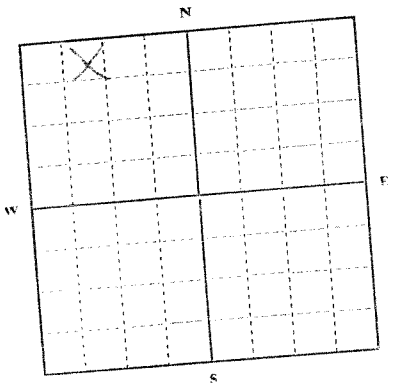
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Donald Loren Glass (Name of Appropriator), of Shields Route (Address) Livingston (Town)

County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW ¼ Sec. 7 T. 2S R. 10E

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 household

3. Date or approximate date of earliest beneficial use; and how continuous the use has been July 10, 1957 Daily

4. The amount of groundwater claimed (in miner's inches or gallons per minute) unknown

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 none

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater July 6, 1957 to July 10, 1957

8. The depth of water table 42 Feet

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 not available

10. The estimated amount of groundwater withdrawn each year not known

11. The log of formations encountered in the drilling of each well if available not available

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 None

Signature of Owner Donald Loren Glass

Date December 24, 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.

M:97332

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of

94332

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. C087236-643B

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well. 1051

1. WELL OWNER
Name: Richard Shinn

2. CURRENT MAILING ADDRESS
424 N 6th
Livingston, MT 59047

3. WELL LOCATION: 710 Chestnut Ln N.
NE ¼ NW ¼ NW ¼ Section 7
Township 2S N/S Range 10E E/W County Park
Govn't Lot ____, or Lot 5, Block ____
Subdivision Name Shinn Minor
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. 6 in. from 0 ft. to 120 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6" from +18" ft. to 47 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type 17# Wall Thickness 250
Casing; Plastic Dia. 4½ from 40 ft. to 120 ft.
Weight 160 Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used ____
Size of perforations 3/8" holes in. by ____ in.
____ perforations from 40 ft. to 120 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? 20+ ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No

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 X Pump ____ Bailer ____
b) Static water level immediately before testing 32 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____
other, (specify) ____
c) Depth at which pump is set for test 115
d) The pumping rate: 50 gpm.
e) Pumping water level 115 ft. at 1 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

Depth (ft.) From	To	Formation
0	2	top soil
2	22	sandy brown clay
22	37	coarse gravel & sand
37	45	soft brown shale
45	120	hard sandstone w/small shale layers

RECEIVED
AUG 31 1993
MONTANA D.N.R.C.
~~BOZEMAN FIELD OFFICE~~

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 6/30/93

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

7/6/93
Date
Van Dyken Drilling
Firm Name
P.O. Box 3745 Bozeman, MT 59772
Address
Signature
380
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 142868

M: 142868

DEPARTMENT BUREAU COPY

Bozeman

02S 10E 07 BBB

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.

100394

1. WELL OWNER
Name John Kaiser

2. CURRENT MAILING ADDRESS
Rte 85 Box 4127
Livingston MT 59047

3. WELL LOCATION
NW ¼ NW ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W County _____
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. 6 in. from 0 ft. to 80 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 38 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 30 ft. to 80 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations ⅜ hole in. by _____ in.
_____ perforations from 40 ft. to 80 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 39 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other (specify) _____
c) Depth at which pump is set for test 80
d) The pumping rate: 15 gpm.
e) Pumping water level 75 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 39 ft. at ½ 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

Depth (ft.) From	To	Formation
0	1	Topsoil
1	30	Brown Clay
30	38	Sand + Gravel
38	80	Blue Shale

RECEIVED
APR 21 1993
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/9/93

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
4/9/93
Date
Vince Hillman Drilling
Firm Name
222 E Mason Bozeman
Address
Signature _____ License No. 436

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

Send To
DNRC
111 N Tracy
Bozeman MT
59715

M: 138870

DEPARTMENT - BUREAU COPY

M: 138870

067 023 102 ...

Approved Stock Form—State Publishing Co., Helena, Montana—41921

GW 4

(4)

T. 2S R. 10E 7B

County Park

File No.

TRIPLICATE

RECEIVED
JUL 2 1964
Montana Bureau of Mines and Geology

033437

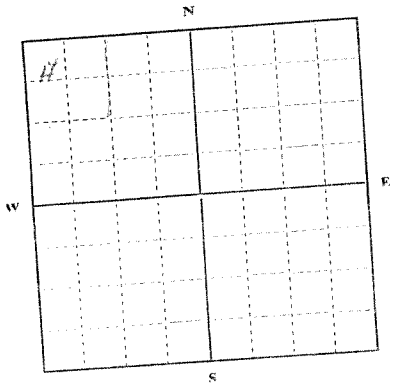
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. John J. O'Rourke (Name of Appropriator), of Box 170 (Address) Livingston (Town)

County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec. 7 T. 2S R. 10E

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 # House and stock water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been # 1941 - Continuous use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) # 40 gal 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 immediate lawn surrounding house

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater # 1941

8. The depth of water table 60 ft to 80 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 140' deep - 6 inch casing with a jet pump - with 2" x 2 1/4" pipe

10. The estimated amount of groundwater withdrawn each year 400,000 gal per year

11. The log of formations encountered in the drilling of each well if available not available

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

Signature of Owner John J. O'Rourke

Date [illegible]

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.

M:97333

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.

97333

Form No. 603 (R 6-84)

BOZEMAN 625 75 067 2S 10E 1 BB File No. C59736.43A

WELL LOG REPORT

Park

State law requires that this form be filed by the water well driller within 60 days after completion

024277

1. WELL OWNER
Name Park County

2. CURRENT MAILING ADDRESS
Box 1037 Livingston, Mt. 59047

3. WELL LOCATION
County Park
Township 2S N/S Range 10E E/W
~~NE~~ SE ¼ NW ¼ NW ¼ Section 7
Lot _____ Block _____
Subdivision _____

4. PROPOSED USE Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify Green Acres Park

5. DRILLING METHOD _____ cable, _____ bored,
x forward rotary, _____ reverse rotary, _____ jetted,
_____ other (specify) _____

6. WELL CONSTRUCTION AND COMPLETION

Perforations x and/or Screen _____

Size of drilled hole	Size and weight of casing	From (feet)	To (feet)	Kind Size	From (feet)	To (feet)
8"		0	69+5"	1/16" slots in 6" plastic	95	135
6"	plastic	65	135			

Was casing left open end? x Yes ____ No
Was a packer or seal used? x Yes ____ No
If so, what material drill cuttings
Was the well gravel packed? ____ Yes x No
Was the well grouted? ____ Yes x No
To what depth? _____
Material used in grouting _____
Well head completion: Pitless adapter
____ Yes x No
Top of casing 12 in. or greater above grade
x Yes ____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
_____ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 60 feet below land surface
If flowing; closed-in pressure _____ psi
_____ gpm
Controlled by: _____ valve, _____ reducers,
_____ other, (specify) _____

9. WELL TEST DATA _____ pump _____ bailer
x other, (specify) air
Pumping water level below land surface:
130 ft. after 3 hrs. pumping 100 gpm
_____ ft. after _____ hrs. pumping _____ gpm

10. WAS WELL PLUGGED OR ABANDONED? ____ Yes x No
If yes, how? _____

11. DATE COMPLETED 5/2/85

12. WELL LOG

Depth (ft.) From	To	Formation
0	1	top soil
1	20	clay
20	28	gravel & boulders
28	38	soft shale & clay
38	100	gray shale
100	135	sandy shale
		110 to 137 water bearing

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

6/13/85
Date

VanDyken Drilling
Firm Name

417 N. 6th Bozeman, Mt. 59715
Address

Mrs Klaas Andriesen 380
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC

32 SOUTH EWING HELENA, MONTANA 59620 444-6610

STATE PUBLISHING CO., HELENA, MONT.

DEPARTMENT - BUREAU COPY

97339

2S 10E 1DDU

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 43B-95431

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well. 112812

1. WELL OWNER
Name R.A. & DONNA CARUSO

2. CURRENT MAILING ADDRESS
P.O BOX 820
LIVINGSTON MT 59047

3. WELL LOCATION
SE 2 ¼ NW ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W County PARK
Govn't Lot ____, or Lot 8, Block 1
Subdivision Name GREEN ACRES
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. 6 in. from 0 ft. to 210 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 50 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type ____ Wall Thickness .250
Casing; Plastic Dia. 4½ from 10 ft. to 210 ft.
Weight 160 Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used FACTORY SLOTS
Size of perforations .025 in. by 1 in.
~~75~~ 20 perforations from 190 ft. to 210 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? 20+ ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION: N/A
Pitless Adapter ☐ Yes ☐ No

9. PUMP (if installed) N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 58 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____.
c) Depth at which pump is set for test 205
d) The pumping rate: 45 gpm.
e) Pumping water level 205 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1 hrs.
h) Recovery water level 58 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

Depth (ft.) From	To	Formation
0	2	TOPSOILS : CLAY
2	22	STICKY CLAYS
22	38	GRAVELS : SAND
38	46	SHALE : CLAY . DARK GRAY
46	98	SHALE . BLUE
98	112	SANDSTONE . HARD . BLUE
112	118	SHALE : CLAY
118	128	SANDSTONE . COURSE . HARD
		LIGHT GRAY . GREEN .
		WHITE GRAINS . RED SPEC
128	134	INTERMITANT LAYERS
		OF SAND : SHALE
		GREENS TO BROWN
134	148	SHALE - GRAY
148	151	SANDSTONE - SOFT
151	180	SAND : SHALES
		CHANGES CONSTANTLY
		LOT OF CLAY
180	188	SHALE . HARD - (5 gpm 80
		(188 - 10 gpm TOTAL)
188	195	SANDSTONE : GREENISH GRAY
195	197	SHALE : CLAY
197	210	SANDSTONE . VERY HARD
		BROWNISH GRAY
		FRACTURED . (TOTAL OF
		40-45

RECEIVED
JUL 18 1995
MONTANA D.N.R.C.
WATER RESOURCES OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ____

14. DATE COMPLETED 5-4-95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
5-4-95
Date
HAYES DRILLING
Firm Name
511 N. MONTANA AVE #A BOZEMAN 59715
Address
Signature
361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M: 151387

AUG 16 1995

02S 10E 07 BBC

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 43B-93254

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

111 4524

1. WELL OWNER
Name CARLO CIERI

2. CURRENT MAILING ADDRESS
P.O. Box 9
LIVINGSTON MT 59047

3. WELL LOCATION
SW ¼ NW ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W County Park
Govn't Lot ____, or Lot 3, Block 7
Subdivision Name GREEN ACRES
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. 6 in. from 0 ft. to 119 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 5/8 from +2 ft. to 38 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type ____ Wall Thickness .250
Casing; Plastic Dia. 4½ from 19 ft. to 119 ft.
Weight 160# Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used FACTORY SLOTS
Size of perforations 2 in. by .025 in.
____ perforations from 90 ft. to 119 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 6-9 SAND
Gravel placed from 80 ft. to 119 ft.
GROUTED: To what depth? 20+ ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No N/A

9. PUMP (if installed) N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 55 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 115
d) The pumping rate: 45 gpm.
e) Pumping water level 115 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1 hrs.
h) Recovery water level 55 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

Depth (ft.) From	To	Formation
0	18	DARK HARD CLAYS - DRY
18	34	GRAVELS : SAND - COURSE DRY
34	42	WEATHERED SANDSTONES
42	96	SHALES : CLAY - SOFT VERY LITTLE SANDSTONE BROWN
96	98	SANDSTONE - GRAY - COURSE
98	105	" BROWN - HARD (8-10 gpm 98-100)
105	111	SHALE : CLAY - SOFT
111	114	SHALE - HARD
114	119	SANDSTONE - BROWN - HARD (25-30 gpm 115-118)

RECEIVED
MAY 12 1995
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ____

14. DATE COMPLETED 4-19-95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
4-19-95
Date
HAYES DRILLING
Firm Name
511 N. MONTANA AVE #A BOZEMAN 59715
Address
Will Dayn
Signature
361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M: 150529

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 are in italics.*** Record additional information in the REMARKS section.

1. WELL OWNER:
Name MIKE GORDON
Mailing address 45 MEIGS RD
LIVINGSTON, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
____ ¼ ____ ¼ ____ ¼ ____ ¼, Section ____
Township ____ N/S Range ____ County PARK
Lot ____ *Tract/Blk* ____ *Subdivision Name* ____
OK *Well Address* SAME AS ABOVE
GPS ☒ Yes ☐ NO
Latitude N45* 41.061 *Longitude* W110* 33.019
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. 6 in. from 0 ft. to 100 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: .250 Wall thickness ☐ Threaded ☒ Welded
Dia. 6 in. from +18" ft. to 55 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 ☒ Threaded ☐ Welded
Dia. 4 in. from 40 ft. to 100 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/s .025 in. ____
____ no. of perforations/slots from 80 ft. to 100 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: BENTONITE
Depth from ____ ft. to ____ ft. OR ☒ Continuos Feed

6. WELL TEST DATA:
A well test is required for all wells. *(See details on well log report cover.)*
☒ Static water level 42 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*
23 gpm with drill stem set at 90 ft. for 1 hours
Time of recovery ____ hrs/min. Recovery water level 42 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 reservoir of the well casing.*

7. WELL LOG: HB

Depth, Feet From	To	Material: Color/rock and type/descriptor (example: blue/shale/hard, or brown gravel/water, or brown/sand/heaving)
0	1	FILL
1	3	TOP SOIL
3	7	SAND & GRAVEL
7	24	SILTY SAND
24	44	SAND & GRAVEL
44	52	CLAY
52	100	SHALE W/ THIN LAYERS OF SANDSTONE

RECEIVED
SEP 21 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED 9/8/05

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) VAN DYKEN DRILLING INC.
Address P.O. BOX 165 BELGRADE, MT 59714
Signature [signature]
Date 9/14/05 License no. 380

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

221680 MBMG ID #

221680

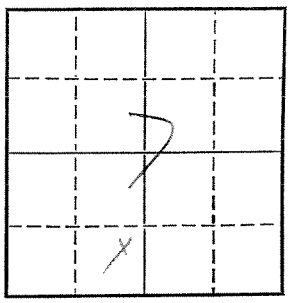
RECEIVED
Montana Bureau of
Mines and Geology

~~do~~ 067 T. 2 S. R. 10 E. 7
~~not code~~ County PARK

033431

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG



Owner BALFORD LEON NEAD Address SHIELDS ROUTE

Driller ? Address ?

Date Started ? Date Completed ?

Location: Sec. 7 T. 2 S R. 10 E ¼ sec. TRACT 8

Type of well DRILLED (Dug, driven, bored, or drilled) Equipment used (Churn drill, rotary, other)

Water use: Domestic [X] Municipal [ ] Stock [ ] Irrigation [ ]

Industrial [ ] Drainage [ ] Other:

Casing: ? ft. to ft. Type Size

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. ? to ft. Ft. to ft.

Type of screen or perforations ?

Static Water level, for non-flowing well: ? feet.

Shut-in pressure, for flowing well: lb./sq. in. on: (date)

Pumping water level feet at gal. per min.

How tested:

Length of test

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

DRILLED ABOUT 1946

(over)

97317

BOZEMAN 067 25 10E 7

Form No. 603 R8/83 OCT 17 1984 File No. Park

MONT. DEPT. of NATURAL RESOURCES & CONSERVATION

WELL LOG REPORT

State law requires that this form be filed by the water well driller within 60 days after completion of the well. 024275

1. WELL OWNER
Name Vickie Stephen Shulins

2. CURRENT MAILING ADDRESS
Box 1347
Livingston, Mt 59047

3. WELL LOCATION
County PARK
Township 2 N/S Range 10 E/W
___ ¼ ___ ¼ ___ ¼ Section 7
Lot 1-6 & 13-16 Block 6
Subdivision Montague Subdivision

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify ___

5. DRILLING METHOD ___ cable, ___ bored,
X 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 X and/or Screen: Kind Size	From (feet)	To (feet)
6"	6" 1 lb per ft	0	35	PVC	35	50

Was casing left open end? ___ Yes X No
Was a packer or seal used? ___ Yes X No
If so, what material ___
Was the well gravel packed? ___ Yes X No
Was the well grouted? ___ Yes X No
To what depth? ___
Material used in grouting ___
Well head completion: Pitless adapter
X Yes ___ No
Top of casing 12 in. or greater above grade
X Yes ___ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
___ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 24 feet below land surface
If flowing; closed-in pressure ___ psi
___ gpm
Controlled by: ___ valve, ___ reducers,
___ other, (specify) ___

9. WELL TEST DATA ___ pump ___ bailer
X other, (specify) air
Pumping water level below land surface:
50 ft. after 1 hrs. pumping 50 gpm
___ ft. after ___ hrs. pumping ___ gpm

10. WAS WELL PLUGGED OR ABANDONED? ___ Yes X No
If yes, how? ___

11. DATE COMPLETED 10/11/84

12. WELL LOG

Depth (ft.) From	To	Formation
0	10	Brown Clay
10	30	Sand & Gravel
30	45	Hard Brown Clay
45	50	Soft Green Clay

(use separate sheet if necessary)

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

10/11/84
Date

Wiltman Drilling
Firm Name

Rte 85 Box 4286 Livingston
Address

Vince Wiltman 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**

32 SOUTH EWING HELENA, MONTANA 59620 449-3962

STATE PUBLISHING CO., HELENA, MONT.

DEPARTMENT - BUREAU COPY

9739

Bozeman 2510E07BC

Form No. 603 (R 2-89)

WELL LOG REPORT 096504 File No. 43B-85100

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 C. M. Smokey & Donna Goldner

2. CURRENT MAILING ADDRESS
RT. 85 Box 4012
Livingston MT. 59047

3. WELL LOCATION
_____ 1/4 SW 1/4 NW 1/4 Section 7
Township T-25 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number PARCEL A-1

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. 10" in. from 0 ft. to 20 ft.
Dia. 6 in. from 20 ft. to 205 ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 O.D. from -1 1/2 ft. to 43 1/2 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4 1/2 from 35 ft. to 205 ft.
Weight SCH 40 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used 1/2" Drill
Size of perforations 1/2 in. by Round in.
_____ perforations from 160 ft. to 205 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? 20'+ ft.
Material used in grouting Bentonite Grout

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

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 X Pump _____ Bailer _____
b) Static water level immediately before testing 35' ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 200'
d) The pumping rate: 15 gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 35' 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

Depth (ft.) From	To	Formation
0'	1'	Top soil
1'	17'	Sandy clay
17'	38'	Gravel & Sand
38'	172'	Shale Black & Blue
172'	205'	Sandstone (Some shale)

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7-9-92

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 7-14-92
Firm Name Bridger Drilling
Address Box 4287, Bozeman, MT. 59772
Signature J. Bile License No. # 425

RECEIVED
JUL 15 1992
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

DEPARTMENT—BUREAU COPY

M: 133982

025 10E 07 BCC

(130460

Form No. 603 R2-97

WELL LOG REPORT

File No. _____

1. WELL OWNER
Name DAVE JUHNKE

2. CURRENT MAILING ADDRESS
305 Maple Street
Livingston, MT 59047

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot 10B, Block _____
Subdivision Name _____
Tract Number 0535128 - 5058268
Latitude _____ Longitude _____

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. 6 in. from 0 ft. to 225 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 in. from +2 ft. to 60 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type A53-B Wall Thickness .0250
Casing; Plastic Dia. 4 1/2 in. from 20 ft. to 225 ft.
Threaded ☐ Welded ☐ Dia. _____ in. from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
300 perforations from 100 ft. to 180 ft.
100 perforations from 200 ft. to 220 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? 20 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 43 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour 220 ft.
d) Recovery level 43 ft. Time of recovery 1 min/hrs.
e) Pumping rate 20 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.

N/A

11. PUMP INSTALLATION INFORMATION
Installation depth _____
Actual pumping rate _____
Manufacturer's name _____
Type _____ Model No. _____ H.P. _____

N/A

12. WAS WELL PLUGGED OR ABANDONED? Yes ☐ No ☒
If yes, how? _____

13. WELL LOG

HB

Depth (ft.) From	To	Formation
0	15	Top soil
15	17	Some gravels small
17	49	gravel
49	54	hard clay easy drill maybe sandstone
54	58	gray clay & shale easy
58	85	darker gray shale & clay easy
85	95	Course white sandstone white green
95	110	Shale & clay gray easy
110	130	sandstone gray course easy
130	155	Shale & clay
155	158	Course sandstone easy
158	170	Shale clay gray easy
170	178	brown sandstone hard
178	181	Sandstone gray easy
181	220	gray shale clay
220	225	white sandstone easy

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SEP 15 1998
DNRC - BOZEMAN
REGIONAL OFFICE

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 8.6.98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 9-11-98

Firm Name Hayes Drilling
Address 2403 Par Court Bozeman MT 59715
Signature [signature] License No. 97

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MONTANA DNRC

OCT 1998

M: 170496

DEPARTMENT — BUREAU COPY

M: 170496

02S 10E 07 BCBB

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 783

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 Steve Himmelspach Sr
MAILING ADDRESS 7 Foxway Lane
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NW ¼ SW ¼ NW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535179 Longitude 5058365
Error as reported by GPS locator (± feet) 36
Horizontal datum [X] NAD27 [ ] WGS84

ok

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 244 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 58 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 24 ft. to 244 ft.
Perforations/Slotted Pipe:
Type of perforator used n/a
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.
Screens: [X] Yes [ ] No
Material Factory slotted sch 40 PVC
Dia. 4.5 Slot size .025 from 164 ft. to 244 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 0 ft. to 25+ ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] Static water level 55 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.
How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
27 gpm with drill stem set at 240 ft. for 1 hours
Time of recovery 1 hr hrs/min. Recovery water level 55 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: HB

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	17	Hard brown clay - sticky
17	42	Gravels, cand & large cobbles
42	50	Red shale (wet @ 50 feet)
50	90	Gray shales & clay - soft
90	110	Red shale & clay
110	119	Blue shale - hard
119	130	Blue shales & clay
130	138	Red shale & clay
138	149	Blue shales & clay
149	155	Red shale - hard
155	170	Blue shales & clay
170	178	Blue sandstone - hard (4 gpm)
178	210	Blue shale & clay
210	218	Blue shale - hard (8 gpm)
218	220	Blue shale & clay
220	225	Blue sandstone - hard (15 gpm)
225	240	Gray shale & clay
240	244	Blue shale & clay

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[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 12/08/2003

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 12/15/2003 License no. 361/074

MBMG ID# 208513

NURC.

02S 10E 01 BCCD

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 832

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 Gary D. & Anna M. Poling
MAILING ADDRESS PO Box 416
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ SW ¼ SW ¼ NW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535231 Longitude 5058112
Error as reported by GPS locator (± feet) 36
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [X] Irrigation
[ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 8 in. from 0 ft. to 34 ft.
Dia. 6 in. from 34 ft. to 203 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +1.5 ft. to 34.5 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 23 ft. to 203 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 4.5 Slot size .025 from 63 ft. to 123 ft.
Dia. 4.5 Slot size .025 from 163 ft. to 203 ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 ft. to 34 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 44 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
30 gpm with drill stem set at 195 ft. for 1 hours
Time of recovery 1/2 hr. hrs/min. Recovery water level 44 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: HB

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	29	Sand, gravel cobbles & small boulders
29	45	Reddish brown shale & clay
45	50	Gray shale
50	58	Brown sandstone - hard
58	70	Gray shales & clay
70	72	Gray sandstones (4-5 gpm)
72	93	Gray shales & clay - hard
93	99	Gray & brown sandstone (2 gpm)
99	125	Gray shale & clay
125		Dark gray shale & sandstones - broken
	127	(3-4 gpm)
127	130	Light gray shale - soft
130	165	Dark gray shale & clay
165	182	Gray sandstone - hard
182		Gray sandstone & black shale mix (10 gpm
	195	- 20 total)
195		Gray sandstone - hard (10-12 gpm - 195';
	205	30 gpm total)

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AUG 3 1 2004
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 06/01/2004

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 06/04/2004 License no. 361/074

MBMG ID# 213641

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

Rumsey

GW 4 Bozeman

File No.

(2)

067 T. 2 S R. 10 E 7BA

County Park

TRIPLICATE

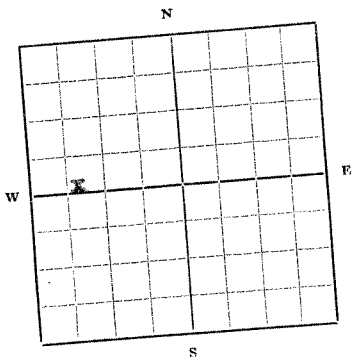
RECEIVED
1 1963
Montana Bureau of Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. J. A. Roth (Name of Appropriator), of Box 118 (Address) Livingston (Town) County of Park State of Montana have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



n ½ ne ¼ nw¼ Sec. 7 T. 2 S R. 10 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 Stock, Household, Lawn & Garden use

3. Date or approximate date of earliest beneficial use; and how continuous the use has been November 1 at 1949 continues since that date

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 20 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 Only lawn & garden. Garden about 50x100 ft. Same location as well within 100 ft thereof.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric pump, Jet type, deep well

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Commenced drilling July 22, 1949. Finished drilling August 10, 19499

8. The depth of water table 30 feet

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 Drilled well, 6 inch casing. depth 49 feet

10. The estimated amount of groundwater withdrawn each year 36,000 gallons

11. The log of formations encountered in the drilling of each well if available First 10 ft dirt. next 20 ft clay & gravel, next 10 ft sand, then 9 ft gravel & sand.

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 No records kept at that time.

Signature of Owner J. A. Roth

Date March 28, 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

M:97337

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.

97337

067 025 10E 01 BBB

Form No. 603 R10/79

File No. _____

WELL LOG REPORT

Bozeman Coded

State law requires that this form be filed by the water well driller within 60 days after comple

033475

1. WELL OWNER
Name Kenneth O Well

2. CURRENT MAILING ADDRESS

3. WELL LOCATION

NW ¼ NW ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W
County Park
Lot _____ Block _____
Subdivision _____
Well Elevation _____
Accuracy: ____ ± 10'; ____ ± 50'; ____ ± 100';

4. DRILLING METHOD ____ cable, ____ bored, X 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)
6"	6" 17#	0	40			

Was casing left open end? X Yes ____ No
Was a packer or seal used? ____ Yes X No
If so, what material _____
Was the well gravel packed? ____ Yes X No
Was the well grouted? ____ Yes X No
To what depth? _____
Material used in grouting _____
Well head completion: Pitless adapter X
12 in. above grade X, other _____
(if other, specify) _____
Pump horsepower 3/4, pump type _____
Pump intake level 62 feet below land surface
Power (electric, diesel, etc.) _____

6. WATER LEVEL
Static water level 40 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) air
Pumping level below land surface:
65 ft. after 1 hrs. pumping 12 gpm
____ ft. after ____ hrs. pumping ____ gpm

8. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? _____

9. DATE STARTED 11/28/80
DATE COMPLETED 11/28/80

10. WELL LOG

Depth (ft.) From	To	Formation
~~0~~	~~28~~	
0	4	clay
4	28	gravel
28	65	Sandstone Bedrock

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SEP 23 1981
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

(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.

11/28/80
Date

Hillman Drilling
Firm Name

Rt 85 Box 4286 Livingston
Address

E. Hillman 258
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

97841
WL - 4922

Bozeman

02S 10E 07 BDC

WELL LOG REPORT

File No. 43B-C100677 (105181)

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 ~~Dennis Parisi~~ Robert Agle

2. CURRENT MAILING ADDRESS
Route 85 Box 4021
Livingston MT 59047

3. WELL LOCATION
SW ¼ SE ¼ NW ¼ Section 07
Township 02S N/S Range 10E E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____

4. PROPOSED USE: Domestic X ☐ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. TYPE OF WORK:
New well X ☐ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary X ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 57-6 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 from 2-4 ft. to 38-2 ft.
Threaded ☐ Welded X ☐ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4.5 from 37-6 ft. to 57-6 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes X ☐ No ☐
Type of perforator used _____
Size of perforations 1/8 in. by 4 in.
20 perforations from 52-6 ft. to 57-6 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 X ☐ Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

GROUTED: To what depth? 25 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter X ☐ Yes ☐ No

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 X Pump _____ Bailer _____
b) Static water level immediately before testing 22 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 52
d) The pumping rate 10 gpm.
e) Pumping water level 47 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 22 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 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

Depth (ft.) From	To	Formation
0	2	Topsoil, Sand & Gravel
2	27	Dry Loose Sand & Gravel
27	28	Claybound Sand & Grave
28	30	Clay & Claystone
30	31	Claystone To Shale
31	33	Brown Sandstone
33	38	Brown Siltstone, Claystone and Sandstone
38	45	Silty Brown Sandstone
45	55	Brown Sandstone, w/ clay se
55	56	Blue Shale
56	57.5	Blue/Gray Sandstone

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED July 29, 1993

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

August 6, 1993
Date

Potts Drilling
Firm Name

30730 Gallatin Rd. Bozeman, MT 59715
Address

Signature _____ License No. 512

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

RECEIVED
AUG 06 1993
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

M: 142869

Bob Quesenberry
Rt 85 Box 4058

GW 2 Revised 1969
STATE PUBLISHING COMPANY

County Gallatin
Verify

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 OTTO JUHNKE

Address LIVINGSTON MONTANA

For Administrator's Use
File
GW 1

Date well started APRIL 7/72

completed APRIL 15/72

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used Cable tools. (Churn drill, rotary or other)

Water Use: Domestic [X] Municipal [ ] Stock [ ] Irrigation [ ]

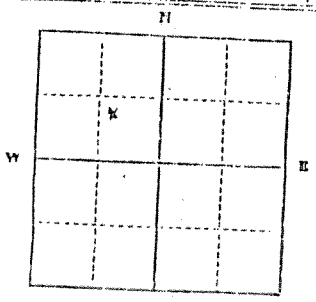
Industrial [ ] Drainage [ ] Other [ ]* Garden/Lawn [ ]

*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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6" 6"	6 5/8" 17#per ft. .250 wall plastic casing	0 43'	45'6" 74	none 1/16" X 2" slots.	54	74



Static water level 37 ft.*
Pumping water level 58 ft.*
at 10 gallons per minute,
measured 60 minutes after pumping began.
*Measured from ground level.
Well developed by surging
for 2 hours.
Power..... Pump..... HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings shutoff outside of casing

¼ ¼ Sec. 7
T. 2 N/S R. 10 E/W

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature [signature]

Driller's Address VAN DYKEN DRILLING CO.

BOZEMAN, MONTANA LICENSE NO. 1

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, 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)	
0	2	Top soils.
2	13	Clays and boulders.
13	14	Sands. Dry.
14	32	Claybound sand and gravels.
32	74	Shales. Water.

Screened in back

74 Show exact depth of bottom

M: 97320

067 025 10E 01B PARK 033450

Approved Stock Form—State Publishing Co., Helena, Montana

T. 2 S R. 10 E 2B

County Park

RECEIVED
Montana Bureau of Mines and Geology

LICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

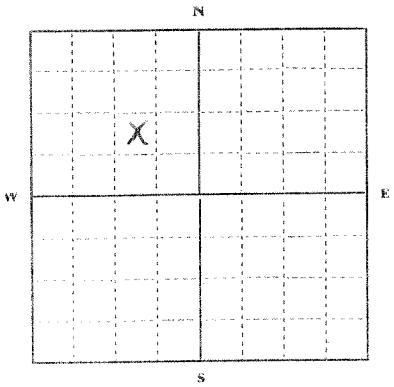
4

(Under Chapter 237, Montana Session Laws, 1961)

1. Robert Poeschl (Name of Appropriator), of Shields Rt Livingston (Address) (Town)

County of Park State of Montana

have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



N ¼ W Sec. 7 T. 2S R. 10E

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 household use and gardens and grounds

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1930 continuous daily use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 1,000 gallons per hour

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 one acre Robert Poeschl

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric pump lot 3 block 18 Montague addition

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1930

8. The depth of water table 30 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 7 inch drilled well 50 ft deep

10. The estimated amount of groundwater withdrawn each year 500,000 gallons

11. The log of formations encountered in the drilling of each well if available not available

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 no information

Signature of Owner Robert Poeschl

Date 12-27-1963

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 Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

~~71884~~ 97334

PARK

033434

RECEIVED
-1 1962
Montana Bureau of
Mines and Geology

4

T 2 S R 10 E 2 B

County Park

Sec. 7

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner J. H. Counts Address Shields Rt. Livingston Mon.

Driller Clouse Address Clyde Park

Date Started _____ Date Completed 1944

Location: Sec. 7 T 2S R 10E 1/4 Sec. N W

Type of well Drilled (Dug, driven, bored, or drilled) Equipment used Churn Drill (Churn drill, rotary, other)

Water use: Domestic ✓ Municipal ____ Stock ✓ Irrigation ✓

Industrial ____ Drainage ____ Other: _____

Casing: 0' ft. to 32 ft. Type Steel Size 6"

Casing: 32 ft. to 42 ft. Type Tank Size Tank

Casing: _____ ft. to _____ ft. Type _____ Size _____

Perforated or Screened: Ft. 32 to ft. 42 Ft _____ to ft. _____

Type of screen or perforations Tank

Static Water level, for non-flowing well: 39 feet.

Shut-in pressure for flowing well: 65 # lb./sq/in. on: July 1st 1961 (date)

Pumping water level 25 feet at 245 gal. per min.

How tested: I have run 2 3/4" hoses continually for 3 months also house hold water

Length of test

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

foot Valve 24 ft

M: 97330

Log of Well

Depth, feet From	to	Description of Material Drilled
		Tank

97330

FORM No. 603 New 7-73

RECEIVED

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

File No. _____

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PINK — BUREAU
CANARY — WELL OWNER
GOLDENROD — DRILLER

WELL LOG REPORT

(033467)

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 Les Hudson Address Shields Rt. - Livingston, Montana

2. WELL LOCATION: County Park Lot #13 - Block 5 - Mantague Addition ; ___ ¼ ___ ¼ ___ ¼, Sec. 7, Twp. 2 N-S Rg. 10 E-W

3. PROPOSED USE: ___ Domestic ___ Stock ___ Municipal ___ Industrial ___ Lawn and Garden ___ Irrigation ___ Other (*if other, specify*) Trailer Court

4. METHOD DRILLED: X Cable ___ Bored ___ Forward Rotary ___ Reverse Rotary ___ Jetted ___ Other (*if other, specify*)

5. WELL CONSTRUCTION:
Diameter of hole 6 inches. Depth 160 ft.
Casing: X Steel X Plastic ___ Concrete ___ Threaded X Welded ___ Other (*if other, specify*) 2' above ground
Pipe Weight: Dia.: From: To:
17 lb/ft 6 5/8 inches feet 47 feet
160 PSI lb/ft. 4 inches 42 feet 160 feet
PVC ~~lb/ft. ---- inches ---- feet ---- feet~~
Was perforated pipe used? X Yes ___ No
Length of pipe perforated 8 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: ___ slots ___ holes
Size ___ set from ___ feet to ___ 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 _____
Well type: ___ Straight screen ___ Graveled
Was the well grouted? ___ Yes X No
To what depth? _____ feet
Material used in grouting _____
Well head completion: Pitless adapter Yes
12" above grade ___ Other 2' above grade
(*If other, specify*) _____
Was the well disinfected? ___ Yes X No

6. WATER LEVEL:
Static water level 21 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 X Bailer ___ Other (*If other, specify*) _____
Pumping level below land surface:
160 ft. after 1 hrs. pumping 16 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	21	Gravel
21	34	Sand & Fine Gravel
34	47	Clay
47	64	Thin layers of shale in Cla
64	160	Shale

(*Use separate sheet if necessary*)

9. DATE STARTED: July 30, L973

10. DATE COMPLETED: August 15, 1973

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.

Jones Welding & Drilling Co. 17
Driller's or Firm Name *License No.*

2103 Bridger Drive - Bozeman, Montana
Address

Milton E Jones 8/29/73
Signed by *Date*

M: 97318 1 of 3

SANITARY SURVEY FORM - WELLS & PUMPS

(Please copy this sheet for additional wells & pumps)

WELLS - COMPLETE ONE SECTION FOR EACH SOURCE

Source ID Number 003 WELL # 2 - EAST
Example: 001, 002, 003

Is aquifer ☐ Confined ☐ Unconfined or ☒ Unknown ?

Has the recharge area been identified? ☐ Yes ☒ No

What is the nature of ~~recharge zones~~? AREA AROUND WELL

☐ Agricultural
☐ Industrial
☒ Residential — MOBILE HOME PARK
☐ Other

Is recharge area protected? ☐ Yes ☒ No

If yes . . How

☐ Ownership
☐ Fencing
☐ Ordinances
☐ Owner

Is well site subject to flooding? ☐ Yes ☒ No

Is well located in proximity of a potential source of pollution (includes surface water, known chemical spills, agricultural use, etc.)? ☐ Yes ☒ No

If yes . . explain HOWEVER, DOG POOP IN YARD NEXT TO WELL SHOULD BE REMOVED MORE FREQUENTLY

Does casing extend at least ☒ 18 inches above the ground; ☐ 12 inches above the floor; or ☐ 3 feet above maximum flood level? (Check for appropriate distance) ☒ Yes ☐ No

Is top of the well casing properly sealed? (sanitary seal) ☒ Yes ☐ No

Does well vent terminate with return bend facing downward and screened? BUILT INTO CAP ☒ Yes ☐ No

Does well have suitable sampling tap? IN PUMPHOUSE ☒ Yes ☐ No

Are check valves, blow-off valves and water meters maintained and operating properly? N/A ☐ Yes ☐ No

Is upper termination of well protected (housed or fenced)? ☒ Yes ☐ No

Is intake located below the maximum drawdown? UNK ☐ Yes ☐ No

Comments: (Such as, detailed information on any items with identified deficiencies)

WELL CASING IS COVERED BY A BOX.

GOOD CAP & SEAL WITH BUILT IN VENT.

PUMPS - COMPLETE ONE SECTION FOR EACH SOURCE

Source ID Number 003
Example: 001, 002, 00

Type SUBMERSIBLE

Location IN WELL # 2

Rated Capacity UNKNOWN

Are pumps operable? ☒ Yes ☐ No

What is state of repair of pumps? SEEM TO BE WORKING OK

How frequently has pumps(s) been replaced? UNKNOWN

Are backup pumps/motors provided? ☐ Yes ☒ No

Are controls functioning properly and adequately protected? ☒ Yes ☐ No

Are underground compartments and suction well water proof? N/A ☐ Yes ☐ No

Is facility properly protected against trespassing and vandalism? SEE COMMENTS ☐ Yes ☐ No

Are pump records maintained (amp, drawdown, discharge, pressure, maintenance schedule, manuals, etc.)? ☐ Yes ☒ No

Is the plumbing adequately painted to prevent excessive corrosion? N/A ☐ Yes ☐ No

Is adequate heating, lighting, and ventilation provided? HEATER IN PUMPHOUSE ☒ Yes ☐ No

Is a preventive maintenance program in operation? OK ☐ Yes ☐ No

Are recommended spare parts on hand? ☐ Yes ☒ No

EMERGENCY POWER

What type NONE

Frequency of testing

Record of primary power failures: _____ in last year

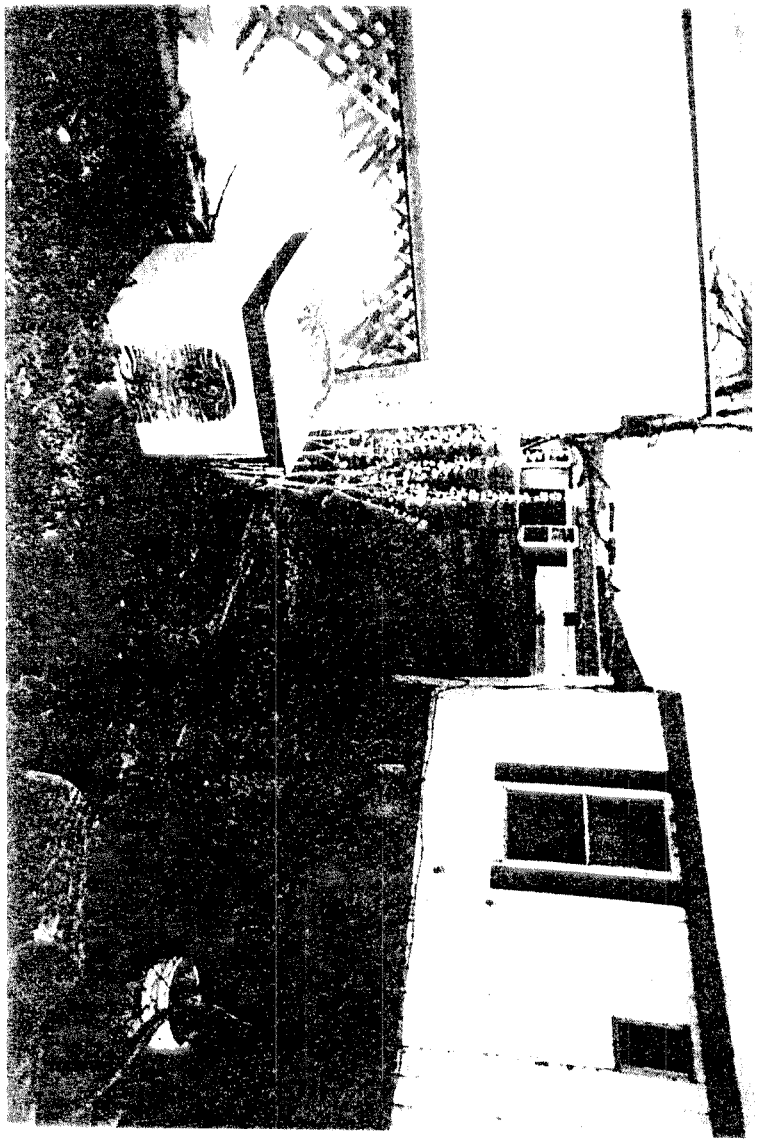
Switchover: ☐ Automatic ☐ Manual

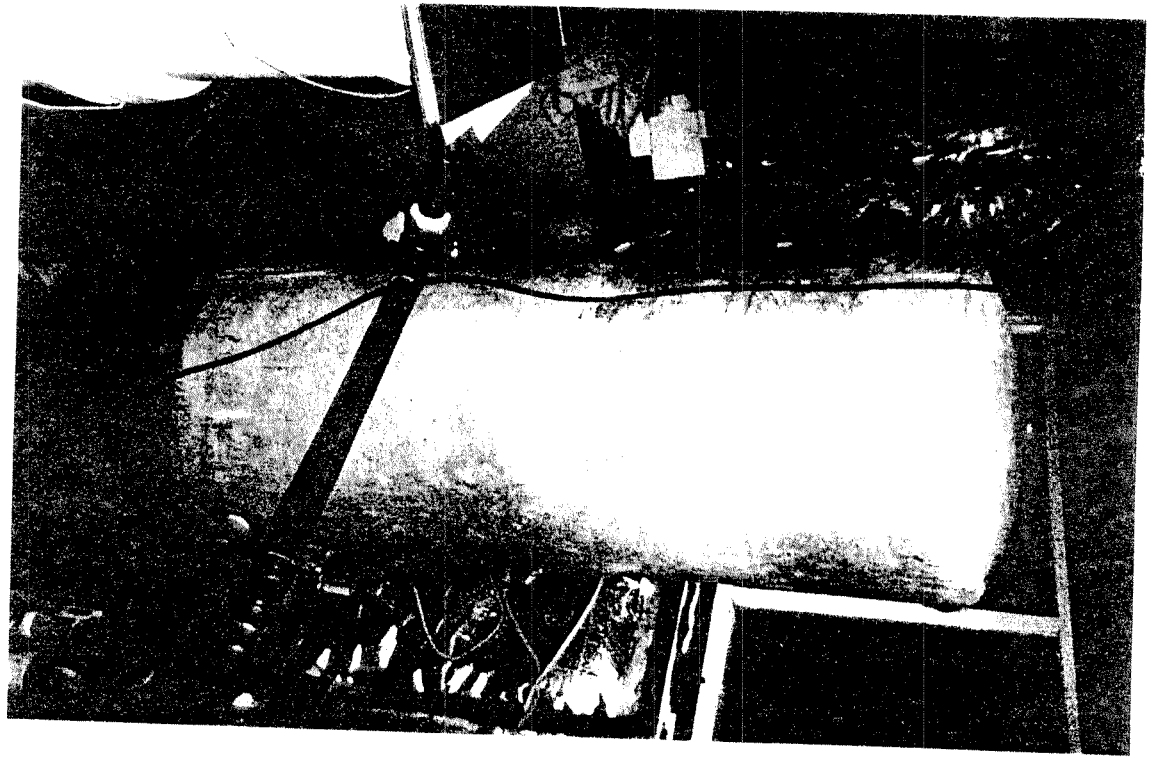
Comments: (Such as, detailed information on any items with identified deficiencies)

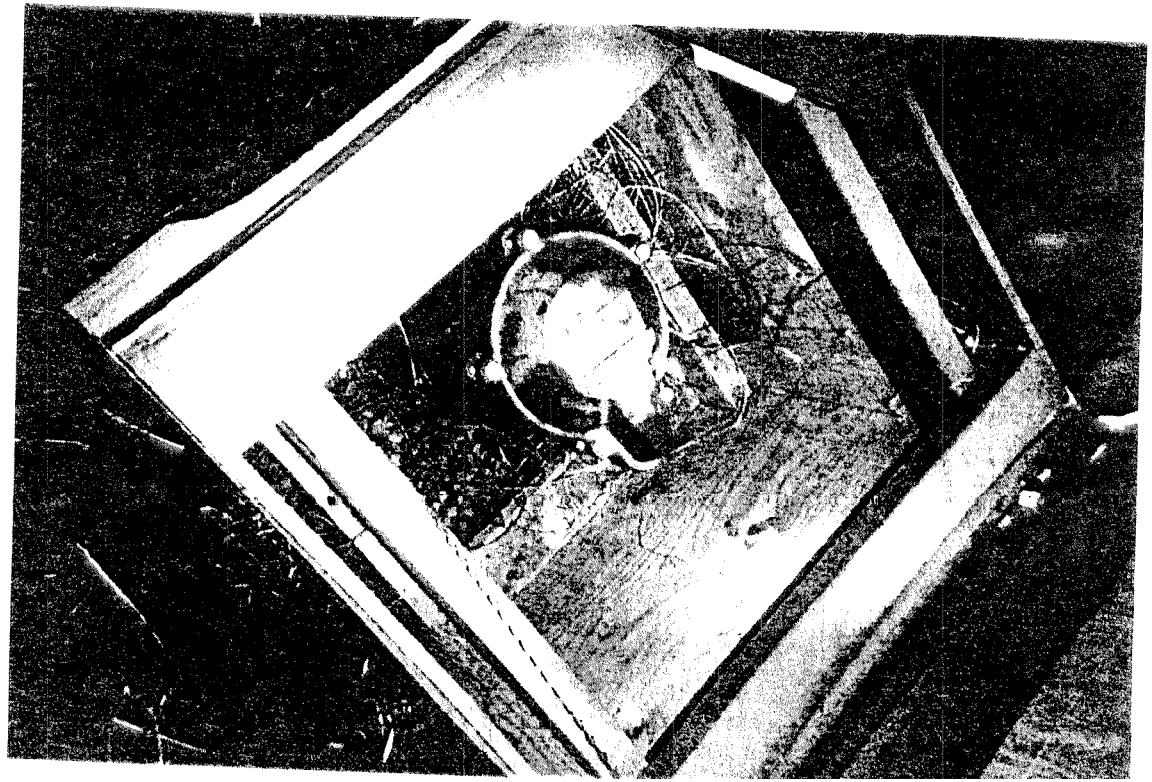
PUMPHOUSE DOOR SHOULD BE KEPT LOCKED

M: 92318
Page 2 of 3

Frontier Mobile Home Park -
Livingston
PWSID # 00038
Second pressure tank in pumphouse







Frontier Mobile Home Park
Livingston
PWSID # 00038
Well #[illegible] East [illegible] in box

M19318
page 3 of 3

SANITARY SURVEY FORM - INVENTORY

DATE OF SURVEY	COUNTY	SURVEYOR NAME/REQUIRES SIGNATURE
11-5-99	PARK	Dean L. Chouinard

PWSID	SYSTEM NAME
D0038	FRONTIER MOBILE HOME PARK

(SYSTEM REPRESENTATIVE)	("ALSO KNOWN AS" NAME IF APPLICABLE)
ED SKILLMAN	FRONTIER TRAILER COURT

SYSTEM ADDRESS (Primary Address)

Addressee: FRONTIER MOBILE HOME PK

Street: C/O SKILLMAN ENTERPRISES, INC

318 CASTLE MOUNTAIN RD.

City: CLYDE PARK State: MT Zip: 59018

System Phone: (406) 686-4402 Fax: ( )

SYSTEM OWNER (Owner's Address)

Addressee:

Street: SAME

City: State: Zip:

Owner Phone: ( ) Fax: ( )

LOCATION OF SYSTEM

Nearest City: LIVINGSTON

Description or Physical Address: GARNIER AVE - NORTH OF LIVINGSTON

OPERATOR OF SYSTEM

Name: ED SKILLMAN

Certified Operator ☐ No ☒ Yes If, yes

Certification # 4905 Phone (406) 686-4402

ALTERNATE OPERATOR OF SYSTEM

Name: NONE

Certified Operator ☐ No ☐ Yes If, yes

Certification # Phone

SYSTEM STATUS

☒ A = Active ☐ D = Delete

☐ I = Inactive ☐ P = Pending *(Add New System)*

SYSTEM CLASS

☒ C = Community

☐ P = Non-Transient Non-Community

☐ N = Transient Non-Community

Total Service Connections: (Total number SVC system was designed for) Residential / Non-Transient: 28 Transient: —

Total Active Connections: (Number of SVC in use at this date) Residential / Non-Transient: 28 Transient: —

Service Connections Metered? ☐ Yes ☒ No % (Metered)

Resident Population (Number of permanent residents utilizing PWS daily) Summer: 65 Winter: 65

Non-Transient Population (Number of non-transient persons utilizing PWS daily) Summer: — Winter: —

Transient Population (Number of transient persons served by PWS daily) Summer: — Winter: —

OWNER TYPE

☐ 1 Federal Government

☒ 2 Private Subdivision, Investor, Trust, Cooperative, Water Association, etc.

☐ 3 State Government

☐ 4 Local Government Authority, Commission, District, Municipality, City, etc.

☐ 5 Mixed Public/Private

☐ 6 Native American Indian Tribes & Reservations

SERVICE CATEGORY

☐ AP Airport
☐ BA Bathing/Swimming
☐ BR Bar
☐ CG Campground
☐ CH Church
☐ DC Day Care Center
☐ HS Hospital
☐ IB Interstate Bottler
☐ IF Industrial/Agricultural
☐ IN Institution
☐ LB Local Bottler
☐ LO Lodge
☐ MA Marina
☒ MH Mobile Home Park
☐ MO Motel/Hotel
☐ PC Picnic Area
☐ RA Rest Area
☐ RC Recreation
☒ RS Residential
☐ RT Restaurant
☐ RV RV Park
☐ SC School
☐ SD Subdivision
☐ SK Ski Area
☐ SS Service Station
☐ US Water User's Association
☐ VC Visitor Center
☐ VM Vending Machine
☐ WH Water Hauler
☐ XX Other

Service Category Description: SYSTEM SERVES ONLY MOBILE HOMES

Comments: T2S, R10E, SEC 7
SINCE LAST SURVEY —
DECISION MADE TO CONTINUE USING WELLS RATHER THAN HOOK TO CITY OF LIVINGSTON.
WELL #1 ABANDONED.
CHLORINE IS NOT BEING ADDED.

M:188587
Page 1 of 6

SANITARY SURVEY FORM - DISTRIBUTION & SOURCES

Source Number Identification: Sources and Entry Points are identified with a three digit code. The codes are used for data entry and federal da reporting. Where appropriate, use the correct source & entry point ID number. (Refer to information from state for correct ID's.) When a source operational it is considered *Active*, this includes systems that are seasonal. *Inactive* sources are those which are shut down but can return to active status, such as a system out of business. *Deleted* sources cannot return to active status, such as abandoned wells.

A water source is a well, spring, lake, river, town, city or municipality, etc. from which a system draws or purchases water:

Total Number of Sources 2

SOURCE TYPE

Source ID 001 = Distribution System for all systems

	Source ID Number(s)			
☒ G Groundwater, Non-Purchased		003	004	
☐ W Groundwater, Purchased				
☐ P Surface, Purchased				
☐ S Surface, Non-Purchased				
Example	S 002			
	G 003,	004	005	

Please note, in addition to the above, is source a spring or infiltration gallery? .

☐ Spring ☐ Infiltration Gallery

If Purchased _____ supplier of water (Name & PWSID)

If Sold _____ purchaser of water (other than within the system)

AVAILABLE

	Source ID Number(s)			
☒ P *Permanent Utilization*		003	004	
☐ E Emergency Utilization				
☐ I Interim Utilization				
☐ O Other Utilization				
☐ S Seasonal Utilization				

If Seasonal _____ Open date _____ Close date

Wh ity? _____ gallons per da

Wh tion? _____ gallons per da

Wh _____ gallons per da

Is 1 ☐ Yes ☒ N

If pa e provided on "Treatment"

Well Info from Previous Inspections!? RC

COMPLETE ONE SECTION FOR EACH SOURCE

STATUS OF SOURCE ☒ (A)ctive ☐ (I)nactive ☐ (D)elete

Source ID 003 Entry Point ID 503 (These are state assigned identification numbers)

Source Name WELL #2 EAST WELL (Name of Source - Example: Well #1 or South well, etc.)

Location of Water Source/Watershed NORTHEAST SIDE OF MOBILE HOME PARK

Entry Point Name ET FOR WELL #2 & #3 (Name of EP - Example: Entry point for North Well #1 & South Well #2)

Location of Entry Point AT PUMPHOUSE

Log Available? ☐ Yes ☒ No

Average Production _____ indicate units

Maximum Production _____ indicate units

Date Drilled 1-1-73 if well, date drilled

Casing Size 6" size of casing installed in well

Case Depth ? depth of casing installed in well

Well Depth 160' depth of well expressed in feet

Grout Depth ? depth of grout used to seal well walls

SWL 21' WHEN DRILLED expressed in feet below ground elevation

Draw Down ? expressed in feet below ground elevation

Pump Capacity ? capacity of pump installed expressed in gallons per min

Intake Type _____ type of intake mechanism

Screened Intrvl _____ expressed in feet below ground elevation

Well Yield _____ pump tested in gallons per minute

Latitude N 45° 40' 42" latitude of source

Longitude W 110° 32' 39" longitude of source

STATUS OF SOURCE ☒ (A)ctive ☐ (I)nactive ☐ (D)elete

Source ID 004 Entry Point ID 503 (These are state assigned identification numbers)

Source Name WELL #3 - WEST WELL (Name of Source - Example: Well #1 or South well, etc.)

Location of Water Source/Watershed NORTHWEST SIDE OF MOBILE HOME PARK

Entry Point Name ET FOR WELL #2 & #3 (Name of EP - Example: Entry point for North Well #1 & South Well #2)

Location of Entry Point AT PUMPHOUSE

Log Available? ☐ Yes ☒ No

Average Production _____ indicate units

Maximum Production _____ indicate units

Date Drilled 1-1-75 if well, date drilled

Casing Size 6" size of casing installed in well

Case Depth ? depth of casing installed in well

Well Depth 160' depth of well expressed in feet

Grout Depth ? depth of grout used to seal well walls

SWL 21' WHEN DRILLED expressed in feet below ground elevation

Draw Down ? expressed in feet below ground elevation

Pump Capacity ? capacity of pump installed expressed in gallons per min

Intake Type ? type of intake mechanism

Screened Intrvl ? expressed in feet below ground elevation

Well Yield ? pump tested in gallons per minute

Latitude N 45° 40' 42" latitude of source

Longitude W 110° 32' 40" longitude of source

Comments: WELL INFO DRAWN FROM PREVIOUS REPORTS. PUMPS HAVE NOT BEEN REPLACED SINCE MR. SHUMWAY PURCHASED THE PARK SO NO INFORMATION IS AVAILABLE ON SIZE OF PUMPS

M.188587
Page 2016

SANITARY SURVEY FORM - WELLS & PUMPS

(Please copy this sheet for additional wells & pumps)

WELLS - COMPLETE ONE SECTION FOR EACH SOURCE

Source ID Number 004 (WELL #3 - WEST) Example: 001, 002, 003

Is aquifer ☐ Confined ☐ Unconfined or ☒ Unknown ?

Has the recharge area been identified? ☐ Yes ☒ No

What is the nature of ~~recharge zones~~? AREA AROUND WELL

☐ Agricultural
☐ Industrial
☒ Residential — MOBILE HOME PARK
☐ Other

Is recharge area protected? ☐ Yes ☒ No

If yes . . How

☐ Ownership
☐ Fencing
☐ Ordinances
☐ Owner

Is well site subject to flooding? ☐ Yes ☒ No

Is well located in proximity of a potential source of pollution (includes surface water, known chemical spills, agricultural use, etc.)? ☐ Yes ☒ No

If yes . . explain

Does casing extend at least ☒ 18 inches above the ground; ☐ 12 inches above the floor; or ☐ 3 feet above maximum flood level? (Check for appropriate distance) ☒ Yes ☐ No

Is top of the well casing properly sealed? (sanitary seal) ☒ Yes ☐ No

Does well vent terminate with return bend facing downward and screened? BUILT INTO CAP ☒ Yes ☐ No

Does well have suitable sampling tap? IN PUMP HOUSE ☒ Yes ☐ No

Are check valves, blow-off valves and water meters maintained and operating properly? N/A ☐ Yes ☐ No

Is upper termination of well protected (housed or fenced)? BOX OVER TOP — MOVEABLE FENCE ☒ Yes ☐ No

Is intake located below the maximum drawdown? ☒ Yes ☐ No

Comments: (Such as, detailed information on any items with identified deficiencies)

WELL CASING IS COVERED BY A BOX. AREA IS SURROUNDED BY A MOVEABLE FENCE — 10' DIAMETER GOOD CAP WITH BUILT IN VENT

PUMPS - COMPLETE ONE SECTION FOR EACH SOURCE

Source ID Number 003 Example: 001, 002, 0

Type SUBMERSIBLE

Location IN WELL # 3

Rated Capacity UNKNOWN

Are pumps operable? ☒ Yes ☐ N

What is state of repair of pumps? SEEM TO BE WORKING OK

How frequently has pumps(s) been replaced? AT LEAST 4 YEARS

Are backup pumps/motors provided? ☐ Yes ☒ N

Are controls functioning properly and adequately protected? ☒ Yes ☐ No

Are underground compartments and suction well water proof? N/A ☐ Yes ☐ No

Is facility properly protected against trespassing and vandalism? SEE COMMENTS ☒ Yes ☐ No

Are pump records maintained (amp, drawdown, discharge, pressure, maintenance schedule, manuals, etc.)? ☐ Yes ☒ No

Is the plumbing adequately painted to prevent excessive corrosion? N/A ☐ Yes ☐ No

Is adequate heating, lighting, and ventilation provided? HEATER IN PUMPHOUSE ☒ Yes ☐ No

Is a preventive maintenance program in operation? OK ☐ Yes ☐ No

Are recommended spare parts on hand? ☐ Yes ☒ No

EMERGENCY POWER

What type NONE

Frequency of testing

Record of primary power failures: _____ in last year

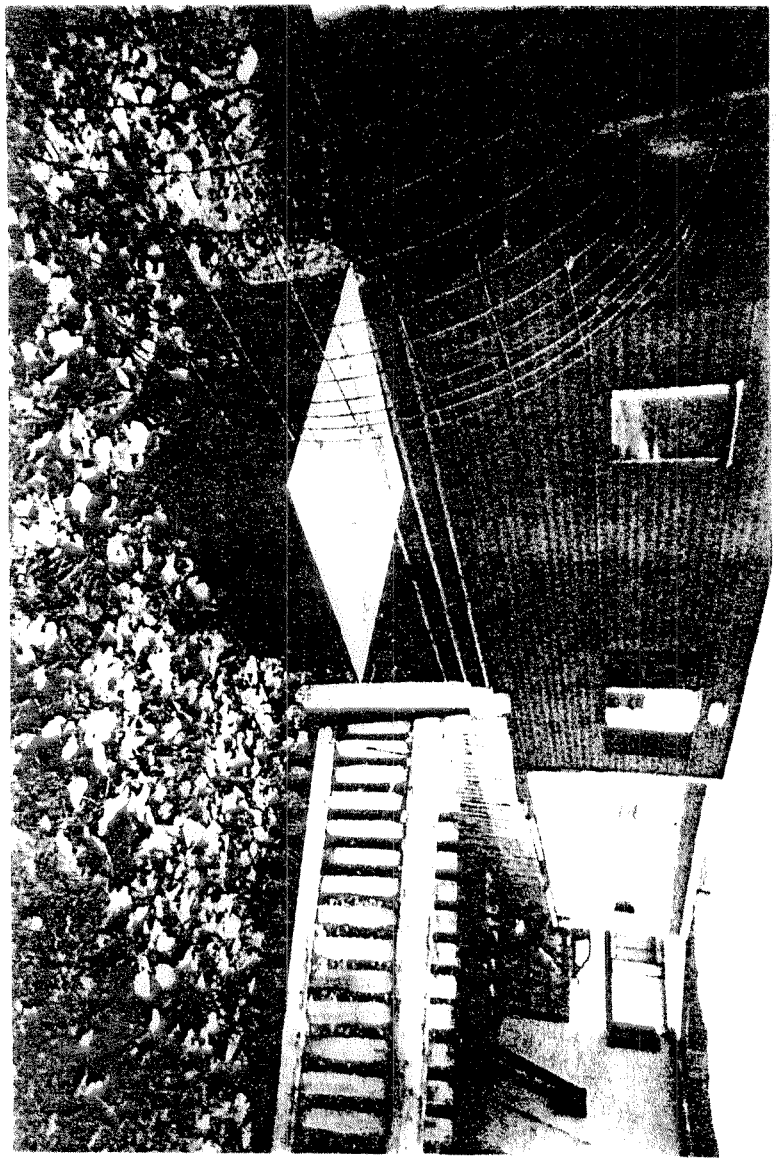
Switchover: ☐ Automatic ☐ Manua

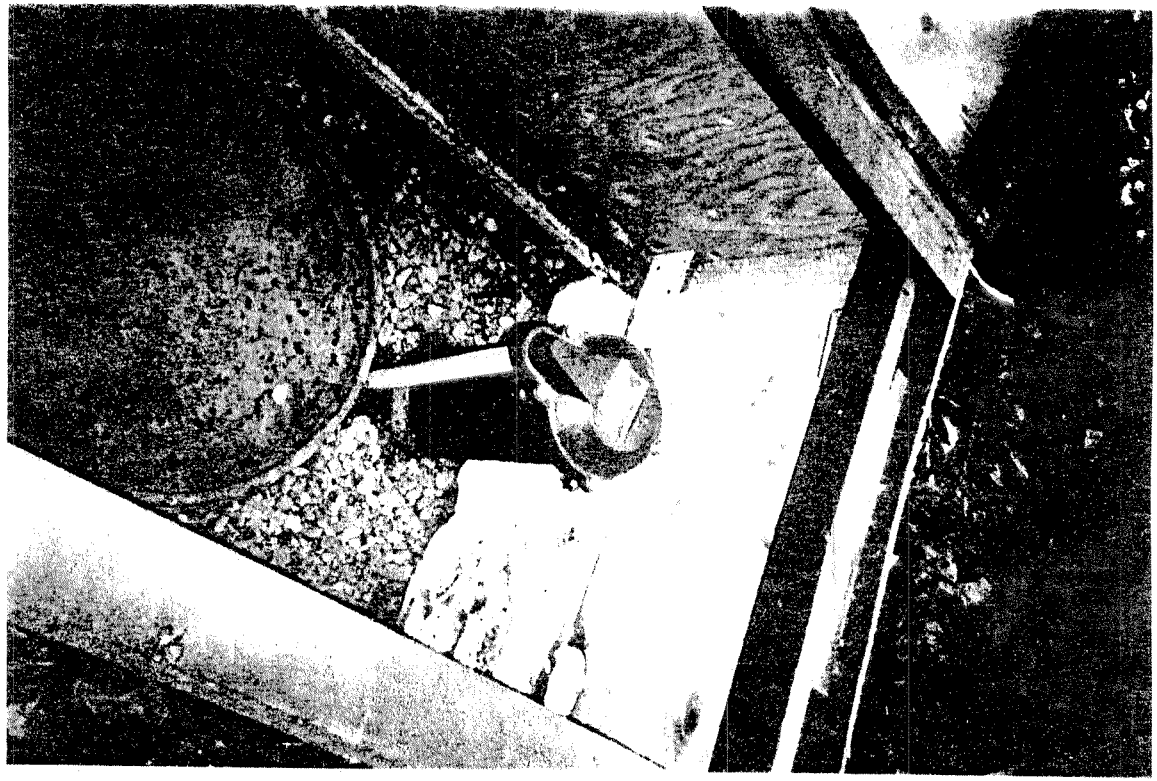
Comments: (Such as, detailed information on any items with identified deficiencies)

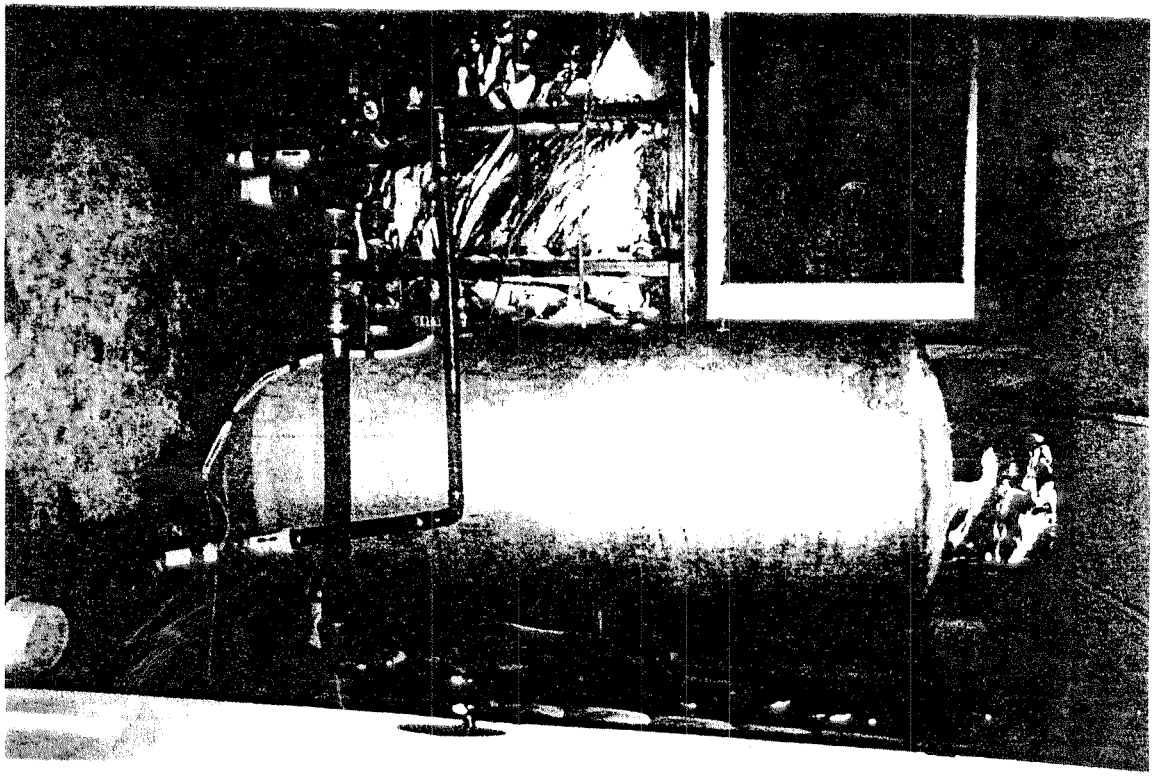
PUMPHOUSE DOOR SHOULD BE KEPT LOCKED

M: 188587
page 3 of 6

Frontier Mobile Home Park -
Livingston
PWSID # 00038
Well #3 West - in box

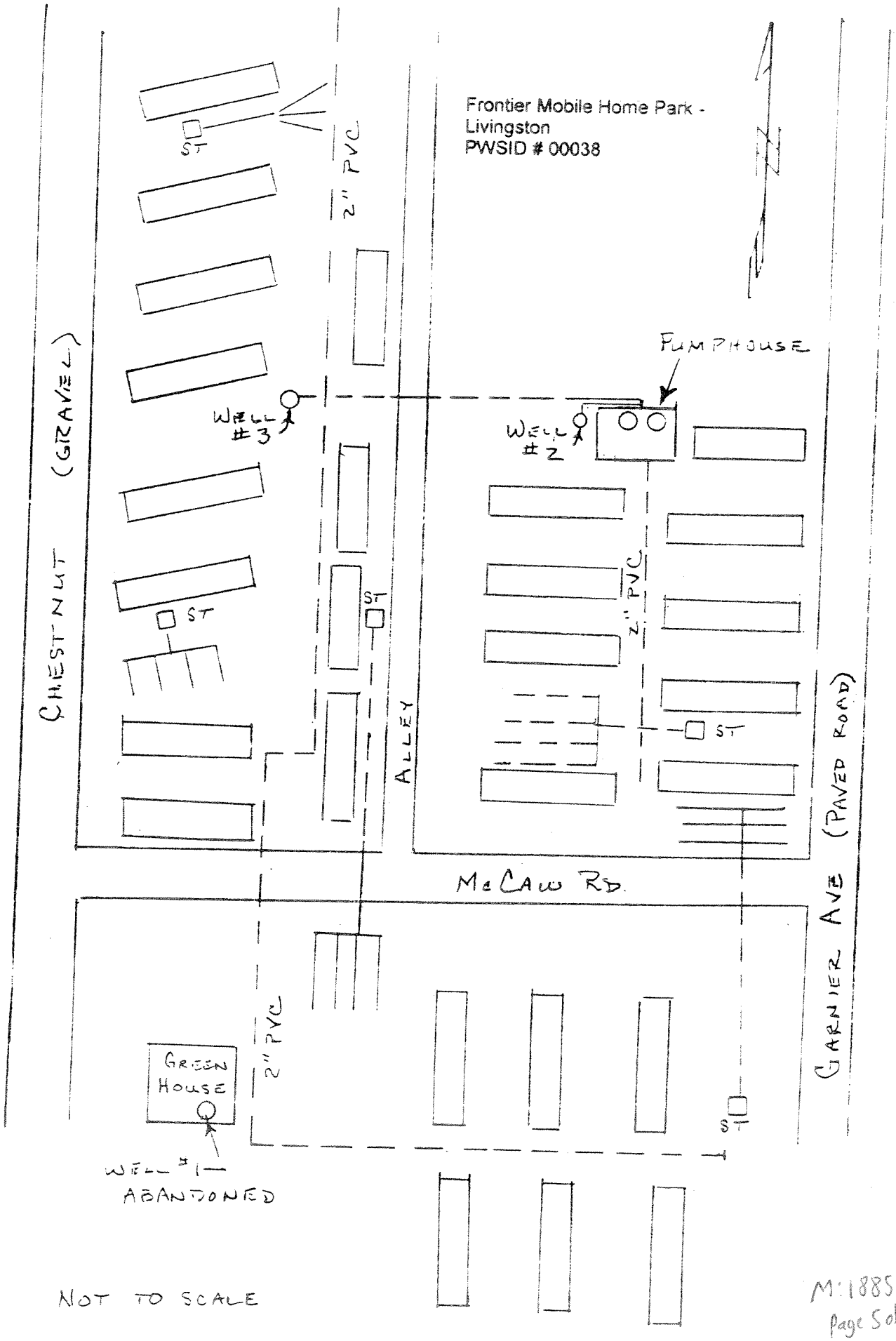






Frontier Mobile Home Park
Livingston
PWSID # 00038
Pressure tank in pumphouse

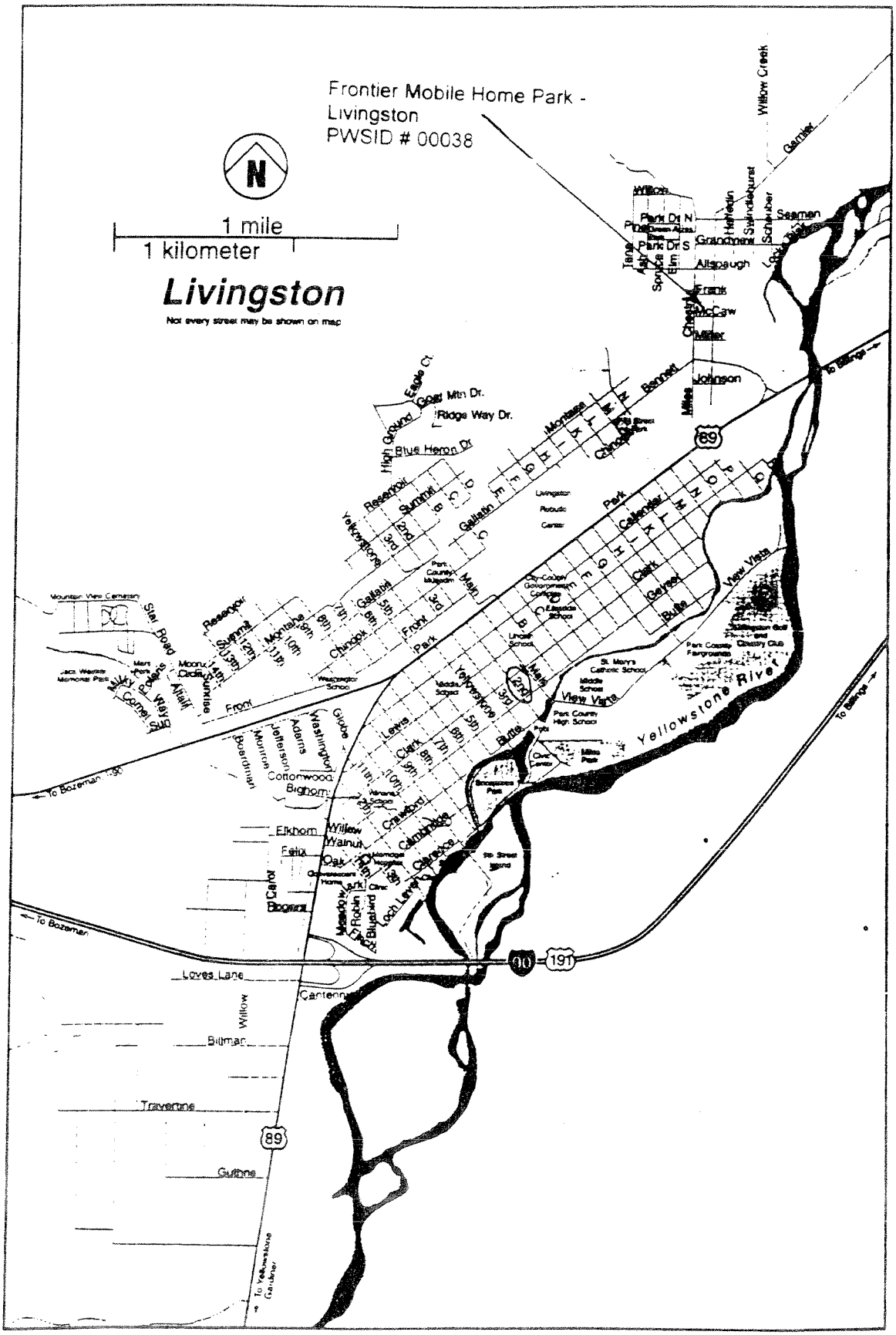
M:1188587
Page 4 of 6



NOT TO SCALE

M:188587
Page 5 of 6

Livingston Street Map



Map © U S WEST Dex, Inc. 1996

M1188587
Page 6 of 6

Bozeman

3 GW 2 Revised 1969
STATE PUBLISHING COMPANY

Not in fiche 6/91

coded

RECEIVED
APR 1 8 1972
Montana Bureau of Mines and Geology

County Park

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 Gene Bruce

Address Old Clyde Park Rd., Livingston Mont.

Date well started Oct 20, 1971

completed Oct 29 1971

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used cable tool (Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

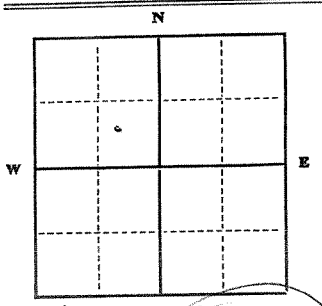
*Describe

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).

ESTIMATED ANNUAL WITHDRAWAL

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)
7"	19 lb 6 5/8 OD					
		48	65	slots	48	65
	Plastic lInner			1/8" x 1foot long		



Static water level 28 ft.*

Pumping water level 43 ft.*

at 20 gallons per minute,

measured 60 minutes after pumping began.

*Measured from ground level.

Well developed by bailer & pump

for 2bailer hours. 1 hr pump

Power 320 vot Pump 3/4 sub

Remarks: (Gravel packing, cementing, packers, type of shutoff)

Lot 12 Blk 19 Montague Adn.

¼ ¼ Sec.

T. 2 ~~N~~ S R. 10 E ~~W~~ Livingston

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Harold B. Hulbert

Driller's Address Rt one Bozeman, Montana

Hulbert Drilling LICENSE NO. 47

County Park

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

092612

Top of Ground (Elev. above sea level)

From (Feet)	To (Feet)	
0	3	Gravel soil
3	11	rock & sand
11	20	rock and sand
20	26	Clay & rock
26	40	gravel
40	54	sand rock & small amount of water
54	55	Fine sand & water
55	65	sand rock & water

HB

65 Show exact depth of bottom

M: 131459

Bozeman

025 10E 07 BDC

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 86002-43B

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

709716

1. WELL OWNER
Name ART Yarger

2. CURRENT MAILING ADDRESS
RR1 85 Box 4055
Livingston MT 59047

3. WELL LOCATION
SW ¼ SE ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 50 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 38 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness .250
Casing; Plastic Dia. 4½ from 30 ft. to 50 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations ½ hole in. by _____ in.
_____ perforations from 30 ft. to 50 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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 37 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____.
c) Depth at which pump is set for test 50.
d) The pumping rate: 15 gpm.
e) Pumping water level 45 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 37 ft. at ½ 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

Depth (ft.) From	To	Formation
0	1	Topsoil
1	36	Sand + Gravel
36	50	Blue Shale

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 5/4/93

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
5/4/93
Date
Vince Hillman Drilling
Firm Name
222 E Mason Bozeman
Address
Signature
436
License No.

RECEIVED
MAY 18 1993
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

Send TO:
DNRC
111 N Tracy
Bozeman MT
59715

M: BS.190

BOZEMAN 067 023 10E 07CA PARK 033478

12 067

T 2 S R 10 E 7CA

County PARK

R ED
Montana Bureau of
Mines and Geology

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG Sewage Plant

Owner City of Livingston, Municipal Water Works Address Livingston, Mont.

Driller I Van Dyken Drilling Co. Address Bozeman, Montana

Date Started Oct. 9, 1960 Date Completed Oct. 12, 1960

Location: Sec. 7 T 2 S R 10 E ¼ sec. NE¼. SW¼

Type of well Drilled (Dug, driven, bored, or drilled) Equipment used Cable Tool (Churn drill, rotary, other)

Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☒ Drainage ☐ Other:

Casing: 0 ft. to 53 ft. Type Steel Size 6"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 30 to ft. 34 Ft. to ft.

Type of screen or perforations 3/8" slots. 6" to 8" long.

Static Water level, for non-flowing well: 3 feet.

Shut-in pressure, for flowing well: lb./sq. in. on: (date)

Pumping water level 18'-6" feet at 100 gal. per min.

How tested: Test Pumped

Length of test 2½ Hrs.

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

(over)

97344

BOZEMAN 067 025 10E 01CA PARK

3 GW 2 Revised 1969
13—3M—10/69

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 CITY OF LIVINGSTON WASTE DISPOSAL PLANT,

Address CITY OF LIVINGSTON, LIVINGSTON, MO NT.

Date well started 6/10/70

completed 6/17/70

For Administrator's Use
File
GW 1

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used cable tools. (Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐

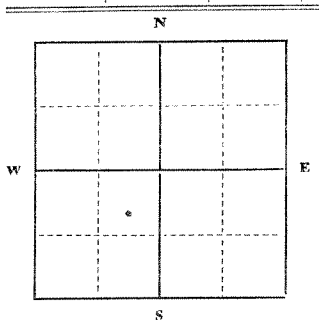
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*Describe Well near sewer disposal plant for caretaker home.

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per ft.	0	62'	¼"X3" slots.	23'6"	24'6"



Static water level 6 ft.*
Pumping water level 12 ft.*
at 40 gallons per minute,
measured 60 minutes after pumping began.
*Measured from ground level.
Well developed by surging.
for 2 hours.
Power ..... Pump ..... HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)
Puddled clay shutoff outside of casing.

NE ¼ SW ¼ Sec. 7
T. 2S N/S R. 10 E

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

VAN DYKEN DRILLING CO.

Driller's Signature [signature]

Driller's Address BOZEMAN, MONTANA

LICENSE NO. 1

County PARK CA

033477

DRILLER'S LOG

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)	
0	2	Top soils.
2	25	Sands and gravels. Water @ 16'
25	28	Claybound sand and gravels. and boulders. Water.
28	49	Clays. Dry.
49	62'	Hard sandstone. Most of the water.

62 Show exact depth of bottom

973415

Form No. 603 R10/79 067 026 10E 07 BBB File No.

BOZEMAN

WELL LOG REPORT

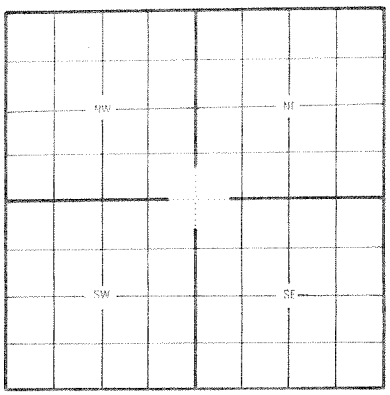
State law requires that this form be filed by the water well driller within 60 days after compl

033474

1. WELL OWNER
Name Charles Gardner

2. CURRENT MAILING ADDRESS
Rt 85 Box 4022
Livingston Mt 59047

3. WELL LOCATION



NW ¼ NW ¼ NW ¼ Section 7
Township 2 N/S Range 10 E/W
County Park
Lot 17 - 26 Block 11
Subdivision Montague
Well Elevation
Accuracy: ±10'; ±50'; ±100';

4. DRILLING METHOD ___ cable, ___ bored, X 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)
6"	6					
	1 3/4"	0	40			

Was casing left open end? X Yes ___ No
Was a packer or seal used? ___ Yes X No
If so, what material
Was the well gravel packed? ___ Yes X No
Was the well grouted? ___ Yes X No
To what depth?
Material used in grouting
Well head completion: Pitless adapter X
12 in. above grade Y, 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 40 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) air.
Pumping level below land surface:
60 ft. after 1 hrs. pumping 30 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WAS WELL PLUGGED OR ABANDONED? ___ Yes Y No
If yes, how?

9. DATE STARTED 11/21/80
DATE COMPLETED 11/21/80

10. WELL LOG

Depth (ft.) From	To	Formation
0	22	gravel
22	65	sandstone fractured

RECEIVED
NOV 28 1980
MONTANA D.N.R.C.
SOUTH FIELD OFFICE

(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.

11/21/80
Date

Hellman Drilling
Firm Name

Rt 85 Box 4286 Livingston
Address

[signature]
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59601 449-3634

77810
4021

BOZEMAN 067 02S 10E 07C Park

Form No. 603 (Rev. 3/75) File No. _____

STATE OF MONTANA
Department of Natural Resources and Conservation

034820

coded

WELL LOG REPORT

10871-943B

Gold-Driller

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 Perry Townsend Current address Rt 90. Livingston Mt.

2. WELL LOCATION Lot 32, Block 3, Subdivision MONTAGUE ADD
County Park, or ¼ N½ ¼ SW ¼ Sec. 7, T. 2 N-S, R. 10 E-W

3. PROPOSED USE X domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) LIVINGSTON

4. METHOD DRILLED X cable, ____ bored, ____ forward rotary, ____ reverse rotary, ____ jetted, ____ other (specify) ____

5. WELL CONSTRUCTION
Diameter of hole 6 in.; depth 78 ft.
Casing: X steel, X plastic, ____ concrete, ____ threaded, X welded, ____ other (specify)

Pipe weight:
17 lb. Dia. 6 From 0 To 38
plastic lb/ft ____ in. 38 ft. 78 ft.
____ lb/ft ____ in. ____ ft. ____ ft.
Was casing left open end? X Yes ____ No
Was a well screen installed? ____ Yes X No
Material ____, dia. ____ in.
(stainless steel, bronze, etc.)
Was perforated pipe used? X Yes ____ No
Perforation type: X slots ____ holes
Size ____ set from ____ ft. to ____ ft.
Size ____ set from ____ ft. to ____ ft.
Was a packer or seal used? X Yes ____ No
If so, what material drill cuttings
Well type: ____ Straight screen ____ Graveled
Was the well grouted: ____ Yes X No
To what depth: ____ ft.
Material used in grouting ____
Well head completion: Pitless adapter X
12 in. above grade ____, other ____
(if other, specify) ____
Was well disinfected? X Yes ____ No

6. WATER LEVEL
Static water level 21 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 X Bailer ____ Other
(if other, specify) ____
Pumping level below land surface:
71 ft. after 1 hrs. pumping 12 gpm
____ ft. after ____ hrs. pumping ____ gpm

8. WELL LOG

Depth (ft) From	To	Formation 120 LVGS
0	10	boulders
10	30	gravel - few boulders
30	36	clay bound gravel
7		& boulders
36	78	hard black shale

(use separate sheet if necessary)

9. DATE STARTED Sept 18, 1976
DATE COMPLETED Sept 23, 1976

10. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If so, how? ____

11. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Van Dyken Drilling 1
Driller's or firm name License No.

Rt 1 Box 392 Bozeman, Mt.
Address M: 97343

Mrs Klaas Andriesen
Signed by date

Form No. 603 (Rev. 7/76) 067 - 025 10E 07 CAL DNR# File No. 38126

BOZEMAN

coded

STATE OF MONTANA

Department of Natural Resources and Conservation

033479

WELL LOG REPORT

Pink-Well Owner
Gold-Driller

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.

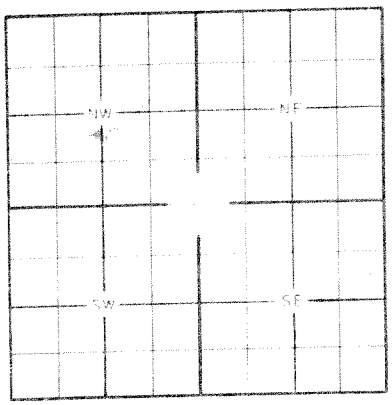
1. WELL OWNER
Name Ralph R. and Patricia Hanks

2. CURRENT MAILING ADDRESS
P.O. Box 74 Livingston, Montana

3. PROPOSED USE ____ domestic (includes lawn and garden); ____ stock; ____ municipal; ____ industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION

NW NE SW SE



¼ SW ¼ NE ¼ SW ¼ Section 7
T. 2 N or (S) R. 10 (E) or W
OR, Lot 21 Block ____
Subdivision MONTAGUE
City Livingston County Park
Elevation ____ Accuracy: ____ ±10'; ____ ±50'; ____ ±100';

5. DRILLING METHOD x 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"	6"17#	+9"	69'9"			

Was casing left open end? x Yes, ____ No
Was a packer or seal used? ____ Yes, x No
If so, what material ____
Was the well gravel packed? ____ Yes, x No
Was the well grouted? ____ Yes, x No
To what depth? ____
Material used in grouting ____
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.) ____

7. WATER LEVEL
Static water level 25 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 x bailer ____ other
(if other, specify) ____
Pumping level below land surface:
50 ft. after 3 hrs. pumping 20 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes x No
If yes, how? ____

10. DATE STARTED Sept. 5,1973
DATE COMPLETED Sept. 11,1973

11. WELL LOG

Depth (ft.) From	To	Formation
0	1	topsoil
1	10	gravel and boulders
10	25	gravel
25	32	sand,gravel
32	38	brown clay
38	44	clay and rock
44	67	hard sandstone
67	68	blue rock
68	70	sand

RECEIVED
FEB 25 1981
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

(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.

12-8-80
Date

Potts Drilling and Developing
Firm Name

80730 Gallatin Road,Bozeman, Montana
Address

M: 97346

Herbert A. Potts
Signature

150
License No.

Form No. 603 (R5/95)

WELL LOG REPORT

File No. _____

02S10E07C

STATE LAW REQUIRES THIS REPORT BE FILED BY THE DRILLER WITH THE DEPARTMENT WITHIN 60 DAYS AFTER WELL COMPLETION.

1. WELL OWNER NAME:

LARRY OR MARGIE RUGGLES

2. CURRENT MAILING ADDRESS:
525 N. YELLOWSTONE
LIVINGSTON, MT. 59047

3. WELL LOCATION:
SW__ 1/4 __ 1/4 __ 1/4 SECTION _7_____
TWP: 2S RGE: 10 E CNTY: _PARK_____
GOV'T LOT_____ or LOT _____ TRACT/BLK_____
SUBDIVISION NAME _____

4. PROPOSED USE:
__X__ DOMESTIC _____ STOCK _____ IRRIGATION
_____ OTHER: _____

5. TYPE OF WORK:
__X__ NEW WELL METHOD: ___ DUG ___ BORED
_____ DEEPENED ___ CABLE ___XDRIVEN
_____ RECONDITIONED _X_ ROTARY ___ JETTED

6. DIMENSIONS: Diameter of the hole
DIA: ___6_____in. from __0_____ft. to __102___ft.
DIA: _____in. from _____ft. to _____ft.

7. CONSTRUCTION DETAILS:
Casing: Steel: _____ Threaded __X__ Welded
Type: __17#_____ Wall Thickness: __.250_____
Dia. ___6_____in. from _+18"___ft. to _38 1/2_ft.
Dia. _____in. from _____ft. to _____ft.
Casing: Plastic: Weight ___160_____
Dia. ___4_____in. from _____ft. to _____ft.
Dia. _____in. from _____ft. to _____ft.
Perforations: _X___ Yes _____ No
Type of perforator used _____
Size of perforations 3/8" HOLES_in. by _____in.
_____perforations from __22__ft. to _102__ft.
_____perforations from _____ft. to _____ft.
Screens: _____ Yes __X__ No
Manufacturer's Name _____
Type _____ Model #. _____
Dia. ____slot size____from _____ft. to _____ft.
Dia. ____slot size____from _____ft. to _____ft.
Gravel Packed:
_____ Yes __X__ No Gravel size: _____
Gravel placed from _____ft. to _____ft.
Grouted: To what depth? __20+_____ft.
Material used in grouting __BENTONITE_____

8. WELL HEAD COMPLETION:
Pitless Adaptor _____ Yes _____ No

9. PUMP: (if installed)
Manufacturer's name _____
Type _____ Model # _____ HP _____

10: WELL TEST DATA: This information is required for all wells. All depth measurements shall be from the top of the well casing.
Wells under 100 GPM must be tested for a minimum of one hour.
A) __X__ Air _____ Pump _____ Bailer
B) Static water level immediately before test
___17_____ft.
Flowing: closed-in pressure _____psi. ____gpm
C) Depth pump is set for test: __95_____
D) The pumping rate: _____15____gpm
E) Pumping water level _95_____ft.
at ___1___ hours after pumping began.
F) Duration of test: Pumping time __1_____hours
G) Recovery time: _____hours
H) Recovery water level ___17____ft.
at _____ hours 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.

HB

11. WAS WELL PLUGGED OR ABANDONED? ___ Yes ___XNo

12. WELL LOG: (Depth in Feet)

FROM - TO		FORMATION
0	2	TOPSOIL
2	24	GRAVEL & SAND
24	95	BLUE SHALE
95	102	GRAY SANDSTONE

Attach additional sheets, if necessary.

13. DATE COMPLETED: __12/20/96_____

14. YELLOWSTONE CLOSURE AREA:
Attach supplement identifying applicable items.

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date: ___1/21/97_____
Firm Name: _VANDYKEN DRILLING CO_____
Address: ___ P.O. BOX 3745 BOZEMAN, MT. 59772

Bernard P Westra
Signature

___380_____
License No.

MONTANA DEPARTMENT OF NATURAL RESOUCES AND CONSERVATION
1520 E. 6TH AVE., PO BOX 202301, HELENA, MT, 59620-2301 PHONE: 406-444-6610

MAR 1997

M:162186

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 743

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 Water & Environmental Technologies
MAILING ADDRESS 1485 Continental Dr
Butte, MT 59701

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ NE ¼ SW ¼ NE ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535641 Longitude 5057817
Error as reported by GPS locator (± feet) 36
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [ ] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [X] Monitoring Well [ ] Other: MW-3

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 22.5 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 Sch 40 lbs. [X] Threaded [ ] Welded
Dia. 2 in. from +2 ft. to 21.5 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: [X] Yes [ ] No
Material Factory slotted Sch 40 PVC
Dia. 2 Slot size .020 from 11.5 ft. to 21.5 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [X] Yes [ ] No
Size of gravel 10-20 Silica Sand
Gravel placed from 9.5 ft. to 22.5 ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 1 ft. to 9.5 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] Static water level 14 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*
na 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: HB

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	Topsoil & clay
4	16.5	Sand & gravel
16.5	22.5	Sandstone

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M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 07/15/2003

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 08/02/2003 License no. 361/074

MBMG ID#

205532

23 Col

WATER & ENVIRONMENTAL TECHNOLOGIES, llc

Consulting Scientists & Engineers
1485 Continental Drive
Butte, Montana

PHONE: (406) 782-5220
FAX: (406) 782-5188

GROUND WATER MONITORING WELL REPORT

Well No. RUG-2

Project RUBBLE Location N. OF OFFICE - BASE OF TIER SLOPE

Project No. CORWBM03 Installed By HAYES DRILLING Date 7/15/03 Time

Method of Installation AIR ROTARY

LOG OF BORING AND WELL

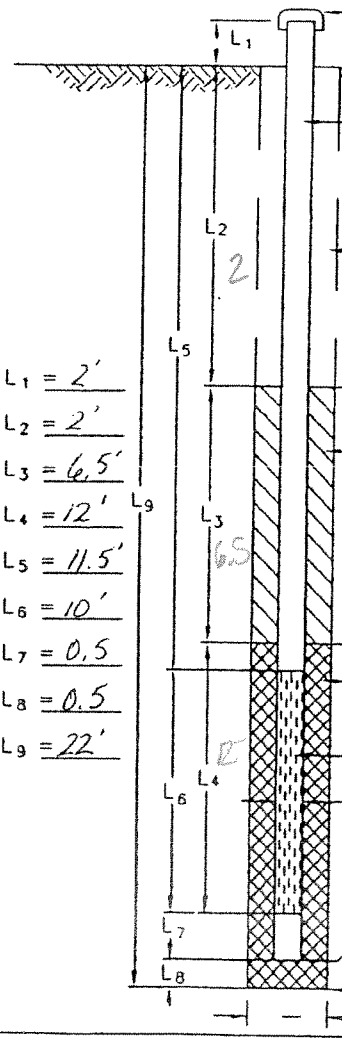
BORING

Depth in ft.	Description	H·Nu Reading
0	0' TOPSOIL; ORGANIC DARK BROWN TO BLACK	
	1' SANDY GRAVEL; FINE TO MED GRAINED SAND WITH GRAVEL TO 1+INCH, DRY	
5	13' GRAVELLY SAND WITH SILT; SLIGHTLY MOIST	
	16' VERY MOIST TO WET;	
10		
15	16.5 SHALE; TAN-BROWN, THINLY BEDDED SHALE WITH THIN SANDSTONE LAYERS	
20		
22	BOH	
25		

OBSERVATION WELL INFORMATION

Type of WELL

Ground Elev. Top of Riser Elev.



L_1 = 2'
L_2 = 2'
L_3 = 6.5'
L_4 = 12'
L_5 = 11.5'
L_6 = 10'
L_7 = 0.5
L_8 = 0.5
L_9 = 22'

Vented Cap

I.D. of Riser Pipe

Type of Pipe SHED 40 PVC 2" DIA

Type of Backfill Around Riser CONCRETE

Top of Seal Elev.

Type of Seal Material BENTONITE CHIPS

Top of Filter Elev.

Type of Filter Material 10-20 gd SILICA SAND

Size of Openings 0.001'

Diameter of Screened Tip 2 INCH

Bottom of Well Elev.

Bottom of Boring Elev.

Diameter of Boring

Remarks

Prepared By

Page 2 of 2

M: 205532

02S10E07 DCAC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 742

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 Water & Enviromental Technologies
MAILING ADDRESS 1485 Continental Dr
Butte, MT 59701

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ NE ¼ SW ¼ SE ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535648 Longitude 5057679
Error as reported by GPS locator (± feet) 31
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [X] Monitoring Well [ ] Other: MW-2

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 37 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 CMT System lbs. [ ] Threaded [ ] Welded
Dia. 2 in. from +3 ft. to 35 ft.

Perforations/Slotted Pipe:
Type of perforator used ____
Size of perforations/slots ____ in. by ____ in.
1 no. of perforations/slots from 25 ft. to 25 ft.
1 no. of perforations/slots from 35 ft. to 35 ft.

Screens: [ ] Yes [X] No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [X] Yes [ ] No
Size of gravel 10-20 Silica Sand
Gravel placed from 20 - 30 ft. to 33 - 37 ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 1 - 20 ft. to 30 - 33 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 22.5 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*
na 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: HB

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	25	Sand & gravel
25	32	Shale & clay
32	37	Sandstone - fractured (water)
CMT Multilevel System (Continuous Multichannel Tubing)		

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SEP 08 2003
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 07/14/2003

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 08/01/2003 License no. 361/074

MBMG ID# Page 1 of 3

DNRC

205536

WATER & ENVIRONMENTAL TECHNOLOGIES, llc

Consulting Scientists & Engineers
1485 Continental Drive
Butte, Montana

PHONE: (406) 782-5220
FAX: (406) 782-5188

GROUND WATER MONITORING WELL REPORT

Well No. RUG-1; 25'

Project _____ Location SW CORNER OF PROPERTY

Project No. COKWBM03 Installed By HAYES DRILLING Date 7/14/03 Time _____

Method of Installation AIR-ROTARY

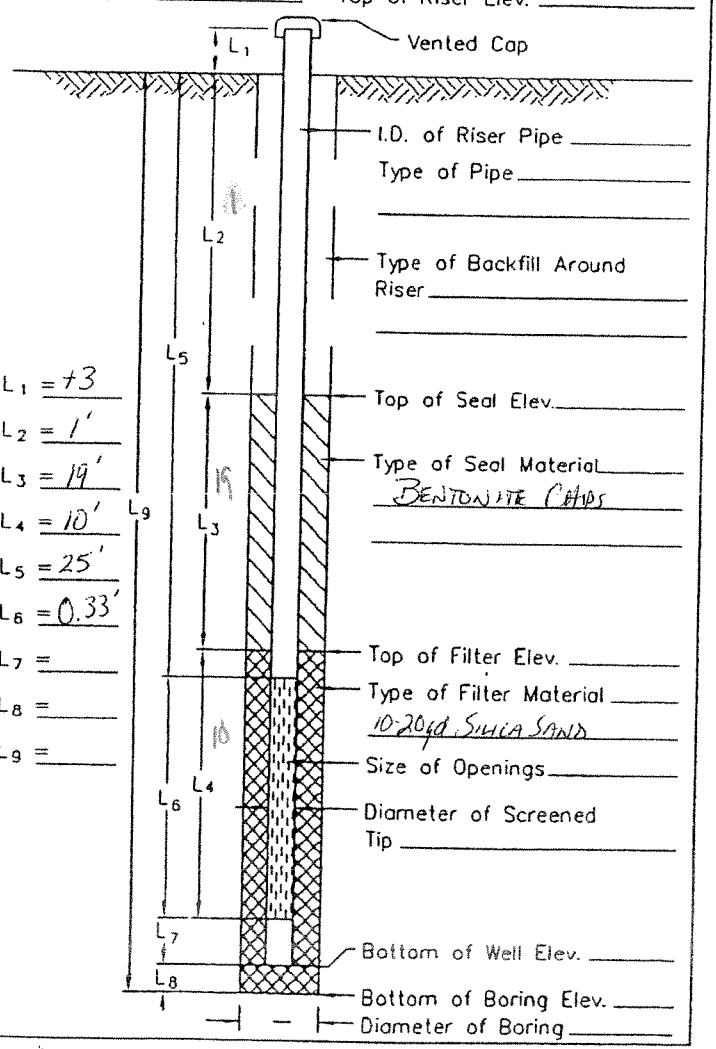
LOG OF BORING AND WELL

BORING		
Depth in ft.	Description	H-Nu Reading

OBSERVATION WELL INFORMATION

Type of WELL MULTI-LEVEL COMPLETION

Ground Elev. _____ Top of Riser Elev. _____



L_1 = +3
L_2 = 1'
L_3 = 19'
L_4 = 10'
L_5 = 25'
L_6 = 0.33'
L_7 =
L_8 =
L_9 =

Remarks LITHOLOGY ON PREVIOUS PAGE - DUAL COMPLETION PAGE 2

Prepared By _____ Page 2 of 3

M:205536

WATER & ENVIRONMENTAL TECHNOLOGIES, llc

Consulting Scientists & Engineers
1485 Continental Drive
Butte, Montana

PHONE: (406) 782-5220
FAX: (406) 782-5188

GROUND WATER MONITORING WELL REPORT

Well No. RUG-1 ~~8~~; 35'

Project RUGGLE

Location SW CORNER OF PROPERTY

Project No. COKWBM03 Installed By HAYES DRILLING Date 7/14/2003 Time

Method of Installation AIR - ROTARY DRILL

LOG OF BORING AND WELL

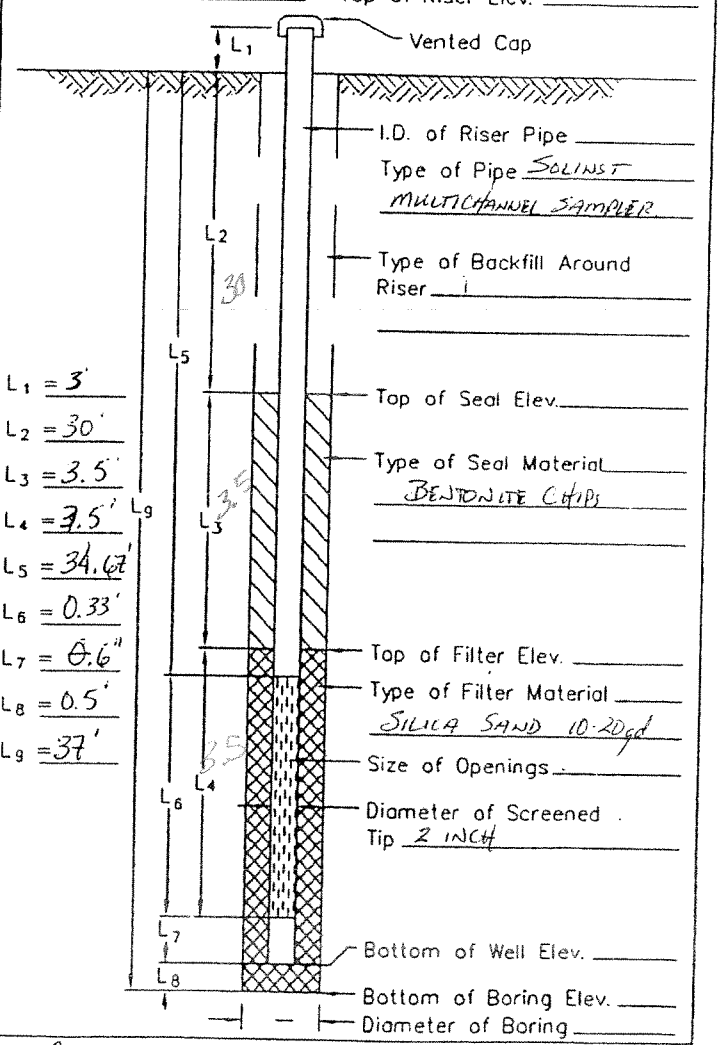
BORING

Depth in ft.	Description	H-Nu Reading
0	0' SANDY GRAVELLY SILT; DARK BROWN TO BLACK, DRY, DENSE, GRAVEL TO 2+ INCH	
	20" SAND AND GRAVEL; MED GRAINED SAND, GRAVELS TO 3 INCH, DRY	
10	13' - MOIST TO VERY MOIST	
20	24 - WET SANDY GRAVEL; GRAVEL DIAMETER INCREASE, V. DENSE.	
30	25.5 SANDSTONE; FINE GRAINED WITH STONE NODULES (GR), DRY HARD	
▽	35' CONGLOMERATE; GRAVEL IN SANDSTONE MATRIX, FRACTURED, SATURATED	
37'	BOH	
40		

OBSERVATION WELL INFORMATION

Type of WELL MULTI-LEVEL COMPLETION

Ground Elev. _____ Top of Riser Elev. _____



Vented Cap

I.D. of Riser Pipe _____

Type of Pipe SOLINST MULTICHANNEL SAMPLER

Type of Backfill Around Riser _____

Top of Seal Elev. _____

Type of Seal Material BENTONITE CHIPS

Top of Filter Elev. _____

Type of Filter Material SILICA SAND 10-20gd

Size of Openings _____

Diameter of Screened Tip 2 INCH

Bottom of Well Elev. _____

Bottom of Boring Elev. _____

Diameter of Boring _____

L_1 = 3'
L_2 = 30'
L_3 = 3.5'
L_4 = 3.5'
L_5 = 34.67'
L_6 = 0.33'
L_7 = 0.6"
L_8 = 0.5'
L_9 = 37'

Remarks DEEP SCREEN OF MULTI-LEVEL COMPLETION PAGE 1

Prepared By _____

025 10E 07 BDAC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 741

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 Water & Enviromental Technologies
MAILING ADDRESS 1485 Continental Dr
Butte, MT 59701

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ NE ¼ SE ¼ NW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535761 Longitude 5057743
Error as reported by GPS locator (± feet) 31
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [ ] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [X] Monitoring Well [ ] Other: MW - 1

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 31 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 Sch 40 lbs. [X] Threaded [ ] Welded
Dia. 2 in. from +2 ft. to 29 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: [X] Yes [ ] No
Material Factory slotted Sch 40 PVC
Dia. 2 Slot size .020 from 9 ft. to 29 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [X] Yes [ ] No
Size of gravel 10-20 Silica Sand
Gravel placed from 7 ft. to 31 ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 1 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.)
[X] Static water level 6 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*
na 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: HB

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 & gravels
2	28	Sand, gravels & large cobbles
28	31	Shales & clay

RECEIVED
SEP 08 2003
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 07/14/2003

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 07/17/2003 License no. 361/074

MBMG ID#

205537

Boreman 2S 10E 07 CBDA Park

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 109733

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

PER Phone Call 14 Jan 97

1. WELL OWNER
Name Kingdom Hall

2. CURRENT MAILING ADDRESS
528 North M St.
Livingston, MT 59047

3. WELL LOCATION
SW ¼ NW ¼ SW ¼ Section 7
Township 2 ~~N~~/S Range ~~9~~ 10 E/~~W~~ County Park
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. 6 in. from 0 ft. to 60 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 28 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness 250
Casing; Plastic Dia. 4 1/2 from 20 ft. to 60 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 Hole in. by _____ in.
_____ perforations from 30 ft. to 60 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? 20 ft.
Material used in grouting Cement

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 50 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 60
d) The pumping rate: 50 gpm.
e) Pumping water level 55 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs. 43B-91526
g) Recovery time 1/2 hrs.
h) Recovery water level 30 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 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

Depth (ft.) From	To	Formation
0	2	Topsoil
2	8	Sand
8	26	Sand + Gravel
26	60	Blue Shale

RECEIVED
JUN 09 1994
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE
HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/19/94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

4/19/94
Date

Vince Hillman Drilling
Firm Name

1625 So. Rouse Bozeman
Address

[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 147917
Page 1 of 2

CORRECTED COPY

WELL LOG REPORT

File No. 43B-C104654

Form No. 603 (R 2-94) 025 09E 07 CBA

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 Kingdom Hall

2. CURRENT MAILING ADDRESS 1505 East Gallitin St
~~528 North W St.~~
Livingston, MT 59047

3. WELL LOCATION NE ~~SW~~ ¼ NW ¼ SW ¼ Section 7
Township 2 N/S Range 9 E/W County Park
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. 6 in. from 0 ft. to 60 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 28 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B Wall Thickness 250
Casing; Plastic Dia. 4 1/2 from 20 ft. to 60 ft.
Weight 160 Dia. _____ from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used Drill
Size of perforations 1/8 hole in. by _____ in.
_____ perforations from 30 ft. to 60 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? 20 ft.
Material used in grouting Cement

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 50 ft. If flowing; closed-in pressure _____ psi. _____ gpm.
Flow controlled by: _____ valve, _____ reducers, _____ other, (specify) _____
c) Depth at which pump is set for test 60
d) The pumping rate: 50 gpm.
e) Pumping water level 55 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 30 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 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 HB

Depth (ft.) From	To	Formation
0	2	Topsoil
2	8	Sand
8	26	Sand + Gravel
26	60	Blue Shale

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 4/19/94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

4/19/94
Date

Vince Hillman Drilling
Firm Name

1625 So. Rouse Bozeman
Address

[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION **DNRC**
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

Dept. of Natural Resources & Cons.
Water Resources Regional Office
201 South Wallace
Bozeman, MT 59715

DEPARTMENT COPY
DRILLER: Please give this copy to the well owner to complete reverse side.
OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended purpose.

Page 2 of 2

M: 47917

02S 10E 07 CBA

Form No. 603 R2-97

WELL LOG REPORT

File No. 43B-C104722

1. WELL OWNER
Name BILL JONES

2. CURRENT MAILING ADDRESS
110 NORTH O
LIVINGSTON, MT 59047

3. WELL LOCATION
NE ¼ NW ¼ SW ¼ Section 7
Township 2 N/S Range 10 E/W County PARK
Govn't Lot _____, or Lot 6C, Block _____
Subdivision Name JONES MINOR SUBD
Tract Number 0535350 - 5058029
Latitude _____ Longitude _____

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. 6 in. from 0 ft. to 55 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 in. from +2 ft. to 38 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type A-53-B Wall Thickness .250
Casing; Plastic Dia. 4 1/2 in. from 35 ft. to 55 ft.
Threaded ☐ Welded ☐ Dia. _____ in. from _____ ft. to _____ ft.

PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
_____ perforations from _____ ft. to _____ ft.
100 perforations from 40 ft. to 55 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? 21 ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter Yes ☐ No ☐ N/A

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 35 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour 50' ft.
d) Recovery level 35 ft. Time of recovery 1/2 min/hrs.
e) Pumping rate 35 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 AIR
a) Static level immediately before testing 35 ft.
b) Depth at which pump is set for test 50 ft.
c) Pumping rate 35 gpm.
d) Maximum drawdown N/A ft.
e) Duration of test: pumping time 1 hrs/min
recovery time 1/2 hrs/min
f) Recovery level 35 ft.
g) Duration of time to recovery level 1 hrs.

11. PUMP INSTALLATION INFORMATION
Installation depth _____
Actual pumping rate N/A
Manufacturer's name _____
Type _____ Model No. _____ H.P. _____

12. WAS WELL PLUGGED OR ABANDONED? Yes ☐ No ☒
If yes, how? _____

13. WELL LOG HB

Depth (ft.) From	To	Formation
0	35	SMALL GRAVELS 6" DOWN
35	38	BROWN SHALE
38	42	SHALE & CLAY TAN
42	55	SANDSTONE & H2O LOTS COLOR

RECEIVED
JUL 14 1998
DNRC - BOZEMAN
REGIONAL OFFICE

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 6-1-98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

Date 6-1-98
Firm Name HAYES DRILLING
Address 2403 PAR COURT BOZEMAN MT 59715
Signature Tony R Counts License No. 97

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

M:170495

DEPARTMENT — BUREAU COPY

M:170495

002 10E 07 CBHT

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 544

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 William Jones Sr
MAILING ADDRESS 110 North O St
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ NE ¼ NW ¼ SW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address #2
GPS [X] Yes [ ] No
Latitude 0535411 Longitude 5058029
Error as reported by GPS locator (± feet) 61
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 160 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 20 ft. to 160 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 3/8 in. by 3/8 in.
200 no. of perforations/slots from 40 ft. to 80 ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: [X] Yes [ ] No
Material Factory slotted PVC 160
Dia. 4 1/2 Slot size .025 from 140 ft. to 160 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 28 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
14 gpm with drill stem set at 155 ft. for 1 hours
Time of recovery 1 hr hrs/min. Recovery water level 28 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: HB

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 & clay
2	27	Sand, gravel & large cobbles
27		Weathered sandstone & clay - some thin
	35	hard layers
35		Gray shales - hard & fractured (4 gpm -
	55	42)
55	57	Reddish shales - hard
57	59	Bluish gray shale - very hard
59	65	Bluish gray sandstone - very hard
65		Light gray sandstone - very hard -
	78	little water
78		Dark gray shale - hard (4 - 5 gpm
	106	76-80)
106	124	Light gray sandstone - very hard
124	130	Black shale - some clay - hard
130		Gray sandstone - very hard (4-5 gpm
	156	155)
156	160	Dark gray shale

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 05/14/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 05/28/2001 License no. 361/074

MBMG ID#

DNRC 188895

025 10E 07 CBAB

MONTANA WELL LOG REPORT

43B-30003320

Form No. 603 R2-99

Well ID# 543

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 William Jones Sr
MAILING ADDRESS 110 N. O Street
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NE ¼ NW ¼ SW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address #1
GPS [X] Yes [ ] No
Latitude 0535321 Longitude 5057973
Error as reported by GPS locator (± feet) 38
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 100 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 20 ft. to 100 ft.

Perforations/Slotted Pipe:
Type of perforator used N/A
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: [X] Yes [ ] No
Material Factory slotted PVC 160
Dia. 4 1/2 Slot size .025 from 40 ft. to 60 ft.
Dia. 4 1/2 Slot size .025 from 80 ft. to 100 ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 27 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
15 gpm with drill stem set at 90 ft. for 1 hours
Time of recovery 1/2 hr hrs/min. Recovery water level 27 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: HB

Depth, Feet From	To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	4	Brown clay & topsoil
4	32	Sand, gravels, cobbles
32	45	Gray shales & some clay
45	65	Gray shales - hard (45-50' - 4gpm)
65	70	Light gray sandstones
70	76	Gray & brown sandstones
76	83	Brown sandstone
83	87	Blue gray shale - hard
87	94	Fractured shales (87-95' - 11gpm)
94	100	Shales & Clay - gray

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 05/11/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature Will Hayes
Date 05/28/2001 License no. 361/074

MBMG ID#

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DNRC 1889010

02S 10E 07 CBAB

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 545

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 Scott Jones
MAILING ADDRESS 432 N. B Street
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NW ¼ NE ¼ NW ¼ SW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535341 Longitude 5057938
Error as reported by GPS locator (± feet) 47
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 159 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 36.5 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs lbs. [ ] Threaded [ ] Welded
Dia. 4 1/2 in. from 19 ft. to 159 ft.

Perforations/Slotted Pipe:
Type of perforator used N/A
Size of perforations/slots ____ in. by ____ in.
____ no. of perforations/slots from ____ ft. to ____ ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: [X] Yes [ ] No
Material Factory slotted PVC 160
Dia. 4 1/2 Slot size .025 from 80 ft. to 120 ft.
Dia. 4 1/2 Slot size .025 from 140 ft. to 160 ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 26 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc bucket/stopwatch
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*
18 gpm with drill stem set at 155 ft. for 1 hours
Time of recovery 1 hr hrs/min. Recovery water level 26 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: HB

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	Hard clay & topsoil
2	27	Sand, gravel & large cobbles
27	34	Clay - brown with sandstone chips
34	45	Black shale - hard
45	47	Reddish brown clay shale
47	50	Black shale (3gpm - 45-47')
50	59	Large gray shale
59	62	Gray sticky clay
62	84	Black shale - hard
84	98	Bluish gray shale - hard
98	102	Large gray sandstone - hard (5gpm - 100')
102	150	Blue/gray shale - hard (4-5gpm - 115')
150	159	Blue sandstone - hard

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 05/16/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 05/28/2001 License no. 361/074

MBMG ID#

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

DNRC 188916

02S 10E 07 CCBC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 744

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 Water & Environmental Technologies
MAILING ADDRESS 1485 Continental Dr
Butte, MT 59701

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ NW ¼ SW ¼ SW ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0535164 Longitude 5057671
Error as reported by GPS locator (± feet) 34
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [ ] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [X] Monitoring Well [X] Other: MW-4

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:
Borehole:
Dia. 6 in. from 0 ft. to 31 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 Sch 40 lbs. [X] Threaded [ ] Welded
Dia. 2 in. from 0 ft. to 30 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 2 Slot size .020 from 20 ft. to 30 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Gravel Packed: [X] Yes [ ] No
Size of gravel 10-20 Silica Sand
Gravel placed from 18 ft. to 31 ft.
Packer: [ ] Yes [X] No
Type ____ Depth(s) ____
Grout: Material used Bentonite
Depth from 1 ft. to 18 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)
[X] 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 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*
na 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: HB

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	25.5	Sand, gravel & boulders
25.5	31	Shale & clay

RECEIVED
SEP 08 2003
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 07/15/2003

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 08/02/2003 License no. 361/074

MBMG ID#

205535

Form No. 603 (R 6-84)

067 CODED 2S 10E 7CBD Bozeman

WELL LOG REPORT

File No. 63788 Park

State law requires that this form be filed by the water well driller within 60 days after completic

027778

1. WELL OWNER
Name Gregory O'Connor

2. CURRENT MAILING ADDRESS
Rt 85 Box 4011
Livingston 59047

3. WELL LOCATION
County Park
Township ____ N/S Range ____ E/W
SE ¼ NW ¼ SW ¼ Section 7
Lot ____ Block ____
Subdivision ____

4. PROPOSED USE Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify ____

5. DRILLING METHOD ____ cable, ____ bored,
X 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	6	0	35			

Was casing left open end? X Yes ____ No
Was a packer or seal used? ____ Yes X No
If so, what material ____
Was the well gravel packed? ____ Yes X No
Was the well grouted? ____ Yes X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter
X Yes ____ No
Top of casing 12 in. or greater above grade
X Yes ____ No

7. WHAT IS THE TEMPERATURE OF THE WATER?
____ Degrees Fahrenheit
☐ Measured ☐ Estimated

8. WATER LEVEL
Static water level 12 feet below land surface
If flowing; closed-in pressure ____ psi
____ gpm
Controlled by: ____ valve, ____ reducers,
____ other, (specify) ____

9. WELL TEST DATA ____ pump ____ bailer
X other, (specify) air
Pumping water level below land surface:
35 ft. after 1 hrs. pumping 40 gpm
____ ft. after ____ hrs. pumping ____ gpm

10. WAS WELL PLUGGED OR ABANDONED? ____ Yes X No
If yes, how? ____

11. DATE COMPLETED 8/4/86

12. WELL LOG

Depth (ft.) From	To	Formation
0	3	topsoil
3	35	Sand, Gravel + Boulders

(use separate sheet if necessary)

RECEIVED
NOV 18 1986
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

13. DRILLER'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
8/4/86
Date
Firm Name
Rt 85 Box 4-86 Livingston
Address
Signature License No. 436

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION DNRC
32 SOUTH EWING HELENA, MONTANA 59620 444-6610

RECEIVED DEC 05 2005 K/J Federal Way

STATE PUBLISHING CO., HELENA, MONT.

DEPARTMENT - BUREAU COPY

97347

GROUN WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Well Number MW-11

Drilling Log

Project	Hoyt	Owner	Hoyt/O'connor
Location	Livingston, MT	Project Number	230-899-3003
Date Drilled	4/3/89	Total Depth of Hole	65'
Diameter	6.0"	Surface Elevation	4481.08
Water Level Initial	61'±	24-hrs	28.50'
Screen Dia	2.0"	Length	10'
Slot Size	.020"	Casing Dia	2.0"
Length	52'	Type	SCH 40PVC
Drilling Company	Ruen Drilling	Drilling Method	Air Rotary
Driller	Wil Hayes	Log by	Taylor Sword

Sketch Map

Notes

Depth (Feet)	Well Construction	PID Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.3ppm			Gray to brown gray, gravel and sand, medium to coarse grained, unconsolidated, dry, earthy.
10		0.2-0.3ppm			Gray to light gray, gravel and sand, medium to coarse grained, dry to very slightly moist unconsolidated, earthy.
20		1.2-2.5ppm			Gray, Brown to light gray, gravel and sand, medium to coarse grained, unconsolidated.
30		1.0-1.2ppm			Gray, brown gray to light gray, gravel and sand medium to coarse grained, unconsolidated, slightly moist.
40		1.0-1.2ppm			Light gray to gray, some yellow gray, Shale, (Bdrx) soft to firm, fissile in part to blocky, some apparent weathering.
50		0.9-1.2ppm			Light gray to gray, Shale, fissile to subfissile, some blocky, soft to brittle.
60		0.5-0.8ppm			Light gray to gray, Shale, fissile to subfissile, soft to brittle, becoming very wet at 62'
70		0.5-0.8ppm			Bottom of exploration at 65'
		0.3-0.8ppm			* Note PID readings are from effluent air stream of air rotary rig

32
35

shale

breaker

into

not expected

open well

~ 33 ft lt gry to gry sh.

02100144

GROUND WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

Well Number MW-12

Project Hoyt
Owner Hoyt/O'connor
Location Livingston, MT
Project Number 230-899-3003
Date Drilled 4/4/89
Total Depth of Hole 65'
Diameter 6.0"
Surface Elevation 4480.90
Water Level Initial 61±
24-hrs 26.98'
Screen Dia 2.0"
Length 10'
Slot Size .020"
Casing Dia 2.0"
Length 55'
Type SCH 40 PVC
Drilling Company Ruen Drilling
Drilling Method Air Rotary
Driller Wil Hayes
Log by Taylor Sword

Sketch Map

Notes

Depth (Feet)	Well Construction	PID Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.3ppm			Brown to gray brown, gravel and sand, medium to coarse grained, unconsolidated, dry to slightly moist, occasionally silty.
10		0.3-2.2ppm			
20		0.5-2.8ppm			Brown to gray brown, gravel and sand, medium to coarse graine, unconsolidated, dry to slightly moist.
30		1.4-2.3ppm			Brown to gray brown, gravel and sand, medium to coarse grained, unconsolidated, dry to slightly moist.
32		0.3-0.7ppm			
40		0.5-0.8ppm			Medium to light gray, Shale (Start at 32') soft becoming more firm with depth, semi-fissile, blocky in part, silty to gritty, dry.
50		0.5-0.9ppm			Medium to light gray, Shale soft to firm, fissile, silty to gritty, becoming damp to wet at 61'
60		0.5-0.8ppm			Medium to light gray, Shale, firm to soft in part, fissile, wet, occasionally peaty.
70		0.5-0.8ppm			Bottom of exploration at 65'

* Note PID readings are from effluent air stream of air rotary rig

02100144

Form No. 603 (Rev. 7/76) Bozeman 067 02S 10E 07C PARK

STATE OF MONTANA

Department of Natural Resources and Conservation

File No. [illegible]

034819

WELL LOG REPORT

Gold-Driller

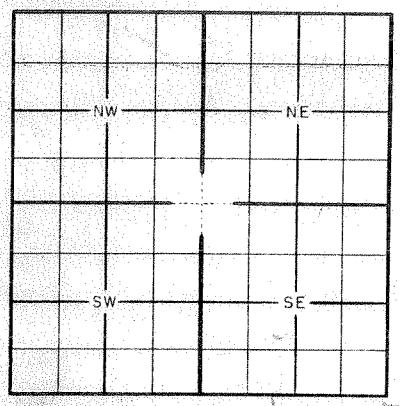
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name Northwest Forest Fuels
Bozeman Montana

2. CURRENT MAILING ADDRESS
Box 1680 W. Cottonwood Ave
Bozeman Montana 59715

3. PROPOSED USE ____ domestic (includes lawn and garden); ____ stock; ____ municipal; X industrial; ____ irrigation; ____ other (specify) ____

4. WELL LOCATION



____ ¼ ____ ¼ ____ ¼ SW ¼ Section 7
T. 2 S N or S R. 10 E E or W
OR, Lot Northwest Block ____
Subdivision BN Pasture
City ____ County Park
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"	1916	0	30'			

Was casing left open end? X Yes, ____ No
Was a packer or seal used? ____ Yes, X No
If so, what material ____
Was the well gravel packed? ____ Yes, X No
Was the well grouted? ____ Yes, X No
To what depth? ____
Material used in grouting ____
Well head completion: Pitless adapter ____
12 in. above grade X, other ____
(if other, specify) ____
Pump horsepower ____, pump type ____
Pump intake level ____ feet below land surface
Power (electric, diesel, etc.) ____

7. WATER LEVEL
Static water level ____ 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 X other
(if other, specify) ____
Pumping level below land surface:
30 ft. after 1 hrs. pumping 80 gpm
____ ft. after ____ hrs. pumping ____ gpm

9. WAS WELL PLUGGED OR ABANDONED? ____ Yes ____ No
If yes, how? ____

10. DATE STARTED 8-21-78
DATE COMPLETED 8-21-78

11. WELL LOG

Depth (ft.) From	To	Formation
0	21	Gravel
21	40	Bedrock Water

(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.
8-21-78
Date

Hillman Drilling
Firm Name

Box 85 Livingston Mont
Address

Signature

License No. 97342

GW 4

Approved Stock Form—State Publishing Co., Helena, M

033439

File No. 067 T. 2 S. R. 10 E. 7CD

TRIPLICATE

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JAN 8 1964
Montana Bureau of
Mines and Geology

County Park

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

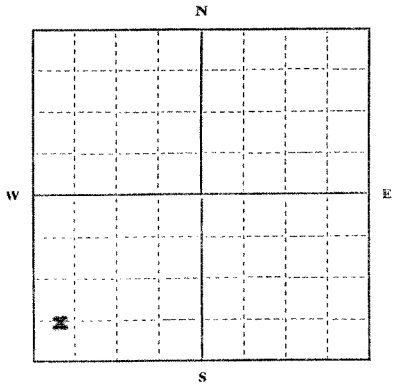
4

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Albert Gehlhausen, Secretary of Canyon View Lumber Company, of Livingston,
(Name of Appropriator) (Address) (Town)

County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE¼ ¼ SW¼ Sec. 7 T. 2 S R. 10E.
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
Log pond.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been Well was dug July, 1961.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 290 gallons per hour.

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
No irrigation.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
Electric pump with 6" casing.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater July, 1961.

8. The depth of water table Well 90 feet deep, about 70 feet of water in well.

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 Electric pump drawing water from a 6" casing, and well is 90 feet deep and there is about 70 feet of water in the well.

10. The estimated amount of groundwater withdrawn each year 750,000.00 each year.

11. The log of formations encountered in the drilling of each well if available
Not available.

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
No records.

Signature of Owner Canyon View Lumber Company,
by Albert J. Gehlhausen
Date December 31, 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 Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

M: 97348

97348

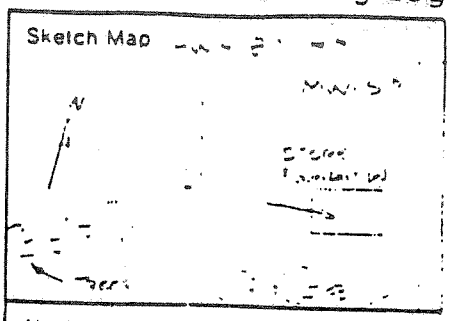
GROUN WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Well Number MW-5

Drilling Log

Project Hoyt | Owner Hoyt/Krohne
Location Livingston MT. | Project Number 230-899-3003
Date Drilled 3/30/89 | Total Depth of Hole 17.5' | Diameter 6.0"
Surface Elevation 4460.26 | Water Level Initial 5.56' | 24-hrs 5.56'
Screen Dia 2.0" | Length 15' | Slot Size .020"
Casing Dia 2.0" | Length 2.5' | Type SCH 40 PVC
Drilling Company Ruen Drilling | Drilling Method Air Rotary
Driller Wil Hayes | Log by Taylor Sword

Sketch Map



Notes

Depth (Feet)	Well Construction	PID * Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.1ppm			Brown to dark brown, clay and sand, fine to medium grained, soft, moist, unconsolidated, earthy
5		0.0-0.1ppm		GW	Brown lightgray to light brown, gravel and sand, medium to coarse grained, unconsolidated, damp, with some clay.
10		0.0-0.3ppm			Brown to dark brown, some brown gray, gravel and sand, medium to coarse grained, unconsolidated, silty in part, wet.
15					Bedrock (Shale) Light gray to gray, fissile, blocky in part, bedrock encountered at 17'
20					Bottom of exploration at 17.5'

* Note PID readings are from effluent air stream of air rotary rig

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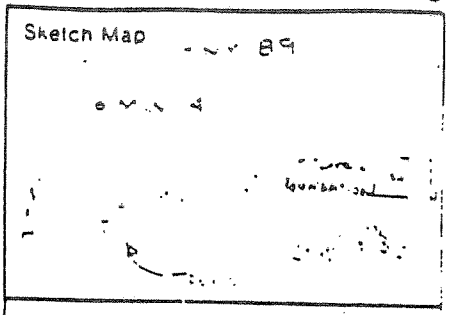
GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Well Number [illegible]

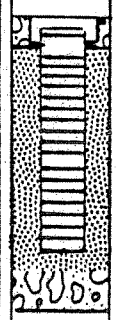
Drilling Log

Project Hoyt
Owner Hoyt/Krohne
Location Livingston, MT.
Project Number 230-899-3003
Date Drilled 3/29/89
Total Depth of Hole 15'
Diameter 6.0"
Surface Elevation 4460.16
Water Level Initial 4±
24 hrs 3.75'
Screen Dia 2.0"
Length 10'
Slot Size .020"
Casing Dia 2.0"
Length 2'
Type SCH 40 PVC
Drilling Company Ruen Drilling
Drilling Method Air Rotary
Driller Wil Hayes
Log by Taylor Sword

Sketch Map



Notes Spud 2:35, T.D. 3:30

Depth (Feet)	Well Construction	PID* Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.3ppm		SW	Brown to light brown, silty sand, fine to very fine grained, loamy, silty inpart, unconsolidated, slightly moist.
5					Brown to light gray-brown, gravel and sand medium to coarse grained, slightly moist becoming wet.
10		0.0-0.5ppm		GW	Brown to light gray-brown, gravel and sand, medium to coarse grained, unconsolidated, silty, occasional clayey, wet.
15		0.0-0.5ppm			Bottom of exploration at 15'
20					*Note PID readings are from effluent air stream of air rotary rig

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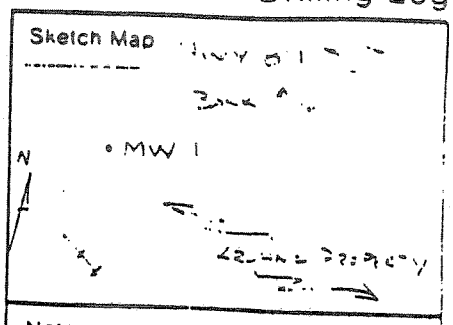
GROUN WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Well Number MW-1

Drilling Log

Project Hoyt | Owner Hoyt/Krohne
Location Livingston, MT | Project Number 230-899-3003
Date Drilled 3/28/89 | Total Depth of Hole 31' | Diameter 6.0"
Surface Elevation 4464.73 | Water Level, Initial 6.02' | 24-hrs 6.01'
Screen Dia 2.0" | Length 10.0' | Slot Size .020"
Casing Dia 2.0" | Length 21.0' | Type SCH 40 PVC
Drilling Company Ruen Drlg. | Drilling Method Air Rotary
Driller Ed Hillman | Log by Taylor Sword

Sketch Map



Notes

Depth (Feet)	Well Construction	PID* Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.6ppm		GW	Brown to light brown to light gray, gravel and sand, medium to coarse grained, some clay, gravel to 3" diameter, unconsolidated, slightly moist.
5		0.6-3.2ppm			Brown to light gray, some dark brown, gravel and sand, some clay, silty, unconsolidated, moist becoming wet at approx 8'
		0.8-1.3ppm			
10		0.1-0.4ppm			Brown to graybrown, gravel and sand, medium to coarse grained, some clay, silty, unconsolidated, wet.
15		0.0-0.4ppm			Brown to graybrown, gravel and sand, medium to coarse grained, silty, unconsolidated, wet.
20		0.0-0.4ppm		GW	Brown to gray brown, gravel and sand, medium to coarse grained, unconsolidated, silty with some clay, earthy, wet.
25		0.0-0.4ppm			
30					Gray to light gray, shale, some yellow brown, fissle, weathered, soft often clay like, grading to harder more lithified shales.
					31' (T.D.) total depth, bottom of exploration

1.6
3.3
6.6
8.3
11.3
26.6
28.3

* Note PID readings are from effluent air stream of air rotary rig.

02'00'44

GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

Well Number MW-2

Project Hoyt | Owner Hoyt/Krohne

Location Livingston, MT. | Project Number 230-899-3003

Date Drilled 3/28/89 | Total Depth of Hole 15' | Diameter 6.0"

Surface Elevation 4464.57 | Water Level Initial 7' | 24 hrs 5.87'

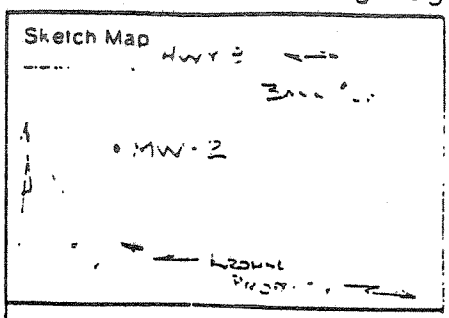
Screen Dia 2.0" | Length 10' | Slot Size .020"

Casing Dia 2.0" | Length 5' | Type SCH 40 PVC

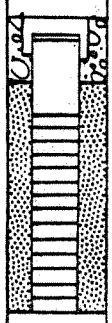
Drilling Company Ruen Drlg. | Drilling Method Air Rotary

Driller Ed Hillman | Log by Taylor Sword

Sketch Map



Notes

Depth (Feet)	Well Construction	PID* Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.4ppm			Brown to light brown, some gray brown, gravel and sand, unconsolidated, slightly moist, silty in part
5		0.0-0.8ppm			Brown to gray borwn, gravel and sand, sand is medium to coarse grained, some clay, unconsolidated silty in part, wet.
10		0.0-0.8ppm			Brown to gray brown, gravel and sand, medium to coarse grained, unconsolidated, slightly silty wet.
15					T.D. at 15' Bottom of explortion at 15'
20					* Note PID readings are from effluent air stream of air rotary rig.

02100144

GROUND WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

Well Number MW-3

Project Hoyt | Owner Hoyt/Krohne

Location Livingston, MT. | Project Number 230-899-3003

Date Drilled 3/29/89 | Total Depth of Hole 15' | Diameter 6.0"

Surface Elevation 4461.21 | Water Level in Hole 4± | 24 hrs 3.72'

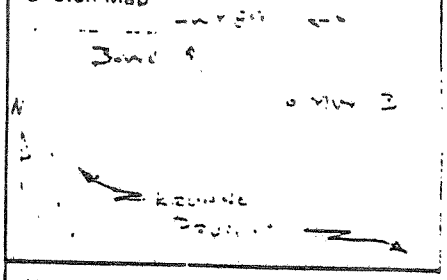
Screen Dia 2.0" | Length 8' | Slot Size .020"

Casing Dia 2.0" | Length 2.5' | Type SCH 40 PVC

Drilling Company Ruen Drlg. | Drilling Method Air Rotary

Driller Ed Hillman | Log by Taylor Sword

Sketch Map



Notes Spud 10:30
T.D. 11:00

Depth (Feet)	Well Construction	PID * Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-		SW	Brown to light brown, loamy sand, fine to very fine grained, silty, slightly damp.
		0.3ppm			Brown to gray brown, gravel and sand medium to coarse grained, unconsolidated, slightly moist becoming wet.
5		0.0-		SW	
10		0.3ppm			Brown to light brown to light gray, gravel and sand medium to coarse grained, unconsolidated, wet.
15		0.0- 0.2ppm			Brown to light brown gray brown, gravel and sand, medium to coarse grained, unconsolidated, wet.
20					Bottom of exploration at 15'
					*Note PID readings are from effluent air stream of air rotary rig

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GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

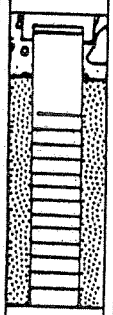
Well Number MW-6

Drilling Log

Project Hoyt
Owner Hoyt/Krohne
Location Livingston, MT.
Project Number 230-899-3003
Date Drilled 3/30/89
Total Depth of Hole 15'
Diameter 6.0"
Surface Elevation 4462.65
Water Level In Tar 7±
24 hrs 5.85'
Screen Dia 2.0"
Length 10'
Slot Size .020"
Casing Dia 2.0"
Length 5'
Type SCH 40 PVC
Drilling Company Ruen Drilling
Drilling Method Air Rotary
Driller Wil Hayes
Log by Taylor Sword

Sketch Map

Notes

Depth (Feet)	Well Construction	PID * Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.5ppm			Brown to dark brown, clayey loam, unconsolidated, silty, slightly moist.
5					Brown-gray- light gray, gravel and sand, medium to coarse grained, unconsolidated, moist, becoming wet
10		0.1-0.8ppm			Brown-Graybrown, gravel and sand, medium to coarse grained, unconsolidated, wet, silty in part.
15		0.3-1.5ppm			Brown to gray brown, gravel and sand, medium to coarse grained, unconsolidated, wet, silty in part.
					Bottom of explortion at 15'
					* Note PID readings are from effluent air stream of air rotary rig

02100144

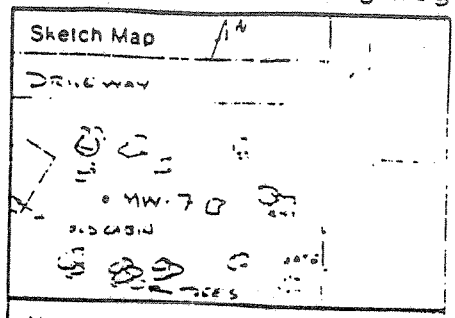
GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

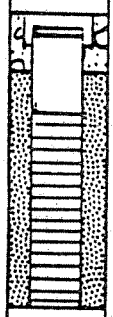
Well Number MW-7

Project	Hoyt	Owner	Hoyt/Krohne
Location	Livingston, MT	Project Number	230-899-3003
Date Drilled	3/30/89	Total Depth of Hole	15'
Diameter	6.0"		
Surface Elevation	4462.97	Water Level, Initial	7.02'
24-hrs.	6.98'		
Screen Dia	2.0"	Length	10'
Slot Size	.020"		
Casing Dia	2.0"	Length	5.0'
Type	SCH 40 PVC		
Drilling Company	Ruen Drilling	Drilling Method	Air Rotary
Driller	Wil Hayes	Log by	Taylor Sword

Sketch Map



Notes

Depth (Feet)	Well Construction	PID * Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.4ppm			Brown to light brown, sandy loam, silty inpart, unconsolidated, with a trace of clay.
5		0.0-0.4ppm			Brown to gray brown, gravel and sand, medium to coarse grained, unconsolidated, slightly moist, silty in part, trace of clay.
10				GW	Brown to Gray to gray brown, graveland sand, medium to coarse grained, unconsolidated, wet.
15		0.0-0.4ppm			Brown to Gray to gray brown, gravel and sand, medium to coarse grained, unconsolidated, wet, with some clay, silty in part.
20					Bottom of exploration at 15'

* Note PID readings are from effluent air stream of air rotary rig

02100144

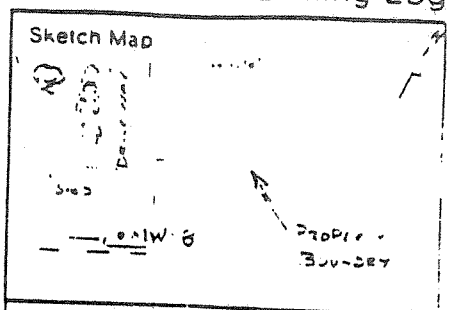
GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

Well Number MW-8

Project Hoyt
Owner Hoyt/Krohne
Location Livingston, MT.
Project Number 230-899-3003
Date Drilled 3/31/89
Total Depth of Hole 35'
Diameter 6.0"
Surface Elevation 4463.37
Water Level Initial 9.25'
24 hrs 8.09'
Screen Dia 2.0"
Length 10.0'
Slot Size .020"
Casing Dia 2.0"
Length 24'
Type SCH 40 PVC
Drilling Company Ruen Drilling
Drilling Method Air Rotary
Driller Wil Hayes
Log by Taylor Sword

Sketch Map



Notes

Depth (Feet)	Well Construction	PID Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.2ppm			Brown to light brown, sand and clay, unconsolidated fine to medium grained, soft, dry.
5		0.3-0.8ppm			Brown to gray brown, gravel and sand, coarse to medium grained, unconsolidated, slightly moist silty.
10		0.5-0.9ppm		SW	Brown to gray brown, gravel and sand, medium to coarse grained, damp to wet, silty in part.
15					Gray to gray brown, gravel and sand, medium to coarse grained, unconsolidated, silty in part.
20		0.1-1.7ppm			Gray to light gray, gravel and medium to coarse grained sand, unconsolidated, wet.
25		0.3-1.2ppm			Gray to light gray, gravel and sand, medium to coarse grianed, unconsolidated, wet, silty in part.
30		0.0-0.3ppm			Gray to light gray, gravel and sand, medium to coarse grained, unconsolidated, silty in part, occasional trace of clay.
35		0.3-1.2ppm			Gray to light gray, gravel and sand, medium to coarse grained, wet, unconsolidated.
					Light gray to gray (Shale) Bedrock, fissile, sometimes blocky, soft, wet.
					Bottom of exploration at 35'

* Note PID readings are from effluent air stream of air rotary rig

325

02100144

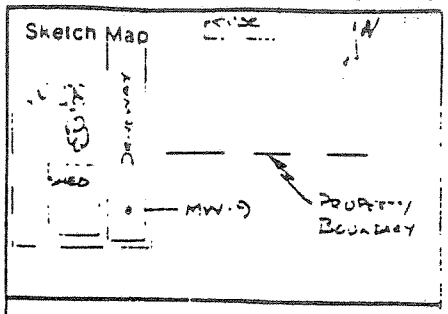
GROUND WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

Well Number MW-9

Project	Hoyt	Owner	Hoyt/Krohne		
Location	Livingston, MT.	Project Number	230-899-3003		
Date Drilled	3/31/89	Total Depth of Hole	15'	Diameter	6.0"
Surface Elevation	4463.48	Water Level, Initial	8'±	24-hrs	8.19'
Screen Dia	2.0"	Length	10'	Slot Size	.020"
Casing Dia	2.0"	Length	5'	Type	SCH 40PVC
Drilling Company	Ruen Drilling	Drilling Method	Air Rotary		
Driller	Wil Hayes	Log by	Taylor Sword		

Sketch Map



Notes

Depth (Feet)	Well Construction	PID * Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.0-0.2ppm			Brown to light brown, sand and clay, fine to medium grained, unconsolidated, dry, silty.
				GW	Brown to gray brown, gravel and sand, medium to coarse grianed, unconsolidated, slightly damp, silty.
5		0.2-0.5ppm			Brown, gray, light gray, gravel and sand, medium to coarse grained, unconsloidated, wet, silty inpart.
10		0.4-1.8ppm			Brown, gray, light gray, gravel and sand, medium to coarse grained, unconsolidated, silty with a trace of clay, wet.
15					Bottom of exploration at 15'

* Note PID readings are from effluent air stream of air rotary rig

02100144

GROUND WATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Well Number MW-10

Drilling Log

Project Hoyt | Owner Hoyt/Krohne

Location Livingston, MT. | Project Number 230-899-3003

Date Drilled 4/1/89 | Total Depth of Hole 15' | Diameter 6.0"

Surface Elevation 4463.72 | Water Level Initial 8± | 24 hrs 8.46'

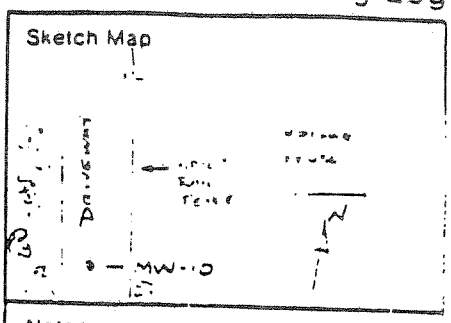
Screen Dia 2.0" | Length 10' | Slot Size .020"

Casing Dia 2.0" | Length 5' | Type SCH 40 PVC

Drilling Company Ruen Drilling | Drilling Method Air Rotary

Driller Wil Hayes | Log by Taylor Sword

Sketch Map



Notes

Depth (Feet)	Well Construction	PID * Reading	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0		0.3-1.2ppm		SW	Brown to light brown, sand, fine to medium grained, with some clay, unconsolidated , soft, dry.
5		0.9-2.1ppm		GW	Brown, gray to light gray, gravel and medium to coarse grianed sand, unconsolidated, moist, silty in part.
10		1.1-2.3ppm			Gray to light gray, gray brown, gravel and sand, medium to coarse grained, unconsolidated, moist to wet, silty.
15					Gray to light gray, gravel and sand, medium to coarse grained, unconsolidated, wet.

Bottom of exploration at 15'

* Note PID readings are from effluent air stream of air rotary rig

02100144

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 ERLynn Harris
Mailing address P.O Box 117
Livingston MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
~~___ ¼~~ NE ¼ NE ¼ NW ¼, Section 5
SW/SW/SE of sec 7 - According to DNRC JMR 4/26/05
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 40 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 +2 ft. to 40 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 Bentonite
Depth from 0 ft. to 20 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*
80 gpm with drill stem set at 38 ft. for 1 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:

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	Top Soil
1	40	Sand + Gravel

RECEIVED
JUN 18 2002
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5-16-02

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) Hillman Drilling Co MT
Address P.O Box 865 Livingston MT 59047
Signature _____
Date 6-16-02 License no. 608

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 196379

DEPARTMENT—BUREAU COPY

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 916

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 Ted Watson
MAILING ADDRESS PO Box 433
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ SE ¼ SW ¼ SE ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536316 Longitude 5057334
Error as reported by GPS locator (± feet) 13
Horizontal datum [X] NAD27 [ ] WGS84

OK

3. PROPOSED USE: [ ] Domestic [X] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 35 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2.5 ft. to 29.5 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 4.5 Slot size .025 from 25 ft. to 35 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] 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 Bucket/Stopwatch
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*
50 gpm with drill stem set at 30 ft. for 1 hours
Time of recovery 15 min. hrs/min. Recovery water level 11 ft.

OR Baller 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: HB

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	25	Sand, gravel & cobbles
25	29	Brown shale & clay
29	33	Fractured sandstone (50 gpm)
33	35	Soft sandstone & clay

RECEIVED
MAY 12 2005
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 04/11/2005

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 04/27/2005 License no. 361/074

MBMG ID# 218718

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

Bureau

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 915

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 Ted Watson
MAILING ADDRESS PO Box 433
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ NE ¼ SE ¼ SE ¼, Section 7
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0536667 Longitude 5057591
Error as reported by GPS locator (± feet) 13
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [X] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 8 in. from 0 ft. to 185 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 8 in. from +1.5 ft. to 26.5 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating Sch 40 lbs. [ ] Threaded [ ] Welded
Dia. 6 in. from 20 ft. to 180 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: [X] Yes [ ] No
Material Factory Slotted SDR 21 PVC
Dia. 6 Slot size .025 from 140 ft. to 180 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 ft. to 18 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 13 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
85 gpm with drill stem set at 180 ft. for 1.5 hours
Time of recovery .5 hr hrs/min. Recovery water level 13 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: HB

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	26	Sand, gravel & cobbles
26	30	Blue Sandstone
30	35	Gray shale
35	40	Gray sandstone
40	125	Dark gray shale & some clay - hard
125	131	Brown shale - hard
131	136	Black shale
136	138	Light gray sandstone & calcite
138	155	Black & gray shale
155	165	Bluish green sandstone (40-50 gpm)
165	174	Gray sandstone - hard
174		Green sandstone - hard (40 gpm - 85 gpm
	184	total)
184	185	Gray shale

RECEIVED
MAY 12 2005
M.B.M.G.

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 04/08/2005

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)
Hayes Drilling Co
Address 2408 Par Court - Bozeman, MT 59715
Signature [signature]
Date 04/27/2005 License no. 361/074

MBMG ID# 218719

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610
Bureau

Township 02S, Range 10E, Section 8

Well Logs

025 10E 08 AAD

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: Fridley Development

2. CURRENT MAILING ADDRESS
P.O. Box 1058
Livingston, MT 59047

3. WELL LOCATION
SE ¼ NE ¼ NE ¼ Section 8
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number 45°40.93N 110°30.73W

4. PROPOSED USE: Domestic ☐ Stock ☐ Irrigation ☐
Other ☒ specify: Fire Protection

5. TYPE OF WORK:
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 8 in. from 0 ft. to 60 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 8 5/8 from +2 ft. to 58 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ 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 _____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

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 17 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: 350 gpm.
e) Pumping water level 58 ft. at 6 hrs. after pumping began.
f) Duration of test: Pumping time 6 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 17 ft. at ½ 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 HB

Depth (ft.) From	To	Formation
0	60	Sand + Gravel

RECEIVED
JUN 1 0 2006
M.B.M.G.

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 3/14/06

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
4/12/06
Date
Hillman Drilling Inc
Firm Name
1030 Mary Rd Bzn
Address
Signature
4336
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

226374

DEPARTMENT — BUREAU COPY

WELL LOG NOT AVAILABLE

M:230193

02S 10E 08 ABDD

MONTANA WELL LOG REPORT

Well ID# 1054

Form No. 603 R2-99

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.

OK

1. WELL OWNER:
Name Ruggles Excavation Inc.
MAILING ADDRESS PO Box 227
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ SE ¼ NW ¼ NE ¼, Section 8
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address 38 Business Park Road
GPS [X] Yes [ ] No
Latitude 45 40 48.0 N Longitude 110 30 49.9 W
Error as reported by GPS locator (± feet) 18
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 8 in. from 0 ft. to 38 ft.
Dia. 6 in. from 38 ft. to 302 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating Sch 40 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 22 ft. to 302 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 4.5 Slot size .020 from 262 ft. to 302 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 ft. to 38 ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 22 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
22 gpm with drill stem set at 290 ft. for 1 1/2 hours
Time of recovery 1 hr. hrs/min. Recovery water level 22 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.

HB

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	23	Sand, gravel & small boulders
23	26	Brown sandstone - hard
26	35	Gray shales - hard
35	85	Gray shales & clay - softer
85	138	Bluish green shale & clay - calcite
138	152	Gray shale & clay
152	160	Dark gray shale - hard
160	166	Bluish green shale
166	178	Bluish green sandstone- hard
178	190	Reddish gray shale
190	200	Bluish green shale
200	218	Gray shale & clay
218	235	Bluish green shale & clay
235	240	Dark gray shale
240	252	Green shale
252	274	Gray shale - some clay
274		Light gray to white sandstone - hard (12
	290	gpm - 274'-280')
290		Gray sandstone - hard (10 gpm -
	302	280'-290')

[ ] ADDITIONAL SHEETS ATTACHED

RECEIVED NOV 21 2006 M.B.M.G.

8. DATE WELL COMPLETED: 10/18/2006

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 11/14/2006 License no. 361/074

MBMG ID# 231197

20 NE 00 AA

112746

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: Bob Boyd

2. CURRENT MAILING ADDRESS
PO 417 N. Main St
Livingston Mt 59047

3. WELL LOCATION
NE ¼ NE ¼ ____ ¼ Section 8
Township 2 S N/S Range 10 E E/W County ____
Govn't Lot ____, or Lot 5, Block ____
Subdivision Name: Boulder Industrial Park
Tract Number: COS 1317

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. 6 in. from 0 ft. to 27 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 from +2 ft. to 27 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type ____ 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 ____
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? CONTINUOUS ft.
Material used in grouting: Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

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: 30 gpm.
e) Pumping water level 27 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1.25 hrs.
h) Recovery water level 10 ft. at .25 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

Depth (ft.) From	To	Formation
0	1	Topsoil
1	20	gravel & sand
20	23	Sand & gravel
23	27	gravel

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7-31-95

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date: 7-31-95
Firm Name: ESD Inc
Address: 109 E Lewis Livingston
Signature: [signature] License No. 259

RECEIVED
AUG 00 1995
MONTANA D.N.R.C.
TEMAN FIELD OFFICE

HB

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:151256

M:151256

025 10E 08 AAA

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 43B-C101960

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 HOMES INC

2. CURRENT MAILING ADDRESS
P.O. Box 186
LIVINGSTON MT 59047

3. WELL LOCATION
NE ¼ NE ¼ NE ¼ Section 8
Township 2 N/S Range 10 E/W County PARK
Govn't Lot ____, or Lot ____, Block ____
Subdivision Name BOULDER BUSINESS PARK
Tract Number 5 PHASE II

OK

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. 6 in. from 0 ft. to 125 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 5/8 from ____ ft. to ____ ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A-53 Wall Thickness .250
Casing; Plastic Dia. 4 1/2 from 25 ft. to 125 ft.
Weight 160 Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☒ No ☐
Type of perforator used DRILL
Size of perforations 3/8 in. by 3/8 in.
____ perforations from ____ ft. to ____ ft.
100 perforations from 45 ft. to 65 ft.
200 perforations from 85 ft. to 125 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? 20+ ft.
Material used in grouting BENTONITE

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No N/A

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 21 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 120
d) The pumping rate: 8 gpm.
e) Pumping water level 120 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 21 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 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 HB

Depth (ft.) From	To	Formation
0	24	SANDY GRAVELS & BOULDERS
24	28	CLAYBOUND GRAVELS
28	46	SOFT SHALE - GREENISH GRA
46	58	SANDSTONE'S - HARD "
58	79	SHALES - HARD - GRAY
79	84	SANDSTONE - GRAYISH WHITE
84	95	BLACKISH SHALE
95	120	SHALE W/ SANDSTONE
120	125	SHALE - BRITTLE - LIGHT TAN
		(50-52 1 1/2 gpm)
		(90-100 1-2 gpm)
		120-125 5-6 gpm

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ____

14. DATE COMPLETED 5-9-97

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

5-14-97
Date

HAYES DRILLING CO.
Firm Name

2403 PARKCOURT BOZEMAN 59715
Address

Will Cayer
Signature

361
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620-2301 444-6610

DNRC

M:164256

DEPARTMENT COPY
DRILLER: Please give this copy to the well owner to complete reverse side.
OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended purpose.

02S10E08AAB

126241

FORM NO. 603 (R 6-94)

COPY

WELL LOG REPORT

File No. 43B-C10307

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 David G. Graybeal

2. CURRENT MAILING ADDRESS
122 Highground AVE.
Livingston, MT 59047

3. WELL LOCATION
WW ¼ NE ¼ NE ¼ Section 8
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 60 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 58 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A53B 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 ____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 8 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 60
d) The pumping rate: 400 gpm.
e) Pumping water level 55 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 1/2 hrs.
h) Recovery water level 8 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 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 HB

Depth (ft.) From	To	Formation
0	1	Topsoil
1	60	Sand + Gravel

RECEIVED
SEP 03 1997
DNRC - BOZEMAN
REGIONAL OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE ____

14. DATE COMPLETED 8/14/97

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

8/14/97
Date

Vince Hillman Drilling
Firm Name

1030 Mary Rd Bozeman
Address

[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610

DNRC

M: 165139

SEP 1997

DEPARTMENT BUREAU COPY

02S 10E 8 AAB (1309

Form No. 603 R2-97

WELL LOG REPORT

File No. _____

1. WELL OWNER
Name Humane Society Park Co.

2. CURRENT MAILING ADDRESS
P.O. Box 705
Livingston, MT 59047

3. WELL LOCATION
NW ¼ NE ¼ NE ¼ Section 8
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____
Latitude _____ Longitude _____

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☐
Other ☐ specify _____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 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 5/8 in. from +2 ft. to 40 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type ASTM 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? 20 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 ✓ Pump _____ Bailer _____
b) Static water level immediately before testing 14' ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour _____ ft.
d) Recovery level _____ ft. Time of recovery _____ min/hrs.
e) Pumping rate 180 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 intende appropriation. In addition to the above information, water level data shall b 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 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
HB

Depth (ft.) From	To	Formation
0	40	Sand / Gravel

☐ ADDITIONAL SHEETS ATTACHED

RECEIVED
OCT 29 1998
DNRC - BOZEMAN
REGIONAL OFFICE

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 9/24/98

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 9/29/98
Firm Name Hillman Drilling Inc.
Address 1039 Mary Rd. Bozeman MT
Signature [signature] License No. 105

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MONTANA

NOV 1998

M:170497

DEPARTMENT — BUREAU COPY

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 938

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 Max Berg
MAILING ADDRESS 59 Pool Creek
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ NW ¼ NE ¼ NE ¼, Section 8
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 45.68191 Longitude 110.51075
Error as reported by GPS locator (± feet) 16
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [X] Domestic [ ] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 184 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 in. from +1.5 ft. to 35 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating Sch 40 lbs. [ ] Threaded [ ] Welded
Dia. 4.5 in. from 24 ft. to 184 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: [X] Yes [ ] No
Material Factory Slotted Sch 40 PVC
Dia. 4.5 Slot size .025 from 144 ft. to 184 ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from 0 ft. to 20+ ft. OR [ ] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] Static water level 14 ft. below top of casing or
[ ] Closed-in artesian pressure ____ psi.

How was test flow measured:
bucket/stopwatch, weir, flume, flowmeter, etc Bucket/Stopwatch
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*
20 gpm with drill stem set at 180 ft. for 1.5 hours
Time of recovery 1 hr. hrs/min. Recovery water level 14 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:

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	33	Sand, gravel & cobbles
33	46	Brown & gray shales
46	49	Gray sandstone - hard
49	96	Bluish gray shale & clay
96	99	Gray sandstone - hard
99	117	Bluish gray shale & clay
117	125	Light gray sandstone - hard
125	130	Gray shale & clay
130	144	Dark gray sandstone & shale (2 gpm - 135')
144	160	Bluish gray sandstone - hard
160	163	Bluish gray sandstone - hard (4-5 gpm - 163')
163	167	Light gray sandstone - hard
167	170	Dark brown shale
170	173	Light gray shale - some clay
173	176	Tan sandstone - shale (9-10 gpm)
176	180	White sandstone - hard, some clay (3-4 gpm)
180	184	Black shale

[ ] ADDITIONAL SHEETS ATTACHED

RECEIVED SEP 16 2005

8. DATE WELL COMPLETED: 6/29/2005

9. REMARKS: M.B.M.G.

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature ____
Date 7/18/2005 License no. 361/074

MBMG ID# 221790

025 10E 08 AAD

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 Hillman Drilling INC.
Mailing address 1030 mary Rd
Bozeman, MT 59718

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ NE ¼ NE ¼ ____ ¼, Section 8
Township 2 N/S Range 10 E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name _____
Well Address _____
GPS ☒ Yes ☐ No
Latitude 45 40.85 N Longitude 110 30.65 W
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. 6 in. from 0 ft. to 60 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 +2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4 1/2 in. from 35 ft. to 80 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 1/8 in/by hole in.
____ no. of perforations/slots from 40 ft. to 60 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 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 29 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*
75 gpm with drill stem set at 60 ft. for 1 hours
Time of recovery ½ hrs/min. Recovery water level 29 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: HB

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	TOPSOIL
1	37	Sand & Gravel
37	60	Sand Stone

RECEIVED
MAY 12 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 4/22/05

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) Hillman Drilling
Address 1030 Mary Rd Bozeman
Signature [signature]
Date 5/10/05 License no. 436

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 218722

DEPARTMENT - BUREAU COPY

02S 10E 08 ABA

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: Roy Lewis
Mailing address: P.O. Box 422
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
NE ¼ NW ¼ NE ¼ ____ ¼, Section 8
Township 2 N/S Range 10 E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☒ Yes ☐ No
Latitude 45° 40.88 N Longitude 110° 30.97 W
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. 6 in. from 0 ft. to 80 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 +2 ft. to 38 ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4 1/2 in. from 30 ft. to 80 ft.

Perforations/Slotted Pipe:
Type of perforator used Drill
Size of perforations/slots 1/8 in by Hole in.
____ no. of perforations/slots from 60 ft. to 80 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 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 16 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*
60 gpm with drill stem set at 78 ft. for 1 hours
Time of recovery 1/2 hrs/min. Recovery water level 16 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: HB

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	Topsoil
1	35	Sand & Gravel
35	80	Blue Shale

RECEIVED
FEB 11 2005
M.B.M.G.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 2/1/05

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) Hillman Drilling
Address 1030 Mary Rd Bozeman
Signature [signature]
Date 2/1/05 License no. 4136

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 217125

DEPARTMENT - BUREAU COPY

Bozeman

GW 2

File No.

TRIPLICATE

LOG

Top of Ground

(Elev. above sea level.....)

0'- 2' Soils.

2'-11' Large boulders.

11'-12' Clean gravels. Water.

12'-16' Clatbound gravels. Wet.

16'-34' Clean sand and gravels. Water.

T.D. 34'

Show exact depth of bottom.

RECEIVED JUN 10 1971 Montana Bureau of Mines and Geology

067 02S 10E 08 A PARK

033480

Approved Stock Form—State Publishing Co., Helena,

T. 2S R. 10E - 8 A

County Park

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION 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)

Owner James O. Murray DR. (JIM) ~~MURRY~~ Address LIVINGSTON, MONT.

Driller VAN DYKEN DRILLING CO. Address BOZEMAN, MONT.

Date of Notice of appropriation of groundwater NONE

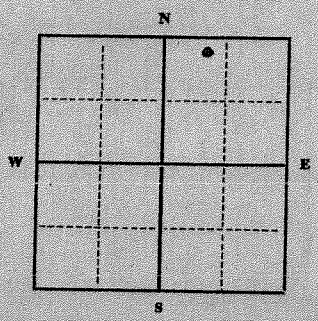
Date well started 7/3/70 Date completed 7/7/70

Type of well Drilled (Dug, driven, bored or drilled) Equipment used Cable tools. (Churn drill, rotary or other)

Water use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐ Industrial ☐ Drainage ☐ Other ☐ Vet. hospital

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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# Tested.	0'	34'	none		



Static Water Level for non-flowing well 9'6" feet.

Shut-in Pressure for Flowing Well none

Pumping Water Level 11'6" feet at 40 gal. per minute.

Discharge in gal. per min. of flowing well none

How Tested Bailer

Length of Test 1 hr.

Remarks: (Gravel packing, cementing, packers, type of shutoff) Puddled clay and drill cuttings shutoff outside of casing

NE¼ Sec. 8 T. 2S R. 10E

Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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).

LICENSE NO. 1

Driller's License Number

Bert Van Dyken

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, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

97349

02S 10E 08 ABC

115197

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-95517

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 Ed Hillman

2. CURRENT MAILING ADDRESS
HC 85 Box 4286
Livingston Mt 59047

3. WELL LOCATION
SW~~NE~~ ¼ NW ¼ NE ¼ Section 8
Township 2S N/S Range 10E E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name Boulder Industrial Park
Tract Number 1 COS 1317

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. 6 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 +2 ft. to 27 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
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 _____
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? CONTINUOUS ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

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 10 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: 20 gpm.
e) Pumping water level _____ ft. at _____ hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time .25 hrs.
h) Recovery water level 10 ft. at .25 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 HB

Depth (ft.) From	To	Formation
0	20	gravel & Sand
20	23	Sand & Small gravel
23	28	gravel
28	40	Shale Bedrock

RECEIVED
AUG 09 1995
MONTANA D.N.R.C.
HELENA FIELD OFFICE

H.P.

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7-28-95

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
7-31-95
Date
ESD Inc
Firm Name
109 E Lewis Livingston
Address
Ed Hillman 258
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M: 153621

SEP 14 1995

M: 153621

025 10E 08 ABD 113069

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-95430

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

OK

1. WELL OWNER
Name Fridley Development

2. CURRENT MAILING ADDRESS
Box 1058
Living Stone Mt 59047

3. WELL LOCATION
~~N~~SE ¼ ~~N~~NW ¼ NE ¼ Section 8
Township 25 N/S Range 10E E/W County
Govn't Lot , or Lot 3 , Block
Subdivision Name Boulder Industrial Park
Tract Number COS 1317

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. 6 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 from +2 ft. to 25 ft.
Threaded ☐ Welded ☒ Dia. from ft. to ft.
Type 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
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? continuous ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

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 10 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: 30 gpm.
e) Pumping water level 25 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time .25 hrs.
h) Recovery water level 10 ft. at 25 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

Depth (ft.) From	To	Formation
0	1	topsoil
1	20	gravel + sand
20	23	sand + gravel
23	25	gravel

RECEIVED
AUG 09 1995
MONTANA D.N.R.C.
[illegible]MAN FIELD OFFICE

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7-31-95

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

7-31-95
Date

ESA INC
Firm Name

109 E Lewis Livingston
Address

[signature] 258
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6810
DNRC

M:151566
Page 1 of 2

DEPARTMENT — BUREAU COPY

WELL DEEPENING - MAINTENANCE

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 43B-95430

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 Fridley Development

2. CURRENT MAILING ADDRESS
Box 1058
Livingston MT 59047

3. WELL LOCATION
~~SE~~ NE ¼ ~~NE~~ NW ¼ NE ¼ Section 8
Township 2S ~~N~~/S Range 10E E/~~W~~ County Park
Govn't Lot _____, or Lot 3, Block _____
Subdivision Name Boulder Industrial Park
Tract Number COS 1317

OK

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. 6 in. from 0 ft. to 60 ft.
Dia. _____ in. from _____ ft. to _____ ft.
Dia. _____ in. from _____ ft. to _____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 6 from +2 ft. to 32 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type _____ Wall Thickness _____
Casing; Plastic Dia. 4½" from 20 ft. to 60 ft.
Weight _____ Dia. _____ from _____ ft. to _____ ft.
PERFORATIONS: Yes ☐ No ☐
Type of perforator used _____
Size of perforations 1/4" 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? continuous
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

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 10 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: 20 gpm.
e) Pumping water level 60 ft. at 2 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time .1 hrs.
h) Recovery water level 10 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

Depth (ft.) From	To	Formation
25	32	gravel
32	60	Blue shale

Redrill

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 1-23-96

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

1-23-96
Date

ESD INC
Firm Name

3 Industrial Park Rd
Address Livingston 59047

[signature]
Signature

258
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

DEPARTMENT COPY
DRILLER: Please give this copy to the well owner to complete reverse side.
OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended purpose.

M: 151566
Page 2 of 2

02S 10E 08 BDDC

MONTANA WELL LOG REPORT

Form No. 603 R2-99

Well ID# 541

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 Ted Watson
MAILING ADDRESS PO Box 433
Livingston, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ SE ¼ SE ¼ NW ¼, Section 8
Township 2S N/S Range 10E E/W County Park
Lot ____, Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS [X] Yes [ ] No
Latitude 0537368 Longitude 5058036
Error as reported by GPS locator (± feet) 49
Horizontal datum [X] NAD27 [ ] WGS84

3. PROPOSED USE: [ ] Domestic [X] Stock [ ] Irrigation [ ] Public Water Supply [ ] Monitoring Well [ ] Other: ____

4. TYPE OF WORK:
[X] New well [ ] Deepen existing well [ ] Abandon existing well
Method: [ ] Cable [X] Rotary [ ] Other: ____

5. WELL CONSTRUCTION DETAIL:

Borehole:
Dia. 6 in. from 0 ft. to 36 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 [ ] Threaded [X] Welded
Dia. 6 5/8 in. from +2 ft. to 33.5 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 [X] No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: [ ] Yes [X] No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: [ ] Yes [X] No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR [X] Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. (See details on well log report cover.)

[X] 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 bucket/stopwatch
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*
70 gpm with drill stem set at 30 ft. for 1.5 hours
Time of recovery 15 min 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: HB

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	34	Sand, gravel, cobbles & small boulders
34	36	Red shale & clay

[ ] ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 05/08/2001

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)
Hayes Drilling Co
Address 2403 Par Court - Bozeman, MT 59715
Signature [signature]
Date 05/28/2001 License no. 361/074

MBMG ID#

DNRC 188926

02510E08CCB

Form No. 603 R2-97

CORRECTED WELL LOG REPORT

File No. 43B-C107428

136976

1. WELL OWNER ✓ Geogann
Name TED WATSON WELL #1

2. CURRENT MAILING ADDRESS
P.O. Box 433
LIVINGSTON, MT 59047

3. WELL LOCATION
NW ¼ SW ¼ SW ¼ Section 8
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot _____, Block _____
Subdivision Name _____
Tract Number _____
Latitude _____ Longitude _____

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. 6 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 in. from +2 ft. to 23 ft.
Threaded ☐ Welded ☒ Dia. _____ in. from _____ ft. to _____ ft.
Type A53B 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? 20 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 ✓ Pump _____ Bailer _____
b) Static water level immediately before testing 12 ft. If flowing; closed-in pressure _____ psi _____ gpm.
c) Pumping level after one hour 20 ft.
d) Recovery level 12 ft. Time of recovery 1 min/hrs.
e) Pumping rate 60 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.

N/A

11. PUMP INSTALLATION INFORMATION
Installation depth _____
Actual pumping rate _____
Manufacturer's name _____
Type _____ Model No. _____ H.P. _____

N/A

12. WAS WELL PLUGGED OR ABANDONED? Yes ☐ No ☒
If yes, how? _____

13. WELL LOG

Depth (ft.) From	To	Formation
0	16	GRAVEL
16	18	GRAVELS-WET
18	24	GRAVELS H2O
24	25	SHALE BLUE-GRAY

HB

☐ ADDITIONAL SHEETS ATTACHED

14. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

15. DATE COMPLETED 1-8-99

16. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 1-8-99
Firm Name Hayes Drilling
Address 2403 Parcourt Bozeman, MT 59715
Signature Tony R Counts License No. 97

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
48 N. LAST CHANCE GULCH P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MONTANA DNRC

FEB 1999
M# 176825
RECEIVED
FEB 03 1999
DNRC - BOZEMAN
REGIONAL OFFICE

DEPARTMENT — BUREAU COPY

Township 02S, Range 10E, Section 18

Well Logs

025 10E 1D ADAD

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 TED WATSON
Mailing address P.O. BOX 433
LIVINGSTON MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SE ¼ NE ¼ NW ¼ NE ¼, Section 18
Township 2 N/S Range 10 E/W County PARK
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. 6 in. from 0 ft. to 105 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 +20" ft. to 18 ft.
Dia. _____ in. from _____ ft. to _____ ft.

Plastic: Pressure Rating 160 lbs. ☐ Threaded ☐ Welded
Dia. 4½ in. from 10 ft. to 105 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 FACTORY SLOTTED PVC 10-30
Dia. 4½ Slot size .025 from 45 ft. to 65 ft.
Dia. _____ Slot size .025 from 85 ft. to 105 ft.

Gravel Packed: ☐ Yes ☑ No
Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

Packer: ☐ Yes ☑ No
Type _____ Depth(s) _____

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 12 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*
60 gpm with drill stem set at 100 ft. for 1 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: HB

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	19	SAND, GRAVEL : LARGE COBBLES
19	25	BROWN SANDSTONE - HARD
25	36	BLUE SANDSTONE - HARD
		10 gpm @ 19'
		5 gpm @ 25-30
36	53	BLUE SHALE : CLAY
53	62	BROWN SANDSTONE (15-18 gpm)
62	83	SHALES : CLAY
83	89	BLUE SANDSTONE - HARD
		(15 gpm 83-85) TOTAL 45
89	97	GRAY SANDSTONE - HARD
		(89-94 - 10-15 gpm) 55-60
97	105	GRAY SANDSTONE : CLAY
		THIN SHALES

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 8-1-00

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) HAYES DRILLING CO
Address 3408 PAR CT BOZEMAN MT 59715
Signature _____
Date 8-8-00 License no. 361

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 183907

DEPARTMENT—BUREAU COPY

FORM No. 6 New 7-72

RECEIVED

AUG 12 1974

MONT. DEPT. OF NATURAL RESOURCES & CONSERVATION

File No. 3531

STATE OF MONTANA

Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PINK — BUREAU
CANARY — WELL OWNER
~~GOLDENROD — DRILLER~~

438

WELL LOG REPORT

(033484)

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 CITY OF LIVINGSTON Address LIVINGSTON, MONTANA

2. WELL LOCATION: County PARK "Q" & LEWIS STREETS-WELL #6; NE ¼ NE ¼ NW ¼, Sec. 18, Twp. 2 N-S, Rg. 10 E-W

3. PROPOSED USE: ___ Domestic ___ Stock XX Municipal ___ Industrial ___ Lawn and Garden ___ Irrigation ___ Other (*if other, specify*) ___

4. METHOD DRILLED: ___ Cable ___ Bored ___ Forward Rotary ___ Reverse Rotary ___ Jetted x Other (*if other, specify*) POWER AUGER

5. WELL CONSTRUCTION:
Diameter of hole 42 inches. Depth 43 ft.
Casing: x Steel ___ Plastic ___ Concrete ___ Threaded ___ Welded ___ Other (*if other, specify*) ___
Pipe Weight: Dia.: From: To:
190.7 lb/ft. 48 inches 0 feet 20 feet
62.6 lb/ft. 16 inches +3 feet 33 feet
___ lb/ft. ___ inches ___ feet ___ feet
Was perforated pipe used? ___ Yes x No
Length of pipe perforated ___ feet
Was casing left open end? ___ Yes x No
Was a well screen installed? x Yes ___ No
Material STAINLESS STEEL Dia. 16 inches (*stainless steel, bronze, etc.*)
Perforation type: x slots ___ holes
Size 0.100 set from 33 feet to 43 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? x Yes ___ No
To what depth? 20' feet
Material used in grouting CONCRETE
Well head completion: Pitless adapter ___
12" above grade x Other ___
(*If other, specify*) ___
Was the well disinfected? x Yes ___ No

6. WATER LEVEL:
Static water level 7 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: x Pump ___ Bailer ___ Other (*If other, specify*) ___
Pumping level below land surface:
34 ft. after 12 hrs. pumping 490 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	13	GRAVEL AND BOULDERS
13	26	SMALLER ROCK AND GRAVEL
26	40	GRAVEL & SAND - VERY DIRTY
40	43	SAND & GRAVEL & ROCK
43		STOPPED AT CLAY

(*Use separate sheet if necessary*)

9. DATE STARTED: MARCH 20, 1974

10. DATE COMPLETED: JULY 15, 1974

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.

LAYNE MINNESOTA COMPANY 76
Driller's or Firm Name *License No.*

3147 CALIFORNIA ST. N.E. MPLS, MINN 55418
Address

[signature] AUGUST 8, 1974
Signed by D. C. VRY *Date*

M: 97361

Form No. 603 (Rev. 7/76)

Bozeman 067 02S 10E 18 Park

coded

STATE OF MONTANA

Department of Natural Resources and Conservation

File No. _____

033483

Pink-Well Owner
Gold-Driller

WELL LOG REPORT

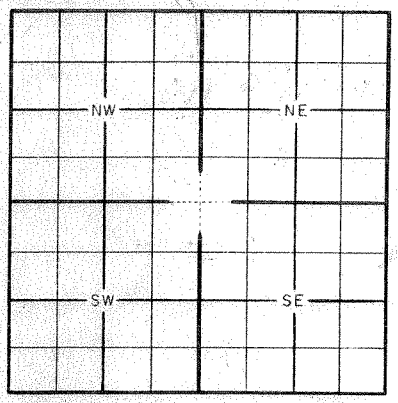
State law requires that this form be filed by the water well driller within 60 days after completion of the well, and Form 602, Notice of Completion of Groundwater Development, be filed by the well owner within 60 days after the water has been put to beneficial use.

1. WELL OWNER
Name Tom FoESS

2. CURRENT MAILING ADDRESS
Box 848
Pawnee Town Mont. 59001

3. PROPOSED USE ___ domestic (includes lawn and garden); ___ stock; ___ municipal; X industrial; ___ irrigation; X other (specify) Compressor cooling

4. WELL LOCATION



___ ¼ ___ ¼ ___ ¼ ___ ¼ Section 16
T. 2 N or S R. 10 E or W
OR, Lot 23-32 Block E
Subdivision Livingston Riverside
City Livingston County Park
Elevation ___ Accuracy: ___ ±10'; ___ ±50'; ___ ±100';

5. DRILLING METHOD X 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"	6" 17#	0	30	N/A		

Was casing left open end? X Yes, ___ No
Was a packer or seal used? ___ Yes, X No
If so, what material ___
Was the well gravel packed? ___ Yes, X No
Was the well grouted? ___ Yes, X No
To what depth? ___
Material used in grouting ___
Well head completion: Pitless adapter ___
12 in. above grade X, other ___
(if other, specify) ___
Pump horsepower ___, pump type ___
Pump intake level ___ feet below land surface
Power (electric, diesel, etc.) ___

7. WATER LEVEL
Static water level 15 feet below land surface
If flowing, closed-in pressure ___ psi
___ gpm flow through ___ inch pipe
Controlled by: ___ valve, ___ reducers, ___ other
(if other, specify) N/A

8. WELL TEST DATA ___ pump X bailer ___ other
(if other, specify) ___
Pumping level below land surface:
20 ft. after 1 hrs. pumping 30 gpm
___ ft. after ___ hrs. pumping ___ gpm

9. WAS WELL PLUGGED OR ABANDONED? ___ Yes X No
If yes, how? ___

10. DATE STARTED Nov 28, 1978
DATE COMPLETED Nov 29, 1978

11. WELL LOG

Depth (ft.) From	To	Formation
0	20	Rocks & Gravel
20	30	Gravel, Sand, Water

(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.

12/1/78
Date

Hillman Drilling
Firm Name

Shields Rte
Address

[signature]
Signature

258
License No.

97359

FORM No. 603 New 7-73

File No. 080407

STATE OF MONTANA
Department of Natural Resources and Conservation

WHITE — DEPARTMENT
PINK — BUREAU
CANARY — WELL OWNER
GOLDENROD — DRILLER

WELL LOG REPORT

2S 10E 18 BBC

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 Marion Address 121 N - Kaith Livingston

2. WELL LOCATION: County Park; ¼ ¼ ¼, Sec. ____, Twp. ____ N-S, Rg. ____ E-W

3. PROPOSED USE: X Domestic ___ Stock ___ Municipal ___ Industrial X Lawn and Garden ___ Irrigation ___ Other (*if other, specify*)

4. METHOD DRILLED: X Cable ___ Bored ___ Forward Rotary ___ Reverse Rotary ___ Jetted ___ Other (*if other, specify*)

5. WELL CONSTRUCTION:
Diameter of hole 6 inches. Depth 42 ft.
Casing: X Steel ___ Plastic ___ Concrete ___ Threaded X Welded ___ Other (*if other, specify*)

Pipe Weight	Dia.	From	To
17 lb/ft.	6 inches	0 feet	42 feet
___ lb/ft.	___ inches	___ feet	___ feet
___ lb/ft.	___ inches	___ feet	___ feet

Was perforated pipe used? ___ Yes X No
Length of pipe perforated ___ feet
Was casing left open end? X Yes ___ No
Was a well screen installed? ___ Yes ___ No
Material ___ Dia. ___ inches (*stainless steel, bronze, etc.*)
Perforation type: ___ slots ___ holes
Size ___ set from ___ feet to ___ 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 ___
Well type: ___ Straight screen ___ Graveled
Was the well grouted? ___ Yes X No
To what depth? ___ feet
Material used in grouting ___
Well head completion: Pitless adapter X
12" above grade X Other ___
(*If other, specify*) ___
Was the well disinfected? ___ Yes X No

6. WATER LEVEL:
Static water level 25 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 X Bailer ___ Other (*If other, specify*) ___
Pumping level below land surface:
30 ft. after 2 hrs. pumping 30 gpm
___ ft. after ___ hrs. pumping ___ gpm

8. WELL LOG:

Depth (ft.) From	To	Formation
0	6	topsoil & gravel
6	12	gravel & sand
12	34	clay & gravel
34	40	sand
40	42	gravel & sand
		HB

(*Use separate sheet if necessary*)

9. DATE STARTED: July 16 - 74

10. DATE COMPLETED: July 17 - 74

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.

[illegible] 38
Driller's or Firm Name *License No.*

[illegible]
Address

[illegible]
Signed by M: 21570 *Date*

02S 10E 18 BCB

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 43B-93797

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

111455

1. WELL OWNER
Name Stuart Dunlap JR.

2. CURRENT MAILING ADDRESS
320 SK ST
Livingston, MT 59047

3. WELL LOCATION
NW ¼ SW ¼ NW ¼ Section 18
Township 2 N/S Range 10 E/W County Park
Govn't Lot _____, or Lot 9 & 10, Block _____
Subdivision Name RIVERSIDE ADD
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. 6 in. from 0 ft. to 20 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 18 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type ASTM 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 _____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ 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 20
d) The pumping rate: 60 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 12 hrs.
h) Recovery water level 6 ft. at ½ 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

Depth (ft.) From	To	Formation
0	1	Topsoil
1	20	Sand & Gravel

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 2/24/95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
2/24/95
Date
Vince Hillman Drilling Inc
Firm Name
1030 Marx Rd Bozeman
Address
Signature
436
License No.

RECEIVED
APR 25 1995
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

APR 1995

M: 150530

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 Richard Sajacinski

Mailing address 422 S K

Livingston MT 59047

2. WELL LOCATION List ¼ from smallest to largest

NW ¼ SW ¼ NW ¼ ____ ¼, Section 18

Township 2 ☐N/S Range 10 ☐E/W County Park

Lot ____, Tract/Blk ____ Subdivision Name

Well Address _____

GPS ☒Yes ☐No

Latitude 45° 39.79N Longitude 110° 32.79W

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. 6 in. from 0 ft. to 20 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 +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 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 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*

30 gpm with drill stem set at 20 ft. for 1 hours

Time of recovery ½ hrs/min. Recovery water level 6 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: HB

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	Topsoil
3	20	Sand + Gravel

RECEIVED
JUN 17 2003
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6/4/03

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) Hillman Drilling

Address 1030 Maryl Rd Bozeman

Signature [signature]

Date 6/16/03 License no. 436

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 203494

DEPARTMENT - BUREAU COPY

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 Marty Claar

Mailing address 326 S K ST

Livingston, MT 59047

2. WELL LOCATION List ¼ from smallest to largest

SW ¼ SW ¼ NW ¼ ____ ¼, Section 18

Township 2 N/S Range 10 E/W County Park

Lot ____, Tract/Blk ____ Subdivision Name

Well Address _____

GPS ☒ Yes ☐ No

Latitude 45° 39.87 N Longitude 110° 32.85 W

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. 6 in. from 0 ft. to 20 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 +3 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 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 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*

35 gpm with drill stem set at 20 ft. for 1 hours

Time of recovery 1/2 hrs/min. Recovery water level 6 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: HB

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	Topsoil
5	20	Sand + Gravel

RECEIVED
JUN 17 2003
D.N.R.C.

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 5/3/03

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) Hillman Drilling

Address 1030 Mary Rd Bozeman

Signature [signature]

Date 5/5/03 License no. 436

Montana DNRC P.O. BOX 201601 HELENA, MT 59620-1601 444-6610

MBMG ID# 203496

DEPARTMENT - BUREAU COPY

067 02S 10E 18 D PARK

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana—39089

File No.

T. 2S R10E 18 B

County Park 033443

TRIPLICATE

RECEIVED DEC 18 Montana Bureau of Mines and Geology

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

OFFICE OF STATE ENGINEER

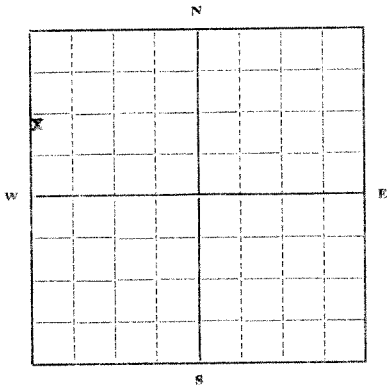
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Paul Duncan & Bessie R. Duncan (Name of Appropriator), of 411 South H (Address) Livingston (Town)

County of Park State of Montana

have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW¼ Sec. 18 T. 2S. R10E

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: lawn irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: 1954. Continuous use.

4. The amount of groundwater claimed (in miner's inches or gallons per minute): Sufficient to irrigate 2 city lots.

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: 2 city lots 25' x 140' each. Owners same as appropriators.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal: Electric pump in basement of house.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: Commenced and completed in 1954.

8. The depth of water table: about 6 feet

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: One inch pipe, surrounded by 14 inch metal culvert which is cemented into basement floor.

10. The estimated amount of groundwater withdrawn each year: Unknown.

11. The log of formations encountered in the drilling of each well if available: None kept.

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:

x Bessie Duncan

Signature of Owner Paul Duncan

Date December 9, 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 Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

97360

Bozeman

WELL LOG REPORT

File No. 43B-92569

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.

110259

1. WELL OWNER
Name: Terry Tillett

2. CURRENT MAILING ADDRESS
419 5th
Livingston MT 59047

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 18
Township 2 N/S Range 10 E/W County Park
Govn't Lot ____, or Lot 23&24, Block 127
Subdivision Name RIVERSIDE ADDITION O.T.
Tract Number ____

4. PROPOSED USE: Domestic ☒ Stock ☐ Irrigation ☒
Other ☐ specify ____

5. TYPE OF WORK:
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Cable ☐ Rotary ☒ Bored ☐ Driven ☐ Jetted ☐

6. DIMENSIONS: Diameter of Hole
Dia. 6 in. from 0 ft. to 20 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 13 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A53B 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 ____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump ____ Bailer ____
b) Static water level immediately before testing 7 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: 50 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 7 ft. at ½ 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

Depth (ft.) From	To	Formation
0	6	Topsoil
6	20	Sand + Gravel

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 7/11/94

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
Date 7/11/94
Firm Name Vince Hillman Drilling
Address 1030 Mary Rd Bozeman
Signature ____ License No. 436

RECEIVED
SEP 16 1994
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

HB

M 158803

Bozeman 02S 10E 18 BCC Park

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 43B-C108850-00

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

110387

1. WELL OWNER
Name Robert Heapes

2. CURRENT MAILING ADDRESS
432 S K
Livingston, MT 59047

3. WELL LOCATION
SW ¼ SW ¼ NW ¼ Section 18
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 20 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 18 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B 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 _____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ 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 18
d) The pumping rate: 40 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 40 ft. at ½ 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

Depth (ft.) From	To	Formation
0	2	Topsoil
2	20	Sand + Gravel

RECEIVED
FEB 23 1995
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 2/6/95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
2/6/95
Date
Vince Hillman Drilling
Firm Name
1030 Mary Rd Bozeman
Address
Signature
436
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M: 14909

MAR 16 1995

DEPARTMENT—BUREAU COPY

061 025 10E 18CBA PARK

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana—42234

File No.

TRIPLICATE

(4) 062 T. 2S R. 10E 18 CBA

County Park

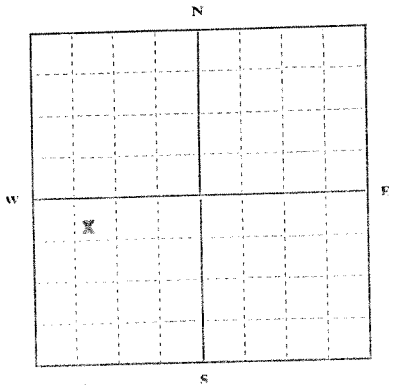
033446

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Robert Boucher (Name of Appropriator), of 421 South K St., Livingston (Address) (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼NW ¼SW¼ Sec. 18 T. 2S R. 10E

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 Irrigation Well

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1958 - Continuous use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 100 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 Lawn use at 421 South K Street, Livingston, Montana, by Robert Boucher

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric Pump located at 421 South K Street, Livingston

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 5 feet

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 10½ feet hand dug well with electric pump and pipe

10. The estimated amount of groundwater withdrawn each year 75,000 gallons

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 None

Signature of Owner R H Boucher

Date 1-4-1964

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.

M:97364

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.

067 025 10E 18CBA PARK

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana—42234

067 T. 2s R. 10E 18 CBA

File No.

County. Park

TRIPLICATE

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JAN 3
Montana Bureau of
Mines and Geology

033447

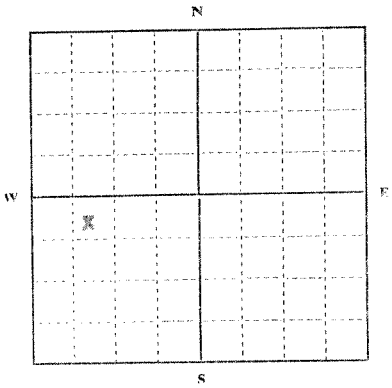
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Beulah Boucher (Name of Appropriator), of 410 South I St., 207 North 34 St. (Address), Livingston Billings (Town)

County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼NW ¼SW¼ Sec. 18 T. 2S R. 10E

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 Irrigation well for lawn

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1953 and continuous use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 50 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 Lawn use at 410 south I Street, Livingston, Montana, by Beulah Boucher

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric pump located at 410 South I St., Livingston, Montana

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1953

8. The depth of water table 5 feet

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 6 feet deep hand dug well with electric pump and pipe

10. The estimated amount of groundwater withdrawn each year 75,000 gallons per year

11. The log of formations encountered in the drilling of each well if available Gravel None

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 None

Signature of Owner Beulah Boucher

Date Dec. 31-1963

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. M: 97365

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.

001 12S R10E 18 [illegible]

GW 4

Approved Stock Form—State Publishing Co., Helena, Montana—42234

T 2S R 10E 18

File No.

County Park 033445

TRIPLICATE

RECEIVED
DEC 31 [illegible]
Montana Bureau of
Mines and Geology

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

3

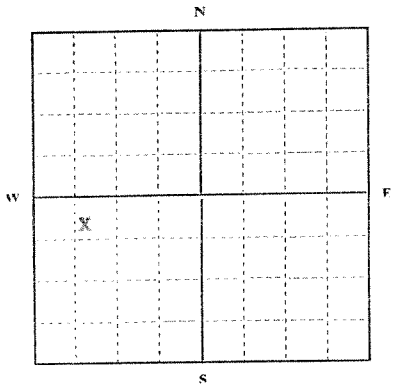
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. R. J. Michels (Name of Appropriator), of 418 South I Street, Livingston (Address) (Town)

County of Park State of Montana

have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼NW ¼SW¼ Sec. 18 T. 2S R. 10E

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 Irrigation well

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1958 - continuous use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 100 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 Lawn use at 418 South I Street, Livingston, Montana, by R. J. Michels

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric Pump located at 418 South I Street, Livingston

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 5 feet

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 6 feet hand dug well with electric pump and pipe

10. The estimated amount of groundwater withdrawn each year 75,000 gallons

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 None

Signature of Owner R. J. Michels

Date December 27, 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.

M:97366

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.

067 02S 10E 18CBA PARK 033444

GW 4

Approved Stock Form—State Publishing Co., Helena, Mo

067 T 2S R 10E 18CBA

File No.

TRIPLICATE

County Park

RECEIVED
DEC 3 1 1963
Montana Bureau of
Mines and Geology

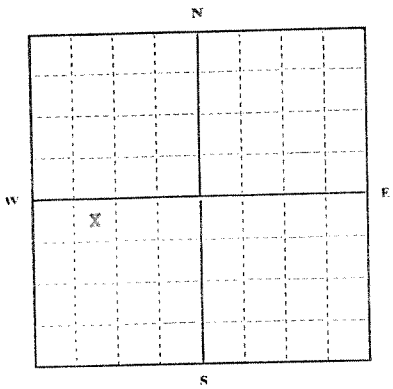
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

3

1. Fred G and Nora M. Burns (Name of Appropriator), of 423 South K, (Address) Livingston (Town)
County of Park State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼NW¼ SW¼ Sec. 18 T. 2S R. 10E

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 Well for Irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1923 Has not been used but may in future

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 100 gallons per minute - not now in use but may in future

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 Will be used in future for irrigation of lawn at 423 South K, Livingston, by Fred G and Nora M. Burns

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal No Pump installed as yet, but may in future

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1923

8. The depth of water table 5 feet

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 6 feet, hand dug well

10. The estimated amount of groundwater withdrawn each year Not now in use, but 75,000 gallons per year may be withdrawn in future

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 None

Signature of Owner Fred G. Burns

Date December 27, 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. M: 97367

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.

GW 4

033203

File No. .....

067 T. 25 R. T10E 18 BDBB

TRIPLICATE

3

County PARK

RECEIVED
DEC 26 1963
Montana Bureau of Mines and Geology

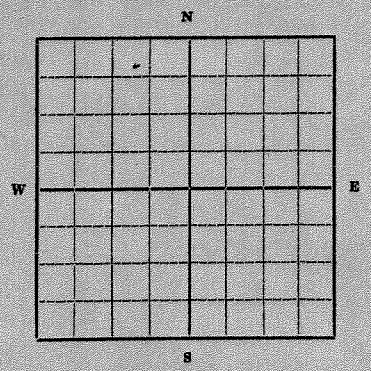
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. A. L. LAHIEN (Geyser Trailer Court), of 1075 S. 6th Livingston
(Name of Appropriator) (Address) (Town)

County of PARK State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



..... ¼ ..... Sec. 18 T. 25 R. 10E

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
CAMPGROUND

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
MAY 22, 1961 CONTINUOUS

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 200

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
PUMP

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
MAY 19, 1961 MAY 22, 1961

8. The depth of water table 32'

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
CASING TWO PACK STEEL CONDUCTOR 30"

10. The estimated amount of groundwater withdrawn each year Unmetered

11. The log of formations encountered in the drilling of each well if available
TOPSOIL, COARSE GRAVEL, LOOSE SAND, FINE SAND, GRAVEL, LOOSE SAND, FINE SAND, GRAVEL, SAND, BLUE CLAY

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
[illegible]

Signature of Owner [signature]

Date 12-23-63

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.

97858

15067 T. 2 S. R. 10 E. 18BD

County PARK 033485

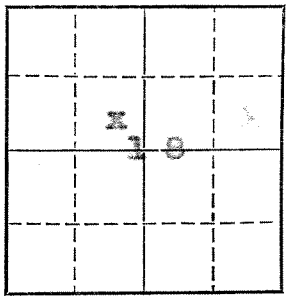
Montana Bureau of Mines and Geology

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

(1)

WATER WELL LOG

" L " Street



Owner City of Livingston, Municipal Water Works Address Livingston, Mont.

Driller Layne - Minnesota Address Minneapolis, Minn.

Date Started Nov. 1954 Date Completed Feb. 1955

Location: Sec. 18 T. 2 S. R. 10 E. ¼ sec. SE¼ NW¼

Type of well Drilled (Dug, driven, bored, or drilled) Equipment used Cable Tool (Churn drill, rotary, other)

Water use: Domestic [ ] Municipal [X] Stock [ ] Irrigation [ ]

Industrial [ ] Drainage [ ] Other:

Casing: 0 ft. to 40 ft. Type Steel Size 16"

Casing: 0 ft. to 20 ft. Type " Size 48"

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 30 to ft. 40 Ft. to ft.

Type of screen or perforations Stainless Steel Shutter Type

Static Water level, for non-flowing well: 5'-4"" feet.

Shut-in pressure, for flowing well: lb./sq. in. on: (date)

Pumping water level 10 feet at 600 gal. per min.

How tested: Test Pumped 800 GPM for 10 Hrs.

Length of test

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

Double Gravel Packed. Top 20' Grouted.

(over)

97362

CLASIUETOWN

FORM NO. 603 (R 6-94)

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: Bob Burns

2. CURRENT MAILING ADDRESS
421 South K
Livingston, MT 59047

3. WELL LOCATION
SE ¼ SE ¼ NW ¼ Section 18
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 20 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 18 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B 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 _____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ 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 20
d) The pumping rate: 30 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 6 ft. at ½ 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

Depth (ft.) From	To	Formation
0	1	Topsoil
1	20	Sand + Gravel

HB

ATTACH ADDITIONAL SHEETS IF NECESSARY

RECEIVED
OCT 22 1996
DNRC - BOZEMAN
REGIONAL OFFICE

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 10/18/96

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
10/18/96
Date
Vince Hillman Drilling
Firm Name
1030 Mary Rd Bozeman
Address
Signature
436
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

DEC 04 1996
M: 160011

DEPARTMENT BUREAU COPY

2S10E 10DD

115198

FORM NO. 603 (R 6-94)

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 Gary Barnhart

2. CURRENT MAILING ADDRESS
Box 35
Livingston, MT 59047

3. WELL LOCATION
NW ¼ SE ¼ NW ¼ Section 18
Township 2 ☒ S Range 10 E/☒ County Park
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. 6 in. from 0 ft. to 20 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 18 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type A53B 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 _____
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? 20 ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☒ Yes ☐ No

9. PUMP (if installed)
Manufacturer's name N/A
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 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 20
d) The pumping rate: 50 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 9 ft. at ½ 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 HB

Depth (ft.) From	To	Formation
0	1	Topsoil
1	20	Sand + Gravel

RECEIVED
SEP 05 1995
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 5/2/95

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
5/2/95
Date
Vince Hillman Drilling
Firm Name
1030 Mary Rd Bozeman
Address
[signature] 436
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

M: 153622

SEP 14 1995

2S 10E 18 BDC

FORM NO. 603 (R 6-94)

WELL LOG REPORT

File No. 116968

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 Gary Barnhart

2. CURRENT MAILING ADDRESS
P.O. Box 35
LIVINGSTON ~~Bozeman~~, MT 59047

3. WELL LOCATION
SW ¼ SE ¼ NW ¼ Section 18
Township 2 N/S Range 10 E/W County Park
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. 6 in. from 0 ft. to 20 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 18 ft.
Threaded ☐ Welded ☒ Dia. _____ from _____ ft. to _____ ft.
Type 453B 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 _____
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? 20 ft.
Material used in grouting Bentowite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☒ No

9. PUMP (if installed)
Manufacturer's name N/A
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 X Pump _____ Bailer _____
b) Static water level immediately before testing 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 20
d) The pumping rate: 60 gpm.
e) Pumping water level 15 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time ½ hrs.
h) Recovery water level 5 ft. at ½ 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

Depth (ft.) From	To	Formation
0	20	Sand + Gravel

HB

RECEIVED
APR 29 1996
DNRC - BOZEMAN
REGIONAL OFFICE

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. YELLOWSTONE CLOSURE AREA: WATER TEMPERATURE _____

14. DATE COMPLETED 3/12/96

15. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.
3/12/96
Date
Vince Hillman Drilling Inc.
Firm Name
1030 Mary Rd Bozeman
Address
Signature
436
License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE P.O. BOX 202301 HELENA, MONTANA 59620 - 2301 444-6610
DNRC

APR 03 1996

M:156118

B2

02S 10E 18 BDC

(137078)

Form No. 603 R2-99

MONTANA WELL LOG REPORT

Well ID# 4313 - C10 88

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 HELEN BARNHART
Mailing address P.O. Box 94
LIVINGSTON, MT 59047

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ SW ¼ SE ¼ NW ¼, Section 18
Township 2 N/S Range 10 E/W County PARK
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. 6 in. from 0 ft. to 28 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.
Casing:
Steel: Wall thickness ____ ☐ Threaded ☐ Welded
Dia. 6 5/8 in. from +18" ft. to 34 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 N/A
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 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 6 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*
30 gpm with drill stem set at 21 ft. for 1 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: HB

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	27	COURSE GRAVEL & SAND COBBLES
27	28	BLACK SHALE (STRONG H2S SMELL)

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6-17-99

9. REMARKS: ALLEN BACK ABOUT 3' TO GET ABOVE FROM STRONG WATER - NOT AS BAD AT 26

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) HAYES DRILLING CO.
Address 2403 PAR CT BOZEMAN MT 59715
Signature ____
Date 6-20-99 License no. 361

MBMG ID# 176987

Bozeman

3 GW 2 Revised 1969
13—3M—10/69

(1) 061 T2S R10E-18

County PARK

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 CITY OF LIVINGSTON TEST WELL NO. 3

Address CITY OF LIVINGSTON

LIVINGSTON, MONTANA

Date well started 3/5/71

completed 3/16/71

For Administrator's Use
File
GW 1

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used Cable tools. (Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

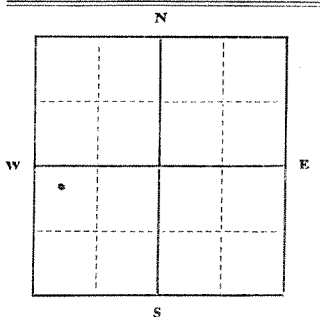
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*Describe Test well No. 3 located end of G street. G Street city park.

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6/5/8" O.D. 17# per ft.	0	47	¼X3" slots.	27	35



NW ¼ SW ¼ Sec. 18

T 2S N/S R 10E E/W

Static water level 7 ft.*
Pumping water level 9 ft.*
at 90 gallons per minute, measured 30 minutes after pumping began.
*Measured from ground level.
Well developed by Air
for 2 hours.
Power gas Pump 200 HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings shutoff outside of casing.

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

VAN DYKEN DRILLING CO.

Driller's Signature T. Bert Van Dyken

Driller's Address BOZEMAN, MONTANA

LICENSE NO. 1

DRILLER'S LOG

033486

Indicate the character ness of strata such as s 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)	
0	2	Top soils.
2	15	Sands, gravels and boulders. Little water @ 11' Standing water level is 7'
15	23	Clean sand and pea size gravels. Water.
23	29	Fine silty sands. Water.
29	30	Coarse sands. Water.
30	31	Coarse gravels. lots of water.
31	32	Fine sands, 45 GPM, with 6' drawdown.
32	34	Tight fine clean sands.
34	41	Gray hard shales. Dry.
41	41'6"	Coarse sands. and clean. 45 GPM, with 2' of drawdown.
41'6"	47	Hard blue shales. Dry.
		Pacific yeild of 45 GPM, per ft. of drawdown.

47 Show exact depth of bottom

9T3C03

Bozeman

GW 2 Revised 1960
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, 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 JOHN LONG

Address LIVINGSTON, MONTANA

Date well started 10/8/71

completed 10/11/71

Type of well Drilled (Dug, driven, bored or drilled)

Equipment used Cable tools. (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).

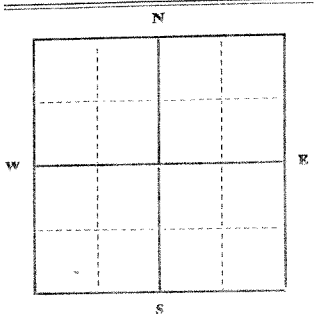
For Administrator's Use

File

GW 1

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per ft.	0	23'9"			
	4" plastic	6	50	1/16th x 2"	30	50



SW 1/4 SW 1/4 Sec. 18
T. 2 ~~N~~ S R. 10 E ~~W~~

Static water level 18 ft.*
Pumping water level 38 ft.*
at 30 gallons per minute,
measured 60 minutes after pumping began.
*Measured from ground level.
Well developed by Surging
for 2 hours.
Power..... Pump..... HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)

Clay and shale shutof from 14' to 30'

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature [signature]

Driller's Address VAN DYKEN DRILLING CO.

BOZEMAN, MONTANA LICENSE NO. 1

County Park

033487

DRILLER'S LOG

Indicate the character 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)	
0	5	Top soils.
5	14	Sand and gravels.
14	21	Clays, Dry
21	50	Crevised shales. Water.
		T.D. 50'

50' Show exact depth of bottom

97368

Bozeman 2 S 10E 18 CC PARK

Form No. 603 (R 2-89)

WELL LOG REPORT

File No. 77933-43B

State law requires that the Bureau's copy be filed by the water well driller within 60 days after completion of the well.

082537

1. WELL OWNER
Name John E Long

2. CURRENT MAILING ADDRESS
Box 1202
Livingston MT 59047

3. WELL LOCATION
____ ¼ SW ¼ SW ¼ Section 18
Township 2 S N/S Range 10 E E/W County Park
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. 8 in. from 0 ft. to 30 ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

7. CONSTRUCTION DETAILS:
Casing; Steel Dia. 8 from +2 ft. to 30 ft.
Threaded ☐ Welded ☒ Dia. ____ from ____ ft. to ____ ft.
Type A53 Wall Thickness .0250
Casing; Plastic Dia. ____ from ____ ft. to ____ ft.
Weight ____ Dia. ____ from ____ ft. to ____ ft.
PERFORATIONS: Yes ☐ No ☐
Type of perforator used ____
Size of perforations 1/4" x 2" in. by ____ in.
____ perforations from 15 ft. to 30 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? Continuous ft.
Material used in grouting Bentonite

8. WELL HEAD COMPLETION:
Pitless Adapter ☐ Yes ☐ No

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 10 ft. If flowing; closed-in pressure ____ psi. ____ gpm.
Flow controlled by: ____ valve, ____ reducers, ____ other, (specify) ____
c) Depth at which pump is set for test 5
d) The pumping rate: 520 gpm.
e) Pumping water level 30 ft. at 1 hrs. after pumping began.
f) Duration of test: Pumping time 1 hrs.
g) Recovery time 10 hrs.
h) Recovery water level 10 ft. at 10 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

Depth (ft.) From	To	Formation
0	3	clay & sand
3	32	gravel & sand

RECEIVED
JUL 30 1991
MONTANA D.N.R.C.
BOZEMAN FIELD OFFICE

#B

ATTACH ADDITIONAL SHEETS IF NECESSARY

13. DATE COMPLETED 2-28-91

14. DRILLER/CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge.

2-28-91
Date

SSD Inc
Firm Name

Rt 85 Box 4286 Livingston MT
Address

[signature] 258
Signature License No.

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION
1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610
DNRC

M:124023
Page 1 of 2

DEPARTMENT — BUREAU COPY

M:124023

RECEIVED
JUL 26 1991
MONT. DEPT. of NATURAL RESOURCES & CONSERVATION

FORM NO. 633 N6/87

AQUIFER TEST DATA

Owner John E. Lucy Address Box 1203 Livingston mt

Well Location: SW ¼ SW ¼ ____ ¼ Section 18, Township 2S N/S, Range 10E E/W, Park County.

Date Test Preformed 5-25 Company performing test ESD INC Measured by Ed Hillman

Type of water level measuring equipment Water Level Probe

Time Data	Water Level Data	Discharge Data
Pump on: Date 5.25 Time 7:11 (t_o)	Static water level 10.75	How was discharge measured? Barrel
Pump off: Date ____ Time ____ (t_o)	Measuring point TOC	Depth of pump/airline? 18'
Duration of aquifer test: Pumping ____ Recovery ____	Elevation of measuring point ____	

Date	Clock Time	Time Since Pump Started (min.) t	Time Since Pump Stopped (min.) t'	Pumping Water Level Measurement	Recovery Water Level Measurement	Discharge Measurement	Pumping Rate (gpm)	Comments on Factors Affecting Test Data
5-25	7:11	1	1		10.75		170	
		5	5					
		10	10					
		15	15					
		20	20					
		25	25	15.05				
		30	30					
		40	40					
		50	50	14.85				
		60	60	15.9			300	
		90	90	15.30				
		120	120	15.35				
		180	180	15.40				
		240	240	15.40				
		300	300	15.41				
		360	360	15.40				M: 124023
		420	420	15.45				Page 2 of 2
		480	480	15.40				

Appendix C

Well Survey Information

1104 East Gallatin Street

PRIVATE WELL SURVEY FORM

Well Information (continued)

How many wells are on your property: _____

Please provide the following information for each well (if known)

Provide sketch of each well location on Page 3 of this form.

	Well #1	Well #2	Well #3
Well Street Address: *(if different from property's address)*			
Township/Range/Section			
Water Rights Number:			
Date well installed:	3-95		
Construction (drilled/driven):	DRILLED		
Well depth (feet below ground surface):			
Depth to water (feet below ground surface):			
Well diameter (in inches):	6		
Perforated/screened interval:			
Type of pump installed in well:			
Do you have a well installation log ? ***If yes, please attach copy to survey form***	☑ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
Is the well presently in use ?	☑ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
If no, approximately how long ago did water use from well cease ?			
Water use: ***Check all of the following that apply*** — Drinking	☑	☐	☐
Domestic	☐	☐	☐
Irrigation	☑	☐	☐
Livestock	☐	☐	☐
Other - list any other types of use:			
Number of persons using the well:	2		
Ages of persons using the well:	57 + 65		
Period of time of well use:	APRIL - NOV		

02S|09E-12B02

1104 East Gallatin Street

PRIVATE WELL SURVEY FORM

WELL LOCATION SKETCH

Provide sketch showing exact well location with respect to house, roads, fences, etc.

Comments

List any other pertinent information (i.e., taste or odor of water from well).

THANK-YOU FOR YOUR PARTICIPATION IN THIS SURVEY

02S/09E-12R02 (cont.)

408 North K Street

PRIVATE WELL SURVEY FORM

Well Information (continued)

How many wells are on your property: _____

Please provide the following information for each well (if known)

Provide sketch of each well location on Page 3 of this form.

	Well #1	Well #2	Well #3
Well Street Address: *(if different from property's address)*	408 No K		
Township/Range/Section	T 2 South R 9 East		
Water Rights Number:			
Date well installed:	1939		
Construction (drilled/driven):	Hand Dug		
Well depth (feet below ground surface):	28 FT		
Depth to water (feet below ground surface):			
Well diameter (in inches):			
Perforated/screened interval:			
Type of pump installed in well:	Lift		
Do you have a well installation log ? ***If yes, please attach copy to survey form***	☐ yes ☒ no	☐ yes ☐ no	☐ yes ☐ no
Is the well presently in use ?	☒ yes ?? ☐ no	☐ yes ☐ no	☐ yes ☐ no
If no, approximately how long ago did water use from well cease ?	1995		
Water use: ***Check all of the following that apply*** — Drinking	☒	☐	☐
Domestic	☒	☐	☐
Irrigation	☒	☐	☐
Livestock	☐	☐	☐
Other - list any other types of use:			
Number of persons using the well:			
Ages of persons using the well:			
Period of time of well use:			

025/09E - 12R0

408 North K Street

PRIVATE WELL SURVEY FORM

WELL LOCATION SKETCH
Provide sketch showing exact well location with respect to house, roads, fences, etc.

See Attachment:

Comments
List any other pertinent information (i.e., taste or odor of water from well).

THANK-YOU FOR YOUR PARTICIPATION IN THIS SURVEY

025/09E-12R03 (cont.)

02S/09E - 12R03 (cont)

Form No. 627 n/4-91

NOTICE OF WATER RIGHT

(EXEMPT FROM THE ADJUDICATION FILING REQUIREMENTS)

IMPORTANT NOTE

Water rights for stock and domestic uses from groundwater sources (wells, developed springs) were exempted from the filing requirements for claims of existing water rights in the general adjudication of water rights if they meet either of the following criteria.

1. The water must have been in use prior to January 1, 1962, or
2. The water must have been put to use between January 1, 1962, and July 1, 1973, and a notice filed under the 1961 Groundwater Codes.

Instream domestic or stock uses in use prior to July 1, 1973, were also exempted from the filing requirements.

FOR DEPARTMENT USE ONLY

No._____ Basin _____
Date Rec'd. _____
Fee Rec'd. $ _____
Transmittal No. _____
Rec'd. By _____
Refund Made _____

A person who claims to have a water right that has been exempted may file this form with the Department of Natural Resources and Conservation for the purpose of receiving notice from the department of applications for permits, change authorizations, or reservations that may affect the person's water right. Filing this notice does not relieve a person of the responsibility of establishing the existence of the water right. Acceptance of this form by the department does not constitute a recognition by the State of Montana that the right is a valid existing water right.

Submit the completed form to the Water Resources Regional Office serving the county in which the development is located, as listed on the back of this form. A filing fee of $[redacted] 25.00 payable to the Department of Natural Resources and Conservation must accompany a completed form.

---

1. OWNER'S NAME Carlo Cieri

   Mailing Address Po Box 9

   City Livingston State MT Zip 59047 Home Phone 222-2678 Other Phone 222-6120

2. DATE THE WATER WAS FIRST USED (month/day/year) July 1939

3. DATE OF FILING OF WATER USE FROM THE COUNTY COURTHOUSE RECORDS (attach copy)
   _____(month/day/year) _____Document No. _____County

4. SOURCE OF WATER (well, spring, or name of stream or lake, etc.) well (Hand Dug) 28 FT

5. DIVERSION RATE (gallons per minute) 150 gpm

6. POINT OF DIVERSION (POD). Describe the location where water is diverted from the source.

   _____1/4 _____1/4 _____1/4 Sec 12, Twp 2 N/S, Rge 9 E/W, County Park
   Lots 4-12 11-22 Blk 48 Tract No._____ Subdivision (if any) Minnesota addition city Livingston 408 NO K street

7. PLACE OF USE
   Purpose of Use: Domestic/irrigation, if same as POD, CHECK ☒

   _____1/4 _____1/4 _____1/4 Sec_____, Twp_____N/S, Rge_____E/W, County _____
   Lot_____ Blk_____ Tract No._____ Subdivision (if any)_____

   Purpose of Use: _____, if same as POD, CHECK ☒

   _____1/4 _____1/4 _____1/4 Sec_____, Twp_____N/S, Rge_____E/W, County _____
   Lot_____ Blk_____ Tract No._____ Subdivision (if any)_____

025|09E-12R03
(cont)

8. PURPOSE AND PERIOD OF USE

Domestic: Number of households 1 Year-round use? Yes ☒ No ☐
If "No" _____ to _____ inclusive of each year
(month/day) (month/day)
Volume for domestic? 1 acre-feet/year (see below)

Lawn and Garden: (Up to 5 acres) Indicate acreage: 1½ acres
Period of Use March 1st to October 1st inclusive of each year
(month/day) (month/day)
Volume for lawn and garden? 2.50 acre-feet/year (see below)

Stock: Number and type N/A Year-round use? Yes ☐ No ☐
If "No" _____ to _____ inclusive of each year
(month/day) (month/day)
Volume for stock? _____ acre-feet/year (see below)

9. REMARKS. Use this space to further clarify any of the requested information.
Possible Household use - irrigation water current use

10. OWNER'S SIGNATURE [signature] Date 8-7-92

11. Use additional sheets if necessary to complete the requested information. Maps showing your point of diversion, place of use, and means of conveyance may be used to further explain your water use. Attach copies of affidavits or other proof of your water use.

AVERAGE WATER REQUIREMENTS

Domestic Volume:	Family of five	1.0	acre-feet/year
	≤1/4-acre lawn and garden	.63	acre-feet/year
	Total Volume	1.63	acre-feet/year
Lawn and Garden Volume:	Up to 5.0 acres	2.50	acre-feet/acre
Stockwater Volume:	Number of head X .017 = _____ acre-feet/year (for beef cattle)		

For other kinds of stock, one additional step is needed.

Milk cows or horses	multiply by 1.5
Hogs	divide by 3
Sheep	divide by 5
Chickens	divide by 300

WATER RESOURCES REGIONAL OFFICES

Billings
1537 Avenue D, Suite 105
Billings, MT 59102
Phone: 657-2105
Serving: Big Horn, Carbon, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties

Bozeman
111 North Tracy
Bozeman, MT 59715
Phone: 586-3136 or 586-3137
Serving: Gallatin, Madison, and Park Counties

Glasgow
839 First Avenue South
PO Box 1269
Glasgow, MT 59230
Phone: 228-2561
Serving: Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, and Valley Counties

Havre
1708 West Second Street
PO Box 1828
Havre, MT 59501
Phone: 265-5516 or 265-2225
Serving: Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties

Helena
1520 East Sixth Avenue
Helena, MT 59620-2301
Phone: 444-6695
Serving: Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis & Clark, Powell, and Silver Bow Counties

Kalispell
3220 Highway 93 South
PO Box 860
Kalispell, MT 59903-0860
Phone: 752-2288 or 752-2843
Serving: Flathead, Lake, Lincoln, and Sanders Counties

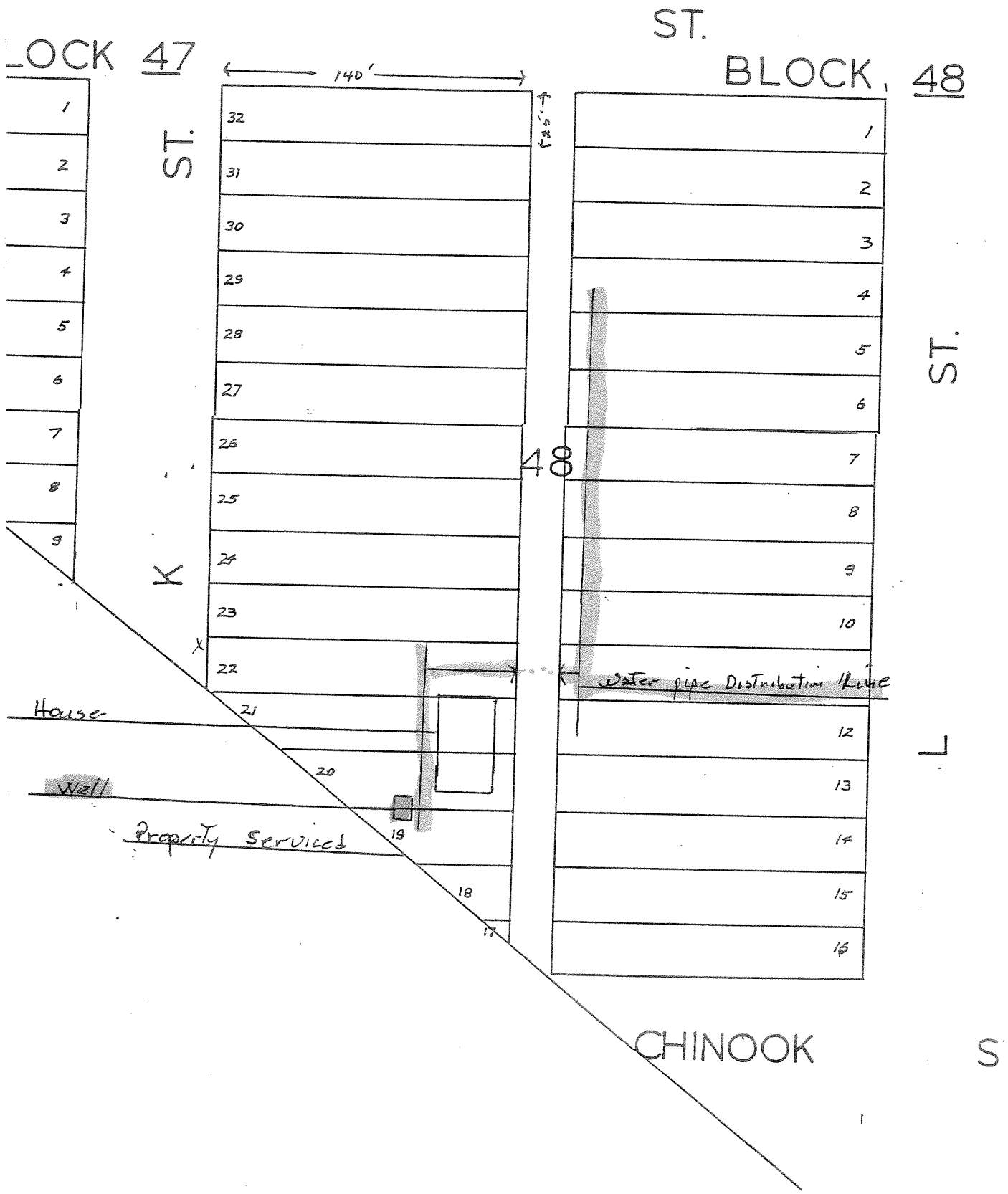
Lewistown
204 South Daws
PO Box 438
Lewistown, MT 59457
Phone: 538-7459 or 538-7012
Serving: Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties

Miles City
5 North Prairie
PO Box 276
Miles City, MT 59301
Phone: 232-6359
Serving: Carter, Custer, Fallon, Powder River, Prairie, Rosebud, and Wibaux Counties

Missoula
Holiday Village Professional Plaza, Suite 105
PO Box 5004
Missoula, MT 59806
Phone: 721-4284
Serving: Granite, Mineral, Missoula, and Ravalli Counties

025|09E-12B03
(cont.)

MINNESOTA ADDITION
LIVINGSTON
T 2 South R 9 EAST Section 12



8 Business Park Road

PRIVATE WELL SURVEY FORM

Well Information (continued)

How many wells are on your property: _____

Provide sketch of each well location on Page 3 of this form.

Please provide the following information for each well (if known)

	Well #1	Well #2	Well #3
Well Street Address: *(if different from property's address)*	8 Business Park Road		
Township/Range/Section			
Water Rights Number:			
Date well installed:	1996		
Construction (drilled/driven):	Drilled		
Well depth (feet below ground surface):	65'		
Depth to water (feet below ground surface):			
Well diameter (in inches):	6"		
Perforated/screened interval:			
Type of pump installed in well:			
Do you have a well installation log ? ***If yes, please attach copy to survey form***	☐ yes ☑ no	☐ yes ☐ no	☐ yes ☐ no
Is the well presently in use ?	☑ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
If no, approximately how long ago did water use from well cease ?			
Water use: ***Check all of the following that apply*** — Drinking	☐	☐	☐
Domestic	☑	☐	☐
Irrigation	☐	☐	☐
Livestock	☐	☐	☐
Other - list any other types of use:			
Number of persons using the well:	10		
Ages of persons using the well:	21 to 57		
Period of time of well use:	8 years		

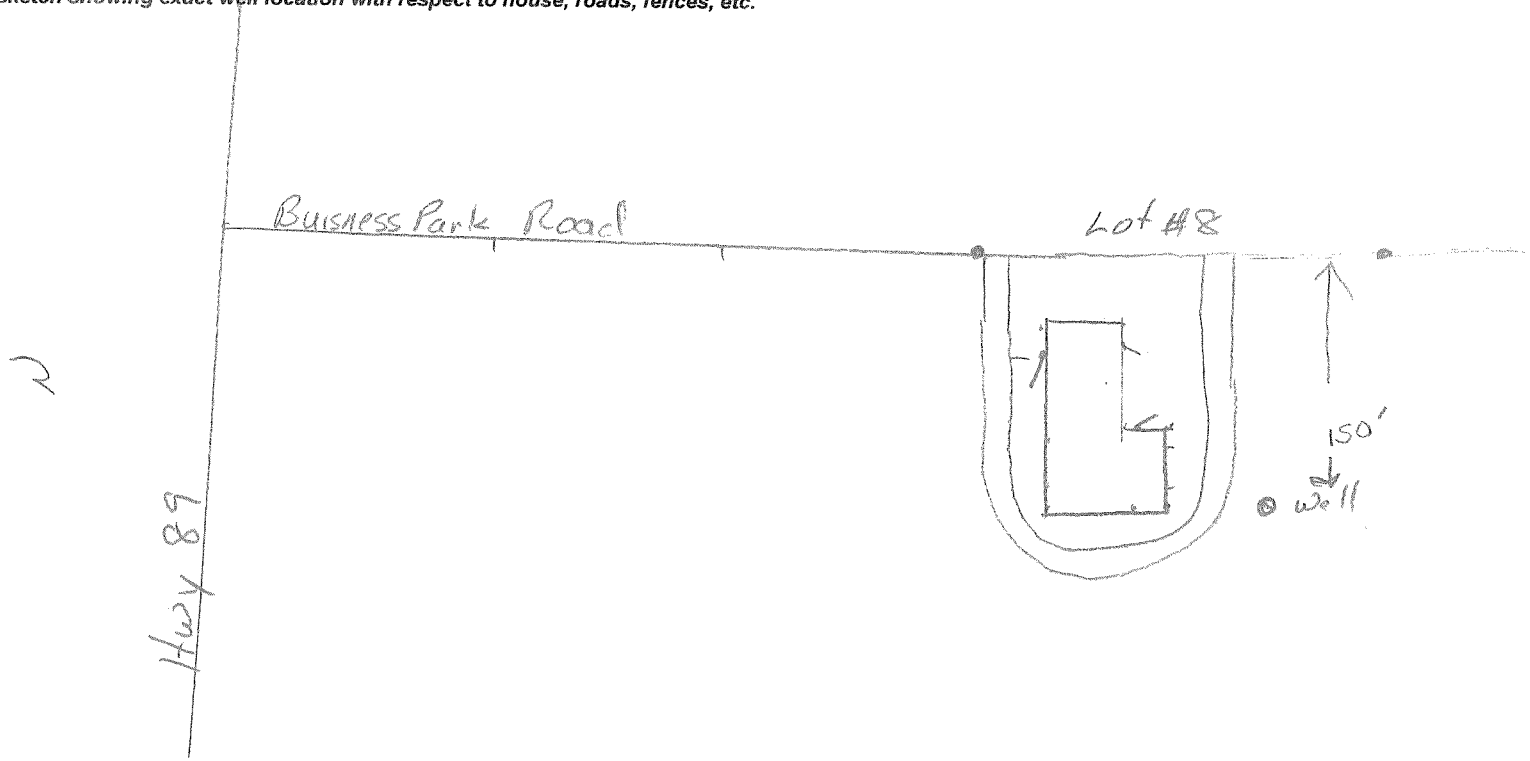
025 | OE - 8A03

8 Business Park Road

PRIVATE WELL SURVEY FORM

WELL LOCATION SKETCH

Provide sketch showing exact well location with respect to house, roads, fences, etc.



Comments

List any other pertinent information (i.e., taste or odor of water from well).

none

THANK-YOU FOR YOUR PARTICIPATION IN THIS SURVEY

026/10E-8A03 (cont.)

110 North O Street

PRIVATE WELL SURVEY FORM

Well Information (continued)

How many wells are on your property: 1

Please provide the following information for each well (if known)

Provide sketch of each well location on Page 3 of this form.

	Well #1	Well #2	Well #3
Well Street Address: *(if different from property's address)*	110 N. O. St.		
Township/Range/Section			
Water Rights Number:	—		
Date well installed:	?		
Construction (drilled/driven):	dug		
Well depth (feet below ground surface):	2½' to water		
Depth to water (feet below ground surface):	2½' makes 5' Total of water		
Well diameter (in inches):	4" pipe		
Perforated/screened interval:	screened		
Type of pump installed in well:	3/4" pump		
Do you have a well installation log ? ***If yes, please attach copy to survey form***	☐ yes ☒ no	☐ yes ☐ no	☐ yes ☐ no
Is the well presently in use ?	☐ yes ☒ no	☐ yes ☐ no	☐ yes ☐ no
If no, approximately how long ago did water use from well cease ?			
Water use: ***Check all of the following that apply*** — Drinking	☐	☐	☐
Domestic	☐	☐	☐
Irrigation	☐	☐	☐
Livestock	☐	☐	☐
Other - list any other types of use:	lawn and garden		
Number of persons using the well:	not presently		
Ages of persons using the well:			
Period of time of well use:	15 yrs up to 2002		

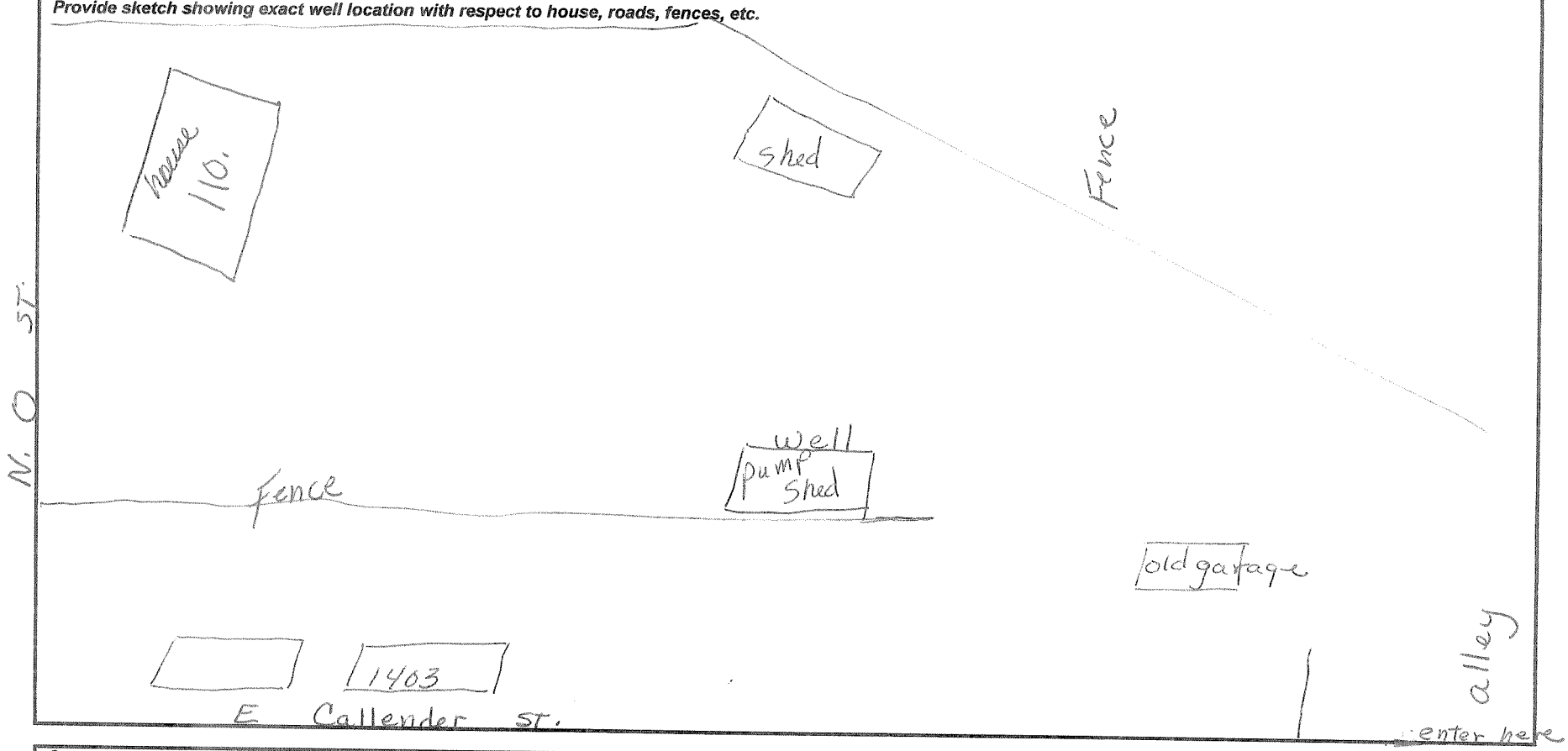
02S/10E-18D04

110 North O Street

PRIVATE WELL SURVEY FORM

WELL LOCATION SKETCH

Provide sketch showing exact well location with respect to house, roads, fences, etc.



Comments

List any other pertinent information (i.e., taste or odor of water from well).

THANK-YOU FOR YOUR PARTICIPATION IN THIS SURVEY

025/10E - 18704 (cont.)