GROUNDWATER INVESTIGATION IN THE OT-7 AREA
COLSTRIP STEAM ELECTRIC STATION, PPL MONTANA, LLC
INTERIM RESPONSE ACTION WORK PLAN OUTLINE

AREA: *Plant Site/ Original Town Site*

LAND USE AND OWNERSHIP: *Riparian range/grazing land near residential property and slightly downhill from the BNSF Railway right-of-way.* The site is located on the East Fork Armells Creek floodplain. Land is owned by *PPL Montana, LLC*.

MEDIA : Soil

Surface Water (identify water body):_____

Groundwater

Alluvial McKay/Rosebud Sub-McKay Other

LEVEL OF IMPACTS:

Well OT-7 (4/4/2013)

Parameter	Result
Bromide (mg/L)	*3*
Specific Conductance (μmhos/cm)	*11,400*
Boron (mg/L)	*2.5*
Chloride (mg/L)	*636*
Sulfate (mg/L)	*8,040*
Ca:Mg	*0.33*

PROJECT SCOPE & OBJECTIVE: Investigation Capture

SITE ASSESSMENT HISTORY *(List reports/summary of work done in area in chronological order)*:

DATE	INVESTIGATION/REPORT	SCOPE	FINDINGS/RESULTS
June 1993	*Well Log – no report prepared other than well log.*	*Well OT-7 was originally installed to monitor shallow water levels in the Colstrip original town site.*	*OT-7 was installed to a total depth of 15 feet below ground surface (bgs). The target interval was fine grained colluvial and/or alluvial sediments that overlie the deeper coarser grained East Fork Armells Creek Alluvium. Water levels at the well have ranged from about 11 feet bgs to more than 15 feet bgs (dry).*
November 1998	*The Montana Power Company East Fork Armells Creek Slurry Spill Cleanup*	*A Spill occurred near East Fork Armells Creek when a weld on slurry pipeline*	*MPC personnel contained the initial spill and initiated soil cleanup. After receiving regulatory approval, MPC rerouted a*

DATE	INVESTIGATION/REPORT	SCOPE	FINDINGS/RESULTS
	Report, (Hydrometrics, Inc., November 1998)	*failed. Approximately 80,000 gallons of slurry spilled on the surrounding ground. An estimated 80 cubic yards of fly ash may have entered the creek.*	*portion of the creek around the area visually impacted by fly ash slurry. Approximately 329 cubic yards of soil and fly ash were removed. Material moved from the site was staged near the area to allow drainage so spillage would be minimized during hauling. Silt fence were removed and flow restored to the original channel.*
May 2009	*PPL Montana, LLC 31M Area Well and Capture System Installation, Startup and Performance,* (Hydrometrics, Inc., 2009)	*Phased installation of monitoring wells was conducted on the northwest Plant Site and the area north of the site. Wells 64A through 83A were installed to evaluate groundwater in these areas. Wells were sampled and selected wells were aquifer tested.*	*Based on the results of the investigations wells 43S, 74A, 75A, 78A, 79A, and 82A were converted to groundwater capture wells and pumping from these wells began in November 2007. Water levels in the capture wells and area monitoring wells are monitored to evaluate the effectiveness of the groundwater capture.*
June 2012	*Evaluation of 2011 Hydrologic Monitoring Data from Colstrip Units 1 Through 4 Process Pond System Colstrip Steam Electric Station, Colstrip, Montana*	*Annual Hydrologic Report*	*Identified well OT-7 as having increase in concentrations of chemical constituents.*
December 2012	*PPL Montana, LLC Colstrip Steam Electric Station Administrative Order on Consent Plant Site Report*	*Plant Site History Report*	*Report identified well OT-7 as having declining water quality which had shown no improvement with time or passive groundwater capture. Noted that well OT-7 is completed in shallow fine-grained colluvium/alluvium above the main alluvial system and that yield of the well is very low. Passive capture is currently being performed at this very low yield well, typically being bailed dry after less than one gallon of water removed.*

NEAREST DOMESTIC OR STOCK WELL(S)*: (indicate direction, distance, and completion zone)

Well ID/GWIC ID (see Figure 5)	Approximate Distance from OT-7	Direction	Formation of Completion / (Depth)
BNSF Colstrip 2N #1 /182889	*Well is within one mile, actual location unknown*	*Unknown*	*Fox Hills? (1520 feet)*
BNSF Colstrip 2N #2 /182891	*Well is within one mile, actual location unknown*	*Unknown*	*Fort Union Bedrock (595.5 feet)*
BNSF Colstrip 2N #3 /182890	*Well is within one mile, actual location unknown*	*Unknown*	*Fort Union Bedrock (518.5 feet)*
Western Energy/14259	*3400 feet*	*east*	*Alluvium (20 feet)*
Western Energy/14260	*3800 feet*	*east*	*Fort Union Bedrock (610 feet)*
Montana Power Company/14262	*900 feet*	*west*	*Fort Union Bedrock (614 feet)*
Western Energy/14263	*900 feet*	*southwest*	*Fort Union Bedrock (450 feet)*

**No nearby domestic or stock wells are present in the targeted alluvium*.

DISTANCE FROM PROPERTY BOUNDARY: *Less than 100 feet. Potentially impacted well is downgradient of property boundary and is located opposite of a hydrologic divide (East Fork Armells Creek)*

PROPOSED ACTION: *This Interim Response Action is intended to further investigate groundwater quality conditions and permeability in the fine grained near surface alluvium/colluvium and the deeper coarser grained alluvium near well OT-7. Investigative measures include:*

- *Installation of groundwater monitoring wells in the deep and shallow alluvium near well OT-7;*
- *Groundwater quality sample collection and analysis at each new well*
- *Aquifer testing; and*
- *Reporting.*

Recommendations for additional evaluation or mitigation, if necessary, will be made following completion of the Interim Response Actions.

MAPS/FIGURES(attached):

- *Figure 1: Project Location Map*
- *Figure 2: Well Network of OT-7 Area.*
- *Figure 3: Geologic Cross Section of Plant Site and Project Area*
- *Figure 4. October 2012 Shallow Units Potentiometric Map,*
- *Figure 5. SC Iso-contour Map of Project Area*
- *Figure 6. Proposed New Well Locations*
- *Figure 7. Schedule*

SCHEDULE

The proposed timeline to complete the scope of work outlined above is included in Figure 6. Work described in this plan will begin within 30 days, weather permitting. Well installation and groundwater quality sampling is expected to be completed within 60 days. An interim report will be submitted within 60 days of well completion. The final evaluation report will be submitted approximately 180 days after work plan submittal.

REFERENCES

Hydrometrics, Inc. (2009). *31M Area Well and Capture System Installation, Startup, and Performance.* PPL Montana, LLC .

Hydrometrics, Inc. (April 2013). *Evaluation of 2012 Hydrologic Monitoring Data from Colstrip Units 1 through 4 Process Pond System Colstrip Steam Electric Station .*

Hydrometrics, Inc. (December 2012). *PPL Montana, LLC Colstrip Steam Electric Station Administrative Order On Consent Plant Site Report.*

Hydrometrics, Inc. (November 1998). *The Montana Power Company East Fork Armells Creek Slurry Spill Cleanup.*

INTERIM RESPONSE ACTION
GROUNDWATER INVESTIGATION IN THE OT-7 AREA
COLSTRIP STEAM ELECTRIC STATION, PPL MONTANA, LLC

Executive Summary

PPL Montana, LLC (PPL) monitors groundwater in the area surrounding the PPL Colstrip Steam Electric Station (Colstrip –SES) Plant Site to detect inconsistencies in water quality and/or quantity that may be attributable to seepage from ponds operated as part of their process. Observations made at monitoring wells include laboratory analysis for a suite of parameters indicative of process water impacts. Typical process water indicator parameters include Total Dissolved Solids (TDS), specific conductance (SC), sulfate, boron, chloride, and the ratio of dissolved calcium to magnesium. As monitoring data become indicative of the presence of process water, PPL mitigates impacts by converting existing wells or installing new groundwater capture wells.

Monitoring well OT-7 was installed in June 1993. The well was installed in shallow (total depth = 15 feet below ground) fine-grained (predominately clay) alluvium to monitor groundwater levels. Water quality samples were periodically sampled from the well. The record of water quality observations at the well has revealed a general pattern of declining water quality that began in 2004. Since that time, SC, TDS, sulfate, magnesium, and chloride have all increased in concentration from the original groundwater quality results at OT-7. Other water quality indices (e.g. boron) have not increased appreciably.

Groundwater from well OT-7 is purged periodically using a disposable bailer as a passive remediation method. Typically, the well will only yield a total of approximately 0.5 gallons before going dry. Low yield and slow recharge at well OT-7 suggest very low permeability in the shallow fine-grained alluvium that likely creates minimal flow velocity. Potential sources for changes in the water quality may include the process ponds, past remediation a short distance downgradient from the well, railroad tracks, access road, and the original town site. However, based on the very low yield, and likely low flow velocities, the source of groundwater impacts at OT-7 are likely to be highly localized.

The work plan described in this Interim Response Action is intended to further investigate groundwater quality conditions and permeability in the alluvium near OT-7. Investigative measures described herein include installation of five groundwater monitoring wells, groundwater quality sample collection and analysis, and aquifer testing. Recommendations for additional evaluation or mitigation, if necessary, will be made following completion of the Interim Response Actions.

Introduction

Background

PPL Montana, LLC (PPL) monitors groundwater on and around the perimeter (both upgradient and downgradient) of the Colstrip Steam Electric Station (Colstrip-SES) Plant Site to detect inconsistencies in water quality that may be attributable to seepage from process ponds. The process ponds are used primarily for storage of process water, fly ash, and bottom ash generated during operation of four coal-fired electric power generation units. The presence of process water in groundwater is typically indicated by a rise in Specific Conductance (SC), Total Dissolved Solids (TDS), sulfate, boron, and chloride. Another indicator of process water impacts is a decrease in the ratio of dissolved calcium to magnesium. As monitoring data become indicative of potential impacts, PPL installs groundwater capture systems or converts monitoring wells to recovery wells to mitigate the influence of the seepage on local groundwater.

Monitoring well OT-7 was originally installed with a network of wells to investigate groundwater levels below Colstrip's Original Town Site. Much of the Original Town Site is on the opposite side of a hydrologic divide, formed by East Fork Armells Creek, from water originating at the Colstrip Steam Electric Station (Colstrip SES). Castle Rock Lake (Surge Pond), a reclaimed coal mining area, railroad tracks, the service access road, and Colstrip's original town site are located on the west side of the hydrologic divide, upgradient of OT-7. Recharge through mine spoils may also alter the character of groundwater in downgradient wells. Calcium and/or magnesium chloride are used routinely to treat the access road directly uphill from OT-7. Runoff from the road could potentially pool near OT-7 and provide recharge to the shallow sediments.

Flow from the Plant site process ponds through the shallow fine-grained alluvium is unlikely due to the low permeability and distance. If the area is impacted by Plant Site process waters the flow path would more likely be from flow in the deeper coarser grained alluvium flowing upward into the finer grained alluvium near OT-7. Current evidence indicates this scenario is highly unlikely. Another potential source is residual shallow impacts associated with cleanup of process waters from a pipeline spill that occurred downstream of the site in the late 1990's.

Staging and containment were conducted near but downhill of OT-7. The likelihood of impacts from the pipeline break spill are considered relatively low.

This Interim Response Action addresses potentially impacted groundwater conditions found at monitoring well OT-7, which is located at the easternmost boundary of the Original Town Site and near the northernmost end of the area generally referred to, (for groundwater monitoring purposes), as the Plant Site. The general project area addressed in this Interim Response Action is presented in Figure 1. A map of the existing groundwater monitoring and capture well network is included as Figure 2.

Monitoring well OT-7 was installed in 1993. Lithology of the OT-7 project area consists of a sequence of fine to coarse-grained alluvial deposits underlain by Tertiary bedrock of the Tongue River Member of the Fort Union Formation. Groundwater is present in both the fine-grained alluvium and in deeper coarse sediments. Well OT-7 was installed in shallow (total depth = 15 feet below ground) fine-grained (predominately clay) alluvium. Water levels in OT-7 typically range from about 11 feet below ground surface (bgs) to more than 15 feet bgs (dry). The vertical gradient at OT-7 between the shallow and coarser sediments is unknown. A cross section of the Plant Site parallel to the general direction of groundwater flow is included in Figure 3.

Well OT-7 is situated near the convergence of two distinctly different groundwater flow regimes. East Fork Armells Creek acts as a hydrologic divide. Groundwater flows from west to east across the Original Town Site towards East Fork Armells Creek. Flow in East Fork Armells Creek Alluvium nearer to the creek is from south to north in the direction of surface water flow. Water east of the creek generally flows to the northwest; and water west of the creek generally drains to the northeast (toward the creek). A map of the potentiometric surface in alluvium beneath and adjacent to the Plant Site is presented in Figure 4.

The record of groundwater sampling results at OT-7 has revealed a general pattern of declining water quality that began in 2004. Since that time, SC, TDS, sulfate, magnesium, and chloride have all increased in concentration from the original groundwater quality results at OT-7. Boron has not increased to the same magnitude as other indicator parameters and calcium has not varied at all. This suggests that the source of recharge responsible for water quality changes at OT-7 is

either a low volume source with little or no boron and calcium; or that the source has concentrations of boron or calcium that are very similar to background concentrations at the well. The lack of boron or calcium, if that be the case, may not noticeably dilute existing concentrations if the recharge source is of minimal contributing flow. Conversely, even a high volume source of recharge would not create increases in a given parameter if the concentrations in the two mixed sources were equal. An SC iso-contour map of the OT-7 project area is included in Figure 5.

Groundwater from well OT-7 is purged periodically using a disposable bailer. Typically, the well will only yield a total of approximately 0.5 gallons before going dry. Low yield and slow recharge at well OT-7 suggest very low permeability in the shallow fine-grained alluvium that likely creates minimal flow velocity. Thus, the source of groundwater impacts at OT-7 may be highly localized. In any case, the source of groundwater quality variability at well OT-7 is unknown but may include process water impacts, artificial recharge from town site water use practices (irrigation, storm-water runoff, etc.), natural recharge through mine spoils or other sources of soluble salts in the sub-surface, the addition of dust suppressant or other chemicals on nearby roads, or a combination of any of the above.

Well 83A is located approximately 200 feet east and slightly up-gradient of OT-7 based on the direction of flow in Armells Creek alluvium. Well 83A was advanced deeper than the fine grained alluvium and was completed in sand and gravel at a total depth of 36 ft-bgs. Bedrock was encountered in the well at total depth. Water quality observations at well 83A have remained constant throughout its period of record from 2004 to 2013; and concentrations of typical process water indicator parameters are consistent with those expected for alluvium of Armells Creek. The apparent disparity between water quality in the deeper alluvium versus that in shallow clay is another indication that the source of water quality impacts at OT-7 is localized. Note however that groundwater flux through the deeper alluvium is much greater than that of the fine grained alluvium; thus, the deeper groundwater can likely buffer low volume inputs of dissolved constituents.

Scope of Work

The purpose of this Interim Response Action is to investigate groundwater conditions near well OT-7 with the intent of differentiating between water quantity and quality in the deeper alluvium and that found at well OT-7. The Scope of Work proposed for this Interim Response Action includes the following four tasks:

- Task 1 –Well Installation;
  - Five monitoring wells will be installed in the project area.
  - A single well will be paired with existing well OT-7. This well will be completed at the base of coarse alluvium that is thought to exist beneath the fine-grained interval of completion at well OT-7.
  - A pair of wells targeting shallow fine-grained alluvium and deeper coarse alluvium will be installed approximately 100 feet to the southeast of well OT-7- between well OT-7 and the Plant Site.
  - A pair of wells targeting shallow fine-grained alluvium and deeper coarse alluvium will be installed approximately 100 feet northeast of well OT-7.
- Task 2 – Groundwater Quality Sampling;
  - Water quality samples will be collected from each of the new wells and analyzed for PPL's typical parameter list.
- Task 3 – Pumping and/or Slug Testing; and
  - A pumping test or slug test will be performed at each of the new wells. A slug test will be performed at existing well OT-7.
- Task 4 – Data Analysis and Reporting.
  - Results of well installation will be summarized in an Interim Report.
  - A Final Report of sampling and testing results will be prepared for submittal upon completion of the investigation.

<u>Task 1 - Well Installation</u>

This task involves the installation, completion, and development of five wells. The wells will be installed at the approximate locations shown on Figure 6. As noted, location one (1) will fully penetrate and target groundwater in coarse alluvial deposits near existing well OT-7. Paired wells will be installed at locations two (2) and three (3). The paired wells will target

groundwater in both the fine-grained alluvium and deeper coarse-grained alluvium. Typical well construction will consist of the following materials/approach:

- Steel casing will be installed through unconsolidated sediments and fill as needed;
- Boreholes will be advanced using air-rotary methods to the target interval;
- Schedule 40 PVC – 4.5-inch, with 25-slot perforations, will be installed across the water-bearing horizon;
- Schedule 40 PVC – 4.5-inch well casing will be connected to the perforated interval and extend to approximately two feet above ground surface;
- A 4.5-inch PVC cap will be installed at the bottom of the well casing;
- Filter sand (10/20 silica sand) will be placed in the annulus across and at least two feet above the perforated interval;
- Bentonite (3/8-inch) chips will be positioned in the annulus above the sand pack;
- An expandable plug will be placed at the top of the 4.5-inch PVC casing;
- Protective surface casing will be installed with a locking steel lid; and
- Concrete pads will be poured around the protective casing at the ground surface.

Cuttings from each boring will be logged for lithology, including rock type, texture, color, relative moisture, and origin (alluvium, colluvium, bedrock, etc.) by an engineer or geologist. A log of borehole lithology and well construction will be prepared for each well and submitted to PPL and the Montana Board of Water Well Contractors.

Following completion, wells will be developed using either air-lift or bailing methods until water, cuttings, fines, and debris are sufficiently removed from the well casing to allow pumping with a submersible pump. Field SC will be measured during and at the end of development. SC stabilization will also be used to determine adequate well development. Estimates of well yield will be made during development by measuring the volumetric rate of bailed or ejected water in a calibrated bucket.

After the new wells are developed, synoptic groundwater level measurements will be made at new and existing wells in the OT-7 Area. A water table or potentiometric surface map will be created with the water level elevations to better refine our understanding of groundwater flow

direction in the target alluvium. Water levels will be used to establish the vertical gradient, if any, between shallow and deep alluvium.

Task 2 – Groundwater Quality Sampling

Groundwater quality samples will be collected from new wells using methods consistent with Hydrometrics, Inc. Standard Operating Procedures (SOP) and methods commonly used by PPL for operational monitoring. Samples will be collected with a submersible sampling pump or a disposable bailer. Field parameters (SC, pH, temperature) will be measured and recorded at the time of sample collection. Samples will be submitted to Energy Laboratories in Billings, Montana for analysis of the parameters listed in Table 1.

TABLE 1. New Monitoring Well Analytical Parameters

- **Physical properties**
  - pH
  - Specific Conductance
  - Total Dissolved Solids
- **Common Ions**
  - Alkalinity, Total as $CaCO_3$
  - Bicarbonate as HCO_3
  - Carbonate as CO_3
  - Chloride
  - Sulfate
  - Magnesium
  - Calcium
  - Potassium
  - Sodium
  - Bromide
- **Nutrients**
  - Nitrate plus nitrite
- **Dissolved Metals**
  - Boron
  - Selenium
  - Mercury

Task 3 – Pumping and Slug Tests

A pumping test or slug test will be conducted at each proposed new well. A pumping test will be conducted if sufficient yield (greater than approximately 1.5 gpm) is estimated during development. Wells with less than 1.5 gpm will be slug tested. Pumping tests will consist of 100 minutes of pumping followed by a recovery period. Water levels will be measured during the pumping and recovery phases of the test using pressure transducers with data loggers and/or electronic water level probes. Alternatively, slug tests will be conducted by displacing water from the well casing using a "slug" and measuring groundwater recovery following the slug injection or withdrawal. Water levels will be measured in slug tested wells using electronic pressure transducers and/or electronic water level probes. Pump test and/or slug test data will be entered into Aqtesolv software for analysis. Test curves will be fit with appropriate analytical solutions included in the software. Results of the tests will be used in the evaluation of groundwater flow in the area, for groundwater modeling purposes, and to design mitigation measures, if necessary.

Existing well OT-7 will be slug tested as part of this Interim Response Action. The slug test will be conducted using methodology described above; and results will be used to contrast hydraulic properties between the upper fine-grained alluvium and the deeper sand and gravels. A slug test is planned at OT-7 in lieu of a pumping test because the well is thought to yield minimal groundwater and to minimize discharge of groundwater with high levels of dissolved constituents.

Task 4 – Data Analysis and Report Preparation

An interim report, including a narrative of monitoring well installation, will be written for submittal to the Montana Department of Environmental Quality (MT-DEQ). Per requirements of the Administrative Order On Consent Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System and Colstrip Steam Electric Station, Colstrip, Montana, the interim report will be submitted within 60 days of completing new wells. However, the final evaluation report will not be submitted until results of the groundwater quality analyses and aquifer testing are evaluated. The evaluation will begin immediately upon installation of the new monitoring wells. The Final Report will contain a map showing the locations of the new wells,

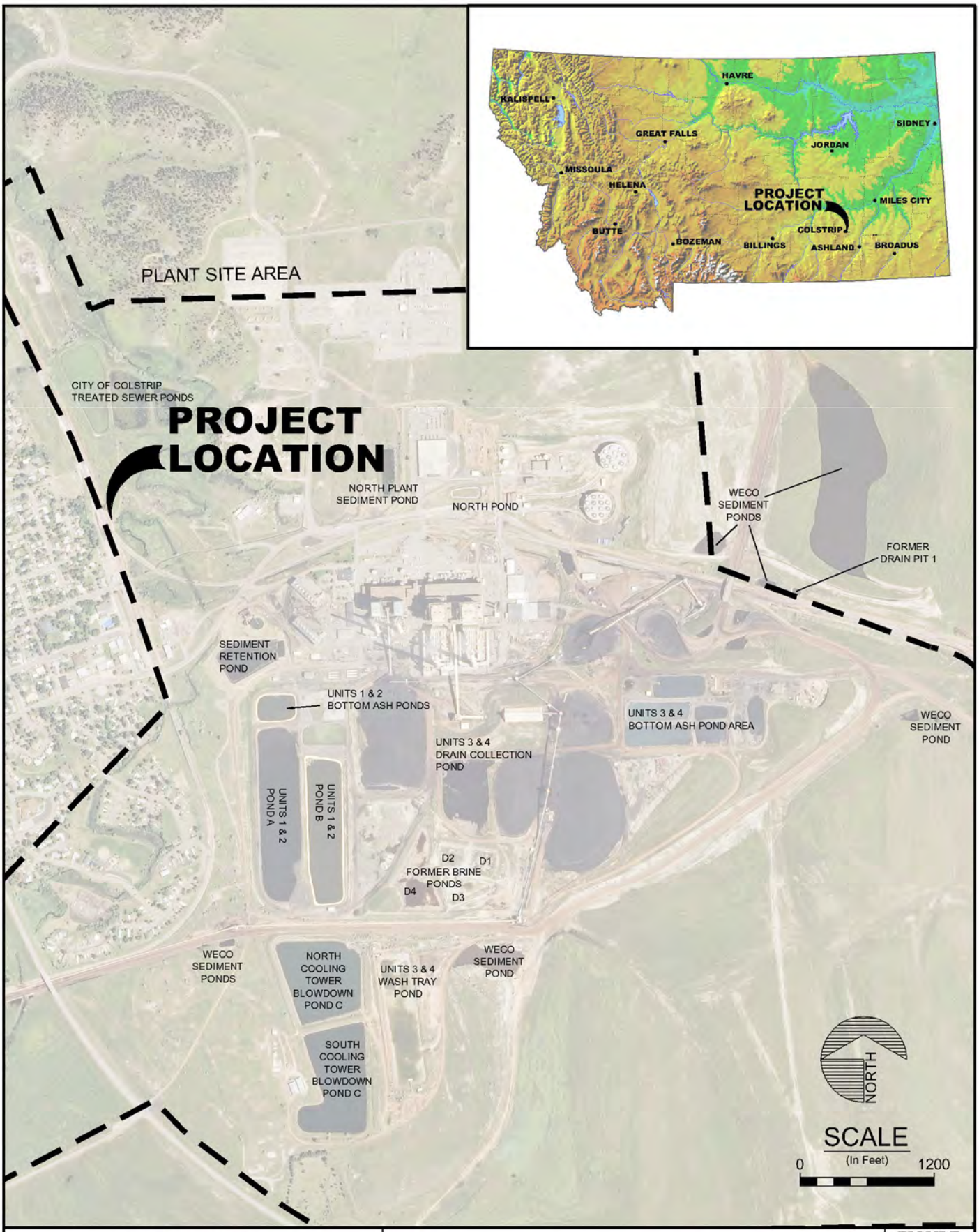
well logs, water quality results, appropriate analyses of all data, and recommendations for process water mitigation and/or additional evaluation in this area.

Schedule

The proposed timeline to complete the scope of work outlined above is included in Figure 7. Work described in this plan will begin within 30 days. Well installation and groundwater quality sampling is expected to be completed within 60 days. An interim report will be submitted within 60 days of well completion. The final evaluation report will be submitted approximately 180 days after work plan submittal.

Figures

- *Figure 1. Project Location Map*
- *Figure 2. Existing Well Network.*
- *Figure 3. Geologic Cross Section of Project Area*
- *Figure 4. Potentiometric Surface Map of Alluvium in Project Area*
- *Figure 5. SC Iso-contour Map of Project Area*
- *Figure 6. Proposed New Well Locations*
- *Figure 7. Schedule*



PPL MONTANA, LLC COLSTRIP STEAM ELECTRIC STATION, INTERIM RESPONSE ACTION GROUNDWATER INVESTIGATION IN THE OT-7 AREA	**PROJECT LOCATION MAP**	FIGURE **1**

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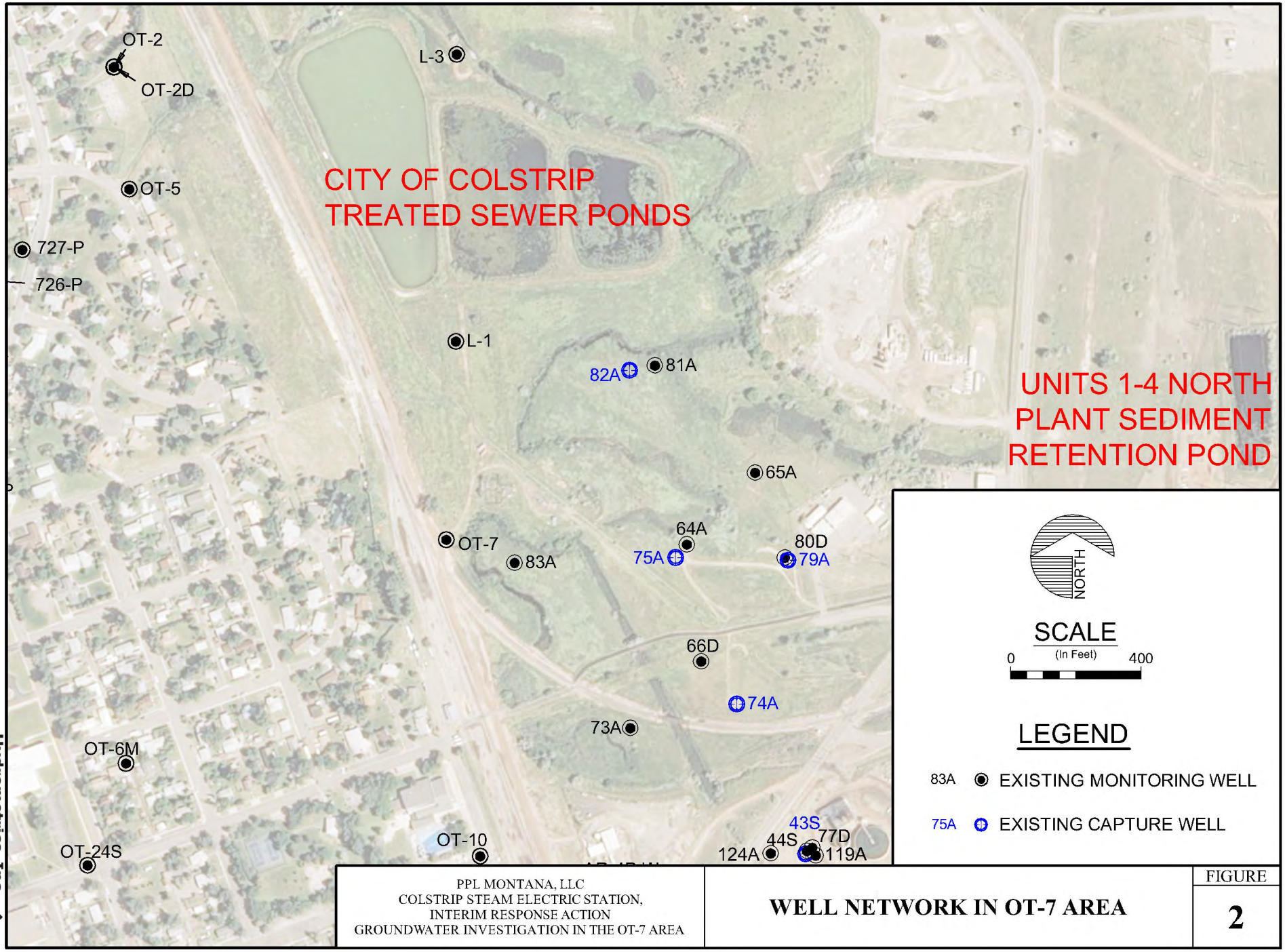

PPL MONTANA, LLC
COLSTRIP STEAM ELECTRIC STATION,
INTERIM RESPONSE ACTION
GROUNDWATER INVESTIGATION IN THE OT-7 AREA

WELL NETWORK IN OT-7 AREA

FIGURE
2

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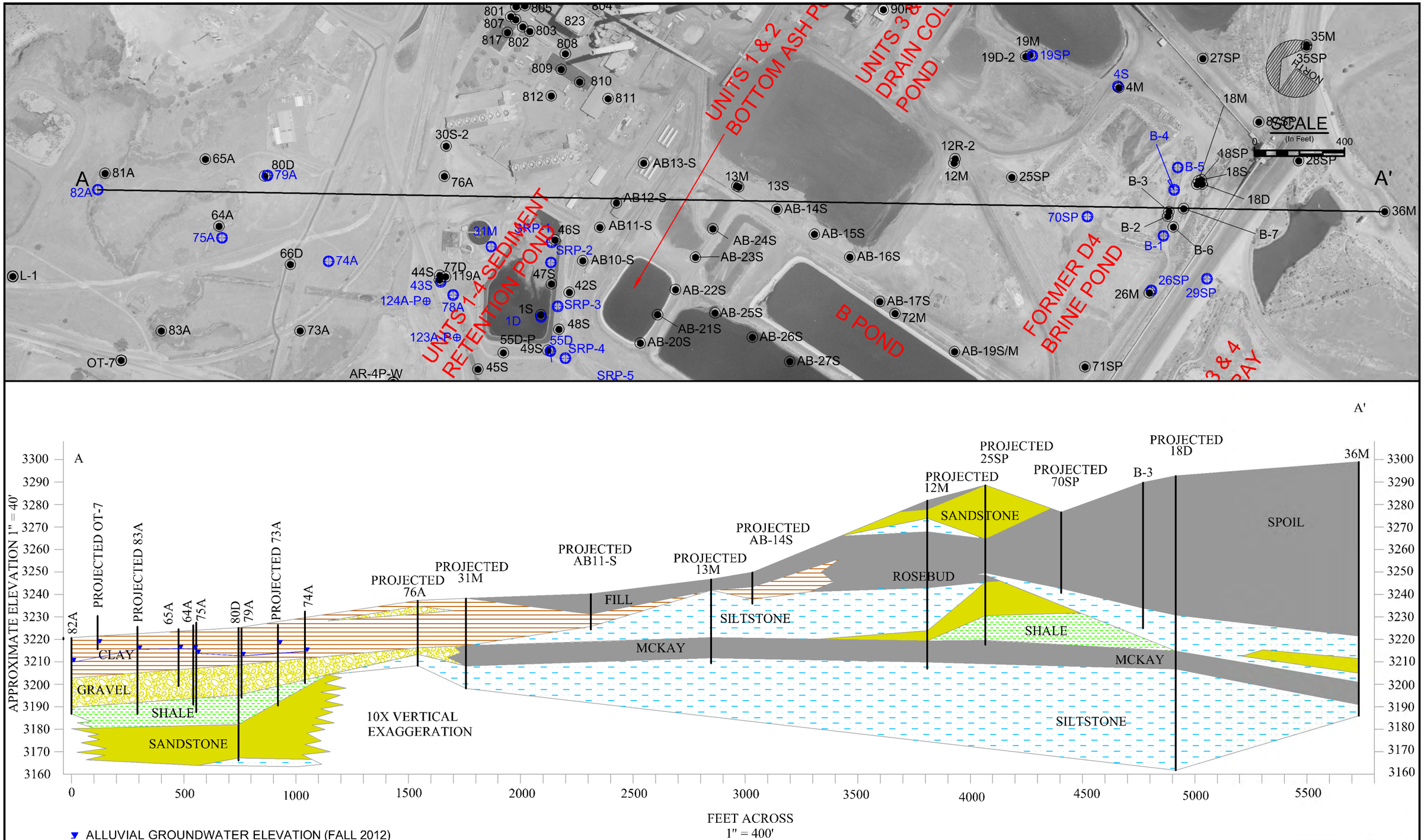

PPL MONTANA, LLC COLSTRIP STEAM ELECTRIC STATION INTERIM RESPONSE ACTION GROUNDWATER INVESTIGATION IN THE OT-7 AREA	**GEOLOGIC CROSS SECTION THROUGH THE PLANT SITE**	FIGURE **3**

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INTERIM RESPONSE ACTION MONITORING WELL
INSTALLATION AND POTENTIAL CAPTURE WELL
CONVERSION NEAR WELL 6M
PPL MONTANA'S COLSTRIP STEAM ELECTRIC
STATION - PLANT SITE

OCTOBER 2012
SHALLOW UNITS
POTENTIOMETRIC SURFACE

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AUTOCAD 2000 DRAWING (DWG)
FIGURE
4

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PPL MONTANA, LLC
COLSTRIP STEAM ELECTRIC STATION
INTERIM RESPONSE ACTION
GROUNDWATER INVESTIGATION
IN THE OT-7 AREA

MAY 2012
SHALLOW UNITS SPECIFIC CONDUCTANCE ISOCONTOUR MAP

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AUTOCAD 2000 DRAWING (DWG)
FIGURE
5

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LEGEND

83A — EXISTING MONITORING WELL

SHALLOW ALLUVIUM
DEEP ALLUVIUM — PROPOSED MONITORING WELL(S)

NORTH

SCALE
(In Feet)
0 100

PPL MONTANA, LLC COLSTRIP STEAM ELECTRIC STATION, INTERIM RESPONSE ACTION GROUNDWATER INVESTIGATION IN THE OT-7 AREA	**PROPOSED NEW WELL LOCATIONS**	FIGURE **6**

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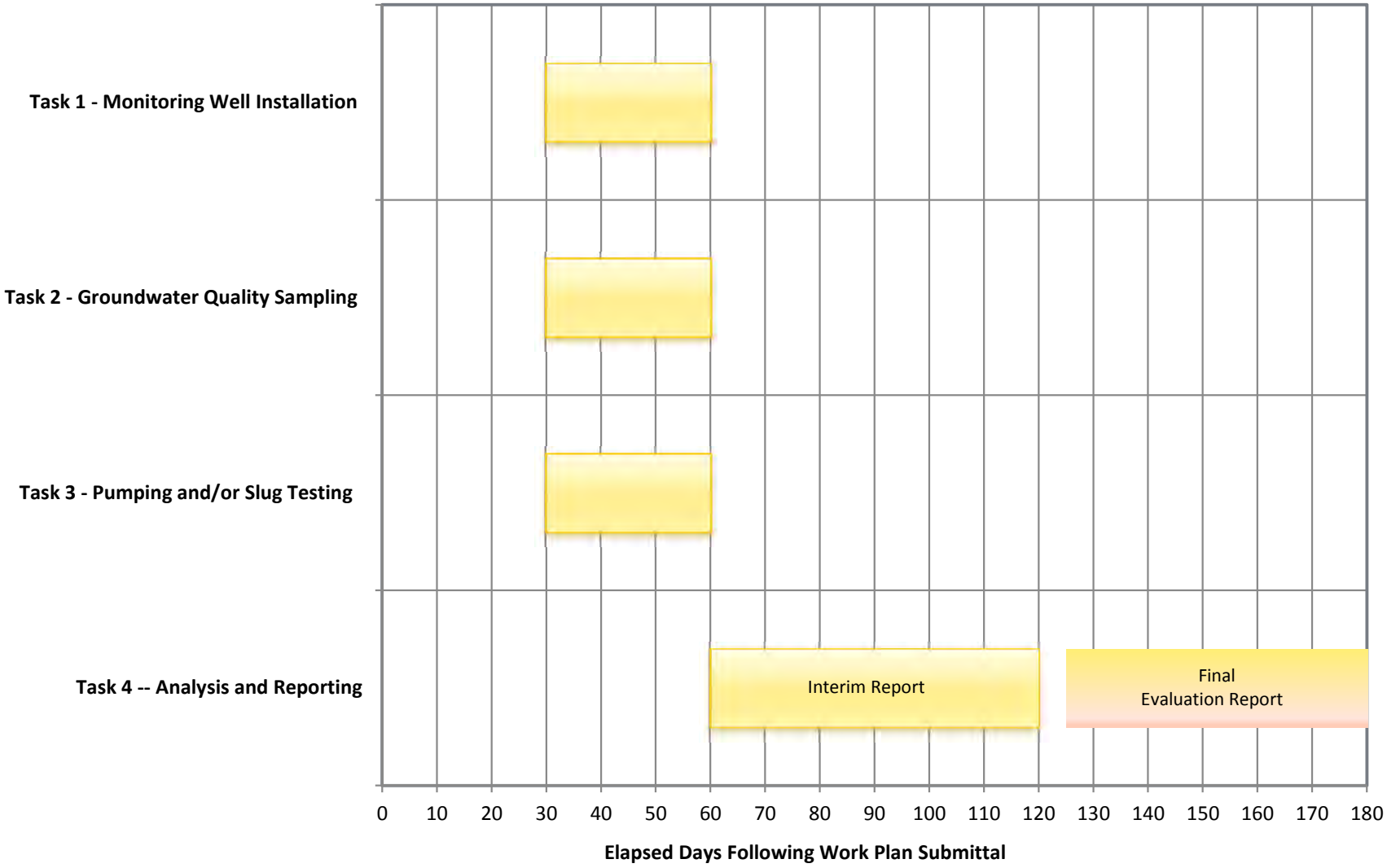
FIGURE 7. SCHEDULE -- INTERIM RESPONSE ACTION GROUNDWATER INVESTIGATION IN THE OT-7 AREA COLSTRIP STEAM ELECTRIC STATION, PPL MONTANA, LLC



PPL MONTANA, LLC

COLSTRIP STEAM ELECTRIC STATION

INTERIM RESPONSE ACTION
GROUNDWATER INVESTIGATION IN THE OT-7 AREA

Pursuant to: ADMINISTRATIVE ORDER ON CONSENT REGARDING IMPACTS RELATED TO WASTEWATER FACILITIES COMPRISING THE CLOSED-LOOP SYSTEM AT COLSTRIP STEAM ELECTRIC STATION, COLSTRIP, MONTANA SECTION XI - SUBMISSIONS

CERTIFICATION:

I, the undersigned, hereby certify that this document was prepared under my direction and to the best of my knowledge the information contained herein is correct and accurate.

Mike Holzwarth	Compliance Professional	11/5/13
Name	Title	Date