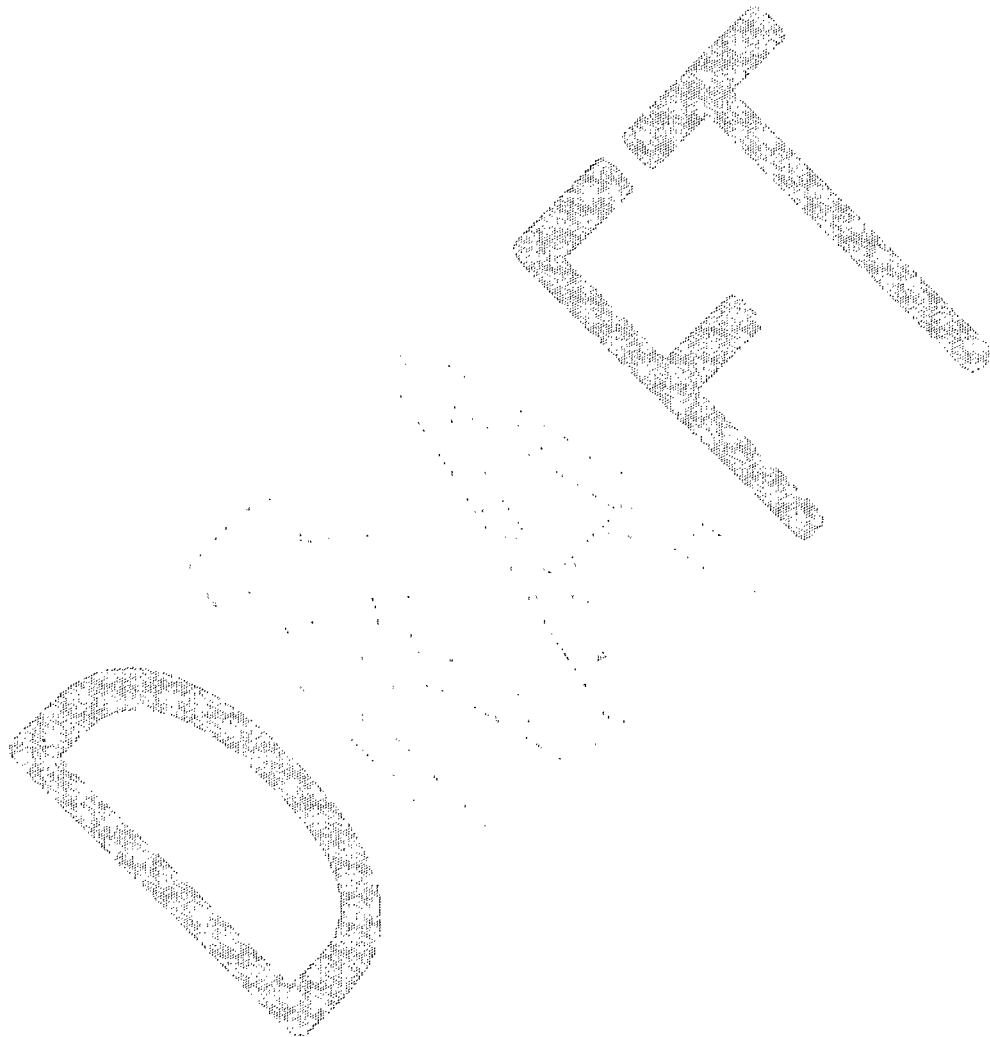


APPENDICES

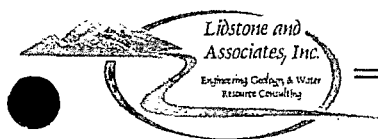
Appendix A	BLM ROW Access Agreement
Appendix B	State of Wyoming Access Agreement
Appendix C	Private Landowner Access Agreement
Appendix D	Test Hole Lithology and Existing Monitoring Well Completions
Appendix E	New Monitoring Well Completions
Appendix F	Laboratory Water Quality Reports
Appendix G	Well Recovery Test Analysis Report



Appendix A

BLM ROW Access Agreement





Lidstone and Associates, Inc.
Engineering, Geology and Water Resource Consultants

February 16, 2015

Ms. Debra Larsen
U.S. Bureau of Land Management
Lander Field Office
1335 Main Street
Lander, WY 82520

RE: Right of Way Grant Application for Monitoring Wells and Associated Access at the American Nuclear Corporation Mill Tailings Site Located in Gas Hills, Fremont County, Wyoming

Dear Ms. Larsen:

Lidstone and Associates, Inc. (LA), authorized agent for the Wyoming Department of Environmental Quality/Land Quality Division (LQD), is providing for your review and approval a Right-of-Way (ROW) Grant Application to allow access to and construction of monitoring wells on federal lands that are administered by the U.S. Bureau of Land Management (BLM). Approval of this ROW Grant application would allow access to and construction of up to 11 groundwater monitoring wells and/or test holes to be completed on BLM administered surface. Up to seven additional wells will be completed on private or state surface, but, in all cases, at least partial access will cross BLM surface. The purpose of this well construction project is to provide necessary groundwater quality information to support the State of Wyoming's efforts to document and clean up any adverse impacts related to historical uranium milling at the abandoned American Nuclear Corporation (ANC) mill tailings site. Once the wells are completed, developed and tested, semi-annual to annual sampling of these wells will take place for approximately the next 20 years. LA wishes to commence construction activities as soon as the ROW Grant has been approved and would like to complete the work by late summer 2015. Well construction activities will be in accordance with BLM conditions and construction timing constraints.

Attached for your review and approval are the following completed documents:

- SF 299, Application for Transportation and Utility Systems and Facilities on Federal Lands;
- Plan of Development;
- Right-of-Way Grant Application Letter of Authorization;
- Attachment 1--Environmental Report prepared by Real West Natural Resource Consulting; and
- Attachment 2--June 12, 2014 Confirmatory Order Between LQD and NRC.

Ms. Debra Larsen
February 16, 2015
Page 2

Please note that the cultural resource survey report was submitted to your office under separate cover by our cultural resources sub consultant, LTA, Inc.

LA and LQD appreciate your time and effort in reviewing and approving the attached ROW Grant application. Please do not hesitate to call me or Chris Lidstone should you have any questions.

Sincerely,
LIDSTONE AND ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'P. Hildenbrand', with a long horizontal flourish extending to the right.

Paul Hildenbrand, P.G., R.G.
Senior Geologist

PRH:rce

Enclosure
Sent via: First Class Mail and Email

APPLICATION FOR TRANSPORTATION AND
UTILITY SYSTEMS AND FACILITIES
ON FEDERAL LANDS

FORM APPROVED
OMB Control Number: 0596-0082
Expiration Date: 1/31/2017

FOR AGENCY USE ONLY

NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

Application Number

Date Filed

1. Name and address of applicant (include zip code)

WDEQ/LQD
Attn: Muthu Kuchanur
122 West 25th Street
Cheyenne, WY 82002

2. Name, title, and address of authorized agent if different from item 1 (include zip code)

Lidstone and Associates, Inc.
Attn: Chris Lidstone
4025 Automation Way, Bldg E
Fort Collins CO 80525

3. Telephone (area code)

Applicant
307-777-7756
Authorized Agent
970-223-4705

4. As applicant are you? (check one)

- a. ☐ Individual
b. ☐ Corporation*
c. ☐ Partnership/Association*
d. ☒ State Government/State Agency
e. ☐ Local Government
f. ☐ Federal Agency

* If checked, complete supplemental page

5. Specify what application is for: (check one)

- a. ☒ New authorization
b. ☐ Renewing existing authorization No.
c. ☐ Amend existing authorization No.
d. ☐ Assign existing authorization No.
e. ☐ Existing use for which no authorization has been received *
f. ☐ Other*

* If checked, provide details under item 7

6. If an individual, or partnership are you a citizen(s) of the United States? ☐ Yes ☐ No

7. Project description (describe in detail): (a) Type of system or facility, (e.g., canal, pipeline, road); (b) related structures and facilities; (c) physical specifications (Length, width, grading, etc.); (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction (Attach additional sheets, if additional space is needed.)

This project consists of access to and construction of up to 11 additional test holes and/or ground water monitoring wells on federal (BLM) surface. Up to 7 wells will be completed on private or state lands, but in all cases access will cross federal surface. Once the wells are completed and tested, semi-annual to annual sampling of these wells will take place for the next 20 years. Work will commence as soon as this ROW is granted and must be completed by late summer, 2015. Well construction and timing will be in accordance with BLM conditions and construction timing constraints. See attached Plan of Development for further detail.

8. Attach a map covering area and show location of project proposal

9. State or Local government approval: ☐ Attached ☐ Applied for ☒ Not Required

10. Nonreturnable application fee: ☐ Attached ☒ Not required

11. Does project cross international boundary or affect international waterways? ☐ Yes ☒ No (if "yes," indicate on map)

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

The WDEQ/LQD is technically and financially capable of completing the project described in this application.

13a. Describe other reasonable alternative routes and modes considered.

The location of the wells were determined to meet hydrogeologic objectives. The best available access routes to the wells were selected and are shown on Figure 1 of the Plan of Development. Selection criteria included: (1) use of existing two tracks; (2) minimal overland travel; and (3) minimal environmental disturbance.

b. Why were these alternatives not selected?

As stated above, the best possible access routes were selected. The drill sites were based on geological considerations and requirements. Alternative routes were considered but were eliminated because they disturbed more native vegetation or channel/riparian areas. Use of existing two tracks was preferred.

c. Give explanation as to why it is necessary to cross Federal Lands.

Access to and construction of these wells is necessary to provide monitoring data for the State of Wyoming's effort to clean up and close the American Nuclear Uranium Mill Tailings. Some of the proposed wells are located on BLM land, but access to all wells at least partially cross Federal Lands. See the Plan of Development for more details.

14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. (Specify number, date, code, or name)

WYW 168561, Right-of-Way Grant issued July 17, 2014

15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative; and (c) expected public benefits.

The project is necessary to provide essential water quality monitoring data to support the State of Wyoming's efforts to document and clean up any adverse impacts related to historical uranium milling at the site. This work is in accordance with stipulations in the USNRC revised confirmatory order dated June 12, 2014 (Attachment 2).

16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

There will be negligible effects on the population of the area. The area is remote with no residences within 10 miles of the site. The only other alternative is to do nothing which would not benefit the State of Wyoming, or the BLM's surface interests. See the Plan of Development for more details

17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.

Temporary impacts while installing the wells will be minimal because of the type of equipment and the type of installation that will be used. The long term effects to air quality, visual impacts, surface and ground water quality and quantity, streams, noise levels, and the surface will be negligible.

18. Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

LQD has performed environmental and cultural resource surveys at and around each proposed drill site. Based on the survey results, impacts to wildlife, vegetation and cultural resources will be negligible. The Environmental Report is Attachment 1. The cultural report was provided by LTA to BLM directly under separate cover.

19. State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities.

"Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901 et seq., and its regulations. The term hazardous materials also includes any nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.

No hazardous materials or hazardous wastes will be used, produced, transported or stored on or within the right-of-way facilities or used in the construction, operation, maintenance or termination of any right-of-way facilities.

20. Name all the Department(s)/Agency(ies) where this application is being filed.

U.S.BLM, Lander Field Office, 1335 Main Street, Lander, WY 82520, Attn: Ms. Debra Larsen

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge.

Signature of Applicant



Date

Feb. 16, 2015

Title 18, U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

GENERAL INFORMATION
ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest Lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, and National Forest Monuments.

Transportation and utility systems and facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.
2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom.
3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.
4. Systems for the transmission and distribution of electric energy.
5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.
6. Improved right-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.
7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application must be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

Department of Agriculture
Regional Forester, Forest Service (USFS)
Federal Office Building,
P.O. Box 21628
Juneau, Alaska 99802-1628
Telephone: (907) 586-7847 (or a local Forest Service Office)

Department of the Interior
Bureau of Indian Affairs (BIA)
Juneau Area Office
Federal Building Annex
9109 Mendenhall Mall Road, Suite 5
Juneau, Alaska 99802
Telephone: (907) 586-7177

Department of the Interior
Bureau of Land Management
222 West 7th Avenue
P.O. Box 13
Anchorage, Alaska 99513-7599
Telephone: (907) 271-5477 (or a local BLM Office)

U.S. Fish & Wildlife Service (FWS)
Office of the Regional Director
1011 East Tudor Road
Anchorage, Alaska 99503
Telephone: (907) 786-3440

National Park Service (NPA)
Alaska Regional Office, 2225
Gambell St., Rm. 107
Anchorage, Alaska 99502-2892
Telephone: (907) 786-3440

Note - Filings with any Interior agency may be filed with any office noted above or with the Office of the Secretary of the Interior, Regional Environmental Office, P.O. Box 120, 1675 C Street, Anchorage, Alaska 9513.

Department of Transportation
Federal Aviation Administration
Alaska Region AAL-4, 222 West 7th Ave., Box 14
Anchorage, Alaska 99513-7587
Telephone: (907) 271-5285

NOTE - The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual department/agencies may authorize the use of this form by applicants for transportation and utility systems and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

SPECIFIC INSTRUCTIONS
(Items not listed are self-explanatory)

- 7 Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required.
- 8 Generally, the map must show the section(s), township(s), and range(s) within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps. The responsible agency will provide additional instructions.
- 9, 10, and 12 The responsible agency will provide additional instructions.
- 13 Providing information on alternate routes and modes in as much detail as possible, discussing why certain routes or modes were rejected and why it is necessary to cross Federal lands will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate routes and modes as related to current technology and economics.
- 14 The responsible agency will provide instructions.
- 15 Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions.
- 16 through 19 Providing this information in as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use a sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, do not address this subject. The responsible agency will provide additional instructions.

Application must be signed by the applicant or applicant's authorized representative.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, the application may be rejected.

DATA COLLECTION STATEMENT

The Federal agencies collect this information from applicants requesting right-of-way, permit, license, lease, or certification for the use of Federal lands. The Federal agencies use this information to evaluate the applicant's proposal. The public is obligated to submit this form if they wish to obtain permission to use Federal lands.

SUPPLEMENTAL

NOTE: The responsible agency(ies) will provide instructions	CHECK APPROPRIATE BLOCK	
	ATTACHED	FILED*
I - PRIVATE CORPORATIONS		
a. Articles of Incorporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Corporation Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
c. A certification from the State showing the corporation is in good standing and is entitled to operate within the State	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate.	<input type="checkbox"/>	<input type="checkbox"/>
f. If application is for an oil or gas pipeline, describe any related right-of-way or temporary use permit applications, and identify previous applications.	<input type="checkbox"/>	<input type="checkbox"/>
g. If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	<input type="checkbox"/>	<input type="checkbox"/>
II - PUBLIC CORPORATIONS		
a. Copy of law forming corporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Proof of organization	<input type="checkbox"/>	<input type="checkbox"/>
c. Copy of Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. If application is for an oil or gas pipeline, provide information required by item "I - f" and "I - g" above.	<input type="checkbox"/>	<input type="checkbox"/>
III - PARTNERSHIP OR OTHER UNINCORPORATED ENTITY		
a. Articles of association, if any	<input type="checkbox"/>	<input type="checkbox"/>
b. If one partner is authorized to sign, resolution authorizing action is	<input type="checkbox"/>	<input type="checkbox"/>
c. Name and address of each participant, partner, association, or other	<input type="checkbox"/>	<input type="checkbox"/>
d. If application is for an oil or gas pipeline, provide information required by item "I - f" and "I - g" above.	<input type="checkbox"/>	<input type="checkbox"/>

*If the required information is already filed with the agency processing this application and is current, check block entitled "Filed." Provide the file identification information (e.g., number, date, code, name). If not on file or current, attach the requested information.

NOTICES

Note: This applies to the Department of Agriculture/Forest Service (FS)

This information is needed by the Forest Service to evaluate the requests to use National Forest System lands and manage those lands to protect natural resources, administer the use, and ensure public health and safety. This information is required to obtain or retain a benefit. The authority for that requirement is provided by the Organic Act of 1897 and the Federal Land Policy and Management Act of 1976, which authorize the secretary of Agriculture to promulgate rules and regulations for authorizing and managing National Forest System lands. These statutes, along with the Term Permit Act, National Forest Ski Area Permit Act, Granger-Thye Act, Mineral Leasing Act, Alaska Term Permit Act, Act of September 3, 1954, Wilderness Act, National Forest Roads and Trails Act, Act of November 16, 1973, Archeological Resources Protection Act, and Alaska National Interest Lands Conservation Act, authorize the Secretary of Agriculture to issue authorizations or the use and occupancy of National Forest System lands. The Secretary of Agriculture's regulations at 36 CFR Part 251, Subpart B, establish procedures for issuing those authorizations.

BURDEN AND NONDISCRIMINATION STATEMENTS

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

**PLAN OF DEVELOPMENT
WDEQ/LQD GAS HILLS MONITOR WELL INSTALLATION AND OPERATION
AMERICAN NUCLEAR URANIUM MILL TAILINGS SITE**

1. Purpose and Need for the Facility

The American Nuclear Corporation (ANC) began mining and milling uranium ore in the Gas Hills Uranium District in eastern Fremont County, Wyoming in the early 1960's. As part of the milling effort, ANC generated many thousands of cubic yards of unsuitable processed wastes known as uranium mill tailings, a slightly radioactive by-product material, resulting from their milling operations. The generation and permanent closure of this mill waste is regulated by the U. S. Nuclear Regulatory Commission (NRC) under the authority of the Atomic Energy Act of 1954, as amended. ANC was in the decommissioning/reclamation phase when, in 1994, they announced that they were discontinuing all operations and going out of business, thereby effectively "abandoning the site" and forfeiting their reclamation responsibilities and remaining reclamation bond. Up to this point, ANC had completed partial decommissioning and reclamation of their uranium ore processing facilities, including: (1) demolition and reclamation of the mill, (2) re-routing of Willow Springs Draw away from Tailings Pond No. 2, (3) reshaping and placement of an interim earthen cover over the processed material tailings of both tailings ponds, and (4) installation of 13 monitoring wells down gradient of Tailings Pond No.1. At the time of their decision to cease operations, ANC and the regulatory bodies had identified the possibility that, during operations, seepage from Tailings Pond No. 1 had migrated down gradient in the surface alluvium and were in the process of attempting to quantify the volume, characteristics and aerial extent of any down gradient impacts.

At the time of the bond forfeiture, the funds for the completion of this closure work were held by the State of Wyoming. When ANC chose to cease operations, they forfeited their bond to the State of Wyoming. The Wyoming Department of Environmental Quality/Land Quality Division (LQD) assumed the responsibility for implementing the reclamation plan at the Site, which also included the continuation of a groundwater/surface water monitoring program and an effort to withdraw impacted groundwater from under Tailings Pond No. 1 (i.e. a pump back system). The monitoring program included the 13 existing monitoring wells and one surface water monitoring location. These sampling sites have been previously approved by BLM Right-of-Way Grant WYW 168561, issued as a renewed grant on July 17, 2014.

The purpose of this new (second) Right-of-Way application is to drill, construct and sample new strategically placed monitor wells in an effort to define (1) the presence and extent of groundwater impacts; (2) the vertical and spatial extent of potential groundwater impacts; (3) provide sufficient technical information to define a final closure program for the mill site and surrounding area. The Applicant will install additional monitoring wells and geological test holes and continue the large scale water quality sampling program that has been in effect for approximately 20 years. This work will provide information needed to satisfy the 2014 Confirmatory Order with the NRC. At least one of the wells will replace an existing damaged monitoring well.

2. Description of the Facility

Wells - Up to 16 additional monitor wells will be installed at selected locations within the area of interest. The majority of the proposed well locations are on Federal Lands. At least three well sites are proposed to be located on either State or Private Lands (see **Figure 1**). Additionally, up to four test holes will be drilled at offset locations from existing wells to verify the geological conditions of the area. These proposed test hole locations are all located on Federal Lands. The proposed well

and test hole locations are shown on **Figure 1** and described in **Table 1**. The wells will fully penetrate the alluvial deposits or will be completed in the first saturated zone of the Wind River Formation. Well depths will range between 50 and 120 feet, depending on local hydrogeologic conditions and targeted geologic units. The wells will be constructed with 2-inch PVC casing and screen in accordance with the Wyoming Department of Environmental Quality/Water Quality Division Rules and Regulations Chapter 26; Well Construction Standards. These standards will include surface seal, surface casing and a locking cap. The test holes will be completed using the same drilling equipment as for the monitoring wells, and will be abandoned in accordance with State standards using an approved abandonment fluid and filling the hole from the bottom to within 2 feet of the surface. The top 2 feet will be filled with native materials. Finally, two additional surface water locations will also be used as sampling locations. These sites are also located on **Figure 1**.

Roads - No road construction is anticipated. Existing improved access roads will be the primary access with existing two-track roads, where available, providing secondary access. In the absence of existing two-track access roads, final access to the well locations will be overland utilizing rubber tired vehicles into and out of the site. Excessive road wear is not anticipated due to infrequent use.

Water Monitoring Activities

Initial water sampling will occur following well completion and development. Additional sampling on a quarterly, semiannual or annual basis may be required depending on the results of the initial sampling event. Water monitoring efforts will typically consist of a single vehicle for part of a day at each site, approximately once per sampling event. The wells and the surface water locations will be sampled for a standardized suite of constituents as required by the State and NRC.

Right-of-Way Location

Consistent with existing Right-of-Way Grant WYW 168561, this right-of-way request is for approximately 11 drilling/well completion sites to be located on BLM administered lands, each being 25 feet by 25 feet, containing a total of approximately 0.16 acres. **Figure 1** shows the proposed well/test hole and two-track road access locations. **Table 1** provides monitor well and test hole information. It is requested that the right-of-way grant be authorized for a 30-year period from the effective date of the grant.

Construction Schedule

Well installation and test hole drilling is anticipated to commence upon BLM Right-of-Way approval with an effort to begin construction in early to mid-summer. The Applicant anticipates that well construction work will be completed within approximately four to six weeks. Initial water quality sampling and monitoring well recovery testing will take place during the two to three month period following well installation. A schedule for future testing, sampling and monitoring will be developed based upon the results of the initial sampling program.

3. Design Criteria

Monitoring Well Design

The monitoring wells will be constructed using schedule 40 PVC well casing and screen. The screened interval will be selected during the drilling process based on observed down hole conditions. After the hole has been drilled to total depth (TD), the appropriate length of screen will be attached to the bottom most joint of casing. The lengths of casing and screen may be joined either by solvent welding or threaded connections. Each joint of casing will be slowly lowered into the hole until the screen is next to the target zone and just above the bottom of the drill hole. A filter

pack composed of silica sand designed to be compatible with the screen slot size will be placed down the annular space from the bottom of the hole to at least 2 feet above the top of the screen. To create a seal immediately above the filter pack and an annular seal above the top of the filter pack seal, bentonite chips will be placed into the annular space from the toe of the filter pack to within 2 feet of the surface. The bentonite chips will be hydrated with clean water as they are emplaced to ensure complete hydration and a proper seal. The filter pack, bentonite seal, annular seal and surface seal material will be placed into the well in a manner such that no voids or bridging will occur. Concrete will be placed from 2 feet below to the ground surface to complete the annular seal.

Following well completion, a fabricated lockable protective cover will be installed over each wellhead to protect the well from damage. The protective cover will extend upward from the ground surface approximately 3 feet and downward from the ground surface approximately 2 feet into the concrete surface seal. Finally, a concrete surface pad, approximately 2 feet by 2 feet by 4 inches thick and sloped away from the well casing, will be constructed to prevent surface drainage from entering the annular space. The top of the casing will be covered with a PVC end cap to prevent sediment and surface water from entering the well. The wells will be permanently marked with their identifying number on the protective cover, the well cap and/or the wet surface seal concrete. Each completed well will be developed by pumping or other standard development techniques prior to sampling to remove fines from and condition the filter pack. The amount of water removed from each well during development will vary depending on the amount of fines needed to be removed from the screen interval, but it is anticipated that the volume of water discharged during this process will be limited. **Figure 2** shows a typical conceptual well design. These wells will not require permits, dedications or easements, other than this right-of-way.

Monitoring Well Construction

The monitoring wells and test holes will be drilled and completed using a truck mounted CME 75/85 hollow stem auger drill rig, or equivalent equipment, that will be capable of air rotary drilling through Wind River Formation sandstones and conglomerates where needed. Split spoon or core samples of formation materials will be collected at regular intervals throughout the drilling of each well and test hole. It is anticipated that the potential short term surface disturbance (during construction) at each drill site will be less than 2,000 square feet (approximately 0.046 acre) and will have a minor and temporary impact on the local environment. Most of the surface disturbance will be from driving equipment and support vehicles onto the drill site. Mud pits will not be used as the method of drilling includes the rotation of augers and perhaps under special circumstances an air compressor to allow cooling of the bit and the removal of cuttings from the hole. A lay down area for auger flights will not be required as the necessary number of flights to drill these wells and test holes can be stored on the drill rig. There will be minimal well development water discharge at the well sites at the completion of well construction, such that the potential for surface erosion will be negligible. All sites and all disturbances will be hand raked and broadcast seeded utilizing the seed mix shown in **Table 2**. Once drilling is completed, the right-of-way needs and long term disturbance will be significantly smaller and are conservatively estimated at an area of 25 feet by 25 feet or a maximum of 625 square feet (0.014 acres).

Environmental Considerations

The Applicant has gone to great effort to select access routes into the drill sites that will minimize disturbance to the land surface. The Applicant has chosen a method of drilling (auger drilling with a CME 75/85, or equivalent) that allows access via a rubber tired truck mounted drill rig. Other drill rig types and drilling methods would require heavier equipment, construction of mud pits and a significantly larger "lay-down" area. The Applicant has reviewed numerous alternative access routes to the drill and monitor well sites and has selectively chosen routes that utilize existing two-

track roads to the extent possible. The Applicant will not blade or otherwise construct new access roads. Where two track roads do not exist, the Applicant has minimized the length of overland travel to ensure that disturbance to existing vegetation is minimal. The Applicant has avoided disturbance to existing wetlands and riparian communities and has coordinated the selection of sites and access routes with their cultural resource, wildlife and vegetation consultants.

The Applicant will utilize Best Management Practices (BMP) where necessary to ensure that there is little to no disturbance to the surrounding land surface and adjacent streams, springs and bodies of water. Such BMP's could include but are not necessarily limited to locally placed rock to dissipate energy from water, silt fences, straw bales and erosion matting, as deemed necessary.



Matthew H. Mead, Governor

Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's
environment for the benefit of current and future generations.*



Todd Parfitt, Director

November 26, 2014

Mr. Richard Vander Voet
Field Manager, Lander Field Office
Wind River/Bighorn Basin District
United States Bureau of Land Management
1335 Main Street
Lander, WY 82520

RE: Right-of-Way Grant Application Letter of Authorization

Dear Mr. Vander Voet:

By this letter, the Wyoming Department of Environmental Quality/Land Quality Division (LQD) authorizes Lidstone and Associates to act on our behalf as Agent for obtaining a Right-of-Way Grant in LQD's name for certain public lands located in the Gas Hills District, Fremont County, Wyoming.

Sincerely,

Nancy Nuttbrock
Deputy Director, Wyoming Department of Environmental Quality
Administrator, Land Quality Division

cc.: John Erickson, Lander LQD
Muthu Kuchanur, Cheyenne LQD
Lidstone and Associates, Fort Collins, CO



Tables

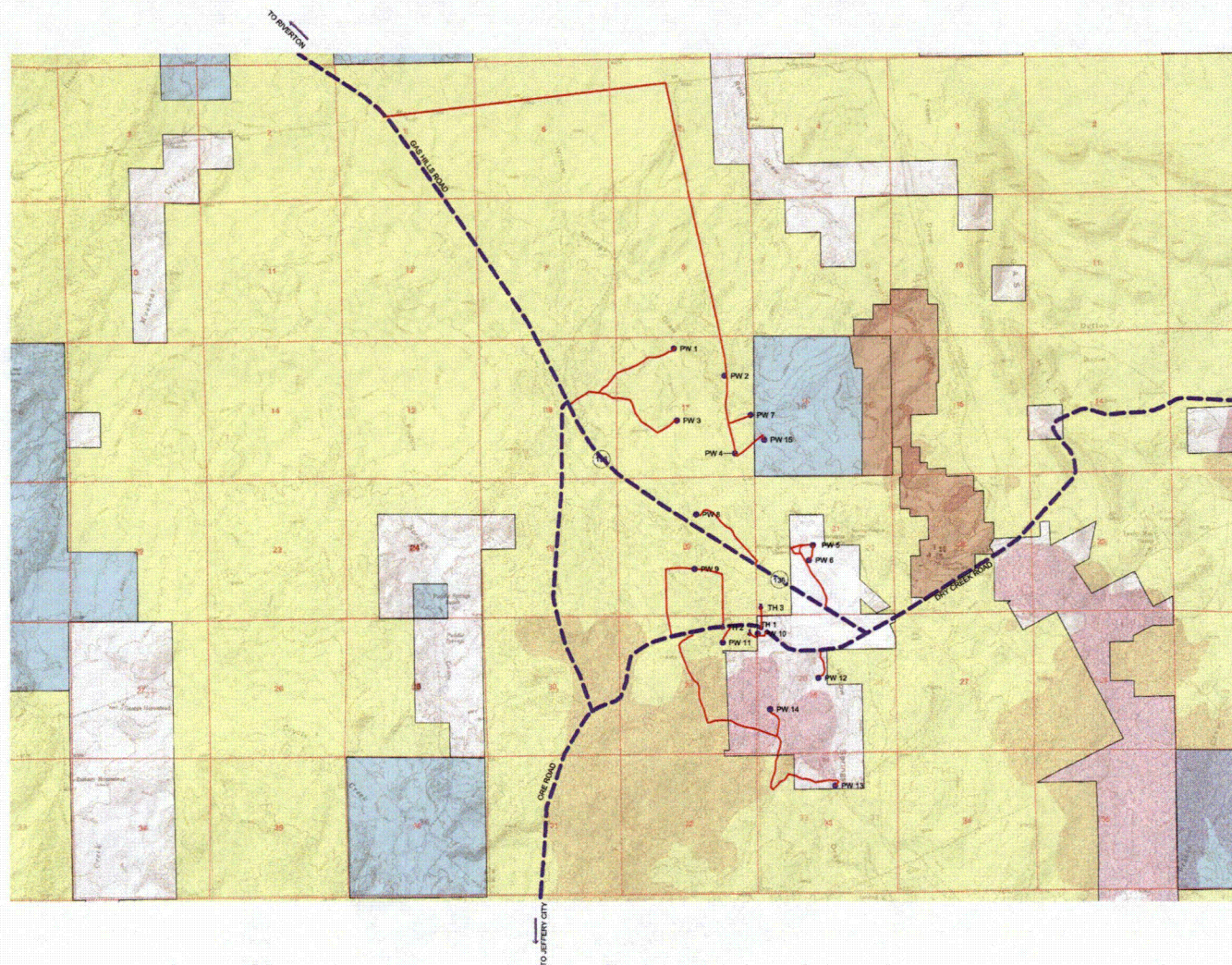
Table 1 Proposed Monitoring Well and Test Hole Locations

Well Name	Well Location (T/R/Sec.)	Surface Elevation (ft)	Anticipated Ground Water Elevation (ft)	Anticipated Depth to Water (ft)	Anticipated Well Depth (ft)	Formation Completed In	Drill Site Ownership
Monitoring Wells							
PW-1	T33N, R90W Sec. 17 NENW	6160	6140	20	40	Alluvium	BLM
PW-2	T33N, R90W Sec. 17 SENE	6270	6170	100	125	Cody Shale	BLM
PW-3	T33N, R90W Sec. 17 NESW	6220	6190	30	60	Cody Shale	BLM
PW-4	T33N, R90W Sec. 17 SESE	6230	6200	30	50	Alluvium	BLM
PW-5	T33N, R90W Sec. 21 NESW	6330	6280	50	100	Wind River	Private
PW-6	T33N, R90W Sec. 21 NESW	6330	6290	40	60	Alluvium	Private
PW-7	T33N, R90W Sec. 17 NESE	6230	6190	40	60	Alluvium	BLM
PW-8	T33N, R90W Sec. 20 SWNE	6265	6210	55	70	Alluvium	BLM
PW-9	T33N, R90W Sec. 20 NWSE	6350	6290	60	80	Wind River	BLM
PW-10	T33N, R90W Sec. 28 NWNW	6390	6346	50	150	Wind River	Private
PW-11	T33N, R90W Sec. 29 NENE	6376	6340	40	60	Fill/Alluvium	BLM
PW-12	T33N, R90W Sec. 28 SENW	6430	6385	45	60	Alluvium	Private
PW-13	T33N, R90W Sec. 33 NWNE	6510	6450	50	75	Alluvium	Private
PW-14	T33N, R90W Sec. 28 NWSW	6440	6390	50	80	Alluvium/Wind River	Private
PW-15	T33N, R90W Sec. 16 NESE	6240	6200	40	60	Alluvium	State
Test Holes							
TH-1	T33N, R90W Sec. 29 NENE	6385	6350	35	60	Wind River	BLM
TH-2	T33N, R90W Sec. 29 NWNE	6360	6340	20	60	Wind River	BLM
TH-3	T33N, R90W Sec. 21 SWSW	6340	6320	20	40	Alluvium	BLM

Table 2. Seed Mix for LQD/ANC Well Installation Project

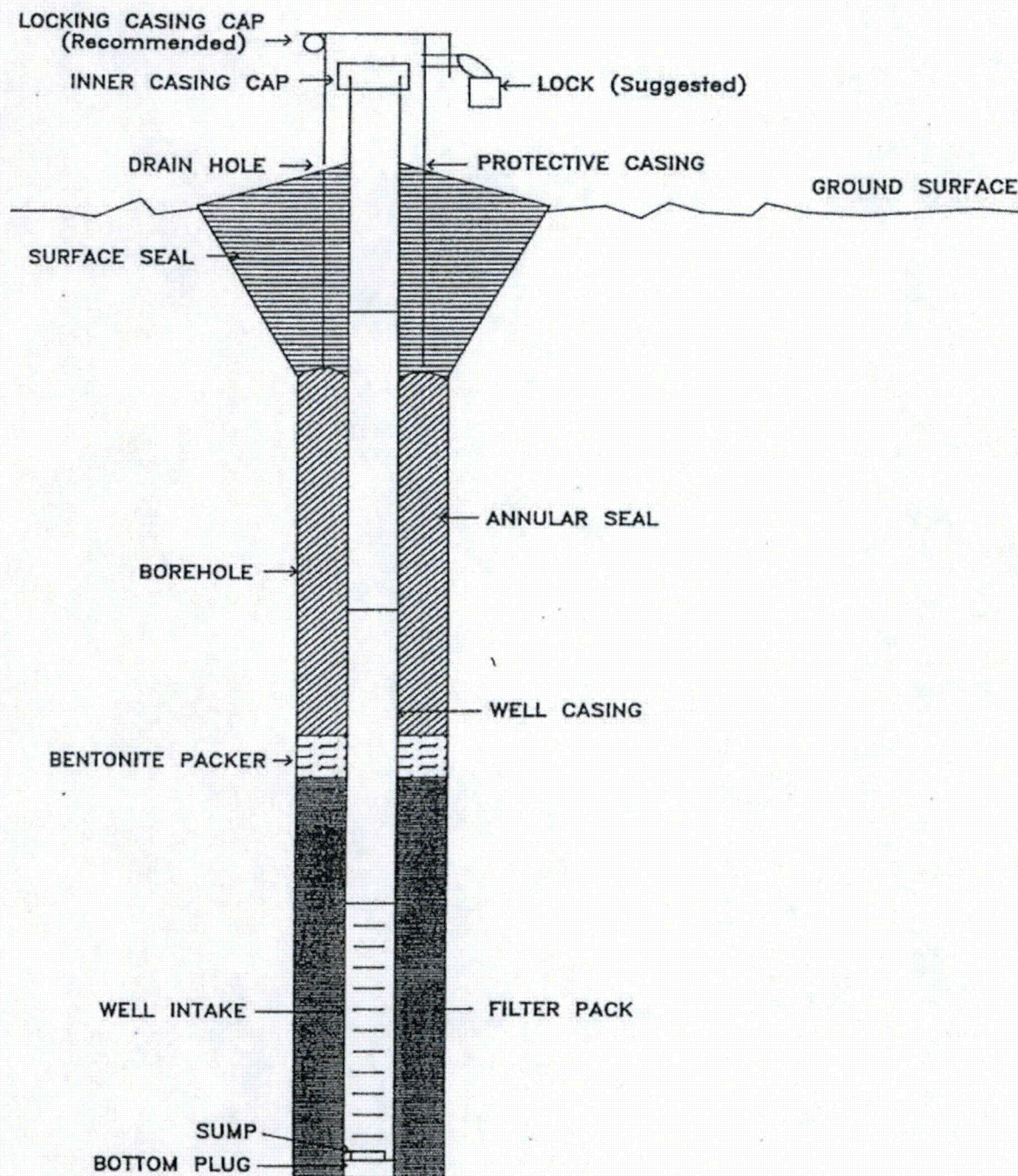
Species¹	Application Rate²
Western wheatgrass (Rosana)	4 lbs PLS/Acre
Slender wheatgrass (Pryor)	2 lbs PLS/Acre
Bluebunch wheatgrass (Secar)	4 lbs PLS/Acre
Indian ricegrass (Nezpar)	2 lbs PLS/Acre
Green needlegrass (Lodorm)	2 lbs PLS/Acre
Winterfat	1 lbs PLS/Acre
Wyoming big sagebrush	2 lbs PLS/Acre
American Vetch	½ lbs PLS/Acre
Rocky Mountain penstemon (Bandera)	0.3 lbs PLS/Acre
White prairie clover	¼ lbs PLS/Acre
Notes:	
¹ Forbs may be substituted depending on availability.	
² Assumes drill seeding; if broadcast seeding, double the application rates.	

Figures



LEGEND											
	STATE OWNERSHIP										
	PRIVATE OWNERSHIP										
	U.S. DOE OWNERSHIP (DEPARTMENT OF ENERGY)										
	U.S. BLM OWNERSHIP (U.S. BUREAU OF LAND MANAGEMENT)										
	RECLAIMED MINE LANDS										
	PW 9 PROPOSED MONITORING WELL										
	TH 2 PROPOSED TEST HOLE										
	ACCESS ROUTE										
	MAIN ROADS										
GENERAL NOTES											
<p>IMAGE FROM GOOGLE EARTH MAY 2, 2014</p> <p>SCALE IN FEET 0 1000 2000</p> <p></p> <p></p> <p>WYOMING DEQ American Nuclear Corporation Tailings</p> <table border="1"> <tr> <td>PROJECT NUMBER: ACAD-STD</td> <td>ENGINEER: DESIGN ENG.</td> </tr> <tr> <td>DRAWN BY: 2/12/15</td> <td>CHECKED BY: APPROVED BY</td> </tr> <tr> <td colspan="2">ACAD FILE: L:\WYOMING\ACAD\WYOMING BASE\WYOMING-REV.DWG</td> </tr> </table> <p>PROPOSED MONITORING WELL/TEST HOLE LOCATION MAP</p> <table border="1"> <tr> <td>REVISIONS:</td> <td>FIGURE</td> </tr> <tr> <td></td> <td>1</td> </tr> </table>		PROJECT NUMBER: ACAD-STD	ENGINEER: DESIGN ENG.	DRAWN BY: 2/12/15	CHECKED BY: APPROVED BY	ACAD FILE: L:\WYOMING\ACAD\WYOMING BASE\WYOMING-REV.DWG		REVISIONS:	FIGURE		1
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	1										

Figure 2: Conceptual Design of a Ground Water Monitoring Well



Attachments

Attachment 1

ANC Uranium Mill Tailings Project

Environmental Report

Prepared for

Lidstone and Associates, Inc.
4025 Automation Way, Bldg. E
Fort Collins, CO 80525

And

Wyoming Department of Environmental Quality –Land Quality Division
122 West 25th ST, Herschler Building
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And

Bureau of Land Management
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Prepared by

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NATURAL RESOURCE CONSULTING

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Real West Natural Resource Consulting
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January 2015

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APPENDIX A: Aerial Photographs and Maps of the Project Areas

APPENDIX B: Photographs of the Proposed Well Sites

APPENDIX C: Photographs and Maps of Proposed Well Sites No. 5, 6 and 13

1.0 INTRODUCTION

Lindstone and Associates, Inc. (Lidstone) has been contracted by the Wyoming Department of Environmental Quality – Land Quality Division (WDEQ), to construct a series of groundwater monitoring wells to collect water samples. The purpose of the sampling is to further understand groundwater migration pathways associated with the ANC Uranium Mill Tailings Site in the Gas Hills Uranium Mining District in eastern Fremont County.

The project site is approximately 45 miles east of Riverton and 70 miles west of Casper. The monitoring will occur in the vicinity of the Willow Springs Draw and is primarily on federal lands managed by the Bureau of Land Management (BLM). The proposed well sites are also on private lands and some road access is on land owned by the State of Wyoming. The proposed 14 well sites are located in T33N, R90W, Sections 16, 17, 20, 21, 28, 29, and 33.

Real West Natural Resource Consulting (Real West) was contracted to address environmental concerns that may be present at or in the vicinity of the proposed well sites. The purpose of this report is to document the environmental conditions at the proposed well site locations to aid in securing a right-of-way with the BLM for the monitoring wells.

2.0 PROJECT DESCRIPTION AND BACKGROUND

Uranium was mined at the ANC Uranium Mill Tailings Site between 1959 and 1981, first on behalf of the U.S. Atomic Energy Commission and, later, for the Tennessee Valley Authority. Of the 550 total acres within the licensed mining area, approximately 140 acres includes the decommissioned mill site and two tailings ponds that are in varied stages of reclamation. Tailings Pond No. 1 encompasses approximately 40 acres and Tailings Pond No. 2 encompasses approximately 120 acres. Mining and milling activities were discontinued in 1981 and the mill was decommissioned in 1989. Mill components and material that could not be economically cleaned were buried in Tailings Pond No. 2.

Reclamation has continued through the Wyoming Department of Environmental Quality – Abandoned Mine Lands (WDEQ/AML) between 1996 and 2009. Those efforts included review and analysis of the down gradient monitoring well analytical data to determine extent and amount of down gradient impact on the alluvial aquifer. Lidstone is currently under contract with WDEQ/AML to complete the annual sampling of the ANC monitoring wells.

Construction of each new well site is anticipated to take between 1 and 3 days. Temporary disturbance during well construction will consist of a 50 ft. by 50 ft. (0.057 acres) area around each well site to accommodate a water well drill rig and one or two support vehicles. A permanent easement is being requested to provide a 25 ft. by 25 ft. (0.014 acres) area around each well site for the new right-of-way. The actual permanent disturbed area is expected to be approximately 2 ft. by 2 ft. or up to 3 ft. by 3 ft. around each 2-inch diameter well (including the wellhead protective cover).

The well sites will be accessed via existing improved roads as well as unimproved two-track roads. The well sites and access roads are shown in Figure A-1, Appendix A. In the absence of existing two-track roads, final access to the well locations will be overland, utilizing the same track in and out of the site. On these overland routes, it is anticipated that narrow two-track trails may be visible for the short term but will revert to a natural state once well monitoring ceases. No new roads will be constructed with this project.

Initially there will be one and possibly two sampling events, approximately one calendar quarter apart. Additional sampling events will depend upon the results of the initial sampling results and the requirements of the regulatory agencies. The existing wells are currently being sampled on an annual basis.

3.0 METHODS

Prior to conducting a site reconnaissance, Tim Vosburgh, BLM wildlife biologist, was contacted by Real West to obtain a map of previously recorded raptor nests. Additional information on wildlife species expected and previously reported in the area was obtained from the U.S. Fish and Wildlife Service Information, Planning, and Conservation System (IPaC) website (USFWS 2014).

Supplemental information on potential big game crucial range and sage-grouse core areas as well as sage-grouse connectivity areas on the site or in the vicinity were obtained through the Wyoming Interagency Spatial Database and Online Management (WISDOM) System (WISDOM 2014). This database also provided habitat type listings expected in the area and the potential for other wildlife, including mammals, amphibians, reptiles and avian species, to inhabit the area.

Amber Travsky, a biologist with Real West, conducted habitat evaluations and surveys on the project site on November 15 and 16, 2014. Each proposed well site was inspected along with the proposed access routes. In addition, the project area, which included a buffer zone within one mile of any well location, was searched for raptor nests. Habitats in the vicinity were also noted. The surveys were conducted both on foot and via 4-wheel drive vehicle.

4.0 RESULTS

4.1 Habitat and Site Description

The project area, which includes the 14 proposed well sites and a 1-mile buffer around the sites, covers approximately 8,600 acres in an elongated oval. The site is bisected, from north to south, by Willow Springs Draw, which is the dominant topographic feature in the project area. The draw forms an intermittent drainage that, in some segments, drops 5 to 10 feet from the adjacent bank into the drainage bottom. In other sections, the bank is less abrupt but, throughout its length on the project site, the drainage shows areas of erosion with some bank undercutting and sluffing into the drainage bottom. The drainage bottom ranges in width from approximately 10 to 40 feet. At the time of the November 2014 survey, the drainage lacked flowing water.

4.1.1 Mixed Grassland Prairie Habitat

The dominant vegetation across the project area is mixed grassland prairie. Dominant shrub species in this habitat are big sagebrush (*Artemisia tridentata*) and rabbitbrush (*Chrysothamnus vicidiflorus*, *C. nauseous*). Sagebrush heights are typically from 8 to 12 inches but the sagebrush is especially robust in some drainage bottoms where it reaches heights of 4 to 5 feet. Other shrubs that are less abundant throughout the project area, although often abundant in localized areas,

include greasewood (*Sarcobatus vermiculatis*), Gardner saltbush (*Atriplex gardneri*), and birdfoot sage (*Artemisia pedifidita*).

Grasses include western wheatgrass (*Pascopyrum smithii*), bluebunch wheatgrass (*Pseudoroegneria spicata*), prairie junegrass (*Koeleria macrantha*), sandberg bluegrass (*Poa secunda*), Indian ricegrass (*Oryzopsis hymenoides*), needleandthread (*Stipa comata*), green needlegrass (*Nassella viridula*), great basin wildrye (*Leymus cinereus*), blue grama (*Bouteloua gracilis*), smooth brome (*Bromus inermis*), and cheatgrass (*Bromus tectorum*). Forb species, which were not easily visible during the November survey, include phlox (*Phlox hoodii*), wild buckwheat (*Eriogonum brevicaule*), and goldenweed (*Haplopappus multicaulis*). Other forb species expected include beard-tongue (*Penstemon* spp.), wild onion (*Allium textile*), milkvetch (*Astragalus* spp.), bastard toadflax (*Comandra umbellata*), Indian paintbrush (*Castilleja linariifolia*), buttercup (*Ranunculus* spp.), and American vetch (*Vicia americana*). The only trees within this habitat type are a few scattered Russian olive trees (*Elaeagnus angustifolia*) along Willow Springs Draw.

Woodland areas that support limber pine (*Pinus flexilis*) and juniper (*Juniperus scopulorum*) are also in the vicinity. The nearest patch of woodland is 1.0 miles east of the project area.

4.1.2 Disturbed Habitat

Approximately 1,033 acres of the site has been previously disturbed, primarily through mining and also associated activities such as road construction and man-camp sites. Reclamation on the mine site consists primarily of grass species with various percentages of ground cover. The disturbed area lacks trees with the exception of a 12-acre former man-camp site that supports scattered cottonwood, Russian olive, and other ornamental trees that were planted when the site was used as a residential area.

4.1.3 Wetlands

Each of the proposed well sites was inspected for the presence of wetlands. Photographs of each of the sites are in Appendix B.

The National Wetland Inventory (NWI) map of the site (USFWS 2014a) shows scattered man-made reservoirs within the mined and reclaimed areas. Additional man-made reservoirs are scattered through the mixed prairie grassland and are primarily for livestock use. The largest of these, covering approximately 0.47 acres, is along the access road that leads to proposed well sites No. 1 and 3. The access road crosses at the dam of the reservoir, though, and will not impact any wetlands. The access road leading to proposed well No. 3 continues along a playa wetland. The wetland covers approximately 7.74 acres but will be avoided and not impacted by the proposed project.

One area of concern within the project area is with well sites No. 5 and 6. The NWI map of the site, as shown in Figure C-1 (Appendix C), indicates the drainage is a wetland classified as a palustrine emergent wetland that is seasonally flooded and created by a dike or impoundment (PEMCh). The infrared aerial photograph of the site is in Figure C-2 and photographs of the drainage are shown in Figure C-3.

While well No. 5 is in upland habitat, proposed well No. 6 is within the flood plain of the draw. The vegetation in the drainage bottom is dominated by big sagebrush reaching up to 4 to 5 feet in height. The understory includes smooth brome and scattered great basin wildrye. Smooth brome is classified as a facultative upland (FACU) plant, meaning it usually occurs in non-wetlands but, occasionally in wetlands (NRCS 2015). Great basin wildrye is classified as an upland species. Due to the lack of hydrophytic vegetation, no sampling was conducted to determine if the site had hydrophytic soil indicators.

The draw has a narrow sandy bottom that is void of vegetation. It is expected that water flows in the draw in the spring and following precipitation events but water apparently is not present in sufficient duration or quantity to support a wetland that would meet the criteria of supporting hydrophytic vegetation, hydrophytic soil indicators, and hydrology. The only impacts with the proposed well construction in the drainage bottom are the brief periods when vehicles are driven across the gully. These activities are expected to occur only 2 to 3 times during construction and then during well monitoring, likely at least two more times. No disturbance, aside from inadvertent tire tracks, will occur in the drainage bottom where water flows intermittently.

Proposed well No. 14 would be located adjacent to a broad arroyo. The NWI map of the area (Figure C-4) indicates there are no wetlands in the arroyo or in the vicinity of the proposed well. The infrared aerial of the site (Figure C-5), also shows a lack of wet areas in the vicinity. Photographs (Figure C-6) show the sandy arroyo bottom is mostly void of vegetation. The well will be constructed on the bank above the drainage with the only impacts to the arroyo due to the limited vehicle access which will occur only a few times during construction.

In summary, no impacts to wetlands are expected with the drilling of the proposed monitoring wells. Access to proposed wells 6 and 13 will require driving through two drainage bottoms where water flow is possible. Such actions will occur only a couple times during construction, though, and will not result in any impacts to wetlands or Waters of the U.S.

4.2 Threatened and Endangered Species

Two federally listed threatened, endangered or candidate species have the potential to occur in the area, based on the IPaC analysis (USFWS 2014). The two species, which include the greater sage-grouse (*Centrocercus urophasianus*) and the Ute ladies'-tresses plant (*Spiranthes diluvialis*), are discussed in more detail below.

4.2.1 Greater Sage-Grouse

The greater sage-grouse was listed as a candidate species in March 2010 and a determination of its status is expected in September 2015. Sage-grouse inhabit foothills, plains, and mountain slopes where sagebrush is present (American Ornithologists' Union 1983) or a mixture of sagebrush, meadows, and aspen is in close proximity. Suitable habitat is found in the mixed prairie grassland habitat where sagebrush density varies from 0 to approximately 10%.

The project area is outside any designated sage-grouse core area but there is an occupied lek within two miles of several of the proposed well sites. The Puddle Springs Lek is located south of the project area, as shown in Figure A-3, Appendix A. The typical stipulation for active leks is a restriction of no disturbance within two miles from March 15 through June 30. Six proposed wells are within the 2-mile buffer: 6, 10 11, 12, 13 and 14.

There is also a No Surface Occupancy or disturbance/disruptive activity stipulation from 6 p.m. to 8 a.m. within 0.25 mile of an occupied lek during the period from March 1 – May 15. Currently no proposed wells are within 0.25 mile of the occupied lek so this stipulation would not apply.

4.1.2 Ute Ladies'-tresses

The Ute ladies'-tresses plant is endemic to moist soils near springs, lakes, or perennial streams. The elevation range of known orchid occurrences is 4,200 to 7,000 feet. Most of the occurrences are in alluvial substrates along riparian edges, gravel bars, old oxbows, and moist to wet meadows in the floodplains of perennial streams (USFWS 1995).

Suitable potential habitat is typically found along streams that experience heavy spring runoff of sufficient magnitude to create movement and reshaping of the stream channel. The orchid is generally intolerant of deep shade and strongly alkaline or clay soils and cannot compete with aggressive rhizomatous species such as reed canarygrass (*Phalaris arundinacea*) and cattails (*Typha latifolia*), or introduced species such as Canada thistle (*Cirsium arvense*).

Suitable habitat is lacking in the vicinity of the proposed well sites and access routes. Therefore, the proposed well construction will have no effect on this species.

4.3 Migratory Birds of Concern

The USFWS IPAC identified 21 migratory bird species potentially occurring in the project area that are identified as Natural Resources of Concern. The species and their preferred habitat are listed in Table 4-1. Also listed is the potential for the species to occur on the project area based on the presence of suitable habitat. Those species that could occur on the project area are discussed in more detail.

ANC Uranium Mill Tailings Project – Environmental Report

Table 4-1. Migratory Birds of Concern potentially within the project area.

Common Name	Scientific Name	Preferred Habitat ¹	Potential on Site
American bittern	<i>Botaurus lentiginosus</i>	Freshwater marshes with tall vegetation	Unlikely
Bald eagle	<i>Haliaeetus leucocephalus</i>	Near lakes, reservoirs, rivers, marshes and coasts.	Unlikely
Brewer's sparrow	<i>Spizella breweri</i>	Strongly associated with dense sagebrush.	Unlikely
Burrowing owl	<i>Athene cunicularia</i>	In active or active prairie dog burrow.	Unlikely
Cassin's finch	<i>Carpodacus cassinii</i>	Open coniferous forest.	Unlikely
Ferruginous hawk	<i>Buteo regalis</i>	Open country; nests in tall trees, on cliff ledges, river-cut banks, hillsides.	Possible
Fox sparrow	<i>Passerella liaca</i>	Dense thickets in coniferous or mixed woodlands; requires dense brushy cover during the nesting season.	Unlikely
Golden eagle	<i>Aquila chrysaetos</i>	Inhabits open and semi-open country; nests on rock ledges of cliffs or in larger trees.	Possible
Lewis's woodpecker	<i>Melanerpes lewis</i>	Open forest and woodland.	Unlikely
Loggerhead shrike	<i>Lanius ludovicianus</i>	Open country with scattered trees and shrubs.	Possible
Long-billed curlew	<i>Numenius americanus</i>	Breeds on prairies and grassy meadows near water.	Unlikely
McCown's longspur	<i>Calcarius mccownii</i>	Sparse short-grass plains, plowed and stubble fields, and areas of bare or nearly bare ground.	Possible
Mountain plover	<i>Charadrius montanus</i>	Nests in shortgrass prairie, commonly in prairie dog towns.	Possible
Olive-sided flycatcher	<i>Contopus cooperi</i>	Forest and woodland habitats.	Unlikely
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	Pinyon-juniper woodland, less frequently pine.	Unlikely
Sage thrasher	<i>Oreoscoptes montanus</i>	Sagebrush plains.	Possible
Short-eared owl	<i>Asio flammeus</i>	Generally nests on high ground or upland sites; forage and nests on open land with low vegetation.	Possible

ANC Uranium Mill Tailings Project – Environmental Report

Table 4-1 (Cont.). Migratory Birds of Concern potentially within the project area.

Common Name	Scientific Name	Preferred Habitat ¹	Potential on Site
Swainson's hawk	<i>Buteo swainsoni</i>	Nests in trees; forages on open terrain with scattered trees.	Possible
Williamson's sapsucker	<i>Sphyrapicus thyroideus</i>	Middle to high elevation coniferous forest.	Unlikely

¹Habitat information obtained from:

NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1.

NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>.

Dorn J.L and R.D. Dorn. 1990. Wyoming Birds. Mountain West Publishing, Cheyenne, WY. 139 pp.

4.3.1 Ferruginous Hawk

The ferruginous hawk prefers unbroken, semiarid grassland with elevated nesting sites such as trees, rock outcrops, hills and ridgelines (Johnsgard 1990). Ferruginous hawks are closely associated with areas that contain high densities of rodents and lagomorphs (Johnsgard 1990).

Suitable nesting habitat, in the form of trees or rock outcrops, is present but scarce on the project area. BLM records indicate ferruginous hawks have been observed nesting in the vicinity and potential active nests are shown in Figure A-2, Appendix A. The figure also shows a 1-mile buffer area with both ferruginous hawk and golden eagle nests.

Suitable habitat is present in the vicinity and there is the potential for this species in the area. No nests were observed during the 2014 surveys by Real West and no ferruginous hawks were observed on the project area or in the vicinity. However, there is the potential for these raptors to nest in the vicinity. Should an active raptor nest become established prior to the initiation of drilling activities, construction should be avoided within 1.0 mile of any active ferruginous hawk nest during the nesting season.

4.3.2 Golden Eagle

Golden eagles typically nest on the rock ledges of cliffs but they also nest occasionally in large trees (NatureServe 2014). Suitable nesting habitat is found in the project area, although it is limited primarily to rock outcrops. The only trees in the area are located in the abandoned man-camp on the old mine site and a few scattered small Russian olive trees. There is the potential for this species to nest in the area although no golden eagles or nests were observed during the 2014 surveys by Real West. Should an active raptor nest become established prior to the initiation of mining activities, construction should be avoided within 1.0 mile of any active golden eagle nest during the nesting season.

4.3.3 Loggerhead Shrike

This species prefers relatively open country with scattered trees and shrubs, savanna, desert scrub (southwestern U.S.), and, occasionally, open woodland; it often perches on poles, wires or fenceposts (AOU 1983). Suitable hunting perches are an important part of the habitat (Yosef and Grubb 1994). Loggerhead shrikes nest in shrubs or small trees (deciduous or coniferous) and, in northern latitudes, nest sites include spruce and fir trees (Bent 1950, Brooks 1988). Suitable habitat is present on the project area and in the vicinity; therefore, it is possible that this species inhabits the area. An individual bird or nest could be disturbed by construction; however, due to the minimal disturbance proposed with construction of the 14 wells, it is unlikely this species would be affected.

4.3.4 McCown's Longspur

This small songbird inhabits sparse short-grass plains, plowed and stubble fields, and areas of bare or nearly bare ground (American Ornithologists' Union 1983). It uses grasslands with little litter and low vegetation cover, such as that provided by shortgrass or heavily grazed mixed-grass prairie. Suitable habitat is present on the project area although no McCown's longspurs were observed during the 2014 survey by Real West. This was a late survey, though, and potentially was after the migration period for this species. Suitable habitat is present and, therefore, this

species could occur in the project area. Due to the limited amount of disturbance with the proposed well construction, it is unlikely any McCown's longspurs would be affected.

4.3.5 Mountain Plover

The mountain plover was proposed for listing as a threatened species in 1999. On May 11, 2011 the USFWS determined that the mountain plover is not threatened or endangered throughout all or a significant portion of its range. While it is not protected under the Endangered Species Act, it is a migratory bird and, as a result, remains protected under the Migratory Bird Treaty Act. It is also considered a Sensitive Species in the State of Wyoming.

This ground nesting species is typically found in areas of short (less than four inches) vegetation on slopes of less than five percent. Any short grass, very short shrub, or cushion plant community could be considered plover nesting habitat (Parrish et al. 1993), however, mountain plovers prefer shortgrass prairie with open, level or slightly rolling areas dominated by blue grama (*Bouteloua gracilis*) and buffalograss (*Buchloe dactyloides*) (Dinsmore 1981, Kantrud and Kologiski 1982).

Suitable habitat is present in the vicinity of the well sites but is limited primarily to the reclaimed habitat in areas where vegetation is sparse. No wells are proposed within the reclaimed habitat with the exception of Well No. 14, which is close to reclaimed areas. Due to the small size of the disturbance, though, no impacts to this species are expected.

4.3.6 Sage Thrasher

This medium-sized songbird breeds in sagebrush plains, primarily in arid or semi-arid situations and is rarely found around towns (AOU 1998). It is most abundant when sagebrush density is at least 11%. It usually nests in shrubs but occasionally on the ground. Suitable habitat is present, although much of the sagebrush lacks the density to provide optimal habitat. It is possible for this species to occur in the area, though. It could be disturbed by construction however, due to the minimal disturbance proposed with construction of the 14 wells, it is unlikely this species would be affected.

4.3.7 Short-Eared Owl

The short-eared owl ranges over mid and tall grasses and marshes, often hunting during daylight (Sibley 2000). Small rodents, especially voles (*Microtis spp.*), compose a preponderance of its diet, and there have been strong shifts between years in the density and location of breeding owls, depending on fluctuating food resources (Wiggins 2004). Suitable habitat is present on the project area and in the vicinity; therefore, it is possible this species inhabits the site. Should an active nest become established prior to the initiation of drilling activities, construction should be avoided within 0.75 mile of any active short-eared owl nest during the nesting season.

4.3.8 Swainson's Hawk

Swainson's hawks inhabit open country such as grassland, shrubland, and agriculture areas (NatureServe 2014). They also are found within urban areas. These raptors nest in trees, usually those bordering agricultural fields, in wetland borders, and on abandoned farms.

On the project area, nesting substrate is limited to the abandoned man-camp on the old mine site and a few scattered small Russian olive trees. No Swainson's hawks or nests were observed during the 2014 surveys by Real West and it is unlikely these hawks nest in the vicinity. Should an active nest become established prior to the initiation of mining activities, construction should be avoided within 0.75 mile of any active nest during the nesting season.

4.4 Big Game

Two big game species occur in the project area: pronghorn antelope (*Antilocapra americana*) and mule deer (*Odocoileus hemionus*). Both species were observed on the project area during the 2014 survey by Real West.

Crucial pronghorn range is found on the northern half of the project area, as shown in Figures A-4 and A-5, Appendix A. Proposed wells within this area include 1, 2, 3, 4, 5, 6, and 8. The typical BLM stipulation for big game crucial range is to avoid construction between November 15 and April 30.

4.5 Raptors

The only raptor observed during the November 2014 survey by Real West was a great horned owl (*Bubo virginianus*). It was roosting in a tree within the former man-camp site adjacent to the previously mined area. A search of the trees on the site indicated no nests were present.

No raptor nests were located on the project area during the 2014 surveys by Real West. However, several nests have been reported previously in BLM records. Active raptor nests and the buffer areas are shown in Figure A-2, Appendix A. All of the wells sites are outside these buffer areas. To ensure no previously undocumented nests are present, an additional survey will be conducted by Real West between April 15 and June 1, 2015. If any active nests are found, the BLM will be notified and no construction will occur within 1.0 mile of an active ferruginous hawk or golden eagle nest and 0.75 mile from all other raptor species.

5.0 MITIGATION

Potential impacts and mitigation measures for wildlife on the project site are listed in Table 5-1. The proposed drilling will result in “no effect” to threatened or endangered wildlife species since none are expected in the area. The site is outside any sage-grouse core area but six well sites are within 2 miles of an occupied lek. BLM stipulations require no construction activities from March 15 and June 30 within 2 miles of an occupied lek.

Crucial big game range is present on the northern half of the project area. BLM stipulations require no construction between November 15 and April 30.

While no raptor nests were found within 1.0 mile of any proposed well site and BLM records have not identified any documented nest site within this distance, a second raptor nest survey will be conducted between April 15 and June 1, 2015 to verify that no nests are present. If an active nest is found that is within 1.0 mile of a proposed well site, the BLM will be notified and no construction will occur within 1.0 mile of a golden eagle or ferruginous hawk nest and 0.75 mile of all other species while the nest is active.

Table 5-1. Summary of Environmental Consequences and Mitigation Measures for Construction of the Proposed Monitoring Well Sites.

Resource/Impact	Mitigation
Threatened and Endangered Species: No federally listed species are expected on the site.	No mitigation needed.
Greater Sage-grouse (candidate species): An occupied lek is south of the project area.	No construction activities from March 15 and June 30 within 2 miles of an occupied lek.
Migratory Birds of Concern Habitat is present for several avian species considered migratory birds of concern.	No mitigation needed due to the limited size of the well sites; there is minimal disturbance to native vegetation.
Big Game Crucial pronghorn range is present.	No construction between November 15 and April 30 at well sites within the crucial range.
Raptors No raptor nests found.	A raptor nest survey will be conducted between April 15 and June 1, 2015 to verify that no nests are present within one mile of any proposed well site. If an active nest is found that is within 1.0 mile of a proposed well site, the BLM will be notified and no construction will occur within 1.0 mile of a golden eagle or ferruginous hawk nest and 0.75 mile of all other species while the nest is active.

A summary of stipulations associated with each of the proposed well sites is shown in Table 5.2. The possible drilling dates are also listed for each site. This assumes no raptor nests are located during the spring 2015 survey.

No impacts to wetlands are expected with the drilling of the proposed monitoring wells. Access to proposed wells 6 and 13 will require driving through two drainage bottoms where water flow is possible. Such actions will occur only a couple times during construction, though, and will not result in any impacts to wetlands or Waters of the U.S.

Table 5-2. Summary of possible stipulations on each of the proposed well sites.

Well Number and Land Ownership	Big Game Stipulation (Nov. 15 – Apr. 30)	Sage-grouse Stipulation (March 15 – June 30)	Drilling Dates
1 (BLM)	X		May 1 – Nov. 14
2 (BLM)	X		May 1 – Nov. 14
3 (BLM)	X		May 1 – Nov. 14
4 (BLM)	X		May 1 – Nov. 14
5 (Private)	X		May 1 – Nov. 14
6 (Private)	X	X	July 1 – Nov. 14
7 (BLM)			No stipulations
8 (BLM)	X		May 1 – Nov. 14
9 (BLM)			No stipulations
10 (BLM)		X	July 1 – March 14
11 (BLM)		X	July 1 – March 14
12 (Private)		X	July 1 – March 14
13 (Private)		X	July 1 – March 14
14 (Private)		X	July 1 – March 14

6.0 LITERATURE CITED

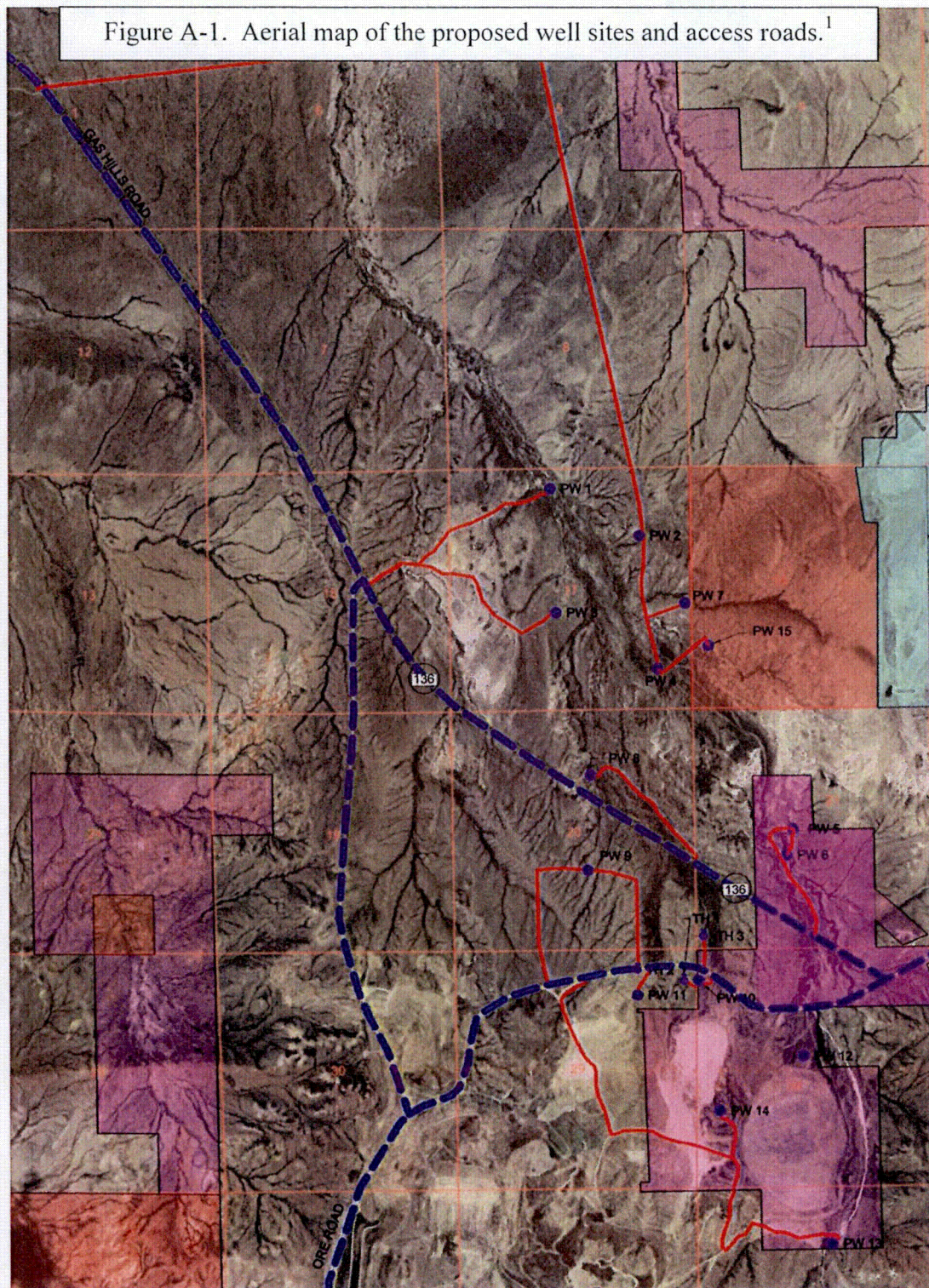
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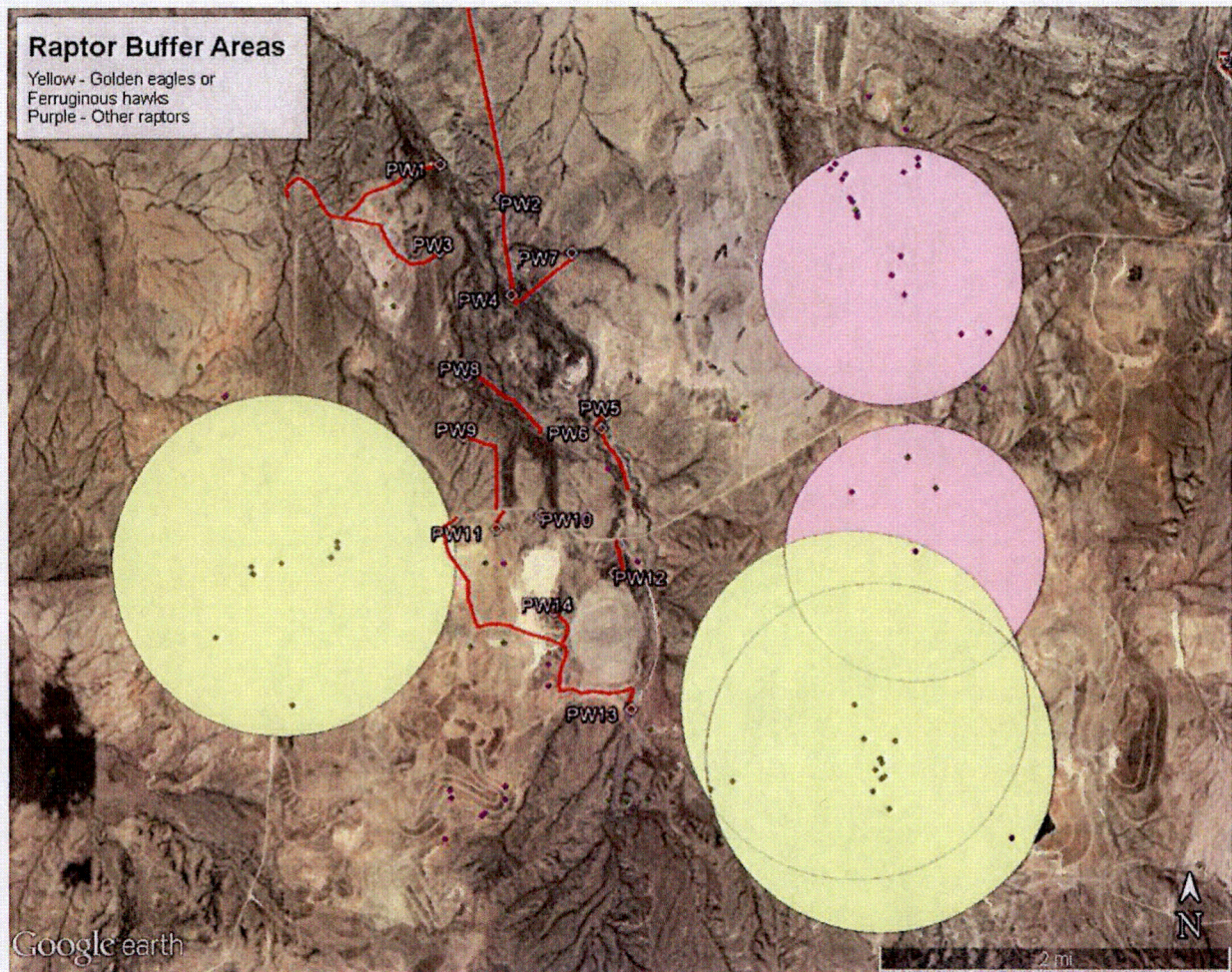
APPENDIX A

Maps and Aerial Photographs of the Project Area



¹Figure provided by Lidstone and Associates (1/18/2015). Land ownership is designated with private (purple), State of Wyoming (maroon), and Department of Energy (teal); the remainder is federal land managed by the Bureau of Land Management.

Figure A-2. Aerial photograph of the raptor buffer areas.¹



¹ Data provided by the Bureau of Land Management (via kmz file from Sarah Wempen on Jan. 6, 2015)

Figure A-3. Sage-grouse lek buffer area.

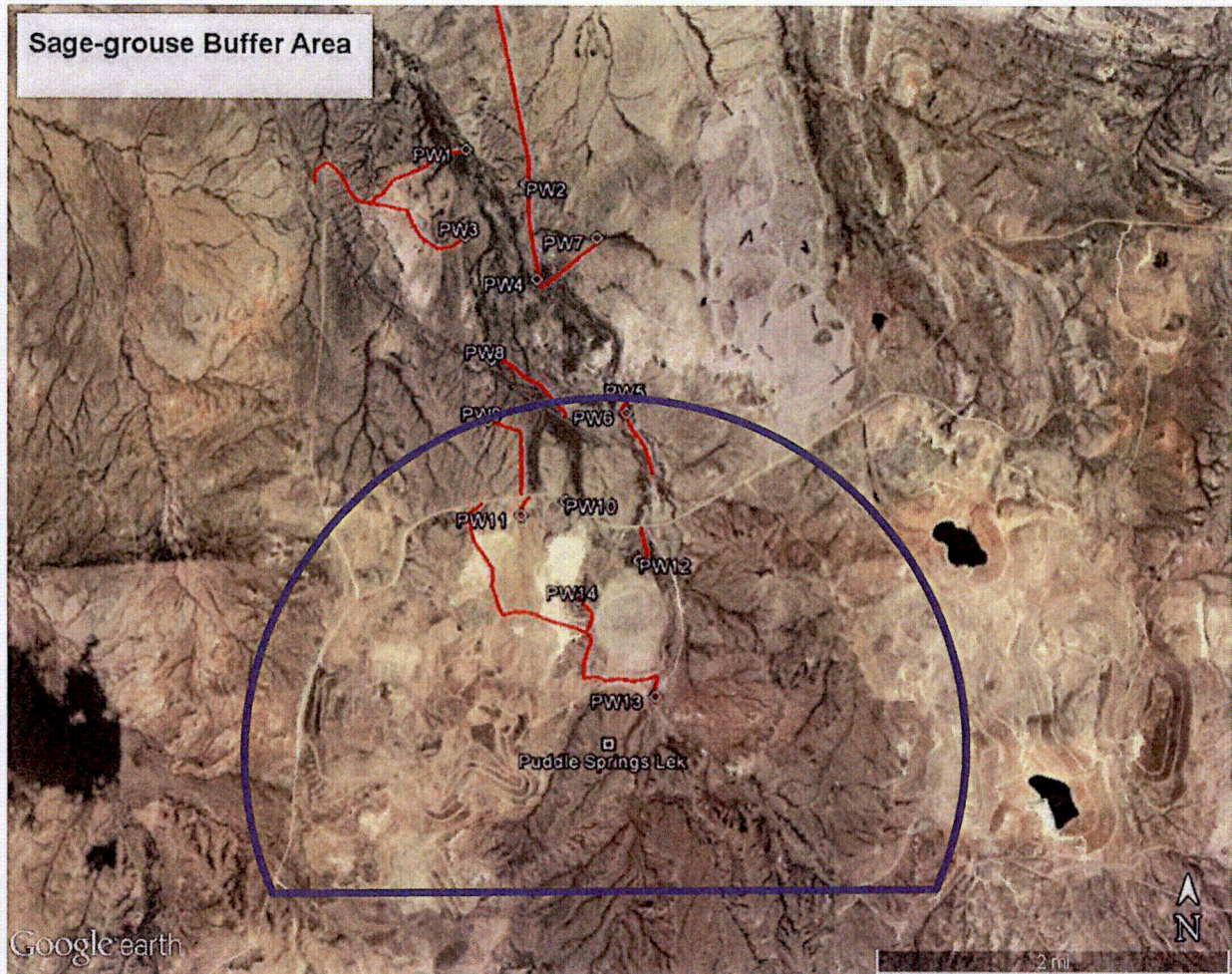
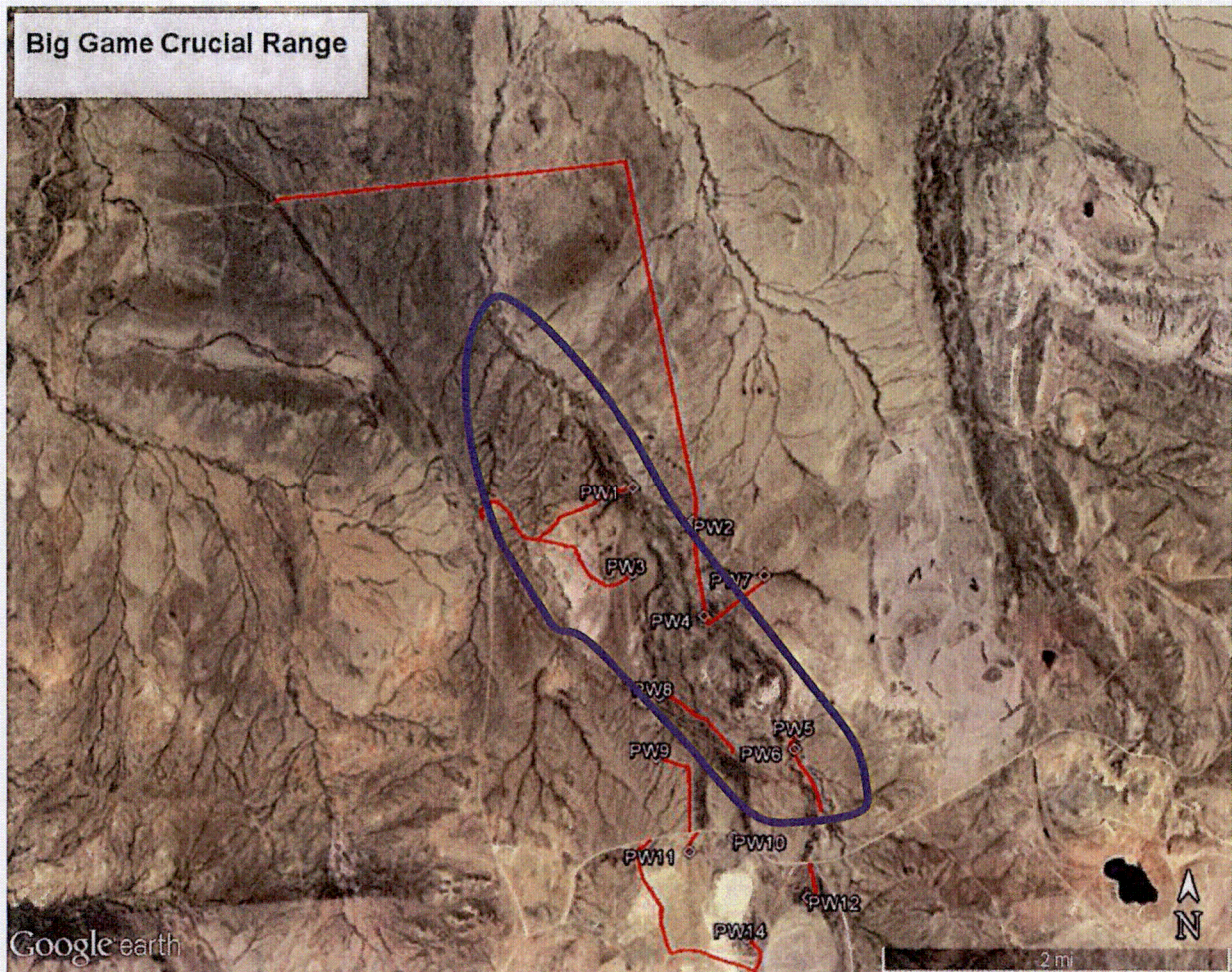
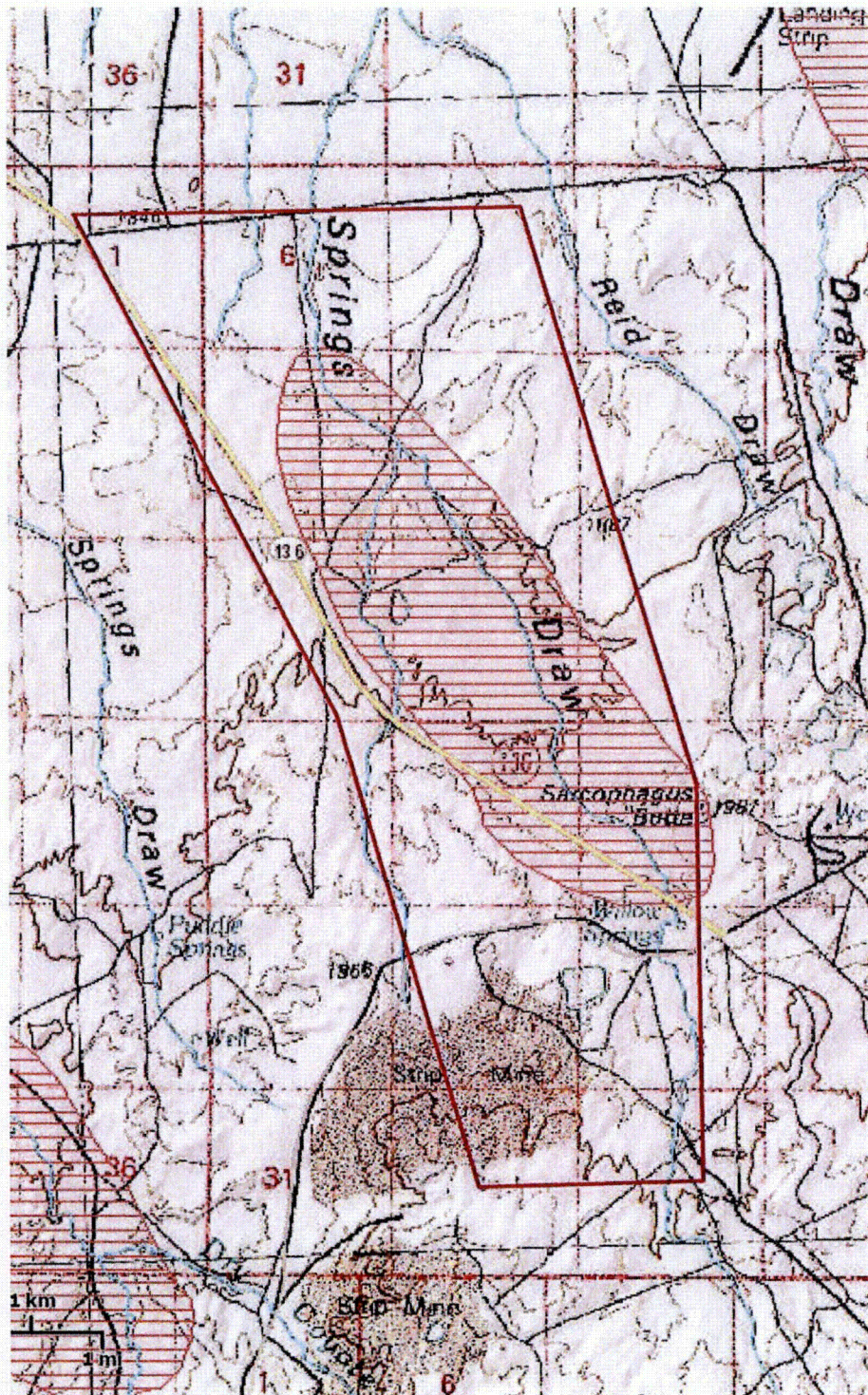


Figure A-4. Big Game Crucial Range.¹



¹Area indicated is an approximation based on the Wyoming Game and Fish Department data (WISDOM 2014) and shown in the topographic map in Figure A-5.

Figure A-5. Topographic map of the big game crucial range (WISDOM 2014).



ADDENDUM B

Photographs of the proposed well sites

Proposed Well #1

This site is an upland site dominated by black greasewood with an understory of western wheatgrass and cheatgrass.



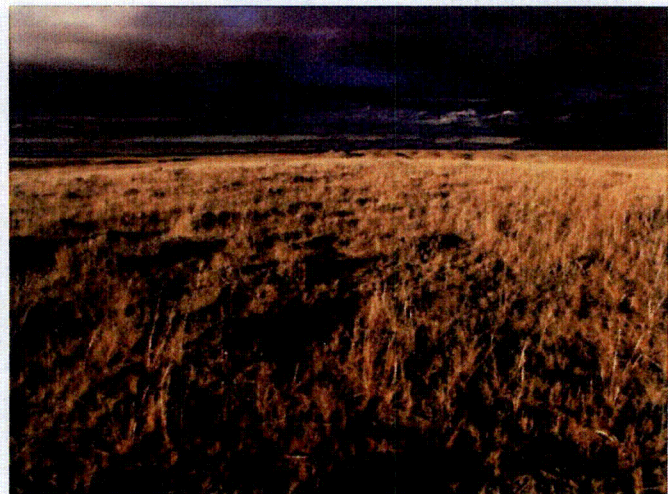
Proposed Well #2

This site is upland mixed grass prairie habitat. The site supports less than 10% big sagebrush with grass species including needle-and-thread grass and western wheatgrass.



Proposed Well #3

This site is mixed grass prairie with big sagebrush, needle-and-thread grass, blue grama and western wheatgrass.



Proposed Well #4

This site supports dense big sagebrush and black greasewood with an understory of western wheatgrass. There is evidence of some recent surface water due to the presence of cattle hoof marks and soil surface churning.



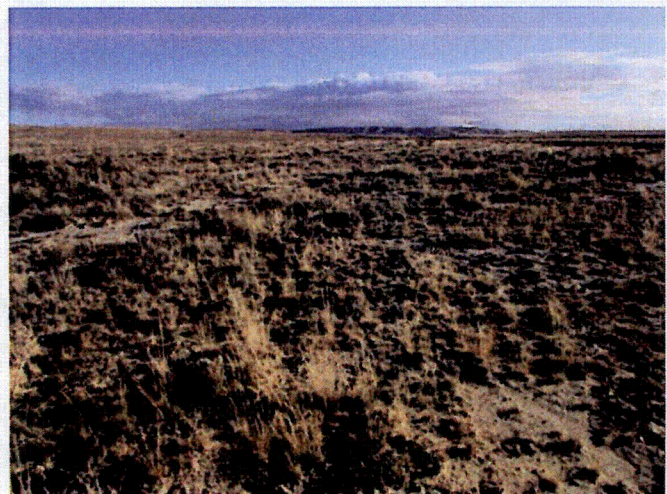
Proposed Well #5

This site is upland mixed grass prairie habitat with birdfoot sagebrush and big sagebrush with western wheatgrass.



Proposed Well #6

This site is upland mixed grass prairie habitat with birdfoot sagebrush, big sagebrush, saltbush, greasewood, sandberg bluegrass and western wheatgrass. NOTE: after the field work the location of this site was adjusted to be within the flood plain of the adjacent Willow Springs Draw.



Proposed Well #7

This site is a narrow grassy swale with the proposed well site at the head of the swale. Evidence of some pooling of water seasonally is located downhill of the site. Vegetation on the well site includes green rabbitbrush, big sagebrush, western wheatgrass, green needlegrass, and cheatgrass.



Proposed Well #8

This site is adjacent to a small stock pond that was dried up and void of vegetation at the time of the site survey. Vegetation next to the pond is upland mixed grass prairie with big sagebrush, western wheatgrass, and cheatgrass.



Proposed Well #9

This site supports mixed grass prairie habitat with big sagebrush, rabbitbrush, western wheatgrass and needle-and-thread grass.



Proposed Well #10

This site is upland mixed grass prairie habitat with big sagebrush, rabbitbrush and western wheatgrass.

**Proposed Well #11**

This site is upland mixed grass prairie habitat adjacent to reclaimed grassland. Vegetation includes big sagebrush, rabbitbrush and western wheatgrass.

**Proposed Well #12**

This site supports dense rabbitbrush with sagebrush and an understory of western wheatgrass.



Proposed Well #13

This site is adjacent to a dry arroyo that drops quickly about 6 feet to the drainage bottom. The arroyo is bound by steep cutbanks and the drainage bottom is mostly void of vegetation except for the edges which support big sagebrush, rabbitbrush, western wheatgrass and cheatgrass. The bank above supports big sagebrush, rabbitbrush, prairie junegrass, Indian ricegrass and western wheatgrass.



Proposed Well #14

This site supports upland mixed grass prairie with big sagebrush and rabbitbrush. The understory includes green needlegrass, sandberg bluegrass and western wheatgrass.



APPENDIX C

Additional Wetland Information and Photographs for Proposed Wells No. 5, 6 and 13

Figure C-1. National Wetland Inventory Map of the proposed Well No. 5 and No. 6.



Figure C-2. Infrared aerial photograph of the proposed wells sites No. 5 and 6.

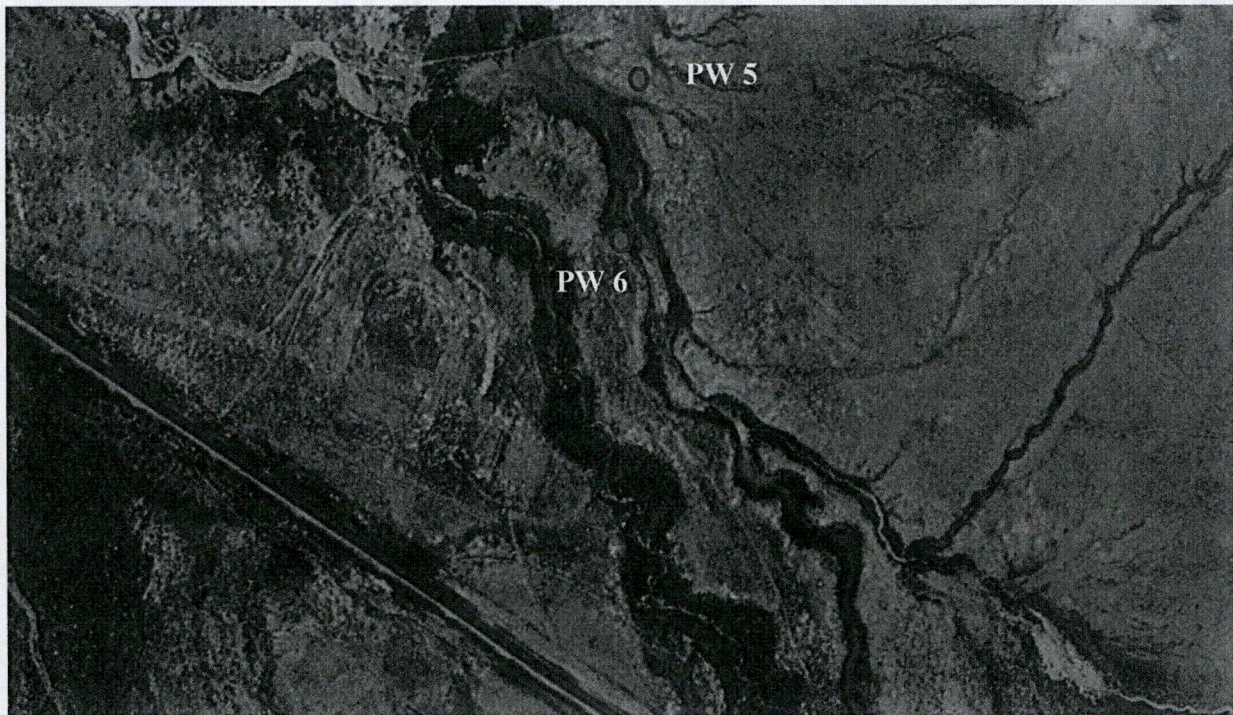


Figure C-3. Photographs of the drainage between proposed well sites No. 5 and No. 6.



Figure C-4. National Wetland Inventory Map of the proposed Well No. 13.



Figure C-5. Infrared aerial photograph of the proposed well No. 13.

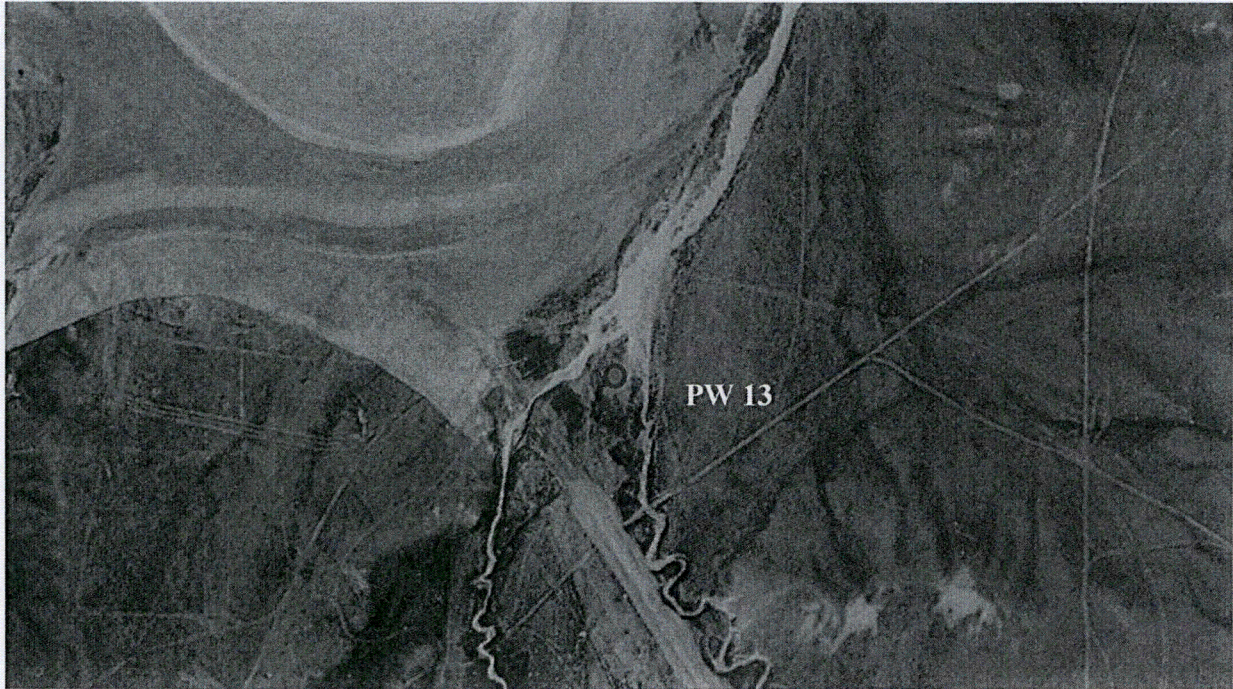


Figure C-6. Photographs of the arroyo and vegetation adjacent to well site 13.



Attachment 2

June 12, 2014

Ms. Nancy Nuttbrock, LQD Administrator
Wyoming Department of Environmental Quality
122 West 25th St.
3rd Floor West
Herschler Building
Cheyenne, WY 82002

SUBJECT: PERMANENT MODIFICATION OF PROVISIONS IN CONFIRMATORY ORDER,
DOCKET NO. 40-4492- AMERICAN NUCLEAR CORPORATION GAS HILLS SITE

Dear Ms. Nuttbrock:

On May 9, 1994, the American Nuclear Corporation (ANC) announced that it intended to discontinue operations at its Gas Hills Site and go out of business. The company forfeited its \$3.2 million reclamation bond to Wyoming Department of Environmental Quality (WDEQ) during October 1994, and WDEQ subsequently undertook reclamation activities at the site using these funds. The site encompasses about 550 acres of land, and consists of two former tailings impoundments.

In 1996, the WDEQ accepted and agreed to the terms of Confirmatory Order (Order) issued by the U.S. Nuclear Regulatory Commission (NRC) for the reclamation of the ANC Gas Hills site. The Order was signed by the NRC and WDEQ in October 1996 (Agencywide Document Access Management System (ADAMS) Accession No. ML071520354). In response to a request by WDEQ, the Order was subsequently modified by letter dated August 11, 2009 (ADAMS Accession No. ML091330303). By letter dated May 29, 2012, the NRC proposed additional modifications to the Order that would result in the temporary suspension of the majority of the Parts until financial issues affecting WDEQ's remediation could be resolved (ADAMS Accession No. ML120670346). WDEQ agreed to these additional modifications by letter dated July 30, 2012 (ADAMS Accession No. ML14122A199).

Since the Order was last modified, WDEQ and the NRC have maintained a dialog on the financial and technical issues related to the reclamation of the ANC Gas Hills site. As a result of these on-going discussions, the NRC and WDEQ have agreed to suspend parts of the Order. NRC and WDEQ recognize that, contrary to WDEQ's initial projections, there are insufficient funds remaining to finish reclamation of the site. The Order requirements currently in effect include implementation of the groundwater corrective action program, sampling of wells and springs, measuring settlement monuments on Pond #1, and providing an annual report to NRC. NRC and WDEQ agree that Pond #1 has reached 90 percent settlement and that the groundwater corrective action program should be discontinued. NRC and WDEQ have decided that the best use of the remaining reclamation funds would be the installation of new monitoring wells and surface water sampling stations to determine the extent of the groundwater plume flowing off-site and, if feasible, to purchase land to extend the site boundary beyond the plume.

The specific parts of the Order to be suspended are Parts I, II, and III, and Paragraphs 1 – 10, 12, and 14 – 16 of Part IV. Elimination of Paragraph 16 of Part IV means that WDEQ will not have to pay for the long-term surveillance and control fund when the site is transferred to the U.S. Department of Energy. Part IV, paragraph 11, will be modified to read as follows:

Using the funds remaining from the forfeited reclamation bond, install new wells and surface water sampling stations at locations agreed upon by WDEQ and NRC. WDEQ shall sample all existing wells and surface water stations, plus any new wells and surface water stations, on an annual frequency for the analytes found in the WDEQ Annual Report for CY 2013 for the ANC Gas Hills Reclamation Project submitted to the NRC by letter dated February 13, 2014 (ADAMS Accession No. ML14071A343), namely: MAJOR IONS--Carbonate as CO₃, Bicarbonate as HCO₃, Calcium, Chloride, Fluoride, Magnesium, Nitrogen, Ammonia as N, Nitrogen, Nitrate+Nitrite as N, Potassium, Silica, Sodium, Sulfate; PHYSICAL PROPERTIES--Conductivity @ 25 C, pH, Total Dissolved Solids, TDS @ 180 C; METALS – DISSOLVED--Aluminum, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Uranium, Vanadium, Zinc; METALS – TOTAL--Iron, and Manganese. The corrective action program will be discontinued.

In order to effectuate these modifications to the Order, WDEQ should review and document its acceptance of these changes to the Order in writing within 60 days. If WDEQ is not in agreement with the proposed changes, please contact the NRC immediately.

If you have any questions, please contact Tom McLaughlin, the Project Manager for the site, at Thomas.McLaughlin@nrc.gov or (301) 415-5869.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedures," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

/RA/

Larry Camper, Director
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Docket No.: 04004492

cc: Tanya King, WDEQ

DISTRIBUTION:

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ML14106A328

OFFICE	MDB/PM	MDB/LA	OGC	MDB/BC	DURLD/DD	DWMEP/D
NAME	TMcLaughlin	CHolston	BJones	MNorato	APersinko	LCamper
DATE	4/16/14	4/17/14	5/15/14	5/27/14	5/27/14	6/12/14

OFFICIAL RECORD COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RIGHT-OF-WAY GRANT

SERIAL NUMBER WYW 168618

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the holder:

Wyoming Department of Environmental Quality (DEQ)
Land Quality Division
122 West 25th Street
Cheyenne, Wyoming 82002

receives a right to construct, operate, maintain, and terminate eight (8) test monitoring wells and three (3) test holes for water sampling, for water quality and water level sampling in the Gas Hills area including access routes on Federal lands described as follows:

T. 33 N., R. 90 W.,

Sec. 5, Lots 3, 4, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 6, Lot 1, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$;

Sec. 8, W $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 17, E $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 18, S $\frac{1}{2}$ NE $\frac{1}{4}$;

Sec. 20, W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;

Sec. 21, SW $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 29, MS 590, Lot 2, N $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$,

Sec. 33, NW $\frac{1}{4}$ NW $\frac{1}{4}$.

6th P.M., Fremont County, Wyoming

(within, as shown on the attached map, Exhibit "A")

b. The right-of-way or permit area granted herein is granted herein for 11 sites, each being 25 feet by 25 feet, containing a total of 0.15 acres, and the total of 9.388 miles of existing improved roads, two-track roads and overland travel routes, 12' in width being 13.65 acres more or less.

- c. This instrument shall terminate on December 31, 2044, 30 years from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
- e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, plans, maps, or designs set forth in Exhibits "A", and "B" dated July 9, 2015, attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

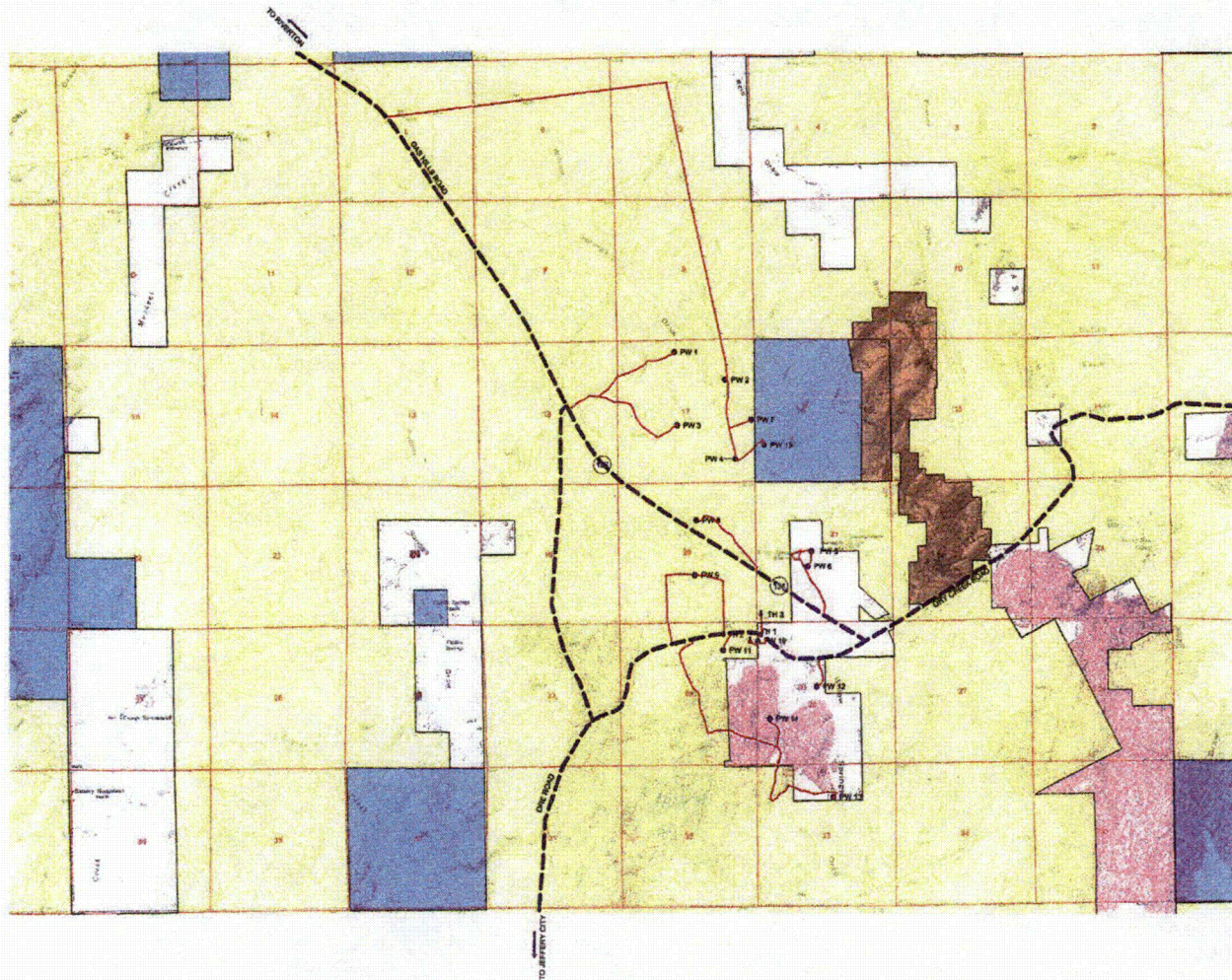
IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

Alan Edwards
(Signature of Holder)
Deputy Director
(Title)
July 10, 2015
(Date)

Michael Vande Vort
(Signature of Authorized Officer)
FIELD MANAGER
(Title)
JUL 10 2015
(Effective Date of Grant)

EXHIBIT "A"

W168618



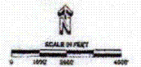
LEGEND

- STATE OWNERSHIP
- PRIVATE OWNERSHIP
- U.S. DOE OWNERSHIP (DEPARTMENT OF ENERGY)
- U.S. BLM OWNERSHIP (U.S. BUREAU OF LAND MANAGEMENT)
- RECLAIMED MINE LANDS
- PW 1 PROPOSED MONITORING WELL
- TH 2 PROPOSED TEST HOLE
- ACCESS ROUTE
- MAIN ROADS

GENERAL NOTES



IMAGE FROM GOOGLE EARTH
MAY 2, 2014



WYOMING DEQ
American Nuclear Corporation/Tailings

PROJECT NUMBER: ACAD-810
DESIGNER: EUGENIA
CHECKED BY: [Signature]
APPROVED BY: [Signature]
DATE: 2/12/15

PROPOSED
MONITORING WELL/TEST HOLE
LOCATION MAP

REVISIONS: [Table with 2 columns: No., Description]
FIGURE
1

WYW168618

WY DEQ-LQD

Right-of-Way Stipulations

1. **CULTURAL RESOURCES, SITE AVOIDANCE.** Due to the potential for affecting significant cultural resources, the holder shall ensure that the proposed access road not be bladed or otherwise affected. This stipulation applies within the following legal locations:

T.33N., R.90W., Section 5 All (within the viewshed of site 48FR1783, the historic Casper to Lander Road)

Violation of this stipulation may result in the holder being subject to the penalties and actions contained in the 43CFR7 Regulations, which are on file at all BLM offices.

2. **CULTURAL RESOURCES, SITE AVOIDANCE.** No activities shall be performed during periods when the soil is too wet to adequately support equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil shall be deemed too wet to adequately support equipment.
3. **CULTURAL AND PALEONTOLOGICAL RESOURCES STIPULATION.** Any cultural and/or paleontological resource (historic or prehistoric site or object or fossil) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures shall be made by the authorized officer after consulting with the holder.
4. The right-of-way shall be maintained in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
5. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
6. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil shall be deemed too wet to adequately support construction equipment.

7. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer.
8. The holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the appropriation or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
9. The holder(s) agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901, et seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agents, or unrelated third parties.
10. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of

Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

11. The holder shall contact the authorized officer at least 7 days prior to the anticipated start of construction and/or maintenance. The authorized officer may require and schedule a preconstruction conference with the holder prior to the holder's commencing construction and/or maintenance on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with construction and/or maintenance associated with the right-of-way, shall also attend this conference to review the stipulations of the grant including the application.
12. One hundred eighty (180) days prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, re-contouring, top-soiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.
13. The right-of-way shall be relinquished to the United States if the authorized uses are no longer needed.
14. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices.
15. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall be tested for purity and germination and the viability testing of seed shall be done in accordance with State law and within 9 months prior to purchase. Commercial seed shall be either certified or properly tested seed. The seed mixture container shall be tagged in accordance with Wyoming State law and copies of seed test results/certification forwarded to this office.
16. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the plan of development which was approved and made part of the grant on JUL 10 2015. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

17. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
18. Construction-related traffic shall be restricted to routes approved by the authorized officer. New access roads or cross-country vehicle travel will not be permitted unless prior written approval is given by the authorized officer. Authorized roads used by the holder shall be rehabilitated or maintained when construction activities are complete as approved by the authorized officer.
19. Surface disturbing and/or disruptive activities are prohibited or restricted in suitable sage-grouse nesting and early brood-rearing habitat during the period within mapped habitat important for connectivity or within 2 miles of any occupied or undetermined lek from March 15-June 30 for the protection of **sage-grouse nesting/brood-rearing (non-Core Area) habitat. Any exceptions to this requirement must have prior written approval from the authorized officer.**
20. Construction activity, surface disturbing and/or disruptive activities will be prohibited during the period from **February 1 to July 31** for the protection of **raptor nesting** habitat except burrowing owl (**April 1 to September 15** for burrowing owls, or until young have fledged. This includes non-emergency activities, i.e. road maintenance, routine maintenance activities, replace or repair pipelines, replacement of any power or telephone facilities, etc. (reference Appendix F of the 2014 Lander Field Office (LFO) Resource Management Plan (RMP)). **Any exceptions to this requirement must have prior written approval from the authorized officer.**
21. Construction activity, surface disturbing and/or disruptive activities will be prohibited during the period from **November 15 to April 30** for the protection of **crucial big game winter range**. This includes non-emergency activities, i.e. road maintenance, routine maintenance activities, replace or repair pipelines, replacement of any power or telephone facilities, etc. (reference Appendix F of the 2014 Lander Field Office (LFO) Resource Management Plan (RMP)). **Any exceptions to this requirement must have prior written approval from the authorized officer.**
22. Surface disturbing and/or disruptive activities that have the potential to cause destruction of reproductive nests, eggs or young of migratory birds will be prohibited during the period of May 1st to July 15th. A survey of the proposed disturbance area(s) may be conducted by the proponent to determine the presence/absence of nesting migratory birds. Nest surveys should be conducted no more than 7 days prior to surface disturbing and/or disruptive activities.
23. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application,

location of storage and disposal of containers, and any other information deemed necessary by the authorized officer.

24. The holder shall be responsible for managing all noxious and undesirable invading plant species in the reclaimed areas, including cheat grass, until the revegetation activities have been determined to be successful. If noxious or invasive weeds are encountered, the BLM and/or the County Weed and Pest Department would be consulted by the holder for suppression and control methods. A Pesticide Use Proposal (PUP) and written approval from the Authorized Officer for the use of herbicides must be obtained prior to usage of herbicides.
25. Mobile equipment being transported from an offsite location to the BLM project area should be cleaned prior to arrival using water, steam, or air pressurized cleaning methods to remove any invasive or noxious weed seed and plant parts or materials that could contain seeds or plant parts. When appropriate, identify sites generally off public lands where equipment can be cleaned. Seeds and plant parts need to be collected and disposed of appropriately.
26. Holders will be responsible for suppression and/or control of any invasive or noxious plant species within the authorized area. If chemical herbicide control methods are used on public lands, only BLM approved chemicals and application methods will be permitted. A Pesticide Use Proposal (PUP) must be submitted and approved by the BLM before initiating chemical control methods.
27. All mulch, seed and other vegetative reclamation materials must be certified weed free. If available all sand, gravel, and fill materials shall be certified weed free.
28. If weed species have been determined by the local BLM weed coordinator to encroach outside of the right-of-way area and are determined a result of the disturbance of the right-of-way, the holder will be responsible for the treatment and management of the weeds as long as the encroachment exists. In order for the holder to be released of this responsibility, no plants shall be found in as many consecutive years as the seed viability for the particular plant species lasts.
29. All weeds the Fremont County Weed and pest deem as noxious or invasive need to be controlled should they begin to grow in disturbed areas.
30. Monitoring the well sights for noxious weeds two (2) growing seasons after the wells are completed should be adequate. Also, a constant monitoring of access road as will be required for early detection and rapid responses.
31. Prior to reclamation and relinquishment of this right-of-way, an approved seed mixture shall be obtained from the BLM, Lander Field Office.

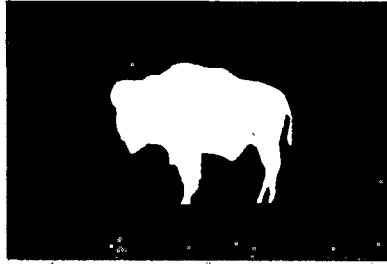
Appendix B

State of Wyoming Access Agreement



WYOMING OFFICE OF STATE LANDS AND INVESTMENTS

122 West 25th Street
Cheyenne, WY 82002
Phone: 307.777.7331
Fax: 307.777.3524
slfmail@wyo.gov



MATTHEW H. MEAD
Governor

BRIDGET HILL
Director

June 4, 2015

RECEIVED
JUN - 8 2015

Mr. Paul R. Hildenbrand
Lidstone and Associates, Inc.
4025 Automation Way, Bldg. E
Ft. Collins, CO 80525

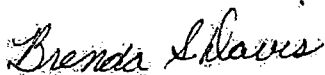
Re: Temporary Use Permit No. 02644
Monitoring Well: Section 16-33N-90W

Dear Mr. Hildenbrand:

The Board of Land Commissioners in regular session on June 4, 2015, approved the above temporary use permit for a five year term. Approval was based on consideration of \$100.00 per year. Receipt of the first year's consideration is hereby acknowledged.

Enclosed for your disposition is a copy of the temporary use permit. If you have any questions, please contact me at (307) 777-7333.

Sincerely,



Brenda S. Davis
Lands Management Specialist
Trust Land Management Division

Enclosure

STATE OF WYOMING
BOARD OF LAND COMMISSIONERS
TEMPORARY USE PERMIT

PERMIT NO.: TUP-02644

COUNTY: Fremont

PERMITEE:

NAME: Lidstone and Associates, Inc.

ADDRESS: 4025 Automation Way, Bldg. E
Fort Collins, CO 80525

PHONE: (970) 223-4705

This permit authorizes only the use indicated below:

- ☐ Construction Activity
- ☐ Hot mix facility
- ☐ Organized recreation activity
- ☐ Access road
- ☐ Sign board
- ☐ Stockpile site
- ☐ Water removal facility
- ☐ Outfitting/guiding activities
- ☒ Other: Monitoring Well

More specifically: Monitoring Well associated with WDEQ - Land Quality Division
American Nuclear Corporation Reclamation Project.

This permit authorizes the following improvements: Monitoring Activity

This permit valid only on the following state land:


SW4SW4 of Section 16, Township 33 North, Range 90 West, 6th P.M.

This permit commences March 16, 2015 and expires March 16, 2020.

Permittee shall pay the Board of Land Commissioners, as consideration for this permit, the total sum of **Five hundred and no/100 dollars (\$500.00)**, payable in five equal installments of **\$100.00**, on or before March 16th of each year, commencing in 2015. If any installment payment is not received when due, this permit shall terminate immediately.

This permit is issued pursuant to Chapter 14 of the Rules and Regulations of the Board of Land Commissioners. **THIS PERMIT IS NON-TRANSFERABLE.**

Date: May 12, 2015


Preliminary Approval by
Director Office of State Lands and
Investments

BOARD APPROVED

Date: June 4, 2015

Final Approval by
Board of Land Commissioners

TEMPORARY USE PERMIT
ADDITIONAL TERMS AND CONDITIONS

GENERAL CONDITIONS:

1. Permittee shall conduct all operations in a manner which minimizes damage to the land.
2. Permittee shall not place any improvements on the permit area other than those expressly approved within this permit, or an amendment hereto. Camping is not authorized on nonexclusive outfitting/guiding permits.
3. Permittee shall properly contain and dispose of all trash, garbage, industrial, and human waste.
4. Permittee shall properly control noxious weeds.
5. Permittee may terminate this permit prior to the expiration date by notifying the Director of the Office of State Lands and Investments in writing. In the event of termination, the Board of Land Commissioners shall not be obligated to refund any payments received.
6. The Board of Land Commissioners may cancel this permit for violation of any of the terms and conditions of this permit or of the applicable rules and regulations of the Board. The Board also reserves the right to cancel this permit on its anniversary date in order to facilitate the sale or exchange of lands within the permit area.
7. Upon termination, cancellation, or expiration of this permit, Permittee shall restore all disturbed land to a condition and forage density reasonably similar to its original condition and forage density. Permittee shall also remove all personal property from the permit area.
8. Permittee shall observe all state, federal and local laws and regulations.
9. Permittee shall legally access permit area and observe all state laws regarding trespass on adjacent or intermingled private lands.
10. Permittee agrees to indemnify and hold the State of Wyoming, its officers, agents, employees, authorized lessees and Permittees harmless against any liability or expenses arising out of the Permittee's operation under this permit.



Lidstone and Associates, Inc.
Engineering, Geology and Water Resource Consultants

April 21, 2015

State of Wyoming
Office of State Lands & Investments
Herschler Building 3-West
122 West 25th Street
Cheyenne, WY 82002-0600
Attn.: Brenda Davis

RE: Application for Temporary Use Permit

Dear Ms. Davis:

Lidstone and Associates (LA) is hereby applying for a Temporary Use Permit for the SW/NW/SW of Section 16, Township 33 North, Range 90 West in Fremont County, Wyoming. The purpose of this Temporary Use Permit is to allow LA and its contractors onto this parcel of land to install one monitoring well and collect ground water samples. This well will be associated with a groundwater investigation phase of the WDEQ/Land Quality Division's reclamation of the former American Nuclear Corporation Uranium Mill Tailings Site located in the Gas Hills District of Fremont County.

Attached to this letter for your consideration and approval are the completed temporary use permit application form, a signed Surface Lessee Notification and Comment Form, a map showing the location of the proposed monitoring well, and our check No. 22189 in the amount of \$125.00 to cover the application fee (\$25.00) and the 2015 annual consideration fee (\$100.00).

LA appreciates your timely consideration and approval of this temporary use permit. Please call me if you have any questions.

Sincerely,
LIDSTONE AND ASSOCIATES, INC.

Paul Hildenbrand, P.G., R.G.
Senior Geologist

PRH:rce

Enclosure
Sent via: First Class Mail

K:\OPEN\WYDEQ\104 - ANC Tailings\TASK ORDER 1\Ltr to State Lands.docx

STATE OF WYOMING
BOARD OF LAND COMMISSIONERS
APPLICATION FOR TEMPORARY USE PERMIT

APPLICATION NO. _____ COUNTY Fremont
(Assigned by office)

APPLICANT:

Name Lidstone and Associates, Inc.
Address 4025 Automation Way, Bldg E
Fort Collins, CO 80525
Phone (970) 223-4705

Use applied for: (check one)

- ☐ Construction activity (indicate total acreage affected _____)
- ☐ Hot mix facility (indicate total acreage affected _____)
- ☐ Organized recreation activity
- ☐ Roadway (indicate proposed width _____ and length _____)
- ☐ Sign Board (indicate dimensions: width _____ and length _____)
- ☐ Stockpile site (indicate total acreage affected _____)
- ☐ Water removal facility
- ☐ Outfitting/guiding activities (indicate exclusive ____ or nonexclusive ____ and provide outfitting/guiding license no. _____)
- ☐ Disposal and/or Injection Well
- ☐ Non-commercial Decorative Rock/Stone Removal
- ☒ Other: (specify) Monitoring well for the ANC project

Specifically describe proposed use: The request is for the installation of a monitoring well that will be associated with the WDEO – Land Quality Division's American Nuclear Corporation Reclamation Project.

List any improvements to be placed on the land: The well will be relatively shallow in depth, on the order of 50 feet. The well will be constructed using a hollow stem auger rig and the initial site disturbance will be on the order of 15' by 20'. Once installed the area of disturbance will be approximately three-feet square. The well will be sampled approximately twice a year.

Describe the state land applied for (use a separate sheet if necessary). Delineate the proposed permit area on a quad map and attach the map.

Legal Description	Sec.	Twp.	Rng.	length/ft	County		
SWNWSSW	16	33N	90W		Fremont		

Requested duration of permit: Number of years 5 from 3/15/2015 to 4/1/2020
(Date) (Date)

Annual Consideration offered to the State of Wyoming for this permit: \$ 100.00
Surface Impact paid to the Surface Lessee: \$ 50.00 on 4/14/15 Check No. 22188
(Date)

This form must be fully completed and be accompanied by the executed Lessee Comment Form, Quad Map, Application Fee and Consideration to the State. If not, all will be returned.

I hereby certify that I have read and agree to abide by the Rules and Regulations of the Board of Land Commissioners governing temporary use permits and the terms and conditions of the temporary use permit.

Paul R. Hildenbrand
Signature of Applicant

4/21/2015
(Date)

Paul R. Hildenbrand
Print or Type Name

STATE OF WYOMING
BOARD OF LAND COMMISSIONERS
SURFACE LESSEE NOTIFICATION AND COMMENT FORM

(Sections A & B to be completed by applicant)

A. PROJECT/ACTIVITY INFORMATION:

Type of Project:	Monitoring well to be associated with the American Nuclear Corporation site		
	(WDEQ/LQD Permit 352C) Reclamation Project		
Applicant:	Lidstone and Associates, Inc.		
Address:	4025 Automation Way, Bldg. E		
	Fort Collins, CO 80525		Phone: (970) 223-4705

State Land Involved:

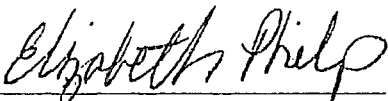
Section	16	Township	33N	Range	90	County	Fremont
Section		Township		Range		County	
Section		Township		Range		County	

B. SURFACE LESSEE INFORMATION:

Lease No.:	3-8521
Name:	Philp Sheep Co.
Address:	131 S. Hidden Valley Rd.
	Shoshoni, WY 82649
Phone No.:	(307) 856-6102

C. SURFACE LESSEE COMMENTS: (to be completed by surface lessee)

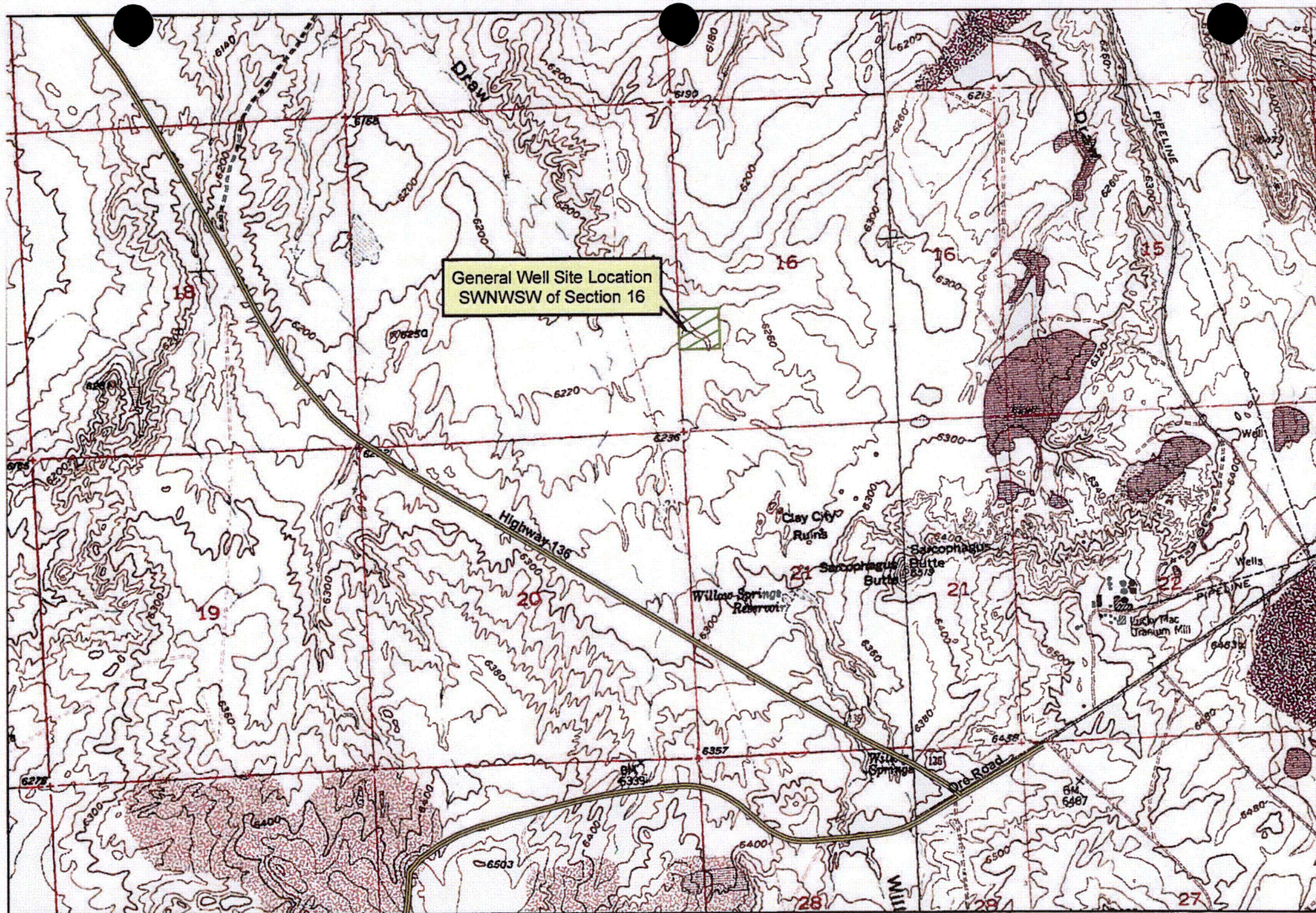
If this project will negatively affect your grazing/agricultural operation, please explain.


(Signature of Surface Lessee)

Elizabeth Philp

(Please type or print name)

April 8, 2015
Date



ANC Reclamation Project
Monitor Well Location
Temporary Use Permit Application
Office of State Lands & Investments



Township 33N, Range 90W

0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

WDEQ - Land Quality Division
122 West 25th Street
Herschler Bldg. 3W
Cheyenne, WY 82002

Appendix C

Private Landowner Access Agreement



**SURFACE OWNER CONSENT FOR ACCESS
TO CERTAIN LANDS FOR THE PURPOSE OF INVESTIGATING POTENTIAL GROUND WATER CONTAMINATION
AT THE WDEQ/LQD ANC TAILINGS RECLAMATION PROJECT**

SITE OR NAME: American Nuclear Corporation Gas Hills Uranium Mill Tailings Site, Gas Hills, Fremont County, Wyoming

LQD PROJECT OFFICER: Muthu Kuchanur

LQD CONSULTANT: Lidstone and Associates, Inc.

I/we, the Owner(s) [or Authorized Agent] of record of the following described property located in Fremont County, Wyoming:

E1/2, SE/NW, Section 21, Township 33N, R90W (See attached map)

(Metes and Bounds Description, Mineral Claim Name, Etc.)

Hereby grant to the Wyoming Department of Environmental Quality, Land Quality Division (LQD), its Consultants, and Contractors access to the above described property for the purpose of investigating the potential for ground water contamination due to historic mining and milling of uranium at the former ANC mill and tailings disposal site installing monitoring wells and collecting ground water samples from said wells. Approved activities include water well drill rig and support vehicle access into the site, investigation and collection of baseline data, surveying, installation of approximately two (2) monitoring wells and subsequent sampling of these wells for chemical analysis. No road construction is anticipated. However a new gate will likely be constructed to permit rig access and said gate shall be completed in a workmanlike manner and in accordance with BLM specifications.

This consent to enter and access the property and sample the monitor wells is granted by the Owner for a five (5) year period with a right to renew this easement if all parties agree. This easement shall also terminate upon transfer or sale of the property or upon abandonment of the monitor wells and/or the termination of water sampling needs, if such an event precedes the five (5) year or its renewal period. Existing two-track roads, where available, will be used for access to the well sites. Care shall be taken to prevent more than incidental, temporary impacts due to travel by vehicle, foot, ATV, etc. during access for the installation and subsequent sampling of the wells. All gates will remain closed and any damage to fences will be repaired. Renewal or termination of this agreement may be made in writing by either the Owner or LQD.

A reasonable attempt will be made to contact the Owner or designated Representative approximately one (1) week prior to accessing the property

OWNER:/s/ Philp Sheep Co DATE: 4-8-15

OWNER'S REPRESENTATIVE: Elizabeth Philp, Treas. Philp Sheep Co DATE: _____

OWNER'S REPRESENTATIVE NAME AND MAILING ADDRESS:

Ms. Elizabeth Philp, 313 S. Hidden Valley Road, Shoshoni, WY 82649-8631

TELEPHONE: 307-856-6102

LQD Consultant

BY: _____ DATE: _____

*A copy of the signing representative's authorization must be attached to this form.

STATE OF WYOMING
BOARD OF LAND COMMISSIONERS
SURFACE LESSEE NOTIFICATION AND COMMENT FORM

(Sections A & B to be completed by applicant)

A. PROJECT/ACTIVITY INFORMATION:

Type of Project:	Monitoring well to be associated with the American Nuclear Corporation site		
	(WDEQ/LQD Permit 352C) Reclamation Project		
Applicant:	WDEQ – Land Quality Division		
Address:	122 West 25 th St. / Herschler Bldg. 3W		
	Cheyenne, WY 82002	Phone:	(307) 777-7756

State Land Involved:


Section	16	Township	33N	Range	90	County	Fremont
Section		Township		Range		County	
Section		Township		Range		County	

B. SURFACE LESSEE INFORMATION:

Lease No.:	3-852J
Name:	Philp Sheep Co.
Address:	131 S. Hidden Valley Rd.
	Shoshoni, WY 82649
Phone No.:	(307) 856-6102

C. SURFACE LESSEE COMMENTS: (to be completed by surface lessee)

If this project will negatively affect your grazing/agricultural operation, please explain.


(Signature of Surface Lessee)
Elizabeth Philp

(Please type or print name)

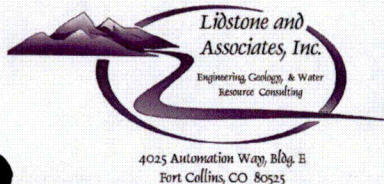
April 8, 2015

(Date)

Appendix D

Test Hole Lithology and Existing Monitoring Well Completions





Project: ANC Tailings

Location: T33N, R90W, Sec. 28 NWNW

Drilled by: Morris Drilling/Inberg Miller

Date started: September 14, 1989

Date completed: September 14, 1989

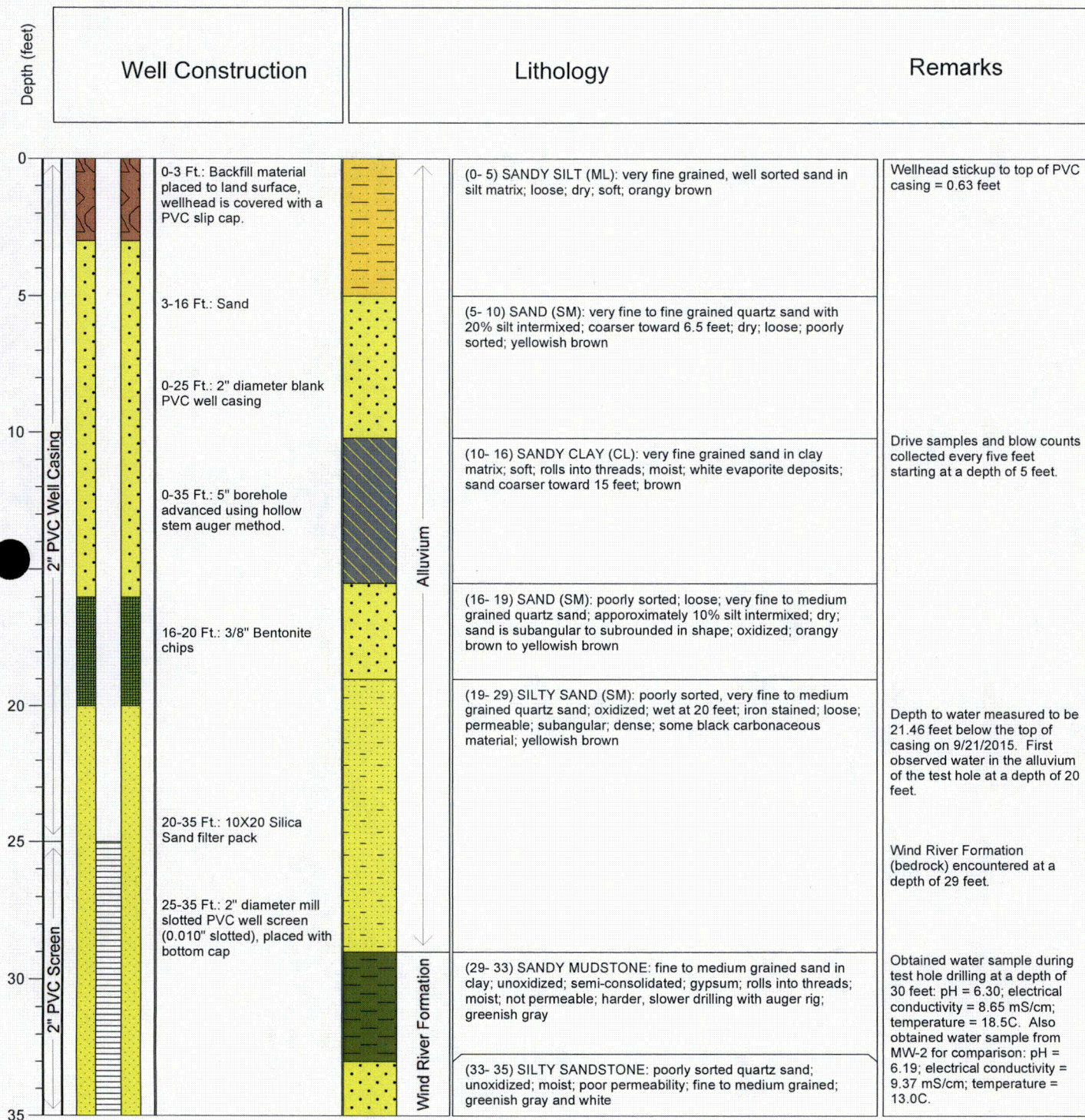
Well Name: MW-2

Drilling Method: Hollow Stem Auger

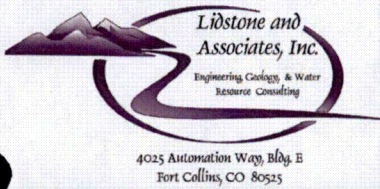
Logged by: M. Stacy

Total depth: 35 Ft.

Elev.: 6,371 Ft.

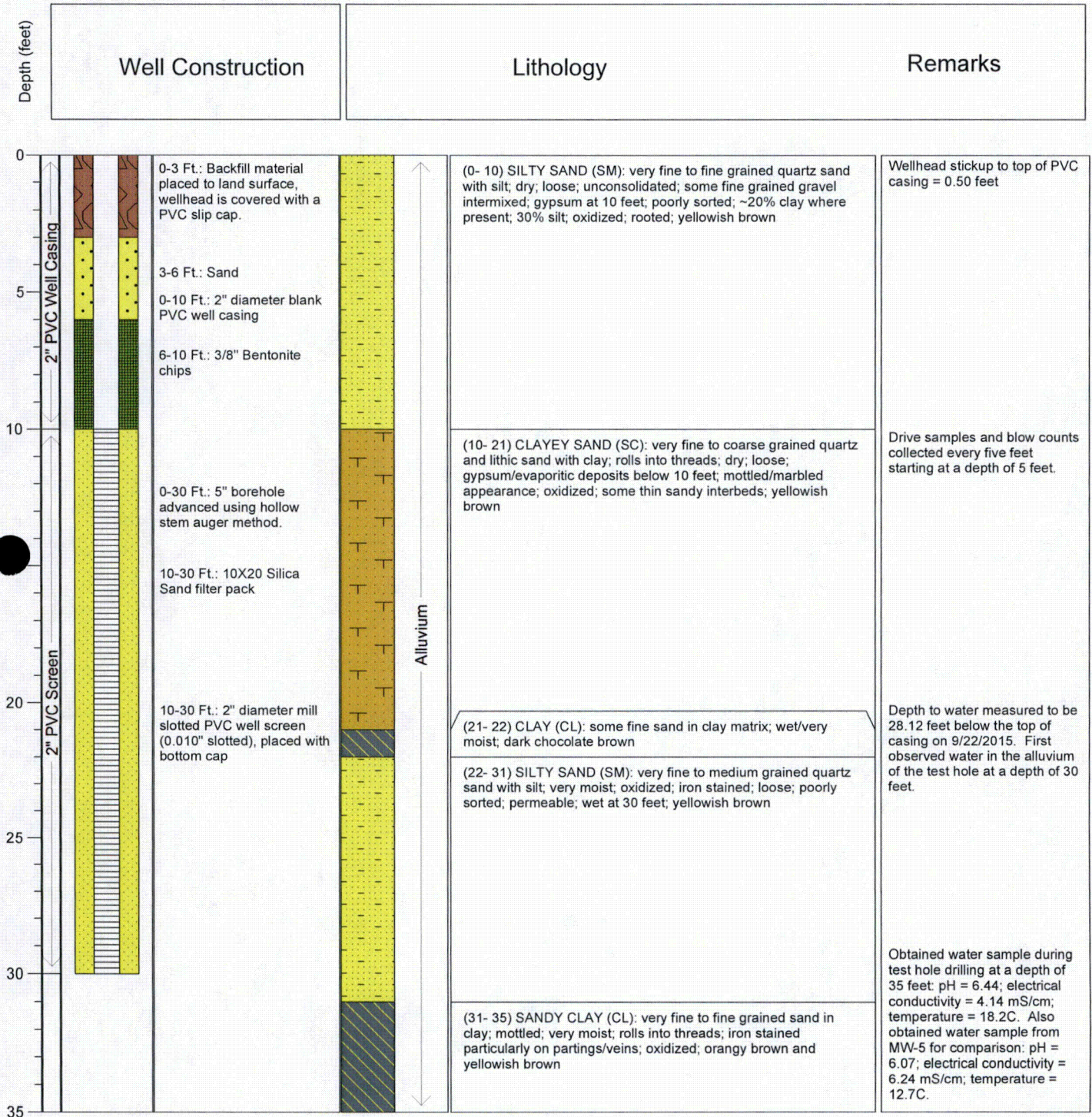


Notes: This figure presents the completion details for the MW-2 monitoring well. The well lies immediately north of Tailings Pond 1 next to PW-10. Morris Drilling drilled and completed the well utilizing hollow stem auger methods. Because there was no geologic log for this existing well, Inberg Miller Engineers drilled an 8 1/4 inch diameter test hole adjacent to this well to determine the formations this well is completed in. This figure presents a compilation of the well completion information from 9/14/89 and the geologic data acquired from the test hole on 7/13/15.

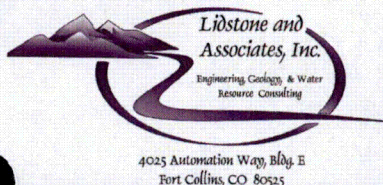


Project: ANC Tailings
 Location: T33N, R90W, Sec. 29 NENE
 Drilled by: Morris Drilling/Inberg Miller
 Date started: September 16, 1989
 Date completed: September 16, 1989

Well Name: MW-5
 Drilling Method: Hollow Stem Auger
 Logged by: M. Stacy
 Total depth: 30 Ft.
 Elev.: 6,364 Ft.

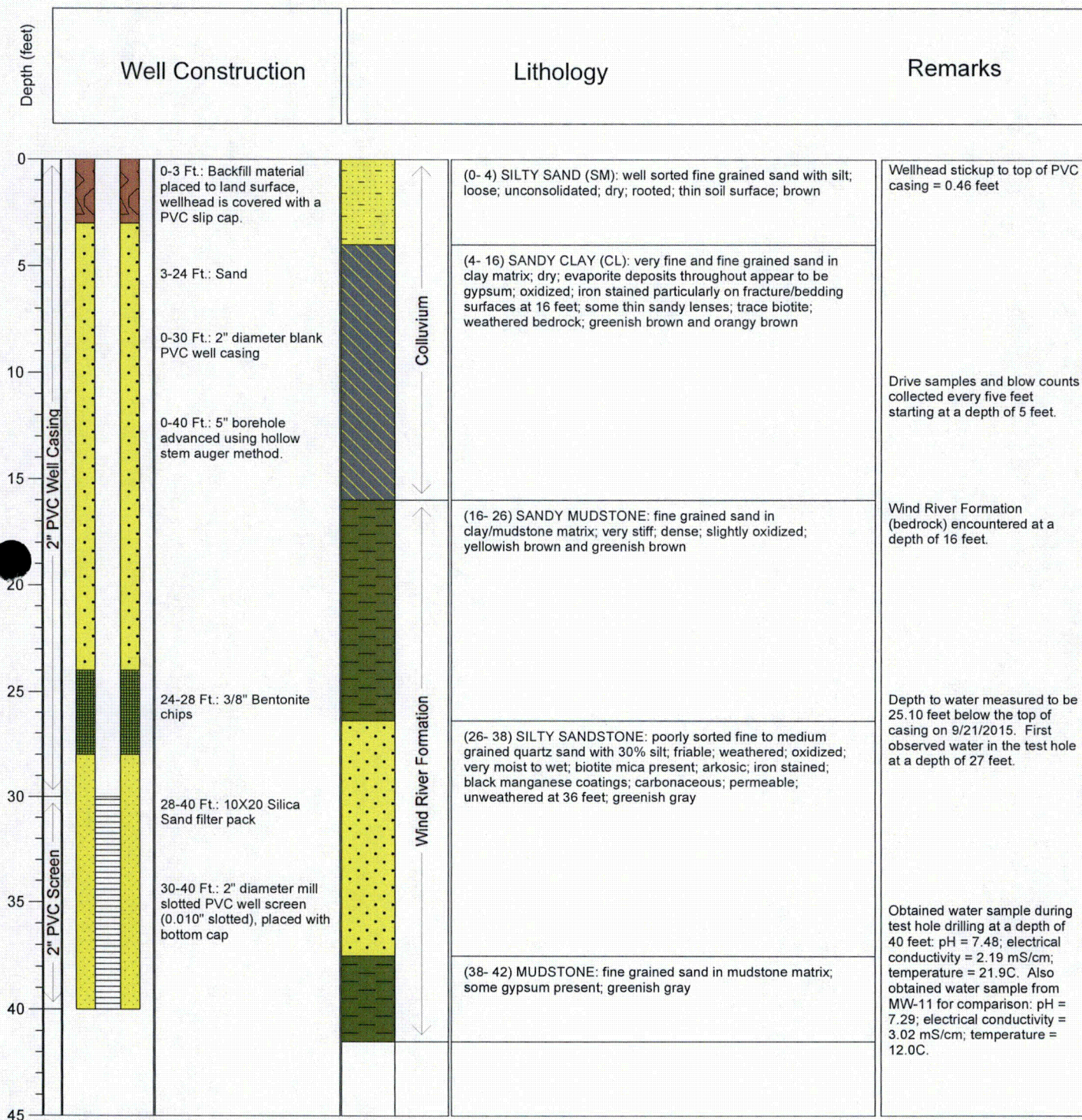


Notes: This figure presents the completion details for the MW-5 monitoring well. The well lies in Gas Draw northwest of Tailings Pond 1. Morris Drilling drilled and completed the well utilizing hollow stem auger methods. Because there was no geologic log for this existing well, Inberg Miller Engineers drilled an 8 1/4 inch diameter test hole adjacent to this well to determine the formations this well is completed in. This figure presents a compilation of the well completion information from 9/16/89 and the geologic data acquired from the test hole on 7/14/15.



Project: ANC Tailings
 Location: T33N, R90W, Sec. 20 SESE
 Drilled by: Morris Drilling/Inberg Miller
 Date started: September 15, 1989
 Date completed: September 15, 1989

Well Name: MW-11
 Drilling Method: Hollow Stem Auger
 Logged by: M. Stacy
 Total depth: 40 Ft.
 Elev.: 6,344 Ft.



Notes: This figure presents the completion details for the MW-11 monitoring well. The well lies west of Gas Draw northwest of Tailings Pond 1. Morris Drilling drilled and completed the well utilizing hollow stem auger methods. Completion details on annular materials are estimated from other monitoring wells completed in the area in 1989. Because there was no geologic log for this existing well, Inberg Miller Engineers drilled an 8 1/4 inch diameter test hole adjacent to this well to determine the formations this well is completed in. This figure presents a compilation of the well completion information from 9/89 and the geologic data acquired from the test hole on 7/14/15.