

**Technical Report on Resources
Allemand-Ross Uranium Project
Converse County, Wyoming, USA**

Technical Report for NI 43-101

Effective Date: April 30, 2019

Report Prepared For:



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1.0 SUMMARY

Western Water Consultants, Inc., d/b/a WWC Engineering, has been retained by Uranium One to oversee and supervise preparation of this independent Technical Report for the Allemand-Ross Uranium Project (the Project), in accordance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). The objective is to disclose a uranium resource estimate for the Project that meets the established definitions and guidance of NI 43-101. The estimate results are from the analysis of historical data on the Project and recent confirmation drilling. An independent technical report is necessary to comply with NI 43-101, Section 5.3(1)(c).

Prior to, and separate from, this Technical Report, an independent NI 43-101 technical report entitled "Allemand-Ross Uranium Project, Converse County, Wyoming, U.S.A., 43-101 Mineral Resource Report" dated December 30, 2008 was prepared for the Project by BRS Inc., a Professional Engineering and Natural Resource Corporation duly licensed in the State of Wyoming, U.S.A. and authored by Douglas Beahm, P.E., P.G., and Andrew Anderson, P.E., P.G.

This report addresses the geology and uranium mineralization of the mineral holdings for the Project located in Converse County, Wyoming, at approximate Latitude 43° 00' North and Longitude 105° 30' West. This Project is within the South Powder River Basin Uranium Mining District of the Powder River Basin (PRB), approximately 42 air miles northeast of Casper, Wyoming (Figure 1). Uranium One controls the mineral rights of the Project area with 462 unpatented federal lode mining claims, ten State of Wyoming mining leases, and eight fee mineral leases.

Mineral resources within the Project occur in sands of the Paleocene age Fort Union Formation. The Fort Union is a fluvial deposit composed of sandstones interbedded with claystone, siltstone, carbonaceous shale, and coals. The uranium mineralization is typical of the Wyoming type roll-front deposits. Uranium One developed a geologic unit identification nomenclature for the Project that describes sand units in ascending order from the 0 sand to the 120 sand. Mineral resources within the Project occur in the 10 through 50 host sands. For the purpose of consistency, the naming convention is loosely based on the nomenclature utilized at the nearby Smith Ranch–Highland Mine to the southeast. The depths to the mineralized zones range from approximately 1,000 feet to over 1,300 feet below the ground surface depending on the topography.

Slightly over 1,300 historic exploration drill holes were completed within the Project area between 1967 and 1988, with the majority being drilled by Conoco Minerals (Conoco). Kerr-McGee Nuclear (Kerr-McGee), Teton Exploration (Teton), and Homestake Mining Corp. (Homestake) also conducted exploration drilling in the area for which drill data is available. Since acquisition of the property in 2005, Uranium One has drilled an additional 301 new holes at the Project for exploration, delineation and baseline well installation purposes. Uranium One's drilling program is described in Section 10.0 of this report.

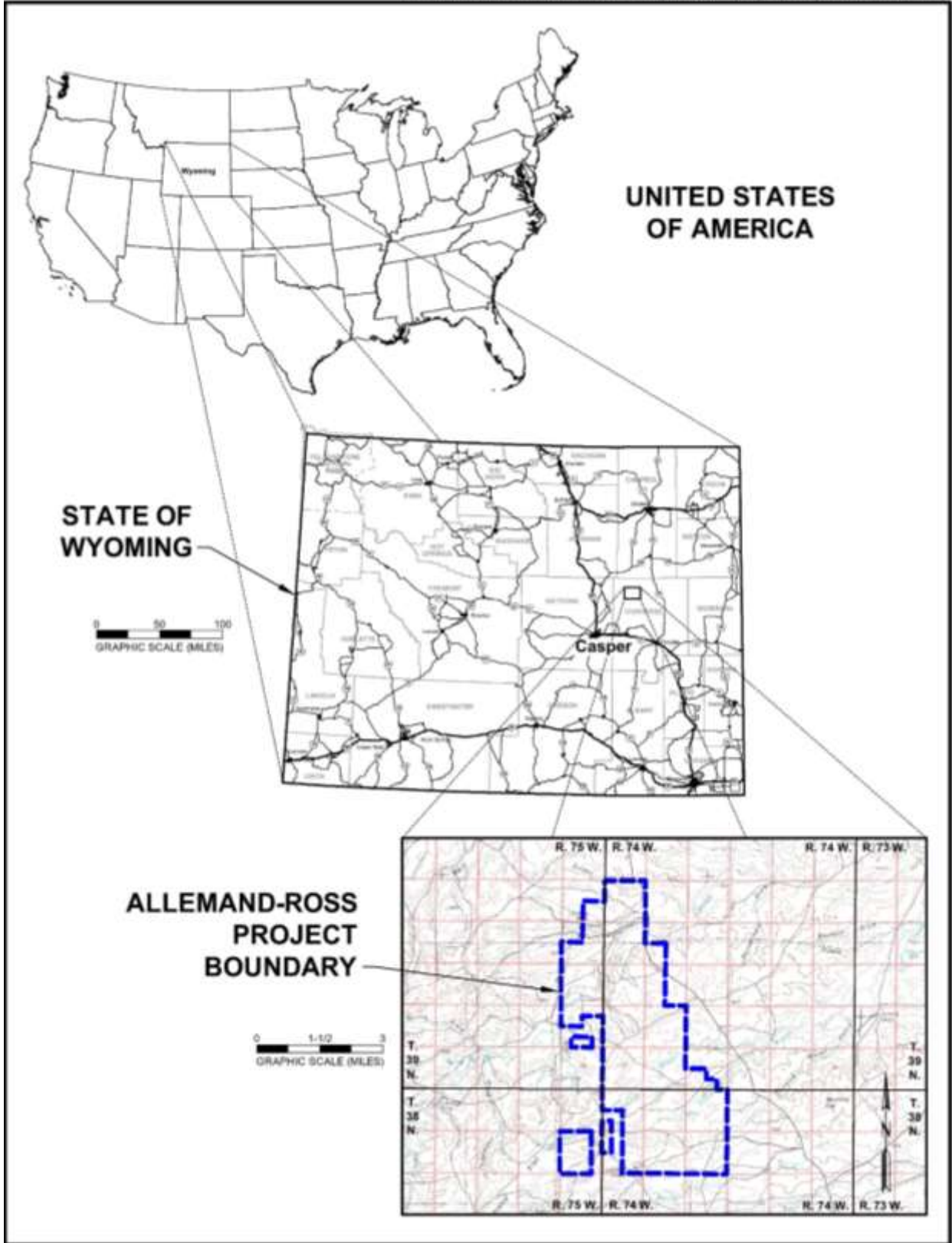


Figure 1. Allemand-Ross Uranium Project Location

Data available for the resource estimate presented in this technical report include lithologic and geophysical logs from drilling described above. More than 1,400 geophysical logs were evaluated for this report. A significant amount of the historic Conoco data was not available for review by Maxwell and Ludeman or BRS during previous reviews of the Project Area (Maxwell & Ludeman, 1988; BRS, 2008). These data were acquired by Uranium One in 2012.

This technical report presents an estimate of mineral resources as defined in Section 1.2 of NI 43-101. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The estimated mineral quantity and grade described in this technical report were calculated using accepted protocols. The estimate meets the NI 43-101 classification of measured and indicated mineral resources as defined by NI 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions Standards incorporated by reference therein.

The Mineral Resource estimates shown in Table 1 were calculated using the grade thickness (GT) contour method where the uranium grade is multiplied by the mineralization thickness. The GT values of the subject mineralized intervals for each hole were plotted on a drill hole map along with notations of where in the roll front that intercept was located. The roll front was then mapped and contour lines for the GT values were drawn. The areas within the GT contour boundaries were used for calculating resource estimates using the following criteria:

Measured Resource: < 70' between data points area of influence ~5,000 ft².

Indicated Resource: from 70' to 200' between data points: area of influence ~ 40,000 ft².

Inferred Resources: from 200' to 400' between data points: area of influence ~160,000 ft².

Table 1. Summary of Estimated Mineral Resources for the Project (0.25 GT Cutoff)

Mineral Resource	Average Grade % eU ₃ O ₈	Ore Tons (000's)	Ore Tonnes (000's)	eU ₃ O ₈ Pounds
Measured	0.085	246	223	417,000
Indicated	0.066	32	29	42,400
Total Measured & Indicated	0.083	278	252	459,400
Inferred	0.098	1,275	1,157	2,496,000
Totals		1,553	1,409	2,955,400

The Mineral Resources are reported based on GT cutoff of 0.25 and are presented in Table 1. Section 14.0 provides a detailed description of resource estimation methods.

Based upon data from the above-described historical and confirmation drilling, the current resource estimate yields a total of 459,400 pounds eU₃O₈ in the Measured and Indicated categories. The Uranium One resource estimation is based on geologic cutoffs as described above. The current resources at the Project are reported in Table 1. The Author, a Wyoming Professional Geologist (PG) and the independent qualified person (QP), is of the opinion that the classification of the resources as stated meets the CIM definitions as adopted by the CIM Council

in May 2014. The mineral resource estimates in this report, based on historical and recent drilling, were reviewed and accepted by the Author.

Recommendations for further work on the Project are summarized in the following bullets. None is contingent on positive results of the other.

- Continue delineation and in-filling drilling as necessary to better refine future wellfields, convert inferred resources to higher categories and to evaluate potential for additional resource targets.
- Conduct additional core drilling during development drilling of the Project resources to gather more disequilibrium data for the Project.

The Author concludes the Measured and Indicated Resources of approximately 459,400 pounds of U_3O_8 for the Project are compliant with Canadian NI 43-101 guidelines. There is limited risk that the estimate of quantity, quality, and physical characteristics of the resources of the Project will be unfavorably affected by future investigations.

The reader is cautioned that due to the uncertainty attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource, because of continued exploration. Confidence in the Inferred Mineral Resource estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of a Preliminary Economic Analysis (PEA) or other feasibility studies.

2.0 INTRODUCTION

2.1 PURPOSE OF THE REPORT

This Technical Report was developed to update the Mineral Resources based on available information for the Allemand-Ross Uranium Project in compliance with the requirements of Canadian NI 43-101 and 43-101F1.

2.2 SOURCE OF INFORMATION AND DATA

This report has been constructed and compiled from information and data including drill hole location maps and data sheets, gamma-ray, resistivity, self-potential curves plotted by depth, core hole data from drilling, and other historical data obtained by previous operators within the Project Area. The findings of this report are based on published and unpublished data.

2.3 AUTHOR

Completion of this report was under the direction and supervision of Mr. Benjamin J. Schiffer, P.G., WWC Engineering. Mr. Schiffer has personal work experience employed as a geologist at Cogema's Christensen Ranch In-Situ Leach (ISL) Mine, now a part of the Willow Creek Mine, from 1995 to 1999. Mr. Schiffer also worked at Cogema's Holiday-El Mesquite mine and at Pathfinder's Shirley Basin Project. Since leaving Cogema in 1999, Mr. Schiffer has been a consulting geologist

and has worked on a number of uranium projects both domestically and internationally. Mr. Schiffer is an independent QP as defined by NI 43-101 and visited the site on March 27, 2019. The purpose of the visit was to observe the geography and geology of the Project site and view the location of the uranium resource areas. Additionally, Mr. Schiffer has approved the technical disclosure contained in this report and has verified the sampling, analytical, and test data underlying the mineral resource estimate.

2.4 CURRENCY AND UNITS OF MEASUREMENT

All references to currency are US dollars (US\$). Units of measurement are the English system of inches, miles, tons, etc. Uranium is expressed as pounds U₃O₈, the standard market unit. Unless otherwise stated, historical reported grades for Mineral Resources estimated are percent eU₃O₈, which is the equivalent U₃O₈ by calibrated geophysical logging probes. ISR refers to in-situ recovery, which is also sometimes referred to as ISL.

3.0 RELIANCE ON OTHER EXPERTS

This Technical Report has been prepared under the supervision of Benjamin J. Schiffer, P.G. Content for this Technical Report is based on information provided by Uranium One and generally accepted uranium ISR practices. Mineral Resource estimates are based on historical exploration, delineation and production drilling, and results of recent confirmation drilling provided by Uranium One and independently evaluated by the Author.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY DESCRIPTION

The Project was previously divided into North and South areas, with North Allemand-Ross historically called the Sand Draw Property and South Allemand-Ross called the North Bear Creek Property. This designation is not utilized by Uranium One as both areas are now within the Project Area. The land ownership is a combination of private, State of Wyoming, and federally owned land administered by the Bureau of Land Management (BLM).

The Project is located in the South Powder River Basin Uranium District of Wyoming, within Converse County (Figure 1). The Project area covers all, or portions of 21 sections within three townships and its location is described as follows:

- T39N R75W – All of section 24, the southeast quarter of section 12, the southwest quarter and east half of section 13, the northwest quarter, the northern half of the northeast quarter, the southeast quarter of the southwest quarter, and the southwest quarter of the southeast quarter of section 25,
- T39N R74W – All of sections 7, 18, 19, 29, 30, 31, 32, the southwest quarter of section 17, the west half of section 20, the southwest quarter and the southwest quarter of the southeast quarter of section 33,
- T38N R75W – the western half of section 12 and the eastern half of the northeast and southeast quarters of section 12,

- T38N R74W – All of sections 4, 5, 8, 9, the northwest quarter, the southwest quarter of the southwest quarter, and the east half of section 6, and the western half of the northwest quarter and the east half of section 7.

4.2 LOCATION

The Project is located within the Southern Powder River Basin Uranium Mining District of the PRB, and approximately 42 air miles northeast of Casper, Wyoming (Figure 1). The Project area is primarily located on private surface land with some areas of Federal or State managed lands.

4.3 MINERAL TENURE, RIGHTS, AND ROYALTIES

Within the Project area, Uranium One holds 462 unpatented lode claims on federally owned minerals. No royalties are due to the federal government from mining on lode claims. Legal surveys of unpatented lode claims are not required, and, to the Authors' knowledge, have not been completed to advance the subject property toward patent. The unpatented lode mining claims will remain the property of Uranium One provided they adhere to required filing and annual payment requirements with Converse County and the BLM.

Uranium One also holds 10 State of Wyoming Uranium Leases on state lands with a combined acreage of 6,188 acres. An additional eight fee (private) mineral leases are held with private mineral owners. In total, the net mineral holdings in the Project Area comprise 10,575 acres.

State mineral leases have a 5% gross royalty attached. Fee minerals have varying royalty rates and calculations, depending on the agreements negotiated with individual mineral owners. In addition, surface use and access agreements may include a production royalty, depending on agreements negotiated with individual surface owners at various levels. Uranium One's average combined mineral plus surface production royalty applicable to the Project is variable based upon the selling price of U_3O_8 . At a selling price below \$50, the combined royalty is 5.16 percent, or above that price, the combined royalty is 7.00 percent.

The areas covered by the surface use and access agreements are based on the legal subdivision descriptions as set forth by the U.S. Cadastral Survey have not been verified by legal survey.

The Author has not verified the claims within the Project area or how the claims are mapped or plotted. The Author has also relied on information provided by Uranium One with regards to royalty rates and has not independently verified royalty rates or surface use and access agreements.

Uranium One has indicated to the Author that payments for state and private leases and BLM mining claim filing payments are up to date as of the effective date of this report.

4.4 ENVIRONMENTAL LIABILITIES

The environmental liability for the Project falls under the jurisdiction of the State of Wyoming, Department of Environmental Quality (WDEQ)-Land Quality Division (LQD), which regulates the permit to mine and Source Materials License.

4.5 PERMITTING

This Project is not fully permitted. However, baseline studies have been initiated for virtually all of the necessary resource areas including: historical/cultural, radiological, hydrological, meteorologic/climatological, soils, vegetation, wildlife, wetlands, geologic, and socioeconomic.

4.6 OTHER SIGNIFICANT FACTORS OR RISKS

Possible risks to development of the Allemand-Ross Project are discussed herein but at this time are thought to have minimal impact.

Greater Sage Grouse

The Governor of Wyoming has issued an executive order (EO) establishing core breeding areas for greater sage grouse (Wyoming Governor's Office, 2008). The EO provides a management strategy designed to protect sage grouse habitat and populations, and in short, to demonstrate that effective conservation is ongoing in Wyoming and that listing under the Endangered Species Act is not necessary or appropriate to protect the species. Stipulations or operating conditions were established for each energy sector that potentially occurs on sage grouse habitat, as outlined in Stipulations for Development in Core Sage-Grouse Population Areas (BLM, 2010). No sage grouse leks have been identified within the Project Area. The closest greater sage grouse core area is the North Glenrock area which is approximately 13 miles to the southwest.

Bozeman Trail

The historic Bozeman Trail passes through the easternmost portion of the Project Area. This portion of the Trail is considered as a non-contributing portion and lies under the Ross Road (County Road 31). The Trail segment located just south of the Allemand-Ross Project Area was also considered non-contributing. A "no effect" determination was recommended, and no further historical work was believed necessary (BLM, 2010).

Oil and Gas Development

The Project is located in the central PRB which is undergoing intensive oil and gas permitting and development for hydrocarbon reservoirs amenable to horizontal development. Horizontal wells require large pads (>10 acres) which can pose a risk to wellfield development if the pad is situated above uranium mineralization. Uranium One is notified by oil and gas companies when they apply for a permit to drill on or nearby the Project. It is incumbent upon Uranium One to negotiate with or protest petroleum companies that have submitted applications for well pads that would impact the development of the Project or decrease the recoverable mineralization.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 TOPOGRAPHY, ELEVATION, AND VEGETATION

The Project is located within the Wyoming Basin physiographic province in the southern portion of the PRB. The site is near the basin synclinal axis. Regional structural features also include the Big Horn Mountains to the west, Casper Arch to the south, and the Black Hills to the east.

The Project is within the mixed grass eco-region of the Northern Great Plains. The elevation ranges from approximately 5,200 to 5,400 feet above mean sea level. Topography in the area is primarily level to gently rolling with several ephemeral drainages dissecting the site. Similar terrain characterizes the un-mined lands surrounding the Project Area. Figure 2 provides a photograph from within the Project area depicting the typical vegetation and terrain.



Figure 2. Allemand-Ross Project Area – View to the Northeast Along Ross Road

The Project area is comprised primarily of grassland with areas of sage. Interspersed among those major vegetation communities are less abundant habitat types of seeded grasslands (improved pastures) and ephemeral draws. All-natural stream flow in the region is categorized as intermittent or ephemeral. A few stock tanks and reservoirs are scattered throughout the area, though the reservoirs rarely contain water.

5.2 ACCESS TO THE PROPERTY

The Allemand-Ross Project area is accessible via 2-wheel drive on existing county and/or two-track roads as follows: from Douglas, WY, proceed northwesterly on WY Highway 93, approximately 21 miles to the junction with WY Highway 95. From the junction of WY Highways 93 and 95, proceed northerly approximately 32 miles on Converse County Road 31, also known as the Ross Road. The Ross Road is an all-season road that is maintained by Converse County. The southern section of which is paved, and the northern section is gravel surface.

Existing private gravel and two-track roads provide access though most of the property. Some road development and improvements may be required at a later time to facilitate future development of well fields or satellite facilities. Recent increases in oil & gas activity have led to an increase in road development through the Project area.

5.3 PROXIMITY OF THE PROPERTY TO POPULATION CENTERS AND TRANSPORTATION

The Project is located in northwest Converse County, Wyoming. Casper is the nearest major local population center with a regional airport and is located along Interstate 25, 75 road miles southwest of the Project area via Ross Road and Wyoming Highway 95.

5.4 CLIMATE AND LENGTH OF OPERATING SEASON

The Project area is located in a semi-arid or steppe climate. The region is characterized seasonally by cold harsh winter, hot dry summers, relatively warm moist springs and cool autumns. Though summer nights are normally cool, the daytime temperatures can be quite high. Conversely, there can be rapid changes during the spring, autumn and winter when frequent variations of cold-to-mild or mild-to-cold weather can occur.

The Wyoming East Uranium region's relatively cool temperatures are a result of Wyoming's higher elevation (Energy Metals, 2007). Temperature extremes ranges from roughly -25°F in the winter to 100°F in the summer. Typically, the "last freeze" occurs during late May and the "first freeze" mid-to-late September (NCDC, 2007). The region is characterized by extremely dry conditions. On average, the region experiences only about 40 to 60 days with measurable (>0.01 in) precipitation (WRCC, 2007). The region has an annual average rainfall from 11 to 12.5 inches. Spring and early summer (May-July) thunderstorms produce 45 percent of the precipitation. May is typically the wettest month while January is the driest month of the year. Severe weather can occur throughout the region but is limited on average to four or five severe events per year. The average snowfall ranges from 20 to 25 inches per year in the project vicinity.

Seasonal wind roses for Allemand-Ross show the predominate wind direction is bimodal with spring and summer being from the southeast and fall and winter being west/northwest. The median wind speed for the Allemand-Ross Project is 11-13 mph and winds average over 25 mph 5% of the time.

5.5 SURFACE RIGHTS AND INFRASTRUCTURE

Uranium One has executed surface use and access agreements with the majority of the landowners who hold surface ownership at the Project, including grazing leasees on state lands.

Energy development in the vicinity of the Project over the past several decades (uranium and oil & gas) has brought considerable upgrades to the local infrastructure. The local economy is geared toward coal mining, oil and gas production, and ranching operations, all of which provide a well-trained and capable pool of workers for ISR production and processing operations. Personnel required for exploration, construction, and facility operations are available in the nearby towns of Casper, Glenrock, and Douglas Wyoming.

Non-potable water will be supplied by wells developed at or near the site. Non-potable water supply wells have not yet been developed for the Project. Water extracted as part of ISR operations will be recycled for reinjection. Typical ISR mining operations also require disposal wells for limited quantities of fluids that cannot be returned to the production aquifers. At least two deep disposal wells are planned for the Allemand-Ross ISR processing facility.

The proximity of the Project to all-weather roads will facilitate transportation of equipment, supplies, personnel, and product to and from the Project area. Electrical power lines extend into and across the Project.

6.0 HISTORY

6.1 PRIOR OWNERSHIP AND OWNERSHIP CHANGES

Kerr-McGee, Homestake and Teton were some of the early uranium exploration companies in the Project area. Most of the early exploration drilling was for shallower (<1,000 feet) mineralization. In 1969, Conoco had staked lode mining claims to the west along Pine Ridge. In 1970 they entered into an agreement with National Resources Corporation to earn in on the Allemand Ranch land holdings. National Resources' interests were acquired by Pioneer Nuclear in 1972 and they remained as a joint venture partner until 1975. During this period, a significant amount of the mineralization within the Project area was delineated by Conoco and its partners. Numerous mining operations were in operation or being permitted in this portion of the PRB as well during this period.

In 1979, Conoco formed an association with Power Reactor & Nuclear Fuel Development Corporation (PNC), a consortium of Japanese utilities. Conoco continued to operate the drilling program on the property and adjacent areas. When Conoco closed its minerals department in 1984, PNC assumed control of the Project and maintained control of key portions of the Project Area (referred to as the SWPRB Project), until the early 1990's at which time the mineral rights were allowed to lapse due to further declining uranium market conditions.

The claims and leases were again acquired during the uranium market upswing in the early to mid 2000's. By the end of 2005, High Plains Uranium (HPU) held the majority of claims and leases with Energy Metals Corporation (EMC) having the remainder in the current Project area. These

properties were consolidated in 2007 with EMC acquisition of High Plains. Uranium One acquired EMC in late 2007.

6.2 TYPE, AMOUNT, QUANTITY, AND RESULTS OF WORK BY PREVIOUS OWNERS

According to historic records, mining claims were first staked in the Project area by Cordero Mining in the mid 1960's. Numerous exploration companies held mineral rights in the area as outlined in Section 6.1 above. Most of these companies were exploring for uranium roll front mineralization and thousands of holes were drilled in the surrounding area.

The historic drilling programs were conducted with truck mounted rotary drill rigs. The following historic data was collected primarily by Conoco and available for review:

- Previous operators and Conoco completed a total of 1,341 drill holes on the entire property through 1988.
- Coring was only done in mineralized zones to recover a sample of the ore for laboratory analyses. Records indicate that Conoco and PNC cored 28 holes within the current Project area.
- Drill logs which measured the natural radioactivity, the electrical resistivity, and the self-potential were created for all drill holes.
- Numerous reports on mineral assays, mineralogy, and hydrology were available for review. Many trend maps and interpretive cross sections were generated and available for review as well.

The majority of the drilling was conducted with no core retrieval. Holes were drilled to target, and the geophysical logs were run prior to the holes being plugged and abandoned. For much of the length of the core holes, no core was recovered. Selective coring was done in the mineralized zones in order to provide samples of mineralized material for laboratory analyses. Electric logs which measured the natural gamma radioactivity, the electrical resistivity and the self-potential were developed for all drill holes. Historic drilling operations are shown in Table 2.

A portion of the historical data for the Project area was originally acquired from some of the mineral and surface landowners by HPU. The bulk of the remaining data was acquired through a data purchase with Ur-Energy in 2012.

Table 2. Historic Drilling in the Allemand-Ross Project

Year(s)	Operator	Holes	Footage
1967-1970	Kerr-McGee, Homestake, Teton	104	86,945
1971-1982	Conoco	1,183	1,653,462
1983-1988	PNC	54	69,170
TOTALS		1,341	1,809,577

6.3 SIGNIFICANT HISTORICAL MINERAL RESOURCE ESTIMATES

Numerous historical resource estimates have been made for the Project by several of the previous operators. Of these, only the BRS estimates in 2008 are considered NI 43-101 compliant, authored by an independent qualified geologist, and are the most recent publicly available technical resource report on the Project. In addition, several internal technical reports have been prepared by Uranium One geologists.

Conoco

Conoco estimated resources for the Allemand-Ross Project Area in 1983. Their estimates utilized standard polygonal methods and were based on a minimum grade of 0.05% eU₃O₈ and a GT cutoff of 0.35. Based on 1982 coring, a sandstone density of 15.99 ft³/ton (2.003 g/cm²) was utilized (Conoco, 1981).

PNC

A study of the economic potential of the newly discovered uranium mineralization was prepared for PNC in 1988 (Maxwell and Ludeman, 1988) which included preparation of an estimate of the uranium mineralization that was present on the PNC land package. The estimate assumed ISR mining methods and utilized a mining recovery of 70%, a minimum thickness of mineable unit of 2.5 feet, a minimum grade of mineable unit of 0.05% eU₃O₈ and a minimum grade-thickness product of 0.40. The resource estimates were prepared using the General Outline method as described by the United States Atomic Energy Commission (AEC) for most of the mineralized pods, and the polygonal method was used for one of the pods located on the North (Sand Draw property).

Uranium One

In 2008, Uranium One contracted BRS Inc. to complete a NI 43-101 resource report for the Project. This report utilized the available historic data and new drill data obtained by Uranium One from drilling operations through 2008. BRS Inc. reported 459,000 lbs. U₃O₈, Measured and Indicated, and 2.496 million lbs. U₃O₈, Inferred, at a 0.25 GT cutoff for the Allemand-Ross Project.

6.4 PRODUCTION

No known uranium production has previously occurred on the Project. However, the Bear Creek Project to the east produced 4,074,143 pounds (1848 tonnes) of uranium. This was an open pit mine that has been reclaimed (Wise Uranium, 2019).

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The Project is located in the Southern PRB. The PRB extends over much of northeastern Wyoming and southeastern Montana and consists of a large north-northwest trending asymmetric syncline. The basement axis lies along the western edge of the basin, and the present surface axis lies to the east of the basement axis. The basin is bounded by the Big Horn Mountains to the

west, Casper Arch to the south, and the Black Hills to the east. Figure 3 is a generalized stratigraphic column of the Southern PRB, and Figure 4 is a geologic map of the Project area.

The PRB is filled with marine, non-marine, and continental sediments ranging in age from early Paleozoic through Cenozoic. Sediments reach a maximum thickness of about 18,000 feet in the deepest parts of the PRB, and likely range from 16,000-17,000 feet thick in the Project area due to the close proximity to the deepest part of the PRB. The southern part of the PRB contains Lance, Fort Union, Wasatch, and White River formation outcrops.

The Upper Cretaceous Lance formation is the oldest of these units and consists of 1,000 to 3,000 feet of thinly-bedded, brown to gray sands and shales. The upper part contains minor, dark carbonaceous shales and thin coal seams, indicating a changing depositional environment over time, which was in this case the gradual regression of a shallow inland sea (Sharp and Gibbons, 1964).

The Paleocene Fort Union formation conformably overlies the Lance and is a fluvial-sedimentary stratigraphic unit that consists of fine to coarse-grained arkosic sandstone which is interbedded with siltstone, mudstone, and carbonaceous materials. Flores (2004) divide the Fort Union into three members, the Tullock, Lebo, and Tongue River members (oldest to youngest). The Tullock Member consists of sandstone, siltstone, and sparse coal and carbonaceous shale. The Lebo Member consists of abundant drab gray mudstone, minor siltstone and sandstone, and sparse coal and carbonaceous shale beds. The Tongue River Member consists of interbedded sandstone, conglomerate, siltstone, mudstone, limestone, anomalously thick coal beds, and carbonaceous shale beds. This member has been mined extensively for its coal beds which can be hundreds of feet thick (Flores, 2004). The total thickness of the Fort Union formation varies between 2,000 and 3,500 feet (Conoco, 1981; Sharp et al., 1964).

The early Eocene Wasatch formation unconformably overlies the Fort Union formation around the margins of the PRB. However, the two formations are conformable and gradational towards the basin center and license area. The relative amount of coarse, permeable clastics increases near the top of Fort Union, and the overlying Wasatch formation contains numerous beds of sandstone that can sometimes be correlated over wide areas. Except in isolated areas of the PRB, the Wasatch-Fort Union contact is arbitrarily set at the top of the thicker coals (locally known as the Badger Coal) or of some thick sequence of clays and silts. The top of the School Coal is the likely boundary within the Project area.

The Wasatch formation crops out at the surface in the Project area. The Wasatch is also a fluvial sedimentary unit that consists of a series of silt to very coarse-grained gradational intervals in arkosic sandstone. Locally, the base of the Wasatch Formation is a contact between the sandstone and mudstone, claystone, or lignite. The sandstone horizons in the Wasatch are the host rocks for several uranium deposits in the southern PRB. Within the Project area, mineralization is found in a 50-100-foot-thick sandstone lens which extends over an area of several townships. On a regional scale, mineralization is localized and controlled by facies changes within this sandstone, including thinning of the sandstone unit, decrease in grain size, and increase in clay and organic material content. The Wasatch formation reaches a maximum thickness of about 1,600 feet (1,100

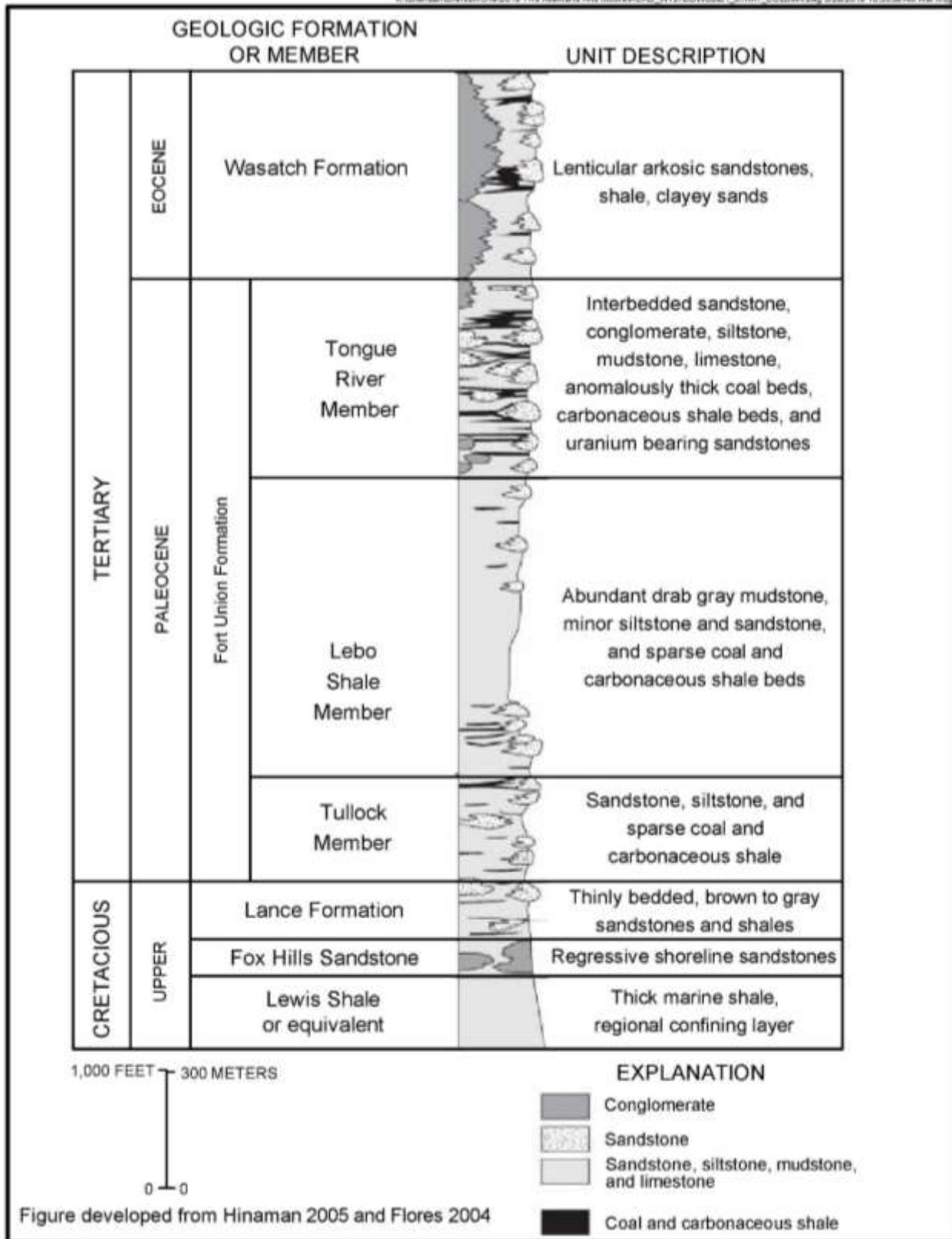


Figure 3. Stratigraphic Column of the Southern Powder River Basin

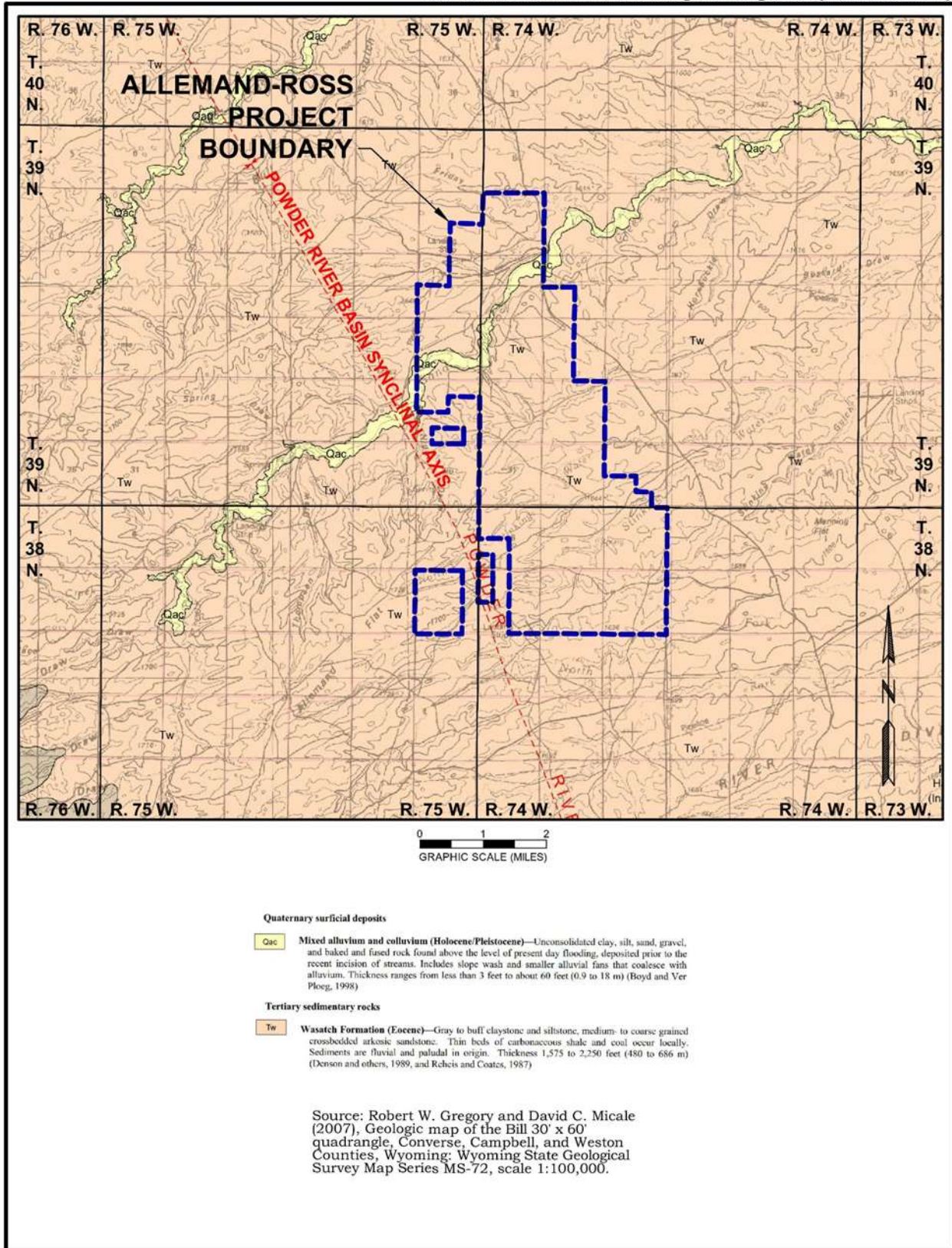


Figure 4. Geologic Map of the Southern Powder River Basin

to 1,300 feet in the license area) and dips northwestward from one degree to two and a half degrees in the southern part of the PRB (Conoco, 1980; Sharp et al., 1964).

Uranium mineralization occurs in zones that are located in channel sands of the upper Fort Union Formation. These channel sands are typical fining upward sand sequences consisting of fine-grained sandstones. The zones of mineralization formed as typical roll front deposits in these sandstones.

The Oligocene White River Formation overlies the Wasatch Formation and has been removed from most of the basin by erosion. Remnants of this unit crop out on the Pumpkin Buttes, located approximately twenty-five miles to the north of the Project area, and at the extreme southern edge of the PRB (about 40 miles to the south). The White River consists of clayey sandstone, claystone, a boulder conglomerate and tuffaceous sediments (Sharp and Gibbons, 1964) which may be the primary source rock for uranium in the Project area and the southern part of the PRB as a whole (Conoco, 1980; Sharp et al., 1964). The youngest sediments consist of Quaternary alluvial sands and gravels locally present in larger valleys. Quaternary eolian sands can also be found locally.

7.2 PROJECT GEOLOGY

The site is located in the southwestern part of the PRB approximately six miles east of the Tertiary Wasatch-Fort Union formation contact. The Fort Union formation underlies the surface Wasatch formation, and is part of the thick PRB sedimentary series. It consists of mudstones, siltstones and clays with minor cross bedded sandstone channels and occasional thin limestone and lignite beds (Lemmers and Smith, 1981). The Fort Union Formation sandstones were deposited in a fluvial paleo-drainage system which flowed generally in a north-northeasterly direction. The targeted host rocks for uranium ore deposits in the Project area are the arkosic sandstones of the Lebo member of the Fort Union formation. These channel deposits are confined by mudstones that serve as aquitards to the water saturated aquifers.

The arkosic sandstones of the Lebo member are gray to red, clay rich, cross bedded, cherty and poorly sorted, with grain sizes in individual beds ranging from fine to very coarse with coarse being the average. Minor to very abundant pyrite and carbonaceous material are present in most of the unaltered (unoxidized) channel deposits. The finer grained rocks range from medium gray siltstones to dark gray carbonaceous claystones. Structure contours indicate a gentle dip to the northeast at an average of one degree (Lemmers and Smith, 1981).

7.3 SIGNIFICANT MINERALIZATION

Uranium at the Project typically occurs as sandstone-hosted c-shaped roll front deposits. The deposits are found at the interface between brown, tan, or red altered and gray unaltered portions of the sandstone. This interface is caused by oxidizing waters moving down-dip through a reducing environment such as a carbonaceous and pyritic water saturated sandstone (Rackley et al., 1968). As the oxidizing agents move through the reducing environment, they alter the sandstone and precipitate uranium on the interface just ahead of the altered sandstone (Rubin, 1970). These oxidation-reduction boundaries often extend laterally for miles in the PRB, but ore-

grade mineralization is typically not present along the entire length of the fronts. Individual roll fronts vary from 5 to 30 feet thick within the host sand and are typically stacked vertically.

Uranium One exploration nomenclature designated the sands in the Project area with decreasing numbers with depth. This theme was developed so that the highest number sand (120 Sand) is designated at the top of the mineralized stratigraphic interval and the lowest mineralized sand (10 Sand) is designated as the lowest mineralized sandstone sequence. Figure 5 depicts the sand units relative to the Project area based on the type log from Section 7, Township 39 North, Range 74 West.

The 10 and 20 sands are separated by 1 to 43 feet of shale and are laterally extensive across the Project area. The approximate thickness of the 10 and 20 sands are 19 to 136 feet and 47 to 171 feet, respectively. These sands contain inferred and possible uranium resources of mineralization in various locations within the Project area. Depending upon mineralization, found in the 10, 20, 30, 40 and 50 sands, various sands serve as the underlying/production/overlying sand in different areas.

The 30 sand is separated from the 20 sand by 1 to 39 feet of the 25 shale. The sand ranges from 4 to 134 feet thick within the Project area. The majority of the measure and indicated resources are found in the 30 sand.

The 40 sand is separated from the 30 sand by 1 to 69 feet of the 35 shale. This sand is laterally extensive and is up to 119 feet thick.

The 50 sand is the next proposed ore production sand and is separated from the 40 sand by the 45 shale which ranges from 1 to 33 feet thick. The 50 sand is anywhere from 21 to 124 feet thick and is the highest of the sands containing inferred uranium resources.

Two upper intermittent sands are designated as the 60 and 70 sands, separated from the 50 sand by a shale ranging from 1 to 106 feet thick. The 60 sand is laterally extensive within the Project area and ranges from 0 to 74 feet thick. The 70 sand is laterally extensive within the Project area and its thickness ranges from 33 to 146 feet. The shale separating the 60 sand and the 70 sand ranges from 0 to 30 feet thick and is often not preserved, resulting in a thicker 70 sand. The 70 sand serves as the overlying sand for the Project.

The mineralized units (10, 20, 30, 40, and 50 sands) within the Project are classified as arkosic sandstones with calcite and clays as the dominant cementing material. The primary clay is montmorillonite, approximately 70 percent, with kaolinite and illite making up the remainder (Conoco, 1981).

The uranium commonly occurs as coatings on the surfaces of the sand grains. It is often associated with either calcite or clay cement but occasionally it is associated with carbonaceous material. Very little crystalline uranium mineral has been identified in the samples except for the occasional presence of uraninite.

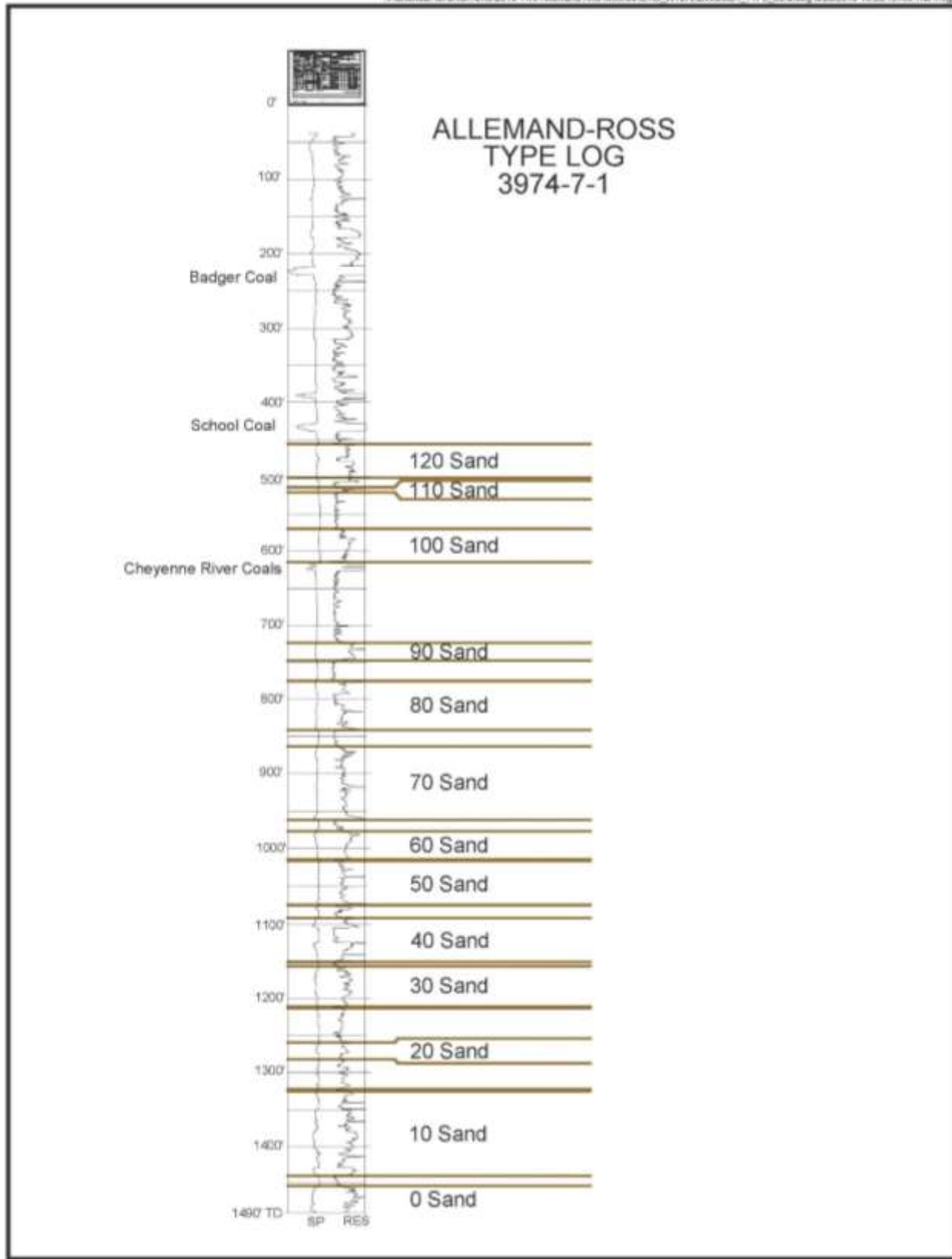


Figure 5. Allemand-Ross Project Type Log

7.4 HYDROGEOLOGY

Recharge to the Fort Union host sands is mainly along their outcrops. Flow in the aquifers generally moves to the northeast along the paleodrainage trend, with a small portion of the groundwater discharging to streams. Aquifer properties are variable due to changes in local lithologies.

Uranium One has been collecting lithologic, water level, water quality, and pump test data as part of its ongoing evaluation of the baseline hydrologic conditions at the Project. In addition to recent data acquisition, historic data collected for PNC (1989) was used to support this evaluation. Drilling and installation of monitor wells in order to provide additional data to further refine the site hydrologic conceptual model occurred in 2008. Water level measurements, both historic and recent, provide data to assess potentiometric surface, hydraulic gradients and inferred groundwater flow directions for the aquifers of interest at Project, at least on a localized scale. Recent pump tests by Uranium One have been completed. These will be used to evaluate the hydrologic properties of the aquifers of interest and to assess hydraulic characteristics of the confining units. The Author did not review any of the hydrogeologic test data acquired for the Project.

8.0 DEPOSIT TYPE

8.1 DEPOSIT TYPE AND GEOLOGICAL MODEL

Uranium mineralization at the Project is typical of Wyoming roll-front sandstone deposits. The formation of roll front deposits is largely a groundwater process that occurs when uranium-rich, oxygenated groundwater interacts with a reducing environment in the subsurface and precipitates uranium. The most favorable host rocks for roll fronts are permeable sandstones with large aquifer systems. Interbedded mudstone, claystone, and siltstone are often present and aid in the formation process by focusing groundwater flux. The geometry of mineralization is dominated by the classic roll front “C” shape or crescent configuration at the alteration interface and shown conceptually in Figure 6. The highest-grade portion of the front occurs in a zone termed the “nose” within reduced ground just ahead of the alteration front. Ahead of the nose, at the leading edge of the solution front, mineral quality gradually diminishes to barren within the “seepage” zone. Trailing behind the nose, in oxidized (altered) ground, are weak remnants of mineralization referred to as “tails” which have resisted re-mobilization to the nose due to association with shale, carbonaceous material, or other lithologies of lower permeability.

Tails are generally not amenable to ISR because the uranium is typically found within strongly reduced or impermeable strata, therefore making it difficult to leach (Davis, 1969; Rackley, 1972).

9.0 EXPLORATION

Drilling is the primary method to explore for uranium roll fronts deposits at depth. This method is utilized by most operators, and to the Author’s knowledge, no other methodology has been utilized in the past at the Project.

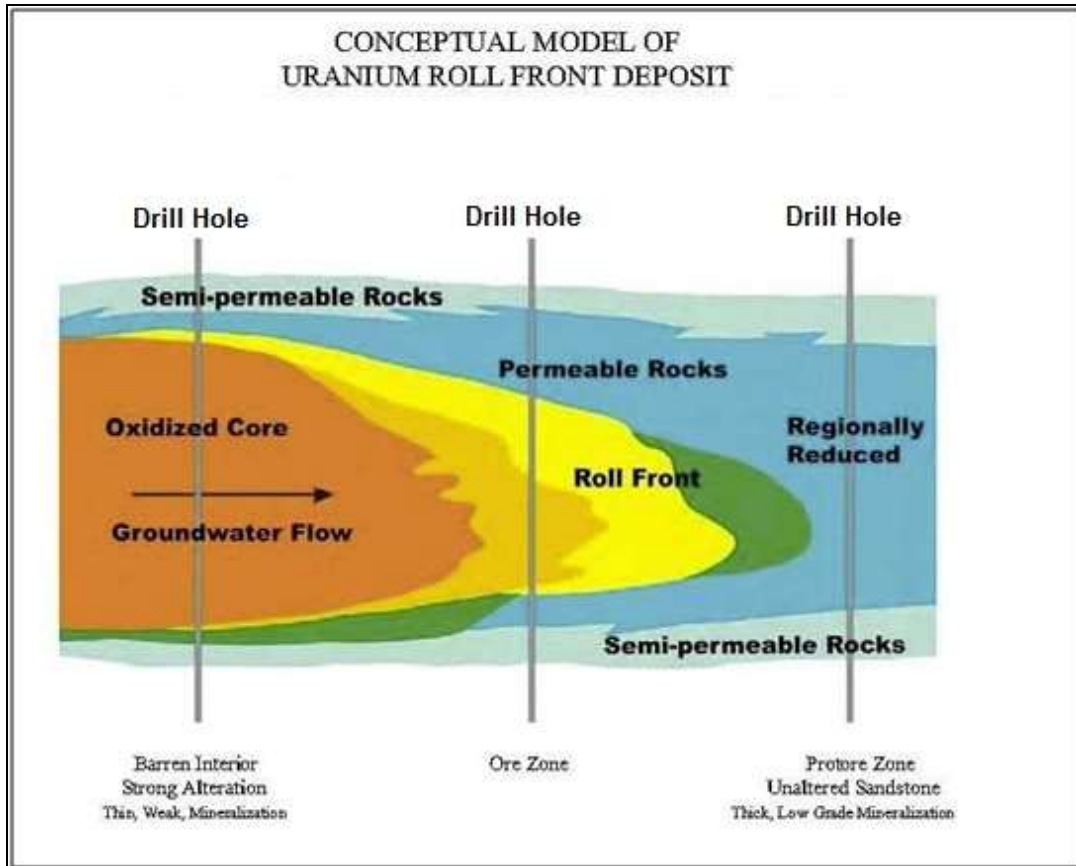


Figure 6. Conceptual Uranium Roll Front Model (Granger and Warren, 1979)

The past exploration efforts by predecessor companies has been described in Sections 6.1 and 6.2.

Uranium One’s exploration efforts have been focused on developing and upgrading the mineral resources throughout the Project area. See Section 10 for information on Uranium One’s drilling programs.

10.0 DRILLING

10.1 TYPE AND EXTENT OF DRILLING

The Project was extensively explored from the late 1960’s through the mid-1980’s with the principle exploratory work and drilling completed by Conoco. Approximately 1,300 rotary drill holes and 24 core holes were completed by Conoco. Mineral resource estimates are based on radiometric equivalent uranium grade as measured by the geophysical logs and verified by core drilling and chemical analysis. Drill holes completed by Conoco were reported abandoned in accordance with Wyoming Statute regulations and statutes in effect at the time.

To date, more than 1,600 drill holes have been drilled by Uranium One and previous uranium exploration companies on the Project. The historical data sets in Uranium One’s possession were generated by competent exploration companies that used acceptable practices of the day. All

available data from geologic reports, drilling, survey coordinates, collar elevations, depths, electric log data, and grade of uranium intercepts, have been incorporated into Uranium One’s database. The data were found to be adequate and sufficient to support current NI 43-101 compliant resource estimates and other discussions contained in this report.

Uranium One conducted verification and resource enhancement drilling beginning in 2005. The majority of Uranium One’s drilling was conducted during the 2008-2010 timeframe. To date, Uranium One has drilled 301 holes at the Project (Table 3). Included in this total are 11 core holes and numerous baseline monitor and pump test wells. The drilling was conducted under WDEQ-LQD Drilling Notification 342DN and all drill holes were abandoned in accordance with Wyoming statutes and regulations. All cased wells have been permitted through the Wyoming State Engineer’s Office.

Table 3. Summary of Uranium One Drilling Allemand-Ross Project

Year	Number of Holes	Footage	Average Depth
2005	12	15,092	1,258
2006	9	13,911	1,546
2008	66	73,760	1,118
2009	114	134,436	1,179
2010	100	136,611	1,366
Totals	301	373,810	1,242

To the Author’s knowledge, all historic drilling was conducted by mud rotary drilling, with cuttings samples taken every five feet during drilling of the hole. These samples were then analyzed for oxidation/reduction state and lithologic characteristics.

11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

Uranium One has Quality Assurance/Quality Control (QA/QC) procedures to guide drilling, logging, sampling, analytical testing, sample handling, and storage. It is the Author’s belief that all procedures were conducted properly by Uranium One field personnel.

11.1 DOWNHOLE GEOPHYSICAL LOGGING

Geophysical logging was routinely conducted for every drill hole on the Project. Geophysical logs typically collected data for gamma ray, single-point resistance, spontaneous potential, neutron, and drill hole deviation. Uranium One utilizes their own geophysical logging units which were manufactured and maintained by GeoInstrument, Inc., of Nacogdoches, TX. Natural gamma logs provide an indirect measurement of uranium content by logging gamma radiation in counts per second (CPS) at one-tenth foot intervals, CPS are then converted to equivalent U₃O₈ (eU₃O₈). The conversion requires an algorithm and several correction factors that are applied to the CPS value. The correction factors include a k-factor, dead time factor, and water factor. K-factors and dead times vary from probe to probe and can also vary in each probe over time. Each probe is regularly recalibrated at the U.S. Department of Energy test pit located in Casper, Wyoming.

In all holes drilled by Uranium One, downhole deviation surveys provided true depth, azimuth, and distance from collar location. On average, deviation rarely exceeded 2% of the total depth, so true depth correction is insignificant. Uranium One staff surveyed drill hole collar locations using Trimble GPS technology to provide easting and northing coordinates and elevations.

All recent logging data is recorded in digital and hard copy paper formats and provided to Uranium One geologists by the logging operators. The logs are transferred to electronic versions with the field geologist's lithology logs for further evaluation. Uranium One drill data is kept on a local, secure server with tape backups maintained in a safety deposit vault.

11.2 CORE DRILLING

Conoco completed 24 core holes at the Project. The material from these cores was utilized to perform mineral assays, permeability and porosity testing, and leach amenability studies.

In the fall of 2005, HPU completed a drilling program on the Project consisting of 11 core holes. Total drilled footage of the program was 14,173 feet. The purpose of the program was to substantiate the uranium analyses reported by former operators and to provide samples for laboratory testing. Chemical analysis for uranium was conducted on 103 core samples collected on approximately one-foot intervals. In addition, two agitation leach studies were conducted on the core material.

11.2.1 Equilibrium Studies

The great majority of the data available for estimation of mineral resources is radiometric geophysical logging data from which the uranium content is interpreted. Radiometric equilibrium conditions may affect the grade and spatial location of uranium in the mineralization. Generally, an equilibrium ratio (Chemical eU_3O_8 to Radiometric U_3O_8 [c/e]) is assumed to be 1, i.e. equilibrium is assumed.

Equilibrium occurs when the relationship of uranium with its naturally occurring radioactive, gamma emitting, daughter products is in balance. Oxygenated groundwater moving through a deposit can disperse uranium down the groundwater gradient, leaving most of the daughter products in place. The dispersed uranium will be in a favorable state of disequilibrium ($c/e =$ greater than 1) and the depleted area will be in an unfavorable state ($c/e =$ less than 1). The effect of disequilibrium can vary within a deposit and has been shown to be variable from the oxidized to the reduced side of the roll fronts.

An evaluation of equilibrium conditions at the Project was completed in 2005 by High Plains Uranium (Maxwell, 2005) (Table 4). This study involved data from 11 core holes and 13 individual mineralized intercepts in 4 of the 21 sections within the Project boundary. The evaluation was not focused on any one mineralized trend but was spread over the Project area. Separate analyses of equilibrium conditions were completed on the major divisions of the roll fronts, i.e. the altered section or tails, the mineralized front section, and the protore, unaltered, section. As seen in other roll front deposits, the resulting analysis showed slight depletion of uranium in the altered section with corresponding enrichment in the frontal and protore section of the deposit.

The range of equilibrium factors, expressed as the ratio of chemical uranium to radiometric equivalent, varied from enriched in the mineralized front to depleted in the tails.

Table 4. Historic Disequilibrium Data for the Project (Maxwell, 2005)

Hole ID	Top	Radiometric Thickness	Radiometric Grade (%)	GT Radiometric	Chemical Thickness	Chemical Grade (%)	GT Chemical	Equilibrium Ratio Chemical to Radiometric
397418-64C	1220	9.1	0.037	0.337	9.1	0.020	0.182	0.541
397418-74C	1192	2.2	0.023	0.051	2.2	0.020	0.044	0.870
397419-43C	1056	2.8	0.029	0.081	2.8	0.013	0.036	0.448
347919-65C	1115	4.4	0.024	0.106	3.8	0.015	0.057	0.540
397513-70C	1360	2.0	0.015	0.030	0.9	0.008	0.007	0.240
397513-70C	1360	9.6	0.187	1.795	9.6	0.231	2.218	1.235
397513-78C	1400	0.5	0.016	0.008	0.5	0.026	0.013	1.625
397524-41C	1367	3.6	0.037	0.133	1.7	0.053	0.090	0.676
Total Section				2.541			2.647	0.772

- Notes: 1) Locations of the holes are denoted in the first 6 digits of the hole ID and include the township, range and section in that order.
 2) The Township, Range, and Section are in reference to the Public Land Survey System.

In summary, given the insufficient amount of available data across the Project area an assumption of radiometric equilibrium is reasonable with respect to mineral resources. Furthermore, it is recommended that an equilibrium factor of 1.0 be utilized at this time with the caveat that as further development drilling is conducted at the project, the program takes into consideration the potential effect of equilibrium conditions on the true distribution of uranium mineralization in the system.

Since core from only 4 of the 21 sections within the project area were evaluated for equilibrium conditions, it is the Author's opinion that additional core is necessary to spatially evaluate disequilibrium. In addition, the radiometric thickness, grade, and GT are inconsistent in some of these analyses with respect to cutoffs, meaning that the sample may not be representative of the mineralization. In this Author's opinion, additional core sampling should be conducted within each of the mineralized areas to ascertain the equilibrium conditions for that specific area and within the primary roll front host sands. Care should be taken to determine the roll front position of the cores as often the trailing, or wing side, of the roll front will exhibit depletion of uranium.

11.3 BOREHOLE DRILL CUTTINGS

During drilling of all holes, cuttings are collected at 5-ft. depth intervals. Detailed descriptions of each of these samples are then documented by the Company's field geologists. Drill cutting samples are valuable for lithologic evaluation, confirmation of electric log (E-log) interpretation, and for description of redox conditions based on sample color. Identifying redox conditions in the host formation is critical for the interpretation and mapping of roll fronts. Note, however, that cuttings samples are not analyzed for uranium content because there is considerable dilution and mixing that occurs as the cuttings are flushed to the surface. In addition, the samples are not

definitive with regard to depth due to variation in the lag time between cutting at the drill bit and when the sample is collected at the surface.

12.0 DATA VERIFICATION

As previously discussed in Sections 6.0 and 10.0, standard industry methods were utilized at the time of data collection. Available data were from drill maps, cross sections, geophysical logs, lithologic logs, and historic reports. The historic data for this Project was developed primarily by a well-financed major US company (Conoco) intent on developing the property as a production center. In the Author's opinion, the data presents a true and correct evaluation of the mineralization within this Project.

The original, historic, radiometric drill data was available as a paper record. This data was input electronically via a spreadsheet and utilized in the development of this report. Data entry was checked and confirmed. Drill hole locations were input from coordinate listings and plotted. The resultant drill maps were then checked and confirmed by overlaying with the original historic maps. Field checks of select historic holes locations were conducted with the locations found to be within acceptable tolerances. Radiometric log interpretations were spot checked for the higher-grade intercepts and, as previously discussed, the historic log interpretation followed standard methods.

Uranium One drill data included collar elevation, collar location, grade and elevation of mineralized intercepts, and the elevation of bottom of hole. New drill hole locations were taken from field surveys using modern survey grade GPS equipment. All historic coordinates were converted to match the Wyoming State Plane NAD83 coordinate system. This conversion included the re-surveying of approximately 10% of historic drill holes and any historic claim posts that could be located in the field. Rectification of the historic local coordinate system to the Wyoming State Plane NAD83 coordinate system was completed and combined with the new drill data. With this rectification historic drill holes could be located in the field with an estimated error of less than 10 feet.

Uranium One has offset numerous historic drill holes to conduct confirmation drilling at the Project with results which validate the historic data. The mineral intercept data of all previous operators was selectively checked for accuracy by Uranium One geologists utilizing the U.S. Atomic Energy Commission standard methods for calculating the thickness and grade of said intercepts.

No historic core samples still exist for verification with the currently held historic data. High Plains conducted core drilling at the Project in 2005 with the completion of 11 holes.

After a review of that data, it is the Author's opinion that the historical mineral intercept data are appropriate for resource estimation in this Technical Report.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No recent mineral processing or metallurgical testing have been conducted on material from the Project or in-situ.

14.0 MINERAL RESOURCE ESTIMATES

In-place eU₃O₈ resources for the Uranium Project were estimated and classified according to the CIM definition of a Mineral Resource classification of Measured, Indicated, and Inferred resources. The classification of resources as discussed in Section 14.4 is based on the Author's prior knowledge and work with roll front deposits in the Powder River Basin. The Project Area has been drilled on quite variable drill hole spacing as shown in Figure 7.

Data preparation consisted predominantly of locating, editing and compiling drill hole location and downhole mineralized interval data for each roll front across the Project area. The data utilized was from historic datasets from previous operators as well as new drill data generated by Uranium One since acquisition of the properties. These data consisted of drill hole core and cutting description logs, geophysical logs, maps, cross sections, reports, and digital databases.

14.1 ASSUMPTIONS

The Mineral Resource estimates were completed using accepted methods mandated by NI 43-101 and CIM standards. In order to "normalize" calculations, certain assumptions were incorporated throughout all calculations. The assumptions and methods are as follows:

Assumptions:

- Radiometric disequilibrium factor (DEF) is 1.00. (cU₃O₈ : eU₃O₈ ratio = 1.00)
- The unit weight of the ore zone is 16.0 cubic feet per ton, based on historical data (Hazen, 1982)
- All geophysical drill logs were assumed to be calibrated per normal accepted protocols and grade calculation are acceptable

14.2 CUTOFF SELECTION

Minerals that are reported as resources must be below the historical, pre-mining static water level and must meet several criteria. These cutoff criteria are:

- Minimum GT (Grade x Thickness): 0.25
 - Intercepts with values lower than this cutoff are mapped outside the GT values employed for resource estimation. They are given a resource value of zero and are excluded from the reported resources.

The GT cutoff of 0.25 is representative of past operations in similar geologic and economic situations.

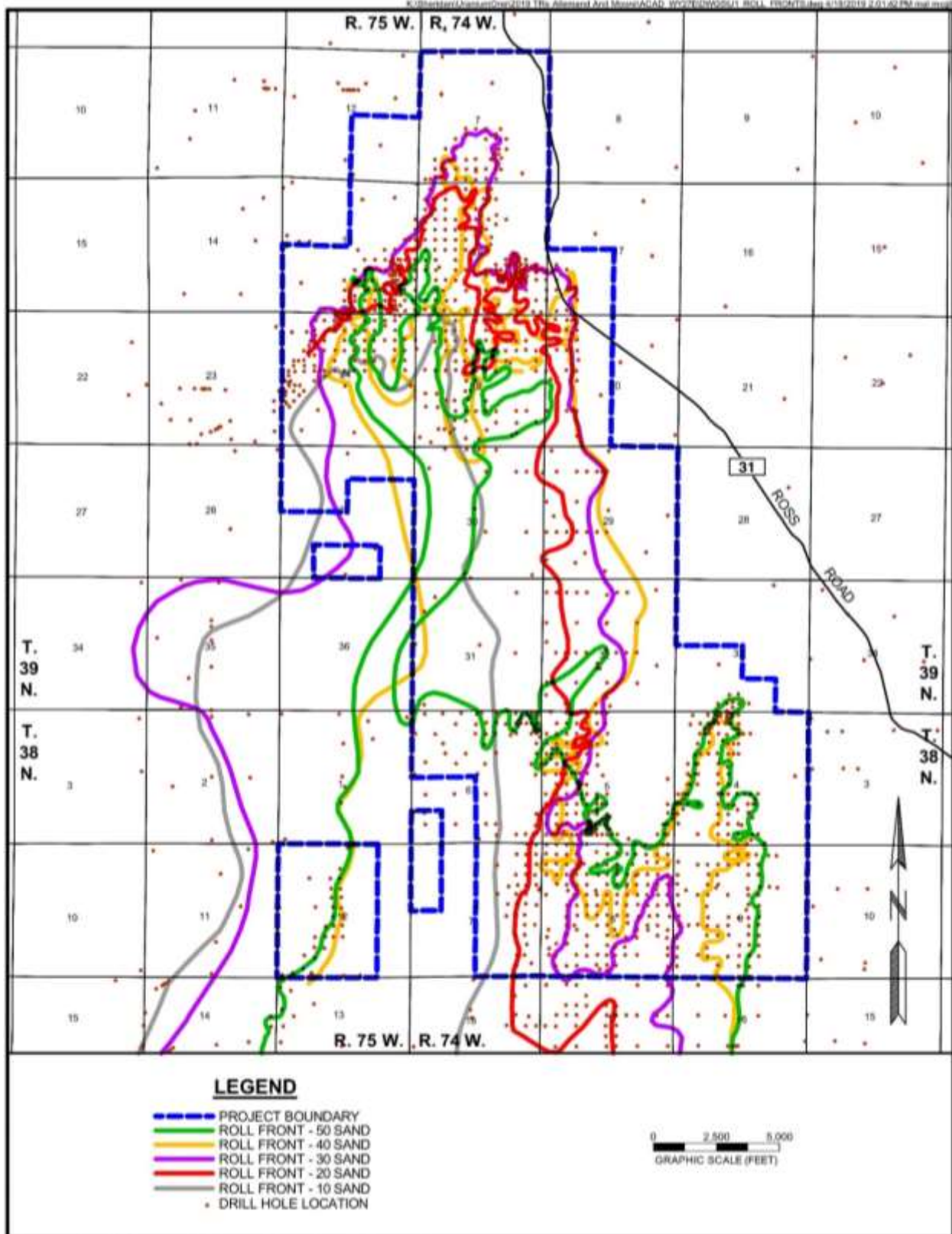


Figure 7. Allemand-Ross Uranium Mineralization

- Notes: 1) Drill hole locations and data include holes that were drilled after 2008.
 2) No resources are attributed to the roll front trends located outside the project boundary.

14.3 RESOURCE CLASSIFICATION

In the Author's opinion, the resource can be defined by existing drilling information, which is of sufficient density and continuity to identify numerous mineralized trends at the Project as depicted on Figure 7. The data appear to meet the criteria for "Measured and Indicated" Mineral Resources under the CIM standards on Mineral Resources. The grade and mineralized zone thickness were obtained from historical and recent exploratory drilling data as discussed in Section 10.

The mineralized roll fronts which traverse the Project display good geologic continuity, as demonstrated by drill hole results displayed on plan maps. Thickness and grade continuity within the Project are also good; however, continuity vertically within roll fronts is more variable.

For the Project resource estimates, the classification was based on the following three criteria.

- 1) Distance between data points (drill hole locations):
 - a. **Measured** – 0 feet to 70 feet between locations.
 - b. **Indicated** – 70 feet to 200 feet between locations.
 - c. **Inferred** – 200 feet to 400 feet between locations.
- 2) A GT cut-off of 0.25.
- 3) Mineralization continuity within the roll front as demonstrated by drill log correlation.

These criteria were selected because they are consistent with those commonly used at the other ISR Projects in the area and their application reflects the current level of geologic certainty of the resource.

14.4 METHODOLOGY

Recent and historical drilling data are used to define the Project resources. The mineral intercept and the mineral horizon are defined as the basic units of the mineral identity and the mineral resource respectively. These units are also generally used as a synonym for the roll front. By assigning mineral intercepts, mineral horizons can be identified by a geologist's interpretation of the stratigraphy, redox, and roll front geometry and zonation characteristics. Horizons, or roll fronts, can then be used to derive and report the resources that are being targeted. Resource areas can then be defined by combining the resources in multiple mineral horizons.

Drill hole gamma logs are used to define where the drill hole has intersected a mineralized zone and, thus, derive the uranium intercepts. The uranium content detected by gamma logs is then reported in terms of mineral grade as $eU_3O_8\%$ on 0.5 ft. depth intervals. The mineral intercept is defined as an interval of continuous thickness where the uranium concentration meets or exceeds the grade value, which is 0.02 percent. Any uranium values below this cutoff value are treated as zero value when calculating the resource estimation. The mineral intercept is defined by the thickness of the mineralized interval, the average grade of the mineral, and the depth of the top of the interval.

A GT value is also assigned to each mineral intercept and is used to represent the overall quality of the mineral intercept and to characterize a potential economic intercept. Mineral intercepts with a $GT \geq 0.25$ are considered potentially economic. Mineral intercepts with a $GT < 0.25$ are excluded from the resource calculation, however, these intercepts may be used to generate GT contours.

Geologic evaluations are used to assign stratigraphic and mineral horizons. Roll front correlation is the primary method used to assign mineral intercepts to mineral horizons and the depth and elevation of the intercepts are the secondary criteria to support correlation. Gamma ray signatures, redox states, lithologies, and relative mineral qualities are also used to interpret the roll front zonation (position within the roll front). Mineral intercept data and associated interpretations are stored in a database that is inventoried per drill hole and mineralized horizon. Map plots can then be generated using GIS software combined with this database to display GT values and interpret data for each mineral horizon.

The Mineral Resource estimates were calculated using the GT contour method. The GT values of the subject sand intervals for each hole were plotted on a drill hole map along with notations of where in the roll front that intercept was located. The roll front was then mapped and contour lines for the GT values drawn. The areas within the GT contour boundaries were used for calculating resource estimates utilizing the following criteria:

- Thickness: Average thickness of the intercepts assigned to a particular mineral horizon (inherent in GT values)
- Grade: Average grade of the mineral intercepts assigned to a particular mineral horizon (inherent in GT values)
- Depth: Average depth of a mineral intercept assigned to the top of the mineral horizon
- Area: The area interior to the 0.25 GT contour lines

Unlike previous resource estimations, the current resources were developed by detailed geologic interpretation of each sub-roll within the host mineralized sand. These sub-rolls typically range from 5 to 15 feet in thickness and they are determined by evaluation of the mineralization within the major host sand and recognition of the stratiform layers within each sand package. Mineralized intercepts are evaluated to determine which zone or zones host the eU_3O_8 . The gamma curve character, relative to the host lithology, and oxidation/reduction state determined the specific location within the roll front (Figure 7). Correlations are then carried along trend for an evaluation of each specific zone.

This methodology develops detailed interpretations of *where* the mineralization is located as well as the quantity of mineral. Subsequent drilling verifies the accuracy of the interpretations. New drill data are integrated with the surrounding data as they become available to update the GT maps.

Mineralized intervals (the thickness of the mineralized zone) for each exploratory drill hole were determined from the geophysical logs based on a 0.02 percent grade cutoff. An average grade

per drill hole intercept was then determined based on conversion of the counts per second to grade. The product of the mineralized thickness and grade was used to calculate the GT. The contained pounds of uranium were calculated using the following formula:

$$\text{Mineral Resource, pounds} = (\text{Area, ft}^2) \times (\text{GT, \%ft}) \times (20 \text{ lbs}) \times (\text{DEF}) / (\text{RD, ft}^3/\text{ton})$$

Area (ft²) = Area of influence in square feet (measured within contour intervals)

GT (percent x feet) = Ore grade in percent times thickness (feet) of mineralization

20 lbs = Conversion constant: grade percent and tons to unit pounds 1% of a ton

DEF (1.00) = Disequilibrium factor (1.00)

RD (16.0) = Rock density (16.0 cubic feet/ton)

Tonnage was calculated based on grade, pounds and a tonnage conversion factor for a given GT contour area. US Tons are calculated by multiplying the pounds by 2000 and Tonnes (metric) are calculated by multiplying the US tons by 0.907185.

GT contouring remains the most dependable method for reliable estimation of resources in roll front uranium deposits. However, this method also depends on the competency of the roll front geologist and the accuracy of the mineral body correlation and contour.

14.5 RESOURCES ESTIMATION AUDITING

The following methods were used by the Author for quality control and assurance for the resource estimates prepared by Uranium One.

- 1) 72 representative historical log files from Uranium One within the Resource Area were examined in detail to confirm gamma interpretations and grade calculations.
- 2) Additional historic logs were reviewed to confirm geologic and grade continuity throughout the Project.
- 3) Drilling density as depicted on maps was evaluated to demonstrate that the uranium mineralization at the Project location was consistent with CIM resource definitions.
- 4) Detailed examination of significant resource bearing roll front systems was conducted in collaboration with Uranium One geologists to confirm log interpretations, continuity of mineralization, and the nature of GT development.
- 5) Random mineralized zones within the resource model were evaluated to confirm the area assigned to the particular GT contour.
- 6) Resource classification methods and results were reviewed against standard industrial practices and CIM resource definitions.

The Author accepts the Uranium One interpretations as properly done and as responsible representations of the minerals present. These interpretations provide a reasonable basis for calculating the uranium resources at the Project location.

14.6 SUMMARY OF RESOURCES

The Author concludes the Measured and Indicated Resources of approximately 459,400 pounds of eU₃O₈ for the Project are compliant with Canadian NI 43-101 guidelines. Table 5 summarizes the Measured and Indicated Resources within the Project. There is limited risk that the estimate of quantity, quality, and physical characteristics of the resources of the Project will be unfavorably affected by future investigations. The Author recommends that Uranium One proceed with additional drilling suggested in this Technical Report.

The reader is cautioned that due to the uncertainty that may be attributed to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource, because of continued exploration. Confidence in the Inferred Mineral Resource estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of a PEA or other feasibility studies.

The results of the estimation of Inferred eU₃O₈ resource in the Project are summarized in Table 5.

Table 5. Summary of Measured and Indicated Resources for the Allemand-Ross Project (0.25 GT Cutoff)

Mineral Resource	Average Grade % eU ₃ O ₈	Ore Tons (000's)	Ore Tonnes (000's)	eU ₃ O ₈ Pounds
Measured	0.085	246	223	417,000
Indicated	0.066	32	29	42,400
Total Measured & Indicated	0.083	278	252	459,400

Note: Measured and Indicated mineral resources are from the 30 sand within the project boundary

14.7 RESOURCE ESTIMATE RISK

To the extent known, there are currently no environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors which could possibly affect the accessibility of the estimated resources.

Table 6. Summary of Inferred Resources for the Allemand-Ross Project (0.25 GT Cutoff)

Mineral Resource	Average Grade % eU ₃ O ₈	Ore Tons (000's)	Ore Tonnes (000's)	eU ₃ O ₈ Pounds
Inferred	0.098	1,275	1,157	2,496,000

Note: Inferred mineral resources are from the 10, 20, 30, 40, and 50 sands within the project boundary

There is risk of improper interpretation of geological data. Examples include data such as grade and continuity. Improper geologic interpretation could also impact the resource estimate in a positive or negative way. Geologists contributing to this Technical Report are thoroughly trained in understanding the nature of roll front uranium deposits to ensure realistic and accurate

interpretations of the extent of mineralization. Based on the positive results of the QA/QC efforts described in Section 14.5 the Author believes that there is limited risk that the geological data was improperly interpreted.

In the opinion of the Author, the uranium mineral resources described herein are considered of economic interest given that with appropriate prices, the mineral resources have reasonable prospect of eventual economic extraction.

15.0 MINERAL RESERVE ESTIMATES

This section is not applicable for this Project.

16.0 MINING METHODS

This section is not applicable for this Project.

17.0 RECOVERY METHODS

This section is not applicable for this Project.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable for this Project.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable for this Project.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable for this Project.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable for this Project.

22.0 ECONOMIC ANALYSIS

This section is not applicable for this Project.

23.0 ADJACENT PROPERTIES

The closest adjacent uranium mining property to the Allemand-Ross Uranium Project is the Bear Creek Project approximately 8 miles to the east and was an open pit mine that has been reclaimed. The next closest uranium mining project is Cameco Resources' Smith Ranch-Highland mine approximately 21 miles to the south. Cameco reports that a total of 22.7 million pounds have been produced from the combined operations as of December 2017 (Cameco, 2018).

24.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information to include.

25.0 INTERPRETATION AND CONCLUSIONS

The Author concludes that the Measured and Indicated resources of approximately 459,400 pounds of U_3O_8 for the Project are compliant with Canadian NI 43-101 guidelines. The Author concludes there is limited risk that the estimate of quantity, quality, and physical characteristics of the resources of the Project will be adversely affected by future investigation.

Uranium One, in coordination with the Author, conducted an intensive, log-by-log roll front mapping exercise that used more than 1,400 geophysical logs and resulted in a series of detailed GT contour maps. In the opinion of the Author, this method of resource estimation optimizes the data collected from drilling and is an established method for providing preliminary wellfield designs and layouts necessary for uranium ISR.

This technical report summarizes the updated estimated Mineral Resources within the Project held by Uranium One in the Southern Powder River Basin Mining District in Wyoming. This Author concludes that the estimated Measured and Indicated Mineral Resource at a 0.02% grade and 0.25 GT cutoff for the Allemand-Ross property is approximately 459,400 pounds of eU_3O_8 (Table 1).

Available data, including historical lithological and geophysical logs of previous exploration of the Allemand-Ross property and data from exploration and development conducted by Uranium One through 2008, support the estimate of Mineral Resources as summarized above and detailed in Section 14.5. In the opinion of the Author, the Project represents a viable mineral resource for ISR development.

The quantity and grade described in this NI 43-101 technical report is calculated using accepted protocols and therefore meets the NI 43-101 classification of Measured and Indicated Mineral Resources as defined by NI 43-101 and the Canadian Institute of Mining, Metallurgy, and Petroleum Definitions Standards incorporated by reference therein.

26.0 RECOMMENDATIONS

The Author recommends the following for moving the property towards further development:

- Investigate areas of insufficient drilling to identify additional resource targets;
- Evaluate potential acreage for additional resources in the immediate area;
- Conduct additional core drilling during development drilling of the Project resources to gather more disequilibrium data for the Project, and
- Continue to receive notices of oil and gas activity and evaluate notices appropriately to ensure oil and gas drilling pads are placed such that they will not limit future wellfield development.

27.0 REFERENCES

- BLM (Bureau of Land Management), 2010, "Environmental Assessment for Cameco Resources/Power Resources Incorporated, Reynolds Ranch In-situ Uranium Recovery Project, Converse County, Wyoming" Prepared by Taylor Environmental Consulting, LLC, Evansville, WY, DOI-BLM- WY-060-EA10-111.
- BRS, Inc. Engineering, 2008, 43-101 Mineral Resource Report, Allemand-Ross Uranium Project, Converse County, Wyoming, dated December 30, 2008.
- Conoco, Inc/PNC, 1981. Progress Report for Project Phase II – 1980-81 Exploration Drilling and Progress Program Project Phase III – 1981-82. Internal Joint Venture Report, March 12, 1981.
- Davis, James F., "Uranium Deposits of the Powder River Basin", Contributions to Geology, Wyoming Uranium Issue, University of Wyoming, 1969.
- Energy Metals Corporation, U.S., APPLICATION FOR USNRC SOURCE MATERIAL LICENSE MOORE RANCH URANIUM PROJECT CAMPBELL COUNTY, WYOMING. Volume 1, Environmental Report, Sections 1-3.4, September, 2007.
- Flores, R. M. "Coalbed methane in the Powder River Basin, Wyoming and Montana: an assessment of the Tertiary-Upper Cretaceous coalbed methane total petroleum system." US Geological survey digital data series dds-69-c 2 (2004): 56. Geologic Survey of Wyoming, "Wyoming Mines and Minerals Map", 1979.
- Granger, H. C. and Warren, C. G. (USGS), 1979, "Zoning in the Altered Tongue with Roll-Type Uranium Deposits", IAEA-SM-183/6.
- Hazen Research Inc., July 15, 1982, "HRI Project 5483 – Uranium Core Analysis". Memorandum prepared for Conoco by Hazen Research Inc., Inc. Golden, CO.
- Lemmers, J. and Smith, D., February 20, 1981, "Idaho Claims Geologic Evaluation, Converse County, Wyoming". Internal report for UNC Teton Exploration.
- Maxwell, Robert D. and Ludeman, Frank L., 1988, "Study of Power Reactor & Nuclear Fuel Development Corporation SWPRB Project Converse County, Wyoming, USA Phase I and II", Power Nuclear Corp.
- Maxwell, Robert D., 2005, Uranium Leach Amenability Studies, Internal High Plains Uranium communications and memos.
- NCDC, 2007, Surface Data, Monthly Extremes. National Climatic Data Center Available: <http://gis.ncdc.noaa.gov/website/ims-cdo/extmo/viewer.htm?Box=-110.307738654357:41.4493000825986:-102.349767058746:45.2536595444503> [2007, July 13].
- NRC, (U.S. Nuclear Regulatory Commission), 2009, NUREG-1910, Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Final Report, May 2009. Available on the Internet as of November 2018: <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1910/>.

- Rackley, R. I., 1972, Environment of Wyoming Tertiary Uranium Deposits, AAPG Bulletin Vol. 56, No. 4.
- Rackley, R.I., Shockey, P.N., and Dahill, M.P., 1968, Concepts and Methods of Uranium Exploration. Wyoming Geological Association Earth Science Bulletin, September, 1968, p. 23-24.
- Rubin, B., 1970, Uranium Roll Front Zonation in the Southern Powder River Basin, Wyoming. Wyoming Geological Association Earth Science Bulletin, December 1970, p. 5-12.
- Sharp, W.N. and A.B. Gibbons, 1964: Geology and Uranium Deposits of the Southern Part of the Powder River Basin, Wyoming. U.S. Geological Survey Bulletin 1147-D, 164 pp.
- World Information Service on Energy (Wise) Uranium Project, 2019, <http://www.wise-uranium.org/uousawy.html#BEARCR>).
- WRCC, (Western Region Climate Center) 2007, Local Climate Data Summaries, available on the Internet as of December 2018: <https://www.wrcc.dri.edu/summary/lcd.html>.
- Wyoming Governor's Office, 2008 Greater Sage-grouse Conservation Executive Order. EO 2008-2.

28.0 CERTIFICATE

CERTIFICATE OF QUALIFIED PERSON

I, Benjamin J. Schiffer, Wyoming Professional Geologist, of 1849 Terra Avenue, Sheridan, Wyoming, do hereby certify that:

- I am currently employed by WWC Engineering, 1849 Terra Avenue, Sheridan, Wyoming, USA, as the Energy/Environmental Department Manager.
- I graduated with a Bachelor of Arts degree in Geology in May 1995 from Whitman College in Walla Walla, Washington.
- I am a licensed Professional Geologist in the State of Wyoming. My registration number is 3446 and I am a member in good standing. I am a Registered Member of the Society of Mining, Metallurgy and Exploration. My Registration Number is 4170811 and I am in good standing.
- I have worked as a geologist for 23 years in natural resources extraction.
- I have 14 years' direct experience with uranium exploration, resource analysis, uranium ISR Project development, Project feasibility and licensing. My relevant experience for the purposes of this analysis includes Field Geologist at COGEMA Mining, Christensen Ranch Mine (now Uranium One America's Willow Creek Project); Restoration Specialist at COGEMA Mining, Holiday-El Mesquite Mine; Project Manager on multiple due diligence assessments of ISR mines and Projects in Wyoming, Texas and New Mexico; Permit Coordinator for Strata Energy, Ross ISR Uranium Project, qualified person on the NI 43-101 assessment (PEA) of Anatolia Energy's Temrezli ISR Project in Yozgat, Turkey, qualified person on the NI 43-101 Technical Report on the Resources of the Shirley Basin Uranium Project, Carbon County, Wyoming, USA, August 27, 2014 and qualified person on the NI 43-101 Preliminary Economic Assessment (PEA) of the Shirley Basin Uranium Project, Carbon County, Wyoming, USA, January 27, 2015, qualified person on the NI 43-101 Technical Report on the Resources of the Ludeman Uranium Project, Converse County, Wyoming, USA, January 25, 2019.
- I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, professional registration, and relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- I am independent of Uranium One as described in Section 1.5 of NI 43-101.

Dated this 30th day of April, 2019
Benjamin J. Schiffer, P.Geo.

