ARKOSE URANIUM PROJECT
Mineral Resource and Exploration Target
43-101 Technical Report

WYOMING, USA

PREPARED FOR:
Uranerz Energy Corporation

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1.0 Summary

This report titled, “ARKOSE URANIUM PROJECT Mineral Resource and Exploration Target, 43-101 Technical Report” was prepared in accordance with National Instrument 43-101, Standards of Disclosure for Mineral Projects (NI 43-101) and in accordance with Canadian Institute Mining (CIM) Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves (CIM standards) and has an effective data for mineral resources and pertinent data the same as the overall report, February 28, 2015.

This report provides estimates of Inferred Mineral Resources and an Exploration Target for the Arkose Uranium Project (Arkose) located in the Powder River Basin of Wyoming.

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. Inferred Mineral Resources are too speculative geologically to have the economic considerations applied to them which would enable them to be categorized as mineral reserves.

Reporting Exploration Target(s) is allowed as a restricted disclosure, as allowed under NI 43-101 Part 2.3.2, which defines, disclosing the potential quantity and grade of mineralization, expressed as ranges, for further exploration. All tonnages, grade, and contained pounds of uranium, as stated in this report, for Exploration Targets should not be construed to reflect a calculated mineral resource (inferred, indicated, or measured). The potential quantities and grades for exploration targets are conceptual in nature and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in discovery of an economic mineral resource within these areas.

Table 1.1 provides a brief list of terms and abbreviations used in this report.

<table>
<thead>
<tr>
<th>GENERAL TERMS AND ABBREVIATIONS</th>
<th>METRIC</th>
<th>US</th>
<th>Metric : US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>Abbreviation</td>
<td>Term</td>
<td>Abbreviation</td>
</tr>
<tr>
<td>Area</td>
<td>Square Meters</td>
<td>M²</td>
<td>Square Feet</td>
</tr>
<tr>
<td>hectare</td>
<td>Ha</td>
<td>Acre</td>
<td>Ac</td>
</tr>
<tr>
<td>Volume</td>
<td>Cubic Meters</td>
<td>m³</td>
<td>Cubic Yards</td>
</tr>
<tr>
<td>Length</td>
<td>Meter</td>
<td>m</td>
<td>Feet</td>
</tr>
<tr>
<td></td>
<td>Meter</td>
<td>m</td>
<td>Yard</td>
</tr>
<tr>
<td>Distance</td>
<td>Kilometer</td>
<td>km</td>
<td>Mile</td>
</tr>
<tr>
<td>Weight</td>
<td>Kilogram</td>
<td>Kg</td>
<td>Pound</td>
</tr>
<tr>
<td></td>
<td>Metric Ton</td>
<td>km³</td>
<td>Short Ton</td>
</tr>
</tbody>
</table>
1.1 Project Overview

The total area of the Arkose Mining Venture Properties, the Project, is approximately 49,138.00 acres. The Project located in various sections of Townships 41-44 North, Ranges 74-77 West; and falls between Latitudes 43° 47’ and 43° 31” North, and Longitudes 106° 10’ and 105° 18’ West, approximately 60 air miles north from Casper, Wyoming. Mineral tenure consists of unpatented mining claims, mineral leases (fee and state), and Surface Use Agreements as identified on Appendix A. Uranerz holds an 81% undivided interest in the mineral title to Arkose subject to their Joint Venture (JV) with United Nuclear, LLC successor in interest to NAMMCO.

1.2 Project Description

Figure 4.1 shows the overall project and sub-areas within the project. Arkose has been subdivided into 12 exploration areas. Table 1.2 summarizes the areas, lists whether an Exploration Target and/or Inferred Mineral Resource was estimated for that area.

<table>
<thead>
<tr>
<th>Area</th>
<th>Exploration Target</th>
<th>Inferred Mineral Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Buck</td>
<td>Estimated</td>
<td>Estimated</td>
</tr>
<tr>
<td>Kermit</td>
<td>Estimated</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Little Butte</td>
<td>Estimated</td>
<td>Estimated</td>
</tr>
<tr>
<td>Sand Rock</td>
<td>Estimated</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Monument</td>
<td>Estimated</td>
<td>Estimated</td>
</tr>
<tr>
<td>South Collins Draw</td>
<td>Estimated</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Cedar Canyon</td>
<td>Estimated</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Sough Doughstick</td>
<td>Estimated</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Lone Bull</td>
<td>No Estimate</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Stage</td>
<td>No Estimate</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Beecher Creek</td>
<td>Estimated</td>
<td>No Estimate</td>
</tr>
<tr>
<td>House Creek</td>
<td>No Estimate</td>
<td>No Estimate</td>
</tr>
</tbody>
</table>
Exploration targets are discussed in Section 9, Exploration. Inferred Mineral Resources are discussed in Section 14, Mineral Resource Estimates. This is an early stage project and Sections 15 through 22 as prescribed in NI 43-101 do not apply.

1.3 Development and Regulatory Status

There has been no development activity on the Arkose project. The only permits necessary for are for exploration by drilling. Uranerz has a Drilling Notification approved by the State of Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) and the BLM.

1.4 History

The project is located within the Pumpkin Buttes Mining District within the PRB which was the first commercial uranium production center in Wyoming. Uranium was discovered in the area in 1951 and production for small open pit mines proceeded intermittently from 1953 through 1967. Beginning in the 1970’s and operating into the 1980’s several large scale open pit and underground mines with conventional uranium processing facilities (mills) were developed and operated in the PRB. With falling uranium prices in the 1980’s the conventional operations ceased and the first uranium production using ISR methods was developed in the PRB. Historically, mineral rights in the project area were held by several mining companies who explored the area by drilling.

NAMMCO commenced acquiring rights to the properties comprising the Arkose Property in 2005, and continued to do so through 2006 and 2007. On January 15, 2008, Uranerz completed an acquisition of an undivided eighty-one percent interest in the Arkose Property and formed the Arkose Mining Venture with United Nuclear, LLC successor in interest to the vendors of these properties, NAMMCO.

Uranerz holds an 81% undivided interest in the mineral title to Arkose subject to their Joint Venture (JV) with United Nuclear, LLC successor in interest to NAMMCO.

1.5 Geology and Mineralization

Within the project area uranium mineralization is hosted by sandstone units with the Tertiary Wasatch and Fort Union Formations. Uranium deposits which have been delineated within the Project are classified sandstone roll front sandstone uranium deposits. Mineralization is interpreted to be dominantly roll front type mineralization which was deposited along an interface between oxidizing ground water solutions and reducing conditions within the host sandstone unit. This boundary between oxidizing and reducing conditions is often referred to as the REDOX interface or front.

Roll front mineralization tend to be continuous for thousands of feet along the REDOX front but may have limited width and continuity perpendicular the front. Roll fronts are often present in multiple sand horizons and may occur as multiple or stacked fronts.
Uranium mineralization is hosted within the Arkose project area within sand horizons of the Tertiary Wasatch and Fort Union formations. The stratigraphic section, Figure 7.2 provides the naming convention used for Arkose with the sand horizons in the Wasatch beginning with the lowest sand designated as the 100 sand and increasing by increments of 10 upward in the section to the 150 sand. Sand horizons in the Fort Union begin with the 90 sand in the upper portions of the formation and count downward by increments of 10 to the 50 sand. The boundary between the Wasatch and Fort Union Formation is marked by a coal and/or lignite horizon. The Arkose project focuses primarily on the 50 to 140 sands.

1.6 Exploration Targets

For the portions of the project, defined as Exploration Targets, there is sufficient geologic evidence from limited drilling to interpret that mineralization may extend from areas of resource production and/or defined mineral resources and/or is present within the drillholes themselves. In these areas favorable conditions for the occurrence of mineralization was determined based on the presence of host sand units and evidence of REDOX interfaces within those host sand units. No estimate of mineral resources or reserves in accordance with CIM guidelines has been made for Exploration Target areas. Rather, the following calculations are intended to quantify an Exploration Target for those portions of the Project, as allowed under NI 43-101 Part 2.3.2. All tonnages, grade, and contained pounds of uranium, as stated herein should not be construed to reflect a calculated mineral resource (inferred, indicated, or measured). The potential quantities and grades, as stated in this report, are conceptual in nature and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in discovery of an economic mineral resource on the property.

The estimated Exploration Target for Arkose ranges from 9.5 million tons at an average grade of 0.07 %eU₃O₈ containing 14.3 million pound of uranium oxide to 10.2 million tons at an average grade of 0.10 %eU₃O₈ containing 21 million pound of uranium oxide. Uranerz controls an 81% undivided interest in Arkose. Thus, of the total Exploration Target the Uranerz portion ranges from 11.6 to 17 million pounds of uranium oxide.

1.7 Mineral Resources

For this investigation drill data was available for over 2,000 drill holes. Inferred mineral resources were estimated by projecting average width and GT along a measured REDOX trend defined by drillholes. The effective date of the mineral resource estimate is February 28, 2015. Radiometric equilibrium was evaluated and a disequilibrium factor (DEF) of 1 was used. The minimum uranium grade included in the estimate was 0.02 %eU₃O₈. Mineral resources are reported at a cutoff of 0.20 GT which is the cutoff. Table 1.3 provides a summary of mineral resource by classification following CIM guidelines. Detailed mineral resource estimates are provided in Section 14 of this report.
Table 1.3 Inferred Mineral Resources**

<table>
<thead>
<tr>
<th>Project Total Inferred Mineral Resources</th>
<th>Tons</th>
<th>%eU₃O₈</th>
<th>Pounds</th>
<th>URZ Pounds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inferred Total</td>
<td>2,058,000</td>
<td>0.100</td>
<td>4,066,000</td>
<td>3,294,000</td>
</tr>
</tbody>
</table>

*Uranerz Pounds 81% of total.
**All numbers are rounded.

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. Inferred mineral resources are too speculative geologically to have the economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred mineral resources have been assessed in the context of preliminary economic assessment (PEA) in this report which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

1.8 Conclusions

The data available for this report is considered, by the Author, to be accurate and reliable for the purposes of estimating mineral resources and exploration targets for the Project.

Mineralization within the project is considered to have a reasonable prospect for economic extraction via in situ recovery methods (ISR).

Mineral resources have been estimated in accordance with CIM standards and definitions and are summarized. Mineral resources are classified as inferred as summarized on Table 1.3.

1.9 Recommendations

It is recommended that exploration and development of the Arkose project be continued. The areas considered of highest priority for development would include:

- The South Doughstick area as it is adjacent to the Jane Dough area which is currently being permitted for ISR mining as part of the Nichols Ranch facility.
- The Monument area as it has a significant exploration target.
- The East Buck area which has both estimated inferred mineral resources and exploration targets which are significant.
- The Little Butte area which has both estimated inferred mineral resources and exploration targets which are significant.

Expenditures for exploration and development of Arkose will be significant as the primary exploration method will consist of drilling and the area to be explored is extensive. Average depths of mineralization defined by drilling to date are in the range of 500 to 1,000 feet. Table 26.1 (Section 26) provides an estimate for additional exploration at South Doughstick, Monument, East Buck Little Butte, specifically, and other areas in general. Table 26.1 also provides an estimate for delineation drilling in at least two of these areas. It is recommended that the drilling be done in phases with each phase evaluated as work progresses before proceeding to the next phase. Recommended exploration drilling costs are estimated at 3 million $US and delineation of two of the target areas at 3.3 million $US.
The other areas within Arkose remain prospective. Exploration targets have been estimated for Kermit, Sand Rock, South Collins Draw, Cedar Canyon, and Beecher Creek. Drilling at Lone Bull, Stage, and House Creek to date is insufficient to define an exploration target but these areas remain perspective.

1.10 Summary of Risks

It is the Author’s opinion that the risks associated are low considering the project is in an early exploration stage. Arkose is located within a geologic environment that is known to host uranium mineralization and has and continues to be mined within the vicinity. Drilling to date at Arkose has defined uranium mineralization in several areas.

The Project does have some risks similar in nature to other mining projects in general and uranium mining projects specially, i.e., risks common to mining projects include:

- Future commodity demand and pricing;
- Environmental and political acceptance of the project;
- Variance in capital and operating costs; and
- Mine and mineral processing recovery.
- It is uncertain if additional exploration will result in discovery of an economic mineral resource within these areas.

Expenditures for exploration and development of Arkose will be significant as the primary exploration method will consist of drilling. Average depths of mineralization defined by drilling to date are in the range of 500 to 1,000 feet.

There is a risk that mineralization may not be found and/or be continuous along the REDOX boundary and that the actual GT along the trends will fall outside the estimated range, either higher or lower.

There is a risk that additional drilling will not increase mineral resources or validate exploration targets.
2.0 Introduction


Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. Inferred Mineral Resources are too speculative geologically to have the economic considerations applied to them which would enable them to be categorized as mineral reserves.

Reporting Exploration Target(s) is allowed as a restricted disclosure, as allowed under NI 43-101 Part 2.3.2, which defines, disclosing the potential quantity and grade of mineralization, expressed as ranges, for further exploration. All tonnages, grade, and contained pounds of uranium, as stated in this report, for Exploration Targets should not be construed to reflect a calculated mineral resource (inferred, indicated, or measured). The potential quantities and grades for exploration targets are conceptual in nature and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in discovery of an economic mineral resource within these areas.

The primary author of this report, Mr. Douglas Beahm, is both a Professional Geologist and a Professional Engineer, and a Registered Member of the US Society of Mining Engineers (SME). Mr. Beahm is a Qualified Person (QP) and independent of Uranerz, using the test set out in Section 1.5 of NI 43-101. Mr. Beahm is experienced with uranium exploration, development, and mining including past employment with the Homestake Mining Company, Union Carbide Mining and Metals Division, and AGIP Mining USA. In addition, as a consultant and principal engineer of BRS, Inc., Mr. Beahm has provided geological and engineering services relative to the development of mining and reclamation plans for a variety uranium projects. Mr. Beahm’s professional experience dates back to 1974. Mr. Beahm has worked previously on the project when it was held by others but has not worked specifically on the current project previously. Mr. Beahm has extensive work experience with similar sandstone-hosted uranium deposits.

Mr. Beahm is responsible for the report in its entirety except as noted in Section 3, Reliance on Other Experts. The effect date of the mineral resource estimates and the exploration target is the same as the effective date of the report, February 28, 2015.

Though his company, BRS Inc., Mr. Beahm was retained to develop a mineral resource estimate and to assess an exploration target within the Arkose project area.

Mr. Beahm visited the project site most recently on February 19, 2015. Mr. Beahm also visited the Uranerz Casper, Wyoming office on several days during February, 2015. During this time Mr. Beahm;
• Reviewed drill data including original geophysical and lithological logs.
• Received electronic copies of all drill data including lithological and geophysical logs for all drillholes subject to the report.
• Observed and documented evidence of exploration drilling at several areas within the Arkose project.
• Observed evidence of mining claim posts and discovery monumentation at several areas within the Arkose project.

Drilling was not active on the Arkose project at the time of the field visit, however, the Author did visit active drilling and geophysical logging at the nearby Uranerz Nichols Ranch ISR mine. The operator of the geophysical logging truck at Nichols Ranch performed the same role on a substantial portion of the Arkose project. Thus, the author was able to discuss geophysical logging and calibration procedures with this individual.

Based on review of the data collection and preservation methods employed by Uranerz, the author is of the opinion that the drilling and exploration practices employed are in keeping with industry standards and the author concludes that the drillhole database available for the Project is reliable.

![Figure 2.1 Drillhole Marker Monument Area](image)
3.0 Reliance on Other Experts

The location, extent, and terms relating to mineral tenure were provided by Uranerz and were relied upon as defining the mineral holdings of Uranerz in the development of this report.

The status of operating permits and current bond obligations was provided by Uranerz and was relied upon in the development of this report.
4.0 Property Description and Location

4.1 Property Description and Location
The total area of the Arkose Mining Venture Properties, the Project, is approximately 49,138.00 acres. The Project located in various sections of Townships 41-44 North, Ranges 74-78 West; and falls between Latitudes 43° 47’ and 43° 31” North, and Longitudes 106° 10’ and 105° 18’ West, approximately 60 air miles north from Casper, Wyoming.

Mineral tenure consists of unpatented mining claims, mineral leases (fee and state), and Surface Use Agreements as identified on Appendix A.

4.2 Leases
Uranerz has a possessory right to explore, develop and produce on the unpatented lode mining claims and must pay an annual maintenance fee to the Bureau of Land Management of $155.00 per claim on or before September 1. Portions of the fee land within the joint venture boundary are covered by Sixty (60) mining leases that require annual payments or in the case of paid up leases payments every 5 years. The mining leases and state leases have primary terms of 10 years and so long thereafter as the property is in production. The three (3) State of Wyoming leases are due to expire in 2015 and decisions will be forthcoming as to whether or not to get an extension of the leases or let them expire. Some of the mining leases will expire in 2016 and it is Uranerz’s intention to negotiate extensions to the primary term of the lease.

4.3 Surface Rights
Portions of the fee surface covering fee and federal minerals within the joint venture boundary are covered by Surface Use Agreements which include annual payments; and damage payments when activity occurs on the property which is paid annually. Surface use on mining claims on BLM lands are allowed subject to 3809 regulations and require both BLM and WDEQ/LQD permitting.

4.4 Permitting
Uranerz has a Drilling Notification approved by the State of Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) and the BLM which allows surface use for the purposes of exploration by drilling.

Although not required at this stage, mine development would require a number of permits depending on the type and extent of development, the most significant permits being the Permit to Mine issued by the WDEQ/LQD and the Source Materials License from the U.S. Nuclear Regulatory Commission (NRC) required for mineral processing of natural uranium. Any injection or pumping operations will require permits from the WDEQ which has authority under the Safe Water Drinking Act that stems from a grant of primacy from the U.S. Environmental Protection Agency for administering underground injection control programs in Wyoming.
4.5 Environmental Liabilities

To the Author’s knowledge no environmental liabilities are known to exist for this project with the exception of the DN bond for exploration WDEQ/LQD Drilling Notification DN378, in the amount of $659,165 effective July 2, 2014. This bond is subject to annual renewal and updating.

4.6 State and Local Taxes and Royalties

Uranerz holds an 81% undivided interest in the mineral title to Arkose subject to their Joint Venture (JV) with United Nuclear, LLC successor in interest to NAMMCO. The mining leases have a variety of production royalty payments based on a two tier system, or a sliding scale system. One of the leases has two-tier royalty based on the price of U308 at the time of the sale, and they are 6% for a U308 price less than $75.00 per lb.; and 8% for U308 price equal to or greater than $75.00 per lb. Some of the leases have a sliding scale royalty that runs from a low of 2% at a U308 price of $25.00 per lb. up to a high of 10% for a U308 price of equal to or greater than $100.00 per lb. Some leases have a sliding scale royalty that runs from a low of 4% at a U308 price of $40.00 per lb. up to a high of 10% for a U308 price of equal to or greater than $100.00 per lb. Other leases have a sliding scale royalty that runs from a low of 4.5% at a U308 price of $49.99 per lb. up to a high of 10% for a U308 price of equal to or greater than $100.00 per lb. Some of the Surface Use Agreements have a two tiered royalty based on the sales price of the U308 received by Uranerz and they are 1% for a sales price of less than $50.00 per lb; and 2% for a sales price of equal to or greater than $50.00 per lb. A couple of the Surface Use Agreements have a fixed royalty percentage of 3% of gross sales of U308. Six Hundred Sixty Two (662) of the total Two Thousand Three Hundred Twenty-One (2,321) mining claims have an overriding royalty of 0.25%. This overriding royalty interest is based on production of uranium on said claims. The State of Wyoming Leases carry a royalty rate of 5% of the gross value.

The current Wyoming severance tax is four percent but after the allowable wellhead deduction the effective severance tax rate is approximately 3% of gross sales. In addition, the *ad valorem* (gross products) tax varies by county assessment but is approximately 6.5%.

Federal income tax is assessed based on company profits rather than individual mine sites and is thus difficult to assess on an individual project basis. However, due to the favorable regular tax depletion deduction most mining companies’ effective tax rate is the Alternative Minimum Tax (AMT) rate of 20%.

4.7 Encumbrances and Risks

The unpatented lode mining claims will remain the property of Uranerz provided they adhere to required filing and annual payment requirements with Johnson and Campbell Counties and the BLM. The SUA will remain in force so long as the mining claims are maintained. Legal surveys of unpatented lode mining claims are not required and are not known to have been completed. All of the unpatented lode mining claims have annual filing requirements ($155 per
claim) with the BLM, to be paid on or before September 1 of each year. Mining claims are subject to the Mining Law of 1872. Changes in the mining law could affect the mineral tenure.
5.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Johnson and Campbell Counties are generally rural, and according to the 2010 United States Census, there were 8,569 people living Johnson County and 46,133 people living in Campbell County. Most of the workers for the operation are from the local area and nearby communities such as Casper, Wyoming approximately 80 miles southeast of the Project. Casper is the county seat of Natrona County and, as of the 2010 census, has a population of 55,316 people. The Uranerz main office is located in Casper as are numerous industrial supply and service companies.

5.1 Topography, Elevation, and Vegetation

The Arkose Uranium Project is located within the Wyoming Basin physiographic province in the western portion of the Powder River Basin. The site is in the vicinity of the Pumpkin Buttes, a series of small buttes rising several hundred feet above the surrounding plains. The buttes are erosional remnants of the Tertiary White River Formation that is believed to have overlain the majority of the Powder River Basin. The volcanic tuffs in the White River Formation have been cited as the source of uranium in the basin (Davis, 1969).

The area is a low-lying plain, roughly 4,650 feet in elevation. Vegetation is characteristically sagebrush grassland with some pines on elevated terrain and some deciduous trees within drainages. There are two main ephemeral drainages at the site, which are tributaries of Cottonwood Creek, which drains to the Cheyenne River.

5.2 Access

The Project covers a vast area but is generally accessible from state and county roads and/or two-track roads in more remote areas. Major access routes are shown on Figure 4.1.

5.3 Climate

In the vicinity of the Arkose property, the weather may limit the time periods for capital construction but should not significantly affect the operation of an ISR facility. The climate is semiarid and receives an annual precipitation of approximately 13 inches, the majority of which falls from February to April as snow. Cold, wind, and snow/blizzards can make winter exploration and construction work in this area difficult but not impossible. The summer months are typically hot, dry and clear except for infrequent high-intensity, short-duration storm events.

5.4 Property Infrastructure

The basic infrastructure (power, water, and transportation) necessary to support an ISR mining operation is located within reasonable proximity of the subject property. Existing infrastructure located at Uranerz’s Nichols Ranch facility may have some benefit to the Arkose Uranium Project. In addition infrastructure has been developed locally is association with local oil, gas, and CBM development.
Non-potable water will be supplied by wells developed at or near the site. Water extracted as part of ISR operations will be recycled for reinjection. Typical ISR mining operations also require a disposal well for limited quantities of fluids (waste) that cannot be returned to the production aquifers. Deep disposal wells have been completed for the Nichols Ranch facility to address wastes rather than tailings/waste storage areas. Additional deep disposal wells may be needed for the Arkose Uranium Project depending on the proximity to Nichols Ranch.

5.5 Land Use

Historically and currently, the land is used for livestock grazing.

5.6 Flora and Fauna

Vegetation and wildlife surveys of the project area were completed as part of the environmental baseline studies required for permitting and licensing. Vegetation communities consist primarily of sagebrush shrubland and mixed grasslands, with limited juniper, greasewood and wetland communities. The project area has the potential to provide habitat for mule deer, elk, pronghorn antelope, jackrabbit, cottontail rabbit, coyote, bobcat, mountain lion, red fox, badger, raccoon, skunk, chipmunk, rodents, songbirds, waterfowl, eagles, hawks, owls, sage grouse, chukar, wild turkey, Hungarian partridge, mourning dove, magpie, and crow. Most species are yearlong residents; however, some species such as elk, eagles, songbirds, and waterfowl are more abundant during migration periods.

5.7 Surface Rights and Local Resources

As discussed in Section 4.0, Uranerz has secured sufficient surface access rights for exploration and development of the project.
6.0 History

6.1 Ownership History of the Arkose Property

The Arkose Property covers an extensive area of land. The location of mineral holdings were provided by Uranerz. Mineral leases and claims are provided in Appendix A. To the Author’s knowledge, formal surveys or title opinions are not available. The following is a brief description of what is known about ownership history of the Arkose Property and the properties in the larger exploration area of which the Arkose Property was historically a part.

The NAMMCO Sellers commenced acquiring rights to the properties comprising the Arkose Property in 2005, and continued to do so through 2006 and 2007. On January 15, 2008, Uranerz completed an acquisition of an undivided eighty-one percent interest in the Arkose Property and formed the Arkose Mining Venture with United Nuclear, LLC successors in interest to the vendors of these properties, the NAMMCO Sellers.

The Arkose Property was originally part of a large exploration area encompassing Townships 33 through 50 North of Ranges 69 through 79 West, on the 6th principle meridian. In 1966, Mountain West Mines Inc. (MWM – now Excalibur Industries) began a successful drilling exploration program in a portion of this area. In 1967, MWM entered into an agreement with Cleveland-Cliffs Iron Company (CCI) for further exploration and option if suitable resources were found. CCI exercised its option in 1976 with plans to begin underground mining operations in the vicinity of North Butte, within approximately 3 to 15 miles of the Arkose Property. Changing economic conditions and the development of ISR mining technology ended much of CCI’s interest in the area.

In addition to CCI, other uranium exploration companies during the last forty years have controlled property either within or near the Arkose Property area. These included Kerr McGee, Conoco, Texaco, American Nuclear, and Tennessee Valley Authority. Areva NC (Cogema Resources Inc. (“Cogema”)) and Power Resources Inc. (a subsidiary of Cameco Corporation) have retained portions of their original land positions in the area. The mining claims and leases originally controlled by most of these companies were let go over the years due to market conditions. These property abandonments continued into 2004.

6.2 Exploration and Development Work Undertaken

Exploration on Arkose has been by drilling. Uranerz provided drillhole locations for some 2,136 drillholes completed within the project area. However, a portion of these drillholes are now included in what is referred to as the Jane Dough Project and are not subject to this report.

6.3 Historical Mineral Resource Estimates and Their Reliability

The Author is aware of historic mineral resource estimates for portion of the Arkose project but not any overall summary. The Author did not rely on any historic reports or data in the preparation of this report.
6.4 Production History

Portions of the project are within the Pumpkin Buttes Mining District, which was the first commercial uranium production district in Wyoming. Uranium was first discovered in the Pumpkin Buttes in 1951. Intermittent production from some 55 small mines through 1967 produced 36,737 tons of ore containing 208,143 pounds of uranium (Breckenridge, Glass, Root, and Wendell, 1974). This early mining focused on shallow oxidized ores exploited by small open pit mines. The Arkose project is focused on uranium mineralization at depths typically in excess of 400 feet from surface and in unrelated to this past production.

To the Author’s knowledge no uranium production has taken place on the Arkose Property.
7.0 Geological Setting and Mineralization

7.1 Regional Geological Setting

The Project is located in the Powder River Basin (PRB) which is a large structural and topographic depression which is sub-parallel to the trend of the Rocky Mountains. The basin is bounded on the south by the Hartville Uplift and the Laramie Range, on the east by the Black Hills, and the Big Horn Mountains and the Casper Arch on the west. The Miles City Arch in southeastern Montana forms the northern boundary of the basin.

The PRB is an asymmetrical syncline with its axis closely paralleling the western basin margin. During sedimentary deposition, the structural axis (the line of greatest material accumulation) shifted westward resulting in the basin’s asymmetrical shape. On the eastern flank of the PRB, sedimentary rock strata dip gently to the west at approximately 0.5 to 3.0 degrees. On the western flank, the strata dip more steeply, 0.5 to 15 degrees to the east with the dip increasing as distance increases westward from the axis. The general surficial geology of this portion of the PRB is shown on Figure 7.1, Geologic Map.

The PRB hosts a sedimentary rock sequence that has a maximum thickness of about 15,000 ft along the synclinal axis. The sediments range in age from Recent (Holocene) to early Paleozoic (Cambrian - 500 million to 600 million years ago) and overlie a basement complex of Precambrian-age (more than a billion years old) igneous and metamorphic rocks. Geologically, the PRB is a closed depression in what was, for a long geologic time period, a large basin extending from the Arctic to the Gulf of Mexico. During Paleozoic and Mesozoic time, the configuration of this expansive basin changed as the result of uplift on its margins. By late Tertiary - Paleocene time, marked uplift of inland masses surrounding the Powder River Basin resulted in accelerated subsidence in the southern portion of the basin with thick sequences of arkosic (containing feldspar) sediments being deposited. Arkosic sediments were derived from the granitic cores of the Laramie and Granite Mountains exposed to weathering and erosion by the Laramide uplift. Near the end of Eocene time, northward tilting and deep weathering with minor erosion took place in the basin. Subsidence resumed in the late Oligocene and continued through the Miocene and into the Pliocene. A great thickness of tuffaceous sediments was deposited in the basin during at least a part of this period of subsidence. By the late Pliocene, regional uplift was taking place, leading to a general rise in elevation of several thousand feet. The massive erosional pattern that characterizes much of the PRB began with the Pliocene uplift and continues to the present. Of particular interest in the project area are the Tertiary-age formations shown on Figure 7.2, Stratigraphic Column.

The White River Formation is the youngest Tertiary unit that still exists in the PRB. Locally, its only known remnants are found on top of the Pumpkin Buttes. Elsewhere the unit consists of thick sequences of buff colored tuffaceous sediments interspersed with lenses of fine sand and siltstone. A basal conglomerate forms the resistant cap rock on top of the buttes. This formation is not known to contain significant uranium mineralization in this area.
The Wasatch Formation is the next underlying unit and consists of interbedded mudstones, carbonaceous shales, silty sandstones, and relatively clean sandstones. In the vicinity of the Pumpkin Buttes, the Wasatch Formation is known to be 1,575 ft thick (Sharp and Gibbons, 1964). The interbedded mudstones, siltstones, and relatively clean sandstones in the Wasatch vary in degree of lithification from uncemented to moderately well-cemented sandstones, and from weakly compacted and cemented mudstones to fissile shales. The Wasatch contains significant uranium resources and hosts the ore bodies for which this permit application is subject to.

The next underlying unit is the Fort Union Formation. In the PRB this unit is lithologically similar to the Wasatch Formation. The Fort Union includes interbedded silty claystones, sandy siltstones, relatively clean sandstones, claystones, and coal. The degree of lithification is quite variable, ranging from virtually uncemented sands to moderately well-cemented siltstones and sandstones. The total thickness of the Fort Union in this area is approximately 3,000 ft. The Fort Union contains significant uranium mineralization at various locations in the basin.

Uranium mineralization is hosted within the Arkose project area within sand horizons of the Tertiary Wasatch and Fort Union formations. The stratigraphic section, Figure 7.2 provides the naming convention used for Arkose with the sand horizons in the Wasatch beginning with the lowest sand designated as the 100 sand and increasing by increments of 10 upward in the section to the 150 sand. Sand horizons in the Fort Union begin with the 90 sand in the upper portions of the formation and count downward by increments of 10 to the 50 sand. The boundary between the Wasatch and Fort Union Formation is marked by a coal and/or lignite horizon.

Figure 7.3 provides a type log taken from the Monument area within the Arkose project.
7.2 Uranium Source and Deposition

Wyoming uranium deposits are typically sandstone roll-front uranium deposits as defined in the “World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification”, (IAEA, 2009). The key components in the formation of roll-front type mineralization include:

- A permeable host formation:
  - Sandstone units of the Wasatch formation.
- A source of soluble uranium:
  - Volcanic ash flows coincidental with Wasatch deposition containing elevated concentration of uranium is the probable source of uranium deposits for the Pumpkin Buttes Uranium Province.
- Oxidizing ground waters to leach and transport the uranium:
  - Ground waters regionally tend to be oxidizing and slightly alkaline.
- Adequate reductant within the host formation:
  - Conditions resulting from periodic H₂S gas migrating along faults and subsequent iron sulfide (pyrite) precipitation created local reducing conditions.
- Time sufficient to concentrate the uranium at the oxidation/reduction interface.
  - Uranium precipitates from solution at the oxidation/reduction boundary (REDOX) as uraninite which is dominant (UO₂, Uranium oxide) or coffinite (USiO₄, uranium silicate).
  - The geohydrologic regime of the region has been stable over millions of years with groundwater movement controlled primarily by high-permeability channels within the predominantly sandstone formations of the Tertiary.

7.3 Local Geology

Depositional Environment: Arkose

In the Pumpkin Buttes Mining District, the Eocene Wasatch and Fort Union Formations host the geologic setting for uranium mining at the Arkose Uranium Project. The Wasatch Formation in this area was deposited in a multi-channel fluvial and floodplain environment. The climate at the time of deposition was wet tropical to subtropical with medium stream and river sediment load depositing a majority of medium grained materials. The source of the sediments, as evidenced by abundant feldspar grains in the sandstones, was the near-by Laramie and Granite Mountains. The Fort Union Formation in this area was also deposited in a multi-channel fluvial and floodplain environment.

At the Arkose mining location, there are a series of sand horizons designated by a numbering system as shown of Figure 7.2. Separating the sand units are horizons composed of siltstones, mudstones, carbonaceous shales, and poorly developed thin coals. These fine-grained materials were deposited in floodplain, shallow lake (lacustrine) and swamp environments. Ultimately, deposition of the Wasatch and Fort Union Formations was a function of stream bed
load entering the basin and subsidence from within the basin. However, in the central part of the Powder River Basin, long periods of balanced stability occurred. During these periods the stream gradients were relatively low and allowed for development of broad (0.5 to 6.0 mi wide) meander belt systems, associated over-bank deposits, and finer grained materials in flood plains, swamps and shallow bodies of water. Evidence for depositional stability exists as a number of coal bed markers with little or no channel scouring are in contact with the major sand horizons (Davis, 1970).

In a fluvial meandering stream process, the flow channel is sinuous in plan view with the highest flow energy concentrated on the outside edge of the channel as it turns through a meander. This results in cutting into the outside channel wall and caving material into the channel especially during flooding. In cross section view, the outside edge of a meander is the steepest and the inside of the meander is sloped more gently. The inside edge of a meander is where deposition takes place. Finer materials are deposited in the shallower (upper) slow flow region of the inside slope and coarser materials are deposited in the lower region. The major fraction of sand in the Wasatch Formation in the Pumpkin Buttes area is medium-grained with lesser fractions of coarse and fine grains. This is accompanied with mostly medium scale festoon cross bedding and current lamented cross bedding. These features can only be seen in cores. In a typical point bar sedimentation process, grain size and sediment structure fine upwards within a single point bar accumulation.

The meandering stream environment is a process of cut and fill. Each time a cut occurs, the inside slope fills with sand and sediment. A single increment of this process results in a structure called a point bar and an accumulation of point bars is sometimes referred to as a meander belt. As the meander process progresses, meander loops eventually migrate down gradient in the direction of flow and can laterally spread out in almost any direction. The size of the complete meander belt system is a function of the size of the valley or basin and stream flow rate, load and gradient. If the subsidence rate and stream load are in the proper proportion, successive layers of meander belts, or meander belt systems, may form as the stream channel wanders back and forth during subsidence.

On an electric log resistivity curve, the fineness grading is apparent where the curve sharply deflects from low to higher resistance and then gradually returns to lower resistance in an upward direction. Other meander belt system sand features such as overbank and crevasse deposits are present as fingers of sand that taper out from a meander termination. These are thin sands without a lot of grain size sorting. Inter–meander channel sands occur between meanders that are migrating in different directions. These sands have more uniform grain size and show on the electric log as a semi-flat curve with only small variations. Tributary and meander cut-off channel sand features form where pre-existing sediments are scoured by a river or stream and subsequently fill with medium and coarse sediments. These channels may cut randomly into meander belts, flood plain or swamp sediments. On the electric resistivity log, channel fills have a massive semi-rounded signature.
7.4 Uranium Mineralization

The uranium mineralization is composed of amorphous uranium oxide, sooty pitchblende, and coffinite and is deposited in void spaces between detrital sand grains and within minor authigenic clays. The host sandstone is composed of quartz, feldspar, accessory biotite and muscovite mica, and locally occurring carbon fragments. Grain size ranges from very fine- to very coarse sand but is medium-grained over all. The sandstones are weakly to moderately cemented and friable. Pyrite and calcite are associated with the sands in the reduced facies. Hematite or limonite stain from pyrite, are common oxidation products in the oxidized facies. Montmorillonite and kaolinite clays from oxidized feldspars are also present in the oxidized facies.
8.0 Deposit Types

Wyoming uranium deposits are sandstone roll-front sandstone uranium deposits as defined in the “World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification”, (IAEA, 2009).

Mineralization within the Pumpkin Butte Uranium Province is interpreted to be dominantly roll-front type mineralization. As depicted on Figure 8.1, roll-fronts are formed along an interface between oxidizing ground water solutions which encounter reducing conditions within the host sandstone unit. This boundary between oxidizing and reducing conditions is often referred to as the REDOX interface or front.

Sandstone uranium deposits are typically of digenetic and/or epigenetic origin formed by low temperature oxygenated groundwater leaching uranium from the source rocks and transporting the uranium in low concentrations down gradient within the host formation where it is deposited along a Redox interface. Parameters controlling the deposition and consequent thickness and grade of mineralization include the host rock lithology and permeability, available reducing agents, ground water geochemistry, and time in that the ground water/geochemical system responsible for leaching; transportation and re-deposition of uranium must be stable long enough to concentrate the uranium to potentially economic grades and thicknesses. Roll Front mineralization is common to Wyoming uranium districts include the Powder River Basin, Gas Hills, Shirley Basin, Great Divide Basin, and others, as well as districts in South Texas and portions of the Grants, New Mexico District.

**Figure 8.1 – Roll-Front Mineralization**

![Diagram](image)

Figure 8.1 - Idealized cross-section of a sandstone-hosted roll front uranium deposit. Modified from Granger and Warren (1974) and De Voto (1978).
9.0 Exploration

9.1 Historical Exploration

Uranium mineralization was discovered in the Pumpkin Buttes on October 15, 1951 by J. D. Love, in the Wasatch Formation on the south side of North Pumpkin Butte, in the west-central portion of the Powder River Basin. The mineralization was one of eight areas recommended in April 1950 for investigation in the search for uranium bearing lignites and volcanic tuffs. In response to this recommendation, airborne radiometric reconnaissance of most of these areas was undertaken by the USGS in October, 1950. Uranium mineralization discovered by J. D. Love was in the vicinity of an aerial radiometric anomaly identified from this survey (Love, 1952).

Intermittent production from some 55 small mines through 1967 produced 36,737 tons of ore containing 208,143 pounds of uranium (Breckenridge, Glass, Root, and Wendell, 1974). This early mining focused on shallow oxidized areas by small open pit mines. Primary exploration methods included geologic mapping and ground radiometric surveys. Modern exploration and mining in the district has focused on deeper reduced mineralization. Exploration is primarily conducted by drilling as discussed in Section 10.

9.2 Exploration Target Definition

For the portions of the project defined as Exploration Targets there is sufficient geologic evidence from limited drilling to interpret that mineralization may extend from areas of resource production and/or defined mineral resources and/or is present within the drillholes themselves. For Exploration Target areas, favorable conditions for the occurrence of mineralization was determined based on the presence of host sand units and evidence of REDOX interfaces within those host sand units. No estimate of mineral resources or reserves in accordance with CIM guidelines has been made for Exploration Target areas. Rather, the following calculations are intended to quantify an Exploration Target for those portions of the Project, as allowed under NI 43-101 Part 2.3.2. All tonnages, grade, and contained pounds of uranium, as stated in this section of the report, should not be construed to reflect a calculated mineral resource (inferred, indicated, or measured). The potential quantities and grades, as stated in this report, are conceptual in nature and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in discovery of an economic mineral resource on the property.
9.3 Exploration Target Estimation Parameters

Exploration Target estimations are based on radiometric equivalent uranium grades %eU₃O₈ determined by downhole geophysical logging. A minimum grade cutoff of 0.02 %eU₃O₈ and minimum GT of 0.20 was applied. A bulk dry density of 16 cubic feet per ton was used along with a radiometric disequilibrium factor of 1. Refer to Section 14 for discussion of chemically equivalent data, cutoff and bulk density.

Exploration Targets were estimated by applying a range of GT values, determined from all drill data available for Arkose, to an interpreted trend length and average width of mineralization. For the exploration target areas the REDOX boundary or trend for each of the target areas was defined from drilling. There is a risk that mineralization may not be found and/or be continuous along the REDOX boundary and that the actual GT along the trends will fall outside the estimated range.

Trend width was determined for each area, where possible, by interpretation of available drill data. If sufficient drill data was not available for an area, data from similar geologic horizons within adjacent areas was used. Low range and high range GT values, above a GT cutoff of 0.20, were determined for each host sand unit in a similar manner and are further described in subsequent sections.

9.4 Exploration Target Areas

Figure 9.1 shows the overall project and sub-areas within the project. The overall mineral trends are also shown on Figure 9.1 along with the location of inset maps which provide greater detail for the exploration areas. Arkose has been subdivided into 12 exploration areas:

- East Buck
- Kermit
- Little Butte
- Sand Rock
- Monument
- South Collins Draw
- Cedar Canyon
- South Doughstick
- Lone Bull
- Stage
- Beecher Creek
- House Creek

These area are shown on six detail maps designated Tend Area 1 through 6, Figures 9.2 through 9.7, respectively.
9.4.1 East Buck

East Buck area REDOX boundaries, defined by wide-spaced drilling, are shown on Figure 9.2. Depth to mineralization for the 120 sand is approximately 550’ and the REDOX trend length is 1.7 miles. In the 100 sand the REDOX trend is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. The depth to mineralization in the 100 sand is approximately 775’ and the exploration target trend length is 3.0 miles. At East Buck drill data that there are at least two separate REDOX fronts within each the 100 and 120 sands. While exploration for the 110 sand was executed at East Buck, there was insufficient data to project a trend length.

Within the East Buck area 45 of the total 308 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within either the 100 or 120 sand unit of the Wasatch Formation. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The corresponding thicknesses of mineralization for the low and high range are 4.5 and 7.2 feet, respectively.
9.4.2 Kermit

Kermit area REDOX boundaries, defined by wide-spaced drilling, are shown on Figure 9.3. Two sand mineralization REDOX trends are present. Depth to mineralization for the 120 sand is approximately 600’ and the REDOX trend length is 0.4 miles. In the 100 sand the REDOX trend is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. The depth to mineralization in the 100 sand is approximately 750’ and the trend length is 6.2 miles.

Within the Kermit area 7 of the total 156 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 100 sand unit of the Wasatch Formation. Mineralization was encountered in the 120 sand but was not above cutoff and GT and values from the 100 sand were applied in the exploration target estimate. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the higher GT values observed in the drilling. The corresponding thickness of mineralization for the low and high range was 5.4 feet.
9.4.3 Little Butte

The REDOX boundaries shown by Figure 9.4 are defined by wide-spaced drilling. The REDOX trend is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. Due to the nature of the deposit, the 80 and 90 sand were estimated as one sand containing at least two REDOX fronts. The depth to mineralization in the 80/90 sand is approximately 490’ and the REDOX trend length is 3.1 miles. The depth to mineralization in the 100 sand is approximately 540’ and the trend length is 1.7 miles.

Within the Little Butte area 48 of the total 269 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within either the 80 or 90 sand unit of the Fort Union Formation along with 8 holes in the 100 sand of the Wasatch Formation. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. For the 100 sand data, from both Little Butte and Kermit was used as they are interpreted to be along the same trend. The corresponding thicknesses of mineralization for the 80/90 and 100 sands are 7.4 and 5.4 feet, respectively.
9.4.4 Sand Rock

The REDOX boundaries shown by Figure 9.4 are defined by wide-spaced drilling. The 90 sand the REDOX trend is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. The depth to mineralization in the 90 sand is approximately 650’ and the trend length is 0.3 miles with at least two REDOX fronts present within the sand. The 140 sand depths to mineralization are approximately 330’ and the trend length is 0.7 miles.

Within the Sand Rock area 6 of the total 91 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 90 sand unit of the Fort Union Formation along with 8 holes in the 140 sand of the Wasatch Formation. The following graphs shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The corresponding thicknesses of mineralization for the 90 and 140 sands are 5.3 and 10 feet, respectively.
9.4.5 Monument

The REDOX boundaries shown on Figure 9.5 are defined by wide-spaced drilling with the 50, 60, and 70 sand REDOX trends is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. Depth to mineralization for the 50 sand is approximately 900’ and the REDOX trend length is 0.5 miles. The depth to mineralization in the 60 sand is approximately 800’ and the REDOX trend length is 12.0 miles with at least two REDOX fronts interpreted in the 60 sand form drilling. The depth to mineralization in the 70 sand is roughly 700-800’ and the trend length is 3.9 miles.

Within the Monument area 17 of the total 132 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 50, 60, or 70 sand unit of the Fort Union Formation. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The thicknesses of mineralization for the 50, 60, and 70 sands are all 8.3 feet.
9.4.6 South Collins Draw

The REDOX boundaries shown by Figure 9.6 are defined by wide-spaced drilling. The depth to mineralization in the 100 sand is approximately 550 feet and the trend length is 1.9 miles. The mineralized trend at South Collins Draw is interpreted to extend to the north onto lands for which Uranerz does not control the mineral tenure.

Within the South Collins Draw area 3 of the total 49 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 100 sand unit of the Wasatch Formation. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The thickness of mineralization for the 100 sand is 6.7 feet.
9.4.7 Cedar Canyon

The REDOX boundaries shown by Figure 9.6 are defined by wide-spaced drilling. In the 100 sand the REDOX trend is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. The depth to mineralization in the 100 sand is 510’ and the trend length is 0.5 miles. Drillhole A26-17-002 contained mineralization in an upper sand of the Wasatch, possibly the 150 sand. Due to the lack of additional data, a trend was not projected for the 150 sand.

Within the Cedar Canyon area 10 of the total 72 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 100 sand unit of the Wasatch Formation. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The thickness of mineralization for the 100 sand is 5.5 feet.

Data was limited for the Cedar Canyon area. The low and high range values determined for South Doughstick were applied to Cedar Canyon as the trends were continuous.
9.4.8 South Doughstick

The REDOX boundaries shown by Figure 9.6 are defined by wide-spaced drilling. Mineralization is present in both the 100 sand of the Wasatch and the 90 sand of the Fort Union. In both 100 and 90 sands the REDOX trend is partially an extension of the area for which inferred mineral resources have been estimated in the same geologic horizon. The depth to mineralization in the 100 sand is approximately 500 feet and the trend length is 0.4 miles along at least two REDOX fronts. The depth to mineralization in the 90 sand is approximately 750’ and the trend length is 1.1 miles.

Within the South Doughstick area 34 of the total 135 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 90 and 100 sands. The following graph shows the drillholes which exceeded cutoff and the values of GT used for the low and high range estimate to define the Exploration Target for this area. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The thickness of mineralization in the 90 and 100 sands are 4.5 and 5.5 feet, respectively.
9.4.9 Lone Bull

A total of 33 holes were drilled at Lone Bull targeting the 100 sand of the Wasatch Formation. Uranium mineralization exceeding a 0.20 GT cutoff was encountered in 2 holes. Artesian flows were encountered during drilling in Section 35, T43N, R77W, and drilled was discontinued in favor of other areas. Drilling was wide-spaced and there is insufficient data to define reasonable REDOX trends for the area at this time in order to estimate an Exploration Target.

The area remains prospective and drilling has demonstrated that mineralization is present.

9.4.10 Stage

No recent drilling has been completed in the Stage area as yet. Geologic evidence from adjacent areas suggests that mineralization may be present in this so the area remains prospective for future exploration.

9.4.11 Beecher Creek

The sand mineralization REDOX trend is shown in the Figure 9.7 Trend Map, and is defined by wide spaced drilling. The depth to mineralization in the 90 sand is approximately 690’ and the trend length is 0.7 miles.

Within the Beecher Creek area 4 of the total 46 drillholes encountered uranium mineralization with intercepts exceeding the 0.20 GT cutoff within the 100 sand unit of the Wasatch Formation. Data was limited for the Beecher Creek area. The low and high average values determined for South Doughstick were applied to Beecher Creek as mineralization is in the same geologic horizon. The low range values represent the average values of drillholes exceeding cutoff. The high range values were selected to reflect median values between the average GT and the very high GT values observed in the drilling. The thickness of mineralization for the 100 sand is 5.5 feet.
Hole number A37-10-003 encountered uranium mineralization is a very shallow horizon at approximately 70 feet. The extent of this shallow mineralization is not well defined by drilling and no exploration target was defined within this horizon.

9.4.12 House Creek

No recent drilling has been completed in the House Creek area as yet. This so the area remains prospective for future exploration.

9.5 Exploration Target Estimates

Exploration targets were estimated for nine of the twelve perspective exploration areas which have been defined within the Arkose Project. The remaining three areas remain of interest but have not been drilled sufficiently to define exploration targets. Table 9.1 summarizes the Exploration Target estimate for the Arkose Project.
<table>
<thead>
<tr>
<th>Exploration Target Area</th>
<th>Sand</th>
<th>Trend L (Miles)</th>
<th>Trend W (Feet)</th>
<th>Low Range</th>
<th>High Range</th>
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<tr>
<td></td>
<td>Thickness</td>
<td>Grade</td>
<td>GT</td>
<td>Tons</td>
<td>Pounds eU₃O₈</td>
</tr>
<tr>
<td>East Buck 100 1 100</td>
<td>4.5</td>
<td>0.11</td>
<td>0.48</td>
<td>148,500</td>
<td>316,800</td>
</tr>
<tr>
<td>East Buck 100 5 75</td>
<td>4.5</td>
<td>0.11</td>
<td>0.48</td>
<td>556,875</td>
<td>1,188,000</td>
</tr>
<tr>
<td>East Buck Total 9.4</td>
<td>4.5</td>
<td>0.11</td>
<td>0.48</td>
<td>378,675</td>
<td>807,640</td>
</tr>
<tr>
<td>Kermit 100 5.9 75</td>
<td>5.4</td>
<td>0.06</td>
<td>0.35</td>
<td>788,535</td>
<td>1,022,175</td>
</tr>
<tr>
<td>Kermit 100 0.4 50</td>
<td>5.4</td>
<td>0.06</td>
<td>0.35</td>
<td>35,640</td>
<td>46,200</td>
</tr>
<tr>
<td>Kermit Total 6.6</td>
<td>5.4</td>
<td>0.06</td>
<td>0.35</td>
<td>40,095</td>
<td>51,975</td>
</tr>
<tr>
<td>Little Butte 80/90 6.2</td>
<td>7.4</td>
<td>0.07</td>
<td>0.49</td>
<td>1,665,444</td>
<td>2,205,588</td>
</tr>
<tr>
<td>Little Butte 100 1.7</td>
<td>5.4</td>
<td>0.06</td>
<td>0.35</td>
<td>227,205</td>
<td>294,525</td>
</tr>
<tr>
<td>Little Butte Total 7.9</td>
<td>7.4</td>
<td>0.07</td>
<td>0.49</td>
<td>1,892,649</td>
<td>2,500,113</td>
</tr>
<tr>
<td>Monument 70 3.9 98</td>
<td>8.3</td>
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<td>1,513,512</td>
</tr>
<tr>
<td>Monument 60 24 60</td>
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<tr>
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<td>213,840</td>
</tr>
<tr>
<td>Monument Total 28.4</td>
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<td>0.07</td>
<td>0.60</td>
<td>5,138,912</td>
<td>7,429,752</td>
</tr>
<tr>
<td>Sand Rock 90 0.6 75</td>
<td>5.3</td>
<td>0.09</td>
<td>0.50</td>
<td>78,705</td>
<td>149,500</td>
</tr>
<tr>
<td>Sand Rock 140 0.7 75</td>
<td>10.0</td>
<td>0.04</td>
<td>0.38</td>
<td>173,250</td>
<td>131,670</td>
</tr>
<tr>
<td>Sand Rock Total 140.7</td>
<td>5.3</td>
<td>0.09</td>
<td>0.50</td>
<td>251,955</td>
<td>351,450</td>
</tr>
<tr>
<td>South Collins Draw 100</td>
<td>6.7</td>
<td>0.07</td>
<td>0.50</td>
<td>49,748</td>
<td>74,250</td>
</tr>
<tr>
<td>Cedar Canyon 100 0.5</td>
<td>5.5</td>
<td>0.10</td>
<td>0.57</td>
<td>45,375</td>
<td>94,050</td>
</tr>
<tr>
<td>South Doughstick 100</td>
<td>5.5</td>
<td>0.10</td>
<td>0.57</td>
<td>72,600</td>
<td>150,480</td>
</tr>
<tr>
<td>South Doughstick 90</td>
<td>4.5</td>
<td>0.10</td>
<td>0.47</td>
<td>81,675</td>
<td>170,610</td>
</tr>
<tr>
<td>S. Doughstick Total 1.9</td>
<td>5.5</td>
<td>0.10</td>
<td>0.57</td>
<td>63,525</td>
<td>131,670</td>
</tr>
<tr>
<td>Lone Bull 100 No Estimate</td>
<td>5.5</td>
<td>0.10</td>
<td>0.57</td>
<td>63,525</td>
<td>131,670</td>
</tr>
<tr>
<td>Stage 100 No Estimate</td>
<td>5.5</td>
<td>0.10</td>
<td>0.57</td>
<td>63,525</td>
<td>131,670</td>
</tr>
<tr>
<td>Total Exploration Target</td>
<td>0.07</td>
<td>9,544,758</td>
<td>14,264,085</td>
<td>0.10</td>
<td>10,195,188</td>
</tr>
</tbody>
</table>

Reporting Exploration Target(s) is allowed as a restricted disclosure, as allowed under NI 43-101 Part 2.3.2, which defines, disclosing the potential quantity and grade of mineralization, expressed as ranges, for further exploration. All tonnages, grade, and contained pounds of uranium, as stated in this report, for Exploration Targets should not be construed to reflect a calculated mineral resource (inferred, indicated, or measured). The potential quantities and grades for exploration targets are conceptual in nature and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in discovery of an economic mineral resource within these areas.
10.0 Drilling

10.1 Drilling Methods and Data

Uranerz conducted exploration of the Arkose Project from 2008 through 2013 but not in 2014. The drillhole data demonstrates that mineralization is present and is of sufficient quality and density to support mineral resource estimation and to define exploration targets. Drillhole data is dominantly based on interpretation of downhole geophysical logs typically consisting of natural gamma, resistivity, and SP (Spontaneous Potential). Resistivity and SP were utilized for defining lithology and correlating the logs. Geophysical was completed by Uranerz personnel using modern logging units owned by Uranerz.

As discussed in Section 12, it is industry standard practice to calibrate of the logging trucks routinely at Department of Energy facilities. Data in the possession of Uranerz includes 100% of the total original geophysical and lithologic logs.

10.2 Recent and Historic Drilling Summary

The drillhole database used for this report has an effective date of January 1, 2015. Uranerz provided drillhole locations for some 2,136 drillholes completed within the project area. However, a portion of these drillholes are now included in what is referred to as the Jane Dough Project and were not used in this report. No historic drill data or other data such a Coal Bed Methane (CBM) drilling was used in this report.

10.3 Drill Data Summary

General drillhole results are summarized for each perspective exploration area within the Arkose project in Section 9. Drillhole locations are shown on Figure 10.1.
11.0 Sample Preparation, Analyses, and Security

The primary assay data for Project is downhole geophysical log. Only limited coring has been completed.

Uranerz has written procedures for the collection of drill data including lithological logging, natural gamma logging. Hard copies of all original drillhole data are maintained by Uranerz and are secure.

Uranerz has standard procedures for the interpretation of natural gamma logging employing the half amplitude method for the interpretation of historic analog data. For all recent drilling, Compulog™ software is utilized to convert natural gamma measurement to equivalent % U₃O₈ (%eU₃O₈). The output data is provided both electronically and in hard copy by ½ foot intervals. This grade data is then summed for thickness and GT for the appropriate mineralized intervals. This procedure is the current industry standard method.

Calibration data for both natural gamma logs is discussed Section 12. When drilling is active both the natural gamma logging trucks are calibrated at least every 3 months. Natural gamma and calibration is performed at DOE standard calibration facilities located in Casper, Wyoming.

It is the Author’s opinion the data collection, assay procedures (geophysical logging), database maintenance, and storage and security for all relevant data are adequate. Further it is the Author’s opinion that the data is suitable for the purposes of resource estimation as necessary for this report.
12.0 Data Verification

12.1 Drill Data
The primary assay data for Project is downhole geophysical log data. Calibration data for the natural gamma logs is available. When drilling is active both the natural gamma logging trucks are calibrated at least every 3 months. Natural gamma and calibration is performed at DOE standard calibration facilities located in Casper, Wyoming.

All drill data is recent, collected from 2008 through 2013. For all drilling, Compulog™ software is utilized to convert natural gamma measurement to %eU₃O₈. The output data is provided both electronically and in hard copy by ½ foot intervals, which is the current industry standard method. All logs with mineralized intercepts above a GT cutoff of 0.20 were examined by the author as well as the great majority of drill holes which defined REDOX trends. The data used in this report was interpreted from the drill data by the Author.

Uranerz provided drillhole location and locations were confirmed by plotting drillhole locations from the database and directly comparing the locations to drill hole maps provided by Uranerz. Physical evidence of drilling was examined in the field during the February 19, 2015 site visit. Also, during the site visit the Author observed the surveying procedures employed by Uranerz. Uranerz is using an Astech GPS system for surveying drillhole. This instrument is capable of measuring horizontal coordinates within 0.25 meters (0.8 feet). This level of accuracy is reasonable for the purposes of this report.

12.2 Radiometric Equilibrium and Density
Limited site specific data is available for determination of bulk density; however, the Author has direct conventional mining experience within the same and/or very similar geologic settings in Wyoming and has direct knowledge of appropriate bulk density for this level of estimate.

Limited site specific data is available for determination of radiometric equilibrium. Given the geologic setting including the depth of mineralization which isolates the mineralization of oxidizing surficial conditions, the Author concludes the use of a DEF factor of 1 is appropriate.

12.3 Downhole Deviation
All drilling is vertical. The dip of the formation is relatively flat, 2 to 3 degrees to the northeast. Downhole deviation is measured as part of the geophysical logging and is available for all drilling and rarely exceeds 2°. Given the flat formational dip and restrictions placed on downhole deviation the variance in thickness measured by geophysical logging and true thickness (less than 1%) will not appreciably affect mineral resource estimation.

12.4 Summary
The author concludes that the data utilized in this report is accurate and reliable for the purposes of its use this report.
13.0 Mineral Processing and Metallurgical Testing

The Arkose Uranium Project is an early stage project and as such no specific metallurgical testing has been completed. Uranium ISR pilot testing and production has been and is currently active within the general area and within the same geologic formations as those target for exploration by the Arkose Uranium Project.

Such projects include the Nichols Ranch project owned by Uranerz which began operations in 2014. Other projects in the area include the commercial operation at Christensen Ranch, the licensed facility at North Butte, and two pilot tests, Ruth and North Rolling Pin.

Based on the foregoing the Author concludes there is a reasonable expectation that mineral resources within the Arkose Uranium Project could be extracted using ISR mining techniques.
14.0 Mineral Resource Estimates

14.1 Mineral Resource Estimation

The Technical Report provides estimates of mineral resources. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. Mineral Reserves will not be addressed in this report.

14.1.1 Definitions

A Mineral Resource is defined as a concentration of occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics, and continuity of a mineral resource are known, estimated or interpreted from specific geologic evidence and knowledge (CIM, 2014). Mineral resource estimates are classified as Measured, Indicated, or Inferred based on the level of understanding and definition of the mineral resource. For the Arkose Uranium Project available data will only support a classification of inferred.

Inferred mineral resources are defined as that part of the mineral resource for which quantity and quality can be measured on the basis of geologic evidence and limited sampling and reasonably assumed but not verified geological and grade continuity. For the Project, the basis of geologic evidence and sampling is drillhole data which is adequate to define the presence and general location of the REDOX front and demonstrate the presence of mineralization along the front between widely spaced drillholes. For the Project, drillhole spacing areas for which the Author calculated inferred mineral resources may exceed 800 feet along trend provided that there is geologic evidence that REDOX front is present and its location can reasonably be assumed.

14.1.2 Methodology

Mineral resource calculations are based on radiometric equivalent uranium grades %eU₃O₈. A minimum grade cutoff of 0.02 %eU₃O₈ and minimum GT of 0.20 was used in the calculations along with a bulk dry density of 16 cubic feet per ton, as subsequently discussed.

Inferred mineral resources were estimated by projecting average width and GT along a measured REDOX trend defined by drillholes according to the foregoing definitions.

14.2 Key Assumptions and Parameters

14.2.1 Cutoff Criteria

The cutoff criteria used by Uranerz at their operating ISR facility at Nichols Ranch is a minimum grade cutoff of 0.02 % U₃O₈ and minimum GT of 0.20 ad was applied herein. The Author is familiar with cutoff criteria as applied for similar operations and concurs that a minimum GT cutoff of 0.20 does meet criteria for reasonable economic extraction via ISR given the depths and general operating conditions at the Project.
14.2.2 Bulk Density

Site specific bulk density data is not available from for the Project. The Author recommends a density of 16 $\text{ft}^3/\text{ton}$ be used for all mineral resource estimations, based on available data and direct mining experience within the host formation.

14.2.3 Radiometric Equilibrium

There is insufficient site specific data to determine radiometric equilibrium within the Arkose Uranium Project. All geologic indications are that use of a disequilibrium factor (DEF) factor of 1 is reasonable. This is supported in the literature. Except in cases where uranium mineralization is exposed to strongly oxidized conditions, most of the sandstone roll-front deposits reasonably approximate radiometric equilibrium. Disequilibrium is normally spatially variable in sandstone-hosted. The nose of a roll front deposit tends to have the most positive DEF and the tails of a roll-front would tend to have the lowest DEF. Overall a DEF factor of 1 is a reasonable assumption for the reduced roll front deposits in the Powder River Basin (Davis, 1969).

Based on the available data and the geologic setting of the mineral deposits, the Author recommends using a DEF factor of 1 for the Arkose Uranium Project.

14.2.4 Width and GT of Mineralization

Appropriate average width and GT applied to each specific mineral resource area was determined from drillhole data. Section 9 discusses in detail the average parameters for the width, thickness, grade and GT of mineralization specifying a low and range values. For the projection of inferred mineral resources the average value of these low and high ranges were applied to the appropriate trend lengths.

14.3 Mineral Resource Summary

All REDOX trends for which inferred mineral resources were estimated are shown on Figure 9.1 through 9.7. The Arkose project is an early stage project with wide-spaced drilling the drill data which will, in the Author’s opinion, only support the estimate of inferred mineral resources.

Mineral Resources for the Project are estimated by classifications, meeting CIM standards and definitions as inferred mineral resources, at a 0.20 GT cutoff, and summarized in Table 14.1.
Table 14.1 – Mineral Resource Summary

<table>
<thead>
<tr>
<th>Inferred Mineral Resources Area</th>
<th>Sand (Miles)</th>
<th>Trend L (Feet)</th>
<th>Trend W (Feet)</th>
<th>Thickness (Feet)</th>
<th>Grade (%eU3O8)</th>
<th>GT</th>
<th>Tons</th>
<th>Pounds eU3O8</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Buck</td>
<td>100</td>
<td>3.4</td>
<td>100</td>
<td>5.85</td>
<td>0.11</td>
<td>0.64</td>
<td>656,370</td>
<td>1,436,160</td>
</tr>
<tr>
<td>Little Butte</td>
<td>90</td>
<td>3.8</td>
<td>110</td>
<td>7.4</td>
<td>0.09</td>
<td>0.635</td>
<td>1,020,756</td>
<td>1,751,838</td>
</tr>
<tr>
<td>Sand Rock</td>
<td>90</td>
<td>1.4</td>
<td>75</td>
<td>5.3</td>
<td>0.10</td>
<td>0.55</td>
<td>183,645</td>
<td>381,150</td>
</tr>
<tr>
<td>South Doughstick</td>
<td>100</td>
<td>1.6</td>
<td>50</td>
<td>5.5</td>
<td>0.12</td>
<td>0.69</td>
<td>145,200</td>
<td>361,680</td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>0.7</td>
<td>50</td>
<td>4.5</td>
<td>0.13</td>
<td>0.59</td>
<td>51,975</td>
<td>135,135</td>
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<td>S. Doughstick Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.13</td>
<td>197,175</td>
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</tr>
<tr>
<td>Total Inferred Mineral Resources</td>
<td></td>
<td>10.9</td>
<td></td>
<td></td>
<td></td>
<td>0.10</td>
<td>2,057,946</td>
<td>4,065,963</td>
</tr>
</tbody>
</table>

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. Inferred mineral resources are too speculative geologically to have the economic considerations applied to them which would enable them to be categorized as mineral reserves.
Sections 15 Through 22- Not Applicable


23.0 Adjacent Properties

Significant mine developments within and near the Pumpkin Butte Mining District in which neither the authors nor Uranerz have any material interest include:

- The Uranium 1 Willow Creek Mine located approximately 3 miles from the Nichols Ranch Project. The Willow Creek Mine Project utilizes the ISR method of uranium extraction.
- The Cameco Smith Ranch-Highland Mine is located approximately 45 miles from the Nichols Ranch Project. Smith Ranch-Highland Mine utilizes ISR for uranium extraction and has been in production since 1997.

Project under development in the vicinity include:

- Cameco’s North Butte Project is located immediately north of Hank.
- Cameco’s Ruth ISR pilot project.
- Uranium One’s Moore Ranch project.

Figure 23.1 shows the general location of the adjacent properties in relationship to the Nichols Ranch project.
24.0 Other Relevant Data and Information
25.0 Interpretation and Conclusions

The data available for this report is considered, by the Author, to be accurate and reliable for the purposes of estimating mineral resources and exploration targets for the Project.

Mineralization within the project is considered to have a reasonable prospect for economic extraction via in situ recovery methods (ISR).

Mineral resources have been estimated in accordance with CIM standards and definitions and are summarized.

It is the Author’s opinion that the risks associated are low considering the project is in an early exploration stage. Arkose is located within a geologic environment that is known to host uranium mineralization and has and continues to be mined within the vicinity. Drilling to date at Arkose has defined uranium mineralization in several areas.

The Project does have some risks similar in nature to other mining projects in general and uranium mining projects specially, i.e., risks common to mining projects include:

- Future commodity demand and pricing;
- Environmental and political acceptance of the project;
- Variance in capital and operating costs; and
- Mine and mineral processing recovery.
- It is uncertain if additional exploration will result in discovery of an economic mineral resource within these areas.
26.0 Recommendations

It is recommended that exploration and development of the Arkose project be continued. The areas considered of highest priority for development would include:

- The South Doughstick area as it is adjacent to the Jane Dough area which is currently being permitted for ISR mining as part of the Nichols Ranch facility.
- The Monument area as it has a significant exploration target.
- The East Buck area which has both estimated inferred mineral resources and exploration targets which are significant.
- The Little Butte area which has both estimated inferred mineral resources and exploration targets which are significant.

The other areas within Arkose remain perspective. Exploration targets have been estimated for Kermit, Sand Rock, South Collins Draw, Cedar Canyon, and Beecher Creek. Drilling at Lone Bull, Stage, and House Creek to date is insufficient to define an exploration target but these areas remain perspective.

Expenditures for exploration and development of Arkose will be significant as the primary exploration method will consist of drilling and the area to be explored is extensive. Average depths of mineralization defined by drilling to date are in the range of 500 to 1,000 feet. Table 26.1 provides an estimate for additional exploration at South Doughstick, Monument, East Buck, Little Butte, specifically, and other areas in general. Table 26.1 also provides an estimate for delineation drilling in at least two of these areas. It is recommended that the drilling be done in phases with each phase evaluated as work progresses before proceeding to the next phase.

<table>
<thead>
<tr>
<th>Area</th>
<th>Expense Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploratory Drilling South Doughstick</td>
<td>250 Drillholes</td>
<td>$500,000</td>
</tr>
<tr>
<td>Exploratory Drilling Monument</td>
<td>250 Drillholes</td>
<td>$500,000</td>
</tr>
<tr>
<td>Exploratory Drilling East Buck</td>
<td>250 Drillholes</td>
<td>$500,000</td>
</tr>
<tr>
<td>Exploratory Drilling Little Butte</td>
<td>250 Drillholes</td>
<td>$500,000</td>
</tr>
<tr>
<td>Exploratory Drilling Other Areas</td>
<td>500 Drillholes</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Sub Total Exploration</td>
<td></td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Delineation (2 Areas)</td>
<td></td>
<td>$3,300,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$9,300,000</td>
</tr>
</tbody>
</table>

There is a risk that mineralization may not be found and/or be continuous along the REDOX boundary and that the actual GT along the trends will fall outside the estimated range, either higher or lower.
27.0 References


28.0 Signature Page and Certification of Qualified Person

SIGANTURE PAGE AND CERTIFICATE OF QUALIFIED PERSON

DOUGLAS L. BEAHM

I, Douglas L. Beahm, P.E., P.G., do hereby certify that:

1. I am the Principal Engineer and President of BRS, Inc., 1130 Major Avenue, Riverton, Wyoming 82501.
3. I graduated with a Bachelor of Science degree in Geological Engineering from the Colorado School of Mines in 1974. I am a licensed Professional Engineer in Wyoming, Colorado, Utah, and Oregon; a licensed Professional Geologist in Wyoming; and Registered Member of the US Society for Mining, Metallurgy, and Exploration (SME).
4. I have worked as an engineer and a geologist for over 40 years. My work experience includes: uranium exploration, mine production, and mine/mill decommissioning and reclamation and have completed more than twenty technical reports on uranium projects since 2005.
5. I was last present at the site on February 19, 2015.
6. I am responsible for the compilation of the overall report.
7. I am independent of the issuer as described in section 1.5 of NI 43-101.
8. I do have prior working experience on the property as stated in the Technical Report.
9. I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by reason of my education, professional registration, and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with same.
11. As of the date of this report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. I consent to the filing of the Technical Report with any stock exchange and/or other appropriate regulatory authority.

February 28, 2015

Signed and Sealed

Douglas L. Beahm