

**CHORD URANIUM PROJECT
FALL RIVER COUNTY, SOUTH DAKOTA, USA**

**Mineral Resource
NI 43-101 Technical Report**



**PREPARED FOR:
BASIN URANIUM CORP. (CSE: NCLR)**



Basin Uranium

**PREPARED BY:
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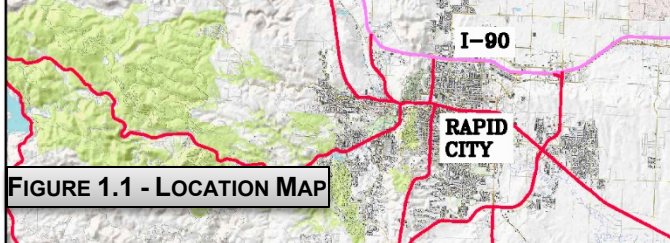
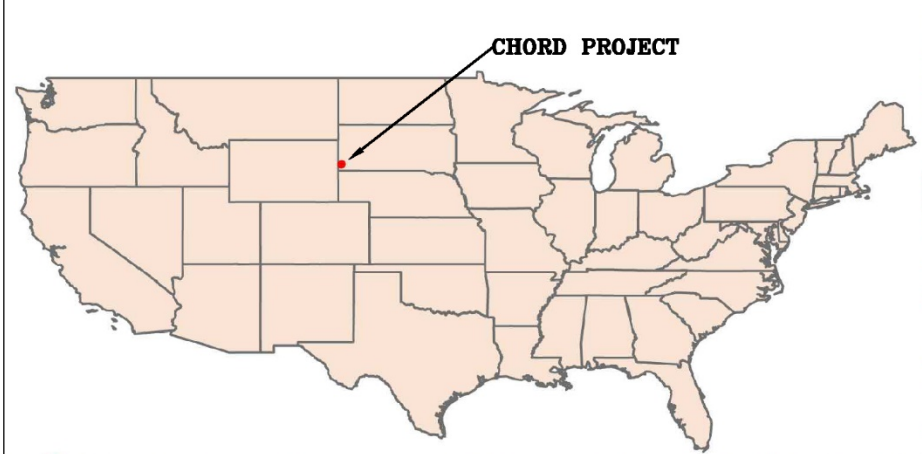
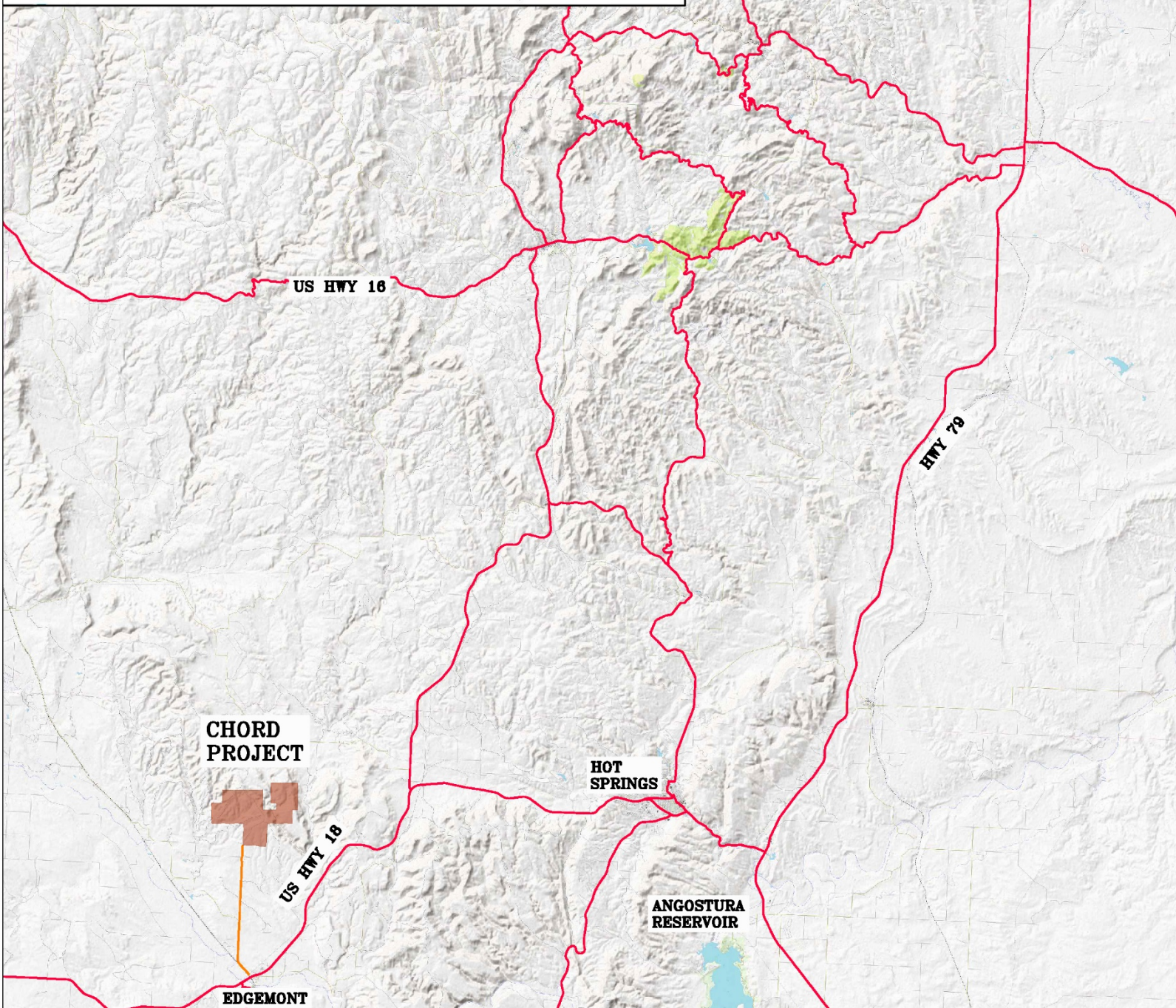
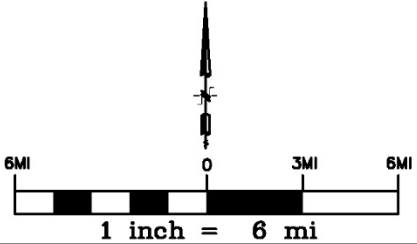


FIGURE 1.1 - LOCATION MAP



LEGEND

-  HIGHWAY
-  INTERSTATE
-  ACCESS ROAD
-  PROPERTY AREA



LOCATION MAP

CHORD URANIUM PROJECT
Fall River County, SD



1.0 Summary

This report titled “CHORD URANIUM PROJECT Mineral Resource, 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 of May 7, 2024.

This report was prepared for BASIN URANIUM CORP. (CSE: NCLR) and will be referred to as “Basin Uranium” or the “Company” throughout this report.

This report provides estimates of Inferred Mineral Resources for the Chord Uranium Project located in the Black Hills National Forest of South Dakota. The Chord project is located within proximity to brownfield sites which have been extensively explored and partially mined in the past. The Inferred Mineral Resource estimates reported herein are stated in pounds of Uranium Oxide (U_3O_8) and grade as weight percent ($\%U_3O_8$). Where uranium grade is based on radiometric equivalent, grade is expressed as equivalent weight percent ($\%eU_3O_8$).

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.

1.1 Project Overview

The total area of the Chord Property, the Project, is approximately 3,640 contiguous acres. The project lies on the southern end of the Black Hills, in Fall River County, South Dakota approximately seven miles north of Edgemont. The Project is in Township 7 South, Range 2 and 3 East, Sections 20, 19, 29, and 30 of Range 3 East and Sections 23, 24, 25, 26, 27 and 36 of Range 2 East. It falls between Latitudes $43.405^\circ 24'$ and $43^\circ 26''$ North, and Longitudes $103^\circ 47'$ and $103.87^\circ 53'$ West, approximately 17 air miles southwest of Hot Springs, South Dakota. Mineral tenure consists of 147 unpatented mining claims and a South Dakota State Mineral Lease (No. 27CS230448) as discussed in Section 4.

Mineralization is sandstone-hosted, and channel-bound into tabular and lenticular deposits within the Lakota and Fall River Formations of the Inyan Kara Group. The uranium mineralization is present primarily as uranium oxide mineral assemblages. Uranium has previously been recovered from the shallower deposits by small open pit mining methods. The mined material was processed through a conventional mill in Edgemont, South Dakota.

The Chord Property was acquired by unpatented mining lode claim staking by Cowboy Exploration and Development LLC (Cowboy Exploration) in 2021. In February 2023 Basin Uranium entered into an Option Agreement for a 90% interest in the Chord Project from Cowboy

Exploration. The South Dakota State Mineral Lease (No. 27CS230448) was acquired and added to the project by Cowboy Exploration on the 19th of October 2023.

1.2 Project Description

Figure 4.1 shows the overall project area. The project has been subdivided into three areas; the Viking, Ridge Runner, and the October-Jinx. Inferred Mineral Resources are discussed in Section 14, Mineral Resource Estimates. This is an exploration project and Sections 15 through 22 as prescribed in NI 43-101 do not apply.

1.3 Development and Regulatory Status

The Project is within a historically explored and mined district. Union Carbide Corporation (UCC) spent approximately \$3.5 to 4.0 million dollars in development of the project in the late 1970's. Basin Uranium has not yet performed exploration activity on the Chord Uranium Project but will need to permit and drill the resource area to confirm historic drilling results, gather geologic and hydrologic data, and update/upgrade the resource estimates. Permitting a drilling program would be subject to the requirements of 43 CFR part 3800, Subpart 3809 and the State of South Dakota and/or the United States Department of Agriculture Forest Service (USFS) requirements.

1.4 History

Uranium was first discovered in Craven Canyon and the adjacent Red Canyon in the early 1950's. Conventional mining was subsequently conducted in the area from the early 1950's through the 1970's. During which time, ore produced by the many small miners was hauled to supply feed to the mill in Edgemont, SD. In 1976 UCC exercised an option to acquire a significant block of claims from Roy Chord and named it the Chord Property. This property contained several previously producing properties including Long Canyon in the Northeast corner of the claims block. The acquisition was completed in 1978. UCC conducted extensive exploration drilling in the late 1970's, culminating in a Feasibility Study and mine development by 1979.

The project became the target of negative publicity during development of the main decline planned by UCC, which brought with it an injunction and added regulatory delays that paused development. UCC dropped the project in the early 1980's following these delays coupled with the downward trends in the uranium market at that time.

The Chord Property was subsequently acquired through the location of unpatented mining lode claims by staking and held by different owners from the mid 1980's through the most recent claim staking by Cowboy Exploration and Development LLC (Cowboy Exploration) in 2021. In February 2023 Basin Uranium entered into an Option Agreement for a 90% interest in the Chord Project from Cowboy Exploration. The South Dakota State Mineral Lease (No. 27CS230448) was acquired by Cowboy Exploration on the 19th of October 2023.

1.5 Geology and Mineralization

The Chord Uranium Project lies at the southern end of the Black Hills Uplift. The uplift is a domed structure that is roughly elliptical in shape trending NNW to SSE and running 120 miles long by 60 miles wide.

In the project area, mineralization is hosted within early Cretaceous, clastic, sedimentary beds of the Inyan Kara group. The Inyan Kara group is between 225 and 700 feet in total thickness and is split into two main formations, the Lakota and the Fall River.

The Lakota formation unconformably overlies the late Jurassic Morrison formation and consists of locally conglomeratic arkosic sandstone with variegated claystone and sandy claystone interbeds, fining upwards into a lacustrine shale known as the Fuson member. The Fall River Formation overlies the Lakota and consists of interbedded sandstone, siltstone and shale. The Inyan Kara group is capped regionally but not locally by the Skull Creek Shale which is a fissile black shale with thin silty beds within the lower 20 to 50 feet of the formation.

Both the Fall River and the Lakota contain local coal and carbonaceous units and both host uranium mineralization. The uranium mineralization in the Fall River and Lakota formations is widely interpreted as roll-front in character. The shallower deposits dominate the Fall River formation and are typically oxidized consisting of carnotite and tyuyamunite. The deeper mineralization dominating the Chilson member of the Lakota contains reduced mineralization dominated by coffinite and uraninite.

1.6 Inferred Mineral Resources

For this technical report, data was available for 1,247 drill holes, totaling approximately 493,500 feet drilled. Mineral resources were estimated using the Grade times Thickness (GT) Contour method. The primary data model used were uranium equivalent grades as determined by downhole geophysical logging and reported as equivalent uranium oxide (eU_3O_8). A radiometric disequilibrium factor of 1 was applied to the resource estimate. The minimum uranium grade included in the estimate was 0.02% $e U_3O_8$. Mineral resources are reported at a minimum grade thickness (GT) value of 0.25.

No formal economic evaluation, Preliminary Economic Assessment (PEA), Preliminary Feasibility study (PFS), or Feasibility Study (FS) has been completed. Mineral resources are not mineral reserves and do not have demonstrated economic viability. However, reasonable prospects for future economic extraction were applied to the Inferred Mineral Estimate reported in Section 14 of this report through consideration of grade and GT cutoffs and by screening out areas of isolated mineralization which would not support the cost of conventional mining under current and reasonably foreseeable conditions.

The drill spacing in most areas is sufficient to support a higher level of mineral resource classification. However, due to the historical nature of the drill data, and with no recent confirmatory drilling, the uranium mineral resource estimates reported here are considered

Inferred Mineral Resources. Estimated Inferred Mineral Resources for uranium are in-place and reported at a GT cutoff of 0.25 with a minimum intercept grade of 0.02% eU₃O₈ as summarized on Table 1.1 see below. Detailed estimates for each area are provided in Section 14.

Table 1.1 - Total Inferred Mineral Resources

Uranium Inferred Mineral Resource Area	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons (Millions)	Pounds (e U₃O₈) (Millions)
October-Jinx	0.25	8.8	0.081	1.584	2.569
Viking	0.25	6.0	0.082	.050	.082
Ridge Runner	0.25	5.9	0.069	.075	.103
Total Inferred Mineral Resource	0.25	8.5	.081	1.709	2.754

Pounds and tons as reported are rounded to the nearest 1,000.

Mineral resources are not mineral reserves and do not have demonstrated economic viability.

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.

1.7 Exploration Targets

Exploration targets have been interpreted within the interstitial areas between the defined Inferred Mineral Resources areas and along trends within the same fluvial sands of the Inyan Kara Group. This interpretation assumes that these sands within the Inyan Kara group correlate geologically and have hydrologic continuity.

These broad trends have been projected as Exploration Targets in the Viking Area to the Ridge Runner, the Ridge Runner to the October-Jinx, and Southwest of October Jinx, see Figure 24.1. This exploration target trend ranges in width, thickness, and grade to establish a range of values for the possible mineral content of the exploration target trend. These trends currently have insufficient data upon which to make any CIM compliant resource estimate and are conceptual in nature. Further exploration will need to be performed in these areas to test them for mineralization. No guarantee is made that any future resource will be delineated by future exploration of these areas.

Table 1.2 - Exploration Target Range Summary

Exploration Target Trend	Trend Length (ft)	Trend Width (ft)	AVG. Thickness Range (ft)	AVG. Grade Range (%eU₃O₈)	Tons Range (Millions)	Pounds (e U₃O₈) Range (Millions)
Viking-Runner	7,650	400	3.6 - 7.3	0.056 – 0.074	0.730 - 1.635	0.813 – 2.419
Jinx Ridge	2,480	400	3.6 – 7.3	0.056 – 0.074	0.249 – 0.559	0.278 – 0.826
October South	1,860	600	3.6 – 7.3	0.056 – 0.074	0.298 – 0.668	0.332 – 0.989
Total	11,990		3.6 – 7.3	0.056 – 0.074	1.278 – 2.862	1.422 – 4.234

The potential quantity and grades are conceptual in nature. Insufficient exploration has been conducted to define a mineral resource. Further exploration is needed to test them for mineralization. It is uncertain if mineral resources will be delineated by future exploration.

1.8 Summary of Risks

It is the author’s opinion that the risks associated with this project are moderate as there has been past mining on property. However, there are risks similar in nature to other mining projects in general and uranium mining projects specifically, i.e., risks common to mining projects including but not limited to:

- risks associated with mineral reserve and resource estimates, including the risk of errors in assumptions or methodologies;
- risks associated with estimating mineral extraction and recovery, forecasting future price levels necessary to support mineral extraction and recovery;
- uncertainties and liabilities inherent to conventional mineral extraction and recovery;
- geological, technical, and processing problems including unanticipated metallurgical difficulties, less than expected recoveries, ground control problems, process upsets, and equipment malfunctions;
- risks associated with labor costs, labor disturbances, and unavailability of skilled labor;
- risks associated with the availability and/or fluctuations in the costs of raw materials and consumables used in the production processes;
- risks associated with environmental compliance and permitting, including those created by changes in environmental legislation and regulation, and delays in obtaining permits and licenses that could impact expected mineral extraction and recovery levels and costs;
- actions taken by regulatory authorities with respect to mineral extraction and recovery activities;
- environmental and political acceptance of the project;
- additional drilling may not increase mineral resources;
- changes in the US mining law of 1872 could affect Basin Uranium’s mineral tenure.

1.9 Conclusions and Recommendations

The data available for this report is considered by the author to be accurate and reliable for the purposes of estimating Inferred Mineral Resources and exploration targets for the Project. Mineralization within the project is considered to have a reasonable prospect for economic extraction via conventional underground mining methods as discussed in Section 14. Mineral resources have been estimated in accordance with CIM standards and definitions and are summarized Table 1.1.

Insufficient hydrogeologic data is available to allow an assessment of extraction of the mineral resource via in-situ recovery (ISR). A drilling program targeting the confirmation of the current resource would also provide data on the hydrogeology of the mineralized horizons and evaluate their potential for extraction by ISR methods. If the deposit or portions thereof are determined to be ISR amenable, similar grade and GT cut-offs as were applied to the current Inferred Resource would also be applicable. Section 14 provides additional details regarding the determination of cut-off grade, GT cut-off, and the assessment of reasonable prospects for eventual economic extraction of the mineral resource.

The recommended project development program, summarized in Section 26, includes collection of core samples from select areas across the project in a manner representative of the overall resource area as follows:

- Complete a drilling program of 15 conventional and 5 diamond drill core holes to update the current resource.
- Convert 4 drill holes into monitoring wells for aquifer testing and background sampling.
- Analyze the samples for bulk density and permeability.
- Analyze the samples for uranium, vanadium, and radium to evaluate disequilibrium and the ratio of vanadium to uranium.
- Complete bench scale testing of mechanical sorting of the mined material prior to mineral processing to upgrade the mined material.
- Complete bench scale metallurgical testing of the bulk sample for anticipated mill processing alternatives including conventional milling, vat, heap leaching and ISR.
- Completion of a PEA
- Total estimated expenditures of \$1,000,000 (US dollars)

2.0 Introduction

2.1 Purpose of Report

This Technical Report was prepared for Basin Uranium Corporation for its Chord Uranium Project located in the Black Hills National Forest, Fall River County, South Dakota. This report addresses the Chord Uranium Project's geology, uranium mineralization, historical resource estimates, historical exploration and mine development work and was prepared in compliance with National Instrument 43-101, *Standards of Disclosure for Mineral Projects* and in accordance with CIM *Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves*. This report provides new estimates of Inferred Mineral Resources as well as identifies exploration target areas for future investigation.

2.2 Terms of Reference

Units of measurement, unless otherwise indicated, are feet (ft), miles, acres, pounds (lbs), and short tons (2,000 lbs). Uranium oxide is expressed as % U₃O₈, the standard market unit. Uranium values reported for historical resources and the new mineral resources reported herein are % eU₃O₈ (equivalent U₃O₈ by calibrated geophysical logging unit). Unless otherwise indicated, all references to dollars (\$) are reported as United States currency. Additional units of measurement are tabulated as follows:

Table 2.1 - Terms and Abbreviations

URANIUM SPECIFIC TERMS AND ABBREVIATIONS					
Grade	Parts Per Million	ppm U ₃ O ₈	Weight	%U ₃ O ₈	
Radiometric Equivalent		ppm eU ₃ O ₈		% eU ₃ O ₈	
Thickness	meters	M	Feet	Ft	
Grade Thickness Product	grade x meters	GT(m)	grade x feet	GT(Ft)	
GENERAL TERMS AND ABBREVIATIONS					
	Term: Metric	Abbreviation	Term: US	Abbreviation	Metric:US
Area	Square Meters	m ²	Square Feet	Ft ²	10.76
	Hectare	Ha	Acre	Ac	2.47
Volume	Cubic Meters	m ³	Cubic Yards	Cy	1.308
Length	Meter	m	Feet	Ft	3.28
	Meter	m	Yard	Yd	1.09
Distance	Kilometer	km	Mile	mile	0.6214
Weight	Kilogram	kg	Pound	Lb	2.20
	Metric Tonne	Tonne	Short Ton	Ton	1.10

2.3 Sources of Information and Data

This technical report is based upon unpublished factual data including resource review reports, drill-hole maps, mineralized intercept data, gamma-logs, resource calculations, and other information from the original files and records of Union Carbide Corporation.

This data was secured by Basin from public records preserved by the South Dakota Geologic Survey and other data from private parties. All the technical data used in this technical report ultimately originated from Union Carbide Corporation's development of the project in the late 1970's.

Verification of this historic data is discussed in Section 12.

2.4 Extent of Authors' Field Involvement

From April 17 to 18, 2024, Carl Warren, P.E., P.G., of BRS Inc. visited the Chord Uranium Project Site in Fall River County, South Dakota. On April 17, Mr. Warren was met onsite by John Glasscock who is the founder of Cowboy Exploration and Development LLC and is an Advisory Board Member to Basin Uranium Corporation. During the first day of the visit Mr. Warren inspected the site for claims discovery monuments, documented evidence of past exploration and mining on the project including open drill holes, and two small open pit mines. One of the open pits has since been reclaimed but showed an area of 2-2.5 times higher than the average background gamma levels of 10 to 15 micro-Rem per hour, using a handheld scintillometer. The second open pit in the southwest quadrant of the property was un-reclaimed with a remaining dump with material registering 8-10 times over background at 120 micro-Rem per hour. A few grab samples were taken off this dump area and measured with a Handheld XRF device. The samples ranged in uranium concentration between 4 and 400ppm. On the second day, Mr. Warren inspected the east-central portion of the site. He observed several additional small open pits with elevated gamma readings, additional drill holes and several underground mine adits in a tributary west of Craven Canyon. From this site visit the author can confirm that both mining and exploration activities have occurred on the property within the last 60-80 years and that uranium mineralization is present.

2.5 Extent of Authors' Past Education, Qualification, and Experience

Carl Warren, P.E., P.G.: The principal author of this report, Mr. Warren, is both a Professional Geologist and a Professional Engineer. Mr. Warren is a Qualified Person and independent of Basin Uranium, using the test set out in Section 1.5 of NI 43-101. Mr. Warren is experienced with uranium exploration and development. Mr. Warren has over 15 years of experience in the mining and geology industries including underground ore control, mineral exploration, core logging, and resource modeling as well as underground and open-pit mine reclamation.

Mr. Warren is responsible for the report in its entirety except as noted in Section 3, Reliance on Other Experts. The effective date of the report is May 7, 2024.

3.0 Reliance on Other Experts

The location, extent, and terms relating to mineral tenure discussed in Section 4 were provided by Basin Uranium and were fully relied upon in defining the mineral holdings of Basin Uranium Corp./Cowboy Exploration and Development LLC in the preparation of this report. Property boundaries inclusive of both the unpatented lode claims and the South Dakota State Mineral Lease were received by the author from Basin Uranium on February 27, 2024.

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4.0 Property Description and Location

The total area of the Chord Property, the Project, is approximately 3,640 contiguous acres. The project lies on the southern end of the Black Hills, in Fall River County, South Dakota approximately seven miles north of Edgemont. The project is in the Black Hills Meridian, Township 7 South, Range 2 and 3 East, Sections 20, 19, 29, and 30 of Range 3 East and Sections 23, 24, 25, 26, 27 and 36 of Range 2 East. It falls between Latitudes 43° 25.8’ and 43° 23.4” North, and Longitudes 103° 47.6’ and 103° 51.9’ West, approximately 18 miles southwest of Hot Springs, South Dakota. The site may be accessed by County Hwy FDR16 from the north and south and is crosscut by several secondary dirt and gravel roads which cross the site, see Figure 4.1 Access and Location Map.

Mineral tenure consists of 147 unpatented mining claims and a South Dakota State Mineral Lease (No. 27CS230448). Mineral tenure consists of 147 unpatented lode mining claims and South Dakota State Mineral Lease No. 27CS230448, see Figure 4.2 property Map. To the author’s knowledge, formal surveys or title opinions are not available.

4.1 Unpatented Lode claims

The 147 unpatented lode claims cover both public USFS and split estate private lands. All claims are monumented within the Black Hills National Forest Hell’s Canyon District. This portion of forest is categorized as Management Area 5.1A: Southern Hills Forest and Grassland Areas.

The unpatented mining claims cover a total of 3,037 acres while the Mineral Lease covers a total of approximately 638 acres. The lode claims and the lease overlap for approximately 35 acres. However, the discovery monuments for the overlapping claims are on open USFS ground and thus the overlap does not invalidate the lode claims.

Cowboy Exploration and Development LLC (Cowboy Exploration), has a right to explore, develop and produce on the unpatented lode mining claims, and must pay annual maintenance fees to the Bureau of Land Management of \$165.00 per each lode on or before September 1 each year. The 147 lode claims can be verified as “active” under the BLM Mineral and Lands Records System as of April 12, 2024. Basin Uranium has a 90% interest option agreement with Cowboy Exploration, dating to February 28, 2023.

Table 4.1 – Unpatented Lode Claims

Serial Number	Claim	Disposition	Township and Range	Section(s)
MT105284176	LONG-2	ACTIVE	7S3E	020
MT105284177	LONG-4	ACTIVE	7S3E	020
MT105284178	LONG-6	ACTIVE	7S3E	19, 20
MT105284179	LONG-8	ACTIVE	7S3E	019
MT105284180	LONG-10	ACTIVE	7S3E	019

Serial Number	Claim	Disposition	Township and Range	Section(s)
MT105284181	LONG-12	ACTIVE	7S3E	019
MT105284182	LONG-14	ACTIVE	7S3E	019
MT105284183	LONG-16	ACTIVE	7S3E	019
MT105284184	LONG-18	ACTIVE	7S3E	019
MT105284185	LONG-20	ACTIVE	7S3E	019
MT105284186	LONG-21	ACTIVE	7S3E	019
MT105284187	LONG-22	ACTIVE	7S3E	20, 29
MT105284188	LONG-23	ACTIVE	7S3E	019
MT105284189	LONG-24	ACTIVE	7S3E	20, 29
MT105284190	LONG-25	ACTIVE	7S3E	19, 20
MT105284191	LONG-26	ACTIVE	7S3E	19, 30, 20, 29
MT105284192	LONG-27	ACTIVE	7S3E	019
MT105284193	LONG-28	ACTIVE	7S3E	019
MT105284194	LONG-29	ACTIVE	7S3E	019
MT105284195	LONG-30	ACTIVE	7S3E	019
MT105284196	LONG-31	ACTIVE	7S3E	019
MT105284197	LONG-32	ACTIVE	7S3E	19, 30
MT105284198	LONG-33	ACTIVE	7S3E	019
MT105284199	LONG-34	ACTIVE	7S3E	19, 30
MT105284200	LONG-35	ACTIVE	7S3E	019
MT105284201	LONG-36	ACTIVE	7S3E	019
MT105284202	LONG-37	ACTIVE	7S3E	020
MT105284203	LONG-38	ACTIVE	7S3E	19, 30
MT105284204	LONG-39	ACTIVE	7S3E	19
MT105284205	LONG-40	ACTIVE	7S3E	19, 30
MT105284206	LONG-41	ACTIVE	7S3E	029
MT105284207	LONG-42	ACTIVE	7S3E	029
MT105284208	LONG-43	ACTIVE	7S3E	29, 30
MT105284209	LONG-44	ACTIVE	7S3E	030

Serial Number	Claim	Disposition	Township and Range	Section(s)
MT105284210	LONG-45	ACTIVE	7S3E	030
MT105284211	LONG-46	ACTIVE	7S3E	030
MT105284212	LONG-47	ACTIVE	7S3E	030
MT105284213	LONG-48	ACTIVE	7S3E	030
MT105284214	LONG-51	ACTIVE	7S3E	29, 30
MT105284215	LONG-52	ACTIVE	7S3E	29, 30
MT105284216	LONG-53	ACTIVE	7S3E	030
MT105284217	LONG-54	ACTIVE	7S3E	030
MT105284218	LONG-55	ACTIVE	7S3E	030
MT105284219	LONG-56	ACTIVE	7S3E	030
MT105284220	LONG-57	ACTIVE	7S3E	030
MT105284221	LONG-58	ACTIVE	7S3E	030
MT105284222	LONG-59	ACTIVE	7S3E	030
MT105284223	LONG-60	ACTIVE	7S3E	30, 31
MT105284224	LONG-61	ACTIVE	7S3E	030
MT105284225	LONG-62	ACTIVE	7S3E	30, 31
MT105284226	LONG-63	ACTIVE	7S3E	030
MT105284227	LONG-64	ACTIVE	7S3E	30, 31
MT105284228	LONG-65	ACTIVE	7S3E	030
MT105284229	LONG-66	ACTIVE	7S3E	30, 31
MT105284230	LONG-67	ACTIVE	7S3E	030
MT105284231	LONG-68	ACTIVE	7S3E	30, 31
MT105284232	LONG-68 A	ACTIVE	7S2E	25
MT105284233	LONG-68 B	ACTIVE	7S2E	25, 36
MT105284234	LONG-68 C	ACTIVE	7S2E	25
MT105284235	LONG-68 D	ACTIVE	7S2E	25, 36
MT105284236	LONG-68 E	ACTIVE	7S2E	25
MT105284237	LONG-68 F	ACTIVE	7S2E	25, 36
MT105284238	LONG-68 G	ACTIVE	7S2E	25

Serial Number	Claim	Disposition	Township and Range	Section(s)
MT105284239	LONG-68 H	ACTIVE	7S2E	25, 36
MT105284240	LONG-68 I	ACTIVE	7S2E	25
MT105284241	LONG-68 J	ACTIVE	7S2E	25, 36
MT105284242	LONG-69	ACTIVE	7S2E	25
MT105284243	LONG-70	ACTIVE	7S2E	25, 36
MT105284244	LONG-71	ACTIVE	7S2E	25
MT105284245	LONG-72	ACTIVE	7S2E	25, 36
MT105284246	LONG-73	ACTIVE	7S2E	25
MT105284247	LONG-74	ACTIVE	7S2E	25, 36
MT105284248	LONG-75	ACTIVE	7S2E	25, 26
MT105284249	LONG-76	ACTIVE	7S2E	25, 26, 36, 35
MT105284250	LONG-77	ACTIVE	7S2E	26
MT105284251	LONG-78	ACTIVE	7S2E	26, 35
MT105284252	LONG-79	ACTIVE	7S2E	26
MT105284253	LONG-80	ACTIVE	7S2E	26, 35
MT105284254	LONG-81	ACTIVE	7S2E	26
MT105284255	LONG-82	ACTIVE	7S2E	26, 35
MT105284256	LONG-83	ACTIVE	7S2E	26
MT105284257	LONG-84	ACTIVE	7S2E	26, 35
MT105284258	LONG-85	ACTIVE	7S2E	26
MT105284259	LONG-86	ACTIVE	7S2E	26, 35
MT105284260	LONG-87	ACTIVE	7S2E	26
MT105284261	LONG-88	ACTIVE	7S2E	26, 35
MT105284262	LONG-89	ACTIVE	7S2E	26
MT105284263	LONG-90	ACTIVE	7S2E	26, 35
MT105284264	LONG-91	ACTIVE	7S2E	26
MT105284265	LONG-92	ACTIVE	7S2E	26, 35
MT105284266	LONG-93	ACTIVE	7S2E	26, 27
MT105284267	LONG-94	ACTIVE	7S2E	26, 27, 34, 35

Serial Number	Claim	Disposition	Township and Range	Section(s)
MT105284268	LONG-95	ACTIVE	7S2E	27
MT105284269	LONG-96	ACTIVE	7S2E	27, 34
MT105284270	LONG-97	ACTIVE	7S2E	27
MT105284271	LONG-98	ACTIVE	7S2E	27, 34
MT105284272	LONG-99	ACTIVE	7S2E	27
MT105284273	LONG-100	ACTIVE	7S2E	27, 34
MT105284274	LONG-101	ACTIVE	7S2E	24, 25
MT105284275	LONG-102	ACTIVE	7S2E	25
MT105284276	LONG-103	ACTIVE	7S2E	24, 25
MT105284277	LONG-104	ACTIVE	7S2E	25
MT105284278	LONG-105	ACTIVE	7S2E	24, 25
MT105284279	LONG-106	ACTIVE	7S2E	25
MT105284280	LONG-107	ACTIVE	7S2E	24, 25
MT105284281	LONG-108	ACTIVE	7S2E	25
MT105284282	LONG-109	ACTIVE	7S2E	24, 25
MT105284283	LONG-110	ACTIVE	7S2E	25
MT105284284	LONG-111	ACTIVE	7S2E	24, 25
MT105284285	LONG-112	ACTIVE	7S2E	25
MT105284286	LONG-113	ACTIVE	7S2E	23, 24, 25, 26
MT105284287	LONG-114	ACTIVE	7S2E	25, 26
MT105284288	LONG-115	ACTIVE	7S2E	23, 26
MT105284289	LONG-116	ACTIVE	7S2E	26
MT105284290	LONG-117	ACTIVE	7S2E	23, 26
MT105284291	LONG-118	ACTIVE	7S2E	26
MT105284292	LONG-119	ACTIVE	7S2E	23, 26
MT105284293	LONG-120	ACTIVE	7S2E	26
MT105284294	LONG-121	ACTIVE	7S2E	23, 26
MT105284295	LONG-122	ACTIVE	7S2E	26
MT105284296	LONG-123	ACTIVE	7S2E	23, 26

Serial Number	Claim	Disposition	Township and Range	Section(s)
MT105284297	LONG-124	ACTIVE	7S2E	26
MT105284298	LONG-125	ACTIVE	7S2E	23, 26
MT105284299	LONG-126	ACTIVE	7S2E	26
MT105284300	LONG-127	ACTIVE	7S2E	23, 26
MT105284301	LONG-128	ACTIVE	7S2E	26
MT105284302	LONG-129	ACTIVE	7S2E	23, 26
MT105284303	LONG-130	ACTIVE	7S2E	26
MT105284304	LONG-131	ACTIVE	7S2E	26, 27
MT105284305	LONG-132	ACTIVE	7S2E	27
MT105284306	LONG-133	ACTIVE	7S2E	27
MT105284307	LONG-134	ACTIVE	7S2E	27
MT105284308	LONG-135	ACTIVE	7S2E	23
MT105284309	LONG-136	ACTIVE	7S2E	23
MT105284310	LONG-137	ACTIVE	7S2E	23
MT105284311	LONG-138	ACTIVE	7S2E	23
MT105284312	LONG-139	ACTIVE	7S2E	23
MT105284313	LONG-140	ACTIVE	7S2E	23
MT105284314	LONG-141	ACTIVE	7S2E	23
MT105284315	LONG-142	ACTIVE	7S2E	23
MT105284316	LONG-143	ACTIVE	7S2E	23, 24
MT105284317	LONG-144	ACTIVE	7S2E	24
MT105284318	LONG-145	ACTIVE	7S2E	24
MT105284319	LONG-146	ACTIVE	7S2E	24
MT105284320	LONG-147	ACTIVE	7S2E	24
MT105284321	LONG-148	ACTIVE	7S2E	24
MT105284322	LONG-149	ACTIVE	7S2E	24

Claims confirmed on BLM MLRS 4/12/24

4.2 South Dakota State Mineral Lease

The South Dakota state lease No. 27CS230448 for T7S, R2E, Section 36 was entered into on October 19, 2023 with a term of 3 years. The annual payment for the lease is \$1,920.00 per year. The lease may then be extended for two years at \$3 per acre annual rental, then another 5 years at \$10 per acre annual rental. Additional leasing is stipulated to hold the annual rental at \$10 per acre after the first cumulative 10 years of lease. Beginning on the 11th year, additional advance royalty payments would be assessed at \$10 per acre and increase to a cap of \$50 per acre in the 15th year of the lease, increasing at a rate of \$10 per year per acre from year 11 to year 15. Additional lease and royalty stipulations apply if mineral products are produced. Basin Uranium has a 90% interest option agreement with Cowboy Exploration, dating to February 28, 2023.

4.3 Surface Rights

Cowboy Exploration has a right to explore, develop and produce on the unpatented lode mining claims. The State Mineral Lease Grants Cowboy Exploration, “unrestricted access to, exclusive possession and quiet enjoyment of the Minerals and the overlying surface.”

Surface use on mining claims on USFS lands are subject to 43 CFR part 3800, Subpart 3809 and to all the requirements thereof. The State of South Dakota and/or the USFS may have additional requirements up to and including a Plan of Operations to drill on areas of USFS Lands or on the State Mineral Lease.

4.4 Permitting

A state uranium exploration permit is required for drilling activities. It is not required for surveying or assessment activities with handheld devices. A hearing will be required in the process of obtaining the exploration permit. The process will take a minimum of four months. Mining exploration will require permits for SARA Title III, spills, mining, stormwater discharge, and water rights.

A mining permit may be obtained from the Board of Minerals and Environment after any necessary permits are obtained from local governing bodies, in this case USFS. The application fee is five thousand dollars for an existing large scale uranium mine, and fifty thousand dollars for a new large scale uranium mine. Mining operations will require permits for asbestos, drinking water, hazardous waste, SARA Title III, septic tanks, spills, storage tanks, underground injection wells (if used to dispose of waste), water and wastewater certification, water quality, air quality, ground water, mining, NPDES surface water, stormwater, and water rights. Uranium mining permits require a public hearing with the Mineral and Environment Board.

4.5 Environmental Liabilities

At the time of writing, South Dakota has recently passed legislation rendering itself an agreement state with the United States Nuclear Regulatory Commission (NRC).

Possible challenges may be presented by legislation regarding the disposal of radioactive material. Effective April 19, 2021, Statute 34A-6-114 states:

“Radionuclides found in nature, such as radium, thorium, and uranium, that have become concentrated through human activities, and which have been generated during oil and gas production activities with a total laboratory-measured radioactivity level of Radium-226 plus Radium-228 greater than 5 picocuries/gram above the background radioactivity level, are prohibited from being disposed of at any solid waste facility permitted under this chapter. The background radioactivity level is as measured at each individual permitted solid waste facility. All radioactivity levels shall be measured using methods and procedures approved by the Department of Agriculture and Natural Resources.”

Specifically, this statute precludes the disposal of radioactive byproducts in landfills, “generated during oil and gas production activities” but may apply to radioactive byproducts created in the processing of mining and milling. Statute 34-21-1.1 specifically states that uranium ore and mine tailings are not affected by the prohibition of radioactive material disposal within state boundaries.

The Black Hills National Forest is also currently in the revision process for their forest plan. At this time, their assessment recommends no changes in management of locatable mineral extraction, as regulated under 36 CFR 228 Subpart A.

Future development, whether exploration, mining or mineral processing would require adequate decommissioning and reclamation bonds for the life of the planned operations.

No current environmental liabilities are known to the author. The Company has not conducted any environmental audit of the property.

4.6 State and Local Taxes and Royalties

The State of South Dakota Lease charges a 2% royalty on gross returns from the sale of minerals produced from the state leased property and thereafter sold. Gross returns are comprised of the gross revenue from sale of mineral products minus charges and costs incurred in transportation for processing and in the milling, treatment, processing, smelting, etc. of ores. Mining costs are not excluded from gross returns. A 2% royalty is also charged on any premiums and bonuses received in connection with the marketing of ores and minerals from the leased property.

South Dakota will also charge a 2% excise tax on the gross receipt for the project. The bid and billing may use a tax rate of 2.041%, as tax collected is also subject to the excise tax. Subcontractors are not subject to excise tax. In addition to municipal taxes at point of sale, South Dakota imposes a 4.2% sales and use tax.

Drill rigs purchased outside of the state and brought in for the project less than 7 years old (according to manufacture date if available; according to purchase date if not) are subject to use tax based on fair market value. This also applies to equipment such as drying ovens, loaders, and pumps. Any materials used or consumed for/by the project are subject to contractor’s excise tax. Motor vehicles require a Motor Vehicle Registration if they are to be used on highways.

The current South Dakota severance tax is 4.74% of the sale price of the severed and saved mineral minus rental payments and royalties. The taxable value for uranium is the sales price per pound of U₃O₈ contained in the product, regardless of its sold form. Additionally, a 2.4% conservation tax is imposed upon the taxable value to the operator.

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%.

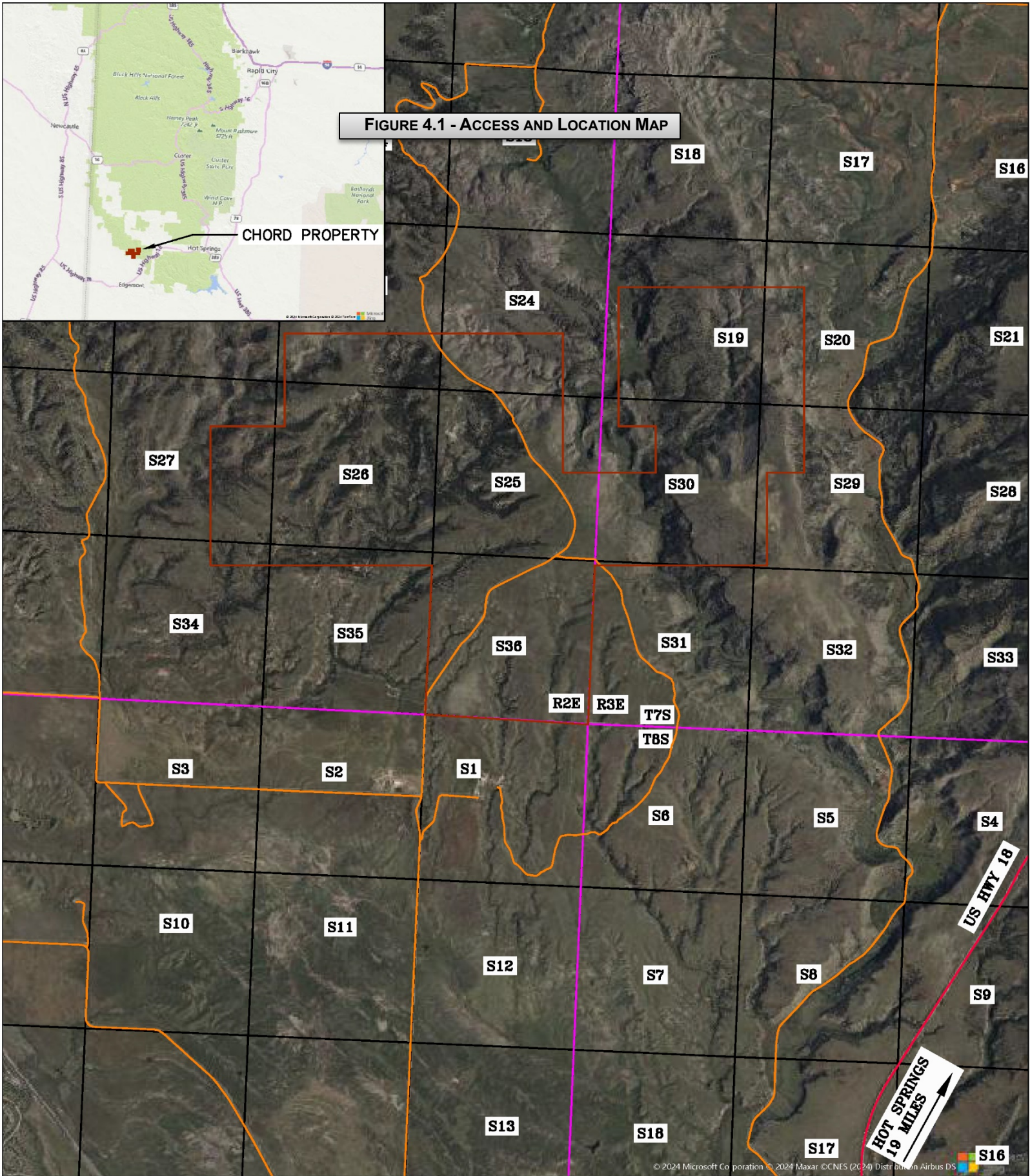
4.7 Encumbrances and Risks

The unpatented lode mining claims will remain the property of Cowboy Exploration and Development LLC (Cowboy Exploration) and be optioned by Basin Uranium Corp. provided they adhere to required filing and annual payment requirements with Fall River County and the BLM. Legal surveys of mining claims are not required and are not known to have been completed.





All the mining claims have annual filing requirements with the BLM, to be paid on or before September 1 of each year. The annual fee for lode claims is \$165.00 per year per claim. Mining claims are subject to the Mining Law of 1872. Changes in the mining law could affect the mineral tenure. Cowboy Exploration has maintained their lode claims through annual payments and appropriate filings since 2021. Similarly, the South Dakota State Mineral Lease will need to be maintained following the annual lease rental payment and schedule set out in the lease agreement.

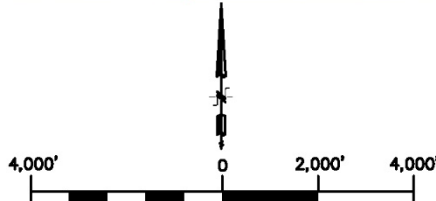
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FIGURE 4.1 - ACCESS AND LOCATION MAP



LEGEND

-  TOWNSHIP LINE
-  SECTION LINE
-  SECONDARY ROADS
-  HIGHWAY



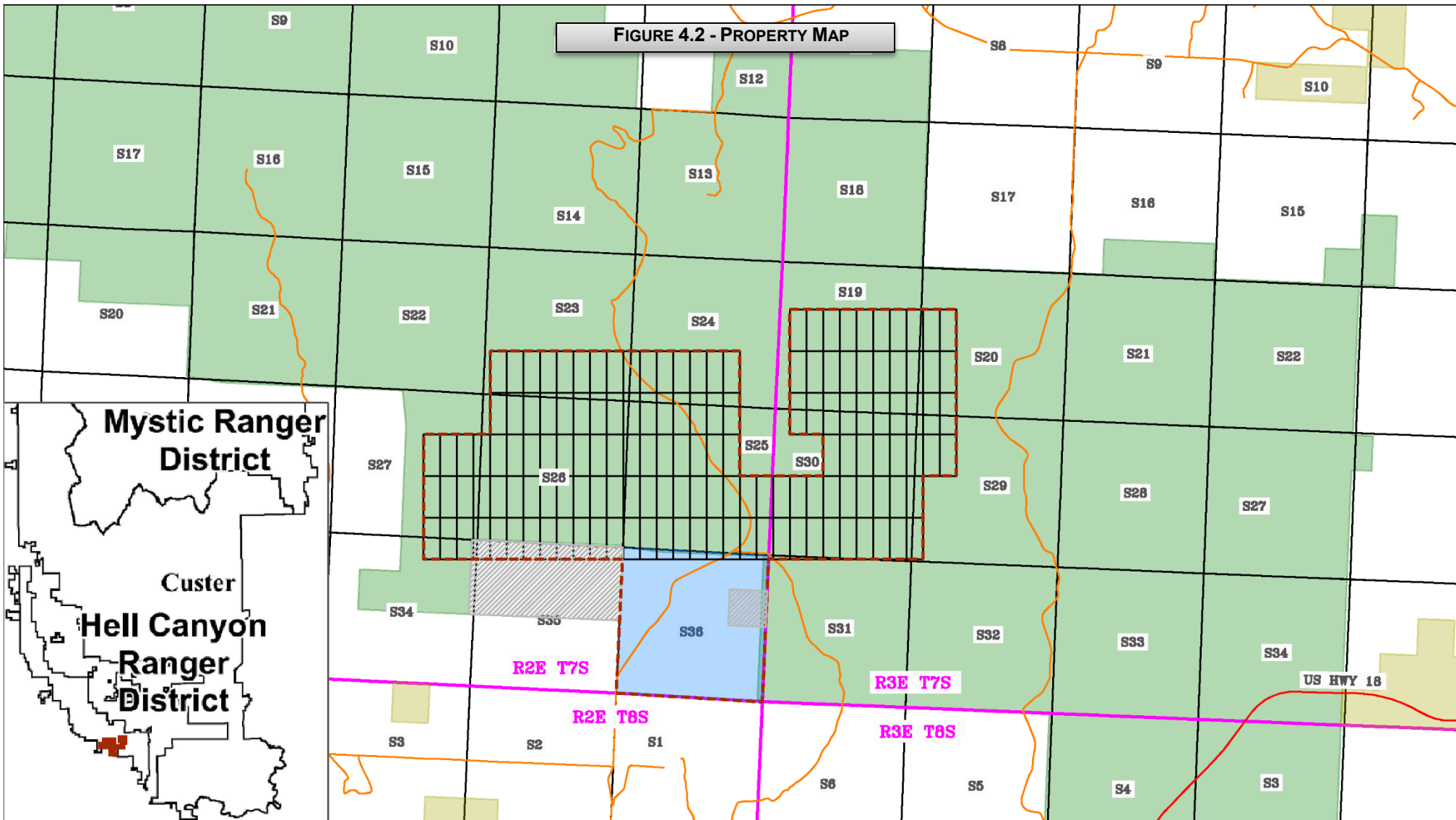
ACCESS AND LOCATION MAP

CHORD URANIUM PROJECT
Fall River County, SD




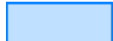









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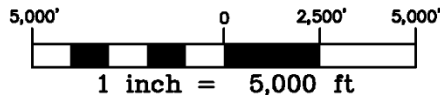
FIGURE 4.2 - PROPERTY MAP



LEGEND

-  NATIONAL FOREST (HELL CANYON RANGER DISTRICT)
-  PRIVATE PROPERTY
-  BUREAU OF LAND MANAGEMENT LANDS
-  SD STATE MINERAL LEASE No. 27CS230448
-  SPLIT ESTATE MINERAL

-  SECTION LINES
-  TOWNSHIP LINES
-  SECONDARY ROADS
-  HIGHWAY
-  OVERALL PROJECT BOUNDARY
-  LODGE CLAIM BLOCK



PROPERTY MAP

CHORD URANIUM PROJECT
Fall River County, SD



Basin Uranium

5.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Fall River County, South Dakota is generally rural. According to the 2020 United States Census, there were 6,973 people living in Fall River County. It is anticipated workers for the operation would come from Hot Springs, the county seat of Fall River County, which is 18 miles from the project site. Additional workers may come from nearby communities such as Edgemont, which is 8 miles from the project site. The closest industrial supply center is Rapid City, 75 miles to the north by way of US-18 W and SD-79S.

5.1 Topography, Elevation, and Vegetation

The topography of the Chord Uranium Project is typical of canyon and plateau geomorphology. The area is bordered by Red Canyon in the east and Driftwood Canyon in the west and is crosscut by Coal and Craven Canyons in the central half of the property block.

The Chord Uranium Project is located at an elevation of approximately 4000 ft, with local variability from 4300 ft in the northwest and 3900 ft in the southeast. The largest immediate relief changes are along the sides of Craven and Red Canyons which are 300-400 ft deep in those areas.

Vegetation in the area is consistent with a cold semi-arid climate and ranges from grasslands dominating the low relief areas of the plateaus and to pine forests dominating the canyons.

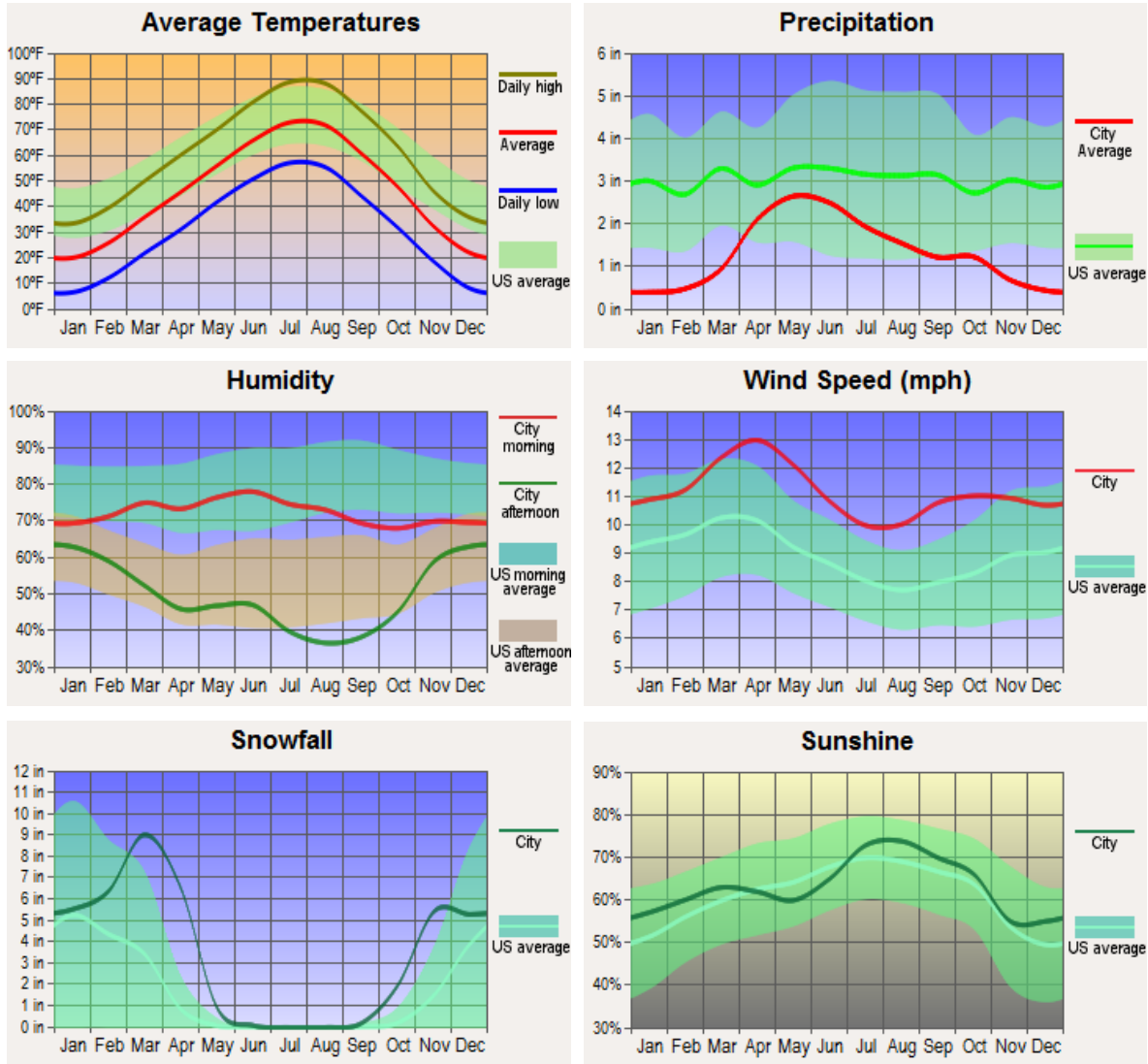
5.2 Access

The Project covers an area accessible from County Highway FDR16 which bisects the property into east and west halves. Additional gravel and dirt county roads and/or two-track roads crosscut the site. Some of the dirt access roads may require improvement for any future mining operations but would likely not require much work to conduct a drilling project. Primary access routes are shown on Figure 4.1 Access and Location Map.

5.3 Climate

The project area falls in a cold semi-arid climate with rain averaging around 18 inches per year. Most precipitation occurs during spring and late fall, with snow totaling an average of 35 inches in November to April. Stream flows in the area are of low to medium flow, with a peak in spring and dip in late summer. Winter temperatures normally range from below 10°F to 50°F with possible wind chills as low as -40°F. Summer high temperatures average approximately 90°F, and typically peak in July-August.

FIGURE 5.1 - AVERAGE CLIMATE - EDGEMONT, SOUTH DAKOTA



<https://www.city-data.com/city/Edgemont-South-Dakota.html>

5.4 Property Infrastructure

As noted above transportation infrastructure exists onsite but may require future improvement. No significant power or water infrastructure currently exists onsite. However, nearby ranches have line power within less than a mile of the property. A two-phase power line runs to a stock tank within 200 ft of the southern edge of the property adjacent to the west side of Craven Canyon.

As such it is the author's opinion that the basic infrastructure (power, water, and transportation) necessary to support a mining operation may be developed or is already located within reasonable proximity of the subject property.

5.5 Land Use

The USFS land is managed for multiple use including grazing, recreation, and mineral exploration and extraction.

5.6 Flora and Fauna

Fauna is typical of northern semi-arid climates and consists of American black bears, deer, coyotes, bobcats, mountain lions, foxes, bighorn sheep, squirrels, rabbits, skunks, and raccoons.

Flora includes most commonly Ponderosa pine with some White spruce and Aspen trees. Wheatgrass, brome, buffalo grass, and many wildflower species are common for plants.

5.7 Surface Rights and Local Resources

As discussed in Section 4.0, Basin Uranium has secured sufficient surface access rights for exploration and development of the project. However, to the author's knowledge, no formal surveys or title opinions have been completed by the Company.

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6.0 History

6.1 Ownership History of the Chord Property

Uranium was first discovered in Craven Canyon and the adjacent Red Canyon in the early 1950's. Conventional mining was subsequently conducted in the area from the early 1950's through the 1970's. During this time, ore produced by the many small miners was hauled to supply feed to the mill in Edgemont, SD, which had a daily average throughput of 400 tons. During this uranium boom, Roy Chord emerged as a prominent figure and founded Black Hills Uranium Co. and Chord Uranium Co. to conduct several mining operations around Fall River County, totaling dozens of individual mining operations over the course of the 1950's and 1960's.

In 1976 Union Carbide Corporation (UCC) exercised an option to acquire a significant block of claims from Roy Chord and named it the Chord Property. This property contained several previously producing properties including Long Mountain in the northeast corner of the claims block. The acquisition was completed in 1978. UCC conducted extensive exploration drilling in the late 1970's. This culminated in detailed site plans including an open pit mine plan, an underground mining plan, a heap leach flowsheet, and beginning steps in the permitting process. A 2,000 foot decline was designed to access the October-Jinx portion of the deposit and was contracted to be constructed in 1979.

The project became the target of negative publicity during development of the main decline which brought with it an injunction and added regulatory delays that paused development. Downward trends in the uranium market in the early 1980's in addition to these delays caused UCC to drop the project.

The Chord Property was subsequently staked and held by different owners from the mid 1980's until being staked by Cowboy Exploration and Development LLC in 2021. In February of 2023 Basin Uranium entered into an Option Agreement for a 90% interest in the Chord Project from Cowboy Exploration. See Table 6.1 Ownership History for a summary of ownership of the Chord Uranium Property. To the author's knowledge, no formal surveys or title opinions have been completed by the Company.

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Table 6.1 - Ownership History

Owner	Dates	Activity
Roy Chord	1951-1975	Small deposit mining
Union Carbide Corp	1974-1984	Drilling Exploration, Feasibility Study, Early Mine Development
American Gold Minerals (Lease from UC)	1982-1986	Preliminary valuation, geologic review, aquifer test
Strathmore Resources	1998-2013	Preliminary Valuation
Tournigan Gold Corporation	2005-2013	Preliminary Valuation
Denver Uranium	2005-2007	Preliminary Valuation
Neutron Energy	2006-2014	Preliminary Valuation
Cowboy Exploration and Development LLC	2021-Present	Claim Staking, Preliminary Valuation
Basin Uranium Corp	2023-Present	43-101 Technical Report Based on Historic Data

6.2 Historic Exploration and Development Work Undertaken

A former Union Carbide Corporation (UCC) engineer, W. T. Cohan, performed work on the in the late 70’s and early 80’s and prepared a series of reports evaluating the property for interested mineral clients. Cohan in 2004 estimated UCC’s total expenditure on the Chord property at \$3.5 to \$4.0 million in unadjusted USD. This total amount was spent on the Chord property which at the time was around 950 unpatented mining claims. The extensive exploration drilling program initiated by UCC in the late 1970’s represented approximately \$2 million of that total by Cohan’s estimation. The drilling program produced a total of over 1,400 borings over this period, and sustained UCC’s interest in the project, culminating in feasibility studies and mine plans.

UCC produced an open pit mine design with a cost estimate in 1976 for the Long Mountain portion of the property, as well as an underground mine design for October-Jinx around the same time. Plans for a 2,000 foot decline from the western wall of Craven Canyon into the October-Jinx were initiated in 1979. The development of the decline was halted by injunction after the first 15 feet of drift was made. Taylor, another former UCC engineer, in his 1983 report, stated “Union Carbide’s Chord project was targeted by environmental groups and was plagued by delays in permitting, unfavorable press coverage, and jurisdictional disputes between competing State and Federal agencies.”

UCC retained interest in the property through the early 1980's. UCC produced preliminary designs for heap leaching onsite around 1980 in tandem with baseline studies in preparation for an Environmental Assessment. In 1982, they leased part of the Chord property to American Gold Minerals, who performed a geologic review in 1982, a preliminary valuation in 1983, and an aquifer test in 1984. In 1983 and 1984, UCC was evaluating the steps and costs in obtaining state and federal permits for the mine plans before they abandoned the project altogether due to the mid 1980's decline in the uranium market.

6.3 Historical Mineral Resource Estimates

Historical resource estimates were published in a report for American Gold Minerals prepared by E.K. Pinnick in 1982 and are later referenced in W.T. Cohan's 2004 Capital and Operating Costs Estimate for analysis.

Table 6.2 - October-Jinx Historic Reserve Estimate (E K Pinnick 1982)

<u>Cut Off Grade</u> <u>% U₃O₈</u>	<u>Class</u>	<u>Tons</u>	<u>Grade</u> <u>%U₃O₈</u>	<u>Contained</u> <u>Lbs U₃O₈</u>	<u>Avg Thickness</u> <u>Feet</u>
0.06	Measured	397,700	0.133	1,187,400	6.7
	Indicated	218,000		453,000	
	Total	615,700		1,640,400	
0.10	Measured	321,700	0.147	945,700	5.7
	Indicated	139,000		408,900	
	Total	460,700		1,354,600	
0.20	Measured	135,500	0.207	561,000	7.3
	Indicated	128,300		531,000	
	Total	263,800		1,092,000	
0.30	Measured	49,000	0.317	310,700	6.0
	Indicated	42,800		271,300	
	Total	91,800		582,000	

Table 6.3 - Viking Historic Reserve Estimate (E K Pinnick 1982)

	<u>Tons</u> <u>Ore</u>	<u>Grade</u> <u>%U₃O₈</u>	<u>Lbs.</u> <u>U₃O₈</u>	<u>Avg.</u> <u>Thickness, ft</u>
Measured:	89,100	0.096	170,800	6.2
Indicated:	76,900	0.108	165,800	
Total:	166,000	0.101	336,600	

The resource estimates cited above are based on data and reports prepared by the previous operators of the project. These resource estimates are of a historic nature. A qualified person has not done sufficient work to classify these historical estimates as current mineral resources or mineral reserves. The author is not treating these historical estimates as current mineral resources or mineral reserves.

6.4 Production History

In 1952, Roy Chord sent his first shipment of uranium ore to Rifle, Colorado. Between 1955 and 1965, a total of approximately 250,000 tons of uranium ore were produced in Fall River County across around 150 mines. In his preliminary valuation for the project, Taylor (1983) indicated that

it is unlikely that more than 100,000 tons of ore were produced from the Chord property. Following a quiet period after the U.S. Government ceased to be a guaranteed purchaser for uranium in 1964, the Chord property was acquired by UCC.

Significant drilling was performed by UCC over this period. Cohan in 2004 cited an estimated total expenditure from UCC of \$3.5 to \$4 million dollars on the project. The majority of that expenditure, around \$2 million, was expended on drilling over 1,400 vertical drill holes for exploration.

UCC was unable to perform significant mining production during their ownership of the property. UCC progressed on plans for an underground mine complex targeting the deeper and unoxidized October-Jinx and open pit mines for the shallower, oxidized horizons. The underground mine development had proceeded well enough by 1979 for UCC to contract Mine Services of Denver, Colorado to construct a decline into the October-Jinx portion of the property but were slowed by public opposition and permitting delays. These factors combined with declining uranium prices in the early to mid 1980's lead UCC to drop the property.

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7.0 Geological Setting and Mineralization

7.1 Regional Geological Setting

The project is located within the southern zone of the Black Hills Uplift. The stratigraphy of the Black Hills area was uplifted around the same time period as the Laramide Orogeny and is likely related to the general uplift of the Rocky Mountains. The uplift forms an elliptical dome structure approximately 60 miles wide and 120 miles long with a northwestern trend. Post uplift erosion exposed a central crystalline core around which the sedimentary rocks now form the surrounding topographic formations. The oldest rocks lie in the pre-Cambrian core and outward from the center of the uplift the sedimentary rocks are progressively younger. Upper Cretaceous and Tertiary rocks are extensively exposed over wide areas adjacent to the Black Hills uplift. Some of these areas include volcanic debris containing small amounts of uranium.

In the southern Black Hills area, faults with large displacements are uncommon, but the Precambrian rocks contain northeast trending zones of structural weakness. The more competent sedimentary beds are highly jointed. In Craven Canyon, the Lakota Sandstone outcrop exposes over 200 fractures that were measured by the USGS. The fractures displayed dominant strikes of N11°W and N75°E, approximately parallel or perpendicular to the mapped faults.

Uranium occurrences in the Black Hills area are known or reported in Precambrian, Cambrian, Pennsylvanian, Cretaceous, and Tertiary rocks. In the northwestern Black Hills area, uranium bearing material has been mined near Carlile, WY and other deposits explored near Aladdin, WY. The Early Cretaceous age Inyan Kara group in the southern Black Hills has the only previously productive uranium deposits in the southern regional area.

Regionally, the Inyan Kara group is capped by the Skull Creek Shale, a fissile black shale interbedded with thin silty beds. Locally, the Inyan Kara group is the outcropping rock on the surface. The Inyan Kara group rocks are highly variable terrestrial deposits. The upper most formation of the group is the Fall River formation, a predominantly massive, cross bedded sandstone ranging from 60 to 125 feet thick, with thin lenses of gray mudstone. In the area between Craven and Coal canyon, the Fall River displays abundant interbedded mudstones and thin lenses of cross bedded sandstone.

The lowest formation of the Inyan Kara group is the Lakota formation. The Lakota is a thick bedded white to pale brown sandstone, with some gray mudstone, carbonaceous shale, and thin coal seams. Massive lenses of cross-bedded sandstone are exposed in the bottom of the Craven Canyon. The Lakota formation has a range of 200 to 500 feet of thickness and is split into 3 different members. The upper Fuson member is composed of siltstones, mudstones, and sandstones with a white, massive sandstone at the base of the member, used as a marker bed. The middle Minnewaste limestone member splits the Fuson from the lower Chilson and is very erratic to absent in the area. The lowest member of the Lakota is the Chilson which is a fine to medium grained

sandstone unconformably overlying a dark fissile shale of the upper Jurassic Morrison formation. The Morrison formation in other areas has been found to contain uranium, but in this area it does not contain any significant uranium mineralization.

7.2 Mineral Source and Deposition

The uranium is presumed to be the result of a typical roll front deposit. A roll front is an irregular “C” shaped interface between altered and unaltered portions of a sandstone along which uranium has been deposited. The interface is created by the mobilization of uranium-bearing oxidizing fluid through a water saturated reduced sandstone. The oxidizing solution alters the host rock and the uranium is deposited on the interface ahead of the altered portion.

The source of the uranium has more than one theory to explain its origin. All theories generally accept that the uranium was moved and deposited by groundwater containing low concentrations of uranium coming in contact with reducing environments. One theory is that the uranium bearing fluid traveled up a series of breccia pipes from the Minnelusa Formation before deposition between the thinly bedded sandstones. Another theory is that the uranium found in the host formation would be enough over a large area of alteration to be concentrated into the deposits. The uranium found in the host formation could also have been a result of the overlying tuffaceous sedimentary rocks found in the White River Formations. Uranium could have been leached from these tuffaceous materials and transferred to the Inyan Kara sandstones by downward ground water movement.

7.3 Property Geology

The Chord Project is located between Craven Canyon and Coal Canyon in the southern Black Hills area. The formation containing the deposits is the Inyan Kara Group of the Fall River and Lakota Formation. It is believed that the shallow, upper most deposit (A Horizon) is found within the Fall River Sandstone. The Fall River formation displays uniform marginal marine deposition and fluvial channel sandstones that can be mapped over large areas.

The upper Lakota Fuson member is made up of primarily shales and mudstone with localized limestone and sandstone deposits and exhibits no substantial uranium mineralization. It is interpreted that the lower 2 horizons (the B Horizon and C Horizon) are found in the lowest member of the Lakota formation, The Chilson. The lower deposits display both oxidized and unoxidized deposits. The unoxidized deposits typically occur near large amounts of carbon where the carbon has preserved a strong reducing environment within an oxidized zone.

7.4 Mineralization

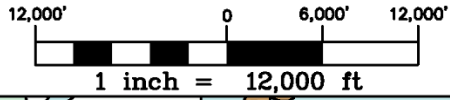
Both oxidized and unoxidized mineral zones have been found on the Chord property. The Inyan Kara groups oxidized prominent uranium-vanadium bearing minerals carnotite and tyuyamunite. In the unoxidized areas the minerals are uranite and coffinite. The vanadium to uranium ratios of the ores vary from a low of 0.4 : 1.0 to a high of 1.5 : 1.0.

The minerals are found largely in sandstones and associated with pyrite, marcasite, calcites, and carbon. The sandstone hosts are widely stained yellow by limonite oxidation and this staining has been noted to obscure the redox boundary. In some areas of the deposit, it has been noted that a change from limonite to hematite staining can be a marker of the redox boundary.

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LEGEND

Qal, Qw, Qe, & Qt	QUATERNARY ALLUVIUM (HOLOCENE & PLEISTOCENE)	Kulm	INYAN KARA GROUP (LOWER CRETACEOUS)	PPm	MINNELUSA FORMATION (LOWER PERMIAN & PENNSYLVANIAN)
Tw	WHITE RIVER GROUP (OLIGOCENE)	Jms	MORRISON FORMATION & UNKAPA SANDSTONE (UPPER JURASSIC)	MDpe	PAHASAPA LIMESTONE (LOWER MISSISSIPPIAN) & ENGLEWOOD FORMATION (LOWER MISSISSIPPIAN & UPPER DEVONIAN)
Kng	NIOBRARA FORMATION, CARLILE SHALE, & GREENHORN LIMESTONE (UPPER CRETACEOUS)	TrPa	SPEARFISH FORMATION (TRIASSIC & PERMIAN)	—	
Kb	BALE FOURCHE SHALE (UPPER CRETACEOUS)	Pmo	MINNEKAHTA LIMESTONE & OPECHE SHASLE (LOWER PERMIAN)	—	
Kms	MOWRY SHALE, NEWCASTLE SANDSTONE, & SKULL CREEK SHALE (LOWER CRETACEOUS)	—			



LOCAL GEOLOGY MAP

CHORD URANIUM PROJECT Fall River County, SD



Basin Uranium

FIGURE 7.1 - LOCAL GEOLOGIC MAP

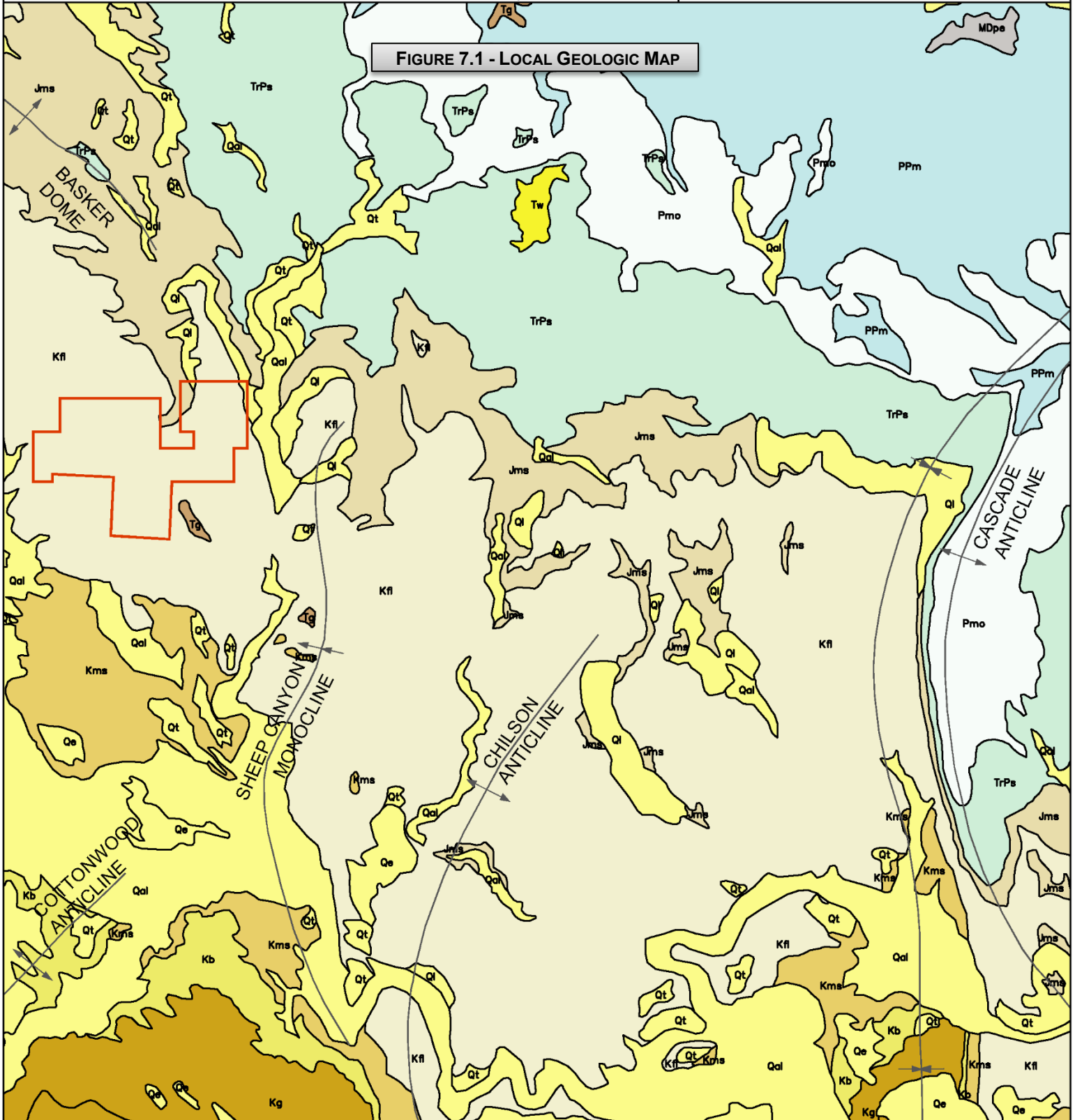
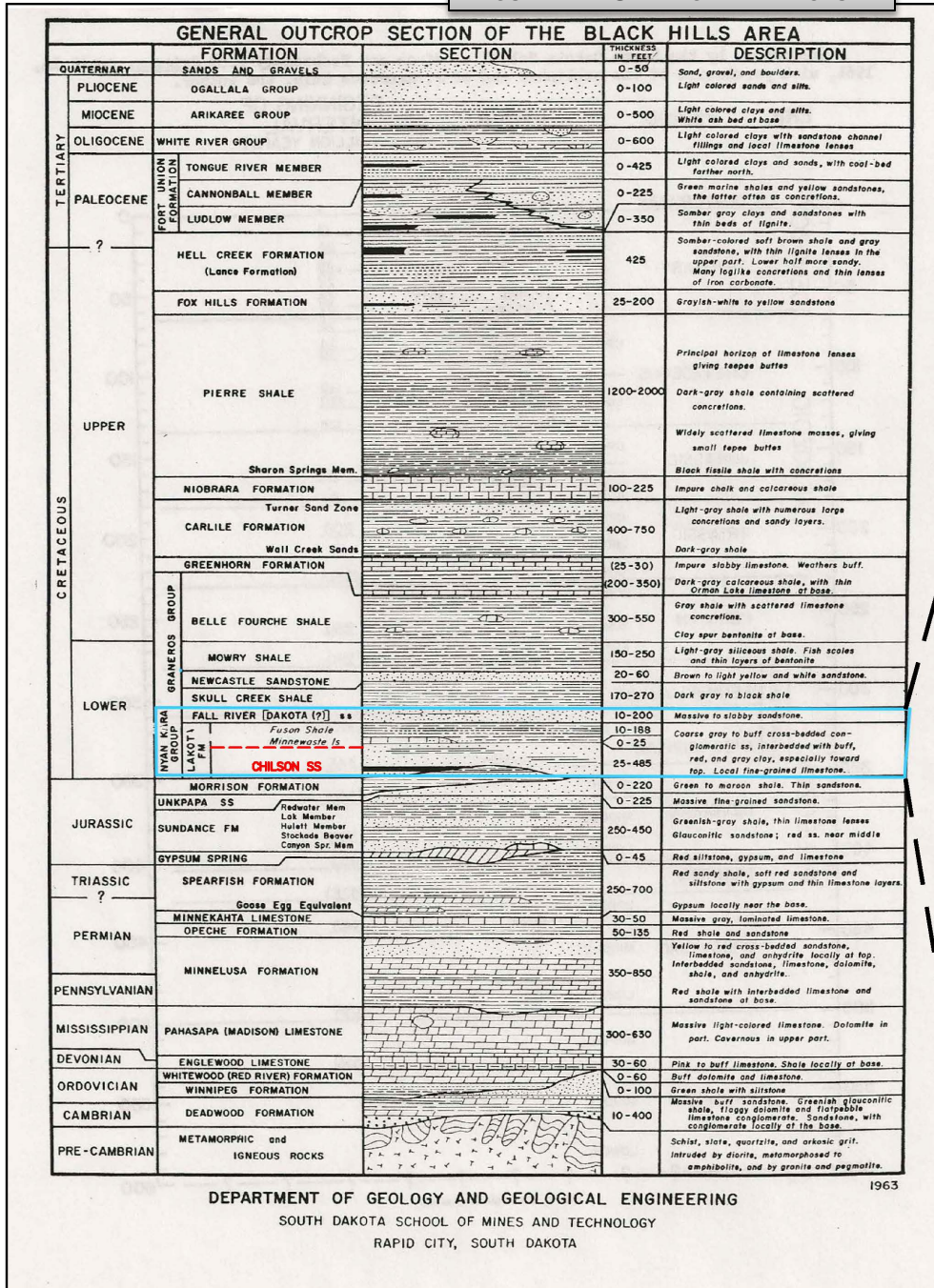
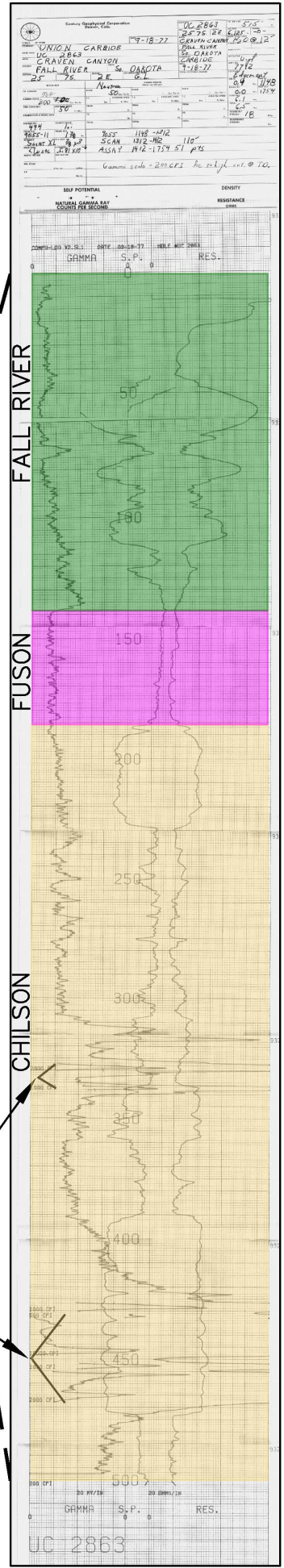


FIGURE 7.2 - STRATIGRAPHIC COLUMN



DEPARTMENT OF GEOLOGY AND GEOLOGICAL ENGINEERING
SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY
RAPID CITY, SOUTH DAKOTA

1963



STRATIGRAPHIC COLUMN AND TYPE LOG
CHORD URANIUM PROJECT
Fall River County, SD



S22

S23

S24

T7S R2E

T7S R3E

FIGURE 7.3 - DRILL HOLE LOCATION AND X-SECTION LOCATION MAP

RIDGE RUNNER AREA

VIKING AREA

S25

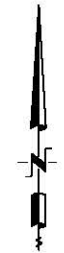
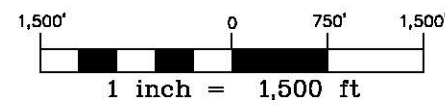
OCTOBER-JINX AREA

S27

S26

LEGEND

-  TOWNSHIP & RANGE LINE
-  SECTION LINE
-  CHORD PROJECT BOUNDARY
-  DRILL HOLE LOCATION
-  BARREN DRILL HOLE LOCATION
-  A HORIZON 0.25 GT CONTOUR
-  B HORIZON 0.25 GT CONTOUR
-  C HORIZON 0.25 GT CONTOUR



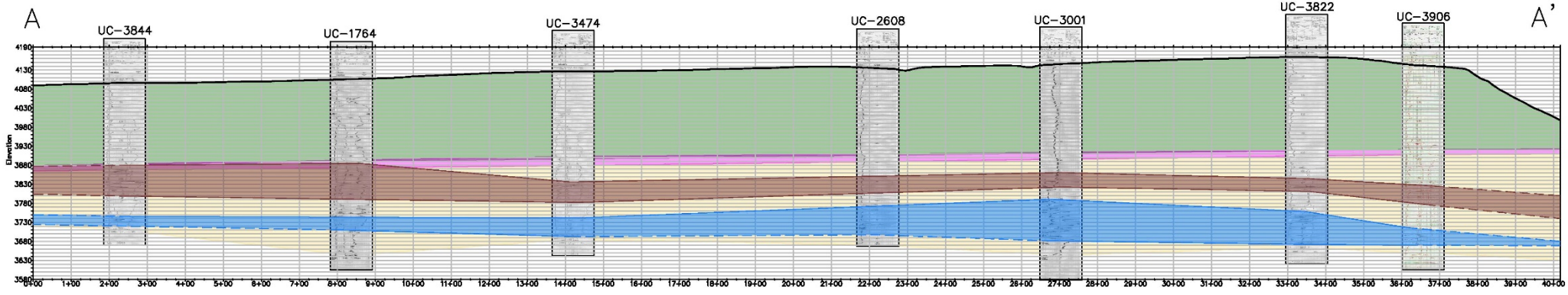
DRILLING & X-SECTION
LOCATION MAP
CHORD URANIUM PROJECT
Fall River County, SD









West

East

FIGURE 7.4 - X-SECTION OCTOBER-JINX A - A'



LEGEND

- | | | | |
|---|------------|---|----------------|
|  | FALL RIVER |  | GROUND SURFACE |
|  | FUSON |  | B HORIZON |
|  | CHILSON |  | C HORIZON |



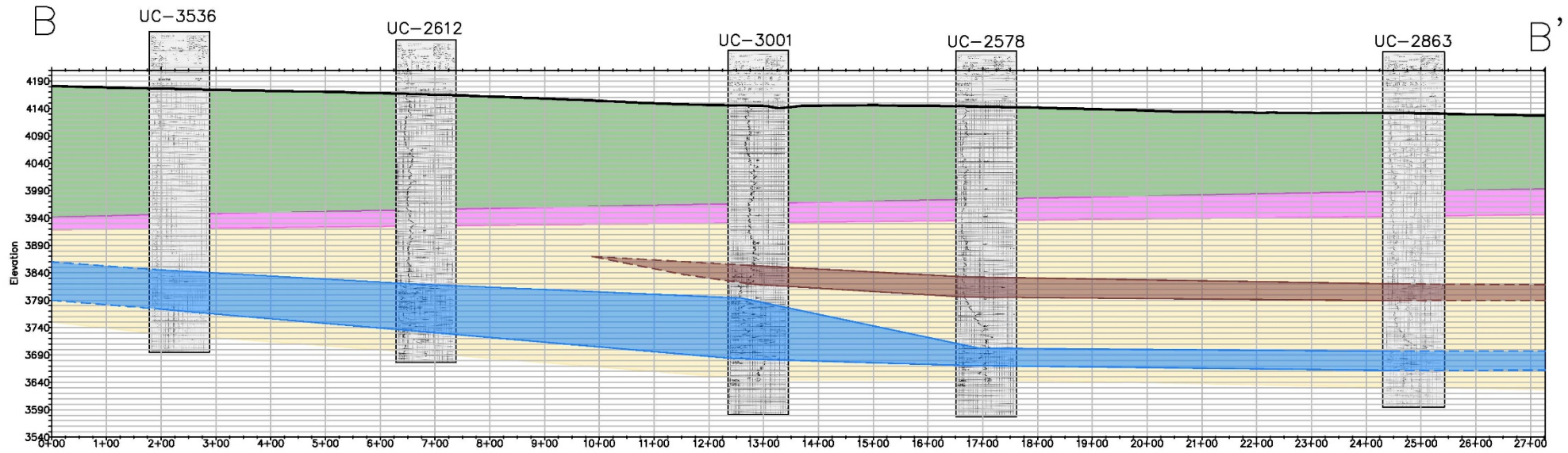
X-Section A-A'
CHORD URANIUM PROJECT
 Fall River County, SD







North

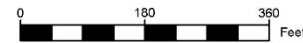
South

FIGURE 7.5 - X-SECTION OCTOBER-JINX B - B'



LEGEND

- | | | | |
|---|------------|---|----------------|
|  | FALL RIVER |  | GROUND SURFACE |
|  | FUSON |  | B HORIZON |
|  | CHILSON |  | C HORIZON |

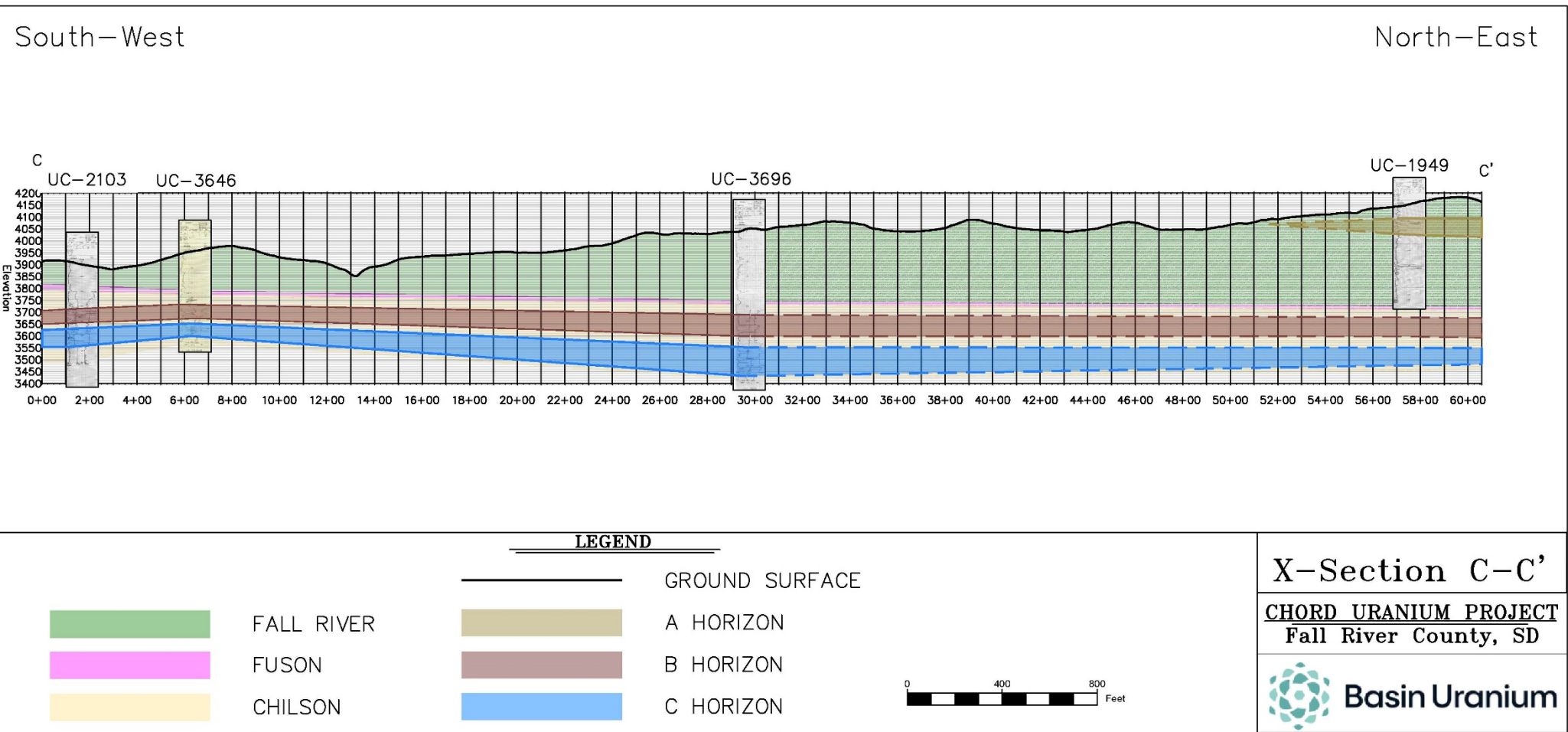


X-Section B-B'

CHORD URANIUM PROJECT
Fall River County, SD



FIGURE 7.6 - X-SECTION VIKING-RIDGE RUNNER C - C'



8.0 Deposit Type

The depositional character of the Chord Uranium Project is that of a sandstone hosted roll front. The ore deposit is contained in fluvial channel sandstone deposits within the early Cretaceous Inyan Kara group. Regionally the Inyan Kara Group is bounded on top by the Skull Creek Shale and the bottom by a gray shale of the upper Morrison Formation. Locally interbedded shales and mudstones further separate the roll front deposit into three discrete mineralized sand horizons.

The source of the uranium is debated but it is mutually agreed to be the result of the movement of oxidizing groundwater through the more permeable members of the Inyan Kara Group. The migration of oxidizing groundwater mobilized the uranium in solution ahead of the oxidizing front. Areas of strong reductive capacity such as sulfide mineralization, carbonaceous material, or reductive gases such as H₂S or natural gas can then cause uranium to precipitate out of solution.

Additionally, structural conditions of fine-grained shales and mudstones act as aquitards and confine the host sands from above and below the deposit. Areas where structural components restrict the flow of groundwater causes precipitation out of solution. The flow is confined to the more permeable sandstone between the less permeable fine-grained rocks. The sandstone layers are massive and cross bedded in areas. These structural components create preferential pathways for groundwater movement and the units with larger fines fractions also typically contain carbonaceous reductive material.

A roll front deposit will move along the channel sandstones and deposits when controlled by structural components of the host rock. Generally, deposit sizes are directly proportional to the size of the sandstone channel that hosts the redox cell containing the roll front. A larger channel sequence will thus generally hold a larger capacity to deposit mineralization than a smaller channel.

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FIGURE 8.1 - IDEALIZED ROLL FRONT (GRIGSBY 1980)

COMPARISON OF ALTERATION PRODUCTS

ALTERED BARREN INTERIOR	ORE ZONE	UNALTERED HOST SANDSTONE
QUARTZ-HEMITITE STAIN BIOTITE-ALTERED TO CHLORITE OR BROWN FELDSPAR-KAOLINIZED OR CHLORITIZED PYRITE-SMALL EUHEDRAL CRYSTALS MAGNETITE-NONE, MAYBE GONE TO HEMITITE CARBON-NONE	QUARTZ BIOTITE-WEAKLY ALTERED, CHLORITIZED, ETCHED FELDSPAR-PARTIALLY ALTERED PYRITE-PARTIALLY ALTERED MAGNETITE-PARTIALLY ALTERED CARBON-PARTIALLY ALTERED	QUARTZ BIOTITE-UNALTERED FELDSPAR-UNALTERED PYRITE-MASSIVE, TARNISHED MAGNETITE-UNALTERED CARBON-UNALTERED
<ul style="list-style-type: none"> • CEMENT GONE, MORE FRIABLE • NO HEAVY MINERALS • NO BIOTITE, CARBON, MAGNETITE • K-FELDSPAR MAY BE REMOVED 	<ul style="list-style-type: none"> • A MIXTURE OF ALTERED AND UNALTERED 	<ul style="list-style-type: none"> • HEAVY MINERALS MAY BE PRESENT

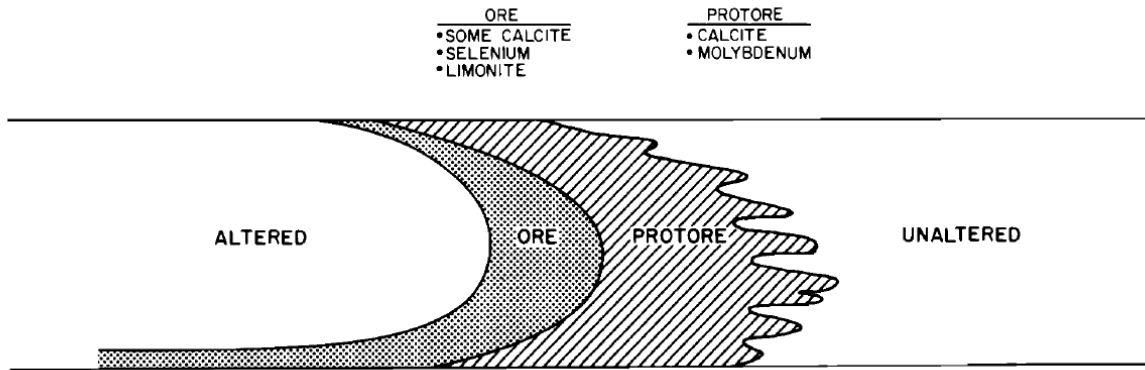
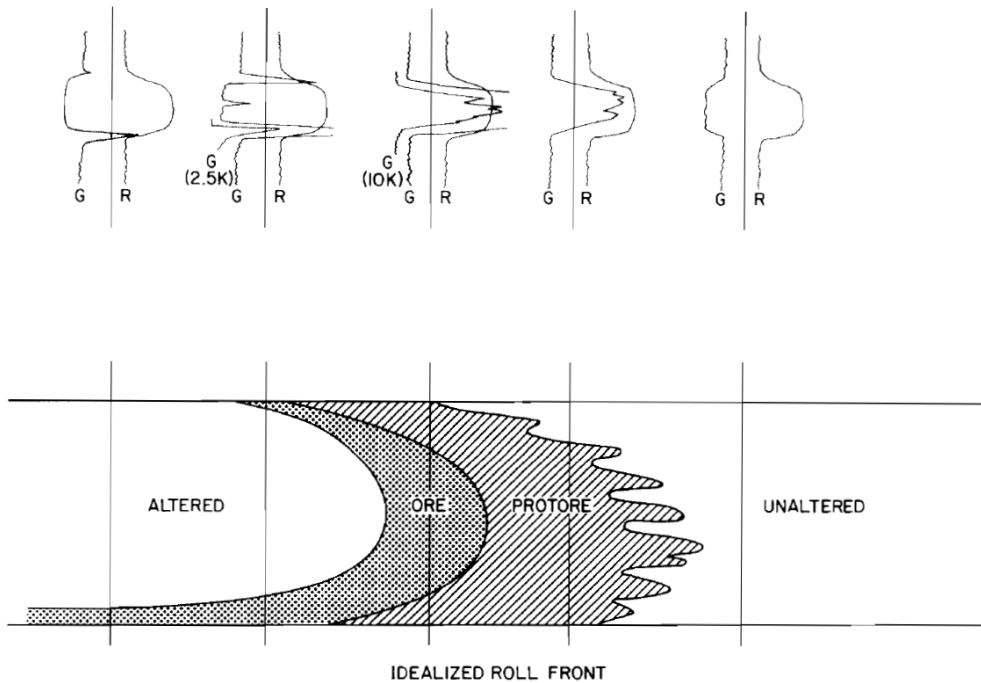


FIGURE 8.1 - IDEALIZED ROLL FRONT: GAMMA LOG INTERPRETATION (GRIGSBY 1980)



9.0 Exploration

Neither Basin Uranium Corporation or Cowboy Exploration and Development LLC have conducted exploration on the Chord Uranium Project to date. Data resulting from historic exploration has been provided to the author in the form of resource review reports, drilling maps and geophysical logs. This data was secured by Basin from publicly available data preserved by the South Dakota Geologic Survey and other data from private parties. All the technical data used in this technical report ultimately originated from Union Carbide Corporation's development of the project in the late 1970's. Verification of this historic data is discussed in Section 12.

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10.0 Drilling

10.1 Drilling Methods and Data

All drilling data available to the author and utilized in this report originates from Union Carbide Corporation's exploration and development of the project. Historic drilling was generally done by vertical rotary drilling with occasional core sampling for physical and metallurgical analysis. It was industry standard at this time to log drill holes using downhole geophysical logging tools including passive gamma, spontaneous/self-potential and resistivity. Drill holes were logged by Century Geophysical, who remains an industry leader in downhole geophysical logging.

All geophysical logs utilized in the development of the database for this technical report were scans of original Century logs obtained by Basin Uranium corporation from records held by the South Dakota Geological Survey (SDGS). Century's log headers clearly state information for each drill hole including the drill hole identification, date drilled, drilling depth, date logged and logging depth, as well as the proximal drilling location to the level of section, township, and range.

More importantly, the Century Geophysical logs also contain all the data needed to recalculate grade-intercept data and assign that data to a depth downhole, including gamma in counts per second (cps), tool calibration K factor, water and air factors, and dead time.

Drill hole maps were included in this package from SDGS. Separate mapping data packages were also acquired from private parties.

10.2 Historic Drilling Summary

Union Carbide Corporation (UCC) and others historically drilled over 2,000 drill holes on the Chord project. For this report, the author had access to original data for a subset of 1,247 drill holes. Of that total, 431 had both reliable collar mapping and geophysical data available to the author upon which to perform a resource estimate.

The drillhole database used for this report has an effective date of April 12, 2024. Only historic drill data was used in the resource estimate. Complete drill data was available for 435 drill holes, totaling approximately 212,000 feet drilled. 134 of these were barren. The remaining 301 drill holes contained a total of 1,022 intercepts above 0.02% grade. Of this total, 4 drill holes representing 66 intercepts were discarded from the database due to unreliable log heading information, leaving a total of 431 drill holes and 956 intercepts meeting the 0.02% cutoff.

11.0 Sample Preparation, Analyses, and Security

Neither Basin Uranium Corporation or Cowboy Exploration and Development LLC have performed any exploratory activities on the property. No recent drilling has occurred on the property, so no recent samples have been obtained. Specific details of the historic drilling methods, sampling procedures for chemical analysis, and down-hole radiometric testing procedures employed by Union Carbide Corporation (UCC) during its exploration and development of the Chord Uranium Project area are not available to the author. Such information would include sample preparation methods and quality control measures, sample security, and analytical procedures.

The database used in the report was recreated from scans of the original historical geophysical and lithological logs and drill maps. All of the downhole geophysical and lithological logs were obtained from the South Dakota Geologic Survey (SDGS). A number of drill hole collar maps and a few intercept maps were acquired from the SDGS and other private parties. No chemical assay data was available to the author for use in this report. The primary assay data for the Project is downhole geophysical logging. Historically, the mineralized uranium intercepts from the gamma-logs were calculated by UCC's geophysical contractor Century Geophysical and validated by an in-house geophysical logging and geology department, creating a printout of the gamma-ray logs, and outlining the mineral intercepts at various cutoffs. Each downhole log typically consisted of gamma counts, resistivity, and spontaneous/self-potential curves plotted by depth. BRS created a digital database from this information including the hole location, elevation, downhole drift, and mineralized intercepts.

The resistivity and spontaneous potential curves are mainly used to identify and correlate the sandstones and mudstones. The gamma count curves are used to measure the equivalent amounts of uranium oxide (eU_3O_8) present in the rock. The logging equipment used by Century would have been regularly calibrated at test pits operated by the Department of Energy (previously the Atomic Energy Commission) at Grand Junction, Colorado. The calibration K factor would have been determined by this method for each gamma tool in accordance with industry standards at the time. However, no documentation of the calibrations were available to the author for this report. All data supplied to the author was in electronic format. All of the original data appears to the author to be genuine.

A third-party contractor was employed to convert the curves of the raster images into vector data. The gamma counts were digitally recorded via this process at regular 0.1ft to 0.5ft intervals along the gamma curves of each log and output into a vector format. Digital gamma counts were checked against each log to validate that the digitization had been performed to the proper scale for depth and gamma counts prior to completing the calculation of %e U_3O_8 using the original K, water, deadtime and air factors stated on each log header.

The previous work completed by UCC appears to be in keeping with industry standards and practices, but until: a) information on these procedures is obtained, b) historic core or pulverized material is assayed, or c) Basin Uranium can verify results through confirmation drilling, the current mineral resource estimate derived from this historic data can only be considered an Inferred Mineral Resource.

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12.0 Data Verification

12.1 Drill Data

The data source for the project is based upon historic drill hole logs and maps acquired by Basin Uranium Corporation from private parties and the South Dakota Geologic Survey (SDGS). All drilling data employed in this technical report was developed by Union Carbide Corporation (UCC) and originates from their work on the project in the late 1970's. The database used in this report was created from UCC's original data and quality control and assurance procedures were employed by the author as a prerequisite for inclusion in the resource model.

Drill hole collar X, Y and Z locations were determined using a set of available drilling maps. Collar general location by township and range were confirmed by the corresponding available geophysical logs. Collar elevations and total depths were similarly cross referenced to the geophysical logs from data gathered from the available mapping. This procedure assured that the drilling location used was an as drilled location and also that the correct logging data was properly attributed to that location. Drill holes of inconsistent or unconfirmable identification, location, or depth were culled from the data set at this early stage. It is the author's opinion that the level of accuracy achieved by the combination of historical mapping and drilling data is reliable for the purposes of this report.

Available drill hole mapping was of various types and were scanned into PDF formats by South Dakota Geological Survey (SDGS) or the private parties. The bulk of the data came from the SDGS and had been scanned into PDF by their offices. Only maps that could be reliably interpreted to have the following qualities were used to locate and re-record collar locations:

- Maps that were clear, readable, and had fidelity to scale
- Maps representing drill holes executed, not planned
- Maps which were able to be geo-referenced either using stated coordinates or that were plainly identifiable or contained sufficient Public Land Survey System (PLSS) linework.

The geophysical logs in the data set were originally performed by Century Geophysical Corporation for UCC. Century Geophysical Corporation still exists and remains a leader in the downhole logging field today. Downhole log scans were only used if they were clearly readable and to scale throughout the entirety of the log length. In some cases, rescans were requested from SDGS for better quality data log scans and the SDGS graciously provided them.

A third-party contractor was employed to convert the curves of the raster images into vector data. The gamma counts were digitally recorded via this process at regular 0.1ft to 0.5ft intervals along the gamma curves of each log and output into a vector format. Digital gamma counts were checked against each log to validate that the digitization had been performed to the proper scale for depth and gamma counts prior to completing the calculation of ${}^{238}\text{U}_3\text{O}_8$ using the original K, water, deadtime and air factors stated on each log header.

This vectorized gamma count data was then used to calculate the equivalent U₃O₈ grade percent at each depth step along the curve using the standard 2KN formula and using all applicable adjustment factors (i.e. water factor and air factors). The digital data was checked and compared to drill hole maps where available and screened internally for quality and consistency. At this stage, data of 4 drill logs was removed from the dataset after showing signs of inaccurate K and/or deadtime factors which produced higher than reasonably believable %eU₃O₈ grades and GT values. The author is of the opinion that the level of accuracy achieved by the combination of historical mapping and drilling data is reasonable for the purposes of this report.

12.2 Downhole Deviation

All UCC drilling was performed as vertical drill holes and collection of downhole deviation data at that time was limited. Deviation was taken into account on all drill holes that had deviation data associated with the log. Where no downhole data was available, the drilling was assumed to be nominally vertical.

Resource areas had varying amounts of drift data collected. A total of 245 drillholes were available in the October-Jinx claims, 73 drillholes in the Viking claims, and 123 drillholes in the Ridge Runner claims. October-Jinx had the highest percentage of drillholes with drift data at 35.5%, compared to Viking with 12.3% and Ridge Runner with none. The variation in level of drift data collection was dependent upon the depth to mineralization, date range of the holes drilled, and the amount of drift expected by the operating engineer where their assessment would be based upon drilling depth and geology. October-Jinx had a larger linear drift than Viking at 29.2 and 17.0 feet, respectively, due to the much deeper average drill depths.

Table 12.1 - Downhole Deviation Summary by Area

Claim Area	Total Drillholes	Percent with Drift Data	Average Total Depth Drilled (feet)	Average Drift (feet)		
				Northing	Easting	Linear Total
October-Jinx	232	37.1%	473.4	-6.2	19.7	29.3
Viking	61	14.8%	171.5	9.7	1.2	16.9
Ridge Runner	118	0%	231.6	N/A	N/A	N/A

12.3 Bulk Density

Limited current site-specific data is available for determination of bulk density of the Chord mineralized material. Pinnick (1982) states that density testing on core samples and Lakota hosted mineralized material yielded a bulk density between 13.71-13.88 cubic feet per ton. A bulk density of 14 cubic feet per ton was used by Pinnick to calculate the Chord reserves and 15.5 cubic feet per ton was used for the Fall River reserves. Others, such as Cohan (2004) have simply used 15

cubic feet per ton in general, which is an approach that the neighboring Dewey-Burdock mine also used for their technical reporting. For resource modeling in this technical report, the author employed a bulk density of 15.5 cubic feet per ton to the A Horizon as it is hosted primarily in Fall River and 14.0 for the B and C Horizons as they are interpreted to be hosted in the Lakota.

13.0 Mineral Processing and Metallurgical Testing

13.1 Historic Mineral Processing and Metallurgical Studies

Union Carbide Corporation (UCC) conducted hydrometallurgical testing in their Phase II studies for their underground and open pit mining development plans around 1980. The oxidized near to surface material was tested comprehensively and was determined to be an excellent candidate for heap leaching as a result of its high permeability. Up to 80mm sized rock fragments, the oxidized material was found to have no issues with channeling or material segregation. By using 20lbs sulfuric acid per ton of mineralized material, recovery rates upwards of 90% U_3O_8 were achieved. The resulting liquor was 740 ppm U_3O_8 ; however, over 90% of the uranium extracted was in a concentration above 2g/L U_3O_8 . Cohan (2004) notes in his capital and cost estimate that this test resulted in tailings containing 0.015% U_3O_8 and that modern mills typically have tailings under 0.010% U_3O_8 , indicating recovery may be improved with more recent methodologies.

Insufficient samples were available for the reduced underground material to undergo the same depth of testing as the surface material. Underground samples were observed to be less permeable than the surface samples and contain more calcite. The unoxidized material samples also contained carbonaceous matter in thin sheets sandwiching finely disseminated uranium in the host sandstone. Bench testing determined the deeper unoxidized material would require 2.5 lbs/ton of oxidizers and 75 lbs/ton acid necessary to achieve an 87% U_3O_8 recovery rate.

13.2 Current Mineral Processing and Metallurgical Studies

No recent mineral processing has occurred for the property. Additional drilling will need to be performed to gather material for bench testing. Bench and batch testing will ultimately need to be performed to determine the amenability of the mineralized material to various updated extraction methods including conventional milling, heap leaching, and in-situ recovery (ISR).

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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 Chord Uranium Project, available data supports 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 mineralized trend and demonstrate the presence of mineralization between widely spaced drillholes. For the project, drillhole spacing areas for which the author calculated inferred mineral resources may exceed 200 feet along trend with sufficient geologic evidence that a mineralized zone is present, and its location can reasonably be assumed. The drillhole data demonstrates that mineralization is present and is of sufficient continuity, quality, and density to support Inferred Mineral Resource estimation and to define exploration targets.

14.1.2 Methodology

The primary resource calculation method utilized in this report is the Grade x Thickness (GT) contour modeling method as follows. The GT contour modeling method is a well-established approach for estimating uranium resources and has been in use since the 1950's in the US. The GT method is particularly applicable as it can be effective in reducing the undue influence of high-grade or thick intersections as well as the effects of widely spaced, irregularly spaced, or clustered drill holes. This method also makes it possible for the geologist to fit the contour pattern to the geologic interpretation of the deposit.

Geologic interpretation of the mineralized host sands was used along with the intercepts that met the minimum cutoff grade and thickness to develop a geologic framework or model to estimate the mineral resources of the project. Each intercept was evaluated based on its geophysical log

expression and location relative to adjacent intercepts. Whenever possible, geophysical logs were used to correlate and project intercepts between drill holes. The mineralized envelope was created by using the top and bottom of each intercept that was within the geologic horizons. Total downhole drift was applied to all intercepts which had that data available, otherwise the drill hole was assumed to have been vertical with no drift adjustments applied.

Because roll front mineralization often crosses bedding and can have varying amounts of structural control the 0.02% intercept data set was then split into discrete mineralized horizons based on relative elevation and geologic units. The individual intercepts meeting the 0.02% eU₃O₈ cutoff were plotted in 3-dimensional space using AutoCAD Civil 3D Software. These intercept points were then separated by geologic interpretation into discrete horizons of mineralization; A being the highest elevation horizon, C the lowest horizon, and B the horizon between A and C. These sub-sets of mineral intercepts meeting the 0.02% eU₃O₈ extraction cutoff were then composited within each horizon using a minimum grade thickness of 0.1 GT. The 0.1 GT is based on a minimum mining thickness cutoff equivalent to 5 ft at 0.02% eU₃O₈.

Sum GT compositing was performed between all intercepts within each horizon meeting the 0.1 GT cutoff regardless of vertical distance, as those intercepts are each individually mineable. Intercepts not individually meeting the 0.1 GT cutoff were composited only if they were within a maximum of 10 ft of intercept(s) at or over the 0.1 GT cutoff and their incorporation and dilution of the zone with interstitial material kept the average grade above the 0.02% eU₃O₈ cutoff. Intercepts not meeting these criteria in holes otherwise having mineralization were dropped from the sum GT and sum T composites. Holes with no intercepts meeting the 0.1 GT cutoff were taken into consideration while modeling as trace holes but not incorporated directly into the model points. No maximum GT was applied to the database. Only data which appeared to be invalid or unreliable was removed from the dataset as discussed above.

Drill spacing on the Chord project varies and was completed on roughly 100-foot centers overall. Areas outside of the main October-Jinx resource area have a wider spacing at roughly 200-foot centers. The current geologic and resource model reflects three sand horizons over the stratigraphic thickness of approximately 400 feet in the Inyan Kara Group.

Table 14.1 - Drill Hole Category by Mineral Horizon

Mineral Horizon	Barren	<0.1ft% GT	≥0.1ft% GT
A Horizon	100	31	42
B Horizon	147	51	55
C Horizon	106	45	121

To establish an initial geologic limit to the projection of mineralization to approximate an inverse distance squared relationship for the grade within each zone, a circular area of influence was applied to each drill hole interval location which met the 0.10 GT cutoff. Each circle was located with its center drill hole collar location or the linearly drifted location of total depth when the drift data was available.

The radius of influence was 200 feet from each drill hole. From this basis of influence the GT contour method was then employed constructing major contours using geologic interpretation of each intercept compared to the intercepts immediately adjacent to one another. Refinement of the geologic limit and projection of mineralization along trend was then based on specific correlation and interpretation of geophysical logs on a hole-by-hole basis.

The dimensions of a 200 ft radius of influence was determined by covariance and semi-variography analyses of the individual grade and thickness intercept data for the 0.02% grade cutoff data set. Semi-variography did not vary in major and minor axes resulting in a circular area of influence. This circular area is supported by the deposit's location in a massive sandstone that is regionally strata bound by the Morrison Formation on the bottom and by local features above.

GT and thickness for the summed mineralized intercepts were then contoured using standard algorithms creating a three-dimensional surface for each parameter. These surfaces were then bound based upon the geological interpretation of the deposit. From the contoured GT ranges the contained pounds of uranium were calculated from the volume calculated by using CAD program software and applying the bulk unit density weight. Similarly, the tons of resource are estimated using the same methodology for constructing a 3D model of mineral thickness within the same area. Grade is then calculated by dividing GT model e U_3O_8 pounds by thickness model calculated resource tons.

The GT contour method is used as common practice for Mineral Reserve and Mineral Resource estimates for similar sandstone-hosted uranium projects. It is the opinion of the author that the GT contour method, when properly constrained by geologic interpretation, provides an estimation of contained pounds of uranium accurate enough for the purposes of this technical report.

14.2 Key Assumptions and Parameters

14.2.1 Cutoff Criteria

A minimum GT cutoff of 0.25 and a minimum grade cutoff of 0.02% e U_3O_8 was applied to the data. The 0.02% grade cutoff criteria applied to the intercept data is an extraction criterion rather than an economic criterion. The tail grade of a conventional mill is widely recognized as being somewhere between 0.01 and 0.015%. As such, grades much below the 0.02% cutoff do not carry an acceptable prospect of extraction at any economy. As stated above, the next cutoff applied at 0.1 minimum GT is to set the basis for the compositing and modeling extents, limiting the equivalent minimum mining height to no less than 5 ft.

Following the creation of model contours based on data screened for the technical ability to extract the resource, a marginal economic GT cutoff can then be applied to screen out that portion of the modeled resource which is not reasonably economic.

The marginal economic GT cutoff for a resource estimate is fundamentally dependent on the approximated average mining cost and the price of the salable product. This marginal economic GT cutoff criteria defines the lowest volume and quality (via thickness and grade) of mineralized material which can be reasonably assumed to cover the marginal operating costs of extraction. The marginal economic GT cutoff applied to the resource totals of this report is 0.25 GT.

At the time of writing, U₃O₈ spot prices exceed \$90 per pound, after having recently hit a high of \$106 per pound early this year. The assumed mining cost per ton for cutoff criteria was an average of \$70 per ton. The author has recently estimated underground mine costs for similar types of deposits in the range of \$60 to \$90 per ton.

The minimum marginal economic underground mining thickness used is 6 ft, restricting the GT value to a minimum Grade x 6 ft thickness. At 0.25 GT and a 6 ft mine thickness, the minimum grade would be 0.0416 eU₃O₈. At that minimum grade the total uranium quantity would be 0.83 pounds per ton. At a uranium price of \$90 per pound, the gross value of each ton of material would be \$75 dollars, exceeding the assumed marginal mining operating costs of \$70 per ton.

Table 14.2 - Marginal Economic GT Cutoff Analysis

At 6 ft Mine height and \$90/lb U ₃ O ₈	Minimum Grade (%eU ₃ O ₈)	Minimum Pounds eU ₃ O ₈ Per ton mined	Gross Value Per Ton Mined
0.10 GT cutoff	0.0167	0.33	\$30
0.25 GT cutoff	0.0416	0.83	\$75
0.50 GT cutoff	0.0833	1.67	\$150
1.00 GT cutoff	0.1667	3.33	\$300

***All numbers are rounded*

The spot uranium price as of May 7, 2024, is reported at \$92.25 per pound U₃O₈.

(<https://tradingeconomics.com/commodity/uranium>)

It is important to note that in practical terms, an operating mine would likely employ a higher (primary) GT cutoff early in its mine life to cover its capital expenditure. During that time, it would still be necessary to excavate mineralized material below a primary cutoff and above the marginal cutoff in order to maintain safe access and utilities, and perform exploration drilling and drifting, etc.

However, rather than treat the marginal material as waste, the marginal material would likely be stockpiled, and the cost of excavation and handling would be borne by the primary mined material. Later, when the capital costs of the mine have been recovered, both the stockpiled and remaining

marginal mineralized material could be recovered while only meeting the marginal operating costs established by the 0.25 GT cutoff. If the marginal mineralized material were treated as mine waste, the same general cost to excavate and handle would be incurred with no possible future benefit.

Assuming the mining costs are written off against the primary mined material, the marginal economic cutoff criteria would thus represent a breakeven cost. The author concludes that application of both the minimum grade and minimum GT cutoffs represent a breakeven point with respect to mineral value and cost of production.

14.2.2 Bulk Density

Limited current site-specific data is available for determination of bulk density of the chord mineralized material. As discussed in Section 12.2, the author used a bulk density of 14 ft³/ton (2.288 tonne/m³) for Mineral Resource Estimation in the Lakota formation Chilson sandstone, such as mineral Horizons B and C. For mineral resource estimations in the Fall River sandstone, Horizon A, a bulk density of 15.5 ft³/ton (2.067 tonne/m³) was used.

14.2.3 Radiometric Equilibrium

Radioactive isotopes decay until they reach a stable non-radioactive state. The radioactive decay products are of two general categories: the first being the sub-atomic energy generating product (i.e., the radiation) and the second being the atomic isotope. Decay product isotopes are referred to as daughters and occur down what is known as a decay chain. When all the decay products are maintained in close association with the primary uranium isotope U²³⁸ for a million years or more, the decay chain will reach equilibrium with the parent isotope; meaning that the daughter isotopes will be decaying in the same quantity as they are being created (McKay, 2007).

An otherwise equilibrated decay system may be put into a state of disequilibrium when one or more decay products are mobilized and removed from the system because of differences in solubility between uranium and its daughter isotopes. In addition, the primary isotope of uranium U²³⁸ and its daughters emit different forms of radiation as they decay. The primary field instruments for the indirect measurement of uranium, either surface or down-hole probes, measure gamma radiation. Within the uranium decay the gamma emitting elements are primarily Radium₂₂₆, Bismuth₂₁₄, and Uranium with Radium₂₂₆ being the dominant source of gamma radiation.

Disequilibrium is considered positive when there is a higher proportion of uranium present compared to daughters and negative where daughters are accumulated, and uranium is depleted. The disequilibrium factor (DEF) is determined by comparing radiometric equivalent uranium grade eU₃O₈ as calculated from gamma counts or other radiometric measurement to actual uranium grade by chemical assay. Radiometric equilibrium is represented by DEF of 1, positive radiometric equilibrium by a factor greater than 1, and negative radiometric equilibrium by a factor of less than 1.

Negative disequilibrium occurs when uranium is separated from its daughters, specifically Radium. This occurs when the uranium mineralization is oxidized, locally depleting the uranium but leaving the radium and other daughters in place with elevated gamma count.

Historic reports of the site from Pinnick (1982) applied a positive DEF of 1.2. The report mentions assay data that supported this ratio application but does not include the assay data in the report. Similarly, Taylor in his 1983 report cites a disequilibrium factor between 1.2 and 1.

The author has employed the more conservative DEF of 1.0 to the resource estimation in this report. It is recommended that representative samples of the mineralization be collected by core for each mineral horizon, gamma count logged by geophysical methods, and be compared to chemical assay. A re-evaluation of the DEF for each mineral horizon and resource estimation can occur at that time.

14.3 Mineral Resource Summary

Mineral resources were estimated by horizon, based on geologic interpretation and correlation. Mineral resources are reported at various cutoff grades for Inferred Mineral Resources, to illustrate the effect of varying cutoff on the mineral resource. The preferred cutoff of 0.25 GT is shaded in the respective tables.

The Chord project currently only has historic drilling data which, in the author's opinion, supports the estimate of Inferred Mineral Resources (MRE). The author is not aware of any factors or issues that materially affect the MRE other than normal risks faced by mining projects in the state in terms of permitting, environmental, taxation, socioeconomic, political factors, and additional risk factors regarding inferred resources.

While no formal economic evaluation, Preliminary Economic Assessment (PEA), Preliminary Feasibility study (PFS), or Feasibility Study (FS) has been completed and while mineral resources are not mineral reserves and do not have demonstrated economic viability, reasonable prospects for future economic extraction were applied to the mineral resource estimate herein through consideration of grade and GT cutoffs and by screening out areas of isolated mineralization which would not support the cost of conventional mining under current and reasonably foreseeable conditions.

A sensitivity analysis was performed on the full model encompassing the resource area to evaluate the project at various cutoff values. This data is represented in Table 14.3. Mineral Resources for the Project after considering reasonable prospects for future extraction are estimated by classifications meeting CIM standards and definitions as Inferred Mineral Resources at a minimum grade of 0.02%e U₃O₈ and minimum GT of 0.25 as summarized in Table 14.4. Figures 14.1 through 14.5 represent the resource models at the 0.25 GT cutoff in the different areas and sand horizons.

Table 14.3 - SumGT Model Sensitivity Analysis

Inferred Mineral Resource (0.02% Grade Cutoff)	Tons (Millions)	Average Sum Thickness (ft)	Average Grade (%eU₃O₈)	Pounds eU₃O₈ (Millions)
A Horizon				
0.10 GT cutoff	0.259	3.7	0.056	0.289
0.25 GT cutoff	0.094	6.1	0.062	0.122
0.50 GT cutoff	0.017	7.2	0.087	0.032
1.00 GT cutoff	-	-	-	-
B Horizon				
0.10 GT cutoff	0.773	4.7	0.065	0.986
0.25 GT cutoff	0.417	6.9	0.079	0.666
0.50 GT cutoff	0.249	9.4	0.086	0.426
1.00 GT cutoff	0.084	13.0	0.098	0.165
C Horizon				
0.10 GT cutoff	1.537	7.3	0.074	2.277
0.25 GT cutoff	1.237	9.4	0.082	2.017
0.50 GT cutoff	0.838	12.9	0.091	1.523
1.00 GT cutoff	0.517	17.5	0.099	1.025
ALL HORIZONS GRAND TOTALS				
0.10 GT cutoff	2.568	5.7	0.069	3.553
0.25 GT cutoff	1.747	8.3	0.080	2.805
0.50 GT cutoff	1.104	11.8	0.090	1.981
1.00 GT cutoff	0.601	16.7	0.099	1.189

***All numbers are rounded.*

Criteria for reasonable prospects for future extraction were applied to the areas of the 0.25 GT cutoff including the screen out of areas of isolated mineralization which would not support the cost of conventional mining methods due to their distant proximity to other extractable mineral resources while under current and reasonably foreseeable conditions discussed in the cutoff criteria. The total Inferred Mineral Resource for the Chord property with probable economic extraction criteria applied is displayed in Table 14.3.

Table 14.4 - Total Inferred Mineral Resource

Uranium Inferred Mineral Resource Area	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons (Millions)	Pounds (eU₃O₈) (Millions)
October-Jinx	0.25	8.8	0.081	1.584	2.569
Viking	0.25	6.0	0.082	.050	.082
Ridge Runner	0.25	5.9	0.069	.075	.103
Total Inferred Mineral Resource	0.25	8.5	.081	1.709	2.754

***All numbers are rounded. Isolated areas of mineralization removed for probable economic extraction.*

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.

14.3.1 Ridge Runner Area Inferred Mineral Resource

The Ridge Runner area is the shallowest of the areas. The Ridge Runner area is only represented by the oxidized A horizon in the Fall River formation. Comparing the average log depth with the collar elevations of the holes drilled in the Ridge Runner area, it appears that the majority of the holes drilled may not have gone deep enough to encounter the lower sand horizons represented in the other areas. A summary of the Ridge Runner area is shown in Table 14.4.

Table 14.5 - Ridge Runner Inferred Mineral Resource

Uranium Inferred Mineral Resource Area	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons (Millions)	Pounds (eU₃O₈) (Millions)
Horizon A	0.25	5.9	0.069	.075	.103
Horizon B	0.25	-.	-.	-.---	-.---
Horizon C	0.25	-.	-.	-.---	-.---
Total Inferred Mineral Resource	0.25	5.9	0.069	.075	.103

***All numbers are rounded. Isolated areas of mineralization removed from probable economic extraction.*

14.3.2 Viking Area Inferred Mineral Resource

The Viking area has the smallest Inferred Mineral Resource of the areas. The Viking area contains deposits in both the B and C horizons of the Chilson formation. The A horizon is not represented in the Viking area likely due to erosion of the upper parts of the Fall River formation. The Viking area is believed to be a mixture of oxidized and reduced material. A summary of the Viking area is shown in Table 14.5.

Table 14.6 - Viking Inferred Mineral Resource

Uranium Inferred Mineral Resource Area	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU ₃ O ₈)	Tons (Millions)	Pounds (eU ₃ O ₈) (Millions)
Horizon A	0.25	-.	-.	-.---	-.---
Horizon B	0.25	6.7	0.074	.036	.053
Horizon C	0.25	4.0	0.120	.014	.029
Total Inferred Mineral Resource	0.25	6.0	0.082	.050	.082

***All numbers are rounded. Isolated areas of mineralization removed from probable economic extraction.*

14.3.3 October-Jinx Area Inferred Mineral Resource

The October-Jinx area contains the bulk of the Inferred Mineral Resources. The October-Jinx area contains deposits in both the B and C horizons of the Chilson formation. The A horizon is not represented in the October-Jinx area likely due to erosion of the upper parts of the Fall River formation. The B horizon is believed to be above the water table and a mixture of oxidized and reduced material. The C horizon is believed to be under the water table and consist of mostly reduced material. A summary of the October-Jinx area is shown in Table 14.6.

Table 14.7 - October-Jinx Inferred Mineral Resource

Uranium Inferred Mineral Resource Area	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU ₃ O ₈)	Tons (Millions)	Pounds (eU ₃ O ₈) (Millions)
Horizon A	0.25	-.	-.	-.---	-.---
Horizon B	0.25	7.0	0.080	.374	.600
Horizon C	0.25	9.6	0.081	1.210	1.969
Total Inferred Mineral Resource	0.25	8.8	0.081	1.584	2.569

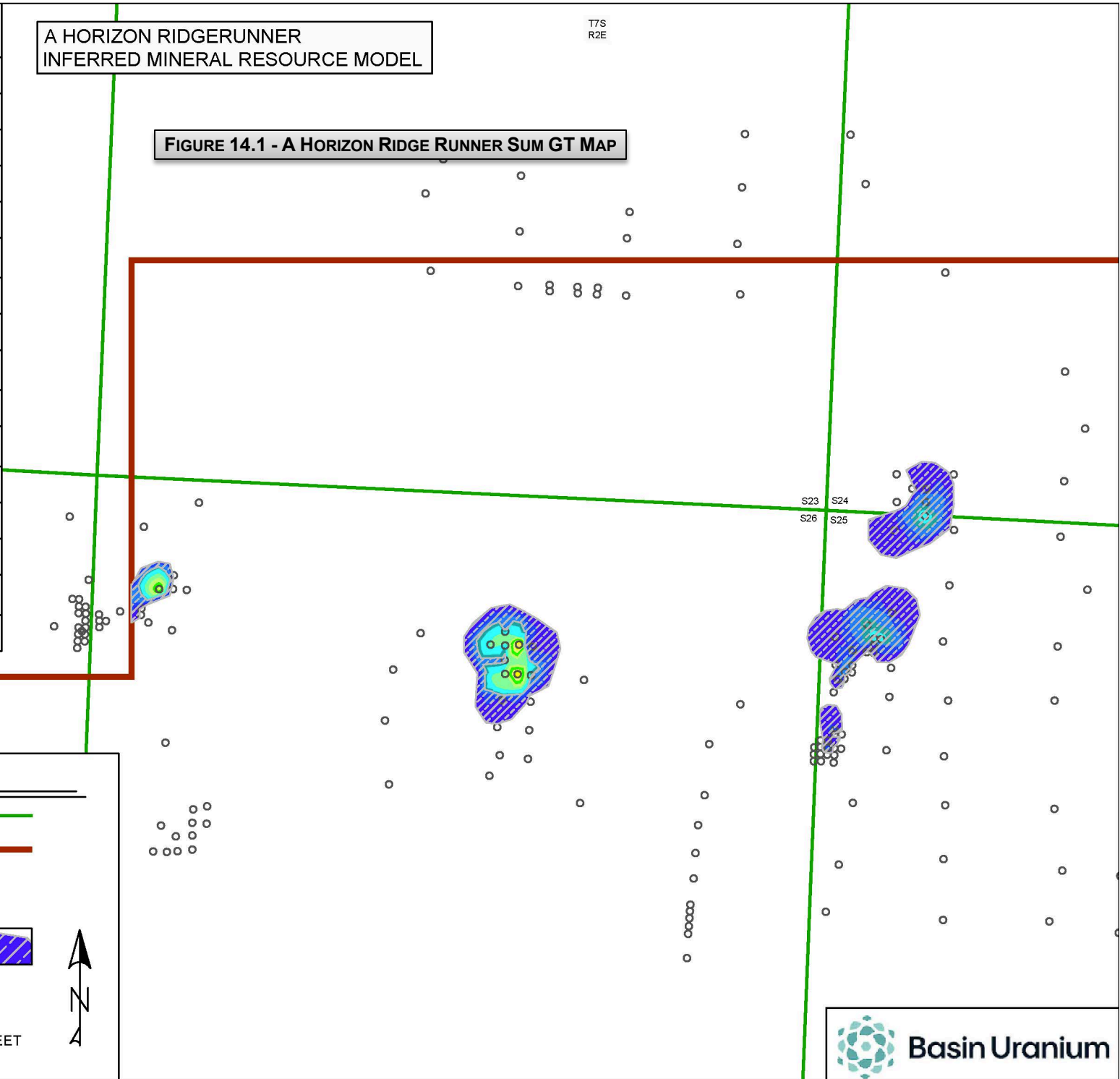
***All numbers are rounded. Isolated areas of mineralization removed from probable economic extraction.*

GT Range Table		
Minimum GT	Maximum GT	Color
0.10	0.15	Dark Blue
0.15	0.20	Blue
0.20	0.25	Light Blue
0.25	0.30	Teal
0.30	0.40	Cyan
0.40	0.50	Light Green
0.50	0.60	Green
0.60	0.70	Bright Green
0.70	0.80	Yellow-Green
0.80	0.90	Yellow
0.90	1.00	Orange
1.00	2.00	Dark Orange
2.00	3.00	Pink
3.00	5.00	Magenta
5.00	6.00	Red


A HORIZON RIDGERUNNER
INFERRED MINERAL RESOURCE MODEL


T7S
R2E


FIGURE 14.1 - A HORIZON RIDGE RUNNER SUM GT MAP

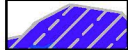


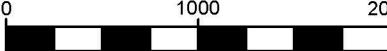
LEGEND


SECTION LINES 

PROPERTY BOUNDARY 

DRILL HOLE COLLAR 

AREAS NOT MEETING MINIMUM ECONOMIC REQUIREMENTS 

0 1000 2000 FEET 

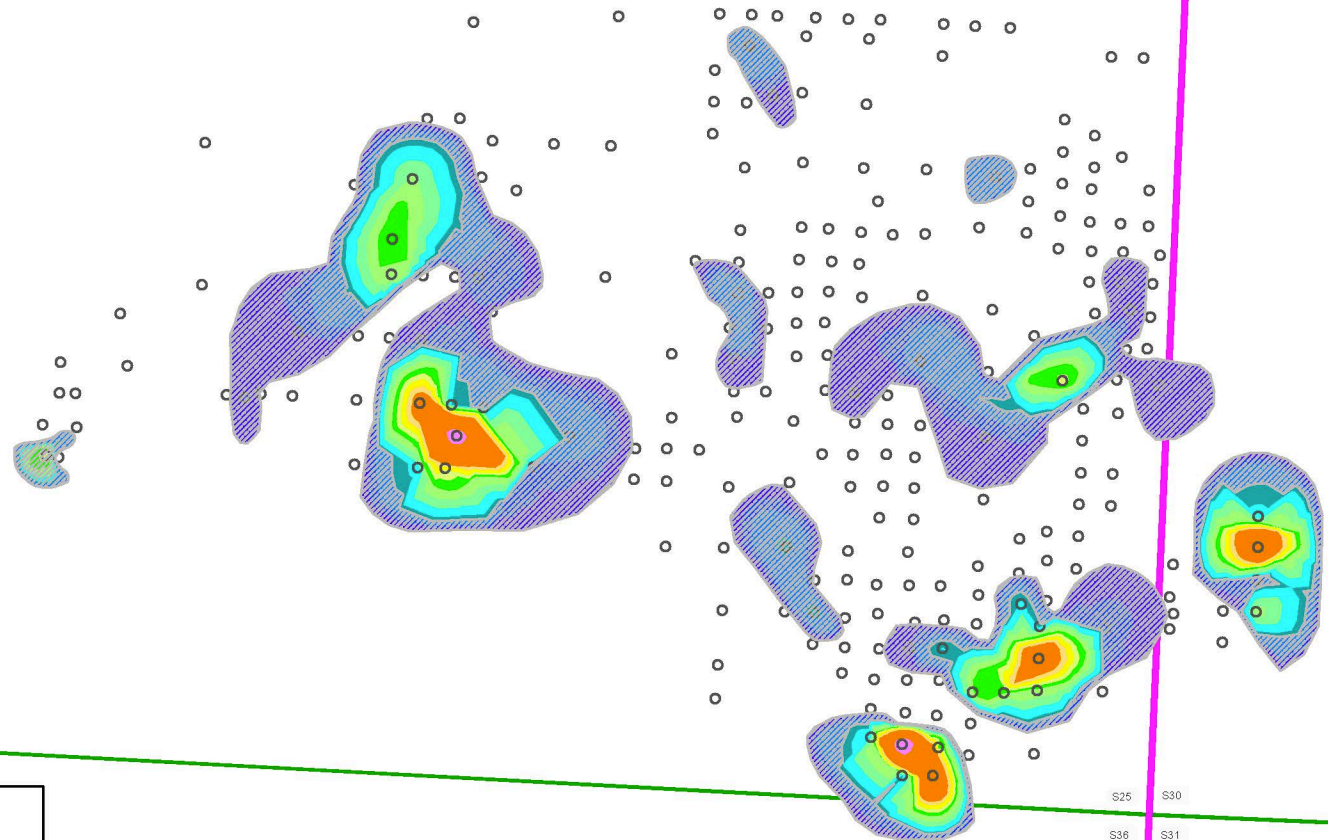


GT Range Table

Minimum GT	Maximum GT	Color
0.10	0.15	Dark Blue
0.15	0.20	Blue
0.20	0.25	Light Blue
0.25	0.30	Teal
0.30	0.40	Cyan
0.40	0.50	Light Green
0.50	0.60	Green
0.60	0.70	Bright Green
0.70	0.80	Yellow-Green
0.80	0.90	Yellow
0.90	1.00	Orange
1.00	2.00	Dark Orange
2.00	3.00	Pink
3.00	5.00	Magenta
5.00	6.00	Red

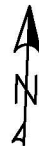
B HORIZON OCTOBER JINX
INFERRED MINERAL RESOURCE MODEL

FIGURE 14.2 - B HORIZON OCTOBER-JINX SUM GT MAP




LEGEND

- SECTION LINES
- TOWNSHIP AND RANGE LINES
- PROPERTY BOUNDARY
- DRILL HOLE COLLAR
- AREAS NOT MEETING MINIMUM ECONOMIC REQUIREMENTS



GT Range Table

Minimum GT	Maximum GT	Color
0.10	0.15	
0.15	0.20	
0.20	0.25	
0.25	0.30	
0.30	0.40	
0.40	0.50	
0.50	0.60	
0.60	0.70	
0.70	0.80	
0.80	0.90	
0.90	1.00	
1.00	2.00	
2.00	3.00	
3.00	5.00	
5.00	6.00	




B HORIZON VIKING INFERRED MINERAL RESOURCE MODEL

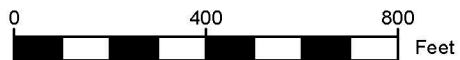
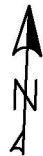
S27 S26

FIGURE 14.3 - B HORIZON VIKING SUM GT MAP



LEGEND

- SECTION LINES 
- PROPERTY BOUNDARY 
- DRILL HOLE COLLAR 
- AREAS NOT MEETING MINIMUM ECONOMIC REQUIREMENTS 



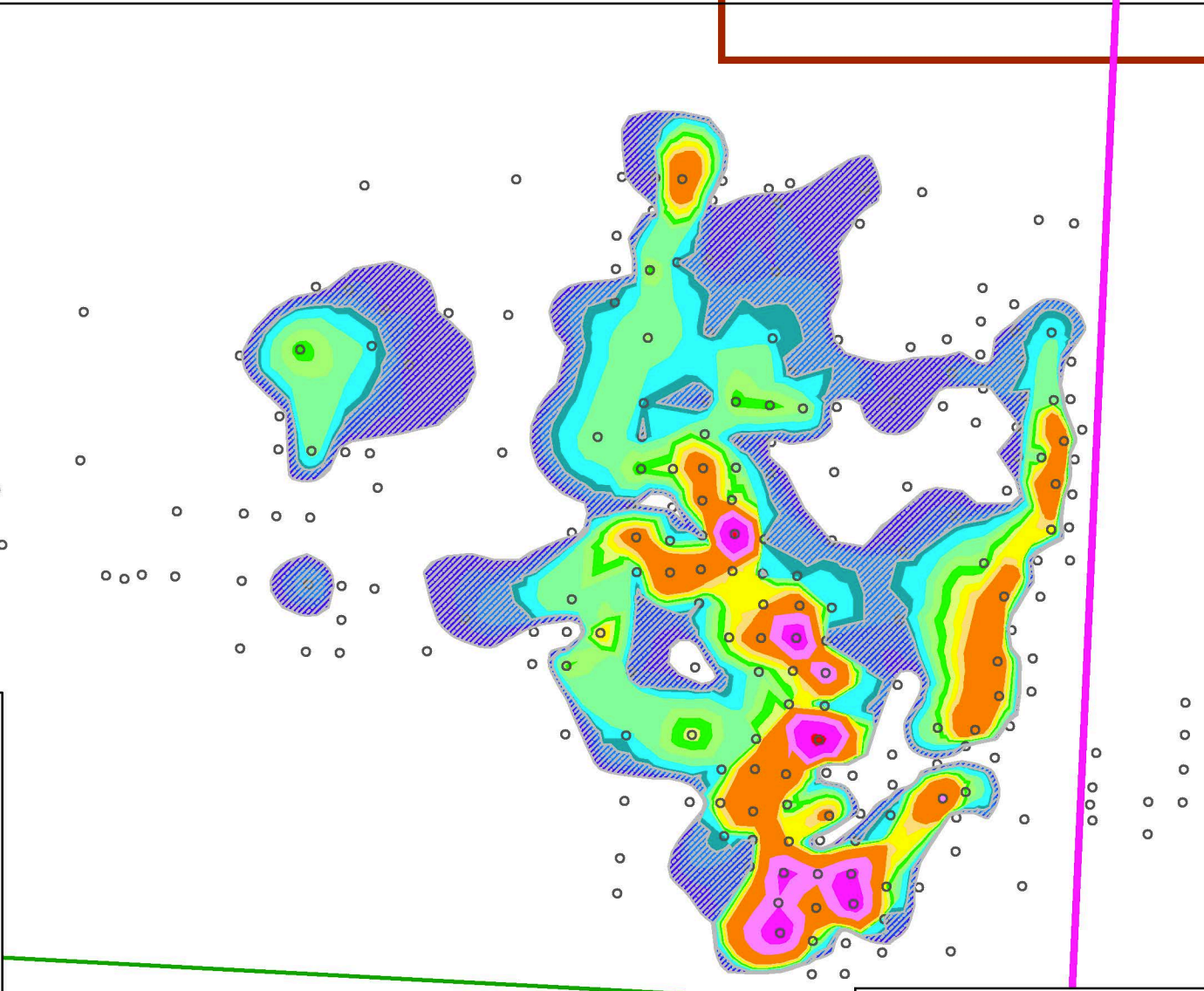
Sum GT Range Table		
Minimum GT	Maximum GT	Color
0.10	0.15	Dark Purple
0.15	0.20	Blue
0.20	0.25	Light Blue
0.25	0.30	Teal
0.30	0.40	Cyan
0.40	0.50	Light Green
0.50	0.60	Yellow-Green
0.60	0.70	Green
0.70	0.80	Light Yellow
0.80	0.90	Yellow
0.90	1.00	Orange
1.00	2.00	Dark Orange
2.00	3.00	Pink
3.00	5.00	Magenta
5.00	6.00	Red

C HORIZON OCTOBER JINX
INFERRED MINERAL RESOURCE MODEL


FIGURE 14.4 - C HORIZON OCTOBER-JINX SUM GT MAP


T7S
R2E
S25


T7S
R3E
S30




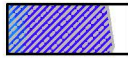
LEGEND

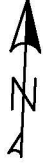
SECTION LINES 

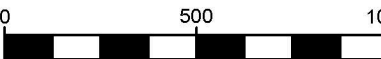
TOWNSHIP AND RANGE LINES 

PROPERTY BOUNDARY 

DRILL HOLE COLLAR 

AREAS NOT MEETING MINIMUM ECONOMIC REQUIREMENTS 



0 500 1000 Feet 

Sum GT Range Table

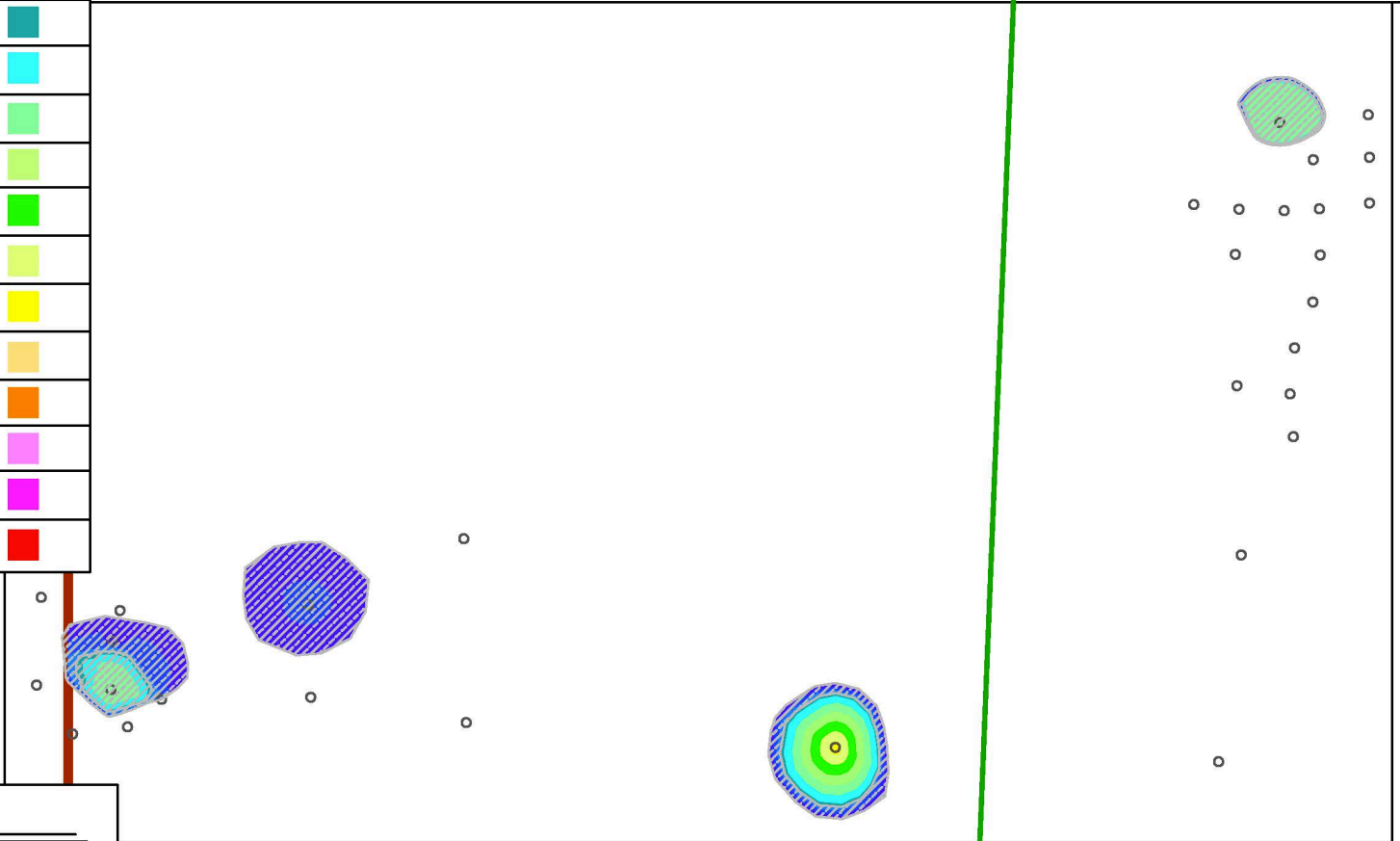
Minimum GT	Maximum GT	Color
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0.15	0.20	Blue
0.20	0.25	Light Blue
0.25	0.30	Teal
0.30	0.40	Cyan
0.40	0.50	Light Green
0.50	0.60	Yellow-Green
0.60	0.70	Bright Green
0.70	0.80	Light Yellow
0.80	0.90	Yellow
0.90	1.00	Orange
1.00	2.00	Dark Orange
2.00	3.00	Pink
3.00	5.00	Magenta
5.00	6.00	Red

C HORIZON VIKING
INFERRED MINERAL RESOURCE MODEL

T7S
R2E

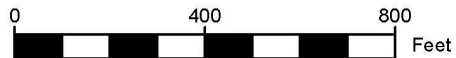
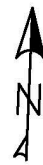
S27 S26

FIGURE 14.5 - C HORIZON VIKING SUM GT MAP



LEGEND

- SECTION LINES
- PROPERTY BOUNDARY
- DRILL HOLE COLLAR
- AREAS NOT MEETING MINIMUM ECONOMIC REQUIREMENTS



15.0 Mineral Reserve Estimates

This section is not applicable.

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16.0 Mining Methods

This section is not applicable.

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17.0 Recovery Methods

This section is not applicable.

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18.0 Project Infrastructure

This section is not applicable.

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19.0 Market Studies and Contracts

This section is not applicable.

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20.0 Environmental Studies, Permitting, and Social or Community Impact

This section is not applicable.

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21.0 Capital and Operating Costs

This section is not applicable.

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22.0 Economic Analysis

This section is not applicable.

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23.0 Adjacent Properties

Significant historic exploration, mine development, and recovery of uranium products has occurred in the Fall River Uranium District of South Dakota. Uranium activities in the area date back to as early as the late 1950s. Current interest in the area is being spurred on by elevated uranium oxide spots and long-term pricing in the market. The Dewey Burdock project is within 15 miles of the Chord Uranium Project and is also hosted within the Lakota formation.

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24.0 Other Relevant Data and Information

24.1 Exploration Targets

The Inferred Mineralized Resource areas have the reasonable possibility of connectivity between them along trends within the same fluvial sands of the Inyan Kara group. These broad trends have been projected to connect the drilling in the Viking Area to the Ridge Runner, the Ridge Runner to the October-Jinx, and Southwest of October Jinx. This exploration target trend ranges in width, thickness, and grade to establish a range of values for the possible mineral content of the exploration target trend. These trends currently have insufficient data upon which to make any CIM compliant resource estimate and are conceptual in nature. Further exploration will need to be performed in these areas to test them for mineralization. No guarantee is made that any future resource will be delineated by future exploration of these areas.

The low range scenario is based on the sand horizon with the lowest average grade for the 0.1 GT cutoff. In this case it was based on the average grade for the A horizon at the 0.1 GT cutoff. The lbs of uranium was divided by square footage of the total inferred resource zone to estimate a lbs of uranium per square foot. The calculated estimate value for the low range scenario is 0.258 lbs of uranium per square foot. The areas of the exploration target were determined by areas lacking in drill hole coverage between the inferred resource areas. The measured exploration target areas were then multiplied with the calculated estimated lbs of uranium per square foot ratio for the low range scenario.

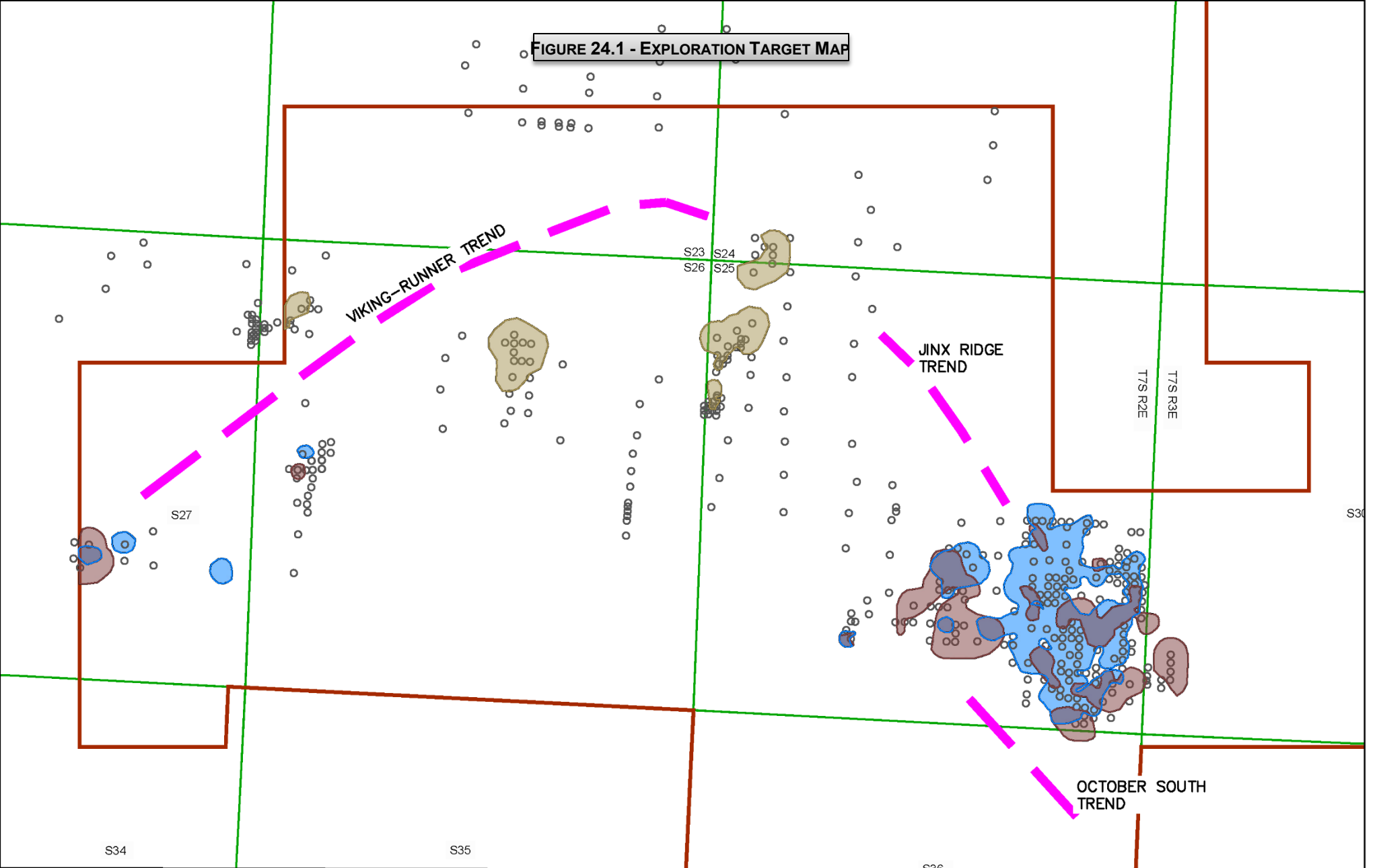
The high range scenario is based on the sand horizon with the highest average grade for the 0.1 GT cutoff. In this case it was based on the average grade for the C horizon at the 0.1 GT cutoff. The lbs of uranium was divided by square footage of the total inferred resource zone to estimate a lbs of uranium per square foot. The calculated estimate value for the high range scenario is 0.768 lbs of uranium per square foot. The areas of the exploration target are the same areas as in the low range scenario. The measured exploration target areas were multiplied with the calculated estimated lbs of uranium per square foot ratio for the high range scenario.

Table 24.1 - Exploration Target Range Summary

Exploration Target Trend	Trend Length (ft)	Trend Width (ft)	AVG. Thickness Range (ft)	AVG. Grade Range (%eU ₃ O ₈)	Tons Range (Millions)	Pounds (e U ₃ O ₈) Range (Millions)
Viking-Runner	7,650	400	3.6 - 7.3	0.056 – 0.074	0.730 - 1.635	0.813 – 2.419
Jinx Ridge	2,480	400	3.6 – 7.3	0.056 – 0.074	0.249 – 0.559	0.278 – 0.826
October South	1,860	600	3.6 – 7.3	0.056 – 0.074	0.298 – 0.668	0.332 – 0.989
Total	11,990		3.6 – 7.3	0.056 – 0.074	1.278 – 2.862	1.422 – 4.234

These trends are conceptual in nature. Further exploration is needed to test them for mineralization. No guarantee is made that any future resource will be delineated by future exploration.

FIGURE 24.1 - EXPLORATION TARGET MAP



LEGEND

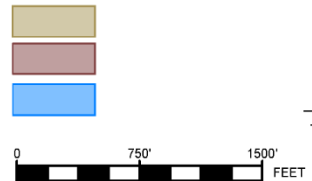
SECTION LINES

PROPERTY BOUNDARY

EXPLORATION TARGET TREND

DRILL HOLE LOCATION

- A HORIZON - 0.1 GT MODEL
- B HORIZON - 0.1 GT MODEL
- - - C HORIZON - 0.1 GT MODEL
-



ALL HORIZONS & EXPLORATION TARGET
INFERRED MINERAL RESOURCE MODEL

CHORD URANIUM PROJECT
Fall River County, SD



25.0 Interpretation and Conclusions

Complete drill hole data was available for 431 drill holes. Mineral resources were estimated using the Grade times Thickness (GT) Contour method. The primary data modeled are equivalent uranium values as determined by downhole geophysical logging and reported as % eU₃O₈. A radiometric disequilibrium factor of 1 was used.

While no formal economic evaluation, Preliminary Economic Assessment (PEA), Preliminary Feasibility study (PFS), or Feasibility Study (FS) has been completed and while mineral resources are not mineral reserves and do not have demonstrated economic viability, reasonable prospects for future economic extraction were applied to the mineral resource estimate herein through consideration of grade and GT cutoffs and by screening out areas of isolated mineralization which would not support the cost of conventional mining under current and reasonably foreseeable conditions.

The drill spacing in most areas is sufficient to support a higher level of mineral resource classification, however, due to the historical nature of the drill data with no recent confirmatory drilling, the uranium mineral resource estimates reported in this report are considered Inferred Mineral Resources. Estimated Inferred Mineral resources for uranium are reported at a GT cutoff of 0.25 with a minimum intercept grade of 0.02% eU₃O₈ as summarized on Table 25.1 which follows.

The data available for this report is considered by the author to be accurate and reliable for the purposes of estimating Inferred Mineral Resources and exploration targets for the Project. Mineralization within the project is considered to have a reasonable prospect for economic extraction via conventional underground mining methods as discussed in Section 14.

Table 25.1 - Inferred Mineral Resource Summary

Uranium Inferred Mineral Resource Area	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons (Millions)	Pounds (e U₃O₈) (Millions)
October-Jinx	0.25	8.8	0.081	1.584	2.569
Viking	0.25	6.0	0.082	.050	.082
Ridge Runner	0.25	5.9	0.069	.075	.103
Total Inferred Mineral Resource	0.25	8.5	.081	1.709	2.754

***All numbers are rounded. Isolated areas of mineralization removed for probable economic extraction.*

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.

The Fall River Uranium district is a past producer of approximately 250,000 tons of mineralized material. Mining in the project area was primarily limited to small sized open pit methods, and focused on the uppermost, oxidized mineral horizons within the Inyan Kara Group. The deeper mineral horizons, particularly with the October-Jinx area were left undeveloped but were strongly explored by Union Carbide Corporation in the late 1970's.

The Project does have some risks similar in nature to other mining projects in general, i.e., risks common to mining projects include but are not limited to:

- future commodity demand and pricing.
- environmental and political acceptance of the project.
- variance in capital and operating costs.
- mine and mineral processing recovery.
- changes in the US mining law of 1872 could affect Arcadia's mineral tenure.
- additional drilling may not increase mineral resources.

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26.0 Recommendations

The data available for this report is considered by the author to be accurate and reliable for the purposes of estimating Inferred Mineral Resources and exploration targets for the Project. Mineralization within the project is considered to have a reasonable prospect for economic extraction via conventional underground mining methods as discussed in Section 14. Mineral resources have been estimated in accordance with CIM standards and definitions and are summarized Table 1.1.

Data from two existing monitoring wells onsite indicates that the lower portion of the Chilson member lies within a saturated aquifer. The mineralized portion of this aquifer may prove to be potentially extractable by in-situ recovery (ISR) methods. However, at this time there is not enough data for the author to make a determination of the resource's amenability to ISR.

The vertical distance of the water level above the mineralized zones is not sufficiently defined from the two existing monitoring wells drilled and reported on by Cohan in the mid 1980's. Additionally, the historic metallurgical testing only contemplated conventional heap and mill methods of extraction, not ISR.

A drilling program targeting the confirmation of the current resource would also provide data on the hydrogeology of the mineralized horizons and evaluate their potential for extraction by ISR methods. If the deposit or portions thereof are determined to be ISR amenable, similar grade and GT cut-offs as were applied to the current Inferred Resource would also be applicable. Section 14 provides additional details regarding the determination of cut-off grade, GT cut-off, and the assessment of reasonable prospects for eventual economic extraction of the mineral resource.

The recommended project development program, summarized in Section 26, includes collection of core samples from select areas across the project in a manner representative of the overall resource area as follows:

- Complete a drilling program of 15 conventional and 5 diamond drill core holes to update the current resource.
- Convert 4 drill holes into monitoring wells for aquifer testing and background sampling.
- Analyze the samples for bulk density and permeability.
- Analyze the samples for uranium, vanadium, and radium to evaluate disequilibrium and the ratio of vanadium to uranium.
- Complete bench scale testing of mechanical sorting of the mined material prior to mineral processing to upgrade the mined material.
- Complete bench scale metallurgical testing of the bulk sample for anticipated mill processing alternatives including conventional milling, vat, heap leaching and ISR.
- Completion of a PEA
- Total estimated expenditures of \$1,000,000 (US dollars)

Table 26.1 - Phase 1 Recommendations

Expense Category	Scope of Services	Estimated Cost
Conventional Drilling and Geophysical logging	Complete 15 drill holes representative of the mineralization across the project	\$150,000
Core Drilling and Geophysical Logging	Complete 5 core holes representative of the mineralization across the project	\$ 150,000
Monitoring Well Conversion and Aquifer Testing	Convert 4 core holes to 6-8 in diameter monitoring wells	\$150,000
Sample Assays	Chemical assays for uranium and other metals and constituents. Physical testing for porosity and permeability.	\$ 50,000
Test Mechanical Sorting	Mechanical sorting may include radiometric sorting or sizing of the mineralized material to upgrade the mineralized material.	\$ 50,000
Metallurgical Testing	Metallurgical testing including bench scale to optimize leach parameters followed by bulk testing of material based for including conventional milling, vat and heap leaching and ISR.	\$ 250,000
PEA	Complete a PEA including preliminary mine and mill designs and cost estimation.	\$ 200,000
Total Estimated Cost		\$ 1,000,000

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Trading Economics: <https://tradingeconomics.com/commodity/uranium> [Accessed 4/12/24]

U.S. NRC Facility Locator: <https://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/dewey-burdock> [Accessed 3/8/24]

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28.0 Signature Page and Certification of Qualified Person

SIGANTURE PAGE AND CERTIFICATE OF QUALIFIED PERSON

CARL DAVID WARREN

I, Carl David Warren, P.E., P.G., do hereby certify that:

1. I am a Senior Engineer for BRS Engineering, located in Riverton, Wyoming, at 1130 Major Ave.
2. I am the principal author of the technical report titled “Chord Uranium Project, Fall River County, South Dakota, USA, NI 43-101 Mineral Resource”, dated May 7, 2024, (the “Technical Report”).
3. I graduated with a Bachelor of Science in Geological Engineering from the Colorado School of Mines in 2009 and a Master of Science Degree in Nuclear Engineering from the Colorado School of Mines in 2013. I am Licensed Professional Engineer in the State of Wyoming.
4. I have worked as both an engineer and a geologist for a cumulative 15 years and have over 18 years of working experience in the mining industry. My relevant work experience includes underground mining, ore control, geological mapping, core logging and data management, uranium exploration, and uranium resource modeling.
5. I visited the site on April 17 and 18, 2024.
6. I am responsible for all sections of this Technical Report.
7. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101. I have no financial interest in the property and am fully independent of Basin Uranium. I hold no stock, options or have any other form of financial connection to Basin Uranium. Basin Uranium is but one of many clients for whom I consult.
8. I do not have prior work experience on the project.
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.

May 7, 2024

“Original Signed and Sealed”

Carl David Warren P.E. P.G.