

**THE SHOOTARING CANYON MILL AND TRIBUTARY
MINES, UTAH AND COLORADO, USA
PRELIMINARY ECONOMIC ASSESSMENT
NATIONAL INSTRUMENT 43-101**



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Section 1: Summary

This Technical Report was prepared for Anfield Energy Inc. (Anfield) by Terence (Terry) McNulty, P.E., D. Sc., of T.P. McNulty and Associates Inc. (author) with contributions by Douglas Beahm, P.E., P.G., of BRS Engineering to provide a Preliminary Economic Assessment (PEA) of the project based on the reactivation of the Shootaring Canyon mill with feed from the Velvet Wood and Slick Rock mines. The project is planned to recover two mineral products, uranium and vanadium oxides based on the Mineral Resource estimates for the project.

The effective date of this report is May 4, 2026. The effective date of the resource estimation and cost modeling is May 2, 2026.

Dr. McNulty and Mr. Beahm are “qualified persons” as defined by CIM's National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) and as described in Section 28 (Certificates and Signatures). Dr. McNulty is independent of Anfield in accordance with the application of Section 1.5 of NI 43-101. Mr. Beahm who is both the President of BRS Inc. and Chief Operating Officer of Anfield Energy is not independent.

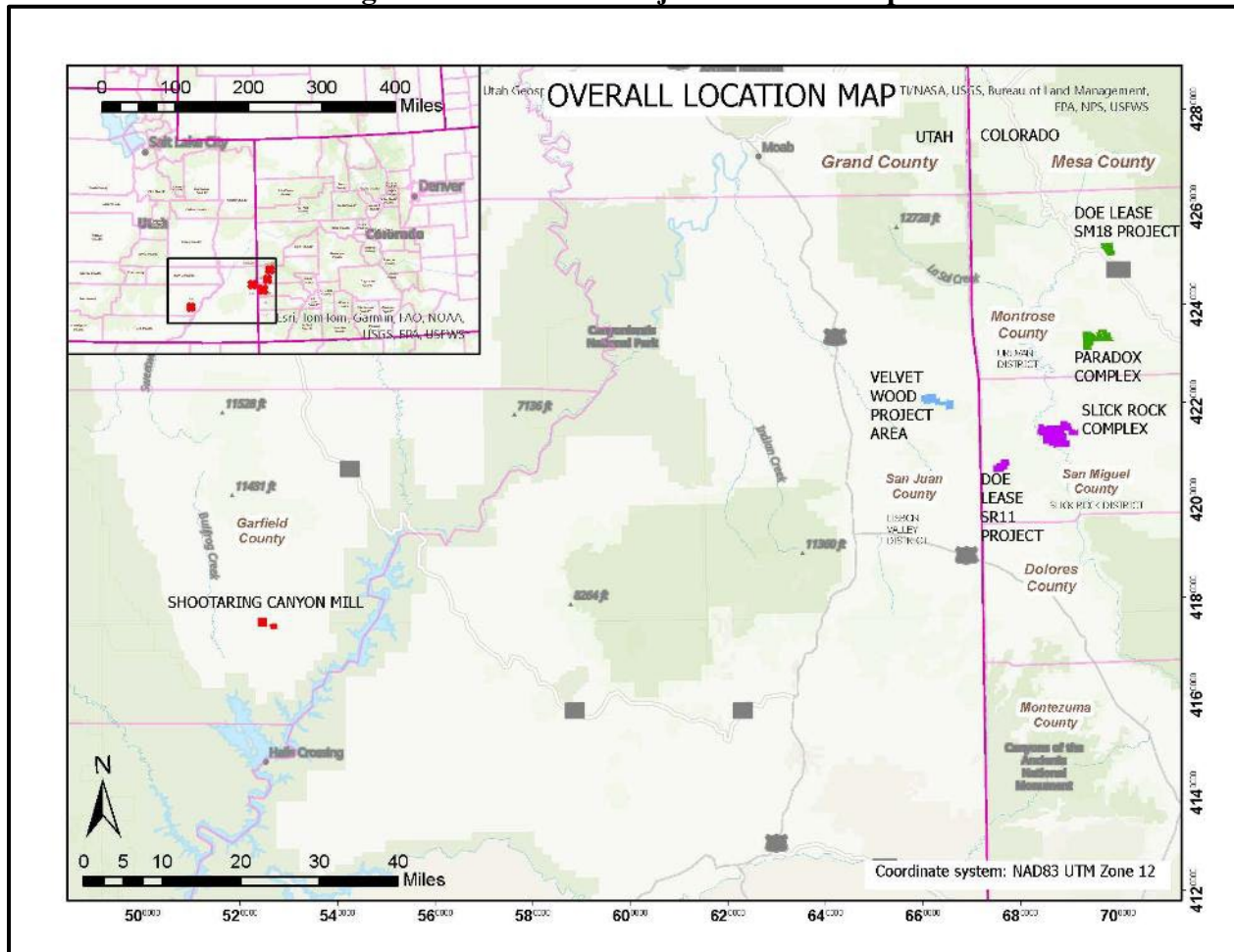
Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

1.1 Project Overview

The properties addressed in this report can be divided into four districts based on location: 1) The Lisbon Valley District is in San Juan County, Utah and contains the Velvet-Wood Project; 2) The Slick Rock District is in San Miguel County, Colorado and contains both the Slick Rock Complex and the SR-11 Project; 3) The Uravan District in Montrose County, Colorado which encompasses the Paradox Complex and the SM-18 Project; and 4) The Henry Mountain District, Utah, contains the Shootaring Canyon Mill. The overall location of these districts is shown in Figure 1.1.1

For the purposes of this PEA, it is assumed that mineral processing will take place at Anfield's mineral processing facility, the Shootaring Canyon Mill. Multiple mines from each of the major districts are planned to operate simultaneously providing a feed stock of mined material to the Shootaring Canyon Mill over a currently planned period of 15 years.

Figure 1.1.1 Overall Project Location Map



1.2 Project Description and Ownership

1.2.1 Lisbon Valley District Description and Ownership

The Velvet -Wood Project area is located in San Juan County, Utah in the Lisbon Valley District approximately 31 miles from Monticello, Utah. In total the mineral holdings within the Project area comprise approximately 2,140 acres. Project ownership includes unpatented mining claims and a State of Utah mineral lease related to the Velvet and Wood mine areas as shown on Figure 4.1.1.

1.2.2 Slick Rock District Description and Ownership

The Slick Rock Complex is located in San Miguel County, Southwest Colorado, approximately 24 miles north of the town of Dove Creek and east of the Dolores River. The Slick Rock Complex includes unpatented mining lode claims and Department of Energy (DOE) mineral leases SR-13 and SR-13A which are contiguous and comprise approximately 6,473 acres as shown on Figure 4.2.1.

DOE mineral lease SR-11 is also located in the Slick Rock District but is geographically separated from the Slick Rock Complex. SR-11 comprises 1,303 acres as shown on Figure 4.2.2. The SR-11

lease has had past mining and has a previous mining permit through Colorado Division of Reclamation, Mining and Safety (DRMS). Future mining would require a new mine permit.

1.2.3 Uravan District Description and Ownership

The Uravan District is located in Montrose County, Colorado within 20 miles of Naturita, Colorado. Included in the PEA within the district are the Paradox Mine Complex, JD-6, JD-7, JD-8, JD-9, and the Uravan Mine Complex, SM-18. Mineral tenure consists of DOE leases and adjacent mining claims as described in Section 4. Refer to Figure 4.3.1 and Figure 4.3.2, respectively for location and mineral ownership.

Each of these leases has had past mining and has a previous mining permit through DRMS. Future mining would require a new mine permit. A new mine permit for the JD-8 mine has been filed with DRMS and DOE and is currently being reviewed and is open to public comment.

1.2.4 Henry Mountain District Description and Ownership

The Shootaring Canyon Mill is located in Garfield County, Utah approximately 52 miles south of Hanksville, Utah. The Shootaring Canyon Mill is located on lands which are split estate, with the surface estate being fee land held by Anfield, and the mineral estate being Utah State Trust Land held by Anfield. Surface ownership and mineral fee lands as shown on Figure 4.4.1.

1.3 History

1.3.1 Lisbon Valley District, Velvet-Wood Mine History

The Velvet-Wood mineral holdings have gone through a succession of ownership. Anfield purchased the Velvet-Wood mine along with other conventional uranium assets from Uranium One including the Velvet-Wood project in August 2015.

The Velvet-Wood Uranium Project, as discussed herein, consists of two areas which were historically held by separate companies. The Velvet area was held by Atlas Minerals who mined portions of the mineralized material. The Wood area was held during a similar time frame by Uranerz. Uranerz drilled 120 rotary holes from 1985 through 1991 and outlined the current Wood mineral resource area (Chenoweth, 1990). The Wood area described in this report was drilled but not mined.

Refer to Section 6 for further historic details.

1.3.2 Slick Rock District History

Surficial to shallow uranium/vanadium mineralization has been known in the Slick Rock area since the early 1900s (then called the McIntyre district). First mined for radium and minor uranium until 1923, numerous companies sporadically operated small-scale mining and processing facilities along the Dolores River. In 1931, a mill was constructed by Shattuck Chemical Co. to process vanadium ore. In 1944, the area was worked by the Union Mines Development Corp. for uranium/vanadium ore.

By December of 1955, Union Carbide Nuclear Corp. (UCNC) had drilled out a sufficient resource on the north side of Burro Canyon and began sinking three shafts. In December 1957, the shaft

sinking was complete on the Burro No. 3, 5, and 7 mines to total depths of 408 feet, 414 feet, and 474 feet, respectively. In the same year, initial ore shipments were made to UCNC's concentrating mill at Slick Rock.

Anfield Energy, Inc. entered into a definitive agreement to acquire Slick Rock Property from Uranium Energy Corp. in an asset swap transaction on April 21, 2022.

Refer to Section 6 for further historic details.

1.3.3 DOE Leases History

Anfield controls 21 of the 29 active DOE Lease tracts. Anfield refers to the DOE leases as mine complexes named by geographic areas as summarized in Table 6.1.1. The locations of the DOE Lease are shown on Figure 6.1.1

For completeness and due to their commonality, a general discussion of all Anfield's DOE leases is included herein. Of the 21 DOE Leases held by Anfield, 6 are included in the PEA as mineral resources including:

- Paradox Mine Complex; JD-6, JD-7, JD-8, JD-9
- Uravan Mine Complex; SM-18
- Slick Rock Mine Complex; SR-11

Specific details and status of these leases are provided in the relevant sections of this report.

Nine of the leases were obtained by Cotter Corporation who extensively explored them by surface drilling methods. Mineralized deposits were delineated, and underground mining was completed on each of the leases from the late 1970s to the early 2000s. The JD-7 Lease also underwent surface mining, with preliminary stripping of an open-pit completed to within 100 feet of the top of mineralization. In addition, 12 of the leases were obtained by Golden Eagle Mining (GEMI) and Golden Eagle Uranium (GEU). These leases, like those controlled by Cotter, had historic underground mine production. The current 10-year lease agreements were executed in 2020.

Anfield purchased the Cotter Leases in March 2019 and the GEU/GEMI leases in January 2024.

Refer to Section 6 for further historic details.

1.3.4 Shootaring Canyon Mill History

The Shootaring Canyon Mill was licensed and constructed by Plateau Resources and has had a succession of owners including US Energy and Uranium One prior to Anfield's acquisition. The mill was constructed by Plateau Resources and operated briefly in 1982. The mill has not been decommissioned and has been under care and maintenance since cessation of operations.

Anfield purchased the Shootaring Canyon mill along with other conventional uranium assets from Uranium One including the Velvet-Wood project in August 2015.

1.4 Regulatory Status

The Shootaring Canyon Mill has an existing radioactive source materials license. The license was originally issued by the US Nuclear Regulatory Commission (USNRC). When Utah became an agreement state, it assumed regulatory jurisdiction over the license through the Utah Division of Waste Management and Radiation Control (DWMRC). Anfield submitted a license renewal application to convert the existing license from care-and-maintenance to operational status on April 5, 2024. Anfield has been conducting by-monthly meetings with DWMRC during the license renewal process. DWMRC completed its initial review of the license amendment and provided its Requests for Additional Information (RAIs). Anfield completed responses to all RAIs in April 2026 and they are under review by DWMRC. As additional questions arise, they are discussed at the bi-monthly meetings. It is anticipated that the licensing process, including a public comment period, will be completed by Q4 2026.

Permitting for Velvet-Wood mining operations required various approvals from the State of Utah Division of Oil, Gas and Mining (DOGM) and the US Bureau of Land Management (BLM). The Velvet-Wood mines have been permitted through the State of Utah and BLM. The mine portal at Velvet has been opened and work is progressing to rehabilitate the decline.

Exploration and mining activities for the mining claims of the Slick Rock Complex are administrated by the Durango, Colorado BLM field office. Exploration drilling and associated activities require an exploration permit and a reclamation bond that must be posted with the State of Colorado, Department of Natural Resources Division of Reclamation, Mining, and Safety. At the time of the report, Anfield does possess an exploration drilling permit (NOI) with the Colorado DRMS. Future mining would require new mine permits.

DOE leases included in the PEA within the Uravan District include the Paradox Mine Complex, (JD-6, JD-7, JD-8, and JD-9) on Monogram Mesa, and the SM-18 Project adjacent to Uravan. Each of these leases has had past mining and has a previous mining permit through DRMS. Future mining would require new mine permits. A new mine permit for the JD-8 mine has been filed with DRMS and DOE and has been deemed complete.

1.5 Geology and Mineralization

1.5.1 Lisbon Valley District Geology

The Velvet-Wood project is located in the Lisbon Valley uranium district, which was the largest uranium producing district in Utah. The Lisbon Valley or Big Indian Wash District produced 5 times as much uranium as any other district in Utah from the period of 1948 through 1988, totaling some 77,913,378 pounds U_3O_8 at an average grade of 0.30 % U_3O_8 (Chenoweth, 1990).

The Lisbon Valley Anticline along which the Velvet-Wood project is located is the most productive uranium producing area in Utah (Chenoweth, 1990). Among the rock units exposed along the Lisbon Valley Anticline, those that contain documented uranium mineralization are the Permian Cutler Formation, the Triassic Chinle Formation (Moss Back Member) and the Morrison Formation (Salt Wash Member).

Uranium mineralization in the Velvet and Wood areas is found in sandstone units within the Cutler Formation. The sandstones are fluvial arkose that has been bleached. The mineral deposits are irregular tabular bodies (Denis, 1982) located at the base, at the top, or close to pinch-outs of the

sandstone bodies (Campbell and Mallory, 1979). The major producing zone in the Cutler occurs near the unconformity between the Cutler and the overlying Chinle Formation.

1.5.2 Slick Rock District Geology

The Slick Rock District is located in the proximal Disappointment Valley syncline. The syncline plunges gently to the southeast and lies between the collapsed Gypsum Valley anticline to the northeast and the Dolores anticline to the southwest. Sedimentary rocks that outcrop in the Slick Rock District range from the Permian Cutler Formation up to the late Cretaceous Mancos Formation with a maximum thickness of approximately 4,700 feet (Shawe, 2011).

Uranium/vanadium mineralization is hosted by the Upper Jurassic Morrison Formation and is typical of Colorado Plateau-style uranium/vanadium deposits. Past production came from the upper or third-rim sandstone of the Salt Wash member of the Morrison Formation. This is the target host for uranium/vanadium mineralization within Anfield's Slick Rock project area.

Uranium and vanadium-bearing minerals occur as fine-grained coatings in detrital grains filling pore spaces between the sand grains and replacing carbonaceous material and some detrital grains (Weeks et al., 1956). The primary uranium minerals are uraninite (UO_2) with minor amounts of coffinite (USiO_4OH). Montroseite (VOOH) is the primary vanadium mineral, along with vanadium clays and hydromica. Metal sulfides occur in trace amounts. Mineralization occurs within tabular to lenticular bodies that are peneconcordant within sedimentary bedding. Mineralization may also cut across sedimentary bedding to form irregular shapes.

1.5.3 Uravan District Geology

The uranium and vanadium mineralization in the Uravan District is hosted within the Jurassic Morrison Formation. The Morrison Formation is separated into two members: the upper Brushy Basin member and the lower Salt Wash member. The Brushy Basin member consists of reddish-brown and greenish-gray mudstone, siltstone, sandstone, and conglomerate. The Salt Wash member is the primary host for known mineralization of uranium and vanadium in the district and is composed of fluvial sandstone and mudstone averaging 350 feet thick. The Salt Wash member is further sub-divided into three parts, the upper, middle, and lower units. The upper and lower units are composed of nearly continuous layers of sandstone interbedded with thin layers of mudstone, and the middle unit is primarily mudstone and siltstone, with discontinuous lenses of sandstone.

The uranium and vanadium bearing minerals occur as fine-grained coatings in detrital grains. These minerals fill pore spaces between the grains and replace carbonaceous material and some detrital grains. The primary uranium mineral is uraninite, with minor amounts of coffinite. Montroseite is the primary vanadium mineral, along with vanadium clays and hydromica.

1.6 Exploration and Drilling Status

1.6.1 Velvet-Wood Exploration and Drilling

Drill data is available in the Velvet-Wood area for a total of 325 drill holes. Of this total, 268 drill holes are of a historic nature and 57 were completed by Uranium One in the 2007/2008 time period. Relevant data including geophysical and lithological logs are available for both recent and historic drilling. 46% of the drill holes encountered uranium mineralization in excess of the recommended

cutoff criteria, an additional 41% showed low grade to trace mineralization, and the remaining drill holes were barren and/or not completed to the host horizon.

1.6.2 Slick Rock Exploration and Drilling

Anfield possesses drilling data from previous operators for the Slick Rock Claim Group as well as the SR-13, SR-13A, and SR-11 lease tracts. Anfield completed a verification drilling project at the Slick Rock Claim Group in 2024.

A total of 312 drill holes were available for the Slick Rock Project Area. All of the drill holes are considered historic. Of this total, 27 holes have location data but no additional data associated with them. These 27 holes were excluded from the resource modeling. The remaining 285 holes contain 346 unique intercepts.

Anfield Energy Inc. completed a 14-hole, 14,100-foot verification drilling program at its Slick Rock uranium and vanadium project in San Miguel County, Colorado, between September 22 and November 12, 2024. A discussion of results and summary of the individual drill intercepts and accompanying discussion are contained in a press release dated January 29, 2025, available on Anfield's website.

1.6.3 Uravan District Exploration and Drilling

Anfield possesses a large database of drilling data generated by the previous operators of the US DOE Lease projects as discussed in Section 10.

In 2025, A total of 22 holes including 4 core holes were drilled on 20 locations in the JD-7 Pit floor and in proximity to historic drill hole collar coordinates. A discussion of results and summary of the individual drill intercepts and accompanying discussion are contained in a press release dated October 21, 2025, available on Anfield's website.

1.7 Mineral Resource Summary

This report summarizes mineral resource for the Velvet-Wood and Slick Rock mines with mineral processing at common facility, the Shootaring Canyon mill. A detailed description of the mineral resource estimation methodology and results is provided in Section 14. Mineral resources have been estimated for both uranium and vanadium as the mineralization occurs primarily as uranyl-vanadates, and the refurbishment of the Shootaring Canyon mill will include a vanadium circuit to recover the vanadium as a co-product with the uranium.

This report summarizes mineral resources for the Lisbon Valley, Slick Rock, and Uravan districts and all their associated properties with resources. Each mine developed from these discussed resources would share a common facility, the Shootaring Canyon Mill. The total estimated in situ uranium mineral resources are summarized in Tables 1.7.1. The associated in situ vanadium mineral resources which will be mined as a co-product are summarized in Table 1.7.2. In addition, Anfield has previously mined uranium stockpiles as summarized in Table 1.7.3.

Table 1.7.1 In situ Uranium Mineral Resource Summary*

Area/Classification	GT Cutoff	Pounds x 1,000 eU ₃ O ₈	Tons x 1,000	Avg Grade %eU ₃ O ₈
Lisbon Valley District / Measured and Indicated	0.5	4,324	629	0.34
Slick Rock District / Indicated	0.4	815	247	0.16
Uravan District / Indicated	0.5	4,667	1,061	0.22
TOTAL MEASURED AND INDICATED MINERAL RESOURCE URANIUM	0.4-0.5	9,806	1,937	0.25
Lisbon Valley District / Inferred	0.5	544	80	0.34
Slick Rock District / Inferred	0.4	9,938	2,418	0.21
Uravan / Inferred	0.4	755	179	0.21
TOTAL INFERRED MINERAL RESOURCE URANIUM	0.4-0.5	11,237	2,677	0.21

*Numbers rounded

Table 1.7.2 In situ Vanadium Mineral Resource Summary*

Area/Classification	GT cutoff (Based on Uranium)	V:U Ratio	Pounds x 1,000 V ₂ O ₅	Tons X 1,000	Avg Grade %V ₂ O ₅
Lisbon Valley District / Inferred	0.5	1.4	6,826	716	0.48
Slick Rock District / Inferred	0.4	6.0	64,518	2,665	1.21
Uravan / Inferred	0.4-0.5	5.0	27,112	1,239	1.09
TOTAL INFERRED MINERAL RESOURCE VANADIUM	0.4-0.5	1.4-6	98,456	4,620	1.1

*Numbers rounded

Table 1.7.3 Stockpile Uranium Mineral Resource Summary*

Area/Classification	GT Cutoff	Pounds x 1,000 eU ₃ O ₈	Tons x 1,000	Avg Grade %eU ₃ O ₈
Stockpile/Measured Mineral Resource	NA	370	126	0.15

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein.

Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

1.8 Preliminary Economic Assessment

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

For the purposes of this PEA, the Shootaring Canyon Mill would be initially refurbished to its original 750 tons per day (TPD) capacity and ramped up to a capacity of 1,000 TPD by the end of year 3 to its planned license renewal capacity. A separate vanadium recovery circuit would be added following the uranium refurbishment and depending on vanadium market conditions. The PEA considers initial mine feed from the existing Velvet mine decline, a new shaft at the Wood mine, and two production shafts at Slick Rock. When the mineral resources are mined out at the Wood mine, additional mines will be added from DOE leases in the Slick Rock, Uravan and Paradox mine complexes. Given the selective nature of the mining methods and the geometry of mineralization, 3-4 producing mines are needed to meet the mill tonnage capacity. Additional mill feed could be sourced as captive feed from other Anfield mineral resource holdings in the Colorado Plateau or from mineral resource holdings of others under toll milling agreements.

All costs are estimated in constant 2026 US Dollars. Operating (OPEX) and Capital (CAPEX) costs reflect a full and complete operating cost going forward including all pre-production costs, permitting costs, mine costs, and complete reclamation and closure costs for of the mine and mineral processing facility. CAPEX does not include sunk costs or acquisition costs.

Commodity prices used in this PEA are discussed in Section 19 and are \$100 per pound for uranium oxide and \$9 per pound for vanadium pentoxide.

Table 1.8.1 summarizes the estimated internal rate of return (IRR) and net present value (NPV) for the base case at a commodity price of \$100/pound uranium oxide, a commodity price of \$9/pound for vanadium oxide, and a discount rate of 8%.

Table 1.8.1 Base Case Economic Criterion (\$ x 1,000)

Pre-Income Tax		Post-Income Tax	
IRR 106%	NPV @ 8% *\$606,000	IRR 97%	NPV @8% *\$533,000

* Rounded to million USD

Mining and mineral recovery methods are described in Sections 16 and 17, respectively. Capital and operating costs, CAPEX and OPEX, are discussed in Section 21.

- Total initial CAPEX (mines and mill), not including current and sunk costs, is estimated at \$98 million USD including contingencies (refer to table 21.1.1).
- Total weighted average OPEX is estimated at \$327 USD per ton mined and processed (refer to Table 21.1.2).
- The total cost per ton to produce saleable uranium and vanadium products is estimated at \$370 USD per ton. This compares to an estimated gross value of \$698 USD per ton (refer to Table 21.1.3).

The PEA considers simultaneous mine feed from multiple sources. Given the selective nature of mining and the geometry of the mineralization, three production centers are needed to meet the mill tonnage capacity. Mine production is planned from Wood for years 1-4, Velvet for years 1-7, and Slick Rock for years 1-14. Beginning in year 5, additional mines are planned for the DOE leases located at the Paradox, Uravan, and Slick Rock mine complexes. The combination of the DOE leases are planned to provide a portion of the mill feed for years 5-14.

Break even with respect to commodity price occurs when the base case commodity prices are reduced by 45% to \$55/lb and \$5/lb for uranium and vanadium, respectively.

This project, like all similar projects, is quite sensitive to commodity prices as shown in Figures 1.8.1 and 1.8.2 for pre and post income tax NPV, respectively.

Figure 1.8.1 Sensitivity to Uranium Price

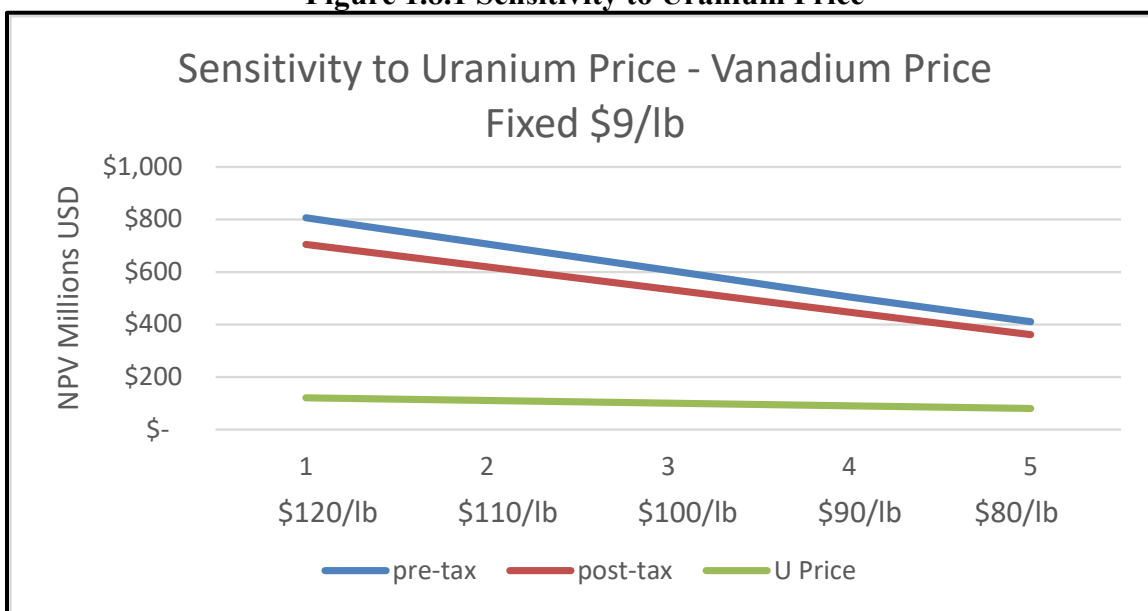
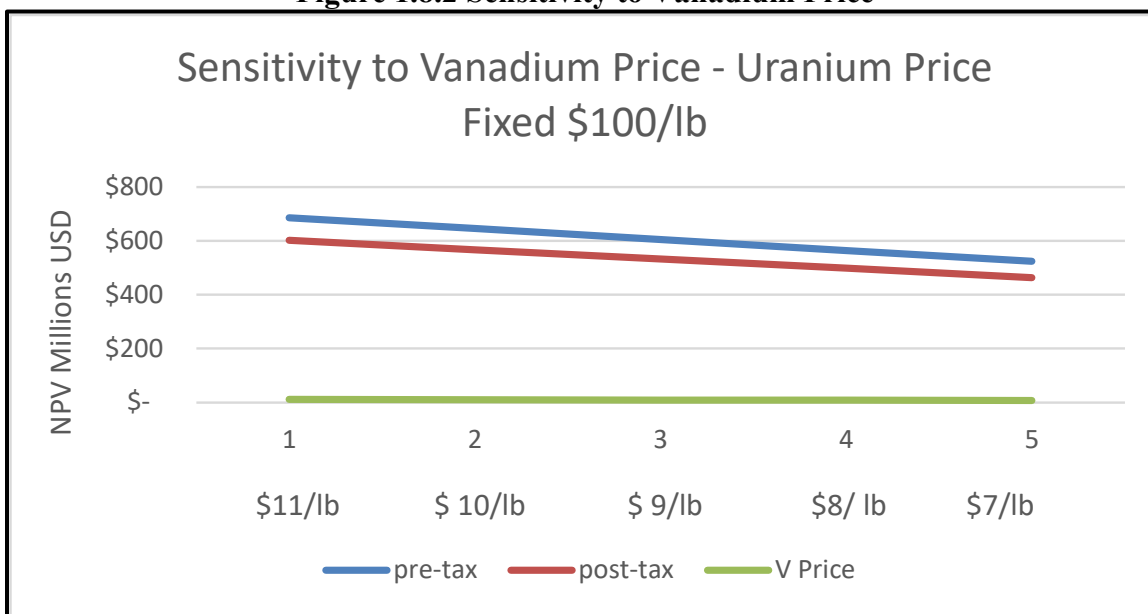


Figure 1.8.2 Sensitivity to Vanadium Price



Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

1.10 Summary of Risks

The authors are not aware of environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors not stated herein which would materially affect the mineral resource estimates or the results of the PEA. To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property, provided the conditions of all mineral leases and options and relevant operating permits and licenses are met. A summary of risks follows, categorized in terms of economic, technical, and permitting and licensing risks.

1.10.1 Economic Risks

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein. A Preliminary Feasibility Study (PFS) is required, at a minimum, to demonstrate the economic viability of the measured and indicated mineral resources and qualify an initial estimate of mineral reserves.

1.10.2 General

It is the authors' opinion that the technical risks associated are low for the following reasons:

- Portions of each of the Mine Complexes included in the PEA have been successfully mined in the past.
- Uranium has been successfully extracted from mined material via conventional milling.
- The Shootaring Mill has a Radioactive Materials License which is well into the renewal process for refurbishment and operation.
- The Velvet-Wood Mine has all major permits and has the potential to be the most profitable of the Mine Complexes included in the PEA.

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

- Future commodity demand and pricing.
- Environmental and political acceptance of the project.
- Variance in capital and operating costs.
- Mine and mineral processing recovery and dilution.
- Continuity of mineralization with respect to thickness and grade may vary.
- Mining claims are subject to the Mining Law of 1872. Changes in the mining law could affect the mineral tenure.
- There is a risk that underground conditions at any or all of the mines included in the PEA may limit access to mineral resources.

1.10.3 Permitting and Licensing Risks

There are risks associated with any such permitting actions which could affect project schedule and costs. The Velvet-Wood, Slick Rock, Uravan, and Paradox mines are brownfield sites within the Colorado Plateau which has a long history of uranium and vanadium mining. The mill is an existing facility with an existing source material license. Environmental studies under the National Environmental Policy Act (NEPA) have been completed for all of the mine sites included in the PEA. For the Velvet-Wood mine, the BLM Plan of Operations and Utah mine permit were approved under an environmental assessment (EA). It is possible that permitting other mines included in the PEA may require additional environmental studies, additional permits, and/or an environmental impact statement resulting in delays and additional costs.

The surrounding communities have a long history of working with and for the region's mining and mineral resource industry, and their support for this project has been strong. Despite expected local support, recent mineral development in the area has received opposition from various Non-Government Organizations (NGOs) and this should be anticipated in some cases. This is expected to be a specific risk for the Slick Rock mine in San Miguel County, Colorado.

San Miguel County promulgated their own mining regulations earlier this year. The Company expects these regulations to be challenged on a preemptory basis at the state level by the Colorado Mining Association (CMA) and by the US Department of Interior (DOI). Portions of the Slick Rock mineral holdings, leases and claims, are adjacent to a proposed conservation area. In draft legislation, leases and claims within the proposed conservation district were excluded as prior existing rights.

There is a risk that the planned schedule for the Slick Rock mines could be delayed for technical reasons or by delays in permitting. While this risk exists, the impact of a one-year delay in the current plan would reduce the estimated NPV by \$36 million USD pre-tax, if the planned production was not offset by other captive mines or toll milling arrangements.

1.10.4 DOE Leases

There is a risk that the DOE leases may not be renewed in 2030. Past precedence with the renewal of DOE leases as discussed in Section 6 is to renew the leases with the current lessee if they are meeting their obligations under the lease and in recognition of the fact the lessee has a vested interest and investment in the leases. This was the case for the 2020-2030 10-year renewal.

The Company expects to renegotiate the royalty terms as part of the DOE lease renewal process. The Company also expects to renegotiate royalty terms with Cotter. In this PEA, the production schedule on the DOE leases is delayed until after 2030 to account for the risks relating to renewal and high royalty rates, which make the DOE leases less attractive on a cost basis than other available options for mine production.

For the purpose of the PEA, it was assumed that the post-2030 royalty on the DOE leases could be reduced by 4% to each party for a total of 8%.

There can be no assurance that the Company will be able to secure reduced royalty rates with the DOE or Cotter as contemplated herein or at all. The impact of the risks related to royalties and/or non-renewal of the leases can be assessed as follows.

- Assuming negotiations only result in a reduction to 8% for both parties and a total of 16%, NPV would be reduced by approximately \$30 million USD.
- Assuming royalties were little changed, the NPV would be reduced by approximately \$77 million USD.
- There is a risk that the DOE leases may not be renewed in 2030 and/or the royalty burden on the leases may not be reduced as discussed in Section 21. Under the worst case this could reduce the NPV by \$209 million USD pre-tax.
- However, production from the DOE leases is not currently planned until 2032 allowing sufficient time for Anfield to offset this loss from other captive mines or toll milling arrangements.

1.10.5 Vanadium Price

Should the vanadium price not reach the price used in the PEA by the decision point for CAPEX investment for the vanadium plant, the effect on the project economics can be moderated by delaying construction and operation of the vanadium circuit. To do this and not lose the vanadium, it would be necessary to construct a lined temporary storage pond for the vanadium feed stream from the uranium plant within the tailings area. A 5-acre pond could be constructed for approximately 1 million USD and would be adequate for 2 or more years of storage of raw vanadium concentrate storage. A sensitivity analysis of delaying the vanadium production and revenue of approximately 75 million USD for 2 years, offset by delaying project costs including 28 million USD CAPEX and 23 million USD in OPEX, showed little change in the NPV for the project provided the vanadium is recovered in the following 4 years.

Other than the aforementioned risks, the authors are not aware of additional environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which would materially affect the mineral resource estimates, provided the conditions of all mineral leases and options, and relevant operating permits and licenses are met.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

1.11 Recommendations

The following recommendations relate to potential improvement and/or advancement of the Project and to further define the in situ mineral resources. The following recommendations are for the Velvet, Wood and Slick Rock mines as they are the earliest mines in the production schedule. The recommendations are independent of one another and may be conducted contemporaneously.

1.11.1 Mines

The Velvet Mine Area and resources are well delineated in the west and fairly well delineated in the east. The eastern portion of the Velvet mine resource will need to be drilled from the underground workings during any future development to classify resources into the Measured and/or Reserve categories ahead of mining extraction operations. The Wood resource area is less well delineated and will require additional surface and/or underground drilling to better define and quantify the resource prior to development. Costs for the recommended program totaling \$1,580,000 USD are summarized in Table 26.0.1.

The Slick Rock mineral resource estimate is dominantly classified as inferred due to the drill hole spacing. The 2024 verification drilling at Slick Rock did increase the total estimated mineral resource and elevate approximately 8% of the mineral resource to an indicated mineral resource classification. Slick Rock will require additional surface drilling to better define and quantify the resource prior to development. Under the current drilling permit (NOI), up to 100 drill holes could be added without reaching the 5-acre disturbance limit which requires a BLM plan of operations. Costs for the recommended program totaling \$4,640,000 USD are summarized in Table 26.0.2.

1.12 Terms and Abbreviations

Table 1.12.1 provides a brief list of terms and abbreviations used in this report:

Table 1.12.1 Terms and Abbreviations

GENERAL TERMS AND ABBREVIATIONS					
	Metric		US		Metric: US
	Term	Abbreviation	Term	Abbreviation	Conversion
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 Ton	mt	Short Ton	Ton	1.10
Currency			US Dollars	\$US, USD	
URANIUM / VANADIUM SPECIFIC TERMS AND ABBREVIATIONS					
Uranium Oxide Grade	Parts Per Million	ppm U ₃ O ₈	Weight Percent	%U ₃ O ₈	
Vanadium Oxide Grade	Parts Per Million	ppm V ₂ O ₅	Weight Percent	%V ₂ O ₅	
Radiometric Equivalent Grade		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)	

Section 2: Introduction

2.1 Purpose of Report and Authors

This Technical Report was prepared for Anfield Energy Inc. (Anfield) by author, Terence (Terry) McNulty, P.E., D. Sc., of T.P. McNulty and Associates Inc. and co-author, Douglas Beahm, P.E., P.G., of BRS Engineering.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Dr. McNulty and Mr. Beahm are “qualified persons” as defined by CIM's National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) and as described in Section 28 (Certificates and Signatures). Dr. McNulty is independent of Anfield in accordance with the application of Section 1.5 of NI 43-101. Mr. Beahm who is both the President of BRS Inc. and Chief Operating Officer of Anfield Energy is not independent.

2.2 Extent of Authors’ Field Involvement

2.2.1 Current Site Visits

Dr. McNulty and Mr. Beahm jointly completed a site visit to the Shootaring Canyon mill, and the tributary mines included in this technical report during the week of June 8th 2026. On June 9, 2026, site visits of all the mine sites were completed including, the Velvet-Wood mine site, the Slick Rock mine sites, and the Uravan and Paradox mine sites. On June 10, 2026, the Shootaring Canyon Mill site and facility was visited. Details of these recent and previous site visits follow.

2.2.2 Velvet-Wood Site Visits



On June 9, 2026, Dr. McNulty and Mr. Beahm jointly visited the Velvet-Wood mine. This included entry and inspection of the mine portal, surface facilities, and access roads. The decline is not currently open to the mine workings due to flooding. Rock bolting of the roof in the decline was observed. The portions of the decline observed appeared to be in good condition.

View looking from decline to portal at surface



View of rock bolting roof in the decline

Previous site visits by Mr. Beahm included attendance at the portal ground-breaking November 6, 2025. Previously on behalf of Anfield after their acquisition of the project, Mr. Beahm visited the project and Uranium One's Moab office along with Anfield personnel on September 16, 2014. At the time Uranium One's office was the repository of the project data. During this time Mr. Beahm inspected drill sites from the latest period of drilling completed by Uranium One (2007 and 2008) and obtained copies of this and previous data including copies of geophysical logs, location maps, and database summaries. Mr. Beahm was also present on site on numerous occasions during 2007 and 2008 on behalf of Uranium One and participated in the verification drilling and coring programs.

2.2.3 Slick Rock Site Visits

On June 9, 2026, Dr. McNulty and Mr. Beahm jointly visited the Slick Rock mine district. This included observation of existing access, mine entries, and additional infrastructure at the DOE leases including the SR 11, Burro and Elison mines. The mine declines are open but gated at the portal to prevent unauthorized entry.



View of Elison portal

Dr. McNulty and Mr. Beahm also observed the main Slick Rock unpatented mining claim area/ Verification drilling was completed in this area in 2024 and baseline monitor wells completed in 2025. Monitor well No. 3 was inspected during the site visit. The well site disturbance was limited. The site was clean and had been reclaimed. The monitor well has an install pump and locked cover.



View of Monitor Well No.3 on Slick Rock claims

Previously Mr. Beahm conducted a site visit on March 18 and 19, 2024 to review verification drill sites at Slick Rock and to meet on-site with representatives of the San Miguel County Planning Commission and Road and Bridge Department relative to the drilling program and site access. In addition, on March 19, 2024, Mr. Beahm visited the SR-11 leases and mine site, and inspected the existing portal, access and infrastructure.

Mr. Beahm previously completed a site visit on April 2, 2013. At the time he was able to access the Burro mine workings which were above the ground water table. In addition to observing the decline, approximately 1,500 feet of mine workings were examined. In addition, Mr. Beahm inspected evidence of previous drilling, the existing vent shaft on the Slick Rock property, and examined potential sites for mine entry.

Based on his recent site visits, the only significant change was related to reclamation of the Department of Energy (DOE) legacy site and mine waste pile associated with the Burro mine. None of these changes materially affect the Slick Rock property.

2.2.4 Shootaring Canyon Mill Site Visits

Dr. McNulty and Mr. Beahm jointly completed a site visit to the Shootaring Canyon mill on June 10, 2026. The team met with engineers from the design firm PSE and discussed progress in detailed planning. The discussions and subsequent tour of the plant focused on the leach area where old tanks and spillage is being removed for off-site disposal in preparation for the installation of new leach tanks following license renewal and the CCD and SX areas of the plant. In addition, the tailings area was inspected along with the recently installed Point of Compliance wells requested by the state of Utah, DWMRC, as part of the license renewal process.

Previously Dr. McNulty visited the site on April 7, 2025 to meet with representatives of the Utah DWMRC to discuss the relicensing of the mill for operational status and to discuss work items which could be conducted under the existing licenses prior to renewal. In addition, the mill facility including the tailings impoundment were inspected. Dr. McNulty was present at the site on numerous occasions during the period of 2007 and 2008 when the evaluation of the mill was being conducted by Lyntek and the report entitled “Definitive Cost Estimate for the Restart of Shootaring Canyon Mill Ticaboo, Utah” was completed on March 28, 2008, by Lyntek, Inc. (Lyntek, 2008). Dr. McNulty contributed to this report and provided peer review of the report.

Previously Mr. Beahm visited the site on April 7 and 8, 2025 to meet with representatives of the Utah Division of Waste Management and Radiation Control (DWMRC) to discuss the relicensing of the mill for operational status and to discuss work items which could be conducted under the

existing licenses prior to renewal. In addition, the mill facility including the tailings impoundment were inspected. Mr. Beahm was also at the site on March 21, 2024 and February 16, 2023. During these site visits, Mr. Beahm observed that the mill stockpiles remained in place, the tailings impoundment was intact, the general condition of the mill was similar to its condition during Mr. Beahm's previous visits in 2007 and 2008, and the mill, office and general facility was well kept and maintained. On the March 21, 2024 site visit, Mr. Beahm also examined and sampled nearby sources for aggregate that could be quarried for construction purposes.

2.2.5 Uravan and Paradox Site Visits

Dr. McNulty and Mr. Beahm jointly completed a site visit to the Uravan and Paradox mine sites. This included observation of existing access, mine entries, and additional infrastructure at various DOE leases including SM18 and the JD mine complex JD5, JD6, JD7, JD8, and JD9. The mine declines and shafts are open but gated at the portal to prevent unauthorized entry. Site access has been established to the sites and line power is available. Surface infrastructure at each mine was inspected.



View of JD8 mine portal with ventilation system visible



View of JD5 shaft and hoist building

Previously during the period of March 18 through 20, 2024, Mr. Beahm visited the Paradox and Uravan projects, examining the JD-5, JD-6, JD-7, JD-8, JD-9 and SM-18 leases including the general site conditions and access as well as the existing portals, declines, shafts, and JD-7 open access for future development.

2.3 Sources of Information and Data

In preparing the Technical Report, the authors relied on geological reports, maps, and miscellaneous technical papers listed in Section 27, References. The information, conclusions, opinions, and estimates contained herein are based on:

- The qualified person's field observations.

- Data, reports, and other information publicly available or provided by Anfield.
- Previous experience with similar deposits.
- Drill hole data as discussed in Section 12.

2.4 Report Terms of Reference

All measurement units used in the report are imperial units, and currency is expressed in U.S. dollars (US\$ or USD) unless stated otherwise.

Reported mineral resources are in situ.

Section 3: Reliance on Other Experts

The location, extent, and terms relating to mineral tenure were provided by John Eckersley, Anfield Energy Director and Counsel, and were relied upon as defining the mineral holdings of Anfield in the development of this report.

For the purpose of Sections 4, Property Description and Location, Mineral Tenure, and Ownership of this report, the authors have relied on ownership data (mineral, surface, and access rights) provided by John Eckersley, Anfield Energy Director and Counsel. The accuracy of the information was not verified by the authors. The authors have not researched the property title or mineral rights for the project and express no legal opinion as to the ownership status of the property. However, Anfield provided copies of the mineral claim lease and purchase agreement which were reviewed for content by the authors. All mining claims whether leased, purchased, or located by Anfield, were verified as to their validity by searching the Bureau of Land Management (BLM) online LR2000 web site. BLM lists the mining claims as current.

The authors have fully relied upon the Frasier Institute Annual Survey of Mining Companies 2025 for the assessment of public policies that affect mining investment.

The authors have reviewed this information provided by others and find the information provided by Anfield to be in keeping with industry standards as appropriate for inclusion in the PEA.

Section 4: Property Description

The properties addressed in this report can be divided into four districts based on location: 1) The Lisbon Valley District is in San Juan County, Utah and contains the Velvet-Wood Project; 2) The Slick Rock District is in San Miguel County, Colorado and contains both the Slick Rock Complex and the SR-11 Project; 3) The Uravan District in Montrose County, Colorado which encompasses the Paradox Complex and the SM-18 Project; and 4) The Henry Mountain District, Utah, contains the Shootaring Canyon Mill.

The mineral rights of these properties consist of four different types of rights; at each property these are singular or in combination. The four different types of mineral rights are: 1) State lease; 2) Bureau of Land Management (BLM) lode claims; 3) Department of Energy (DOE) leases; and 4) patented/private claims.

Anfield controls 21 of the 29 active DOE Lease tracts in Colorado. Anfield refers to the DOE leases as mine complexes named by geographic areas as summarized in Table 6.1.1. The locations of the DOE Lease are shown in Figure 6.1.1. For completeness and due to their commonality, a general discussion of the history of all Anfield's DOE leases is included Section 6. The DOE and, where applicable, the Cotter mine production royalties listed in Table 6.1.1 and discussed subsequently for the 6 leases included in the PEA, are considered excessive. Further discussion of royalties and their cost implications is provided in Section 21 under the discussion of operating costs.

Of the 21 DOE Leases held by Anfield, 6 are included in the PEA as mineral resources including:

- Paradox Mine Complex: JD-6, JD-7, JD-8, JD-9
- Uravan Mine Complex: SM-18
- Slick Rock Mine Complex: SR-11

Specific details of the DOE leases included in the PEA are provided in the discussion of mine complexes.

The Lisbon Valley District is made up of BLM lode claims and a State of Utah mineral lease. The Slick Rock District has a combination of BLM lode claims and DOE leases. DOE leases make up the bulk of the mineral rights in the Uravan District, but there are also patented/private claims.

Each type of mineral right has annual encumbrances. The State lease requires annual payments to State of Utah for lease ML 49377. BLM lode claims have claim maintenance fees of \$200 per claim that are due by September 1st of each year. DOE leases have annual advance royalty payments, and the patented/private claims have property taxes to be paid annually.

4.1 Lisbon Valley District

4.1.1 Velvet-Wood Project

4.1.1.1 Property Description and Location

The Velvet-Wood Project area is located in San Juan County, Utah, approximately 31 miles from Monticello, Utah in Township 31 South, Range 25 East, Sections 2, 3, 4 and 10, at Latitude 38° 07' 00" North and Longitude 109° 09' 00" West. The Wood area is located in Township 31 South,

Range 26 East, Sections 6 and 7 and Township 31 South, Range 25 East, Sections 1, 11, and 12 at Latitude 38° 08' 00" North and Longitude 109° 06' 00" West.

In total, the mineral holdings within the Project area comprise approximately 2,140 acres. (See Figure 1.1.1, Overall Project Location Map).

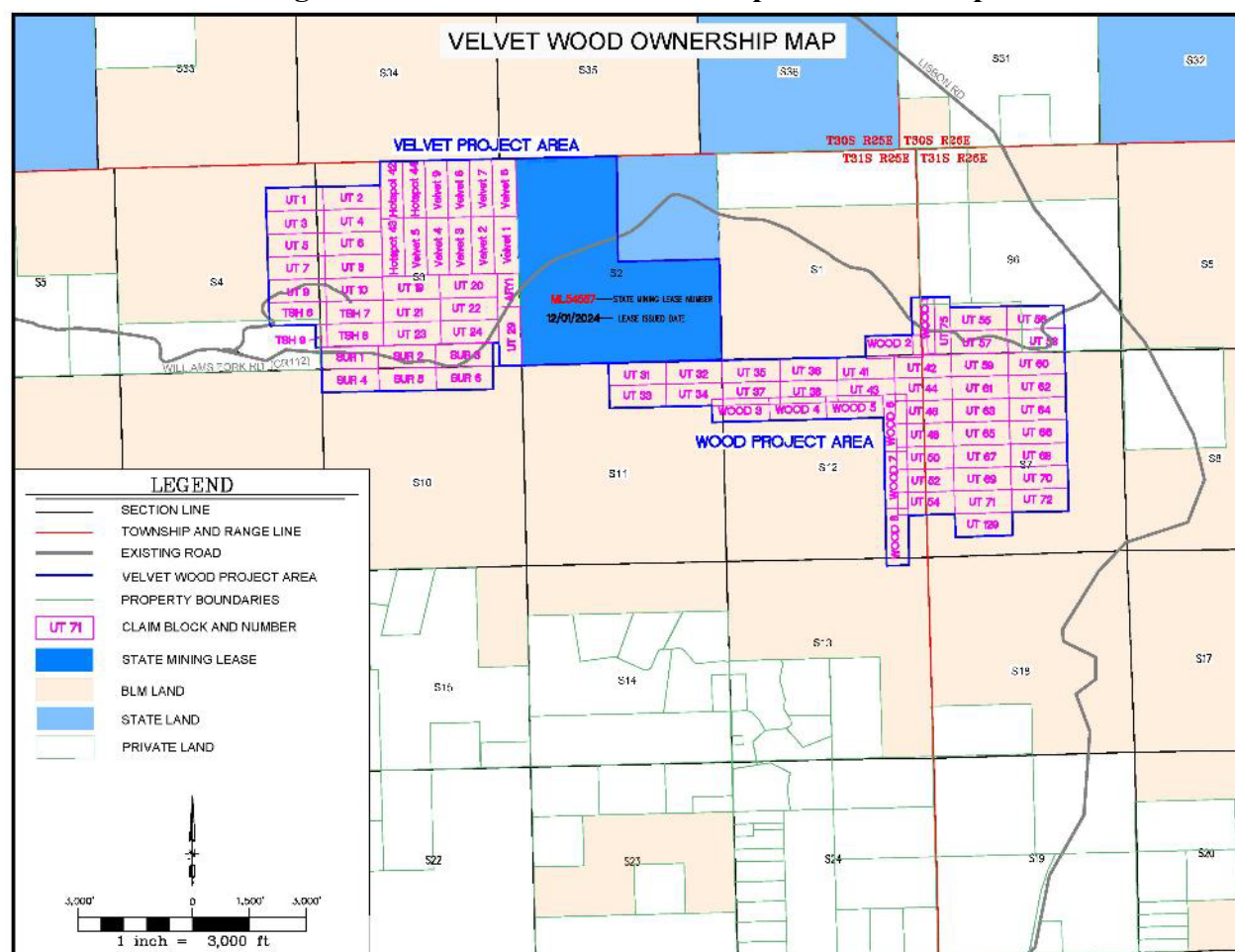
4.1.1.2 Mineral Tenure

Figure 4.1.1, Velvet-Wood Mineral Ownership and Claim Map, shows the approximate location of unpatented mining lode claims and state leases that are part of the Velvet-Wood Project. Copies of recent claim filings with the BLM for unpatented mining lode claims were provided by Anfield. The entire Velvet-Wood project encompasses an area of approximately 2,140 acres.

Unpatented mining claims, both lode and placer, are under the authority of the Mining Law of 1872 on federal lands administered by the BLM. Under the Mining Law, the locator has the right to explore, develop, and mine on unpatented mining claims without paying production royalties to the federal government. Claim maintenance fees of \$200 per claim are due by September 1 of each year. Unpatented federal lode mining claims are designated in the field by four corner posts, two end-center posts, and a location monument. Claim location notices for each unpatented claim are recorded in the county recorder's office of the county in which the claims are located and then filed with the BLM State office.

In addition to the mining lode claims, three quarters of Section 2 is a State of Utah lease ML 54557 OBA. To maintain these mineral rights Anfield must comply with the state lease provisions including annual payments to State of Utah for leases ML 54557 OBA and BLM and San Juan County, Utah filing and/or annual payment requirements to maintain the validity of the unpatented mining lode claims.

Figure 4.1.1 Velvet-Wood Ownership and Claim Map



4.1.1.3 Permitting

Permitting for Velvet-Wood mining operations required various approvals from the State of Utah Division of Oil, Gas and Mining (DOGM) and the BLM. The Velvet-Wood mines have been permitted through the state of Utah and BLM. The mine portal at Velvet has been opened and work is progressing to rehabilitate the decline.

4.1.1.4. Environmental Liabilities

Financial assurance instruments are required by Utah for mine and exploration permits. The current bond for the Velvet-Wood Mine Complex is \$539,000.

No other outstanding environmental liabilities are known to the authors.

4.1.1.5 Taxes and Royalties

Uranium mining in Utah is subject to Mineral Production Tax. Mineral Production Tax Withholding was increased from 4% to its current level of 5% effective July 1, 1993. (Refer to Utah Senate Bill 180, 1993). On the Section 2 State of Utah lease, an 8% royalty is levied on

uranium, and a 4% royalty applies to vanadium production or other minerals. Additional state taxes would include property and sales taxes. At the federal level, profit from mining ventures is taxable at corporate income tax rates. However, for mineral properties, depletion tax credits are available on a cost or percentage basis, whichever is greater. For uranium, the percentage depletion tax credit is 22%, among the highest for mineral commodities (IRS Pub. 535).

The estate of Mr. Jim Butt holds a 2.5% gross production royalty on all uranium and vanadium recovered at the Shootaring Canyon Mill from material mined from the Velvet 1-9 claims. Mr. Kelly Dearth holds a 1% gross royalty for all uranium mined from the Wood claims, including UT 31-38, 41-44, 48, 50, 52, 54-72, and 129, a total of 37 claims.

4.1.1.6 Encumbrances and Risks

The Velvet and Wood mines have been permitted by the State of Utah and BLM. To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property if the aforementioned requirements, payments, and notifications are met.

4.2 Slick Rock District

4.2.1 Slick Rock Complex

4.2.1.1 Property Description and Location

The Slick Rock Complex is located in San Miguel County, Southwest Colorado, approximately 24 miles north of the town of Dove Creek and east of the Dolores River. The Slick Rock Complex lode claims are located in Township 44 North, Range 18 West, Sections 15, 16, 19 to 30, 30, 32, 33, and 34 and in Township 43 North, Range 18 West, Sections 3, 4, and 5. DOE lease SR-13 is located in Township 44 North, Range 18 West, Sections 29 to 33. DOE lease SR-13A is located in Township 44 North, Range 18 West, Sections 19 and 30 and in Township 44 North, Range 19 West Sections 24 and 25. The approximate geographic center of the Complex is Latitude 38° 02' 54.7" North, Longitude 108° 51' 50.8" West. In total the mineral holdings within the Complex area comprise approximately 6,473 acres as shown on Figure 4.2.1.

The Slick Rock Complex is bordered to the southwest by DOE uranium lease tract C-SR-14; and to the north and northeast by the Sunday-Carnation-Topaz-St. Jude mine complex, operated by Western Uranium and Vanadium Corp.

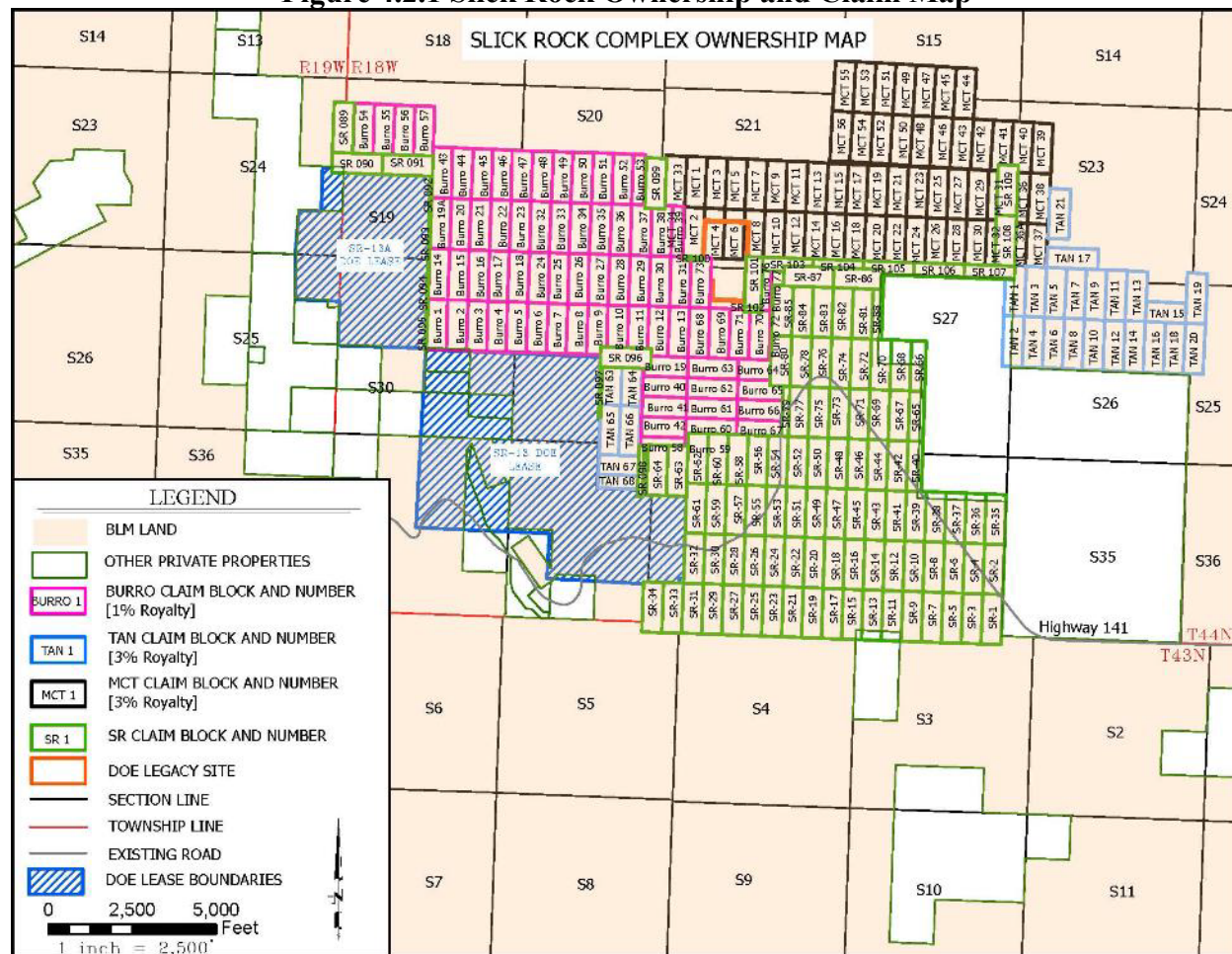
4.2.1.2 Mineral Tenure

Figure 4.2.1, Slick Rock Ownership and Claim Map, shows the approximate location of the BLM lode claims on the project. The project contains four claim blocks. The Burro claim block consists of 76 claims. The SR claim block consists of 131 claims, of which 109 were included in the study area for this report, with the remainder located outside of the project area. The TAN claim block consists of 27 claims. The MCT claim block consists of 56 claims. The MCT and TAN claims are leased from UR Energy. A total of 268 mineral lode claims and two DOE leases were utilized for the Slick Rock Complex mineral resource estimate in this report. The claims encompass an area of approximately 4,976 acres or 7.8 square miles while the SR-13 and SR-13A DOE leases have an area of approximately 1,077 and 420 acres respectively. Anfield acquired the DOE lease SR-

13 from Gold Eagle Mining Inc. (GEMI) and the SR-13A DOE lease from Cotter Corporation (Cotter) in 2024 and 2020, respectively.

To maintain these mineral rights, Anfield must comply with the BLM and San Miguel County, Colorado filing and/or annual payment requirements to maintain the validity of the unpatented mining lode claims. For the DOE leases, Anfield must pay the annual royalty to DOE at the beginning of each lease year during the term of this lease.

Figure 4.2.1 Slick Rock Ownership and Claim Map



4.2.1.3 Permitting

Exploration and mining activities for the mining claims of the Slick Rock Complex are administrated by the Durango, Colorado BLM field office. Exploration drilling and associated activities require an exploration permit and a reclamation bond that must be posted with the State of Colorado, Department of Natural Resources Division of Reclamation, Mining, and Safety. At the time of the report, Anfield does possess an exploration permit (NOI) with the Colorado DRMS. The current reclamation bond held by DRMS is \$81,313.00. DOE leases SR-13 and SR-13A were previously mined and have mine permits for reclamation through Colorado DRMS. Future mining would require new mine permits.

4.2.1.4. Environmental Liabilities

The DOE leases SR-13 and SR-13A have current mine permit bonds for US\$31,282.00 and US\$6,000.00 respectively. Reclamation of these sites was completed in 2025, but the bonds have not been released. Anfield is unaware of any additional significant environmental liabilities on the property. DOE also maintains a legacy site within the property boundary.

4.2.1.5 Taxes and Royalties

Uranium mining in Colorado is subject to Minerals Severance Tax of 2.25% after the first \$19 million of gross product. In addition, two claim blocks are associated with royalties of 1% related to the Holley BC claims and 3% associated with the MCT claims. At the federal level, profit from mining ventures is taxable at corporate income tax rates. Pre and Post tax economic analyses are provided in Section 22.

The DOE leases SR-13 and SR-13A pay royalties to the DOE annually and this amount will be credited against royalty bid payments. The royalties are US\$13,200.00 for SR-13 and US\$10,200.00 for SR-13A. These annual royalties will not be refunded if the lease is cancelled, relinquished, or expires. The royalty bid payment is per dry ton of processed ore and is 15.52% for SR-13 and 29.50% for SR-13A. Cotter retained a royalty in the amount of 15% on uranium and vanadium produced from the properties. Refer to Table 6.1.1.

4.2.1.6 Encumbrances and Risks

To the authors' knowledge there are no other forms of encumbrance related to the Project.

The Project does have some risks similar in nature to other mining projects in general and uranium mining projects specifically, i.e., risks common to mining projects as discussed in Section 25. In addition, the project is located in San Miguel County, Colorado. The county has passed its own mining regulations which are being challenged on a preemptory basis, as by law, regulation of mining in the US is reserved to the Federal and State governments, in this case BLM and Colorado DRMS. Some level of public resistance to mining is likely in this area.

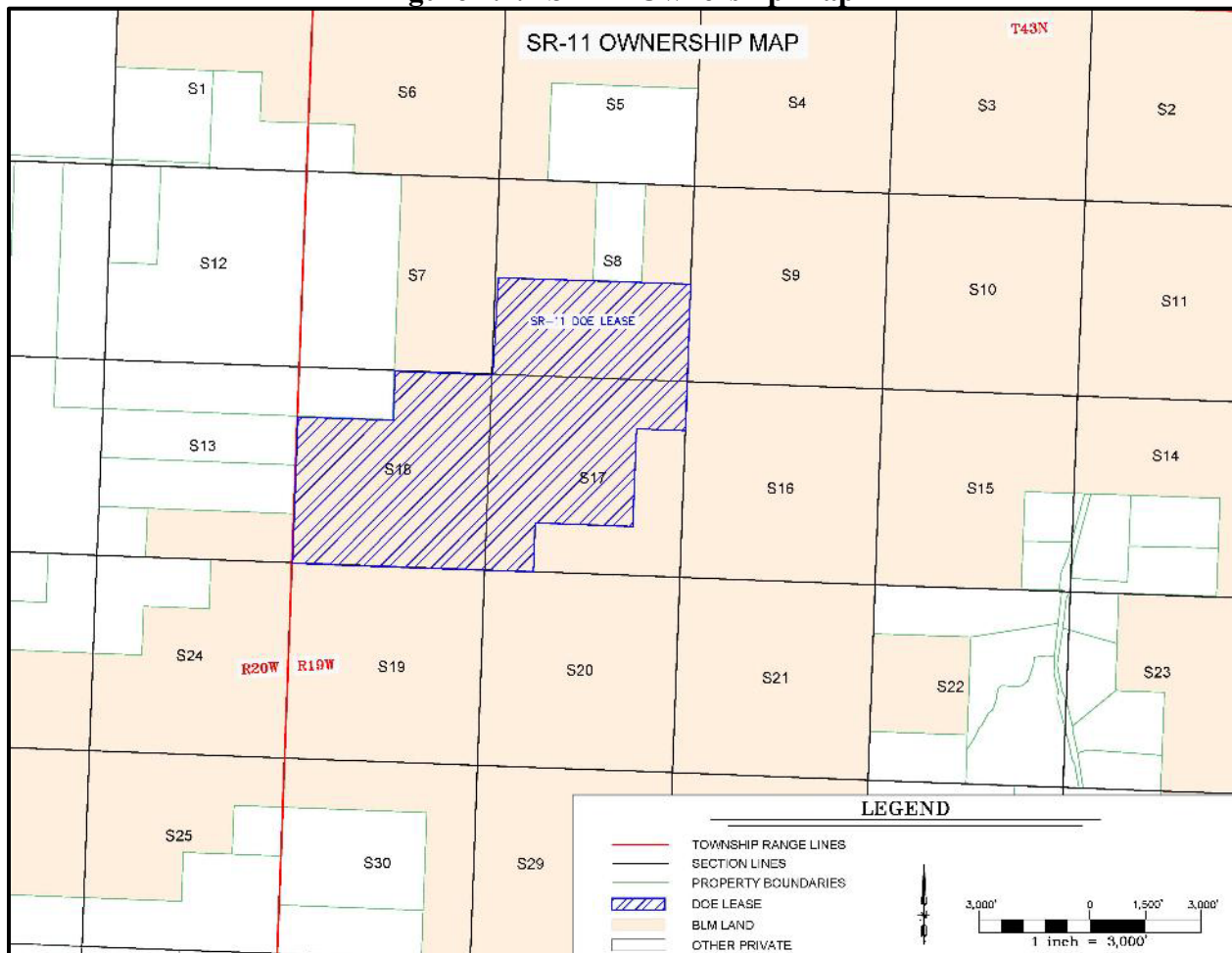
To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property if the aforementioned requirements, payments, and notifications are met.

4.2.2 SR-11 Project

4.2.2.1 Property Description and Location

The SR-11 Project is located in San Miguel County, Colorado approximately 5 miles southwest of Slick Rock and 27 miles west of Naturita. This DOE lease is located in Township 43 North and Range 19 West, Sections 8, 17, and 18. The approximate geographic center of the SR-11 Project is Latitude 38° 59' 31.6" North, Longitude 108° 59' 33.5" West. Refer to Figure 4.2.2.

Figure 4.2.2 SR-11 Ownership Map



4.2.2.2 Mineral Tenure

Anfield acquired the DOE lease SR-11 from Cotter in 2019. For DOE leases, Anfield must pay the annual advance royalty to DOE at the beginning of each lease year during the term of this lease.

4.2.2.3 Permitting

The SR-11 Project has had past mining and has a previous mining permit through DRMS. The SR-11 lease consists of approximately 1,303 acres, and the DRMS reclamation permit for the lease applies to 11.3 acres of the lease tract.

4.2.2.4 Environmental Liabilities

The DOE lease SR-11 has a current mine permit bond for US\$94,400.00. Anfield is unaware of any additional significant environmental liabilities on the property.

4.2.2.5 Taxes and Royalties

Uranium mining in Colorado is subject to Minerals Severance Tax of 2.25% after the first \$19 million of gross product. At the federal level, profit from mining ventures is taxable at corporate income tax rates. However, for mineral properties depletion tax credits are available on a cost or

percentage basis whichever is greater. For uranium, the percentage depletion tax credit is 22%, among the highest for mineral commodities (IRS Pub. 535).

For DOE leases including SR-11, Anfield pays royalties to the DOE annually and this amount will be credited against royalty bid payments. The advance royalty amount is US\$24,900.00 per year. These annual royalties will not be refunded if the lease is cancelled, relinquished, or expires. The royalty bid payment is per dry ton of ore and is 13.73%. Cotter retained a royalty in the amount of 15% on uranium and vanadium produced from the properties. Refer to Table 6.1.1.

4.2.2.6 Encumbrances and Risks

To the authors' knowledge there are no other forms of encumbrance related to the Project.

The Project does have some risks similar in nature to other mining projects in general and uranium mining projects specifically, i.e., risks common to mining projects as discussed in Section 25. In addition, the project is located in San Miguel County, Colorado. The county has passed their own mining regulations which are being challenged on a preemptory basis, as by law, regulation of mining in the US is reserved to the Federal and State governments, in this case BLM and Colorado DRMS.

The SR-11 DOE lease tract has been mined in the past and is a brownfield site. Current environmental and cultural studies have been completed for the project as part of NEPA environmental clearances required by DOE for current reclamation obligations. The existing mine portal and associated infrastructure are in place. A new mine permit is required for the resumption of mining. Some level of public resistance to mining is likely in this area.

To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property if the aforementioned requirements, payments, and notifications are met.

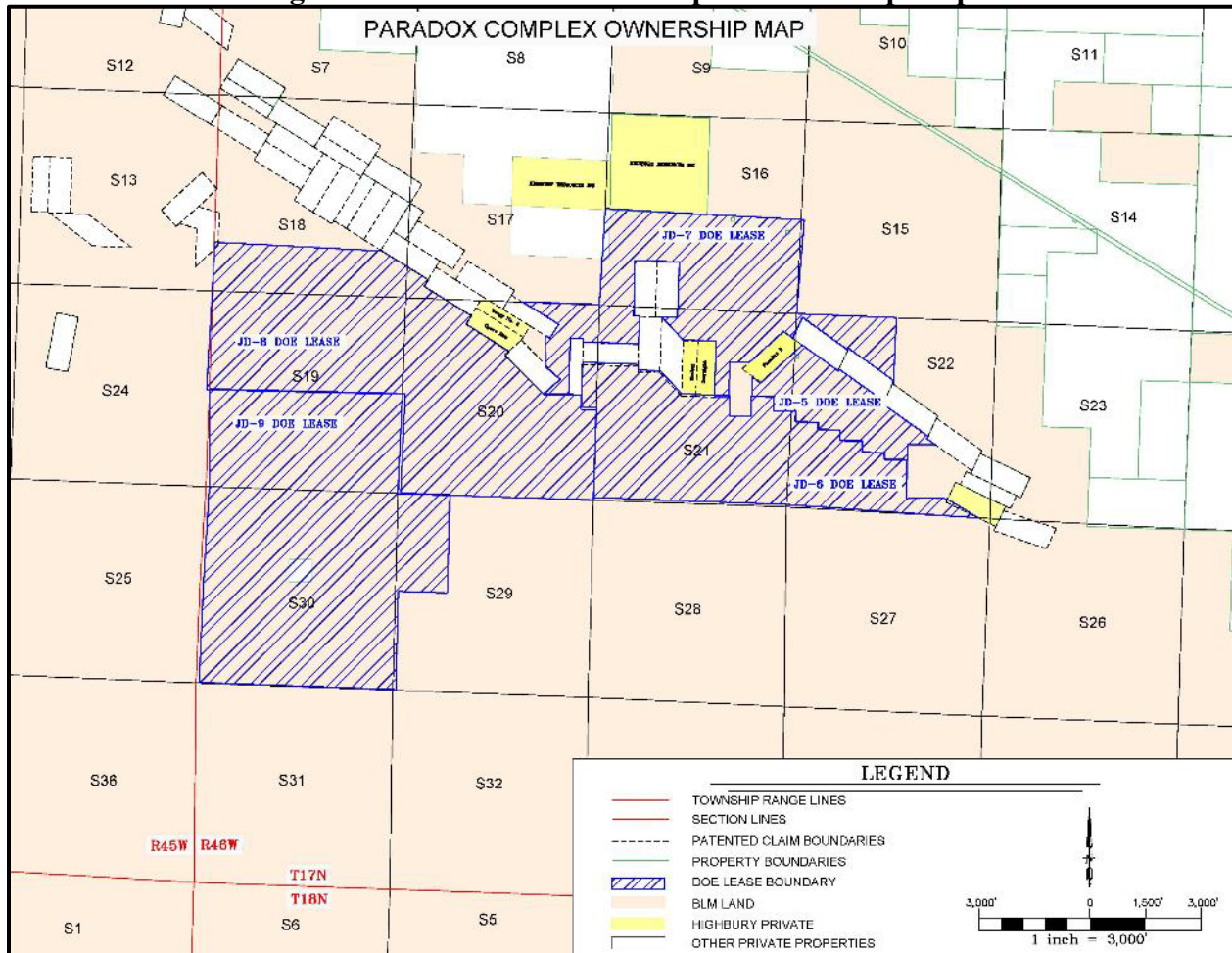
4.3 Uravan District

4.3.1 Paradox Complex

4.3.1.1 Property Description and Location

The Paradox Complex (previously known as the West Slope Project) is located within the Uravan Mineral District of southwestern Colorado, approximately 10 miles west of Naturita, Colorado (see Figure 4.3.1), within Township 46 North and Range 17 West, Sections 16 to 22, 29, and 30 in Montrose County, Colorado. The approximate geographic center of the Complex is Latitude 38° 13' 27.1" North, Longitude 108° 46' 11.8" West. The Complex consists of four adjacent DOE leases, JD-6, JD-7, JD-8, and JD-9, that were previously developed and mined by Cotter Corporation from the late 1970s to early 2000s. All four leases experienced underground mining activity over the 30-year period. In addition, the JD-7 lease had significant open pit stripping performed to within 100 feet of the top of mineralization. The total area is approximately 3,014 acres. Refer to Figure 4.3.1.

Figure 4.3.1 Paradox Mine Complex Ownership Map



4.3.1.2 Mineral Tenure

The JD-6, JD-7, JD-8, and JD-9 leases were acquired by Anfield in 2020 from Cotter. Anfield must pay the annual advance royalty to DOE at the beginning of each lease year during the term of this lease.

4.3.1.3 Permitting

Each of the sites within this project have had past mining and each have previous mining permits through the Colorado Department of Reclamation and Mining and Safety (DRMS). The DOE lease tracts have been mined in the past and are brownfield sites. Current environmental and cultural studies have been completed for the project as part of the environmental protection plan required by DOE. Existing mine portals and associated infrastructure are in place. A new mine permit is required for the resumption of mining.

- A new mine permit for the JD-8 mine has been filed with DRMS and DOE, has been accepted as complete by DRMS and is under review and public comment. With the original filing a public notice and comment period was required. Public comment will be complete and a decision from DRMS is due on July 28, 2026.
- The JD-6 lease consists of 325 acres, and the DRMS reclamation permit for the lease applies to 2.48 acres of the lease tract.

- The JD-7 lease consists of 320 acres on the DOE mining lease and 120 acres on the JD-7A lease, which is used for overburden placement from the open-pit mine. The DRMS reclamation permit for the JD-7 mine specifies an area of no greater than 650 acres of the lease tract may be disturbed.
- The JD-8 lease consists of 813 acres, and the DRMS reclamation permit applies to 20.96 acres of the lease tract.
- The JD-9 lease consists of 897 acres, and the DRMS reclamation permit applies to 11.1 acres of the lease tract.

4.3.1.4. Environmental Liabilities

Current mine permit bonds are US\$2.64 million. Future development, whether mining or mineral processing, would require adequate decommissioning and reclamation bonds for the life of the planned operations.

4.3.1.5 Taxes and Royalties

Mineral severance taxes in Colorado are at a rate of 2.38% of gross value.

On March 1, 2019, Anfield reported the acquisition of nine past-producing uranium and vanadium properties in southwestern Colorado, and the Charlie in-situ project in northeastern Wyoming. The subject US DOE Leases of this report, JD-6, 7, 8, and 9, were included in this transaction. Cotter received 11,051,775 common shares of Anfield Energy. Cotter retained a royalty in the amount of 15% on uranium and vanadium produced from the properties. Refer to Table 6.1.1.

US DOE royalties vary by lease and require annual advance payment. The annual advance royalty payments shall be credited against the royalty bid payments upon successful mineral extraction from the individual leases. Refer to Table 6.1.1.

4.3.1.6 Encumbrances and Risks

To the authors' knowledge there are no other forms of encumbrance related to the Project. All of the DOE leases in the Paradox Complex have been mined in the past. The JD-8 Permit has been filed, accepted as complete and is under review and public comment.

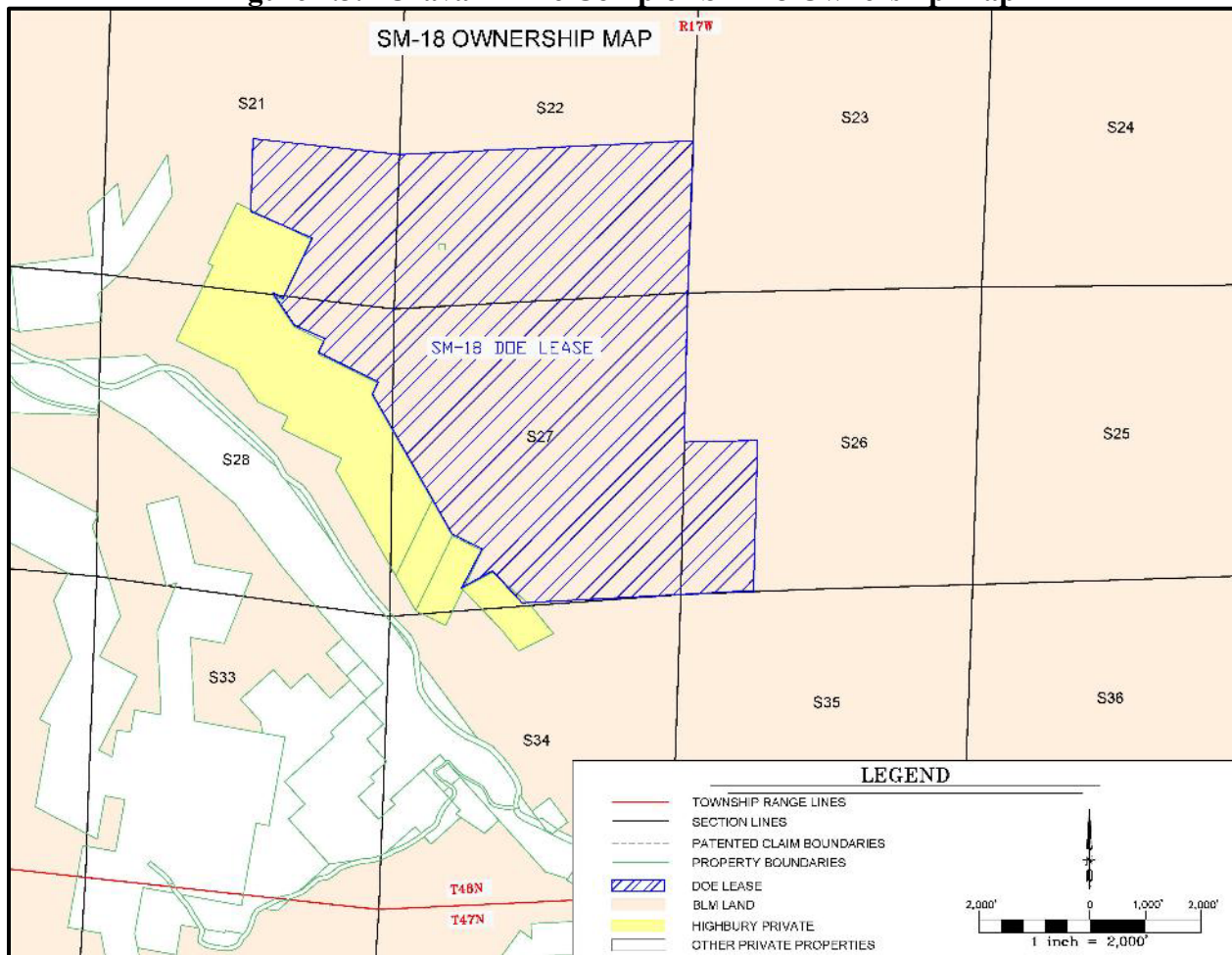
To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property if the aforementioned requirements, payments, and notifications are met.

4.3.2 SM-18 Project

4.3.2.1 Property Description and Location

The SM-18 Project is located in Montrose County, Colorado and is approximately 15 miles northwest of Naturita. SM-18 is located in Township 48 North and Range 17 West, Sections 22, 26, and 27. The approximate geographic center of the SM-18 Project is Latitude 38° 23' 19.7" North, Longitude 108° 43' 57.8" West. Refer to Figure 4.3.2.

Figure 4.3.2 Uravan Mine Complex SM-18 Ownership Map



4.3.2.2 Mineral Tenure

The SM-18 DOE lease was acquired by Anfield in 2019 from Cotter Corporation (Cotter) as part of the West Slope acquisition. Anfield must pay the annual advance royalty to DOE at the beginning of each lease year during the term of this lease.

4.3.2.3 Permitting

The SM-18 Project has had past mining and has a previous mining permit through DRMS. The SM-18 lease consists of approximately 1,181 acres, and the DRMS reclamation permit for the lease applies to 14.9 acres of the lease tract. The SM-18 DOE lease tract has been mined in the past and is a brownfield site. Current environmental and cultural studies have been completed for the project as part of the environmental protection plan required by DOE. The existing mine portal and associated infrastructure are in place. A new mine permit is required for the resumption of mining.

4.3.2.4. Environmental Liabilities

The DOE lease SM-18 has a current mine permit bond for US\$63,900.00. Anfield is unaware of any additional significant environmental liabilities on the property.

4.3.2.5 Taxes and Royalties

Uranium mining in Colorado is subject to Minerals Severance Tax of 2.25% after the first US\$19 million of gross product. At the federal level, profit from mining ventures is taxable at corporate income tax rates. However, for mineral properties depletion tax credits are available on a cost or percentage basis whichever is greater. For uranium, the percentage depletion tax credit is 22%, among the highest for mineral commodities (IRS Pub. 535).

Anfield pays royalties to the DOE annually for the SM-18 lease, and this amount will be credited against royalty bid payments. The royalty amount is US\$37,700.00. These annual royalties will not be refunded if the lease is cancelled, relinquished, or expires. The royalty bid payment is per dry ton of ore and is 16.08%. Cotter retained a royalty in the amount of 15% on uranium and vanadium produced from the properties. Refer to Table 6.1.1.

4.3.2.6 Encumbrances and Risks

To the authors' knowledge there are no other forms of encumbrance related to the Project. The SM-18 DOE lease tract has been mined in the past. A new mine permit will be required for mining.

To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property if the requirements, payments, and notifications are met.

4.4 Henry Mountain District

4.4.1 Shootaring Canyon Mill

4.4.1.1 Property Description and Location

The Shootaring Canyon Mill is located in Garfield County Utah approximately 52 miles south of Hanksville, Utah in Township 36 South, Range 11 East, Sections 3 and 4 and Township 35 South, Range 11 East, Sections 33 and 34 at approximate Latitude 37° 43' 00" North and Longitude 110° 41' 00" West.

4.4.1.2 Mineral Tenure

The Shootaring Canyon Mill is located on lands which are split estate as shown on Figure 4.4.1, Shootaring Canyon Mill Ownership Map. The surface estate is fee land held by Anfield, and the mineral estate is Utah State Trust Land held by Anfield through two mineral leases as follows.

Surface Ownership:

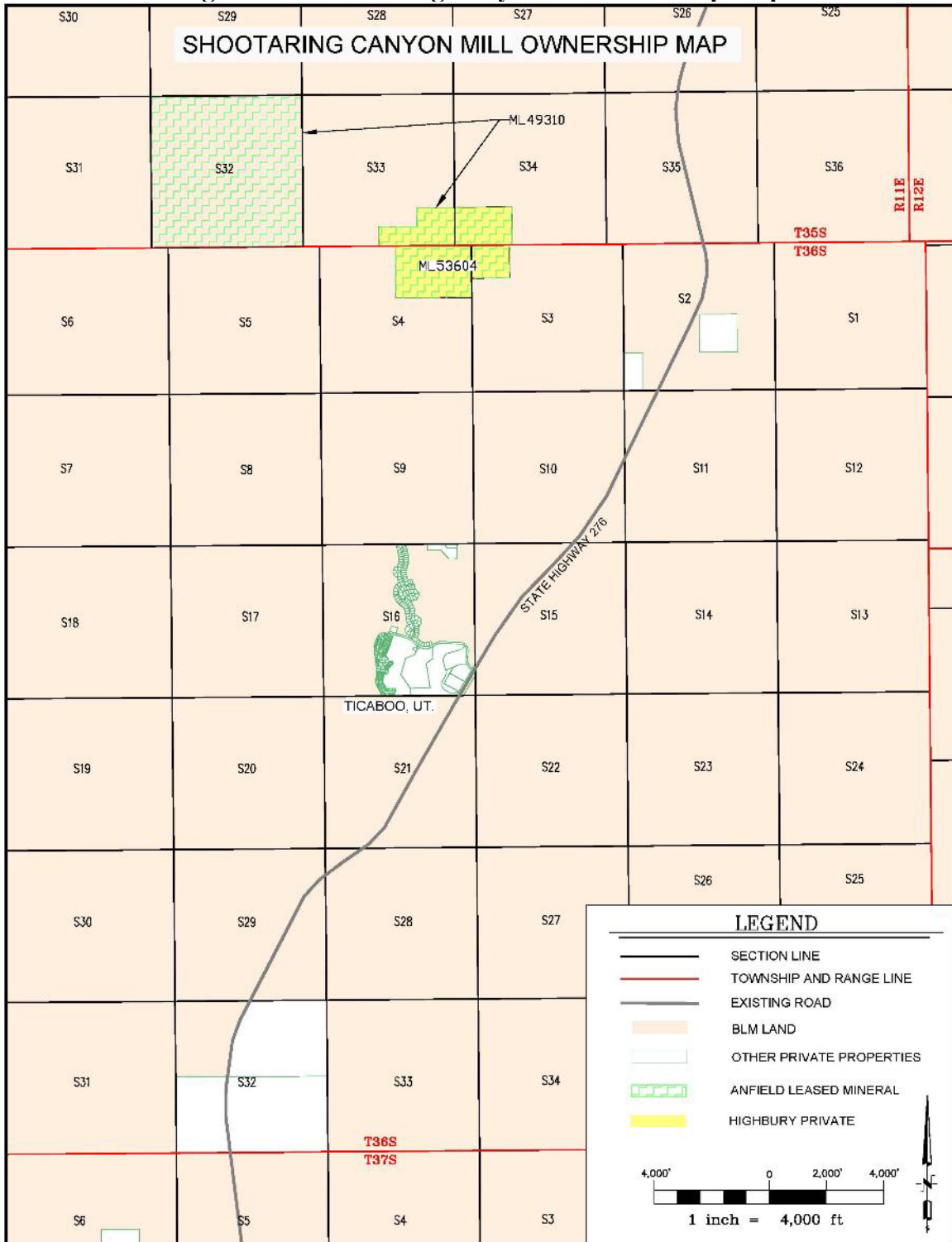
- Township 35 South, Range 11 East, SLB&M, Section 33: S/2SW/4SE/4, SE/4SE/4, Section 34: SW/4SW/4, W/2SE/4SW/4
- Township 36 South, Range 11 East, SLB&M, Section 3: Lot 4, Section 4: Lots 1, 2, N/2S/2NE/4
- Approximately 264.52 Acres

Mineral Ownership:

- State of Utah Lease ML 53604, Township 36 South, Range 11 East, Section 3: Lot 4, Section 4: Lots 1, 2, N/2S/2NE/4
- Approximately 144.5 Acres
- State of Utah Lease ML 49310, Township 35 South, Range 11 East, Section 32: All, Section 33: S/2SW/4SE/4, SE/4SE/4, Section 34: SW/4SW/4, W/2SE/4SW/4
- Approximately 760 Acres

To maintain these mineral rights, Anfield must comply with the state lease provisions including annual payments with respect to State of Utah leases ML 49310, and ML 53604.

Figure 4.4.1 Shootaring Canyon Mill Ownership Map



4.4.1.3 Permitting

The Shootaring Canyon Mill has an existing radioactive source materials license. The license was originally issued by the US Nuclear Regulatory Commission (USNRC). When Utah became an agreement state it assumed regulatory jurisdiction over the license through the Utah Division of Waste Management and Radiation Control (DWMRC). Anfield submitted a license renewal application to convert the existing license from care-and-maintenance to operational status on April 5, 2024. Anfield has been conducting bi-monthly meetings with DWMRC during the license renewal process. DWMRC completed its initial review of the license amendment and provided its Requests for Additional Information (RAIs). Anfield completed responses to all RAIs in April 2026, and they are under review by DWMRC. As additional questions arise, they are discussed at the bi-monthly meetings. It is anticipated that the licensing process, including a public comment period, will be completed by Q4 2026.

4.4.1.4. Environmental Liabilities

The current surety bond for the Shootaring Canyon Mill totals \$12,294,452.00.

No other outstanding environmental liabilities are known to the authors.

4.4.1.5 Taxes and Royalties

The mill is subject to property taxes at a mill levy rate of 0.01. The current annual cost is approximately \$115,000.00 per year. As improvements are made, the assessed value will increase as will the property tax.

4.4.1.6 Encumbrances and Risks

To the authors' knowledge there are no other forms of encumbrance related to the Project. Shootaring Canyon Mill has a radioactive source materials license and the mill has operated in the past. The site produced limited waste as it processed less than 6,000 tons of material. Containment and remediation requirements are included in the aforementioned surety bond.

To the authors' knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property if the aforementioned requirements, payments, and notifications are met.

Section 5: Accessibility, Climate, Local Resources, Infrastructure, and Physiography

5.1 Lisbon Valley District

5.1.1 Velvet-Wood Project

5.1.1.1 Physiographic Features

The Velvet-Wood Uranium Project is located within the Lisbon Valley physiographic province in San Juan County, Utah. The project area is located primarily on a dipping bench above the Lisbon Valley, with elevations averaging 6,750 feet above sea level. Nearly 500 feet of elevation differential exists between the highest and lowest drill hole collars on the property. The site is located overlooking the Lisbon Valley. The Lisbon Valley drains through the Little Indian Canyon into Colorado where it joins the Dolores River, which enters the Colorado River northeast of Moab.

5.1.1.2 Access

Portions of the Velvet deposit were previously mined. Mineralization was accessed via a portal and decline. The mine entrance was closed by backfill but was reopened in November 2025 and the mine portal re-established. The Velvet portal is accessible by good quality roads beginning with the Big Indian Road, a hard surface road that exits U.S. Highway 191 about 19 miles north of Monticello, Utah or 34 miles south of Moab, Utah (See Figure 5.1.1).

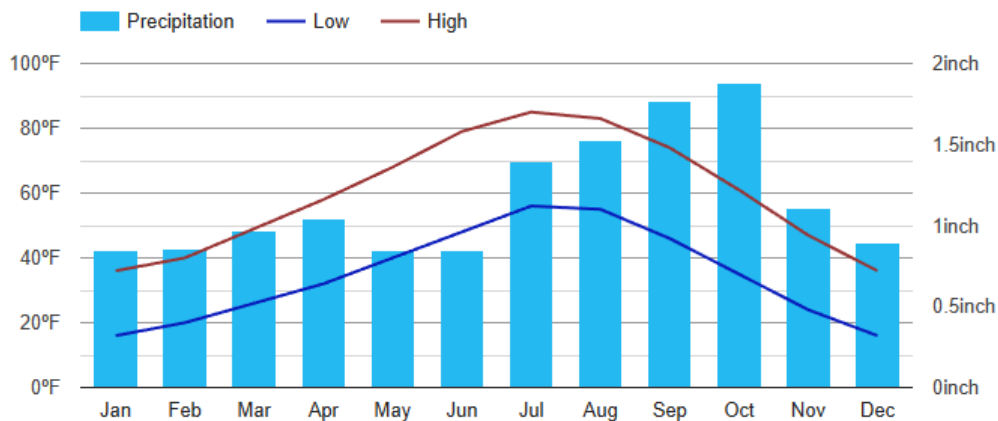
The Big Indian Road extends eastward and loops into the Lisbon Road to serve properties in the Lisbon Valley area. A gravel road, San Juan County Road 112 (Williams Fork) exits the Big Indian Road about 5.5 miles east of its intersection with Highway 191. A private access road connects with County Road 112 about 6 miles southeast of its intersection with the Big Indian Road. The Velvet Mine portal is about one mile northeast along this road. The site, as described above, is accessible via 2-wheel drive on existing county and/or two-track roads. The project is located approximately 10 miles south of La Sal, Utah. Most transport will occur via over-the-road commercial trucks. Access to exploration drill sites and vent locations are provided by existing roads connecting to the main access at the Velvet portal and the Lisbon Road.

The Wood area is located about 3 miles east of Velvet along County Road 112 and is also accessible from the east via the Lisbon Valley Road and County Road 112.

The climate is semi-arid. Average temperatures in July range from a high of 85°F and a low of 56°F. The average temperatures in January range from a high of 36°F and a low of 16°F. The average annual precipitation is thirteen inches. Winters are generally mild, and the length of the operating season should not be affected by the climate. A climate summary follows in Figure 5.1.2.

Figure 5.1.2 Velvet-Wood Climate Summary

La Sal Climate Graph - Utah Climate Chart



(https://www.usclimatedata.com/climate/la-sal/utah/united-states/usut0134#geo_map)

5.1.1.4 Property Infrastructure

The Velvet-Wood Mine is located between Monticello, Moab, and La Sal, Utah. In addition to access roads, some infrastructure is present on the Velvet-Wood site. The site is accessible over the multiple historic drill trails covering the area. An active copper mine, Copper One Mine, is located 3 miles north of the property. The presence of the copper mine and other industrial facilities in the area is significant in context of mine permitting, in that the Velvet-Wood Mine will be compatible with current land use. The Velvet Mine portal is located in the SE $\frac{1}{4}$ of Section 3, T31S, R25E. Water for industrial use has been previously supplied by wells. Two of the previous underground mine ventilation shafts have been capped with access for water sampling retained. A third vent shaft has been reclaimed at the surface. The Velvet facilities area has been re-occupied, growth media has been salvaged and stockpiled, the surface graded, temporary shop facilities have been installed, the Velvet portal reopened, and rehabilitation of the portal and decline is in progress.

5.1.1.5 Land Use

The Velvet-Wood project area is generally used for livestock grazing and recreational uses such as hunting. An active copper mine and heap leach facility, Copper One Mine, is located 3 air miles north of the property. The presence of the copper mine and other industrial facilities in the area is significant in the context of mine permitting that the Velvet-Wood project will be compatible with current land use.

5.1.1.6 Flora and Fauna

All of the project areas are arid or semi-arid areas with little to no vegetation. Vegetation at Velvet-Wood is characteristically pinion, cedar, and juniper forest, with some ponderosas in the higher areas. Bare rock with sparse vegetation such as yucca is common, and sagebrush is thick in drainages where soil forms. Common mammals include the desert cottontail, squirrels, and mule deer. Common birds include jays, ravens, golden eagles, and hawks. There are also a variety of reptiles including lizards and snakes.

5.1.1.7 Surface Rights and Local Resources

The Velvet-Wood mining claims are on public lands; the surface and mineral rights are administered by the Bureau of Land Management (BLM). The Mining Law of 1872 provides for surface rights associated with mining claims provided the use and occupancy of the public lands in association with the development of locatable mineral deposits is reasonably incident including prospecting, mining, or processing operations and is approved by the appropriate BLM Field Office; see 43 CFR Subpart 3715. The state lease has similar provisions for surface use.

5.2 Slick Rock District

5.2.1 Slick Rock Complex

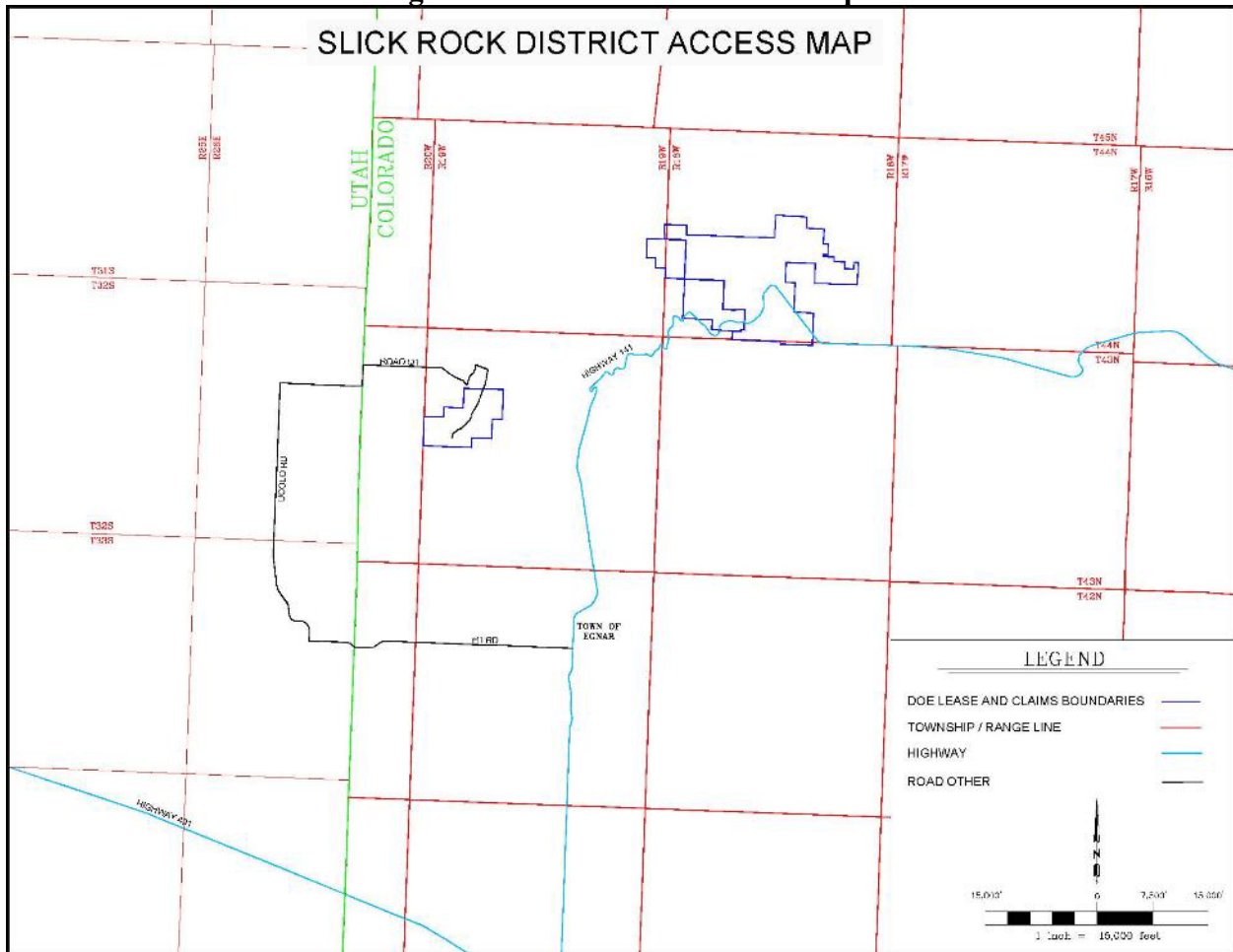
5.2.1.1 Physiographic Features

The Slick Rock property is located in the southern end of the Uravan mineral belt of the Colorado Plateau physiographic province. It is located in the southeastern edge of the Paradox fold and fault belt in the proximal Disappointment syncline. Elevations within the project area range from approximately 5,500 feet to 6,250 feet above sea level. The majority of the project area lies within the broad Disappointment Valley floor. It is bounded on the west by the Dolores River and incised to the west and south by Burro Canyon, Joe Davis Canyon, and Nicholas Wash. To the north is a dip-slope of an escarpment formed from erosion of the northern limb of the Disappointment Valley syncline.

5.2.1.2 Access

The Slick Rock project can be accessed via Colorado State Highway 141, County Road CR-T11, and numerous historic drill roads and trails (See Figure 5.2.1). To access the site: from the post office in Dove Creek, Colorado, drive 2.0 miles west-northwest on State Highway 491; turn right (north) onto State Highway 141; continue for 23.7 miles to County Road CR-T11, and then turn left onto the well-maintained gravel road.

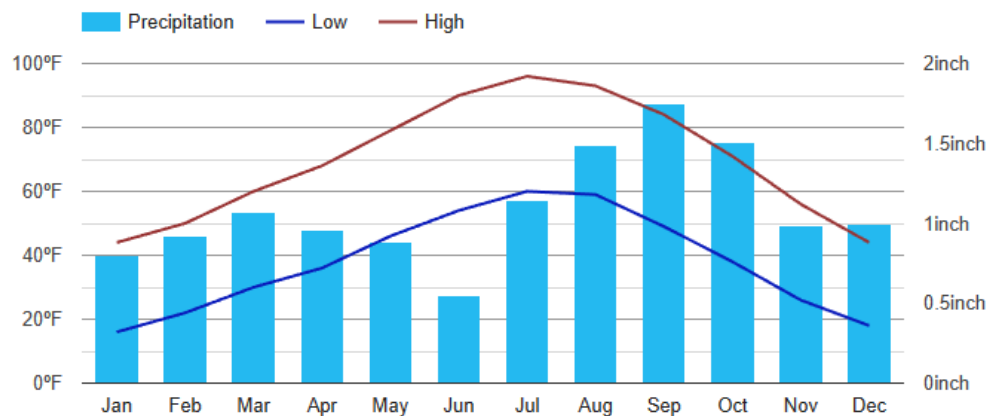
Figure 5.2.1 Slick Rock Access Map



5.2.1.3 Climate

The climate is semi-arid and is characterized by mild winters with moderate snowfalls which are seldom heavy enough to cause access problems. The summers are warm with temperatures occasionally reaching 100°F. Annual precipitation for the area averages approximately 12 inches occurring mostly during summer thunderstorms; the remaining precipitation comes from winter snow and spring rain. Climate is only a minimally limiting factor for year-round mining operations. Vegetation in the area is sparse and consists of junipers and pinion pines in rocky soils along with sage and other brush, forbs, grasses, and cacti typical of a semi-arid climate. See Figure 5.2.2 for a climate summary.

Figure 5.2.2 Slick Rock Climate Summary
 Naturita Climate Graph - Colorado Climate Chart



(<https://www.usclimatedata.com/climate/naturita/colorado/united-states/usco0651>)

5.2.1.4 Property Infrastructure

Cortez, Colorado (population 8,500) is the nearest major community, located approximately 57 miles south-southeast of the Slick Rock project area. It has sufficient services, fuel, accommodations, and supplies to serve as a staging area for any future exploration program.

The Slick Rock project area has multiple access roads in addition to overhead power lines and a buried natural gas line. A ventilation shaft exists on site to the Burro underground mine. The shaft has been grated and is open. The Burro and Ellison portals and underground mine workings are open and ground conditions are stable within the SR-13 lease.

5.2.1.5 Land Use

The Slick Rock project area is generally used for livestock grazing and recreational uses such as hunting. Historic mining occurred in the area including the Burro and Ellison Mines within the SR-13 lease. A legacy Department of Energy site is centrally located within the site.

5.2.1.6 Flora and Fauna

The site contains primarily pinyon-juniper woodland with some occasional sagebrush shrubland. Rabbitbrush is found on the disturbed areas from previous mining. Mammals found to be in the area are elk, mule deer, and bats. No endangered or threatened species other than Gunnison's Sage Grouse are likely in the area.

5.2.1.7 Surface Rights and Local Resources

The 1872 Mining Law grants certain surface rights to mineral claimants along with the right to mine provided the surface use is incident to the mine operations. In order to exercise those rights, the operator must comply with a variety of State and Federal regulations (refer to section 20.1). For the mine operations, as described in Section 16, the author concludes that Anfield has and/or can obtain sufficient surface rights for the planned operations through permitting and licensing of

site activities. The surface rights for SR-13 and SR-13A are controlled by the US Department of Energy (DOE).

5.2.2 SR-11 Project

5.2.2.1 Physiographic Features

The SR-11 property is located 8 miles southwest of the Slick Rock Project and is in the southern end of the Uravan mineral belt of the Colorado Plateau physiographic province. Elevations within the project area range from approximately 7,500 feet to 6,500 feet above sea level. The project is 1 mile south of the landmark of Summit Point and is bounded to the south by Summit Valley.

5.2.2.2 Access

The SR-11 Project is reached by Colorado State Highway 141, a paved 2 lane highway. From Highway 141, gravel county roads (S8 to Q1 to Q4) and existing dirt and two-track roads provide secondary access to the site.

5.2.2.3 Climate

The climate is semi-arid and is characterized by mild winters with moderate snowfalls which are seldom heavy enough to cause access problems. The summers are warm with temperatures occasionally reaching 100°F. Annual precipitation for the area averages approximately 12 inches occurring mostly during summer thunderstorms; the remaining precipitation comes from winter snow and spring rain. Climate is only a minimally limiting factor for year-round mining operations. Vegetation in the area is sparse and consists of junipers and pinion pines in rocky soils along with sage and other brush, forbs, grasses, and cacti typical of a semi-arid climate.

5.2.2.4 Property Infrastructure

Cortez, Colorado (population 8,500) is the nearest major community, located approximately 57 miles south-southeast of the Slick Rock project area. It has sufficient services, fuel, accommodations, and supplies to serve as a staging area for any future exploration program.

The SR-11 project area may be accessed by existing gravel county road Q4 and has multiple dirt roads throughout. There is limited infrastructure remaining on site. The site has an existing decline that was driven by Cotter in the late 2000's and a water tank.

5.2.2.5 Land Use

The SR-11 project area is generally used for livestock grazing and recreational uses such as hunting. Historic mining occurred in the area.

5.2.2.6 Flora and Fauna

The site is characterized as pinyon-juniper woodland with some occasional sagebrush shrubland. Rabbitbrush is found on the disturbed areas from previous mining. Mammals found to be in the area are elk, mule deer, and bats. No endangered or threatened species other than Gunnison's Sage Grouse are likely in the area.

5.2.2.7 Surface Rights and Local Resources

The surface rights for SR-11 are controlled by the US DOE. Adjacent lands are controlled by the US Bureau of Land Management.

5.3 Uravan District

5.3.1 Paradox Complex

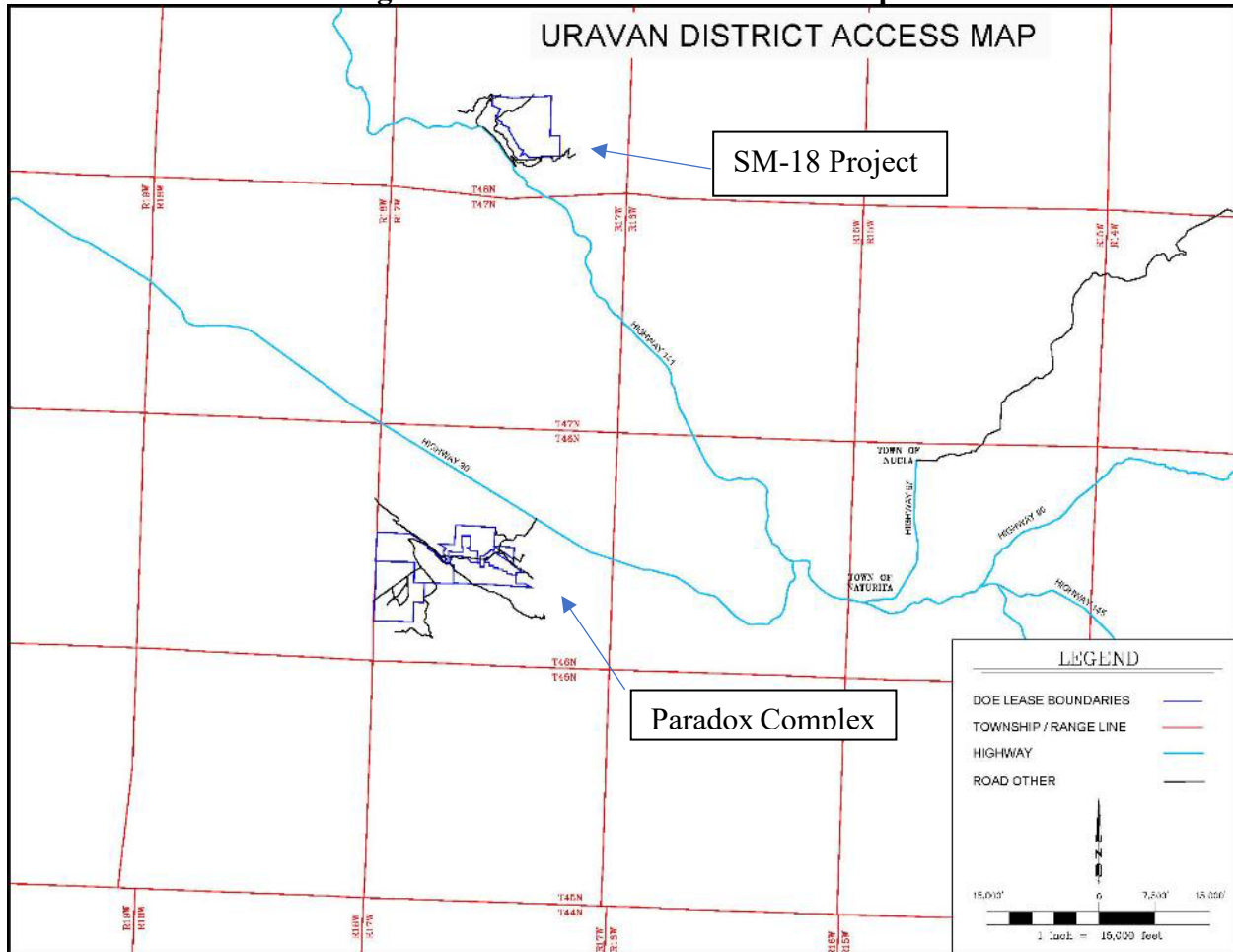
5.3.1.1 Physiographic Features

The Project area is typical of the mesa and canyon topography of southwest Colorado. Monogram Mesa dominates the setting, lying immediately south of Paradox Basin. The four lease tracts are located along the flanks of Monogram Mesa.

5.3.1.2 Access

The US DOE Leases can be reached by taking Colorado Highway 141 west approximately 1.5 miles from Naturita, turning south on State Highway 90, and then proceeding approximately 9 miles west. There, heading south on a maintained gravel road to Monogram Mesa accesses the JD-6, JD-8, and JD-9 Lease tracts. The JD-7 Lease is accessed by another gravel road, which heads south from State Highway 90, approximately 1.5 miles west from the Monogram Mesa access road. Refer to Figure 5.3.1.

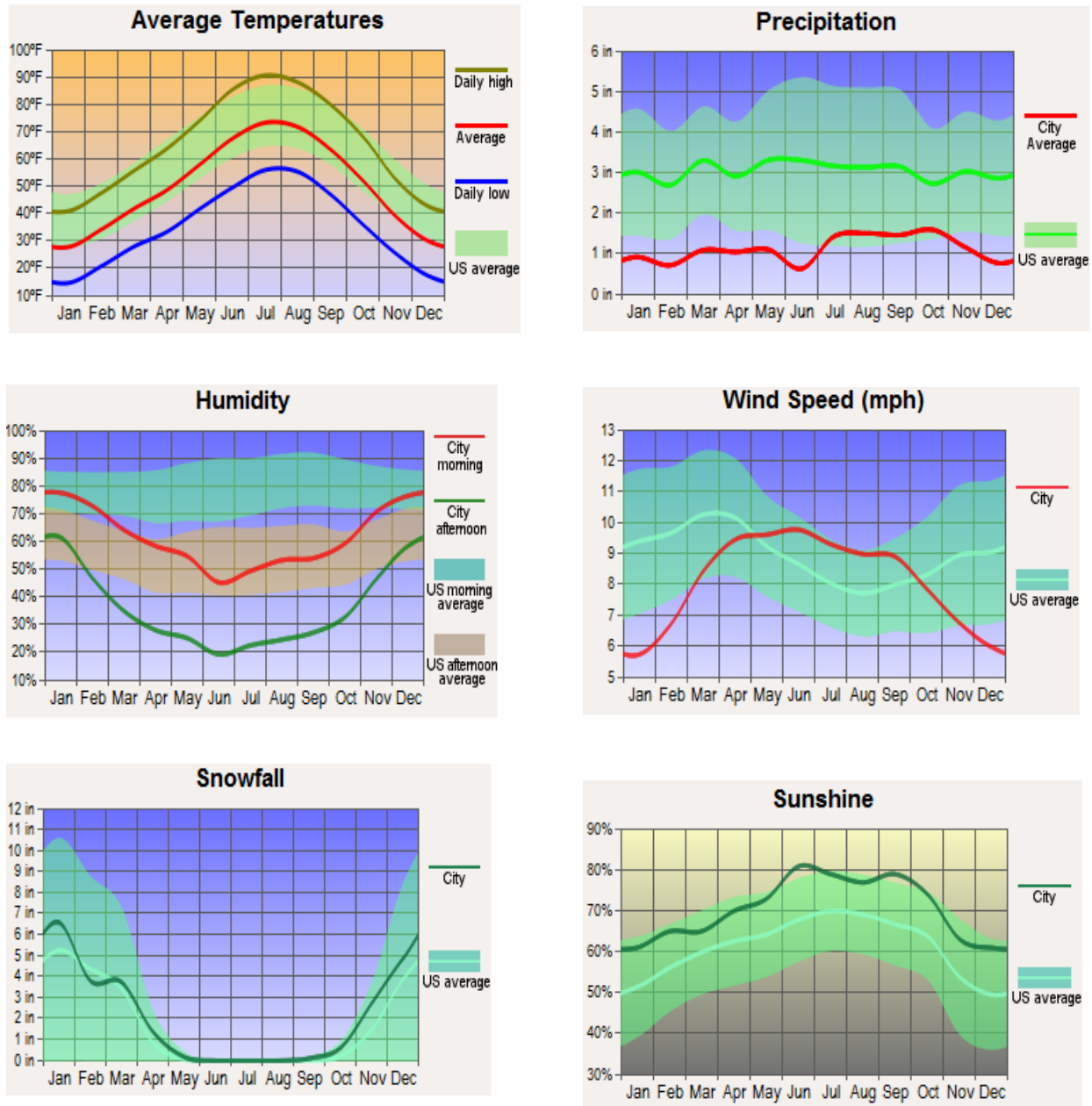
Figure 5.3.1 Uravan District Access Map



5.3.1.3 Climate

The Property climate is semi-arid to arid and receives annual precipitation of 7-12 inches with most precipitation falling in the form of spring rains and late autumn to early spring snows. The summer months are usually hot, dry, and clear except for infrequent, monsoonal rains. Due to the dry climate, all streams in the area are ephemeral to low flow, fed by storm runoff and the occasional groundwater seep. Temperatures range from approximately 70 to 90°F in the summer season, and 10 to 40°F in the winter season. Refer to Figure 5.3.2.

Figure 5.3.2 Average Climate in Naturita, CO



(<https://www.city-data.com/city/Naturita-Colorado.html>)

5.3.1.4 Property Infrastructure

There is limited infrastructure remaining onsite. Each lease has at least one adit for accessing the underground workings, and associated ore load outs. Surface infrastructure includes buildings and ventilation systems. At the JD-7 Lease, an open-pit was partially stripped above the mineralized horizon. Additionally, storm water catchments for run-off have been constructed and a storm water pollution prevention plan is in place.

5.3.1.5 Land Use

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

5.3.1.6 Flora and Fauna

The sites are located in pinyon-juniper woodland with some occasional sagebrush shrubland. Rabbitbrush is found on the disturbed areas from previous mining. Mammals found to be in the area are elk, mule deer, and bats. No endangered or threatened species other than Gunnison's Sage Grouse are likely in the area.

5.3.1.7 Surface Rights and Local Resources

The surface rights to the four lease tracts are controlled by the US DOE. Adjacent lands are controlled by the US Bureau of Land Management or are other US DOE lease tracts.

Although there are no sources of goods and services in the immediate vicinity of the project, there are adequate supplies of equipment, services, and work force at the city of Grand Junction, approximately 90 miles to the north. The nearby towns of Naturita and Nucla provide limited goods and services for exploration drilling activities. Skilled laborers for mining and mining contractors are available in the area.

5.3.2 SM-18 Project

5.3.2.1 Physiographic Features

The Project area is typical of the mesa and canyon topography of southwest Colorado. Monogram Mesa dominates the setting, lying immediately north of Paradox Basin.

5.3.2.2 Access

The SM-18 Project is adjacent to Colorado State Highway 141, a paved 2 lane highway providing major access to the site. From Highway 141, gravel county roads and existing dirt and two-track roads provide secondary access to the site.

5.3.2.3 Climate

The Property climate is semi-arid to arid and receives annual precipitation of 7-12 inches with most precipitation falling in the form of spring rains and late autumn to early spring snows. The summer months are usually hot, dry, and clear except for infrequent, monsoonal rains. Due to the dry climate, all streams in the area are ephemeral to low flow, fed by storm runoff and the occasional groundwater seep. Temperatures range from approximately 70 to 90°F in the summer season, and 10 to 40°F in the winter season.

5.3.2.4 Property Infrastructure

There is limited infrastructure remaining on site. There is a supply trailer, a water tank, a portal and a vent shaft still present from when the mine was previously active.

5.3.2.5 Land Use

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

5.3.2.6 Flora and Fauna

The property is located in pinyon-juniper woodland with some occasional sagebrush shrubland. Rabbitbrush is found on the disturbed areas from previous mining. Mammals found to be in the area are elk, mule deer, and bats. No endangered or threatened species other than Gunnison's Sage Grouse are likely in the area.

5.3.2.7 Surface Rights and Local Resources

The surface rights for the SM-18 Project are controlled by the US DOE. Adjacent lands are mostly controlled by the US Bureau of Land Management or are other US DOE lease tracts.

Although there are no sources of goods and services in the immediate vicinity of the project, there are adequate supplies of equipment, services, and work force at the city of Grand Junction, approximately 90 miles to the north. The nearby towns of Naturita and Nucla provide limited goods and services for exploration drilling activities. Skilled laborers for mining and mining contractors are available in the area.

5.4 Henry Mountain District

5.4.1 Shootaring Canyon Mill

5.4.1.1 Physiographic Features

The Shootaring Canyon Mill is located within the Colorado Plateau physiographic province. The region is made up of almost flat-lying sedimentary rocks formed into buttes, mesas, and deep narrow canyons.

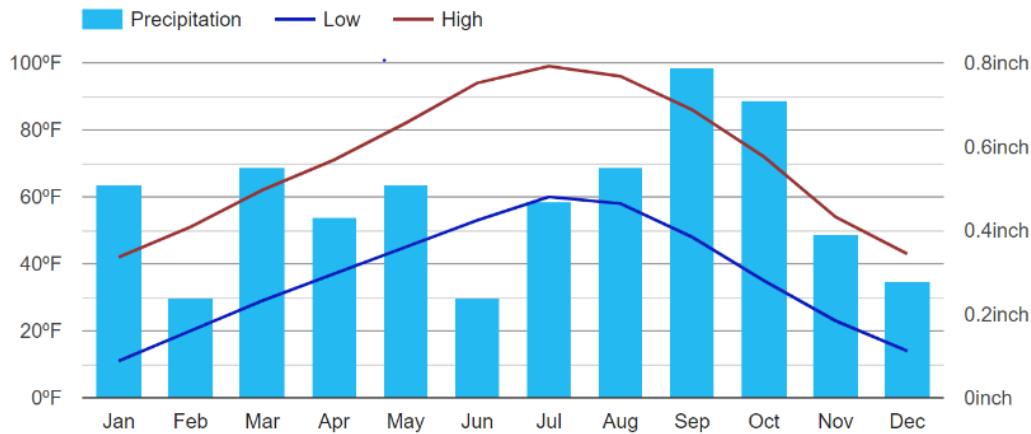
5.4.1.2 Access

The Shootaring Canyon Mill is located approximately 2 miles west of Utah Highway 276 and approximately 3 miles north of Ticaboo, Utah as shown in Figure 1.1.1. By road it is approximately 180 miles from the mill to the Velvet Mine area. Access to the mill is via paved highways with the exception of the 2-mile gravel road from the mill to Highway 276.

5.4.1.3 Climate

The climate is arid. Average temperatures in July range from a high of 99°F and a low of 60°F. The average temperatures in January range from a high of 42°F and a low of 11°F. The average annual precipitation is less than 6 inches. Winters are generally mild, and the length of the operating season should not be affected by the climate. A climate summary follows in Figure 5.4.1.

Figure 5.4.1 Shootaring Canyon Mill Climate Summary



(<https://www.usclimatedata.com/climate/hanksville/utah/united-states/usut0101>)

5.4.1.4 Property Infrastructure

The Shootaring Canyon Mill infrastructure is discussed in Sections 17 and 18.

5.4.1.5 Land Use

The Shootaring Canyon mill is an existing mineral processing facility that is located on private land with no public access.

5.4.1.6 Flora and Fauna

The Shootaring Canyon Mill site is sparsely vegetated. Bare rock with sparse vegetation such as yucca is common, and sagebrush is thick in drainages where soil forms. Common mammals include the desert cottontail and mule deer. Common birds include jays, ravens, golden eagles, and hawks. There are also a variety of reptiles including lizards and snakes.

5.4.1.7 Surface Rights and Local Resources

The primary mill infrastructure is located on private property owned by Anfield. Adjacent surface leases associated with the mill convey the necessary rights for operation of the mill and associated tailings facility provided all environmental regulations and license conditions are met.

Ticaboo, Utah is the closest community to the mill, approximately 3 miles to the north.

Section 6: History

6.1 Project History

6.1.1 Velvet-Wood Project History

The original locator of the Velvet area was Gulf Minerals Corporation (Gulf). The Velvet Mine Uranium Project was initially drilled during the 1970s with the principal exploration work and drilling completed by Gulf.

The Wood mineralization was discovered in 1975 by Atlas in Section 6, Township 31 South, Range 26 East (Chenoweth, 1990). Uranerz U.S.A. Inc. (Uranerz) later controlled the Wood area of the project during the 1980s when most of the initial exploration took place. A total of 120 known historic rotary drill holes were completed by Uranerz from 1985 through 1991. The exploration resulted in the discovery of three mineralized zones in the Cutler Formation. The most important of these, the Wood mineralized body, was outlined in 14 holes that intercepted high grade material. Sometime in the 1990s, Uranerz's mining claims were allowed to lapse.

Gulf sold the Velvet property to Atlas in the late 1970s. Atlas' Velvet Mine commenced operations in 1979 in Section 3 and advanced to the property line with Section 2. Atlas completed feasibility studies for mining the Section 2 mineral resources including hoisting and haulage of mined products to their Moab mill for processing in 1980. These plans were never executed due to low uranium prices in the 1980s, and the Section 2 property was sold by Atlas Minerals as they were experiencing an economic downturn. The Velvet Mine was closed in 1984. Subsequent changes in ownership include:

- The Velvet Mine property was acquired by Umetco Minerals Corp. in 1989.
- Umetco held the Section 3 property until the mid-1990s at which time the property was transferred to US Energy (USE).
- Mr. William Sheriff secured the Section 2 state lease by competitive bid and staked the adjoining mining claims. The property was then transferred to Energy Metals Corporation (EMC).
- In 2004, Energy Metals Corporation staked new mining claims over the Wood area.
- Uranium One gained control of the Velvet-Wood property through the purchase of Energy Metals Corporation in 2007.

As discussed in Section 4.2, Anfield purchased the Velvet-Wood Uranium Project and other conventional uranium assets including the Shootaring Canyon Mill located near Ticaboo, Utah from Uranium One in August 2015.

6.1.2 Slick Rock Project History

Surficial to shallow uranium/vanadium mineralization has been known in the Slick Rock area since the early 1900s, originally known as the McIntyre district. First mined for radium and minor uranium until 1923, numerous companies sporadically operated small-scale mining and processing facilities along the Dolores River. In 1931, a mill was constructed by Shattuck Chemical Co. to process vanadium ore. Beginning in 1944, the area was worked by Union Mines Development Corp. for uranium/vanadium ore. The uranium was used to develop and construct the first atomic bombs. This sparked intensive exploration efforts throughout the Uravan mineral belt.

Between November 1948 and March 1956, the United States Geological Survey (USGS) drilled 2,641 holes in the Slick Rock district to explore for uranium- and vanadium-bearing deposits. The drilling was part of an exploration program conducted for the U.S. Atomic Energy Commission (AEC)(OFR70-348). Fifty-two of these drill holes were located within the boundary of Anfield's Slick Rock project area. The first phase of the USGS's exploration was to obtain geological data and delineate areas of favorable ground. This widely spaced drilling program was done on approximately 1,000 foot centers. The second phase was drilled with more moderate spacing (100-300 foot centers) to discover ore deposits. The third phase was drilled on more closely spaced intervals (50-100 foot centers) to extend and outline any deposits discovered by earlier drilling (Weir, 1952). At this time, private industry was also actively exploring the area. By 1954, an estimated 212,000 feet of drilling was completed district wide (Shawe, 2011).

By December 1955, Union Carbide Nuclear Corp. (UCNC) had drilled out a sufficient resource on the north side of Burro Canyon and began sinking three shafts. In December 1957, the shaft sinking was complete on the Burro No. 3, 5, and 7 mines to total depths of 408 feet, 414 feet, and 474 feet, respectively. In the same year, initial ore shipments to UCNC's concentrating mill at Slick Rock were also made. The concentrated ore was processed at the UCNC mill in Rifle, Colorado until the mid-1960s when a vanadium circuit was constructed at the Uravan mill site.

The Anfield Slick Rock project has received more recent interest by the exploration activities of United States Enrichment Corporation (USEC,) Energy Fuels, and Homeland Uranium. In 2006, USEC drilled 17 boreholes. All boreholes were completed to target depth, except one borehole SR-1011 which was abandoned.

In 2007, Energy Fuels drilled five boreholes on the extreme northern portion of the project. Four of the boreholes were oxidized and barren. The fifth borehole was abandoned due to excessive water encountered in the Burro Canyon Formation and the upper Salt Wash Member of the Morrison Formation (Bill Thompson, Manager, Ur-Energy, LLC).

In 2008, Homeland Uranium drilled four boreholes in an effort to twin the mineralized boreholes drilled by the AEC in the 1950s. All boreholes were completed to target depth.

Uranium Energy Corporation (UEC) began acquiring mineral interests in the Slick Rock project area beginning in December of 2010 by staking areas where the previous owner had allowed the mining claims to lapse. UEC then held 293 mineral lode claims encompassing an area of approximately 4,858.5 acres. UEC also began leasing additional claims from UR Energy on November 30, 2011.

Anfield acquired all of UEC's Slickrock holdings including claims and claims leases on April 12, 2022, as part of the overall acquisition agreement. Anfield announced subsequently on June 8, 2022, that it completed the previously announced asset swap to exchange certain of its properties for properties of UEC (the "**Property Swap**" and, together with the Debt Settlement, the "**Transactions**"). Pursuant to the terms of the Property Swap, Anfield acquired UEC's interest in the Slick Rock uranium-vanadium property ("**Slick Rock**") located in San Miguel County, Colorado, in exchange for UEC acquiring Anfield's in-situ recovery uranium asset portfolio in Wyoming. (<https://anfieldenergy.com/anfield-energy-announces-completion-of-transactions-with-uranium-energy-and-conversion-of-subscription-receipts-issued-in-c15-million-offering/>)

6.1.3 DOE Leases History

DOE Leases are managed by the Department of Energy Legacy Management Program (LM). LM currently manages the Uranium Leasing Program (ULP) and continues to administer 31 lease tracts, all located within the Uravan Mineral Belt in southwestern Colorado. Of these lease tracts, 29 of these lease tracts are actively held under lease and two have been placed in inactive status indefinitely. Anfield controls 21 of the 29 active DOE Lease tracts. Anfield refers to the DOE leases as mine complexes named by geographic areas as summarized in Table 6.1.1. The locations of the DOE Lease are shown on Figure 6.1.1.

For completeness and due to their commonality, a general discussion of all Anfield's DOE leases is included herein. Of the 21 DOE Leases held by Anfield, 6 are included in the PEA as mineral resources including:

- Paradox Mine Complex; JD-6, JD-7, JD-8, JD-9
- Uravan Mine Complex; SM-18
- Slick Rock Mine Complex; SR-11

Specific details and status of these leases are provided in the relevant sections of this report.

Beginning in the 1950s, the leases were explored by the US Atomic Energy Commission (US AEC, now US DOE).

1949-1962: First Leasing Period (Mineral Leasing Program)

In 1949, AEC included portions of these lands in 48 mineral leases that were negotiated with adjacent mine owners and operators.

1974-1994: Second Leasing Period (Uranium Leasing Management)

A second leasing program was initiated in 1974. The previously withdrawn lands were divided into 44 lease tracts and offered to the domestic uranium industry through a competitive bid process. During this program the 21 DOE leases now held by Anfield were originally leased.

1994-2008: Third Leasing Period (Uranium Leasing Program)

In 1994, all existing leases were allowed to expire to give DOE the opportunity to prepare a programmatic Environmental Assessment (EA) to determine if the leasing program should continue. Recognizing that the former lessees had a vested interest in their respective lease tracts, DOE granted the lessees access to the lease tracts to maintain their existing operations or perform reclamation. In 1996, DOE reoffered respective leases to the previous lessees. At that time, many former lessees opted out of the program, leaving just two lessees, who chose to continue with their respective, multiple leases.

1994-2011: Legacy Mine Reclamation

In October 1994, DOE initiated a mine reconnaissance program to locate, identify, and quantify mine-related features associated with the abandoned uranium "legacy" mine sites located on the lease tracts. In 2005, DOE prepared a second programmatic EA to determine if the leasing program should continue. The EA was finalized and approved in July 2007. A Finding of No Significant Impact (FONSI) was issued in that same month for the continued leasing of DOE-managed lands for another 10-year period for the exploration and production of uranium and vanadium ores. In April and June 2008, DOE executed new 10-year lease agreements. On July 31, 2008, several

environmental organizations filed suit against DOE and the ULP in federal court for the District of Colorado. On October 18, 2011, the court ruled that DOE violated National Environmental Policy Act (NEPA). The court invalidated the July 2007 evaluation and finding, stayed the 29 leases in existence under the program. DOE announced the public availability of the Final Uranium Leasing Programmatic Environmental Impact Statement (PEIS) on March 21, 2014.

2020-2030: Fifth Leasing Period

DOE continued the leasing program for an additional 10-year period and executed new 10-year leases in January and July 2020 with the existing leaseholders.

Current Status

Nine of the leases were obtained by Cotter Corporation which extensively explored them by surface drilling methods. Extensive mineralized deposits were delineated, and underground mining was completed on each of the leases from the late 1970s to early 2000s. The JD-7 Lease also underwent surface mining, with preliminary stripping of an open-pit completed to within 100 feet of the top of mineralization. In addition, 12 of the leases were obtained by Golden Eagle Mining (GEMI) and Golden Eagle Uranium (GEU). The leases like those controlled by Cotter had historic underground mine production. The current 10-year lease agreements were executed in 2020.

Anfield purchased the Cotter Leases in March 2019 and the GEU/GEMI leases in January 2024.

In the DOE Uranium Leasing Program Annual Status and Activities Report for Calendar Year 2024, March 2025, LM states it has begun preparing updates to the lease agreements to be issued in the future. DOE has verbally stated it intends to re-issue the leases to current lessees for an additional 10-year period so long as conditions of the leases are being met.

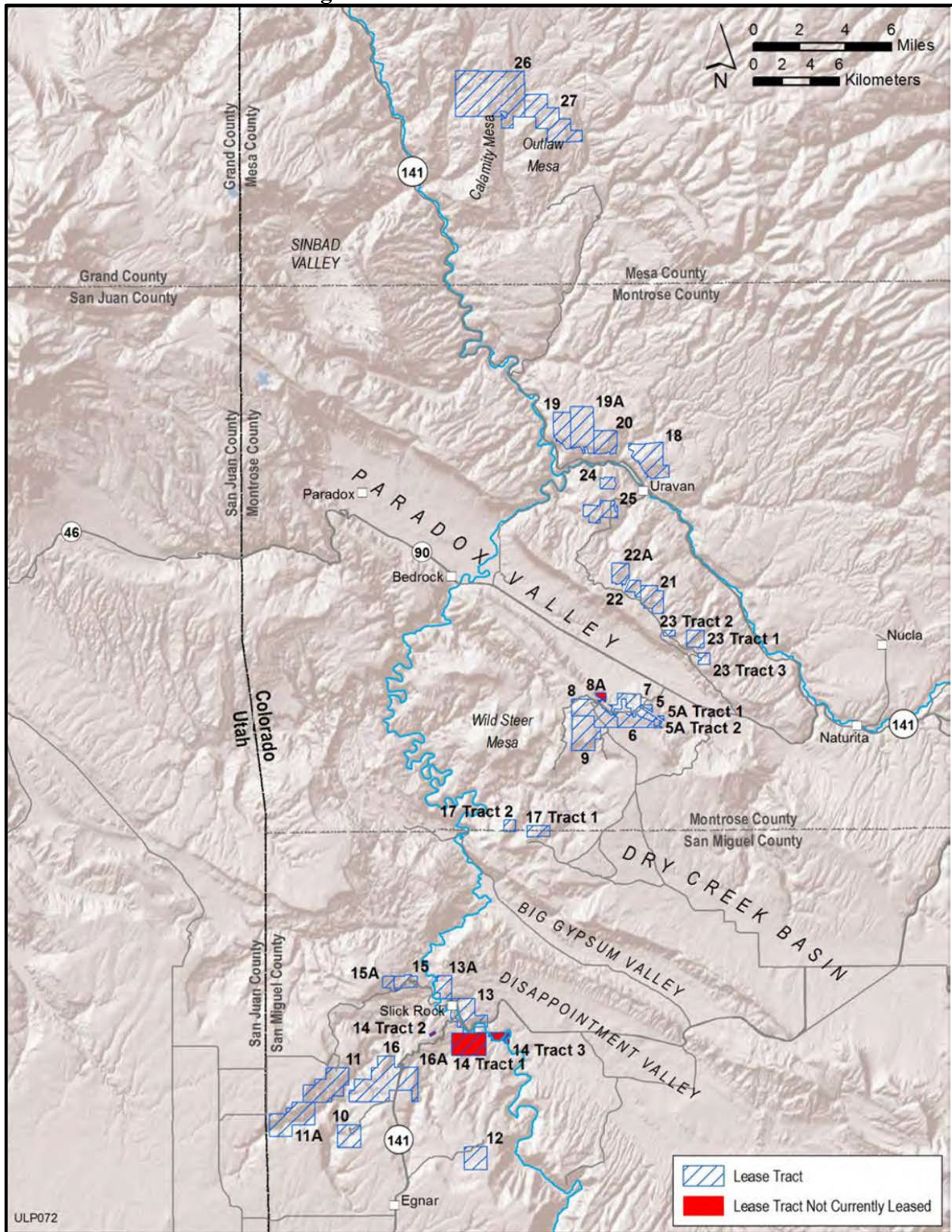
Eleven of the leases have existing permits with reclamation plans and respective bonds as discussed in Section 4. These reclamation plans can be superseded with new mine permits.

Previous mineral resource estimates are discussed in Section 6.2. Past production on the leases is discussed in Section 6.3.

Table 6.1.1 DOE Leases Held by Anfield

DOE Lease Number	Claim Name	Acquired From	Lease Date	Date Acquired	DRMS Surety	DOE Surety	DOE Royalty	Cotter Royalty	Annual Advance
Slick Rock Mine Complex									
DE-RO01-19LM70238	C-SR-11	Cotter	7/6/2020	Mar 2019	\$ 100	\$ 94,400	13.73%	15%	\$ 24,900
DE-RO01-19LM70241	C-SR-13A	Cotter	7/6/2020	Mar 2019	\$ 21,600	\$ 6,000	29.50%	15%	\$ 10,200
DE-RO01-19LM70240	C-SR-13	GEMI	1/6/2020	Jan 2024	\$ 300	\$ 31,282	15.52%		\$ 13,200
DE-RO01-19LM70242	C-SR-15	GEMI	1/6/2020	Jan 2024	\$ -	\$ -	15.12%		\$ 6,300
DE-RO01-19LM70229	C-SR-10	GEU	1/6/2020	Jan 2024	\$ -	\$ -	13.10%		\$ 3,900
DE-RO01-19LM70230	C-SR-11A	GEU	1/6/2020	Jan 2024	\$ -	\$ -	14.30%		\$ 12,400
DE-RO01-19LM70231	C-SR-15A	GEU	1/6/2020	Jan 2024	\$ -	\$ -	15.05%		\$ 10,900
DE-RO01-19LM70232	C-SR-16	GEU	1/6/2020	Jan 2024	\$ -	\$ -	15.10%		\$ 5,200
Paradox Mine Complex									
DE-RO01-19LM70253	C-JD-5	GEMI	7/6/2020	Jan 2024	\$ 100	\$ 66,595	13.80%		\$ 10,600
DE-RO01-19LM70237	C-JD-5A	GEU	1/6/2020	Jan 2024	\$ -	\$ -	20.10%		\$ 4,800
DE-RO01-19LM70254	C-JD-6	Cotter	7/6/2020	Mar 2019	\$ 100	\$ 66,800	19.92%	15%	\$ 28,300
DE-RO01-19LM70255	C-JD-7	Cotter	7/6/2020	Mar 2019	\$ 131,007	\$ 2,198,800	16.86%	15%	\$ 87,100
DE-RO01-19LM70256	C-JD-8	Cotter	7/6/2020	Mar 2019	\$ 29,950	\$ 58,100	15.02%	15%	\$ 13,600
DE-RO01-19LM70257	C-JD-9	Cotter	7/6/2020	Mar 2019	\$ 100	\$ 317,900	16.26%	15%	\$ 21,800
DE-RO01-19LM70233	C-WM-17	GEU	1/6/2020	Jan 2024	\$ -	\$ -	15.20%		\$ 6,000
Uravan Mine Complex									
DE-RO01-19LM70244	C-SM-18	Cotter	7/6/2020	Mar 2019	\$ 43,672	\$ 63,900	16.08%	15%	\$ 37,700
DE-RO01-19LM70250	C-CM-25	Cotter	7/6/2020	Mar 2019	\$ 24,405	\$ 5,000	19.38%	15%	\$ 19,200
Long Park Mine Complex									
DE-RO01-19LM70248	C-LP-21	Cotter	7/6/2020	Mar 2019	\$ 100	\$ 48,000	16.92%	15%	\$ 33,000
DE-RO01-19LM70234	C-LP-22	GEU	1/6/2020	Jan 2024	\$ -	\$ -	15.10%		\$ 7,900
DE-RO01-19LM70235	C-LP-22A	GEU	1/6/2020	Jan 2024	\$ -	\$ -	12.10%		\$ 3,900
DE-RO01-19LM70236	C-LP-23	GEU	1/6/2020	Jan 2024	\$ -	\$ -	16.10%		\$ 19,400

Figure 6.1.1 DOE Uranium Leases



6.1.4 Shootaring Canyon Mill Ownership History

The Shootaring Canyon Mill was licensed and constructed by Plateau Resources, and has had a succession of owners including US Energy and Uranium One prior to Anfield. The mill was built starting in 1980 and commenced operations in 1982. The mill operated briefly ceasing operations due to the depressed price of uranium after approximately 6 months. The mill processed less than 6,000 tons and produced and sold 27,825 pounds of U₃O₈. The mill and its source material license have been maintained.

On August 27, 2015, Anfield closed the Asset Purchase Agreement (APA) with Uranium One Americas Inc. (Uranium One) and subsequently amended to acquire the Shootaring Canyon Mill located in Utah and a portfolio of conventional uranium mine assets including the Velvet and Wood mines previously discussed.

6.2 Previous Mineral Resource Estimates

6.2.1 Velvet-Wood Historic Mineral Resource Estimates

A historic mineral resource estimate for the Velvet area within Section 2 was completed by MRC using a polygonal method. A similar historical mineral resource estimate for the Velvet area within Section 3 was completed by Price, 1987. Mineral resources related to the Wood area, located in T31S, R26E, Section 7, is referenced in the literature (Chenoweth, 1990). However, the original source and basis of this estimate is not known and thus cannot be stated herein.

Section 14 provides a current estimate of mineral resources in accordance with National Instrument 43-101.

6.2.2 Slick Rock Historic Mineral Resource Estimates

There are no historical mineral resource estimates for Slick Rock known to the authors.

6.2.3 DOE Historic Mineral Resource Estimates

As part of the DOE leasing program's Programmatic Environmental Impact Statement (PEIS), Issued in March 2014 (DOE, 2014), DOE estimated the remaining uranium resources for the lease tracts, see Table 6.2.1. The method and resource classification for this estimate was not provided.

Section 14 provides current mineral resource estimates for the following six DOE leases included in the PEA as mineral resources including:

- Paradox Mine Complex; JD-6, JD-7, JD-8, JD-9
- Uravan Mine Complex; SM-18
- Slick Rock Mine Complex; SR-11

Table 6.2.1 DOE Leases Historic Mineral Resources

DOE Lease	Remaining Resource* lbs U₃O₈	Area	County
C-JD-5	230,000	Paradox	Montrose
C-JD-5A	30,000	Paradox	Montrose
C-JD-6	850,000	Paradox	Montrose
C-JD-7	2,800,000	Paradox	Montrose
C-JD-8	330,000	Paradox	Montrose
C-JD-9	630,000	Paradox	Montrose
C-WM-17	75,000	Paradox	Montrose
C-SR-10	not known	Slick Rock	San Miguel
C-SR-11	740,000	Slick Rock	San Miguel
C-SR-11A	300,000	Slick Rock	San Miguel
C-SR-13	330,000	Slick Rock	San Miguel
C-SR-13A	220,000	Slick Rock	San Miguel
C-SR-15	84,000	Slick Rock	San Miguel
C-SR-15A	250,000	Slick Rock	San Miguel
C-SR-16	44,000	Slick Rock	San Miguel
C-SM-18	1,200,000	Uravan	Montrose
C-CM-25	540,000	Uravan	Montrose
C-LP-21	1,000,000	Long Park	Montrose
C-LP-22	140,000	Long Park	Montrose
C-LP-22A	not known	Long Park	Montrose
C-LP-23	550,000	Long Park	Montrose
Source: DOE, EIS-0475, March 2014			

* Amount shown equals the lease "bid quantity" minus the total production to date.
Values have been rounded to two significant figures.

Cautionary Statement on Historical Resource Estimates

In accordance with NI 43-101 Section 2.4, disclosure of historic mineral resources, Anfield is not treating these historical mineral resources as current mineral resources. The resource estimates cited are based on data and reports prepared by others. These resource estimates are of a historic nature. Work necessary to independently verify the classification of the mineral resource estimates in accordance with National Instrument 43-101, verified by a qualified person, and in compliance with CIM standards has not been completed. This historical estimate should not be relied upon.

6.3 Past Production

6.3.1 Velvet-Wood Past Production

The Velvet Mine operated into the early 1980s. According to Chenoweth, due to continued low uranium prices, Atlas Minerals closed all of its mines and mill, which included the Velvet Mine in southeastern Lisbon Valley in March 1984. When the Velvet Mine was closed it had produced approximately 400,000 tons of ore which graded 0.46 percent U_3O_8 and 0.64 percent V_2O_5 with total production estimated at 4.2 million pounds of U_3O_8 (Chenoweth 1990).

6.3.2 Slick Rock Past Production

In 1971, the final year that the Atomic Energy Commission reported production figures, the Burro mines had produced 404,804 tons of ore at an average grade of 0.25% U_3O_8 yielding 1,992,898 lbs U_3O_8 , and 1.5% average grade V_2O_5 yielding 12,149,659 lbs V_2O_5 (Nelson-Moore et al., 1978). According to the Colorado Bureau of Mines' annual reports, the Burro mines produced an additional 243,825 lbs U_3O_8 at an average grade of 0.20% and 1,791,798 lbs V_2O_5 at an average grade of 1.4% up until 1983 when depressed uranium prices forced an end to mining activities. The total production of the Burro mines was 2,236,723 lbs U_3O_8 and 13,941,457 lbs V_2O_5 as summarized in Table 6.3.1.

Table 6.3.1 Slick Rock District Total Production

Production Years	U_3O_8 (lbs)	V_2O_5 (lbs)
1957-1971	1,992,898	12,149,659
1971-1983	243,825	1,791,798
Total	2,236,723	13,941,457

6.3.3 DOE Leases Past Production

Past production is reported on 17 of the 21 DOE Leases controlled by Anfield as shown on Table 6.3.2. Note past production is reported for all the DOE leases controlled by Anfield. The six DOE leases included in the PEA as mineral resources are:

- Paradox Mine Complex; JD-6, JD-7, JD-8, JD-9
- Uravan Mine Complex; SM-18
- Slick Rock Mine Complex; SR-11

Table 6.3.2 DOE Lease Historic Production

DOE Lease	Historical Production			Area	County
	lbs U ₃ O ₈	lbs V ₂ O ₅	Ratio V:U		
C-JD-5	410,951	732,466	1.8	Paradox	Montrose
C-JD-5A	not known			Paradox	Montrose
C-JD-6	348,125	2,307,093	6.6	Paradox	Montrose
C-JD-7	46,280	125,410	2.7	Paradox	Montrose
C-JD-8	35,704	125,410	3.5	Paradox	Montrose
C-JD-9	226,711	1,213,986	5.4	Paradox	Montrose
C-WM-17	not known			Paradox	Montrose
C-SR-10	988,597	7,426,751	7.5	Slick Rock	San Miguel
C-SR-11	161,997		-	Slick Rock	San Miguel
C-SR-11A	5,110	42,713	8.4	Slick Rock	San Miguel
C-SR-13	372,748	2,765,681	7.4	Slick Rock	San Miguel
C-SR-13A	not known			Slick Rock	San Miguel
C-SR-15	381,652	2,219,856	5.8	Slick Rock	San Miguel
C-SR-15A	954,080	4,342,039	4.6	Slick Rock	San Miguel
C-SR-16	not known			Slick Rock	San Miguel
C-SM-18	22,533	97,186	4.3	Uravan	Montrose
C-CM-25	62,411	255,812	4.1	Uravan	Montrose
C-LP-21	175,770	1,235,865	7.0	Long Park	Montrose
C-LP-22	181,055	871,539	4.8	Long Park	Montrose
C-LP-22A	572,742	2,950,255	5.2	Long Park	Montrose
C-LP-23	245,944	1,476,359	6.0	Long Park	Montrose

Sources: Behre-Dolbear, 2007, DOE, EIS-0475 March 2014

Section 7: Geological Setting and Mineralization

7.0 Regional Geological Setting: The Colorado Plateau

The Colorado Plateau is a regional geologic feature characterized by high elevation mesas and deeply incised canyons in southwestern Colorado and much of eastern Utah. The sedimentary units which dominate the Colorado Plateau were deposited during a period of tectonic stability beginning in the early Paleozoic and running through the Mesozoic Eras. During this time, a stable shelf depositional environment allowed thick accumulations of clastic, carbonate, and evaporitic sediments. Beginning approximately 6 million years ago, the entire Colorado Plateau was subject to epeirogenic uplift of 4,000-6,000 feet. This geologically rapid uplift caused the existing rivers and streams to aggressively downcut resulting in the canyon lands topography of today (Hunt, 1956). The Velvet-Wood, Slick Rock, and Uravan Districts are situated in the central portion of the Colorado Plateau. The Velvet-Wood Project lies along the western flank of the Lisbon Valley anticline in the Lisbon Valley Utah while the Slick Rock Projects are located along the spine of the Disappointment syncline in the Paradox Basin of Colorado.

Sedimentary strata within the Colorado Plateau hosts numerous uranium/vanadium deposits. Uranium deposits are hosted by the Pennsylvanian Hermosa Formation, the Permian Cutler Formation, the Triassic Chinle Formation, and the Jurassic Morrison Formation as shown on the stratigraphic description in Table 7.0.1. During the Jurassic, rising salt domes, which caused anticlinal and synclinal folding, were the positive topographic features that dictated the direction of river systems flowing from the highlands to the southwest. This resulted in a pattern of high sandstone to mudstone ratios in synclinal valleys that flanked the elongated salt domes at the time. The high ratio of sandstone to mudstone allowed for increased permeability and porosity. This permitted increased fluid flow, which later influenced the formation of the uranium and vanadium deposits. Thicker sequences of sandstone were generally more conducive for development of the mineralized zones of uranium and vanadium.

The Lisbon Valley Anticline along which the Velvet-Wood project is located is the most productive uranium producing area in Utah (Chenoweth, 1990). Among the rock units exposed along the Lisbon Valley Anticline, those that contain documented uranium mineralization are the Permian Cutler Formation, the Triassic Chinle Formation (Moss Back Member) and the Morrison Formation (Salt Wash Member).

The majority of the uranium production in the Colorado Plateau was from the Morrison Formation, specifically the Salt Wash Member. In the Salt Wash Member, deposits are concentrated along a thin, one to several mile-wide arcuate belt that extends from the Gateway district through the Uravan district and south to the Slick Rock district. This concentration of deposits was termed the Uravan Mineral Belt as shown on Figure 7.0.1 (Fischer and Hilpert, 1952). This crescent-shaped area in the Jurassic Morrison formation has closely spaced, larger-sized, and higher-grade uranium deposits than the adjoining areas.

The Paradox Complex and the SM-18 Project are located within the northern half of the Uravan Mineral Belt, while the Slick Rock Complex and the SR-11 Project lie within the southern half. The Uravan Mineral Belt has been a historically significant producer of uranium and vanadium since the early 20th century. All projects have significant adjacent and adjoining uranium and vanadium production histories, as discussed in Section 6, History.

Table 7.0.1 Stratigraphy of Slick Rock District and Vicinity (Shawe, 1970)

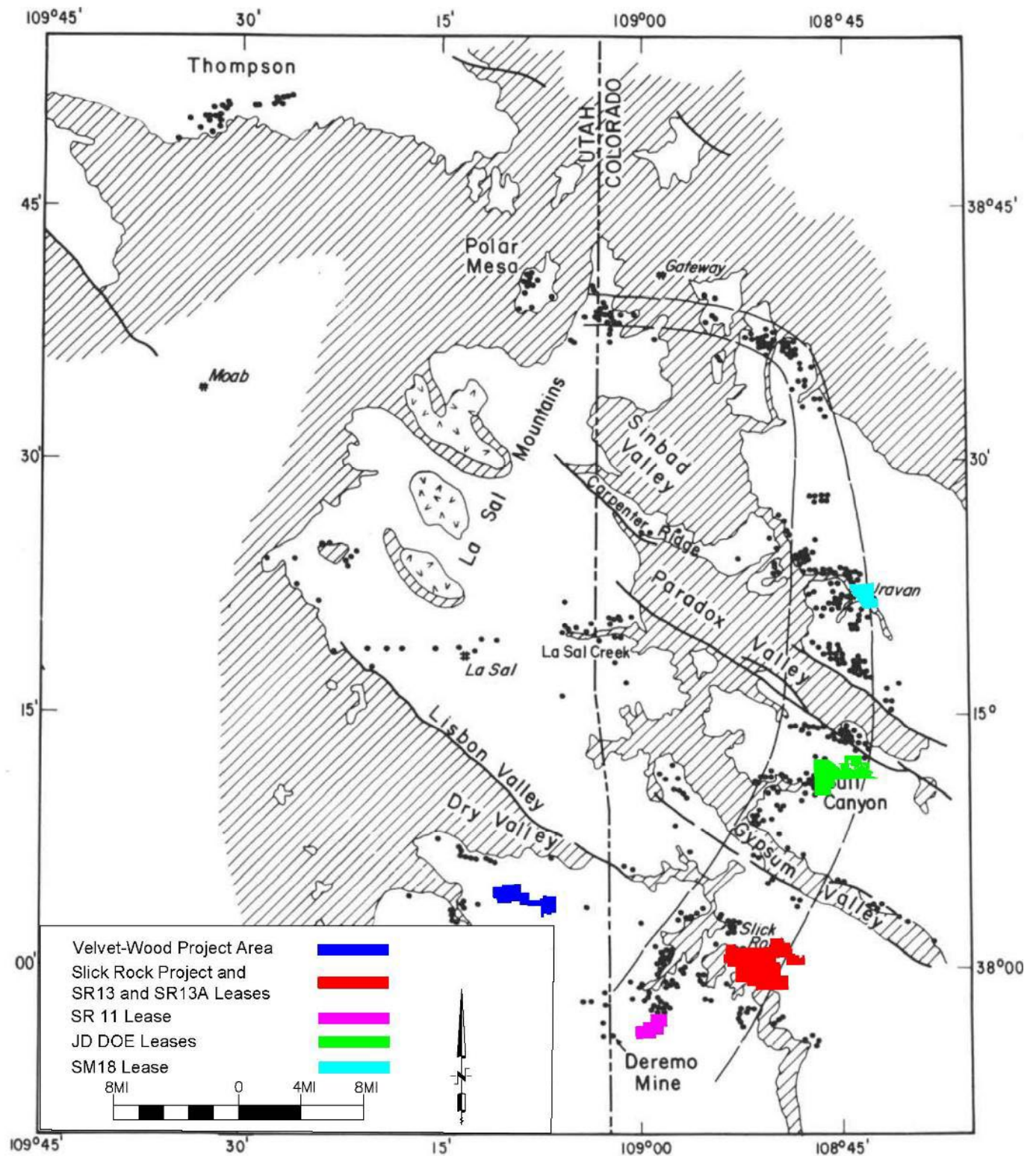
STRUCTURE OF SLICK ROCK DISTRICT AND VICINITY

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TABLE 1.—Summary of consolidated sedimentary rocks in the Slick Rock district

Age	Formation and member	Thickness (feet)	Description
Late Cretaceous	Mancos Shale	1, 600–2, 300	Dark-gray carbonaceous, calcareous shale.
	Dakota Sandstone	120–180	Light-buff sandstone and conglomeratic sandstone, dark-gray carbonaceous shale, and coal.
Early Cretaceous	Burro Canyon Formation	40–400	Light-gray to light-buff sandstone and conglomeratic sandstone; greenish-gray and gray shale, siltstone, limestone, and chert.
Late Jurassic	Morrison Formation, Brushy Basin Member	300–700	Reddish-brown and greenish-gray mudstone, siltstone, sandstone, and conglomerate.
	Morrison Formation, Salt Wash Member	275–400	Light-reddish-brown, light-buff, and light-gray sandstone and reddish-brown mudstone.
	Junction Creek Sandstone	20–150	Light-buff sandstone.
	Summerville Formation	80–160	Reddish-brown siltstone and sandstone.
	Entrada Sandstone, Slick Rock Member	70–120	Light-buff to light-reddish-brown sandstone.
	Entrada Sandstone, Dewey Bridge Member	20–35	Reddish-brown silty sandstone.
Jurassic and Triassic(?)	Navajo Sandstone	0–420	Light-buff and light-reddish-brown sandstone.
Late Triassic(?)	Kayenta Formation	160–200	Purplish-gray to purplish-red siltstone, sandstone, shale, mudstone, and conglomerate.
Late Triassic	Wingate Sandstone	200–400	Light-buff and light-reddish-brown sandstone.
	Chinle Formation, Church Rock Member	340–500	Reddish-brown, purplish-brown, and orangish-brown sandstone, siltstone, and mudstone; dark-greenish-gray conglomerate.
	Chinle Formation, Petrified Forest(?) Member	0–100	Greenish-gray mudstone, siltstone, shale, sandstone, and conglomerate.
	Chinle Formation, Moss Back Member	20–75	Light-greenish-gray and gray sandstone and conglomerate; minor greenish-gray and reddish-brown mudstone, siltstone, and shale.
Middle(?) and Early Triassic	Moenkopi Formation	0–200	Light-reddish-brown siltstone and sandy siltstone.
Early Permian	Cutler Formation	1, 500–3, 000	Reddish-brown, orangish-brown, and light-buff sandstone, siltstone, mudstone, and shale.
Late and Middle Pennsylvanian	Rico Formation	130–240	Transitional between Cutler and Hermosa Formations.
Middle Pennsylvanian	Hermosa Formation, upper limestone member	1, 000–1, 800	Light- to dark-gray limestone; gray, greenish-gray, and reddish-gray shale and sandstone.
	Hermosa Formation, Paradox Member	3, 250–4, 850	Upper and lower units gray dolomite, limestone, and dark-gray shale interbedded with evaporites; middle unit halite and minor gypsum, anhydrite, dolomite, limestone, and black shale.
	Hermosa Formation, lower limestone member	100–150	Medium-gray limestone, dark-gray shale.
Early Pennsylvanian and Mississippian	Molas Formation	100	Reddish-brown, dark-gray, and greenish-gray shale and silty shale and gray limestone.
Mississippian	Leadville Limestone	240	Medium-gray limestone and dolomite.
Devonian	Name not assigned	250–550	Gray sandy dolomite and limestone and grayish-green and reddish sandy shale.
Cambrian	Name not assigned	500–700	Light-gray to pinkish conglomeratic sandstone, sandstone, siltstone, shale, and dolomite.
Precambrian	Name not assigned	-----	Granitic to amphibolitic gneisses and schists, and granite.

Figure 7.0.1 Uravan Mineral Belt (from Chenoweth, 1981)



7.1 Local Geology – Lisbon Valley District

7.1.1 Velvet-Wood Project

The dominant feature in the Velvet-Wood area is the Lisbon Valley Anticline. The Lisbon Valley Anticline is a northwest/southeast feature about 20 miles long that was formed when salt in the Paradox Formation was mobilized. The up-warping and subsequent erosion of the anticline has exposed Pennsylvanian to Cretaceous age rocks along the length of the anticline. Consolidated rocks that crop out in the Lisbon Valley area range in age from Late Pennsylvanian to early Pleistocene. The oldest, the Pennsylvanian Honaker Trail Formation, is exposed in the interior of the anticline with successively younger rocks exposed in the faces of three mesas along the flanks of the anticline. In the Velvet-Wood area, the mesa recedes southward stepwise away from the center of the anticline and is known as Three Step Hill. The surficial geology of Velvet-Wood is shown on Figure 7.1.1 and the Regional Cross Section in Figure 7.1.2.

Figure 7.1.1 Velvet-Wood Project Local Geologic Map (from Doelling, 2004)

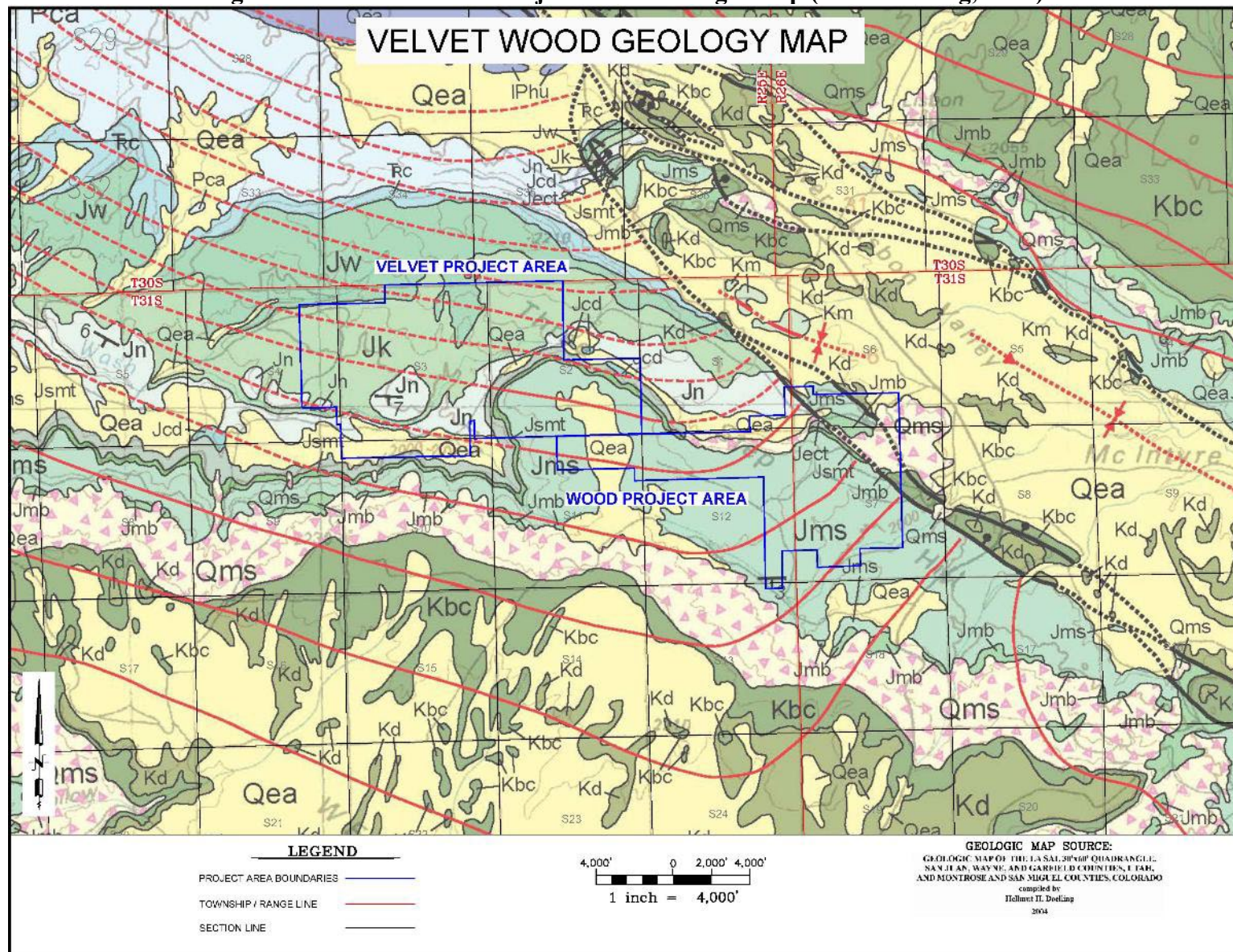
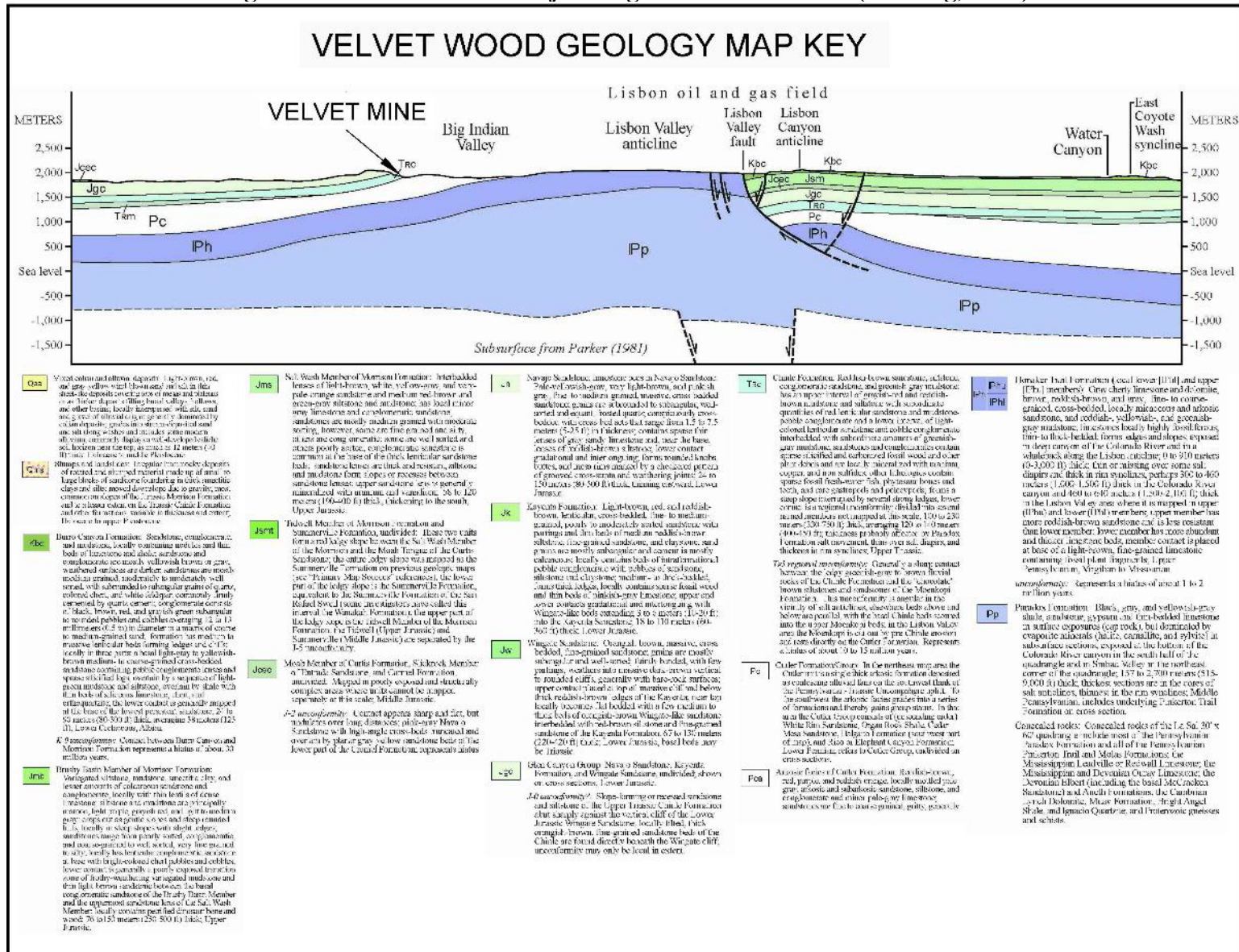


Figure 7.1.2 Velvet-Wood Project Regional Cross Section (Doelling, 2004)



Three Step Hill is a mesa composed of three benches, each progressively higher than the last. The Velvet-Wood Deposit is under the lowest bench and on the margin of the second. The top of the mesa is a dip slope primarily on the top of the Wingate Sandstone. Low mesas of Kayenta Formation rocks are preserved near the southern base of the dip slope. The dip slope of the middle bench is composed of resistant sandstone units of the Salt Wash Member of the Morrison Formation. The Brushy Basin Member has been stripped off the plateau but is exposed near the base of the slope of the third mesa. The highest mesa is capped by the Burro Canyon Formation. Some remnants of Dakota Sandstone are exposed on the upper plateau. The dips of the rocks are progressively shallower toward the south. The dips on the lower plateau are about 6 to 8 degrees and dips on the upper plateau are about 3 to 5 degrees.

Locally, uranium mineralization is found in the Permian Cutler Formation. The Cutler formation in Lisbon Valley is composed predominantly of fluvial arkosic sandstones, siltstones, shales, and mudstones that were deposited by meandering streams that flowed across a flood plain and tidal flat. This flood plain was occasionally transgressed by a shallow sea from the west, resulting in the deposition of several thin limestones and marine sandstones. Wind transported sand along the shoreline of the shallow sea, forming dunes (Campbell and Mallory, 1979). The marine and eolian sandstones are usually finer grained, better sorted, and cleaner than the fluvial arkosic sandstones. The fluvial sandstones are medium to very coarse grained and have abundant feldspar and biotite. The sandstone units are usually red-brown to purple red in color. Some of the sandstones have been bleached tan to gray-white. The top of the Cutler is truncated by a regional unconformity that has removed in excess of two hundred feet of the formation in the northern part of Lisbon Valley.

The unconformity at the top of the Cutler has truncated the southward dipping Cutler beds, the mineralized sandstone bed at the Velvet-Wood Deposit is stratigraphically a few hundred feet above that at the Big Buck Mine in the northern end of Lisbon Valley. The purple-red fluvial sandstones occur in large lenticular bodies that are hundreds of meters long and range in thickness from less than 3 to over 75 feet. Laterally these lenses thin and grade into the shale, mudstone, and siltstone sequences (Campbell and Mallory, 1979).

The fluvial sandstones are composed of medium to coarse-grained quartz, feldspar, and rock fragments in sub equal amounts. These arkosic sandstone units' source of sediment was the Uncompahgre highland northeast of the Velvet-Wood area on the Utah/Colorado border. The cementing agent in the Cutler fluvial sandstones is either calcite or secondary overgrowth on the quartz grains. All of the known mineralized fluvial sandstone units were bleached light tan-pink or gray-white (Campbell and Mallory, 1979).

The upper portion of the Cutler Formation, which is the primary host of known uranium mineralization in the Velvet-Wood Area, is composed of intervals of siltstone interbedded with thin-bedded, fine-grained sandstone. In places there are thicker, more resistant sandstone beds up to 47 feet thick. The thickness and frequency of sandstone beds increases downward, and siltstone is less common. Thick mudstone intervals separate the sandstone beds. A few limestone and conglomerate beds occur in the bottom third of the formation. The rocks are mostly greenish-gray, reddish-brown, or reddish-orange. The limestone beds are usually olive-gray (Campbell and Mallory, 1979).

Faulting and folding are the major structural features of the Velvet-Wood area. There are two major faults in the Velvet-Wood area. The faults are northeastward dipping normal faults with

displacement ranging from a few feet to as much as 700 feet. The rock units between the two faults are folded downward to the northeast. The sandstones in the Velvet-Wood area exhibit jointing parallel to the Lisbon Valley anticline and are thought to be tensional joints. The host rocks of the Velvet-Wood Area are truncated by the faulting on the southwest side of the Lisbon Valley graben. The mineralization of the Velvet-Wood Deposit appears to be fault bounded on the northeast side of the deposit. (Weir and Puffett, 1981).

7.2 Local Geology – Slick Rock District

7.2.1 Slick Rock Complex and SR-11 Project

The Slick Rock District lies in the Paradox Basin at the southern edge of the salt anticline region also called the Paradox Fold and Fault Belt (Kelley, 1958). The district, which covers approximately 570 square miles of the Colorado Plateau, is underlain by about 13,000 feet of sedimentary strata which lies on metamorphic and igneous rocks of a Precambrian basement. The sedimentary formations range in age from Cambrian to Late Cretaceous (Shawe, 1970). See Figures 7.2.1a and 7.2.1b for Slick Rock Project Local Geology Map.

Figure 7.2.1a Geologic Map of Slick Rock Project Area (from USGS/Carter 1955)

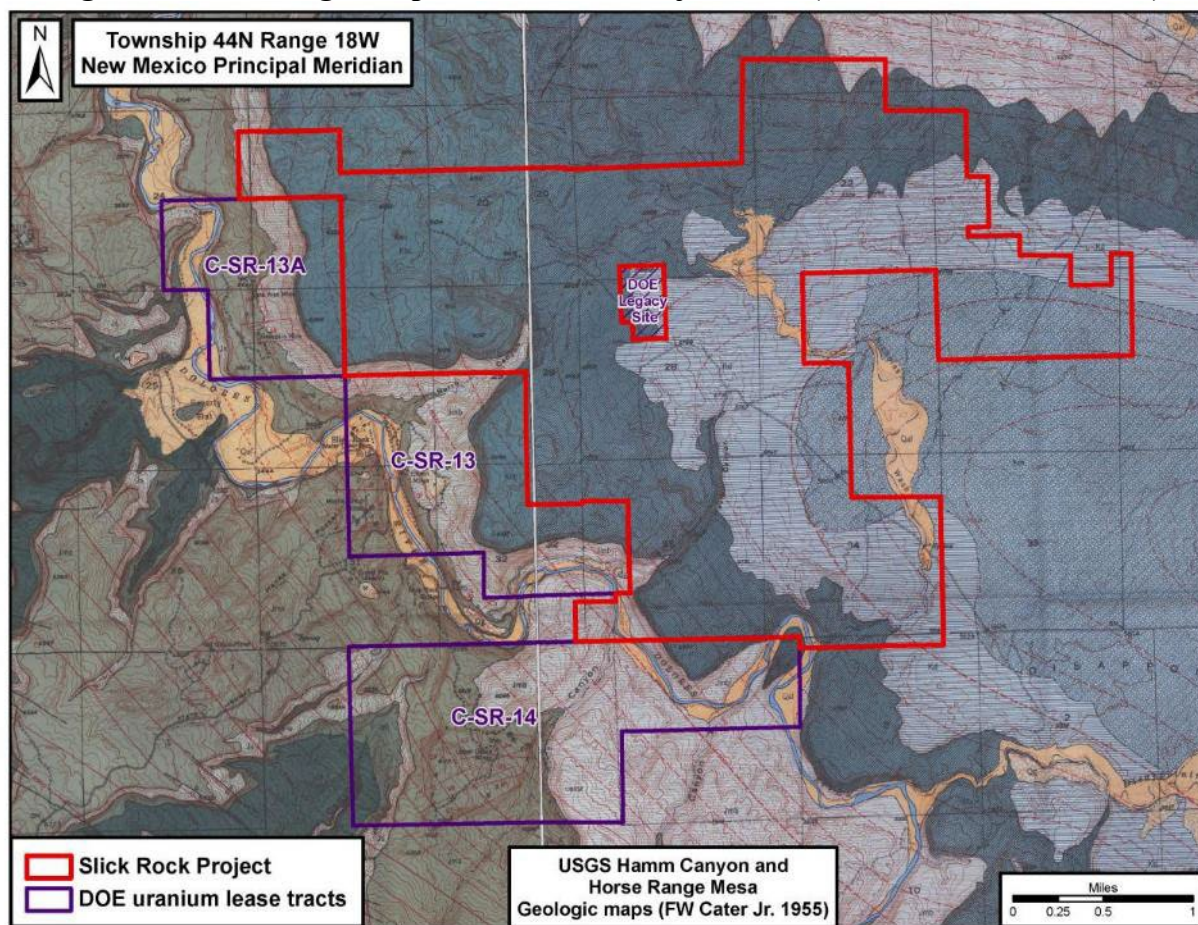
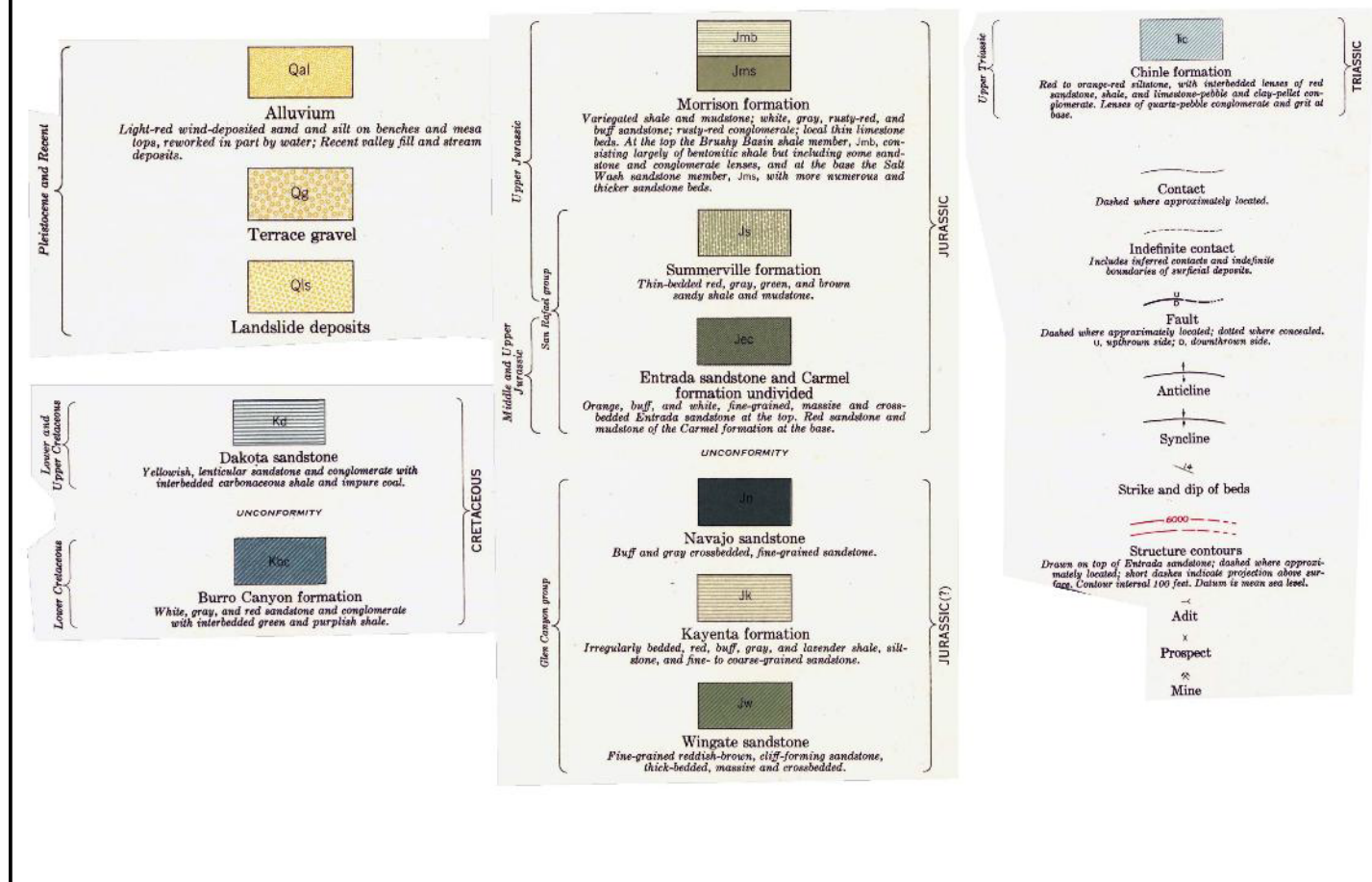


Figure 7.2.1b Geologic Map of Slick Rock Project Area Legend (from USGS/Carter 1955)

SLICK ROCK GEOLOGY MAP KEY



The Slick Rock District is located in the proximal Disappointment Valley syncline. The syncline plunges gently to the southeast and lies between the collapsed Gypsum Valley anticline to the northeast and the Dolores anticline to the southwest. Sedimentary rocks that outcrop in the Slick Rock District range from the Permian Cutler Formation up to the late Cretaceous Mancos Formation with a maximum thickness of approximately 4,700 feet (Shawe, 2011). The Jurassic Morrison Formation is the host of uranium/vanadium deposits in the Slick Rock District. It is widely recognized as an aggrading, terrigenous clastic, fan-shaped fluvial sequence of sediments. While the precise location of the sediment source is unknown due to erosion, most authors agree that the sediment source area for the fan is the modern-day south-central Utah and north-central Arizona area (Page et al., 1956). The proximal fan is dominated by a high percentage of coarse clastics in braided stream sediments. The energy of the depositional environment decreases distally, as does the grain size of the sediments. The Slick Rock District occupies the medial fan facies. From the apex of the fan, the stream flow was in a northern, northeastern, and eastern direction. In the Slick Rock district, the direction of stream flow was generally to the northeast while local paleo topography controlled the flow direction.

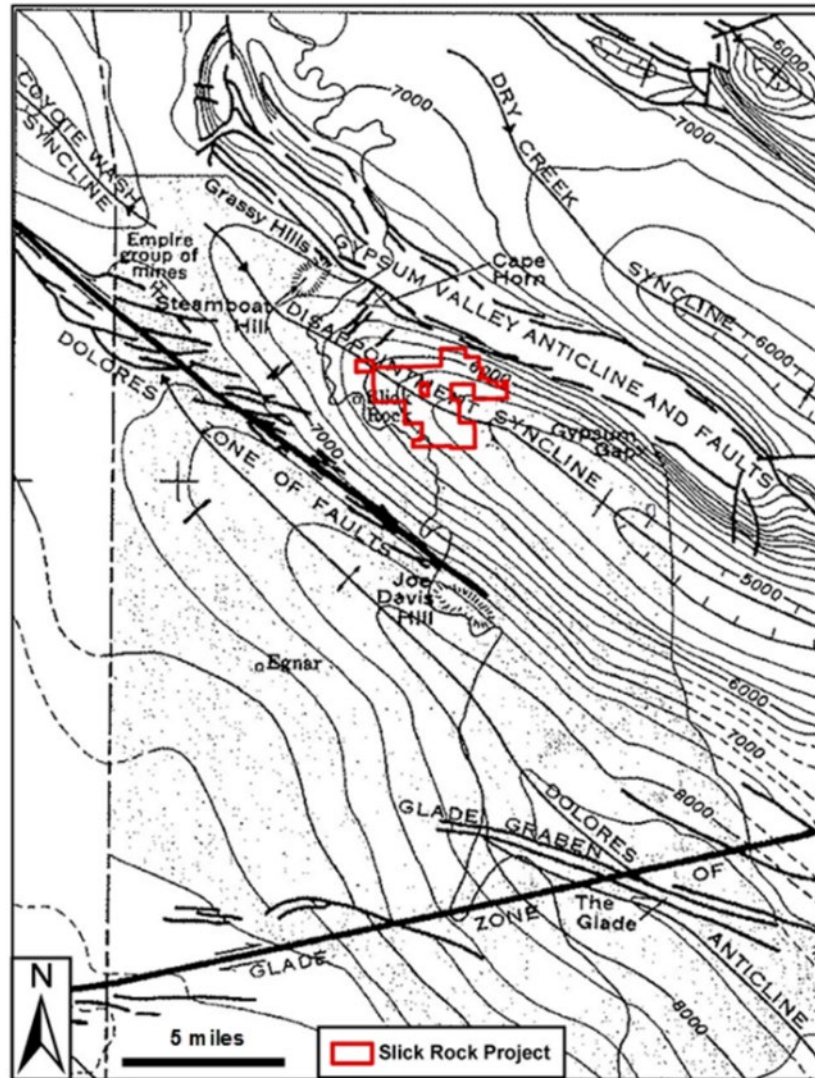
The salt anticlines were the positive topographic highs during Jurassic time that diverted Morrison distributary systems to courses along their flanks. This allowed for thick accumulations of high sandstone/mudstone ratio sediments in valleys that flanked the elongated salt domes of Jurassic time. High sandstone/mudstone ratios increase permeability (the ability of sediments to transmit fluids) and porosity (available void space). Such conditions are favorable for increased fluid flow and may largely control ore formation. The thick accumulation of sediments in major channels occurred along the southern margin of the Gypsum Valley anticline in the Slick Rock district and across Anfield's project area (Tyler and Ethridge, 1983).

Major folds in the Slick Rock District are broad, open, and trend about north 55 degrees west, and are parallel to the collapsed Gypsum Valley salt anticline which bounds the northeast edge of the district. The Dolores anticline lies about ten miles southwest of the Gypsum Valley anticline. The Disappointment syncline lies between the two anticlines (Williams, 1964). See Figure 7.2.2, Slick Rock Structural Geology Map.

Within the Slick Rock District area, the Morrison is divided into two Members: the upper Brushy Basin Member and the lower Salt Wash Member. The Salt Wash Member is composed of fluvial sandstone and mudstone averaging about 350 feet thick, and is further divided into three parts: the top and bottom units that are composed of fairly continuous layers of sandstone interbedded with thin layers of mudstone, and a middle unit that is primarily mudstone but contains scattered discontinuous lenses of sandstone (Rogers and Shawe, 1962). The major host sandstone for uranium and vanadium is the upper unit of the Salt Wash Member

The Slick Rock District lays in an area where only the Salt Wash and Brushy Basin Members of the Morrison Formation are present. The Morrison Formation attains its maximum thickness in these members and stream-type deposits (lenticular cross-bedded sandstones) have their greatest aggregate thickness and maximum lateral continuity (Shawe, 2011).

Figure 7.2.2 Slick Rock Structural Geology Map (from Williams, 1964)



As discussed in Section 6, History, the United States Geological Survey (USGS) on behalf of the Raw Materials Division of the Atomic Energy Commission, conducted extensive exploration throughout the Uravan mineral belt. As early as 1952, the USGS had determined that the following four geologic characteristics were indicative of favorable grounds for a uranium deposit:

- Most mineralized deposits are in or near thicker, central parts of sandstone lenses and, in general, the thickness of the sandstone decreases moving away from the mineralized deposits. Sandstone less than 40 feet thick is generally not favorable for large ore bodies.
- Sandstone in the vicinity of the mineralized deposit is colored light brown, but moving away from the mineralized deposit an increasing proportion of sandstone has a reddish color, which is indicative of unfavorable ground.
- The mudstone in the mineralized sandstone near and immediately below the deposit changes from a red to gray color. The amount of altered mudstone decreases further outward from the deposit.

- Sandstone in the immediate vicinity of the deposit contains more carbonized plant fossils than similar beds further away from the mineralized zone. This suggests that mineralization is localized in the vicinity of abundant carbonaceous material (Weir, 1952).

Results from USGS's 1948-1956 drilling indicate that within Anfield's Slick Rock project area the Salt Wash is greater than 40 feet thick, contains abundant carbonaceous material, is tan to gray in color, and is in contact with a reduced mudstone over a significant portion of the project area.

7.3 Local Geology – Uravan District

7.3.1 Paradox Complex and SM-18 Project

The uranium and vanadium mineralization in the Uravan District is hosted within the Jurassic Morrison Formation. The Morrison Formation is separated into two members: the upper Brushy Basin member and the lower Salt Wash member. The Brushy Basin member consists of reddish-brown and greenish-gray mudstone, siltstone, sandstone, and conglomerate. The Salt Wash member is the primary host for known mineralization of uranium and vanadium in the district, and is composed of fluvial sandstone and mudstone, averaging 350 feet thick. The Salt Wash member is further sub-divided into three parts, the upper, middle, and lower units. The upper and lower units are composed of nearly continuous layers of sandstone interbedded with thin layers of mudstone, and the middle unit is primarily mudstone and siltstone, with discontinuous lenses of sandstone. Refer to Figure 7.3.1 and 7.3.2.

Figure 7.3.1 Geologic Setting

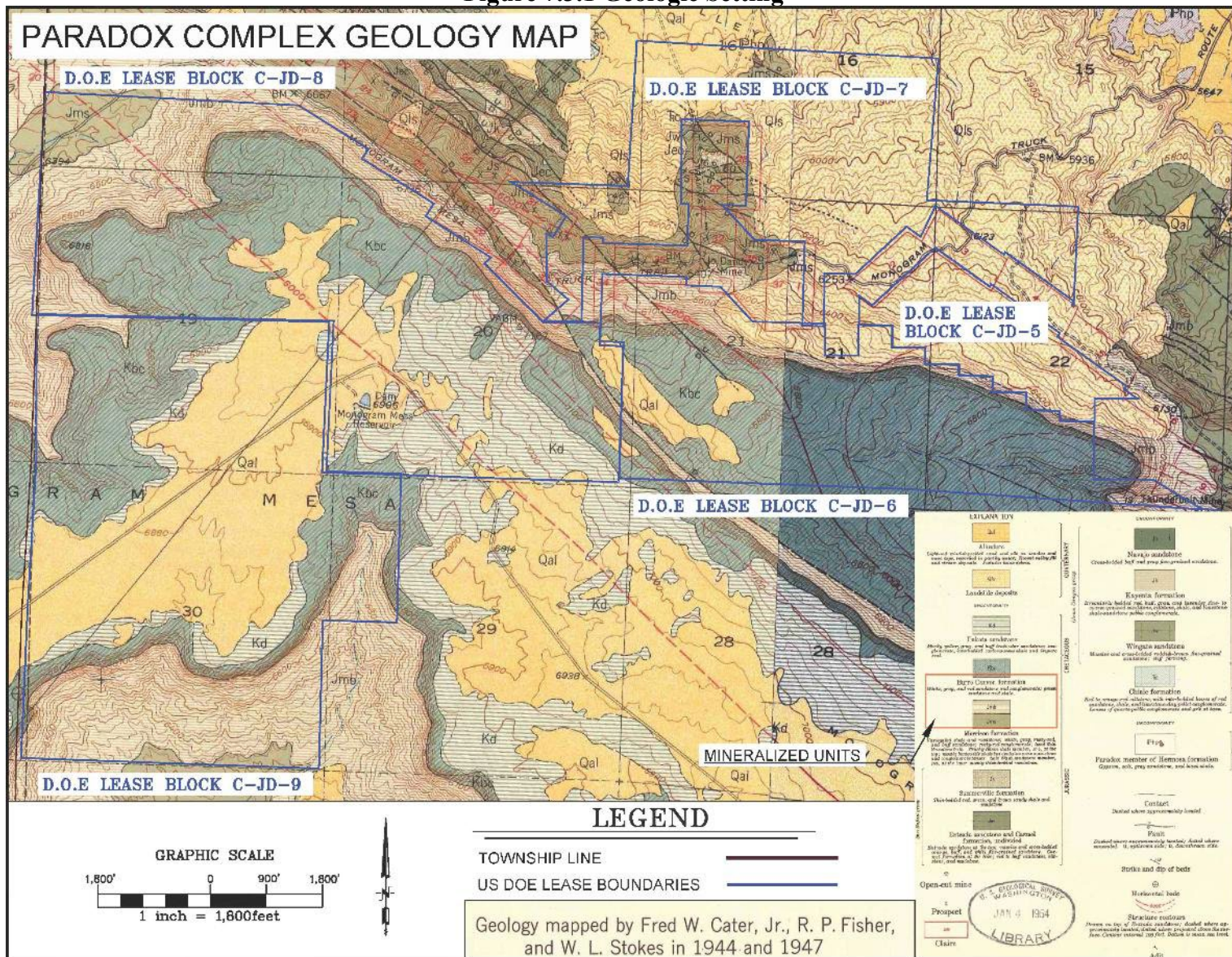
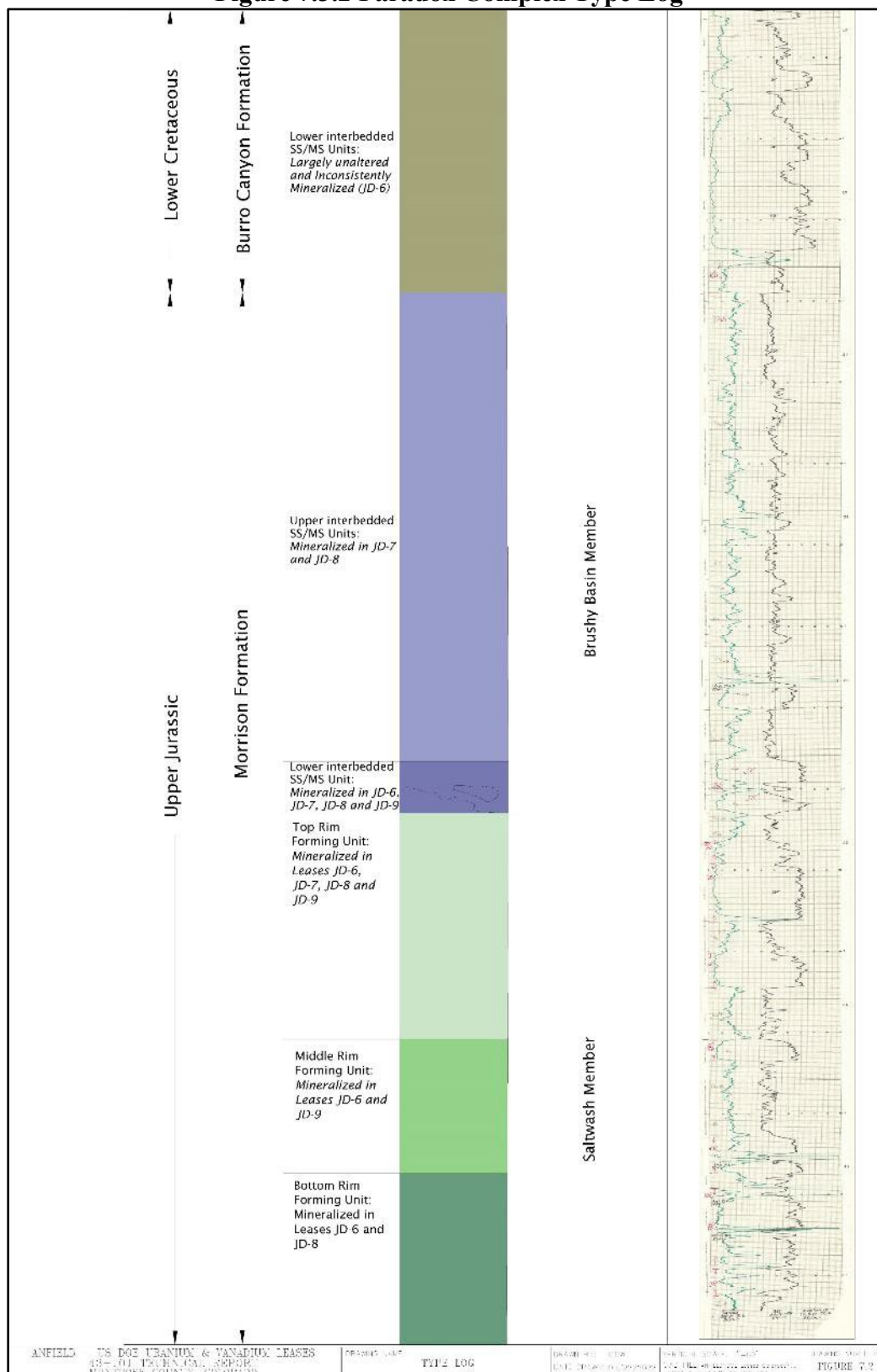


Figure 7.3.2 Paradox Complex Type Log



The geologic structure in the Uravan District varies, depending on location. On the eastern flank of Monogram Mesa (JD-6, JD-7, JD-8) there are numerous synthetic and antithetic faults striking NW-SE that drop down mostly to the east, toward the basin center of Paradox Valley. Small horst blocks were also developed between opposing faults. Atop Monogram Mesa and on its western side (JD-9), the bedding is mostly flat to very shallow dipping. Uranium/vanadium mineralization pre-dates the structural history that created the numerous small faults (Carter, 1954), and in the mineralization at the JD-7 Lease, faulting can be observed to cut across mineralized zones.

The surficial geology of the Uravan District is quite variable, depending on topography and location along the flank of Monogram Mesa. Extensive light-red sandy, silty wind-blown, and reworked material mantles the mesa tops. The flanks of the leases near JD-6 and JD-7 are comprised of talus slopes of varying rock types, and landslide deposits predominantly from the Brushy Basin mudstone. In the valley bottom of Paradox Basin, the wind-blown materials are intermixed with disintegrated slope wash deposits (Carter, 1954).

The uranium and vanadium bearing minerals occur as fine-grained coatings in detrital grains. These minerals fill pore spaces between the grains and replace carbonaceous material and some detrital grains. The primary uranium mineral is uraninite, with minor amounts of coffinite. Montroseite is the primary vanadium mineral, along with vanadium clays and hydromica. Metal sulfides occur in trace amounts. The mineralization typically occurs in the tabular to lenticular bodies within sedimentary bedding but may also cut across sedimentary bedding to form highly irregular shapes (see Figures 8.2.1a and 8.2.1b in Section 8 Deposit Types). The mineralized bodies have an average thickness of 2 to 4-ft, and range in size from a few feet wide to several hundred feet wide. The length of the deposits varies from several feet to hundreds of feet.

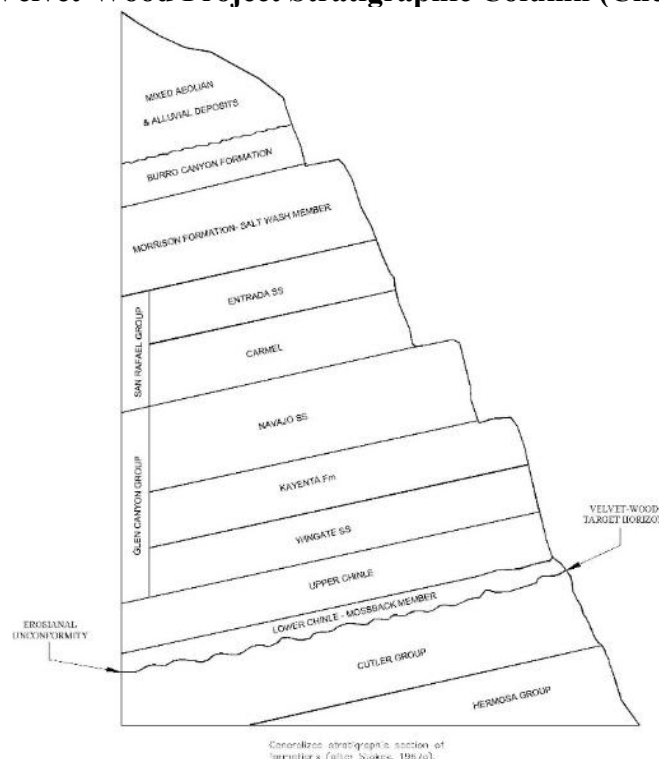
Section 8: Deposit Types

8.1 Lisbon Valley District Deposit Type

Uranium mineralization in the Velvet and Wood areas is found in sandstone units within the Cutler Formation. The sandstones are fluvial arkose that has been bleached. The mineral deposits are irregular tabular bodies (Denis, 1982) located at the base, at the top, or close to pinch-outs of the sandstone bodies (Campbell and Mallory, 1979). The major producing zone in the Cutler occurs near the unconformity between the Cutler and the overlying Chinle Formation. The mineralization may extend a short distance into the sandstone of the Moss Back above. The uranium-bearing sandstones are petrologically very similar to other Cutler fluvial sandstones but contain less calcite and more clay and are slightly coarser grained (Campbell and Mallory, 1979). Uraninite is the principal uranium mineral encountered in the reduced zones of the Velvet Area. In areas where the mineralization lies above groundwater levels, oxidized uranium minerals such as carnotite and tyuyamunite may occur. Uranium mineralization within the Colorado Plateau of Southwestern Colorado and Southeastern Utah have been described as tabular-blanket type deposits that are sub-parallel to bedding planes and/or features such as unconformities. Mineralization is often confined to paleochannels and controlled by lithology, permeability, porosity, and the presence of a chemical reductant, often carbonaceous material (Hasan, 1986). A similar depositional morphology is observed at the Wood Mine.

Uranium mineral resources within and in the vicinity of the project are found in the upper Permian Cutler formation. Many of the other mines in the district are located in the basal Moss Back member of the Triassic Age Chinle Formation overlying the Cutler Formation. As shown on Figure 8.1.1, Velvet-Wood Project Stratigraphic Column, there is an erosional unconformity between the Permian and Triassic aged beds where the Triassic Moenkopi formation was eroded away before the placement of the Moss Back Member of the Chinle Formation. Observations from the 2007 and 2008 coring program on the Velvet project have developed the model that mineralization in both formations is related to the unconformity, although the location of mineralization with respect to the contact varies from location to location within the district. Most of the mineral resources in the Cutler occur within six feet of the unconformity.

Figure 8.1.1 Velvet-Wood Project Stratigraphic Column (Chenoweth, 1990)



Much of the historic mining in the vicinity such as the Bardon, Divide, School Section, Pats, and Service Berry mines are pre-1960 except for the Velvet Mine (1979-1984). With the exception of the Velvet and Bardon mines, most of these are in the Chinle formation and were mined prior to 1941. The discovery of mineralization in the Cutler formation was late, therefore the Cutler is largely unexplored (Chenoweth, 1990). Most of the earlier drilling stopped at the base of the Chinle. Further to the east, the discovery of the Wood Deposit was reported by Uranerz in 1987 in T31S, R26E, Section 7 (Chenoweth, 1990). The Bardon, Velvet and Wood areas are oriented along a common trend beginning in the northwest at the Bardon Mine and proceeding to the southeast through the Velvet Mine to the Wood area along a trend of more than 6 miles. Limited exploration has been conducted between the Velvet Mine and Wood area, and the Bardon Mine and the Velvet Mine, but these areas remain largely unexplored. The reader is cautioned that additional drilling may or may not result in discovery of additional mineral resources on the property.

8.2 Slick Rock District Deposit Type

There has been much discussion and debate regarding ore forming mechanisms in the Slick Rock area, but there is good agreement on several contributing factors:

The Brushy Basin and Salt Wash members contain significant concentrations of detrital volcanic debris which is strongly suspected as the source of uranium and vanadium.

Compaction and de-watering during burial of these sediments allowed for the transport mechanism along preferential pathways dictated by permeability and porosity within transmissive sand units of the Morrison Formation.

The uranium and vanadium in solution within a transmissive sand unit encountered a reduced environment locally caused by abundant plant remains and evidenced by reduced green mudstone found within the Salt Wash sandstones. This environment favored precipitation of uranium along a solution interface between the uranium in an oxidized alkaline solution and a strongly reduced acidic environment.

The physical expressions of the deposits formed at the solution interface have a variety of shapes and volumes. In the following, Shawe provides an excellent summary of the deposit morphology in the Slick Rock district:

“Two general forms of ore bodies are common in the Morrison Formation in the district, one tabular and the other so-called ‘roll’. Some deposits consist mainly of tabular ore bodies and others are dominantly roll bodies, although both types display elements of the other, and in many places tabular bodies are continuous with roll bodies. Some deposits have both types significantly developed. The two types were deposited by the same general process and at the same time; differences in their forms were dictated by local differences in the lithology of the host sandstone units that controlled fluid movement” (Shawe, 2011).

In the Slick Rock district, uranium/vanadium deposits of the Morrison are mainly tabular to lenticular and elongate parallel to sedimentary trends. Tabular trends are localized in massive sandstones where clay and mudstone are interstitial, in scattered and streaked gull and pebble accumulations, and are found in discontinuous lenses. Conversely, roll deposits are narrow, elongate, and curve sharply across bedding and appear to be confined to sandstone where clay and mudstone are well indurated within interconnected layers. Mineralization in either case, tabular or roll deposits, averages about 0.25% U_3O_8 and 1.5% V_2O_5 within the mineralized sandstone. The mineralized bodies have an average thickness of 2 to 4 feet and range in size from a few feet wide to several hundred feet wide (Fischer and Hilbert, 1952). These deposits can contain a few tons of ore to several thousand tons in the larger ore bodies.

Details of the forms of roll ore bodies related to lithologic differences and mineral distribution within rolls (calcium-carbonate, titanium oxides, barite, and iron oxides) provide strong evidence that the deposition of the mineralized bodies occurred at an interface between two chemically differing solutions (one that is oxidized and one that is reduced). The interface interpretation was first proposed by Fischer in 1942. Continuity of the roll ore bodies with tabular bodies indicate that the tabular bodies also formed at a solution interface. It is important to note that the term “roll” was coined by local miners to describe the geometry of ore bodies that cut across sedimentary bedding and does not imply similarity to the geochemical process involved in forming the “roll” deposits of Wyoming and South Texas uranium provinces, as illustrated in Figures 8.2.1a and 8.2.1b, (Shawe, 2011).

Figure 8.2.1a Uranium/Vanadium Deposits of the Slick Rock District, Colorado
Perspective Geologic Cross Section of Roll Ore Bodies (Shawe, 2011, paper 576-f)

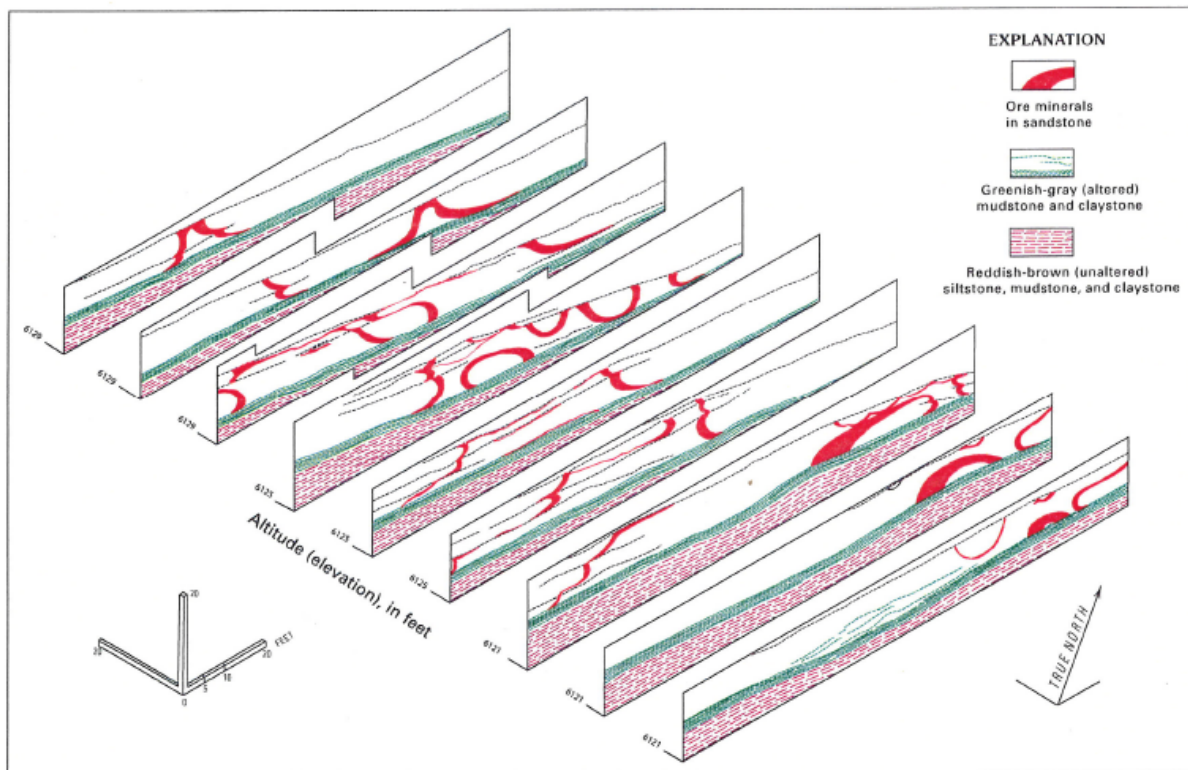
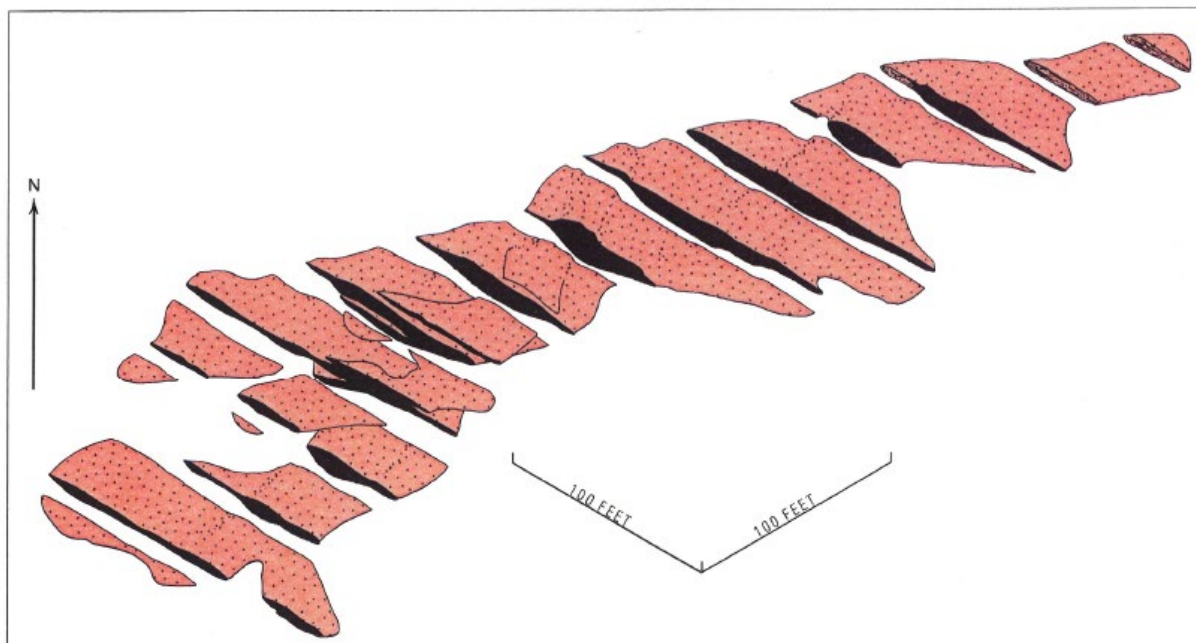


Figure 8.2.1b Uranium/Vanadium Deposits of the Slick Rock District, Colorado
Perspective Geologic Cross Section of Tabular Ore Bodies (Shawe, 2011, paper 576-f)



The uranium- and vanadium-bearing minerals occur as fine-grained coatings in detrital grains; they fill pore spaces between the sand grains and replace carbonaceous material and some detrital grains (Weeks et al., 1956). The primary uranium minerals are uraninite (UO_2) with minor amounts of coffinite (USiO_4OH). Montroseite (VOOH) is the primary vanadium mineral, along with vanadium clays and hydromica. Metal sulfides occur in trace amounts. Secondary minerals: calcium uranyl vanadate (Tyuyamunite) ($\text{Ca}(\text{UO}_2)_2(\text{VO}_4)_2 \cdot (5-8)\text{H}_2\text{O}$) and potassium uranyl vanadate (Carnotite) ($\text{K}_2(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 1-3\text{H}_2\text{O}$) occur in shallow oxidized areas and on outcrop. Figure 8.2.2 shows a typical specimen of oxidized uranium/vanadium minerals collected underground in the vicinity of the Burro No. 3 shaft and the scintillometer.

Figure 8.2.2 Slick Rock Sample and Scintillometer



8.3 Uravan District Deposit Type

There has been much debate concerning the formation of mineralized deposits in the Uravan district, but there is general agreement in the literature of several contributing factors. The Brushy Basin and Salt Wash members contain significant concentrations of detrital volcanic materials, which are strongly suspected as the source of uranium and vanadium. Compaction and dewatering of the host sediments during their burial created permeability and porosity conditions in the transmissive sand units of the Morrison Formation forming preferential pathways for groundwater. Uranium and vanadium in solution encountered a reduced environment, locally caused by an abundance of plant remains identified in the reduced green mudstone found within the Salt Wash member. This environment favored precipitation of uranium along an interface between oxidized alkaline solutions and a strongly reduced acidic environment.

The physical expressions of the deposits formed at the solution interface have a variety of shapes and sizes. In the following excerpt from page 19 of USGS Professional Paper 576-F, D. R. Shawe provides an excellent summary of deposit morphology in the Uravan mineral belt, of which the Uravan district is a part. See Figures 8.3.1a and 8.3.1b. The summary is reflective of the mineralized deposits and setting at the Project:

“Two general forms of mineralization are common in the Morrison Formation in the district, one tabular, and the other so-called “roll”. Some deposits are tabular and others are dominantly of roll bodies, though both forms display elements of the other. In many places tabular bodies are continuous with roll bodies. Some deposits have both types significantly developed. The two types were deposited by the same general process and at the same time. The differences in their forms were dictated by the local differences in the lithology that controlled fluid movement [in the host sandstone].” (Shawe, 2011)

Note: The term “roll” was used locally by miners to describe how the mineralization cuts across sedimentary bedding boundaries. The term does not imply a similar geochemical process involved in forming “roll-front” deposits indicative of Wyoming and south Texas uranium districts.

In the Uravan district, the uranium/vanadium deposits of the Morrison Formation are mainly tabular to lenticular, and elongate parallel to sedimentary trends. Tabular trends are localized in massive sandstones where clay and mudstone are interstitial and found in discontinuous lenses. The roll deposits are typically narrow, elongate, and curve shaped. The roll deposits usually cross bedding planes and appear to be confined to sandstone where clay and mudstone are well indurated. Mineralization in either case, tabular or roll deposits, averages about 0.25% eU_3O_8 and 1.5% V_2O_5 within the host sandstones. The mineralized bodies are typically 2 to 4-feet thick and range in size from a few feet to several hundred feet in width and length.

Figure 8.3.1a Diagrammatic cross section of Typical Roll-Tabular Uranium-Vanadium Mineralization in the Uravan Uranium Belt (from Shawe, 2011, fig. 15)

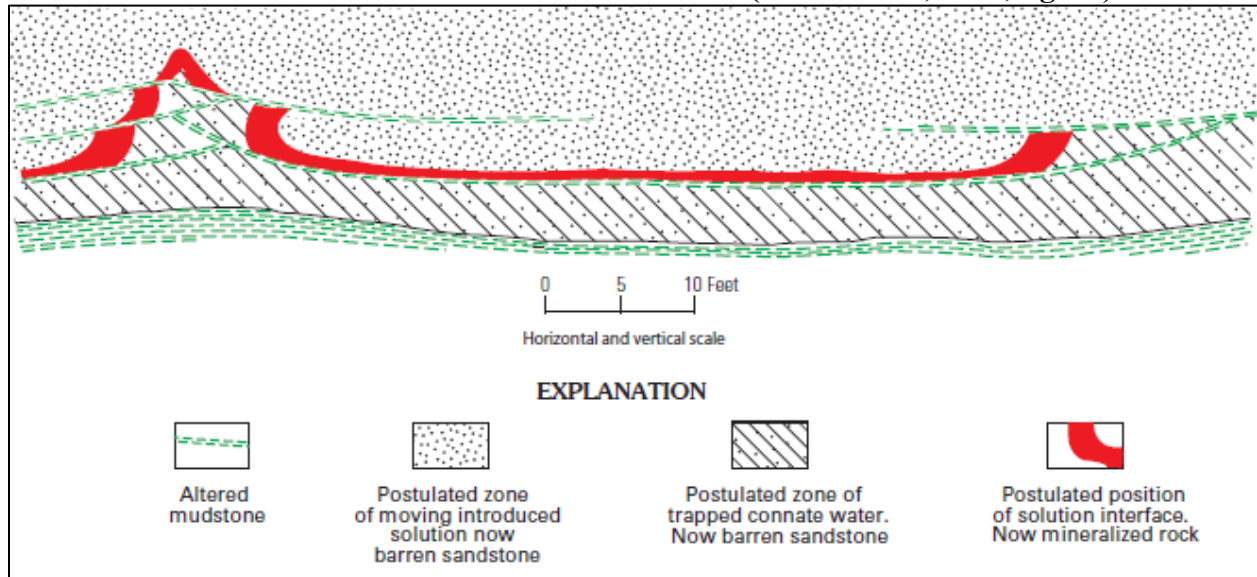
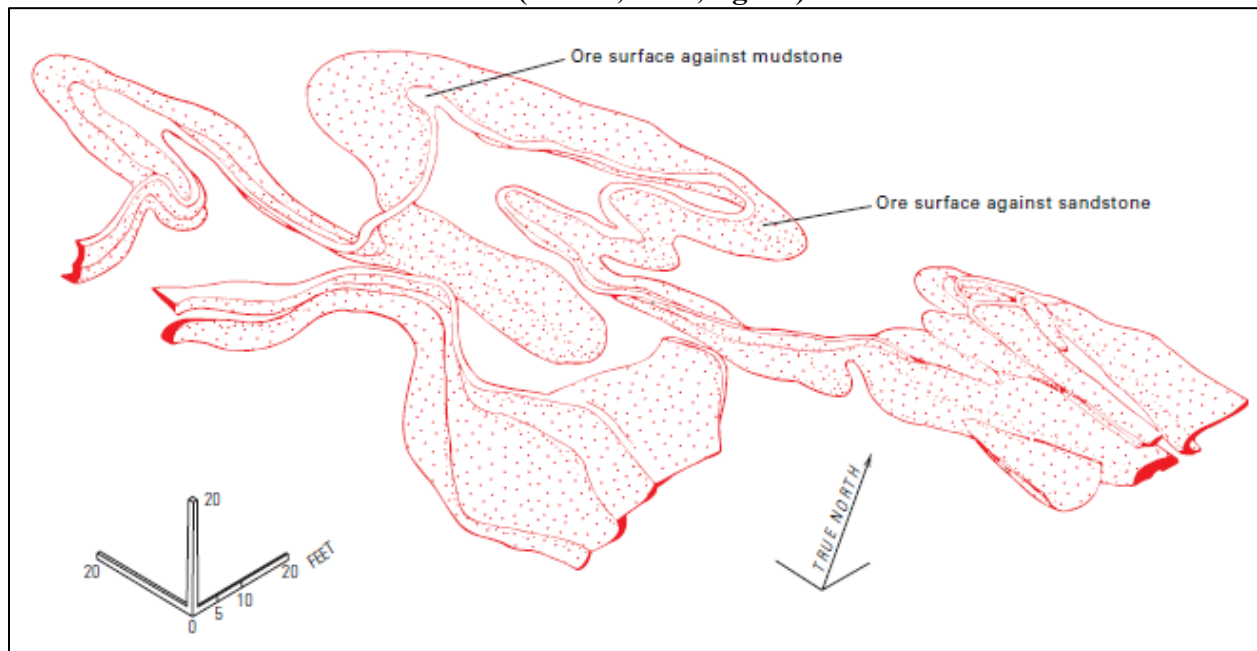


Figure 8.3.1b Perspective view of part of a roll ore deposit typical of the Uravan Uranium Belt (Shawe, 2011, fig. 14)



Section 9: Exploration

In the late 1940s and through the 1950s, extensive exploration was conducted by the US Atomic Energy Commission (AEC) and private parties throughout the region during the Manhattan Project. These programs consisted of geologic mapping, ground and aerial radiometric surveys, trenching, and rock and sediment sampling. Subsequently exploration has been primarily limited to drilling.

Anfield has not conducted exploration activities other than drilling, as discussed in Section 10 on any of the properties included in this technical report.

Section 10: Drilling

Anfield has acquired drilling data from previous operators across its several prospective mining properties. In addition to the data acquired from previous operators, Anfield recently conducted drilling on the Slick Rock complex in 2024 and the JD-7 project in 2025.

10.1 Lisbon Valley District

A summary of drill data acquired by Anfield at Velvet-Wood from previous operators follows. Anfield has not conducted drilling on the Velvet-Wood project.

10.1.1 Velvet-Wood Drilling Data from Previous Operators

Atlas and MRC conducted extensive rotary and limited core drilling on the Velvet Mine area that was included in the acquisition of the property, including the delineation of 4 mineralized areas with drilling on a rough grid approximating 100-foot centers.

The available drill data for the Velvet Mine project area includes radiometric data from some 173 drill holes completed on the property. From 1985 through 1991, Uranerz completed a total of 120 known historic vertical rotary drill holes in the Wood Mine project area. There are geophysical logs available for 96 of those historic drill holes. Of the 96 logs, 95 of the historic geophysical logs typically consist of natural gamma, resistivity, spontaneous potential (SP), half foot radiometric grade of uranium measured in weight percent U_3O_8 , and vertical deviation data which were matched with a northing and easting collar location and collar elevation from available drill hole maps. All geophysical logging was performed by Century Geophysical Corporation for Uranerz. Industry standard practice for Century Geophysical logging trucks included calibration of the logging trucks routinely at Department of Energy facilities.

Drilling averaged a depth of 1,538 feet and ranged from 1,240 feet to 1,870 feet. All of the holes were surveyed for down-hole deviation, and deviation data was available from the geophysical logs. Drift at the mineralization horizon ranged from 5 feet to over 258 feet and averaged 63 feet to the northeast, or up dip. The dip of the host formation is approximately 8 degrees to the southeast. Drilling was conducted vertically although virtually all drill holes drifted up dip. The average vertical declination was approximately 2.3 degrees from vertical. Because this declination opposed the dip of the formation, the effect of dip on true thickness is diminished. Considering the effect of the actual drill hole declination from vertical, the correction to true thickness would be less. This means that a 10-foot thickness interpreted from the geophysical log would actually be 9.99 feet. At this level, the data correction would be less than the accuracy of the original data, which is interpreted down to one foot. As a result, no correction is necessary from the log thickness to true thickness.

Additional exploration drilling was conducted by Uranium One in 2008, generally focused between the areas of known mineralization at Velvet and Wood. The drilling showed low grade mineralization but did not encounter significant mineralization. In total, Uranium One completed 43 drill holes at Velvet and 14 drill holes at Wood. Drilling results for the Velvet-Wood project are summarized in Tables 10.1.1 through 10.1.3 which follow. Locations of all known drill holes

are shown on Figure 10.1.1. Note values are expressed as Grade Thickness (GT), the product of average grade (%eU₃O₈) x thickness (feet).

Table 10.1.1 Historic Drill Results Velvet Area*

Barren	Trace < 0.1 GT	Mineralized 0.1–0.25 GT	Mineralized 0.25-0.5 GT	Mineralized > 0.5 GT	TOTAL
6	30	29	24	84	173
3.5 %	17.3 %	16.8 %	13.9 %	48.6 %	

Table 10.1.2 Historic Drill Results Wood Area*

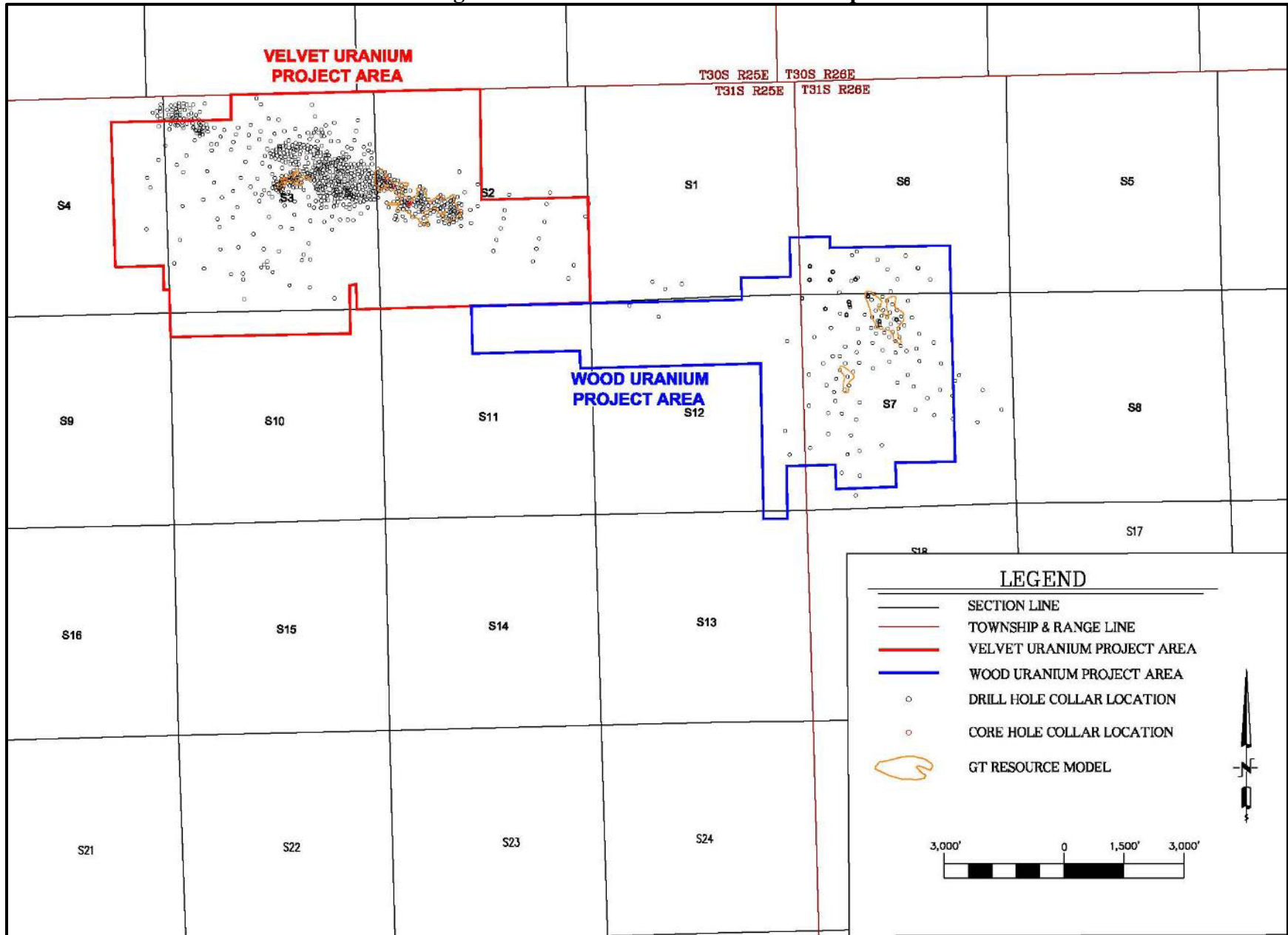
Incomplete	Barren	Trace < 0.1 GT	Mineralized 0.1–0.25 GT	Mineralized 0.25-0.5 GT	Mineralized > 0.5 GT	TOTAL
1	20	40	7	6	21	95
1.1 %	21.1 %	42.1 %	7.4 %	6.3 %	22.1 %	

*The historic data available for Velvet was limited to data from the previous MRC mineral holdings. The historic data available for Wood was from the previous Uranerz mineral holdings.

Table 10.1.3 2007/2008 Drill Results Velvet-Wood

Incomplete	Barren	Trace < 0.1 GT	Mineralized 0.1–0.25 GT	Mineralized 0.25-0.5 GT	Mineralized > 0.5 GT	TOTAL
3	15	20	6	7	6	57
5%	26%	35%	11%	12%	11%	

Figure 10.1.1 Velvet-Wood Drill Hole Map



10.2 Slick Rock Complex

Anfield possesses drilling data from previous operators for the Slick Rock Claim Group as well as the SR-13, SR-13A, and SR-11 lease tracts. Anfield completed a verification drilling project at the Slick Rock Claim Group in 2024.

10.2.1 Slick Rock Claim Group Drill Data

Anfield has obtained radiometric and chemical assays from the U.S. Atomic Energy Commission's (AEC) exploration program OFR70-348 for vanadium and uranium values, respectively, from those holes drilled by the United States Geological Survey (USGS) on behalf of the Raw Materials Division of the AEC. Logs for boreholes drilled by USEC and Energy Fuels were obtained by claim acquisition, and the uranium intercept values from the logs for boreholes drilled by Homeland Uranium were available in the public domain.

A total of 312 holes are known to be located within or proximal to the Slick Rock project area. Of that total, 27 of these holes had locations but no other data, leaving 285 drill holes upon which to build a database. Of the 285 holes in the database used for resource estimation, 207 were drilled by Union Carbide, 53 by the USGS, 17 by USEC and 4 each by Energy Fuels and Homeland Uranium. Within the 285 drill holes, data was available on 346 discrete intercepts distributed between 3 stratigraphically distinct zones.

Mineralization at Slick Rock occurs within three stratigraphic horizons of the Jurassic Morison Formation. Three-dimensional plotting and correlation of the Slick Rock intercepts demonstrated three vertically distinct mineralized zones running along dipping bedding. The A zone is stratigraphically the youngest and highest in the section, followed by the B zone and then the deepest C zone. A summary of drill results follows in Table 10.2.1. An image from the drilling is shown in Figure 10.2.1. Drill hole locations are shown on Figure 10.2.2. Representative cross-sectional views of the drill data are shown on Figure 10.2.3.

Table 10.2.1 Slick Rock Drill Hole Intercepts by Zone

	Intercepts in database	Composited Intercepts	Composited Intercepts above 0.02 % eU₃O₈
Zone A	109	46	13
Zone B	243	143	76
Zone C	7	2	0

10.2.2 SR-13 Lease Tract Drill Data

A database consisting of drill hole locations and intercepts on lease tract SR-13 was obtained by Anfield from the previous operator of the tract, Golden Eagle Mining Inc. (GEMI). A limited number of US Atomic Energy Commission (US AEC) drill hole assay values were obtained as part of the Open File Report detailed in the section above.

The SR-13 database contains data for 398 drill holes. Data for 375 drill holes was obtained from the GEMI dataset. Data for 23 of the drill holes was obtained from the USAEC open file report. The 398 drill hole dataset contains 122 drill holes with composite intercept values meeting or exceeding a 0.1 GT cutoff with a minimum grade cutoff of 0.02 % eU₃O₈. Mineralization at SR-

13 is interpreted as one stratigraphic zone that correlates with Zone B at the Slick Rock claim group.

Drill hole locations are shown on Figure 10.2.2. Drill holes are assumed to be vertical.

10.2.3 SR-13A Lease Tract Drilling Data from Previous Operators

A database consisting of drill hole locations and intercepts was obtained by Anfield from the previous operator of the lease tract, Cotter Corporation. Original geophysical drill hole logs were obtained from the Cotter Corporation office to support the database information. The most recent drill holes in the Cotter dataset were completed in 1997. A limited number of USAEC drill hole assay values were obtained as part of the Open File Report detailed under the Slick Rock Claim Group section above.

The SR-13A database contains data for 332 drill holes. Data for 243 drill holes was obtained from the Cotter dataset. The USAEC open file report contained data for 89 drill holes. Of the combined 332 drill hole dataset, 62 drill holes contained composited intercept values meeting or exceeding a 0.1 GT cutoff with a minimum grade cutoff of 0.02 % eU₃O₈. Mineralization at SR-13 is interpreted as one stratigraphic zone that correlates with Zone B at the Slick Rock claim group.

Drill hole locations are shown on Figure 10.2.2. Drill holes are assumed to be vertical.

10.2.4 SR-11 Lease Tract Drilling Data from Previous Operators

A database consisting of drill hole locations and intercepts was obtained by Anfield from the previous operator of the lease tract, Cotter Corporation. Original geophysical drill hole logs were obtained from the Cotter Corporation office to support the database information. The most recent drill holes in the Cotter dataset were completed in 1997. A limited number of USAEC drill hole assay values were obtained as part of the Open File Report detailed under the Slick Rock Claim Group section above.

The SR-11 database contains collar locations for 741 drill holes. Of those 741 collars, data is available for 605 drill holes. Of the 605 drill holes with data, Cotter Corporation possessed geophysical logs for 130 of the holes. Within the 605 drill hole dataset, 320 drill holes contained intercept values meeting a minimum grade cutoff of 0.02 % eU₃O₈. 219 of those drill holes with intercepts contained a composited intercept value meeting or exceeding a 0.1 GT cutoff.

Drill hole locations are shown on Figure 10.2.2. Drill holes are assumed to be vertical.

10.2.5 Slick Rock Claim Group Drilling Data from Anfield

Anfield Energy Inc. completed a 14-hole, 14,100-foot verification drilling program at its Slick Rock uranium and vanadium project in San Miguel County, Colorado, between September 22 and November 12, 2024. The individual drill intercepts and accompanying discussion are contained in a press release dated January 29, 2025, available on Anfield's website and SEDAR+.

The drilling program utilized standard circulation rotary drilling techniques (air, foam, or mud depending on conditions), with all holes drilled vertically. Downhole deviation was measured and

remained minimal, <3 degrees from vertical. Lithological samples were collected at 5-foot intervals and logged by site geological staff. All holes were geophysically logged with a calibrated gamma-ray sonde to determine equivalent uranium (eU_3O_8) grades. All logging was performed by Hawkins CBM Logging using a sonde calibrated at the U.S. Department of Energy's Casper, Wyoming test pits.

Drill hole locations were designed to offset historical drill targets. Gamma-ray logging results confirmed the presence of uranium mineralization with a minimum grade of 0.02% eU_3O_8 in 7 of the 14 holes, with depths and grades generally consistent with the historical dataset. GT values above a minimum 0.1 GT cutoff were encountered in 4 of the drill holes. The drill hole collar locations are shown on Figure 10.2.2. Representative cross-sectional views of the drill data are provided on Figure 10.2.3.

Figure 10.2.1 2024 Drilling at Slick Rock



Figure 10.2.2 Slick Rock Drill Hole Map

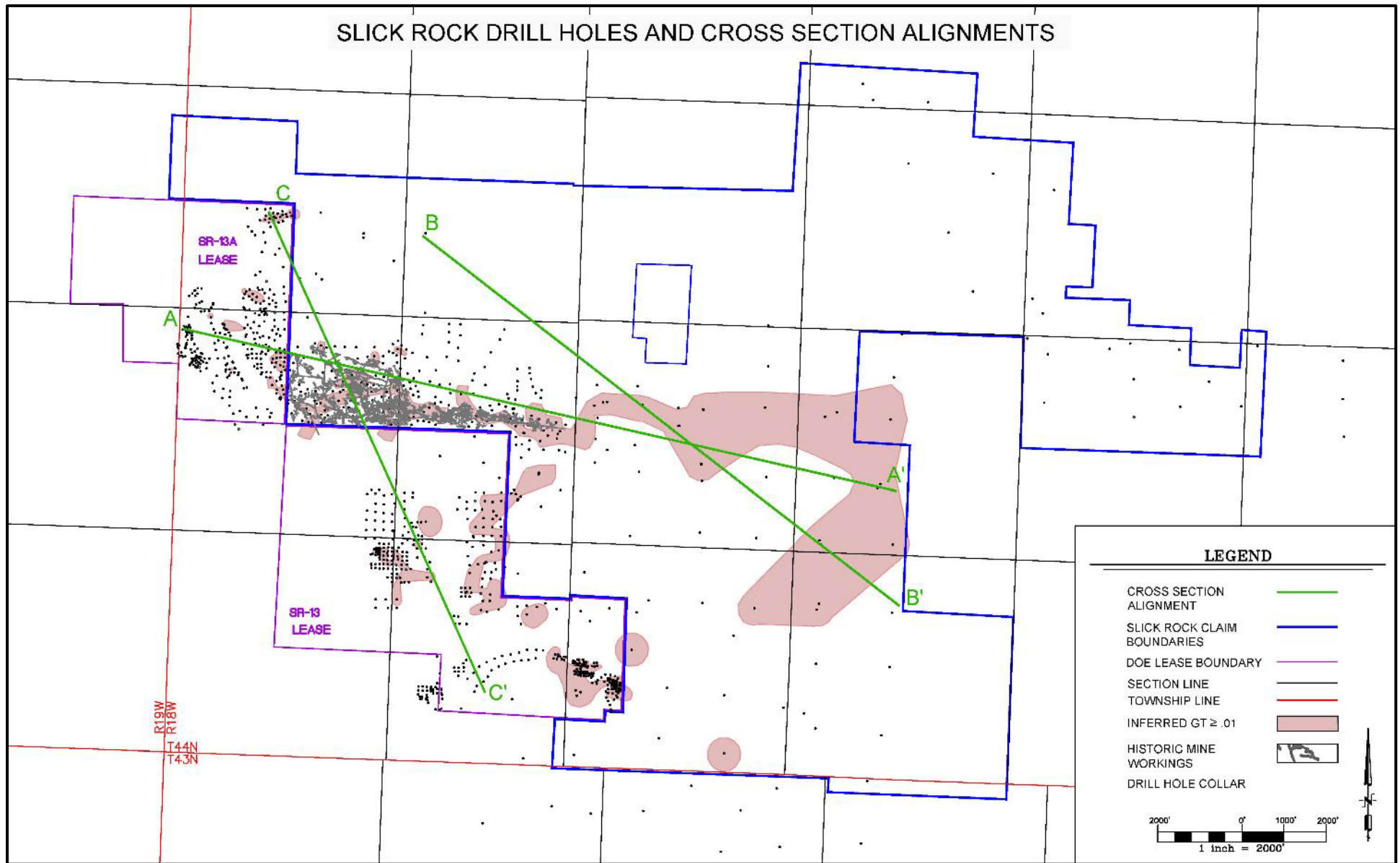
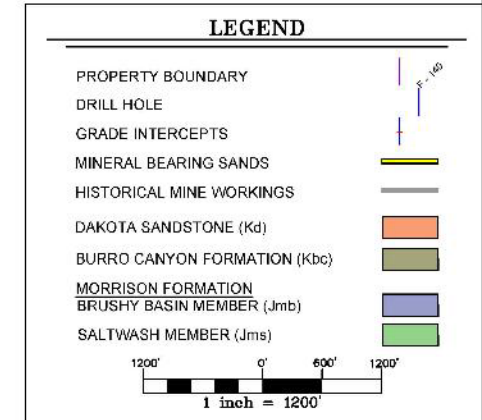
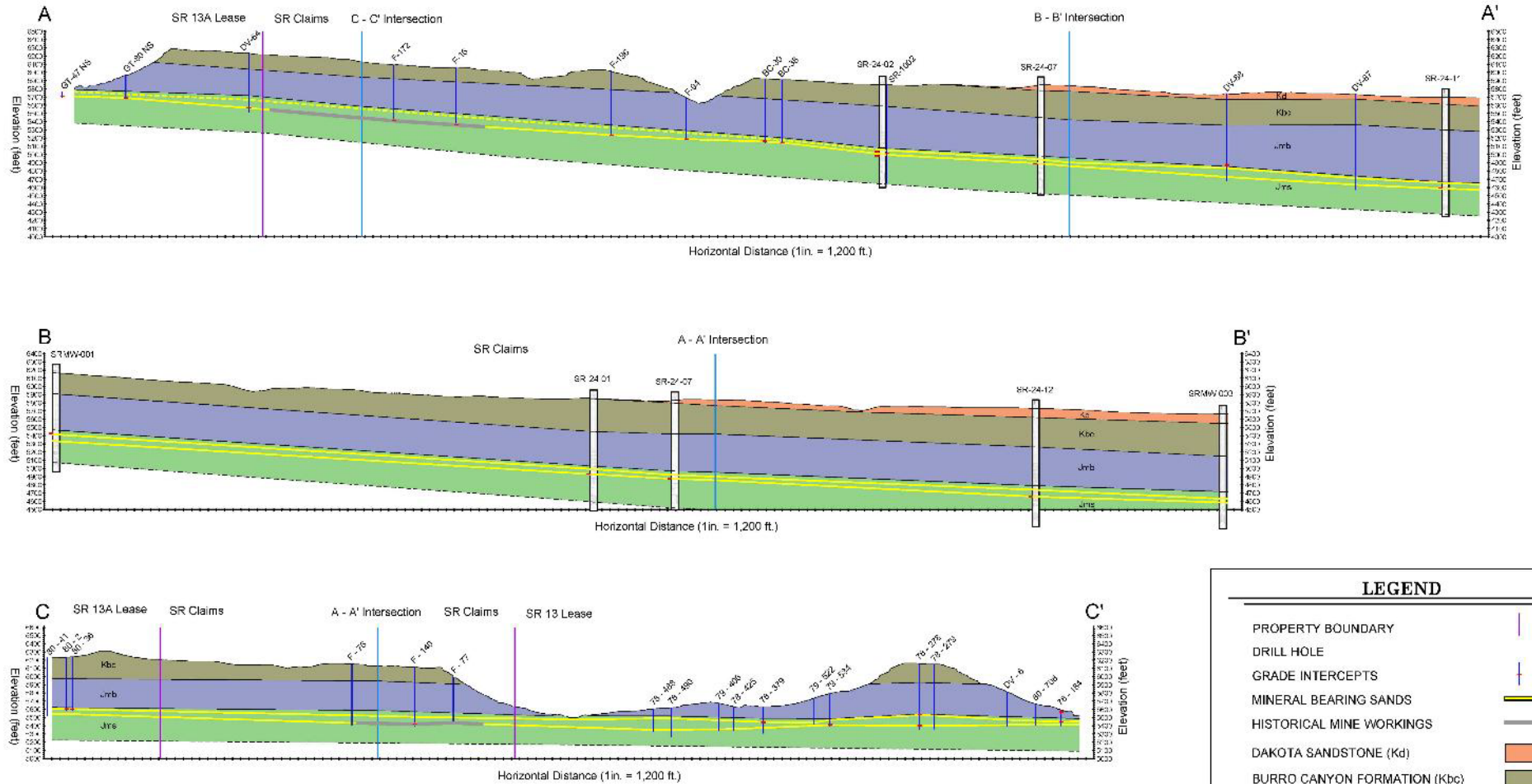


Figure 10.2.3 Slick Rock Cross Sections

SLICK ROCK CROSS SECTIONS



10.3 Uravan District

Anfield possesses a large database of drilling data generated by the previous operators of the US DOE Lease projects. A confirmation drilling program was completed at the JD-7 lease tract in 2025.

10.3.1 JD Leases Drilling Data from Previous Operators

The main operator of DOE Leases was Cotter Corporation, following limited exploration drilling in the 1950s by the USGS on behalf of the AEC.

All the drilling was vertical and utilized truck-mounted rotary drill rigs. Upon completion the holes were logged with a geophysical tool that recorded spontaneous potential, resistivity, and natural gamma. The holes were also logged to determine the extent and direction of drift during drilling of the hole. Natural gamma logs were calibrated using the standard DOE (Formerly AEC) calibration facilities in Grand Junction, Colorado. The data used for the estimation of uranium mineral resources is based on the equivalent uranium grade and thickness interpolated from the downhole geophysical logging.

The authors have reviewed the original geophysical logs. They are complete with standard calibration factors. The interpolation of the logs has been verified as discussed in Section 12.

Vanadium was sampled and assayed to a limited extent. The estimation of vanadium mineral resources is based on the observed ratios of vanadium to uranium from mining on the project and in the region.

Drill data was available for 2,198 drill holes, totaling approximately 1,250,370 feet drilled.

The drill hole database consists of:

- JD-6 Lease; 403 drill holes in total of which 188 were barren
- JD-7 Lease; 705 drill holes in total of which 214 were barren
- JD-8 Lease; 537 drill holes in total of which 245 were barren
- JD-9 Lease; 553 drill holes in total of which 259 were barren

The locations of the drill holes are shown on Figures 10.3.1 through 10.3.4 for the JD-6, JD-7, JD-8, and JD-9 leases, respectively.

Cross sectional representations of the drill data are provided on Figures 10.3.5 to 10.3.9 for the JD-6, JD-7, JD-8, and JD-9 leases, respectively.

The authors consider the available drill data suitable for the estimation of mineral resource for the purposes of this report.

10.3.2 JD-7 Lease Tract Drilling Data from Anfield

Anfield completed a confirmation drilling program at the JD-7 lease tract between September 15 and October 9, 2025. The program consisted of 23 holes totaling 7,564 feet. Drill hole intercepts

and accompanying discussions are contained in a press release dated October 21, 2025, available on Anfield's website and SEDAR+.

Drilling was primarily conducted using air rotary methods, with 149 feet of split barrel coring completed in five holes to recover core through the mineralized zones for chemical assay, vanadium-to-uranium ratio determination, radiometric equilibrium assessment, and metallurgical/mineralogical testing.

The primary objectives of the confirmation drilling were to:

- Verify the presence, depth, and tenor of uranium mineralization against the historical drilling database at the JD-7 mine;
- Support upgrading and increasing confidence in the current mineral resource estimate for uranium and vanadium; and
- Provide data to refine the geological model, delineate mineralization boundaries, and assist with future mine planning for the Paradox Mine Complex.

Downhole geophysical logging (gamma ray) was performed on all holes to determine equivalent uranium grades (eU_3O_8) and Grade-Thickness (GT) values. A minimum cut-off of 0.02% eU_3O_8 (200 ppm eU_3O_8) with a minimum GT of 0.2 was applied. Elevated uranium mineralization above cut-off was intersected in 15 of the 23 holes, with 11 holes returning $GT > 0.5$.

Core samples from the mineralized intervals were submitted to Pace Analytical (Sheridan, Wyoming) and Hazen Research (Golden, Colorado) for chemical uranium and vanadium assays. These results, once received, will be correlated with the downhole gamma logs to assess radiometric equilibrium and validate the vanadium-to-uranium ratio.

The drill hole collar locations are shown on Figure 10.3.2. Representative cross-sectional views of the drill data are provided on Figure 10.3.6.

Figure 10.3.1 JD-6 Lease DH and X-Section Location Map

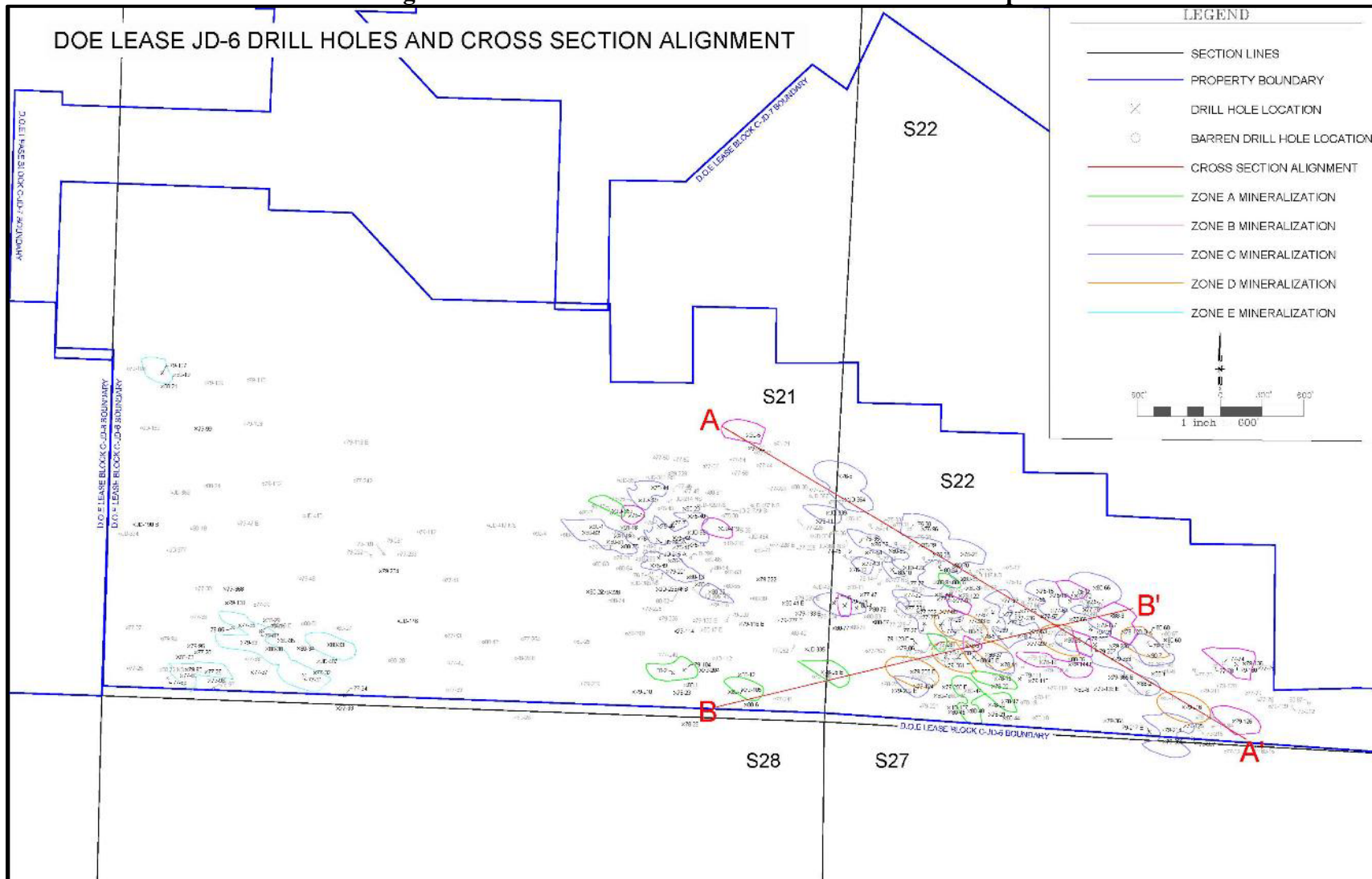


Figure 10.3.2 JD-7 Lease DH and X-Section Location Map

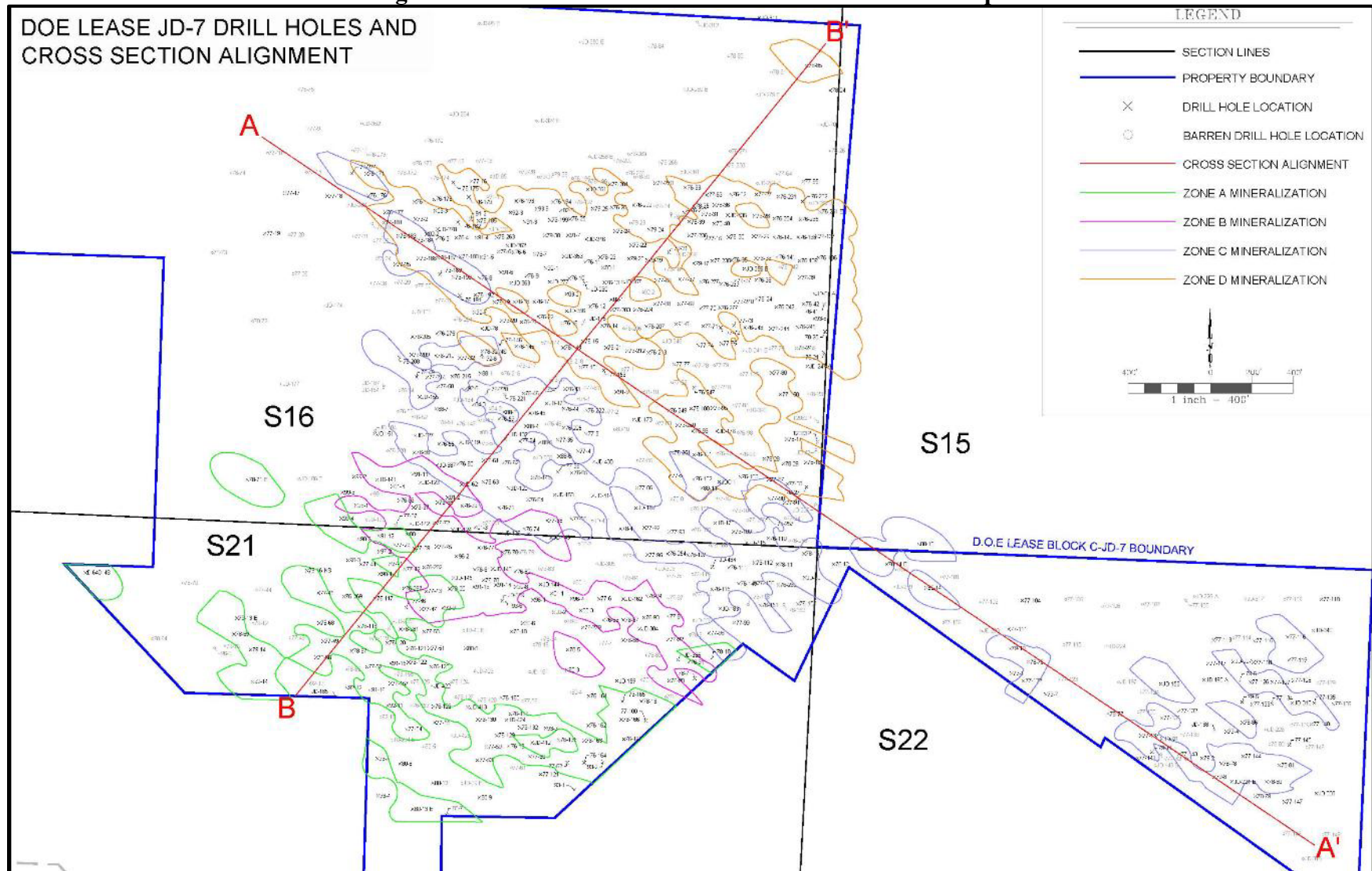


Figure 10.3.3 JD-8 Lease DH and X-Section Location Map

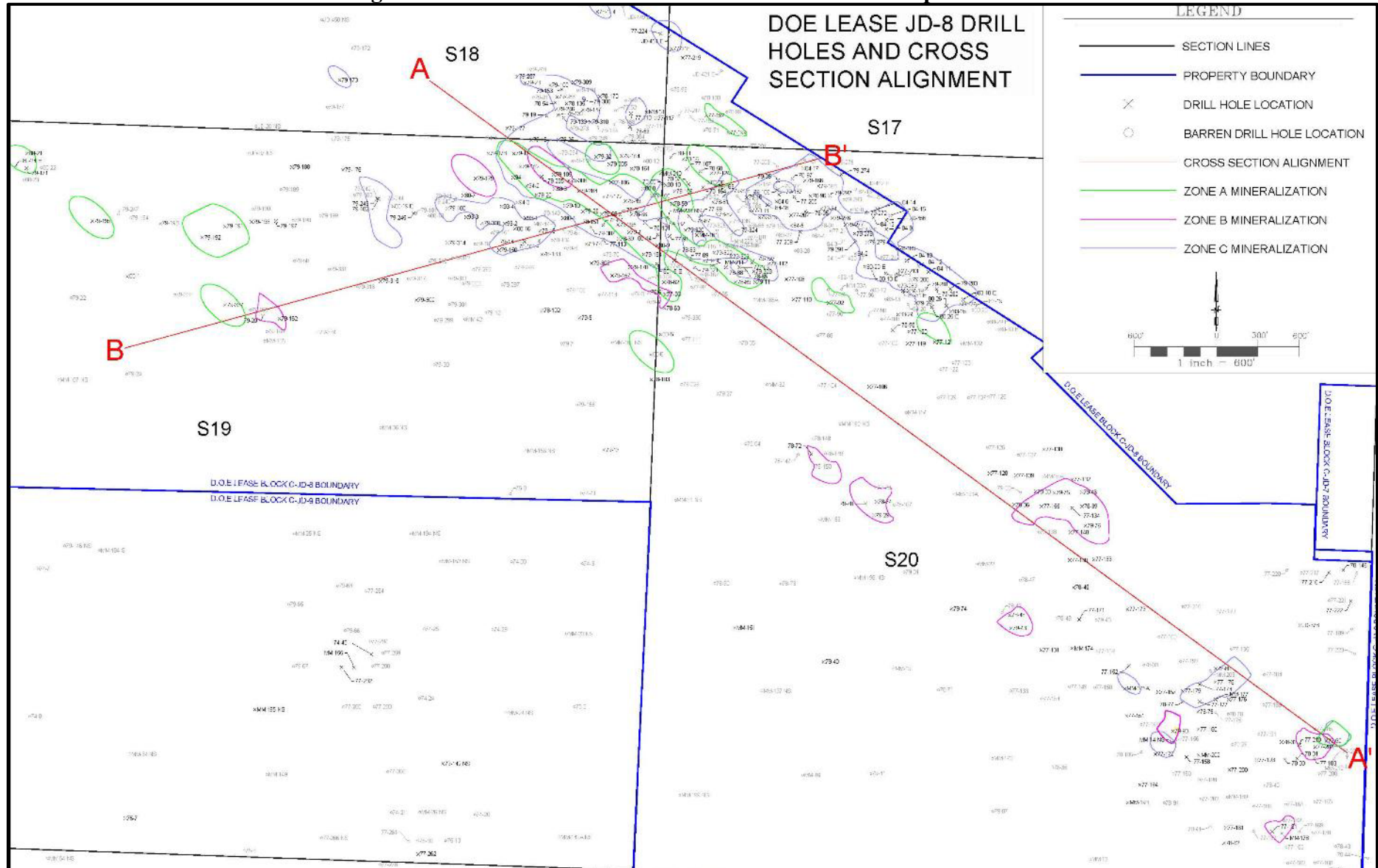


Figure 10.3.4 JD-9 Lease DH and X-Section Location Map

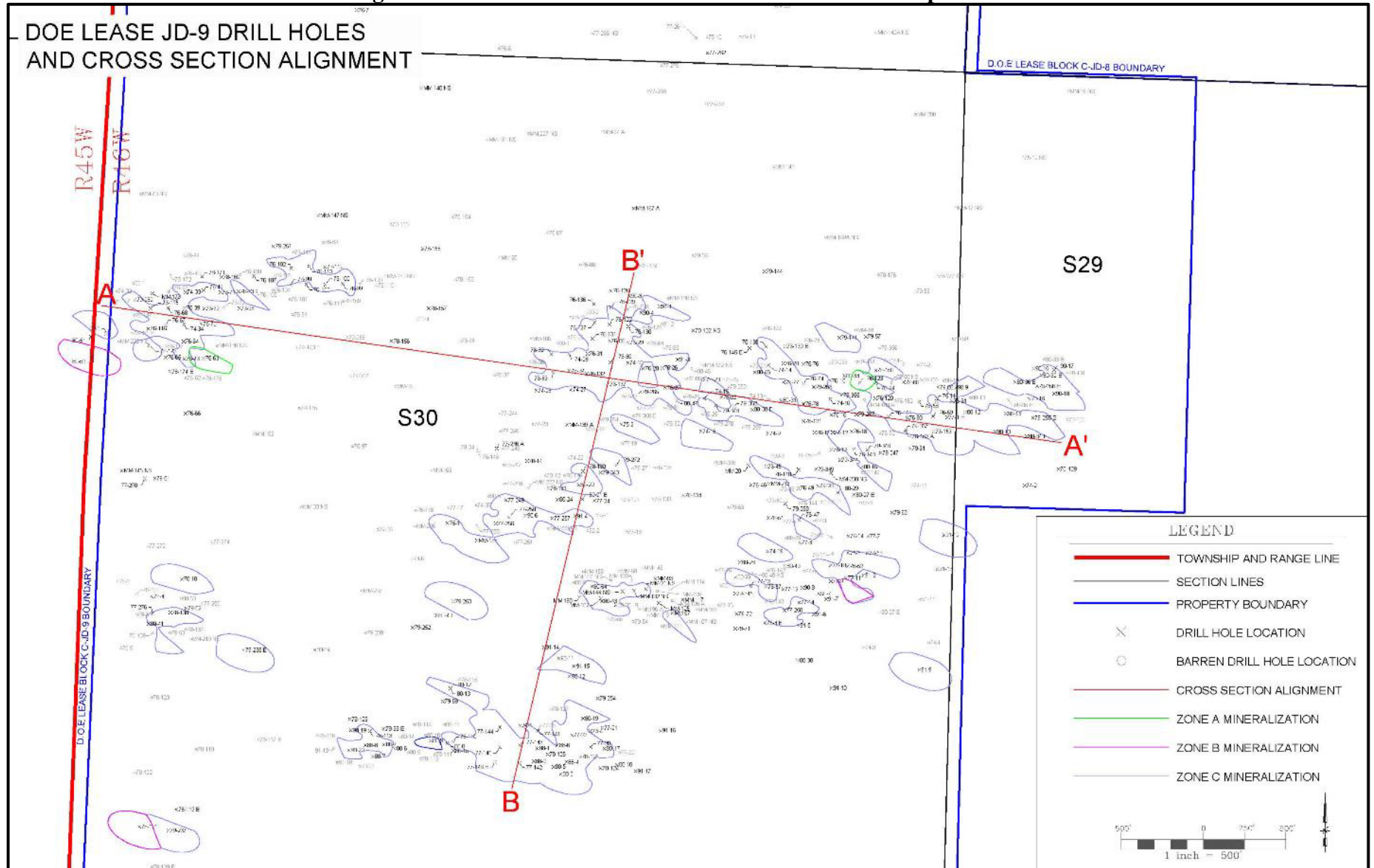


Figure 10.3.5 JD-6 Lease X-Sections

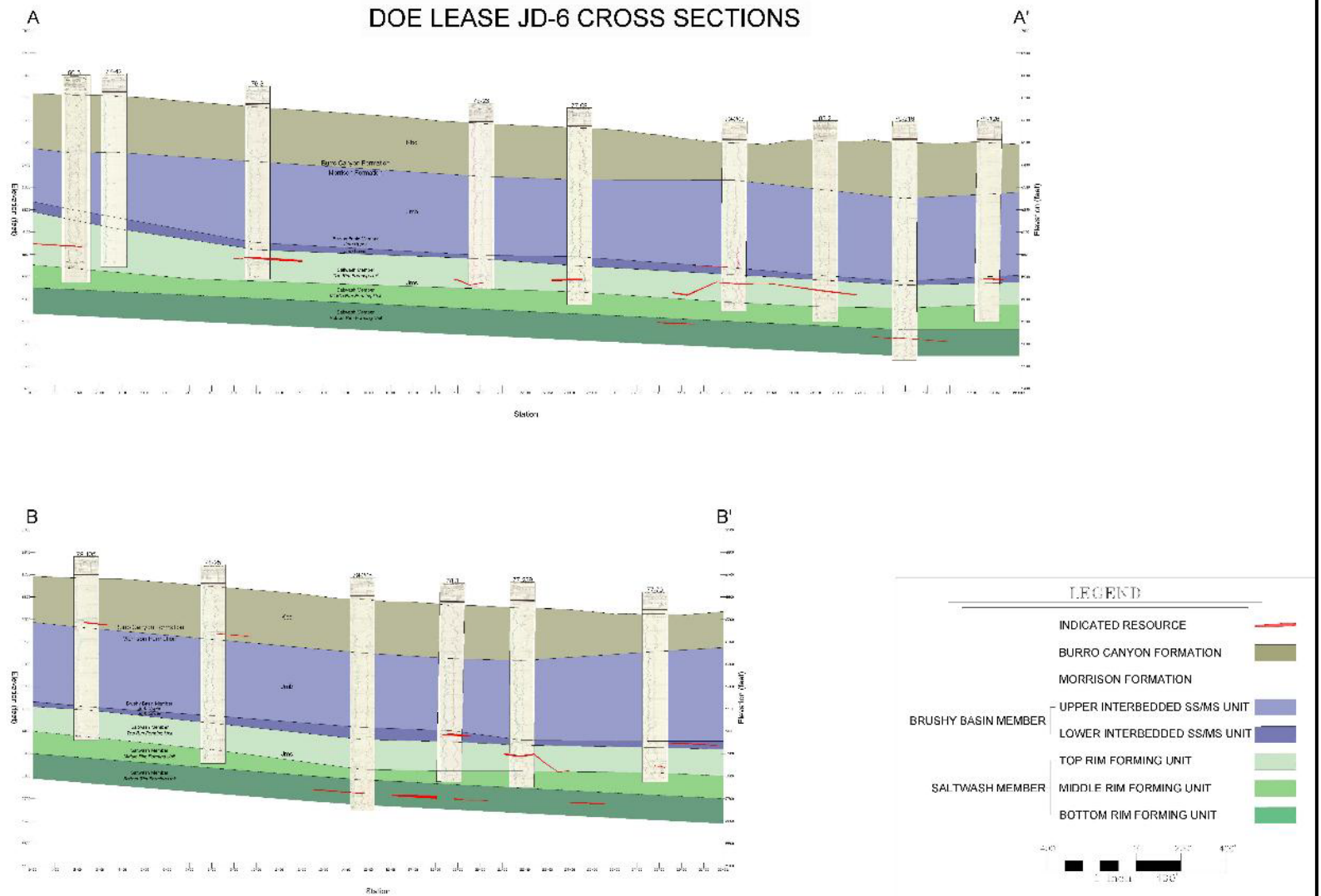


Figure 10.3.6 JD-7 Lease X-Sections
DOE LEASE JD-7 CROSS SECTIONS

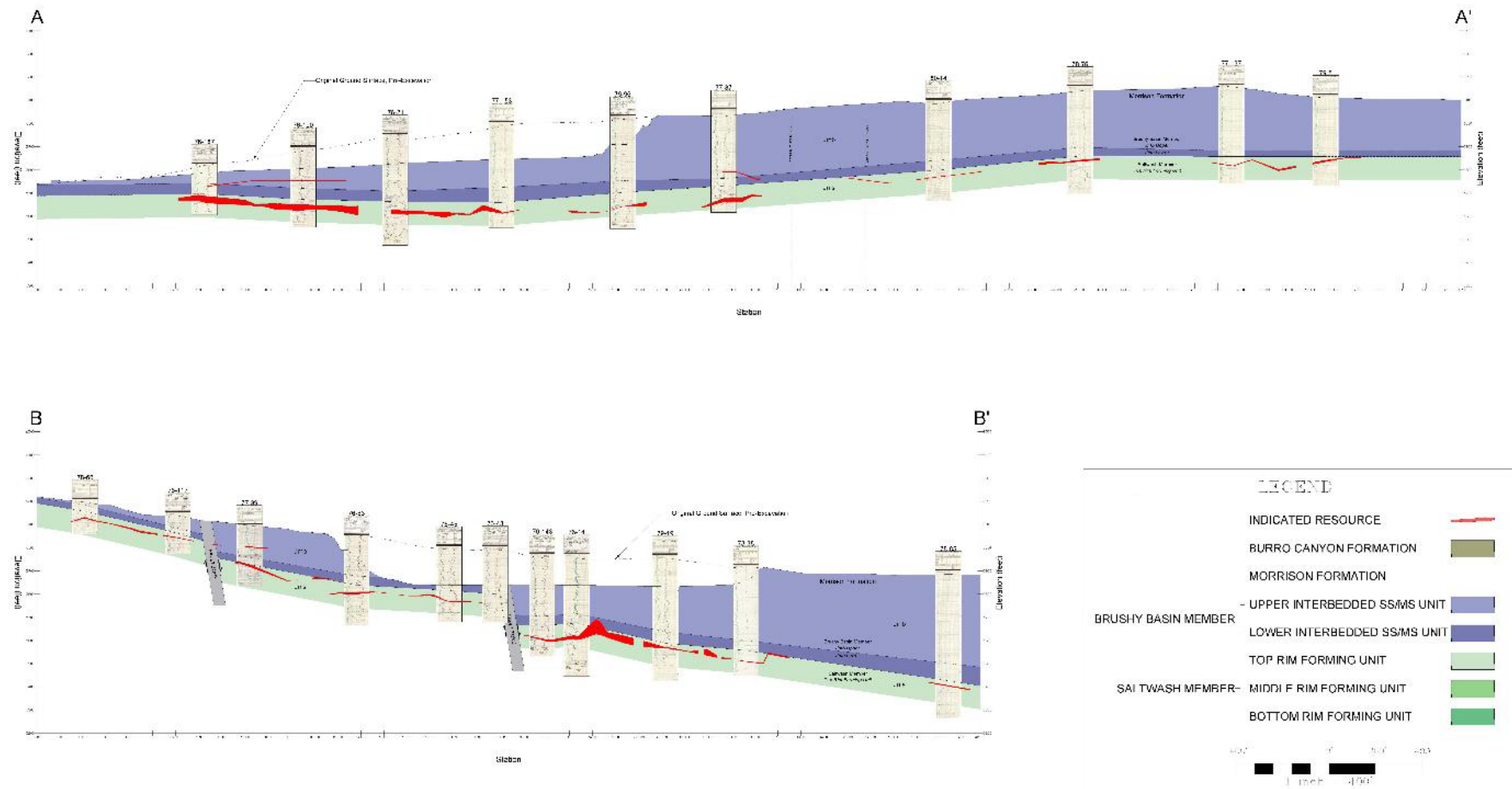


Figure 10.3.7 JD-8 Lease X-Sections

DOE LEASE JD-8 CROSS SECTIONS

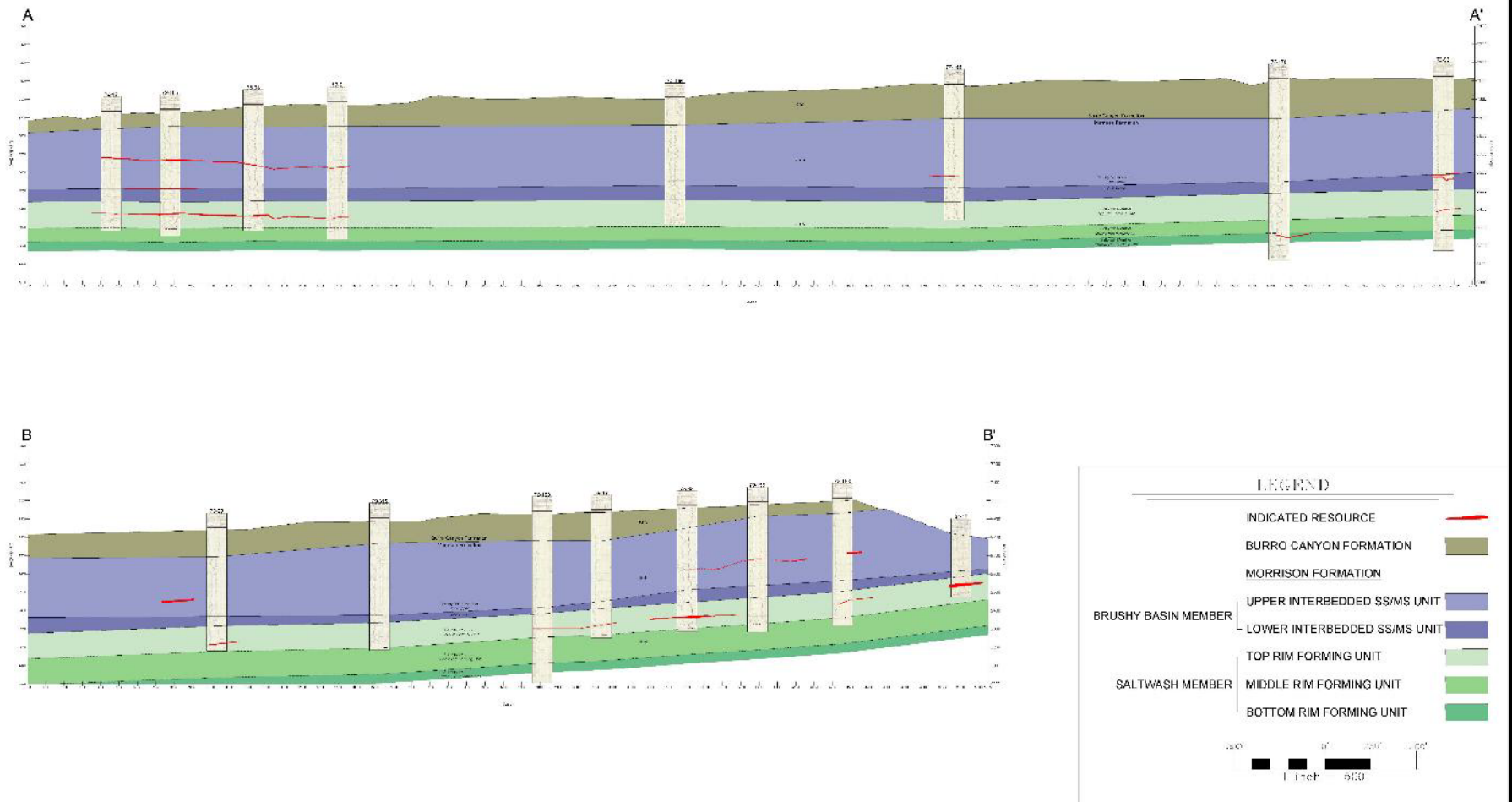
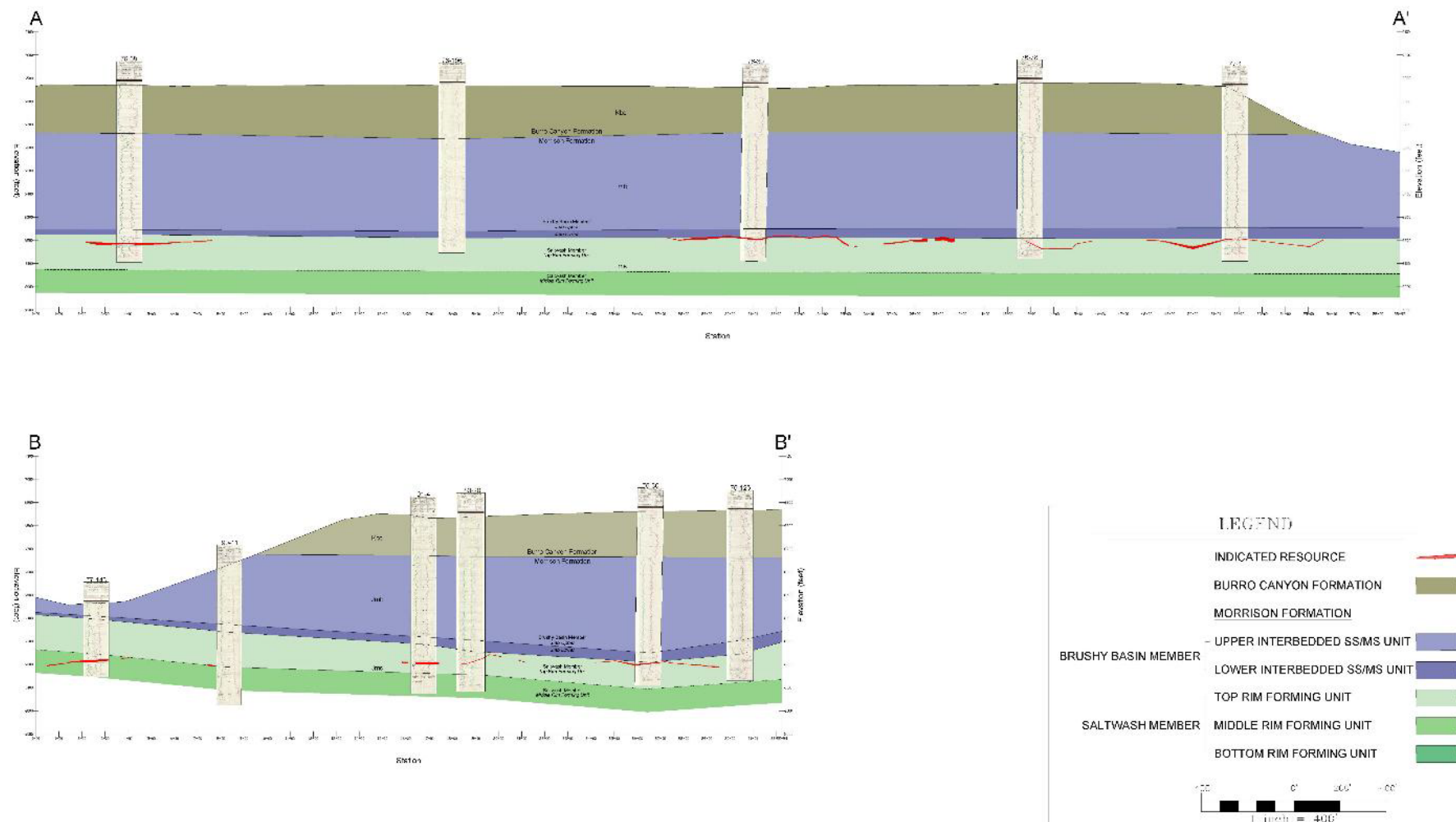


Figure 10.3.8 JD-9 Lease X-Sections

DOE LEASE JD-9 CROSS SECTIONS



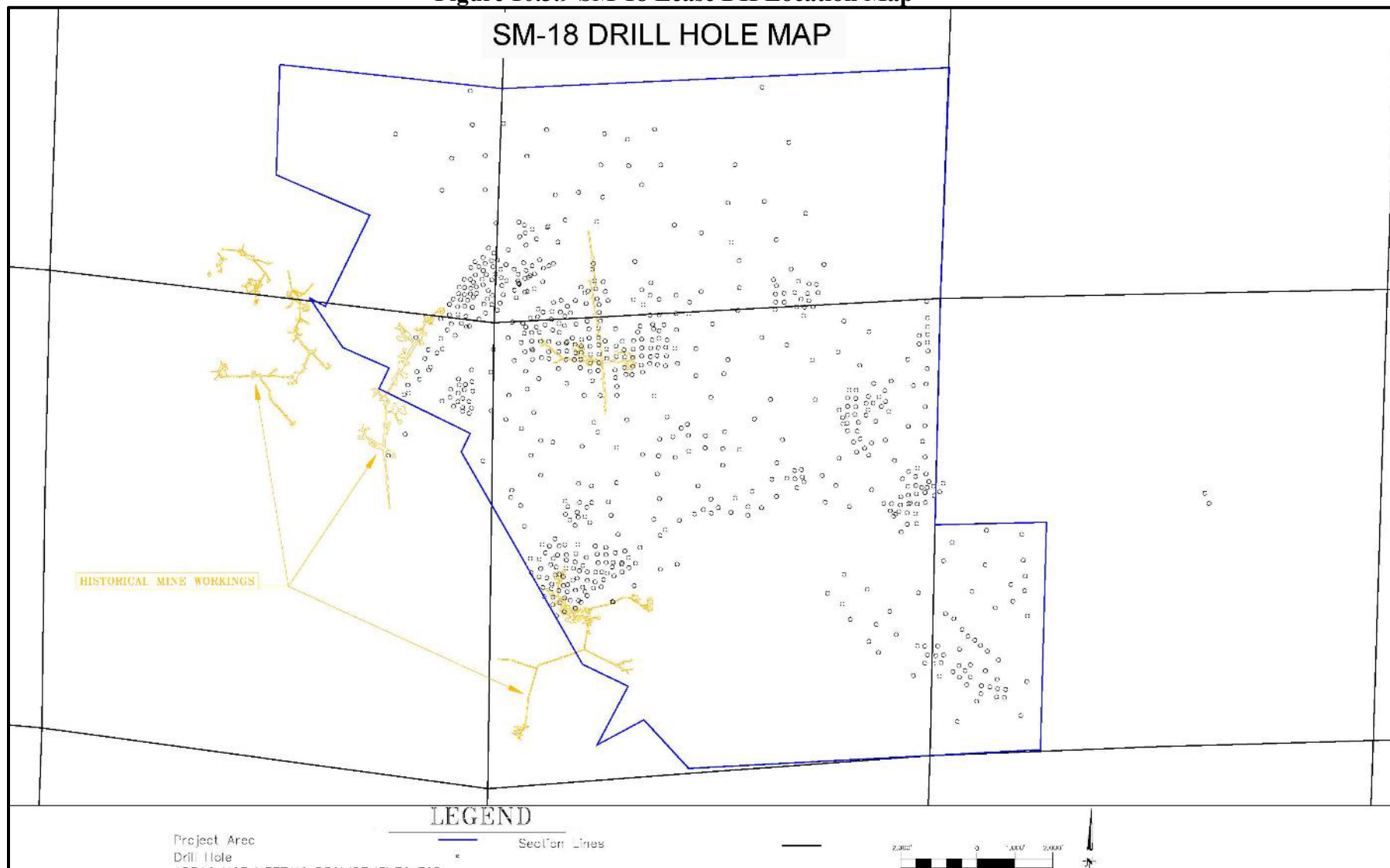
10.3.3 SM-18 Lease Tract Drilling Data from Previous Operators

A database consisting of drill hole locations and intercepts was obtained by Anfield from the previous operator of the lease tract, Cotter Corporation. Original geophysical drill hole logs were obtained from the Cotter Corporation office to support the database information. The most recent drill holes in the Cotter dataset were completed in 1997. Several of the drill holes in the Cotter database were completed by DOE lease operators prior to Cotter.

The SM-18 database contains collar locations for 681 drill holes. Of those 681 collars, data is available for 672 drill holes. Of the 672 drill holes with data, Cotter Corporation possessed geophysical logs for 227 of the holes. Within the 672 drill hole dataset, 366 drill holes contained intercept values meeting a minimum grade cutoff of 0.02 % eU₃O₈. 192 of those drill holes with intercepts contained a composited intercept value meeting or exceeding a 0.1 GT cutoff.

Drill hole locations are shown on Figure 10.3.9. Drill holes are assumed to be vertical

Figure 10.3.9 SM-18 Lease DH Location Map



Section 11: Sample Preparation, Analyses, and Security

11.1 Velvet-Wood Sampling

The Velvet-Wood Mine Uranium Project was initially drilled during the 1970s and 1980s with the principal exploration work and drilling completed by Gulf and Uranerz for the Velvet and Wood properties, respectively. As previously discussed in Section 14, the data is considered accurate and reliable for the purposes of completing a mineral resource estimate for the property.

Core drilling completed during the 2007/2008 drilling program was directly supervised by BRS and Uranium One personnel including Doug Beahm and personnel under his direct supervision. On site personnel completed lithologic logging of rotary and core samples. Upon completion of drilling, geophysical logs of the drill holes were completed by a commercial provider of such services, Century Geophysical. The loggers were contractually required to provide Uranium One with calibration data and the k-factor for their probes and completed onsite calibration for each hole.

With respect to QA/QC for equivalent uranium measurements (eU_3O_8) by downhole geophysical logging, the Department of Energy (DOE) maintains standard calibration pits located in Grand Junction, Colorado for use by the US uranium industry for instrument calibration. For Velvet and Wood, the original log files contain a record of the geophysical probes which show the instruments were calibrated at the DOE standard calibration pits located in Grand Junction, Colorado prior to the drilling program. For example, the geophysical logging unit which measured eU_3O_8 for core holes DW14T-08 and SLV-8883T-08, completed on 10/02/2008 and 9/25/2008, respectively were calibrated at the Grand Junction DOE facility on 9/22/2008.

Drill core was placed in protective plastic sleeves at the drill site and packaged into core boxes. Mineralized core was subsequently split for analysis and metallurgical testing with half of the core retained. The core splits were delivered to the testing laboratory and testing facility, Hazen Research (Hazen), by the author, and a chain of custody established. In addition, select core samples were chosen for geotechnical testing. Chemical assays were completed by the following methods:

- Uranium by fluorometric assay.
- Vanadium, molybdenum, arsenic, iron, magnesium, aluminum, calcium, thorium, zinc, copper, nickel, cobalt, and manganese by semi-quantitative x-ray fluorescence (XRF).
- Uranium equivalent (eU_3O_8) by gamma spectroscopy.

Hazen is located at 4601 Indiana Street, Golden, Colorado, USA 80403. Hazen has provided analytical services for the uranium mining and processing industries since the early 1960s. An outgrowth of this activity has been the Radiochemistry Laboratory, which specializes in the determination of the long half-life radionuclides of the uranium and thorium decay series and radionuclides produced from nuclear power generation. These isotopes emit alpha, beta, and gamma radiation. Hazen holds a variety of state and federal certifications to perform radiochemical testing on drinking water from domestic and foreign sources, including NELAC Certification by the State of New York. Typical parameters include gross alpha/beta, gross gamma, radium-226, radium-228, radon in water, thorium, tritium, strontium, cesium, and uranium. In addition, Hazen

Analytical Laboratory holds certifications from various state regulatory agencies and from the US Environmental Protection Agency (EPA).

It is the authors' opinion that the sample preparation, security, and analytical procedures were in keeping with industry practice and are adequate for the purposes of this report.

11.2 Slick Rock Sampling

Anfield possesses drilling data from previous operators for the Slick Rock Claim Group as well as the SR-13, SR-13A, and SR-11 lease tracts. Anfield completed a verification drilling project at the Slick Rock Claim Group in 2024 as discussed in Section 12.

The only chemical assay values are historical and were generated by the AEC laboratories. Later operators (USEC, UCNC, Homeland Uranium, Energy Fuels, and UEC) relied on radiometric values and did not perform chemical assays.

Samples were prepared by the USGS on behalf of the Raw Materials Division of the Atomic Energy Commission (AEC). USGS geologists conducted diamond drilling and radiometrically logged the holes, described the lithology, and scanned the cores for radiometric anomalies using a Geiger counter. Within Anfield's Slick Rock project area, 51 of the 52 core samples were retrieved with greater than an 80% recovery rate. Only borehole DV-88 was less than 80% at a 65% recovery rate (OFR70-348).

Sample intervals with radiometric anomalies greater than 0.045% eU_3O_8 were shipped to the AEC labs in Washington, D.C., Denver, CO, or Grand Junction, CO for chemical determination of uranium and vanadium content. The precise chain of custody of these samples is unknown. The AEC laboratories determined uranium values using fluorometric, colorimetric, volumetric, polargraphic, coulometric, radioactivation, X-ray spectrometric, and nuclear photographic plate techniques. The choice of method is determined by many factors such as the concentration of uranium in the sample, its chemical complexity, the accuracy sought, the speed required, and the availability of the instrumentation (Grimaldi, 1952). AEC laboratories determined vanadium content via wet chemical digestion and volumetric determination by using a prescribed method developed by Claude W. Sill, U.S. Bureau of Mines, Salt Lake City, Utah and compiled and edited by R. W. Langridge in AEC publication, RMO-3001. The certifications held by the AEC laboratories are unknown.

The samples were collected and processed according to strict protocols developed by the AEC and other U.S. government agencies. The results are consistent with later industry analyses. The authors believe the determinations of grade are sufficiently accurate and precise to support the estimation of mineral resources.

In 2024, Anfield conducted drilling activities at the Slick Rock project to verify the presence of mineralization inferred by historic data. A total of 14 rotary holes were drilled on 14 locations in the central portion of the Slick Rock Claims and in proximity to historic drill hole collar coordinates. Lithological samples were collected at 5-foot intervals and logged by site geological staff. All holes were geophysically logged with a calibrated gamma-ray sonde to determine equivalent U_3O_8 (eU_3O_8) grades. All logging was performed by Hawkins CBM Logging using a sonde calibrated at the U.S. Department of Energy's Casper, Wyoming test pits.

11.3 Uravan District Sampling

Anfield possesses a large database of drilling data generated by the previous operators of the US DOE Lease projects. A confirmation verification drilling program was completed at the JD-7 lease tract in 2025 as discussed in Sections 10 and 12.

In 2025, Anfield conducted drilling activities at the JD-7 project to verify the presence of mineralization indicated by data generated by the historic operator, Cotter Corp. The Cotter database includes drilling conducted both before and after overburden stripping in the JD-7 pit was performed. In 2025, A total of 22 holes were drilled on 20 locations in the JD-7 Pit floor and in proximity to historic drill hole collar coordinates. Four holes were core in the anticipated mineralized zones. Only 2 of the core holes had adequate core recovery as discussed in Section 12 to be used for evaluation of radiometric equilibrium.

All core intervals were logged in the field by site geologists (BRS staff) and stored in core boxes. After drilling the core was transported BRS's core storage and logging facility in Riverton, Wyoming. The cores were logged in detail including scanning with a handheld XRF. Based on comparison of the geophysical logs, the sample lithology and XRF scans, sample intervals were selected for laboratory analyses. Samples for lab assay were split vertically with half of the core preserved and half sealed and packaged for shipment to the lab, with Chain of Custody forms used. The samples were assayed at a certified lab, PACE labs, in Sheridan, Wyoming by ICP methods.

Assay results and sample rejects were returned to BRS and have been preserved with the exception of samples prepared and sent to Hazen Research for metallurgical testing. Standard Chain of Custody protocols were followed. Testing results are discussed in Section 13.

Section 12: Data Verification

12.1 Velvet-Wood Data Verification

The primary assay data for the Velvet-Wood Project is downhole geophysical log data. A comparison of downhole radiometric geophysical data to chemical core assays was also completed to evaluate radiometric equilibrium conditions.

Ten of the 96 Wood Project logs were chosen at random and reviewed for data entry errors. In one instance half foot uranium grade data from a printout was compared to half foot grade data that was scaled from a histogram. The two data sets varied by less than 0.002 %eU₃O₈. This amount of variance is insignificant. No grade data entry errors were found. Five drift data entry errors were corrected. Due to the preliminary amount of drift data entry errors, all drift data entries were checked and corrected if necessary. One hundred percent of the log data entry was reviewed after entry and corrected where necessary. Multiple maps were rectified, and point locations and rectifications were checked for consistency and any data entry errors.

Historic drill data for each drill hole consisting of radiometric data was posted on drill maps including collar elevation, elevation to the bottom of the mineralized intercept, thickness of mineralization, grade of mineralization, and elevation of the bottom of the hole. Data entry was checked and confirmed. Drill hole locations were digitized from the drill maps to create a coordinate listing and then plotted. The resultant drill maps were then checked and confirmed by overlaying with the original maps.

2008 drill data included collar elevation, collar location, grade and elevation of mineralized intercepts, and elevation of bottom of hole. New drill hole locations were taken from field surveys using modern survey grade GPS equipment. All historic coordinates were converted to match the Utah State Plane NAD83 coordinate system. This conversion included the re-surveying of a limited number of historic survey monuments and rectification of the historic coordinate system to the Utah State Plane NAD83 coordinate system. With this rectification, historic drill holes could be located in the field with an estimated error of approximately 15 feet. Further field surveys should be completed to increase the accuracy of historic drill hole coordinates.

A comparison was completed of historic drill hole Sum GT data with 2008 Uranium One drill hole Sum GT data for three holes completed which were intended to twin holes SLV-8806, SLV-8803, and DW-14. The closest of the 2008 core holes to historic data was SLV-8806T-08 which is approximately 23 feet to the southeast of SLV-8806 at mineralization. SLV-8806T-08 had an 8.28 GT as compared to SLV-8806 with a 6.12 GT. Drill hole SLV-8803T-08 deviated approximately 25 feet to the west from SLV-8803 at mineralization. SLV-8803T-08 had a 2.08 GT as compared to SLV-8803 which had a 9.36 GT. No deviation data is available for the historic drill hole DW-14 so the distance to the intended twin drill hole is not known at depth. The 2008 drill hole DW-14T-08 did not intercept mineralization above cutoff grade as compared to DW-14 with a 1.65 GT.

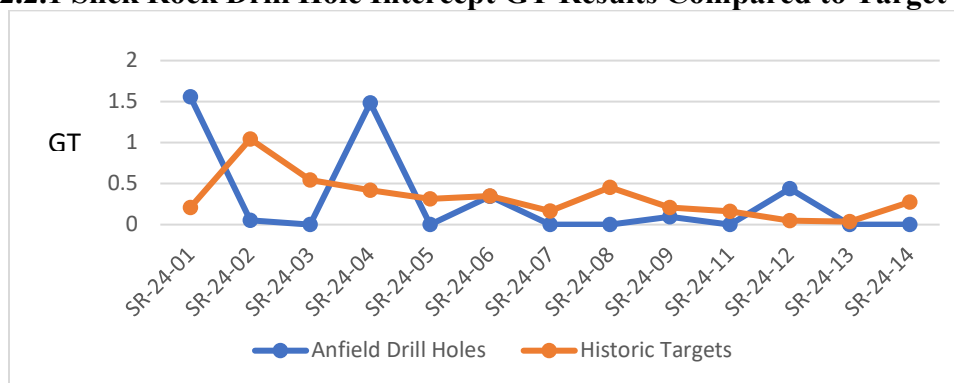
Although the GT values of holes SLV-8803T-08 and DW-14T-08 are less than the intended twin holes, the drill holes show mineralization at the same elevation, in the same host rock, and with approximately the same mineralized thicknesses. The drill holes therefore confirm the continuity

of the host formation but indicate that variations in grade should be expected, as seen historically at Atlas' nearby Velvet Mine.

12.2 Slick Rock Data Verification

In 2024, Anfield conducted drilling activities on the Slick Rock mining claim portion of the project to verify data generated by the USGS and subsequent operators. A total of 14 holes were drilled in the proximity of historic drill holes. A comparison of historic target GT values and realized values are shown on the graph below, Figure 12.2.1.

Figure 12.2.1 Slick Rock Drill Hole Intercept GT Results Compared to Target Intercepts



The drill holes showed mineralization within the same stratigraphic units and a close correlation with expected depths. A variance both in grades and thicknesses was encountered, with many duplicate holes showing either weaker or stronger results. This is likely due to the difficulty in locating the precise location of the historic collars and differences in downhole deviation. The historical drilling does not include deviation data, and all drill holes are assumed to be vertical based on the collar location. The effects of downhole deviation can vary significantly hole to hole and be affected by drill tooling and methods. For the 14 drill holes in 2024, downhole deviation averaged 3.6%, ranging from 11.4 - 50.9 feet horizontally from the collar location, trending generally West-Northwest, up-dip.

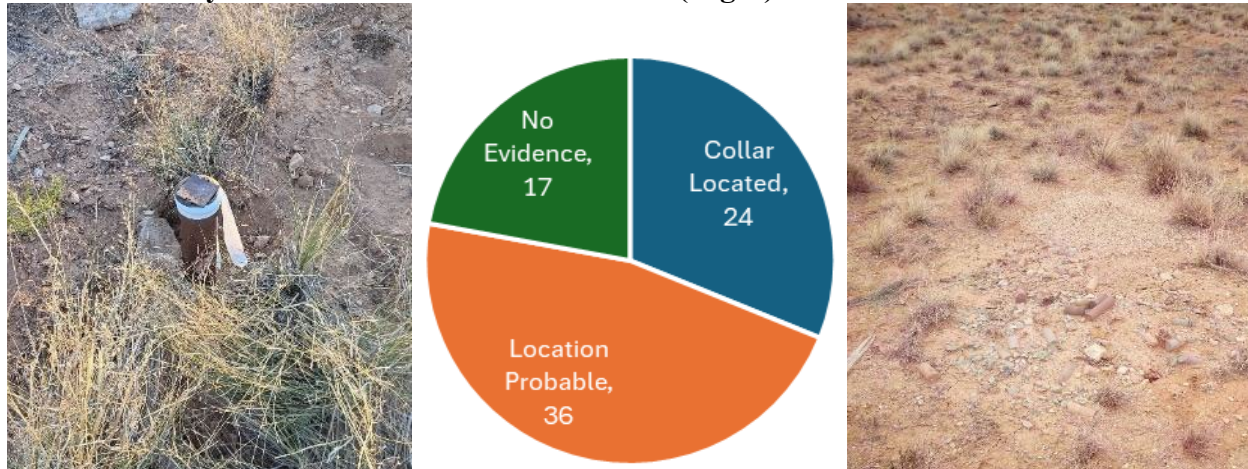
Given the difficulty in replicating the exact conditions of the historic drill holes, the agreement in stratigraphy, mineralization depth, and mineralization tenor sufficiently validates the general quality of the historical data.

In addition to the verification drilling, Anfield conducted ground surveys to check the historical locations of previous drill collars. The historical drilling was conducted between the late 1940s through 2007 by a variety of operators. It is common for evidence of drill sites to disappear over the course of several years, particularly when modern reclamation practices are used. Many of the older sites were more evident than the sites drilled in the early 2000s.

The ground survey team visited 77 historic drill sites across the property. Evidence of drilling ranged from open drill holes and marked standpipes to apparent drill cuttings, driller waste, and small piles of discarded core. In many cases the evidence was subtle, but some showed no definitive signs of past activity. For those non-evident sites, a clean drilling operation, a plugged drill hole below the surface, and decades of vegetative regrowth could have eliminated signs of

past drilling activities. Ultimately, 78% of the visited sites were either clearly drilled or showed some evidence of past drilling activity. 22% of the surveyed sites showed no concrete evidence of past drilling activity. See Figure 12.2.2.

Figure 12.2.2 (Left) Historical Drill Hole Stand Pipe. (Center) Chart: Categories of Surveyed Historical Drill Site Evidence. (Right) Discarded Rock Core Pile



12.2.1 SR-13 Lease Tract Data Verification

Anfield has not conducted any drilling activities at the SR-13 Lease Tract to verify data generated by the USGS or subsequent operators. Anfield has obtained radiometric and chemical assays from U.S. Atomic Energy Commission's exploration program OFR70-348 for vanadium and uranium values, respectively, from those holes drilled by the USGS on behalf of the Raw Materials Division of the AEC. An additional database was obtained from Golden Eagle Mining Inc. as part of the purchase arrangement for the property.

Geophysical logs were not available for the SR-13 Lease tract dataset. Given the track record of consistency of the results from government and private industry drilling in this district, the authors believe the sample data are sufficiently accurate to generate an inferred mineral resource estimate as described in Section 14.

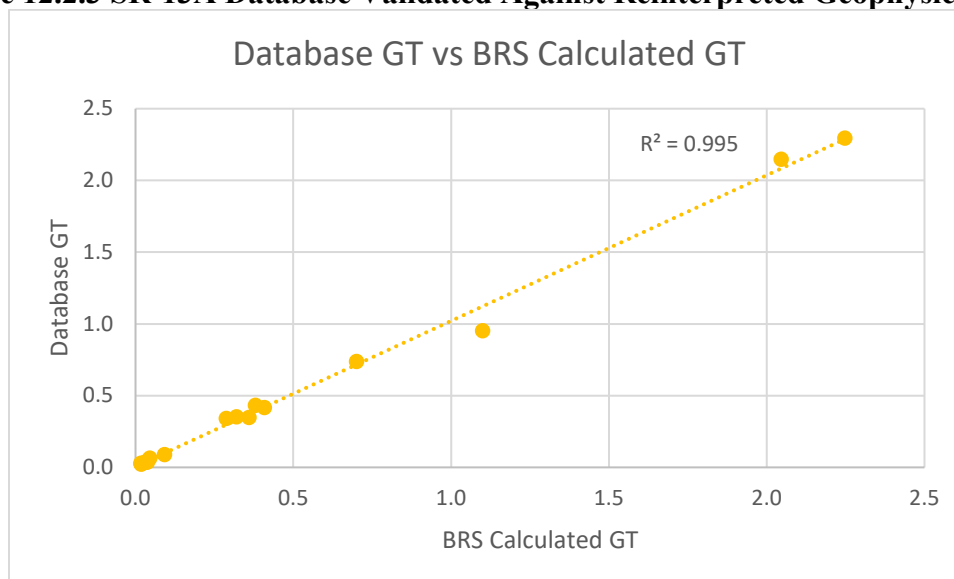
12.2.2 SR-13A Lease Tract Data Verification

A subset of 9 mineralized drill holes, 7 trace mineralized drill holes, and 14 barren drill holes were randomly selected to validate geophysical logs against the digital Cotter Corporation database.

The geophysical gamma logs for the selected mineralized and trace mineralized holes were reinterpreted for depths and $eU_3O_8\%$ grades on half foot intervals using the K factor and Deadtime information included with the logs. The barren logs were verified to not contain elevated gamma values.

A comparison between the database GT values and interpreted GT values from the geophysical logs is graphed in the below Figure 12.2.3.

Figure 12.2.3 SR-13A Database Validated Against Reinterpreted Geophysical Logs



12.2.3 SR-11 Lease Tract Data Verification

A subset of 32 mineralized drill holes ranging from slightly mineralized with a GT of 0.06 to strongly mineralized with a GT of 4.4 were randomly selected to validate geophysical logs against the digital Cotter Corporation database.

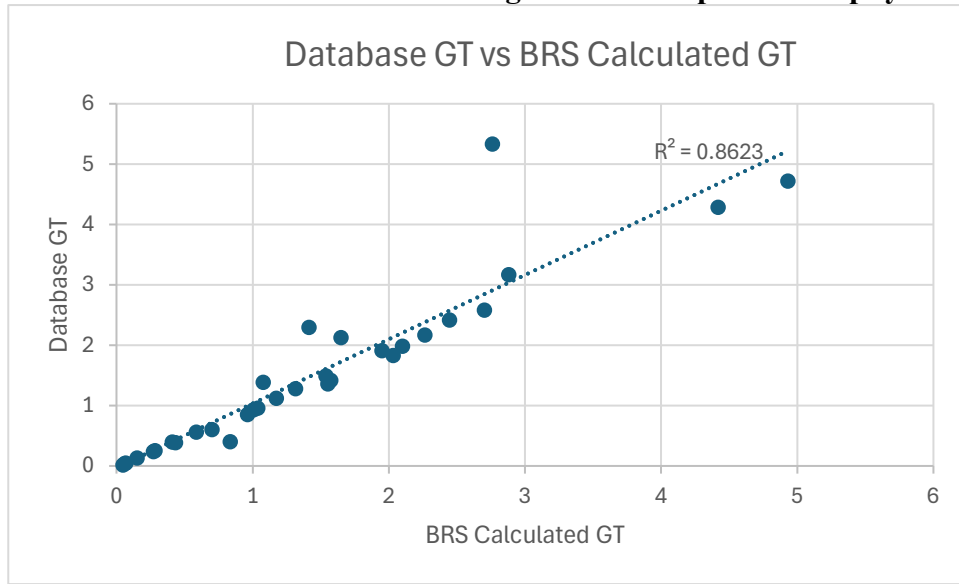
The geophysical gamma logs were reinterpreted for depths and $eU_3O_8\%$ grades on half foot intervals using the K factor and Deadtime information included with the logs.

A comparison between the database GT values and interpreted GT values from the geophysical logs is graphed in Figure 12.2.4 below.

The data shows a good linear relationship with only a single hole considered to be an outlier. Removing this drill hole the linear regression coefficient, R^2 is 0.96, showing excellent correlation.

Overall, the sum GT of the historic and current data interpretation shows the current interpretation yield approximately 5% higher values. Use of the previous interpretation is thus conservative.

Figure 12.2.4 SR-11 Database validated against Reinterpreted Geophysical Logs



12.3 Paradox Complex JD Leases Data Verification

The primary assay data for the Project is downhole geophysical log data, all of which is historical in nature; Anfield has yet to drill on the Property. The author has examined the geophysical logs in possession of the Company for the US Department of Energy (DOE) lease tracts, explored during the 1950s by the US Geological Survey (USGS) on behalf of the US Atomic Energy Commission AEC, and later from the 1970s to early 2000s by Cotter Corporation. The Company also owns an extensive library of geophysical, geological, and mine permitting and development documents and data that served as a basis for evaluating the Project.

12.3.1 Drill Data

The historical data meets the standards employed by the uranium exploration and mining industry in the United States at the time it was collected. Cotter Corporation was a significant explorer and developer of uranium deposits in the western United States. The data collected was generated professionally and is considered adequate for the calculation of new mineral resources.

BRS personnel generated a digital database from the original database hardcopy files produced by Cotter Corporation. The files included: Drill hole ID, northing and easting coordinates (NAD-27, Colorado South state plane), collar elevation, depth drilled, drift direction and distance (if recorded), total depth drilled, and depth, thickness, and grade %eU₃O₈. In addition to the hard copy database, original downhole geophysical logs were available for a subset of the data. These geophysical logs were reinterpreted and then used to verify the Cotter database.

When posted, vanadium grade % was also entered in the excel file. However, vanadium grade % is very limited in scope in the Cotter database. For the estimates of contained vanadium in the mineral resources, the average ratio of the mined material (vanadium to uranium) from past mineral production at each lease tract, was utilized. Typically, this is a 5:1 to 7:1 ratio, vanadium to uranium, in the Uravan district. For those posted intercepts in the historical database, with both

uranium and vanadium grade %, a comparison of their ratios was overall similar to those reported from past production.

12.3.2 Grade and GT Verification

Radiometric equivalent data for the depth, thickness and grade of uranium was available in the original files from the Cotter Corporation for each drill hole used in the mineral resource calculation.

The AEC published information on the calibration standards for geophysical logging and on gamma log interpretation methods (Dodd and Drouillard, 1967). The standard manual log interpretation method was the half-amplitude method (West, 1975). The AEC and its successor agency, the Energy Research and Development Administration (ERDA,) conducted workshops on gamma-ray logging techniques and interpretation as did private companies including Century Geophysical. Mr. Beahm attended the geophysical log interpretation workshop conducted by Century Geophysical. On November 19, 1976, the author received certification in geophysical log interpretation from Century after attending their short course.

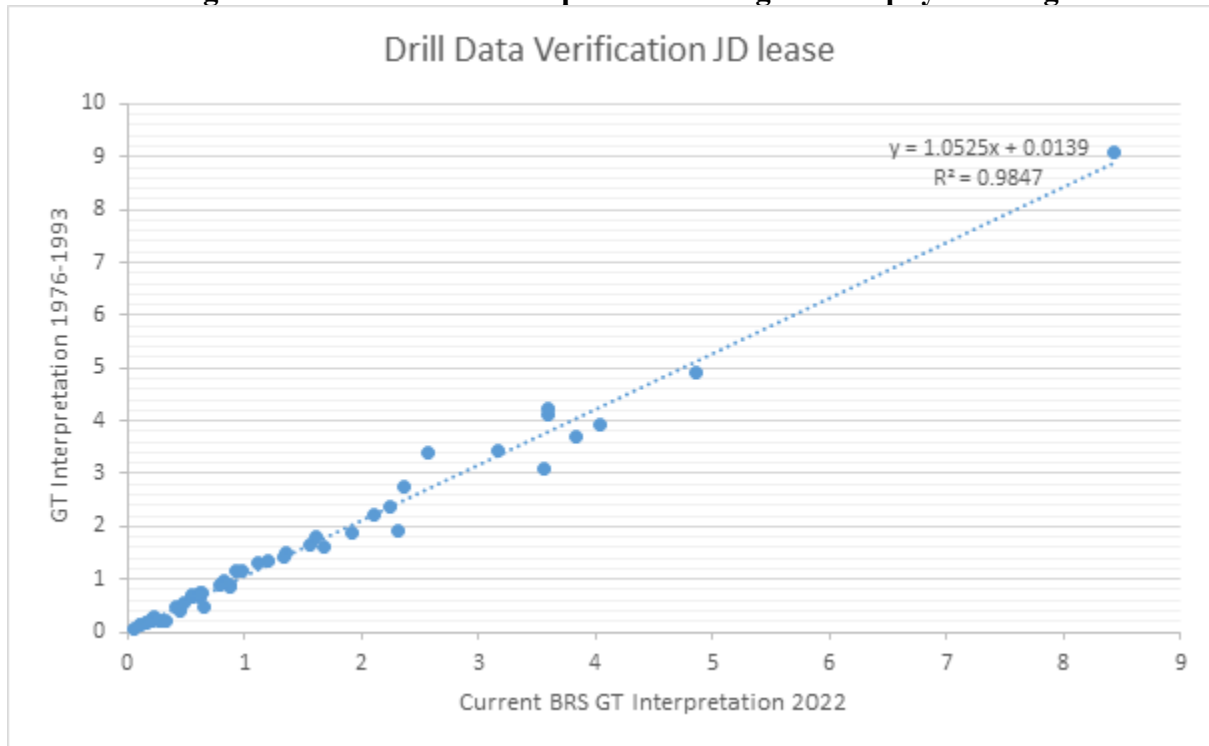
For verification purposes, 33 drill holes containing 51 mineralized intercepts were selected representing the range of mineralization observed from each of the four JD leases in rough proportion to the numbers of drill holes within each lease. The author re-calculated the mineralized intercepts for each drill hole to verify the original log interpretation. Mineralization in the verification drill holes ranged from a high GT value of 9.10 to a low value of 0.14. Barren holes were examined but not included in the analysis.

Verification by the author confirmed that the drill hole database reasonably reflects the depth, thickness and radiometric equivalent uranium grade from the original geophysical logs. The only discrepancy noted was the omission of isolated mineralized intercepts of lower grade and thickness which were not included in the data. The author concurs with the omission of these intercepts as they would not be included in a mineral resource calculation based on reasonable prospects of economic extraction.

Re-calculation by the author shows the original interpretation of radiometric equivalent uranium grade is approximately 5% less the re-calculated values by linear regression analysis. Thus, use of the original interpolated radiometric equivalent values would be conservative.

Figure 12.3.1 is a comparison of the drill hole database values to those re-calculated by the author using the standard half-amplitude log interpolation method. The linear regression analysis shows a strong correlation (R^2 value of 0.98) between the original and current data interpretations.

Figure 12.3.1 Database Comparison to Original Geophysical Logs



Note: By linear regression analysis the Database GT values are 5% less than the re-interpreted GT values. By comparison of the sum of the GT values in the Database GT values are 6% less than the re-interpreted GT values.

12.3.3 Drill Hole Locations

Exact drill hole collar locations could not be confirmed on the ground by recent survey as evidence of the exact collar locations have deteriorated or been reclaimed. However, drill hole location data was taken from the Cotter database and verified to be within less than 30 ft of the georectified maps containing corresponding collar data. In the case that a drill hole's location could not be minimally confirmed, it was removed from the dataset.

12.3.4 Downhole Deviation

All historical drilling on the Project was completed vertically. The dip of the formation is relatively flat, 1-3° to the west, except in the fault zone along the eastern flank of Monogram Mesa in the JD-6 and JD-7 leases. Following gamma logging, a deviation tool was lowered down the hole, resulting in a graphical plot showing horizontal distance from vertical and the drift direction at the select intervals recorded. The drift was typically plotted on drill hole location maps as a straight line (e.g., 100 feet at N45°W), when in fact the drift plots can be rather erratic, reflective of the true nature of how the drill bit penetrated the substrata. The author elected to utilize the surface plot of the drill holes to reflect the same usage of Cotter Corporation, and direct comparison to the historical drill hole and underground maps.

Each lease tract had varying amounts of drift data collected. A total of 403 drill holes were completed in the JD-6 lease tract, 705 in the JD-7 lease, 537 in the JD-8 lease and 553 in the JD-9 lease tract. Of these totals the JD-6 and JD-8 leases had the highest percentages of drift data gathered covering 95% and 91% of drill holes, respectively. This compares to JD-7 Lease at the low end of 8% of total drill holes with drift data and JD-9 having 53%.

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. The leases with the deepest drill holes generally experience the largest drifts. The JD-7 lease drill holes were the shallowest of the data set, having an average depth of 341 feet and the least average linear drift of 1.3 feet. Conversely, drill holes in the JD-6 and JD-8 leases were deeper having average total depths of 745 feet and 634 feet, respectively. As such the average linear drifts of JD-6 and JD-8 were larger at 21.4 feet and 35.2 feet, respectively. See Table 12.3.1 for a summary of drifting data per DEO lease area.

Table 12.3.1 Downhole Deviation Summary by Lease

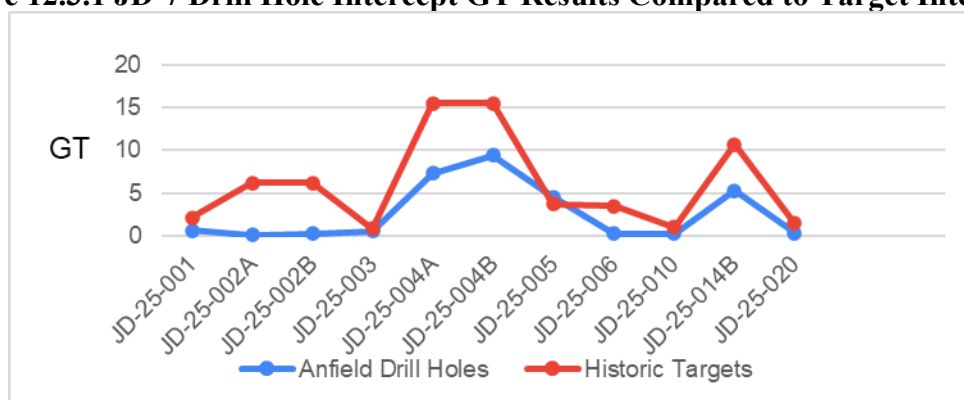
Lease	Total Drillholes	Percent with Drift Data	Average Total Depth Drilled (feet)	Average Drift (feet)		
				Northing	Easting	Linear Total
JD-6	403	95%	745	4.0	-21.0	21.4
JD-7	705	8%	341	1.3	0.4	1.3
JD-8	537	91%	634	31.4	15.9	35.2
JD-9	553	53%	667	-19	7	20.2

All the available drift data was used when modeling the Indicated Mineral Resource.

12.3.5 2025 JD-7 Drilling Data Analysis

In 2025, Anfield conducted drilling activities at the JD-7 project to verify the presence of mineralization indicated by data generated by the historic operator, Cotter Corp. The Cotter database includes drilling conducted both before and after overburden stripping in the JD-7 pit was performed. In 2025, A total of 22 holes were drilled on 20 locations in the JD-7 Pit floor and in proximity to historic drill hole collar coordinates. A comparison of historic target GT values and realized values are shown on the graph below, Figure 12.3.1.

Figure 12.3.1 JD-7 Drill Hole Intercept GT Results Compared to Target Intercepts



Following correction of the historic depths account for the overburden removal in the pit where applicable, the 2025 drill holes showed mineralization within the same stratigraphic units as the historic drilling, with a close correlation to expected depths and thicknesses. A variance in grades was encountered. This is likely due to the difficulty in locating the precise location of the historic collars, differences in downhole deviation, and geologic structure. For the purposes of field duplication, all historic drill holes were assumed to be vertical based on the collar location. The effects of downhole deviation can vary significantly hole to hole and be affected by drill tooling and methods. For the 22 drill holes in 2025, downhole deviation averaged 1.4%, ranging from very little deviation up to 20 feet horizontally from the collar location, trending between 54 and 265 degrees, generally southwest to southeast.

In the opinion of the authors, given the difficulty in replicating the exact conditions of the historic drill holes, the agreement in stratigraphy, mineralization depth, thicknesses, and mineralization tenor sufficiently validates the general quality of the historical data for the purposes of this PEA.

12.4 Uravan Complex

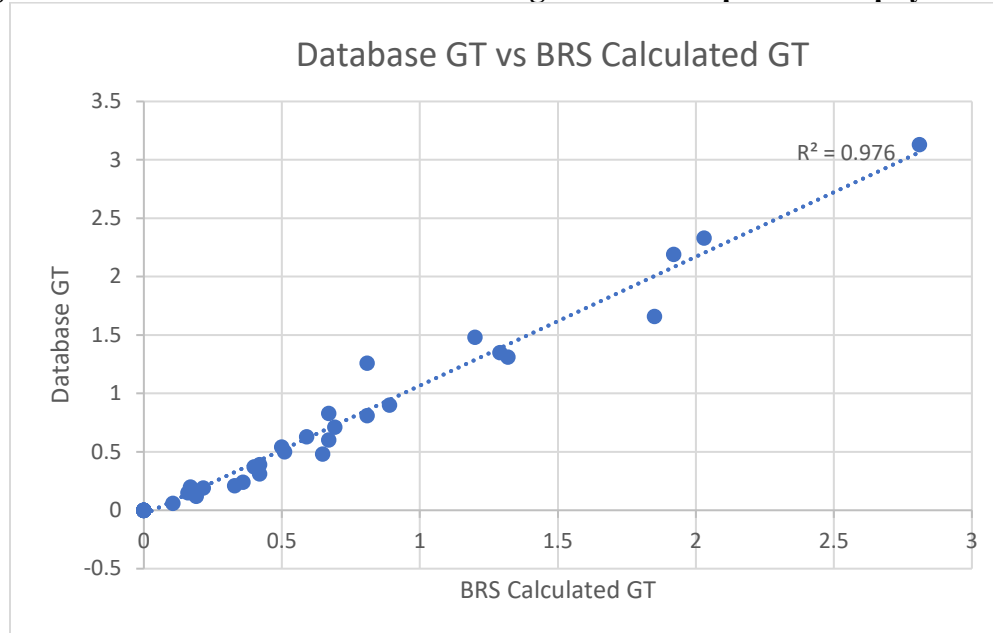
12.4.1 SM-18 Lease Tract Data Verification

43 geophysical logs were randomly selected to validate against the digital Cotter Corporation database. 28 of the drill logs corresponded to mineralized drill holes; however, the remaining 15 holes are barren.

The geophysical gamma logs for the selected mineralized and trace mineralized holes were reinterpreted for depths and $eU_3O_8\%$ grades on half foot intervals using the K factor and Deadtime information included with the logs. The barren logs were verified to not contain elevated gamma values.

A comparison between the database GT values and interpreted GT values from the geophysical logs is graphed in Figure 12.4.1 below.

Figure 12.4.1 SM-18 Database validated against Reinterpreted Geophysical Logs



12.5 Density

12.5.1 Velvet-Wood Density

Atlas mining production reported a unit weight of 14.5 cubic feet per ton. Eight samples taken from Velvet core holes for geotechnical purposes were analyzed for density among other properties. The densities of the eight samples ranged from 123.1 to 163 pounds per cubic foot and averaged 136.1 pounds per cubic foot. This converts to an average density of 14.7 cubic feet per ton as compared to the historic value of 14.5 cubic feet per ton. In this report, for the purposes of mineral resource calculations, a density factor of 14.5 cubic feet per ton is recommended.

12.5.2 Slick Rock Density

The 1954 and 1956 USGS reports on “Accuracy of Uranium and Vanadium Estimates” assume a bulk tonnage factor in the Colorado Plateau to be 14 cubic feet per ton. The historic density expressed as a tonnage factor from Burro mine records is 15 cubic feet per ton. As the 15 cubic feet per ton is more conservative in its effect on the overall resource tonnage and pounds of product and is proximal to the Slick Rock Resources, it is the most reasonable estimate of density in the opinion of the authors. Future verification drilling should incorporate a core drilling program to confirm the density factor for future resource estimation.

12.5.3 Uravan District – Uravan and Paradox Mine Complexes

Bulk density data is available for the Project from previous technical reports and studies completed by Cotter Corporation, resulting in 14.5 cubic feet per ton (2.21 tonnes per cubic meter) for the mineralized, host sandstone. This was the typical tonnage factor used by the mining companies across the greater Uravan mineral district. The authors recommend a density factor of 14.5 cubic feet per ton (2.21 tonnes per cubic meter) be used for the mineral resource calculations, based on available data and personal mining experience in similar sandstone-hosted deposits.

12.6 Downhole Deviation

Virtually all the drilling performed in all resource project areas was drilled vertically.

Downhole deviation data of drill holes was primarily available for the Velvet mine portion of the Velvet-Wood project and partially available for the Wood portion. In the case of Velvet, where deviation data was available and verifiable, the data was accommodated into drill hole databasing to adjust the location of the GT and T intercepts accordingly. In the cases of the Wood portion of the Velvet-Wood project, all drilling was modeled as vertical.

Historic data for the Slick Rock District largely predates downhole deviation survey methods. All drilling done by the AEC would have been performed vertically. More recent drilling performed by Anfield, Cotter and others with available downhole deviations were applied to the data. Otherwise the data was assumed to be vertical.

Drilling in the Uravan District was vertical. As discussed in Section 9.1 drill hole deviation data was available for this area and was used in resource modeling.

12.7 Radiometric Equilibrium General Information

The dominant data available for evaluation of mineral resources consisted of radiometric geophysical logging data of each drill hole, from which the uranium content was calculated using standard industry methods and calibration. Such calculations of equivalent uranium content from geophysical log data assume that the uranium is in radiometric equilibrium with its daughter products.

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., alpha, beta, gamma, and neutron 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 U-238 for the order of a million years or more, the decay chain will reach equilibrium with the parent isotope; meaning that the daughter isotopes will be in a state of decay 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, both the primary isotope of uranium U-238 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 chain, the gamma emitting elements are primarily Radium226, Bismuth214, and Uranium238. Of these Radium226 is 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 eU_3O_8 to chemical uranium grade. 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, liberating the uranium but leaving the radium in place.

Velvet-Wood project data from historical core drilling and the 2007/2008 coring program contains 41 individual core samples from 6 core holes. Comparing the core assay U_3O_8 GT values of each of the intervals to their corresponding radiometric equivalent eU_3O_8 GT values provides a DEF range of 0.81 to 1.59 with an average DEF of 1.33. Although the available data indicates a positive DEF, the authors recommend the use of a DEF factor of 1 for Velvet-Wood based on the limited number of data points and the fact that the core holes offset holes with relatively high thicknesses and grades, rather than a representative sampling of the deposit.

There is very limited data available to the authors from the USGS pertaining to radiometric equilibrium for the Slick Rock project. It is the authors' experience that the Colorado Plateau uranium deposits typically are neutral to slightly positive in their DEF. As such, a DEF of 1 is assumed for the Slick Rock resource estimate. Future verification drilling should incorporate core drilling samples to confirm the disequilibrium factor for future resource estimation.

For the Uravan District, current drilling from late 2025 included 4 core holes on the JD7 DOE lease. Of the 4 core holes two core holes had core recoveries greater than 90% within mineralized zones with grade above 0.02 % eU_3O_8 . Core hole JD7-2025-04 had two mineralized zones and core hole JD7-2025-14 had one mineralized zone.

The DEF of the three mineralized zones ranged from slightly negative at 0.945 to positive at 1.128. The overall weighted average showing a positive DEF of 1.05. The authors conclude that with the limited numbers of samples a positive correction of the radiometric grades is not warranted and the use of a DEF of 1 is appropriate for the purposes of this PEA.

Comparison of equivalent uranium from gamma probe results to assay results follows.

- Hole JD7-2025-0004
 - Radiometric Data; depth 152-164 feet, average grade 0.734 %eU₃O₈, GT 8.44
 - Assay Data; depth 152-163.7 feet average grade 0.780 %U₃O₈, GT 9.52
 - **Disequilibrium Factor 1.128**
- Hole JD7-2025-0014
 - Radiometric Data; depth 209-217.5 feet, average grade 0.391 %eU₃O₈, GT 3.27
 - Assay Data; depth 208.9-217.7 feet average grade 0.392 %U₃O₈, GT 3.45
 - **Disequilibrium Factor 1.04**
- Hole JD7-2025-0014
 - Radiometric Data; depth 220-228 feet, average grade 0.132 %eU₃O₈, GT 1.06
 - Assay Data; depth 218.7-230 feet average grade 0.128 %U₃O₈, GT 1.00
 - **Disequilibrium Factor 0.945**

12.8 Qualified Person's Opinion on Data Adequacy

Verification by the authors, as described above, confirmed that the drill hole database reasonably reflects the depth, thickness and radiometric equivalent uranium grade from the original geophysical logs. Verification drilling has been completed at Velvet/Wood, Slick Rock and Paradox substantiate the historic data. It is the authors' opinion that the current drill holes databases can be relied upon for use in this PEA. Additional drilling is recommended in Section 26 to further delineate the mineral resources and validate the drill hole database.

Section 13: Mineral Processing and Metallurgical Testing

During the period 1910-1930, the Uravan District in southwestern Colorado was a major producer of vanadium that was extracted from minerals dominated by *roscoelite* and *carnotite*. Tailings and residues deposited by those early operations were re-treated in the early-1940s as a major source of uranium for the Manhattan Project. Through the early-1980s, the Uravan District and a few outlying operations produced over 400 million pounds of vanadium pentoxide, V_2O_5 .

During the period 1953-1980, there were as many as 24 uranium and uranium/vanadium mills operating in the Colorado Plateau region of Arizona, Utah, Colorado, and New Mexico. The “gold standard” reference for the industry through 1970 was Merritt, 1971. If the vanadium content of the mill feed was sufficiently high, the mill usually had a vanadium byproduct circuit. A notable example was the Navajo mill at Shiprock, NM, built by Kerr-McGee Oil Industries Inc., later acquired by Vanadium Corporation of America and its successor, Foote Mineral Company. The Chief Metallurgist for Kerr-McGee was Wayne C. Hazen, co-founder of Hazen Research, Inc. For operations without vanadium circuits, a vanadium penalty was sometimes assessed for toll and custom shippers.

The general processing technique employed by most mills was crushing and coarse grinding in rod mills, followed by agitated tank leaching in aqueous sulfuric acid at pH 1.5-2.0 with an oxidant like manganese dioxide or sodium chlorate, solution purification, and precipitation of a uranium oxide product.

Early mills recovered uranium from the leached slurry with ion exchange resin beads suspended in mesh baskets (resin-in-pulp), but commercialization of polyacrylamide flocculants allowed later plants to effect separation of the pregnant leach solution from the leached residue by counter-current decantation (CCD) in a string of thickeners. By 1970, nearly all plants treated the clarified pregnant leach solution (PLS) in solvent extraction (SX) circuits using tertiary amine extractants dissolved in a diluent that was usually a high-flash point kerosene.

Some mineralized material contained sufficient calcite to render acid leaching uneconomical, and leaching was conducted at elevated temperature and pressure in agitated autoclaves with sodium carbonate and bicarbonate in an aqueous solution. In this case, carbonate ions complexed the dissolved uranium and bicarbonate ion controlled hydroxyl ion which otherwise would have prematurely precipitated the uranium as a hydroxide. A few mills, including Anaconda’s operation at Bluewater, NM, treated ores on either a toll or purchase basis and had both acid and alkaline circuits.

The plants with vanadium recovery circuits leached at a higher free acid concentration corresponding to pH 0.5-1 and recovered vanadium from the uranium SX waste solution (raffinate) in another SX circuit with a different extractant, typically an aliphatic phosphoric acid, or with a different concentration in the organic phase of the same extractant.

Overall recoveries of uranium were typically in the range of 93 to 98 percent and vanadium recoveries were 70 to 80 percent, depending on mineralogy and the extent to which soluble losses could be minimized during solid/liquid separation. It is very likely that the Shootaring Canyon mill will be able to achieve at least 96 percent U_3O_8 recovery, especially given the unusually high

average feed grades of 0.24 to 0.29% U_3O_8 and the high free acid concentration during leaching. The vanadium plant will have the advantage of state-of-art instrumentation and process control. Recent information summarized below indicates a good probability of about 90% V_2O_5 recovery.

13.1 Velvet-Wood Metallurgical Studies

As reported in the 2023 PEA, a considerable amount of metallurgical laboratory testing was conducted during 2007-2008 by Hazen Research, Inc., in Golden, Colorado. This work was done for Uranium One, the owner at that time of the Velvet-Wood properties and the Shootaring Canyon Mill. Fresh core samples of uranium-mineralized material were recovered by drilling at the Velvet Mine. This metallurgical program demonstrated that the mineralized material from the Velvet property is amenable to conventional two-stage leaching with dilute sulfuric acid and sodium chlorate as the oxidant. Leaching experiments for 18 Velvet core samples were completed; however, three of the extractions were low due to laboratory errors and difficulties in pH control, as discussed in the summary report (Hazen Research, Inc., 2008). The average of the 15 experiments that were conducted under near-optimum conditions was 96.1 percent uranium extraction. However, the average grade of mineralized samples used in the leaching experiments was only 0.100% U_3O_8 , while the run-of-mine diluted average grade is expected to be 0.265% U_3O_8 and the average grade mined from Atlas Mineral's Velvet Mine was 0.46% U_3O_8 . Therefore, the samples used in the leach experiments were substantially lower in uranium grade than the estimated grade of the Velvet and Wood mineralization. It is therefore possible that vanadium content and uranium extractions obtained in the tests were also lower than may be obtained with the estimated higher grades for mined material.

The acid consumption for baseline experiments averaged 118 pounds of 98% H_2SO_4 per ton of mill feed. (Note that reagent consumptions in this report are expressed in short tons of mill feed, not metric tonnes.) Carbonate content in the mineralized material has a direct relationship to acid consumption during leaching and may influence uranium extractions either by causing excessive gypsum precipitation or by making pH control difficult. Sodium chlorate (NaClO_3) proved to be an effective oxidant at a consumption of 2 pounds per ton of mill feed. Molybdenum content for all of the core samples that were assayed averaged 99 ppm and molybdenum content in the pregnant leach solution averaged 0.17 grams per liter. Vanadium assay results from Uranium One's 2007/2008 exploration program showed an overall average of 2.13 to 1 vanadium to uranium ratio, while the historic ratio was 1.39 to 1. On average, vanadium concentrations from this property will be less than 1.00% V_2O_5 , whether based on the historic vanadium to uranium ratio, or the ratio from 2008 assays.

No metallurgical testing has been completed on the Wood property. However, given the close proximity to Velvet and the fact that the mineralization lies within the same geologic unit as Velvet, similar metallurgical response is expected. The mineralized core recovered from Wood in 2008 had similar mineralogy to that found in mineralized core recovered from Velvet in 2007, based on geologists' direct observation of core and drill samples from both projects.

As alternatives to conventional milling, heap and vat leaching were briefly considered. However, this report is confined to agitated leaching, and there are several reasons for this decision:

- Vat leaching economics depend on rapid leaching kinetics that can be obtained in a 4- to 7-day leaching cycle, thereby minimizing the number of vats required. In order to ensure rapid solution percolation, the vat feed must be crushed to minus 0.25 to 0.5 inches, de-slimed, and the slimes separately leached in agitated tanks. Since fine particles dictate the thickener area requirement for a CCD circuit, vat leaching would require essentially the same size CCD system that conventional milling requires, negating most of the cost advantage usually attributable to vats;
- Heap leaching was applied successfully to several uranium ores during the 1960s and 1970s, but extraction of co-product vanadium was not attempted. Satisfactory vanadium extraction requires a higher free acid concentration, causing more severe attack of the gangue minerals and heightening the potential for secondary slimes to impair heap permeability;
- Neither vats nor heaps could reasonably be expected to achieve uranium extractions that can be obtained with milling.

Owing to the need to leach at an elevated free acid concentration to dissolve and complex vanadium, an acid consumption of 112 pounds of 98% H₂SO₄ per ton of leach feed was assumed during that phase of testing.

13.2 Slick Rock and Paradox Metallurgical Studies

Pending results from ongoing metallurgical testing at Hazen Research, we are relying partly on the established record of uranium processing by the Union Carbide Nuclear Corporation (UCNC) in the immediate vicinity of mines that will supply a large fraction of the feed to the Shootaring Canyon mill.

For example, uranium/vanadium-mineralized material from this District was processed for nearly 26 years by UCNC with acceptable recoveries by conventional milling methods. Uranium recoveries at the processing mill in Uravan, Colorado, were estimated to be 97 to 98%, and vanadium recoveries at the Rifle, Colorado, processing mill were estimated to be 85% according to personal communication with Curt Sealy, formerly with UCNC and UEC as VP-Strategic Development (Beahm, et al., 2014).

According to Merritt (1971), pages 469-474, the UCNC mill at Uravan treated 1,000-1,200 tons of ore daily that came from approximately 60 mines within a radius of 30-40 miles in the Uravan Mineral Belt. Most ores were from UCNC mines, but about one quarter of the mill feed was purchased from a variety of small shippers. The 2-stage acid leach was operated under essentially the same conditions as those planned for the Shootaring Canyon mill. In addition to yellowcake, the Uravan mill made a crude vanadium product that was refined in UCNC's mill at Rifle, CO.

The Uravan mill averaged 260 pounds of acid per ton of ore treated and used sodium chlorate as the oxidant. The second-stage leach was conducted at a high free acid concentration corresponding to pH 0.5-0.8 and the residue slurry was thickened with overflow solution returning to the first stage as an "acid kill" strategy to consume excess free acid. This is identical to the procedure that will be used at Shootaring Canyon. The second-stage leach residue slurry was then washed in a string of eight conventional 50-foot diameter wood stave thickeners.

According to Merritt, the washing efficiency at UCNC's Uravan mill exceeded 99 percent, corresponding to a soluble uranium loss of less than 1 percent. This is a critical element of good uranium mill design, as the effort to achieve maximum uranium leaching extraction should not be in vain due to high soluble losses. The current design for the Shootaring Canyon Mill will use modern High-Rate CCD thickeners and the final thickener will be a tall High-Density version of the High-Rate design in order to maximize underflow density (% solids). This will minimize the amount of entrained water in tailings and maximize recycling of that solution to the process water head tank. Also, residual acidity will be conserved.

Since mid-2025 extensive metallurgical testing has been carried out by Hazen Research on samples of uranium/vanadium mineralization from several former underground mines in this District that are now owned by Anfield Energy. To date, samples have been collected from early stockpiles of shot muck, but drilling of fresh core is planned later in 2026. This work has included compositing, mineralogical characterization, and two-stage acid leaching that simulates the Shootaring Canyon Mill's processing flowsheet.

Most of the preliminary leaching tests have been done in bottle roll apparatus on samples that have been stage-crushed to a nominal product passing size of $P_{80} = 0.5$ mm (32-mesh). Leached residues from first-stage and second-stage leaching have been evaluated for their particle settling behavior in order to establish approximate CCD thickener area requirements and flocculant type and dosages. Samples tested to date have been very responsive with uranium and vanadium extractions of 98-99% and 90%, respectively.

The current metallurgical laboratory program has involved mineralized material that may differ from future samples of fresh core in leaching response and residue settling characteristics. This unpredictability was partially remedied by considering tests that were conducted for Energy Fuels by John Litz (2008), who had left Hazen and established his own laboratory.

Litz conducted bottle roll leach tests and Kynch-type residue settling tests on samples from 5 mines in the Uravan District that were planned sources of feed for the Piñon Flats mill that was never constructed. One of those mines was the JD-8, which is now owned by Anfield and will supply feed to the Shootaring Canyon mill. Litz simulated the two-stage leach conditions that will also be used at Shootaring Canyon, and the current program at Hazen employs the same conditions.

Litz reported a net sulfuric acid consumption of 237 lb/ton, which closely matches preliminary Hazen results, as well as the historical average for the UCNC mill at Uravan, as mentioned earlier. Uranium and vanadium extractions obtained in duplicate tests were 98.8/99.4% and 95.8/92.8%, respectively. The estimated settling area requirement was 2.50 ft² per ton/day (tpd) of feed at 20% solids with a terminal density of 61 % solids. Flocculation required 0.023 lb/ton of *Percol*, a commonly used commercial reagent.

13.2.1 Ongoing Metallurgical Testwork

Metallurgical laboratory testing will continue at Hazen Research as fresh core samples become available. Leaching parameters and uranium/vanadium recoveries will be determined and design criteria for CCD residue washing will be developed. Solvent extraction tests will be completed to establish retention times and to develop remedies for slow phase disengagement if it is observed.

Yellow cake will be precipitated and analyzed for potential penalty impurities such as molybdenum. If necessary, an organic washing step in SX will be examined. Similar tests will focus on vanadium metallurgy.

This PEA and its conclusions are not reliant on improvements to the planned processing methods, nor are any such improvements reflected in cash flow estimates. Nonetheless, we will continue to investigate promising opportunities to reduce operating costs. Two of the dominant expense categories in the current plan are transportation from mine to mill and sulfuric acid. An example of our continuing quest for economic improvements is removal of non-mineralized and minimally radioactive waste rock prior to haulage from the mines (sorting).

Throughout the copper and gold industry, there is great interest in sorting to upgrade feed to processing operations and to reduce reagent requirements. The uranium industry was a leader in upgrading with adoption of radiometric sorting at Cotter Corporation's Schwartzwalder Mine near Golden, Colorado, in 1960. The objectives were (1) to reduce truck haulage costs to the mill at Cañon City, and (2) to reduce milling costs by increasing feed grade. Sorting by scanning truck loads was installed at Anaconda's Jackpile Mine in 1976 for the same reasons.

With the same objectives in mind, we are investigating sorting, but with different sensing technology in the sorting machine itself. Instead of classic radiometric sensing for uranium alone, we are considering multi-channel X-Ray fluorescence (XRF), which can simultaneously detect uranium, vanadium, and calcium. Theoretically, this would enable minimal rejection of uranium and vanadium, while reducing acid consumption during leaching.

13.3 Recommended Metallurgical Recoveries

Owing to the need to leach at an elevated free acid concentration to dissolve and complex vanadium, the acid consumption attributable to uranium alone is much lower than the additional acid needed to solubilize vanadium mineralization. Our current estimates for the purpose of this PEA are 85 lb/ton acid for uranium extraction plus 204 lb/ton acid needed to increase free acid concentration for maximum practical vanadium extraction. Under these leaching conditions, the authors predict metallurgical recoveries of at least 96% for uranium and 90% for vanadium as a realistic base case.

As a point of comparison, Energy Fuels, operator of the White Mesa, Utah, mill, predicted metallurgical recoveries for uranium and vanadium of 96% and 75%, respectively, from their La Sal, Utah, project (Mathisen, 2022). The La Sal project is located less than 20 air miles from Velvet-Wood, and is a similar sandstone-hosted uranium/vanadium deposit.

13.4 Risks and Opportunities

13.4.1 Risks

Recently, NI 43-101 filings have included estimates of the rapidity of project ramp-up behavior, specifically, the curve describing percent of design feedrate (or product creation rate) versus time since the end of commissioning and the beginning of commercial production. This curve is never vertical! Investors are acutely aware of time value of money, and some want the best estimate the

project owner can make about the time when revenue generation will fulfill expectations. Accordingly, we will offer our prediction and underlying justification.

All major industrial projects that depend on economic extraction of natural resources carry an element of risk, and mining is no exception. A PEA is always created with a degree of optimism, but one of the obligations of those developing a mineral mining and processing enterprise is to recognize risks and to minimize them. An important element of that recognition is preparedness through derivation of factual information and thoughtful application of a solid basis for decisions. Risks can be controlled and minimized if this form of self-auditing is followed, but risk is never reduced to zero.

In 1998, Terence P. (Terry) McNulty introduced the concept of estimating risk according to criteria that describe the level of preparedness of a project owner and its contractors. This resulted in a family of four curves, ranging from rapid (Series 1) to very slow (Series 4) rates of achievement of design feed treatment rate. These so-called “McNulty Curves” have since been updated periodically. All publications and presentations are cited in the References to this PEA (McNulty, 1998, 2004, 2014, 2024, 2025). The curves are widely used as a predictive tool by operating mining companies, EPCM contractors, and project financing entities, including Royal Bank of Canada. Over 150 projects have been reported and characterized by McNulty and other authors; about half have been Series 1, while roughly 20 percent have only achieved Series 4.

The Shootaring Canyon mill is expected to follow a Series 1 curve for the following reasons:

- The uranium/vanadium-mineralized deposits that will provide feed to the mill are essentially identical to those processed decades ago by a major uranium/vanadium producer using the same flowsheet and processing parameters.
- Recent metallurgical test results are being supplemented by the current laboratory program.
- Current mineralogical characterization is being conducted by Qemscan electron microscopy which provides a more comprehensive understanding of mineral relationships than was available during the “uranium boom” era.
- The mill was designed conservatively by Mountain States Engineers, a firm that was experienced in uranium mill design;
- The current design upgrade is being done by PSE, an engineering firm with extensive experience in designing small processing plants and the designer of the vanadium addition to the Energy Fuels mill at White Mesa, UT.
- The only new equipment will be conventional in design and application, eliminating the “reliability risk” that can be introduced by prototypes.
- Unlike the relatively primitive process monitoring instrumentation and manual control available 50 years ago, the new mill will use a distributed control strategy with a high level of machine learning that will minimize off-spec operating conditions.
- Both Beahm and McNulty were intimately involved in the uranium industry as mining engineer and metallurgist, respectively during the 1960s and 1970s.
- The Board and senior management of Anfield, the project owner, are fully engaged in decision making.
- Both uranium and vanadium mineral grades will be higher than was typical during the 1950s-1970s.

The financial analysis in this PEA is based on a treatment schedule that begins with a year of operation on stockpiled material plus limited mine production at an average of about 70 percent of design feedrate, which is consistent with a Series I curve.

However, potential risks remain. In addition to the usual risks of market price, regulatory issues, and adverse public sentiment, it will be challenging to attract and retain productive employees.

13.4.2 Opportunities

As mentioned earlier, Anfield is investigating sorting as a way of potentially eliminating minimally-mineralized waste rock. Experience in South Africa by Rados, the supplier of XRF-based sorting, indicates that the reject may contain as little as 15 ppm U_3O_8 . Simultaneous rejection of carbonates could reduce consumption of sulfuric acid, as most of the consumption is due to reactions that convert carbonates to sulfates like gypsum.

Experience in Canada, the US, and overseas with precious metal, copper, and uranium mining has demonstrated that as much as half of the feed to sorters can be rejected. If a significant fraction of the production from Anfield's mines can be rejected on-site, the trucking and reagent expenses used in this PEA will be reduced proportionally.

Section 14: Mineral Resource Estimates

14.0 Mineral Resource Estimates – Executive Summary

This report summarizes mineral resources for the Lisbon Valley, Slick Rock, and Uravan districts and all their associated properties with resources. Each mine developed from these discussed resources would share a common facility, the Shootaring Canyon Mill. The total estimated in situ uranium mineral resources are summarized in Table 14.0.1. The associated in situ vanadium mineral resources which will be mined as a co-product are summarized in Table 14.0.2. In addition, Anfield has previously mined uranium stockpiles as summarized in Table 14.0.3.

Table 14.0.1 In situ Uranium Mineral Resource Summary*

Area/Classification	GT Cutoff	Pounds x 1,000 eU ₃ O ₈	Tons x 1,000	Avg Grade %eU ₃ O ₈
Lisbon Valley District / Measured and Indicated	0.5	4,324	629	0.34
Slick Rock District / Indicated	0.4	815	247	0.16
Uravan District / Indicated	0.5	4,667	1,061	0.22
TOTAL MEASURED AND INDICATED MINERAL RESOURCE URANIUM	0.4-0.5	9,806	1,937	0.25
Lisbon Valley District / Inferred	0.5	544	80	0.34
Slick Rock District / Inferred	0.4	9,938	2,418	0.21
Uravan / Inferred	0.4	755	179	0.21
TOTAL INFERRED	0.4-0.5	11,237	2,677	0.21

*Numbers rounded

Table 14.0.2 In situ Vanadium Mineral Resource Summary*

Area/Classification	GT cutoff (Based on Uranium)	V:U Ratio	Pounds x 1,000 V ₂ O ₅	Tons X 1,000	Avg Grade %V ₂ O ₅
Lisbon Valley District / Inferred	0.5	1.4	6,826	716	0.48
Slick Rock District / Inferred	0.4	6.0	64,518	2,665	1.21
Uravan / Inferred	0.4-0.5	5.0	27,112	1,239	1.09
TOTAL INFERRED MINERAL RESOURCE VANADIUM	0.4-0.5	1.4-6	98,456	4,620	1.1

*Numbers rounded

Table 14.0.3 Stockpile Uranium Mineral Resource Summary*

Area/Classification	GT Cutoff	Pounds x 1,000 eU ₃ O ₈	Tons x 1,000	Avg Grade %eU ₃ O ₈
Stockpile/Measured Mineral Resource	NA	370	126	0.15

*Numbers rounded

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.0.1 Definitions

A Mineral Resource is defined as a concentration or 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.

14.0.2 General Methodology

The GT contour method is the principal estimation method employed on all the properties discussed in this report. GT contouring has been used as a common practice for Mineral Reserve and Mineral Resource estimates for similar sandstone-hosted uranium projects ("Estimation of Mineral Resources and Mineral Reserves", adopted by CIM November 23, 2003, p. 51.) It is the opinion of the authors that the GT contour method, when properly constrained by geologic interpretation, provides an accurate estimation of contained pounds of uranium.

There are minor differences in the application of the GT contouring method between the resource estimate models in each district. These differences are dictated by legacy database infrastructure and specific modeling interpretations between projects, but the overall approach to the GT contouring and the fundamental calculation of resources using the GT contouring method for each project remains the same. Where methodologies diverge from GT contouring as with projected inferred areas at the Velvet and Wood Project or the Old Velvet Mine remaining resources, those resources will be discussed separately.

When the GT contour method is applied, geologic interpretation of the mineralized host sands is used along with the intercepts that meet the minimum reported grade and thickness criteria to develop a geologic framework to estimate the mineral resources at each project area. Each intercept is evaluated based on its geophysical log expression and location relative to adjacent intercepts.

Whenever possible, geophysical logs are used to correlate and project intercepts between drill holes. The mineralized envelope is created by using the top and bottom of each intercept that is within each discernable geologic horizon. Drilling on the Colorado Plateau has been dominated by vertical drilling with limited drift data collected historically. Total downhole drift is applied to all intercepts when that data is available, otherwise the drill hole is assumed to have been vertical with no drift adjustments applied and location error accounted for in radius of influence applied to the intercept during contour modeling.

A minimum reported grade of 0.02% eU_3O_8 was applied to screen the drill data. Uranium grades below 0.02% were not considered in the estimation of mineral resources herein. In some cases where the mineralized horizons are more discrete and continuous a higher minimum grade of 0.05% has been applied in modeling to allow for more certainty in economic prospects and hedge against mining dilution.

Because mineralization in the Colorado Plateau can often cross bedding and can have varying amounts of structural control, the 0.02%-0.05% intercept data set is then split into discrete mineralized horizons based on relative elevation and geologic units. Where continuous mineralization is geologically discernable across project or district scales, these horizons are denoted by alphabetical labeling in a descending order. The order corresponds with depth where A is the highest elevation horizon, B is stratigraphically below A, C below B and so on. These sub-sets of mineral intercepts meeting the 0.02% eU_3O_8 minimum grade are then composited within each horizon using a minimum grade thickness of 0.1 ft eU_3O_8 GT to begin contour modeling. This minimum is to set the basis for the compositing and modeling extents, limiting the equivalent minimum mining height to no less than 5 ft at 0.02% and 2 ft at 0.05%.

Drill hole intercepts not individually meeting the 0.1 GT cutoff are composited only if they are 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 keep the average grade above the minimum reported grade for the project area. Intercepts not meeting these criteria in holes otherwise having mineralization were dropped from the sum GT and sum T composites. Drill holes with intercepts below cutoff and 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. Maximum GT limits in data were applied to models on a model-by-model basis to remove invalid and/or unreliable points from the modeling dataset.

Summed GT and thickness data sets for the summed mineralized intercepts of each zone are then contoured using standard ACAD Civil-3D algorithms creating a three-dimensional surface for GT and thickness in each zone. These surfaces were then bounded based upon the geological interpretation of each deposit. Verification of the contour models are performed by inspection against all the available data prior to calculating the resource estimate. From the contoured GT ranges, the contained pounds and tons of material containing uranium are calculated volumetrically. The generation of these contour model volumes was done for all projects in ACAD Civil-3D but in different versions using slightly different techniques based on project-to-project dataset, age and needs.

Following the modeling of the resource at the 0.1 GT cutoff, higher economic cutoffs are then applied, clipping out the model volumes which are non-economic due to average grade, thickness, pod size and/or distance to the main deposit body.

14.0.3 Project GT Resource Modeling - Key Assumptions and Criteria

Data cutoffs and modeling assumptions are critical components of any resource modeling method. Modeling parameters are dictated by several factors including density of drilling data, deposit characteristics and interpreted geologic model. All districts and property resources are contained within the Colorado Plateau. They are each stratigraphically controlled, sand-stone hosted uranium/vanadium deposits of the Colorado Plateau style, as discussed in Section 7 above. This deposit style has been modeled well in the authors' experience by the GT contouring method and has yielded results which have proven accurate enough to guide mining operations for many decades.

The modeling assumptions and data cutoffs applied to each model are stated by district and resource property in Tables 14.0.4, 14.0.5 and 14.0.6, below:

Table 14.0.4 Lisbon Valley District – Key Assumptions/Parameters by GT Contour Model

Modeling Assumption Parameter	GT Contour Resource Model	
	Velvet Mine	Wood Mine
<i>Minimum reported grade (% eU₃O₈)</i>	0.05	0.05
<i>Minimum Nominal Thickness (ft)</i>	4	4
<i>Anisotropy</i>	no	no
<i>Maximum Radius of Influence (ft)</i>	100	100
<i>Radiometric Equilibrium Factor (DEF)</i>	1	1
<i>Bulk Tonnage Factor (cft/st)</i>	14.5	14.5
<i>Minimum Sum GT Resource Model Cutoff</i>	0.5	0.5

Table 14.0.5 Slick Rock District– Key Assumptions/Parameters by GT Contour Model

Modeling Assumption Parameter	GT Contour Resource Model			
	Slick Rock Claims	SR-13	SR-13A	SR-11
<i>Minimum reported grade (% eU₃O₈)</i>	0.02	0.02	0.02	0.02
<i>Minimum Nominal Thickness (ft)</i>	4	4	3	4
<i>Anisotropy</i>	no	no	no	no
<i>Maximum Radius of Influence (ft)</i>	400	400	100	100
<i>Radiometric Equilibrium Factor (DEF)</i>	1	1	1	1
<i>Bulk Tonnage Factor (cft/st)</i>	15	15	15	15
<i>Minimum Sum GT Resource Model Cutoff</i>	0.4	0.4	0.4	0.4

Table 14.0.6 Uravan District – Key Assumptions/Parameters by GT Contour Model

Modeling Assumption Parameter	GT Contour Resource Model				
	JD - 6	JD - 7	JD - 8	JD - 9	SM-18
<i>Minimum reported grade (% eU₃O₈)</i>	0.05	0.05	0.05	0.05	0.02
<i>Minimum Nominal Thickness (ft)</i>	3	4	4	4	4
<i>Anisotropy</i>	yes	yes	yes	yes	no
<i>Maximum Radius of Influence (ft)</i>	100x200	100x200	100x200	100x200	100
<i>Radiometric Equilibrium Factor (DEF)</i>	1	1	1	1	1
<i>Bulk Tonnage Factor (cft/st)</i>	14.5	14.5	14.5	14.5	14.5
<i>Minimum Sum GT Resource Model Cutoff</i>	0.5	0.5	0.5	0.5	0.4

Minimum grade and thickness criteria are used to define mineralized intercepts for resource modeling purposes. These are applied to each individual mineralized intercepts, and then to the sum GT of intercept composites, prior to modeling. Data not meeting these minimum requirements are removed from the modeling data set and have no influence on the contour model other than establishing its boundaries.

As discussed previously, a minimum thickness dictated by mining approach is typically applied at the data preparation level via the use of a minimum reporting grade and grade x thickness limit (GT). Maximum radius of influence is determined by the drilling density, the continuity of the deposit, and the resource classification level. The closer drilling spacing of the Velvet and Wood data allows for a smaller maximum radius of influence and a more certain resource classification (i.e. Indicated and Measured). Meanwhile, projects with larger drill spacing like that at most of the Slick Rock Claims result in a decreased certainty and a lower resource classification in the Inferred category.

The bulk tonnage factors and DEF discussed in Section 12 of this report were used in the calculation of the resource quantities from the sum GT and sum thickness contour model volumes.

The minimum sum GT contour resource model cutoff is the primary cutoff criteria applied to the contour model volume as the initial screening of those portions of the model quantities not meeting the criteria for reasonable economic extraction. In addition, isolated mineralized areas not meeting a minimum of 10,000 lbs of eU₃O₈ resource were dropped from the resource totals as not meeting a minimum expectation of reasonable economic extraction.

14.0.4 Reasonable Prospects for Economic Extraction and Cutoff Criteria

Based on conceptual mine limits as discussed in Section 16 and the average grade, thickness and GT criterion applied to the estimate, it is the authors' opinion that the mineral resources estimated for the project which include the Velvet-Wood mine, Slick Rock and Paradox Complexes, SR-11 and SM-18 mines can be reasonably and economically recoverable through underground mining methods including haulage from the mine sites to the Shootaring Canyon Mill for conventional mineral processing and product recovery. Multiple mines will be needed to be operated simultaneously over most of the life of the mill in order to meet the mill tonnage capacity and/or an alternate feed source would be needed.

The project economics as defined in the PEA and presented in Section 21 and 22 has a positive NPV and a reasonable internal rate of return based on commodity prices of \$100 per pound for uranium oxide and \$9 per pound for vanadium pentoxide as discussed in Section 19.

The minimum GT cutoff criteria defines the lowest volume and quality (thickness and grade) of mineralized material which would break even with respect to marginal operating costs. In practice, the mine would operate at a higher or primary cutoff until the capital for the mine and mill was recovered. Where it is necessary to excavate mineralized material below this primary cutoff and above the minimum cutoff, this material could be stockpiled and the cost of excavation and handling this material would be borne by the primary mined material. Similarly, material below the primary cutoff may be left accessible in the mine. Thus, this marginal mineralized material could later be recovered if it meets haulage and milling costs. Note if the marginal mineralized material were treated as mine waste, the same general cost to excavate and handle this would be incurred with no possible future benefit.

Table 14.0.7 uses the capital and operating costs estimated for the Slick Rock mine as an example to demonstrate that the marginal mineralized material meets marginal forward costs and thus has reasonable prospects of future economic extraction. The 0.4 GT cutoff for Slick Rock was the lowest GT cutoff applied in the PEA.

Table 14.0.7 GT cutoff Calculation

Slick Rock		
	Marginal Forward Cost \$/ton	Fully Loaded Costs \$/ton
OPEX		
Mining	\$ 156.00	\$ 156.00
Haulage	\$ 30.77	\$ 30.77
Mineral Processing	\$ 50.42	\$ 50.42
Reclamation Mine		\$ 3.35
Taxes and Royalties	\$ 19.07	\$ 19.07
Total OPEX	\$ 256.26	\$ 259.61
CAPEX		
Individual mines		\$ 10.05
\$20,350 m USD		
Mill \$80,800 m USD		\$ 39.53
2,024 m tons total*		
Total CAPEX	\$ -	\$ 49.58
Total Cost per Ton	\$ 256.26	\$ 309.19
Value at minimum GT	289.2	
Value at average mined grade		607.32
Difference - Value less Cost	\$ 32.94	\$ 298.13
Notes:	Grade at .4GT cutoff	Average Grade
4 ft minimum thickness	0.10 % U ₃ O ₈	0.21 % U ₃ O ₈
\$100 Uranium, 96% recovery		
\$9 Vanadium, 90% recovery		
Minimum GT 0.4 = Grade 0.10 % U ₃ O ₈ , V:U ratio 6		

The cutoff calculation demonstrates that material at the minimum GT can be recovered at a slight profit excluding the CAPEX burden which is borne by the primary mined material.

14.1 Mineral Resource Estimate – Lisbon Valley District

14.1.1 Lisbon Valley District Resource Summary

Table 14.1.1 Lisbon Valley District Resource Summary – Uranium

Area/Classification	GT Cutoff (ft%)	Thousand Pounds eU ₃ O ₈	Thousand Tons	Average Grade %eU ₃ O ₈
VELVET-WOOD / TOTAL MEASURED MINERAL RESOURCE URANIUM	0.5	1,836	283	0.32
VELVET-WOOD / TOTAL INDICATED MINERAL RESOURCE URANIUM	0.5	2488	346	0.36
VELVET-WOOD / TOTAL MEASURED AND INDICATED MINERAL RESOURCE URANIUM (M&I)	0.5	4,324	629	0.34
VELVET-WOOD / TOTAL INFERRED MINERAL RESOURCE URANIUM	0.5	544	80	0.34

Table 14.1.2 Lisbon Valley District Resource Summary – Vanadium

Area/Classification	GT cutoff (Based on Uranium)	V:U Ratio	Thousand Pounds V ₂ O ₅	Thousand Tons	Avg Grade %V ₂ O ₅
VELVET-WOOD / TOTAL INFERRED MINERAL RESOURCE VANADIUM	0.5	1.4	6,826	716	0.48

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.1.2 Velvet-Wood Mineral Resource Estimate Summary

For Velvet-Wood drill data, all individual drill hole intercept data meeting or exceeding the minimum reported grades (0.05% eU₃O₈) were first calculated, individually multiplying the thickness in feet by an average eU₃O₈ % grade resulting in a sum GT value in feet times % eU₃O₈ for each intercept. Intercept GT values were summed within each drill hole by zone (host sandstone) and composited to the total thickness within each zone. At 0.5 GT cutoff the average thickness of mineralization was 5.4 feet. Where the mineralization was less than 4 feet it was diluted to 4 feet.

Summed GT and thickness for the summed mineralized intercepts of each zone were then contoured using standard ACAD Civil-3D algorithms, creating a three-dimensional surface for GT and thickness in each zone. These surfaces were then bounded based upon the geological interpretation of each deposit. Verification of the contour models was performed by inspection against all the available data prior to calculating the resource estimate. From the contoured GT ranges, the contained pounds of uranium were calculated volumetrically using the Civil-3D surface volumetrics toolset.

Validation of each of the sum GT and sum thickness contour models is performed via inspection of the model contours to all available data prior to resource calculation. All interpolation within the maximum radius of influence is performed via the inverse distance square method from available data when manually constructing contours. Interpolation between manual contours and points is performed by the Civil 3D standard algorithm parameters.

Modeling parameters are dictated by several factors including density of drilling data, deposit characteristics and interpreted geologic model. Mineralization at the Velvet-Wood project is a stratigraphically controlled, sand-stone hosted uranium/vanadium deposits typical of the Colorado Plateau style of mineralization, as discussed above. Key criteria and assumptions applied in the mineral resource modeling include those referenced in Table 14.0.4 above.

Minimum grade and thickness criteria are used to define mineralized intercepts for resource modeling purposes. These are applied to each individual mineralized intercept and then to the sum GT of intercept composites are applied to the data prior to contour modeling.

Minimum mining thickness is dictated by mining method, which in this case is underground random room and pillar. Mine height is typically 7-8 foot with minimum mining thickness of 4 feet, requiring split blasting at the working mine face. In the case of Velvet-Wood, the average thickness is approximately 5.4 feet, thus the minimum thickness was only applied to drill data with thicknesses less than 4 feet.

Maximum radius of influence is influenced by the drilling density and the continuity of the deposit with respect to both the host sands and in situ mineralization.

The bulk tonnage factors and DEF discussed in Section 9 of this report were used in the calculation of the resource quantities from the sum GT and sum thickness contour model volumes.

The minimum sum GT contour resource model cutoff is the primary cutoff criteria applied to the contour model volume as the initial screening of those portions of the model quantities not meeting

the criteria for reasonable economic extraction. In addition, individual model areas outside the conceptual mine limits not meeting a minimum of 10,000 lbs of eU₃O₈ resource were excluded from the resource totals as not meeting a minimum expectation of reasonable economic extraction. Refer to Table 14.1.3.

It is the opinion of the authors that the resource models are reasonably valid within the mineral resource classification assigned to each area of each project.

Table 14.1.3 Velvet-Wood Mineral Resources - Uranium

Area/Classification	GT cutoff	Thousand Pounds eU₃O₈	Thousand Tons	Average Grade %eU₃O₈
New Velvet / Measured Mineral Resource	0.25	1,966	363	0.27
New Velvet /Measured Mineral Resource	0.5	1,836	283	0.32
Old Velvet/ Indicated Mineral Resource	0.25	Not Estimated*		
Old Velvet / Indicated Mineral Resource**	0.5	548	71	0.38
Wood / Indicated Mineral Resource	0.25	2,113	377	0.28
Wood / Indicated Mineral Resource	0.5	1,940	275	0.35
TOTAL MEASURED MINERAL RESOURCE	0.5	1,836	283	0.32
TOTAL INDICATED MINERAL RESOURCE	0.5	2,488	346	0.36
TOTAL MEASURED AND INDICATED MINERAL RESOURCE (M&I)	0.5	4,324	629	0.34
Velvet / Inferred	0.5	518	76	0.34
Wood / Inferred	0.5	26	4	0.30
TOTAL INFERRED MINERAL RESOURCE	0.5	544	80	0.34

*Numbers rounded

** From long hole drilling and pillar face sampling, only 0.5 GT or greater data reported

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and

as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein

The Velvet mine was mined by Atlas Minerals, who mined portions of the deposit producing approximately 400,000 tons of material at grades of 0.46 %U₃O₈ and 0.64 %V₂O₅ (approximately 4 million lbs uranium and 5 million lbs vanadium) during the period 1979-1984 (Chenoweth, 1990). Vanadium assay results from Uranium One's 2007/2008 exploration showed an overall average of 2.13 to 1 vanadium to uranium ratio, while the historic ratio was 1.39 to 1. The authors recommend using a vanadium to uranium ratio of 1.4:1 for estimating the Velvet-Wood vanadium mineral resource. See Table 14.1.4.

Table 14.1.4 Velvet-Wood Mineral Resources - Vanadium

Area/Classification	GT cutoff (ft%eU ₃ O ₈)	Thousand Pounds eV ₂ O ₅	Thousand Tons	Average Grade %eV ₂ O ₅
New Velvet Inferred Mineral Resource	0.25	2,752	363	0.38
New Velvet Inferred Mineral Resource	0.5	2,570	283	0.46
Old Velvet Inferred Mineral Resource	0.25	Not Estimated*		
Velvet Inferred Mineral Resource	0.5	767	71	0.53
Wood Inferred Mineral Resource	0.25	2,958	377	0.39
Wood Inferred Mineral Resource	0.5	2,716	275	0.49
Velvet Inferred	0.5	725	76	0.48
Wood Inferred	0.5	36	4	0.41
TOTAL INFERRED MINERAL RESOURCE	0.5	6,814	709	0.48

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title,

taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.1.3 Measured Mineral Resources, New Velvet Mine

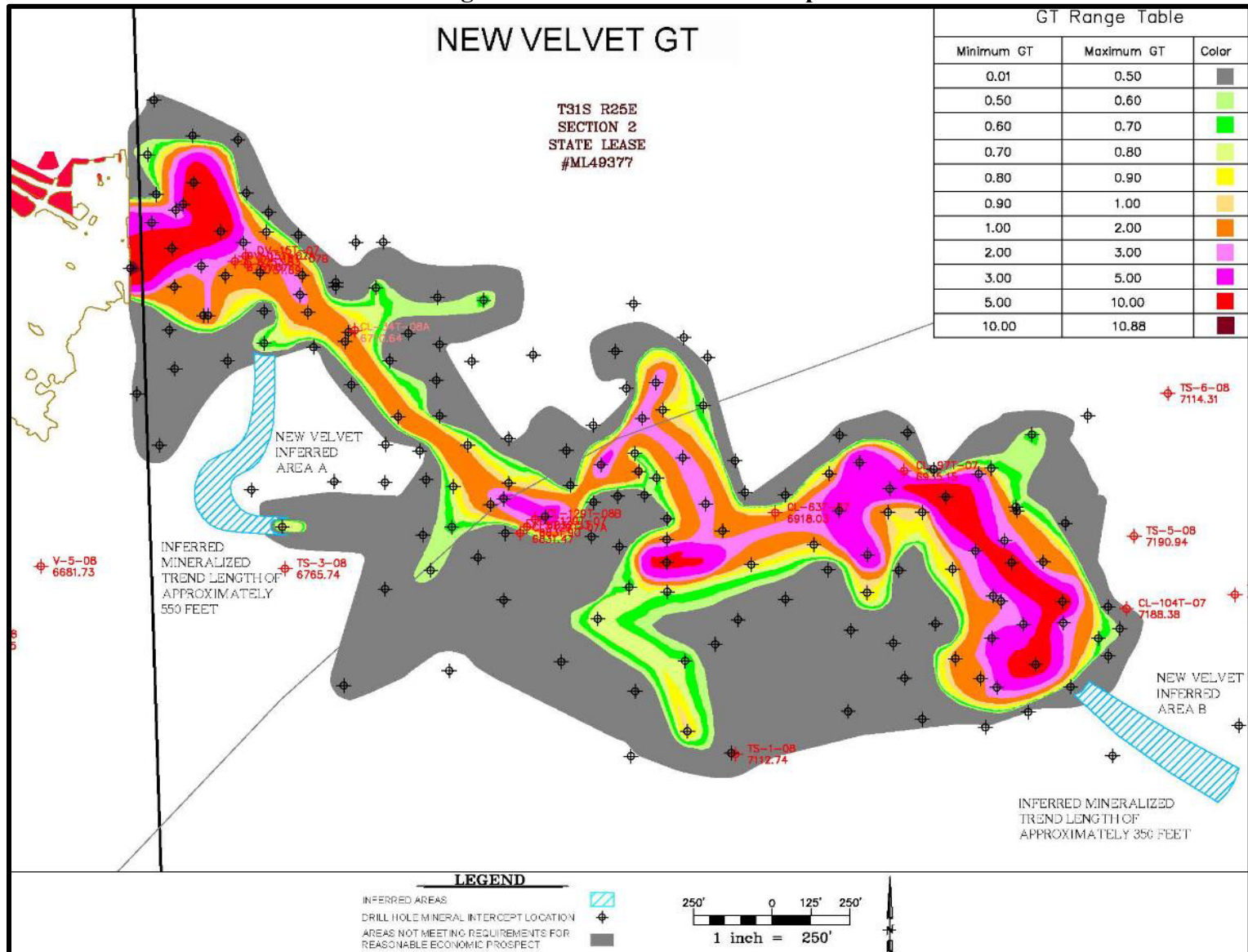
Measured mineral resources are limited to the New Velvet area in Section 2, Township 31 South, Range 25 East (Figure 14.1.1). The current estimate follows with the recommended cutoff, 0.5 GT, highlighted (Table 14.1.5):

Table 14.1.5 New Velvet Measured Mineral Resources*

GT minimum	Thousand Pounds eU₃O₈	Thousand Tons	Average Grade %eU₃O₈	Average Thickness (feet)
0.25	1,966	363	0.27	6.7
0.5	1,836	283	0.32	6.9
1	1,571	187	0.42	7.1

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.1.1 New Velvet GT Map



14.1.4 Indicated Mineral Resources, Old Velvet Mine

The Old Velvet Mine Area is located in Section 3, Township 31 South, Range 25 East as shown on Figure 14.1.4. The mineral resource estimate addresses an undeveloped area (Area III) of the Old Velvet Mine and Areas I, II, IV, and East Side of the mine that were developed but left unmined. Areas I, II, IV, and East Side were closely delineated with underground face and long-hole sampling as reported by Price, 1987. Area III was delineated by surface drill holes on approximately 100-foot centers.

14.1.5 Old Velvet Mine Area III - Resource Calculation Methods

Resource calculations were completed using the GT Contour method previously discussed. Although a mineral resource classification as Measured may be appropriate as discussed above for the New Velvet Mineral resources in Section 2, a classification of Indicated Mineral Resources is recommended for Old Velvet Mine Area III as the data has yet to be verified by surface drilling and is currently inaccessible for underground sampling. The current mineral resource estimate for Old Velvet Mine Area III follows (Table 14.1.6):

Table 14.1.6 Old Velvet Mine Area III Indicated Mineral Resources*

GT minimum	Thousand Pounds eU₃O₈	Thousand Tons	Average Grade %eU₃O₈	Average Thickness (feet)
Undiluted 0.5	39	5	0.38	2.2
Diluted** 0.50	39	9	0.21	4

*Numbers rounded

**Used in summary Table 14.1.6 not additive to total

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.1.6 Old Velvet Mine Areas I, II, IV, and East Side - Resource Calculation Methods

The following are the current estimates of mineral resources for Old Velvet Mine Areas I, II, IV, and East Side (refer to Figure 14.1.4). These unmined areas were designated as Areas I, II, IV, and East Side and were sampled underground using a combination of face and long-hole drill samples. The data was posted on underground mine maps (Price, 1987) which were used as the basis for Figure 14.1.4. The authors have audited the Price, 1987 data and have used the data as the basis of the current resource estimate. In the course of this estimate the following checks and calculations were made:

- The data was reviewed to ensure that the posted data matched the data utilized in the calculations.
- The area of influence assigned to the data was reviewed and confirmed, specifically;
 - Rib and face samples were projected 10 feet into the rib face or through the pillar if other sides of the pillar were accessible and the projection was justified by the data.
 - Long-hole samples were projected 10 feet on each side of the long-hole fans.
- Density was reviewed. A density of 13 cubic feet per ton was used as compared to the 14.5 cubic feet per ton recommended in this report. This would have the effect of overstating the tonnage by 10% if the 14.5 cubic feet per ton were correct. However, the GT cutoff employed in the estimate was 0.6 as compared to the 0.5 to 0.25 range recommended in this report, which would offset this difference.
- Average thickness and grade were compared to all other sources of data including surface drill data.
- Mineralized areas delineated on the mine maps were digitized into AutoCAD and the total area, tonnage, and pounds were calculated and compared to the 1987 Price estimate.

The current mineral resource estimate using the methodologies described above for the Old Velvet Mine Areas I, II, IV, and East Side follows (Table 14.1.7):

Table 14.1.7 Old Velvet Areas I, II, IV, and East Side Indicated Mineral Resources*

GT minimum	Thousand Pounds eU ₃ O ₈	Thousand Tons	Average Grade %eU ₃ O ₈	Average Thickness (feet)
Undiluted** 0.5	509	62	0.41	5.02

*Numbers rounded

**used in summary, Table 14.1.6 not additive to total

Although a mineral resource classification of Measured for Old Velvet Areas I, II, IV, and East Side by CIM definitions may be appropriate based on the level of detail reflected in the data and the estimation, a classification of Indicated Mineral Resources is recommended for Old Velvet Areas I, II, IV, and East Side as the data has yet to be verified by field data. Refer to Table 14.1.8. The area is currently inaccessible as the mine is flooded, and verification drilling from the surface would be impractical as surface drilling would likely not be able to maintain circulation in the vicinity of the mine openings.

Table 14.1.8 Total Indicated Mineral Resources Old Velvet Mine Area**

GT minimum	Pounds eU ₃ O ₈	Tons	Average Grade %eU ₃ O ₈
0.50	548,000	71,200	0.38

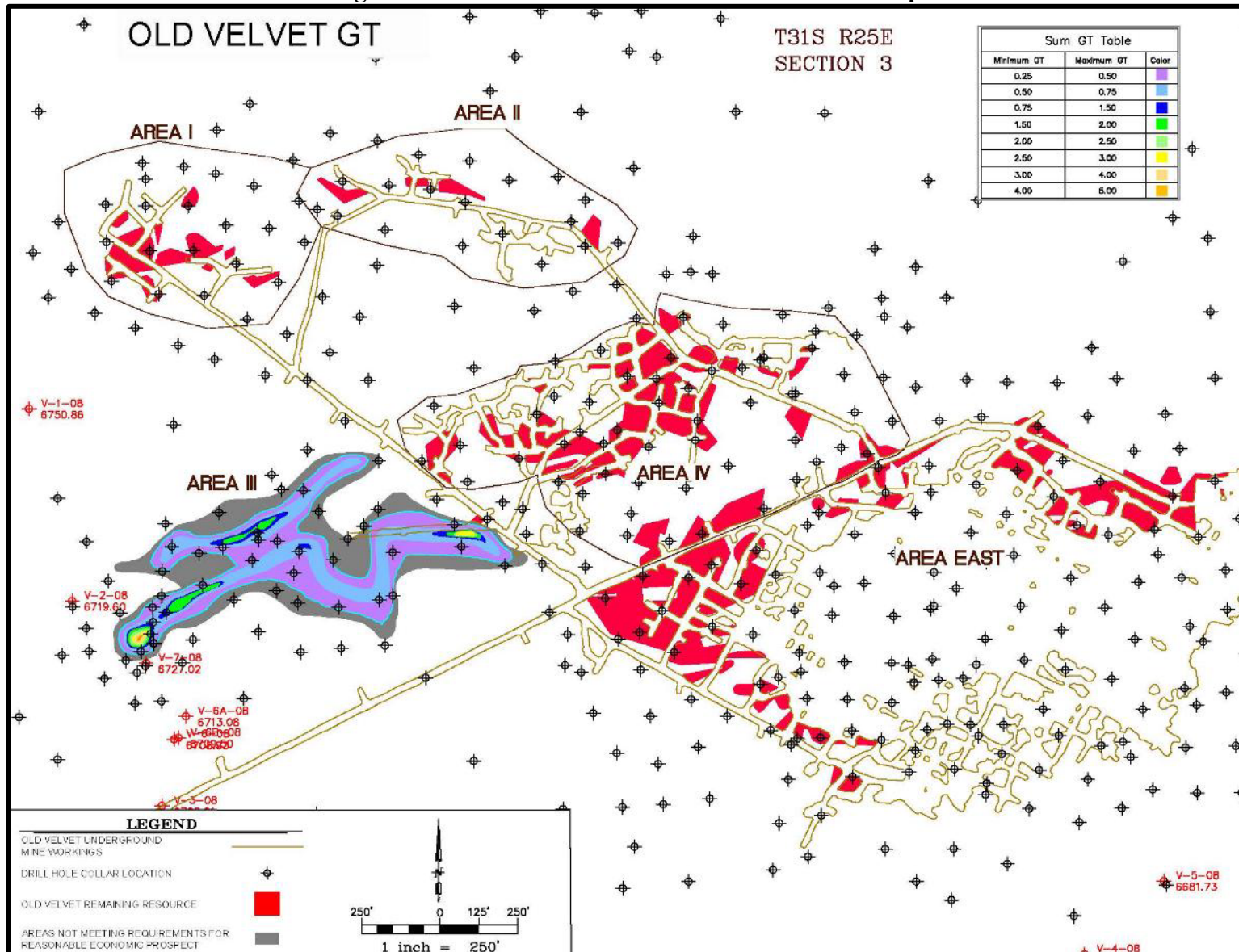
*Numbers rounded

** Sum of Areas I, II, III, and IV

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction

were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.1.4 Old Velvet Mine GT and Resource Map



14.1.7 Indicated Mineral Resources, Wood Mine

The current indicated mineral resource estimate for the Wood project area, utilizing the GT contour method is shown on Figure 14.1.5, Wood Project Resource GT Map. A GT cutoff of 0.5 is recommended for reporting purposes in this report and is highlighted in the following Table 14.1.9.

Table 14.1.9 Total Indicated Mineral Resources Wood Mine

GT minimum	Thousand Pounds eU_3O_8	Thousand Tons	Average Grade $\%eU_3O_8$	Average Thickness (feet)
0.25	2,113	377	0.28	4 feet diluted
0.5	1,940	275	0.35	4 feet diluted
1	1,581	155	0.51	4 feet diluted

*Numbers rounded

14.1.8 Inferred Mineral Resources, Velvet-Wood

Inferred mineral resources were estimated for limited areas in both the Velvet and Wood areas where a reasonable prospect of mineralization could be based on geologic data from drilling but where drill spacing exceeded 100 feet. Refer to Table 14.1.10. The areas where inferred mineral resources are projected for the Velvet and Wood Areas are shown on Figures 14.1.3 and 14.1.5, respectively.

Table 14.1.10 Total Inferred Mineral Resources Velvet-Wood Areas

GT minimum	GT cutoff (ft $\%eU_3O_8$)	Thousand Pounds eU_3O_8	Thousand Tons	Average Grade $\%eU_3O_8$	Average Thickness (feet)
Wood	0.5	26	4	0.30	4 feet diluted
Velvet	0.5	518	76	0.34	6.9
TOTAL	0.5	544	80	0.34	6.7

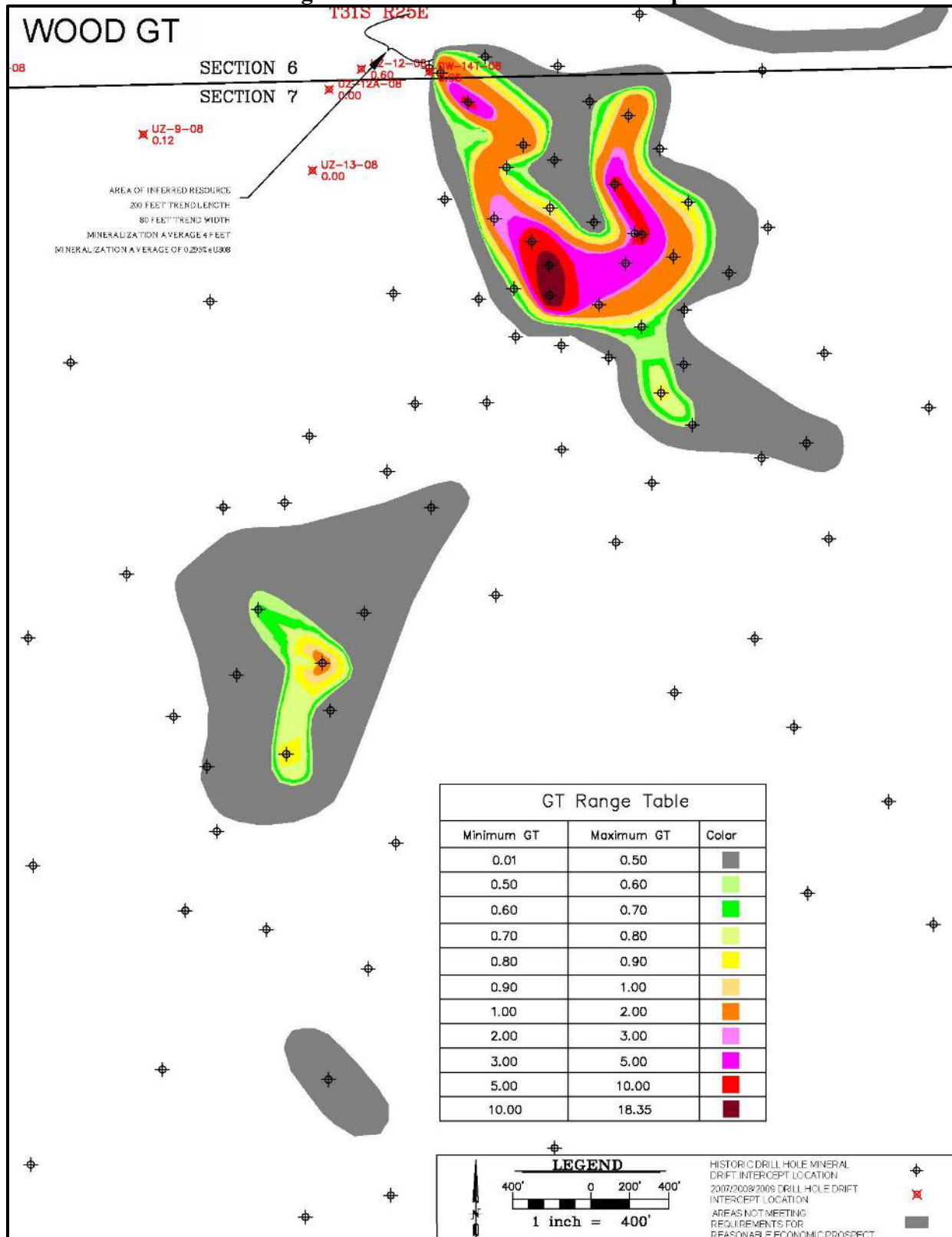
*Numbers rounded

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein.

Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.1.5 Wood Resource GT Map



14.2 Mineral Resource Estimate – Slick Rock District

The Slick Rock District Includes the Slick Rock Complex made up of the Slick Rock Claims and DOE Leases SR-13 and SR-13A as well as the SR-11 Project.

14.2.1 Slick Rock District Resource Summary

Within the Colorado Plateau and specifically within the Uravan Belt, uranium and vanadium occur together. From the 1930s through 1945 the majority of historic mining recovered only vanadium. Beginning in the late 1940s the emphasis shifted to uranium mining and most of the mines in the district recovered uranium and vanadium as co-products. This is true of the Velvet-Wood and Slick Rock mines. The historic Burro Mine located within the central-west portion of the Slick Rock Complex produced both uranium and vanadium during its operation along with neighboring mines at later dates like the Hawkeye and the Ellison mines. Current resource estimates and classifications may be found in Table 14.2.1 below.

Table 14.2.1 Slick Rock District Resource Summary – Uranium

Project Area/Classification	GT Cutoff (ft%)	Thousand Pounds eU₃O₈	Thousand Tons	Average Grade %eU₃O₈
Slick Rock Claims / Indicated	0.4	815	247	0.16
Slick Rock Claims / Inferred	0.4	8,550	2,098	0.20
SR-13 Lease / Inferred	0.4	467	132	0.18
SR-13A Lease / Inferred	0.4	147	25	0.30
SR-11 Lease / Inferred	0.4	774	163	0.24
Total Slick Rock District Indicated Mineral Resource	0.4	815	247	0.16
Total Slick Rock District Inferred Mineral Resource	0.4	9,938	2,418	0.21

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

An “Inferred Mineral Resource” is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geologic evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from location such as outcrops, trenches, pits, workings, and drill holes. (CIM, 2014). Portions of the district which fit this definition are contained within the bulk of the Slick Rock Claims area, and the whole of the SR-13 lease areas. This is due to a combination of wider drill hole spacings and/or data which is not verifiable due to lack of base inspectable data like geophysical logs for validation.

The more tightly and recently drilled portion of the Slick Rock Claims, in contrast, can be considered in the authors’ opinion to be verified by the most recent drilling and tighter drilling spacings in that area, See Figure 14.2.1. Similarly, the drilling spacings and data-sets for the SR-13A and SR-11 DOE leases obtained from Cotter include original logs which were used to verify the grade calculations and the existing Cotter data-sets. As such these portions of the resource estimate are considered Indicated Mineral Resources.

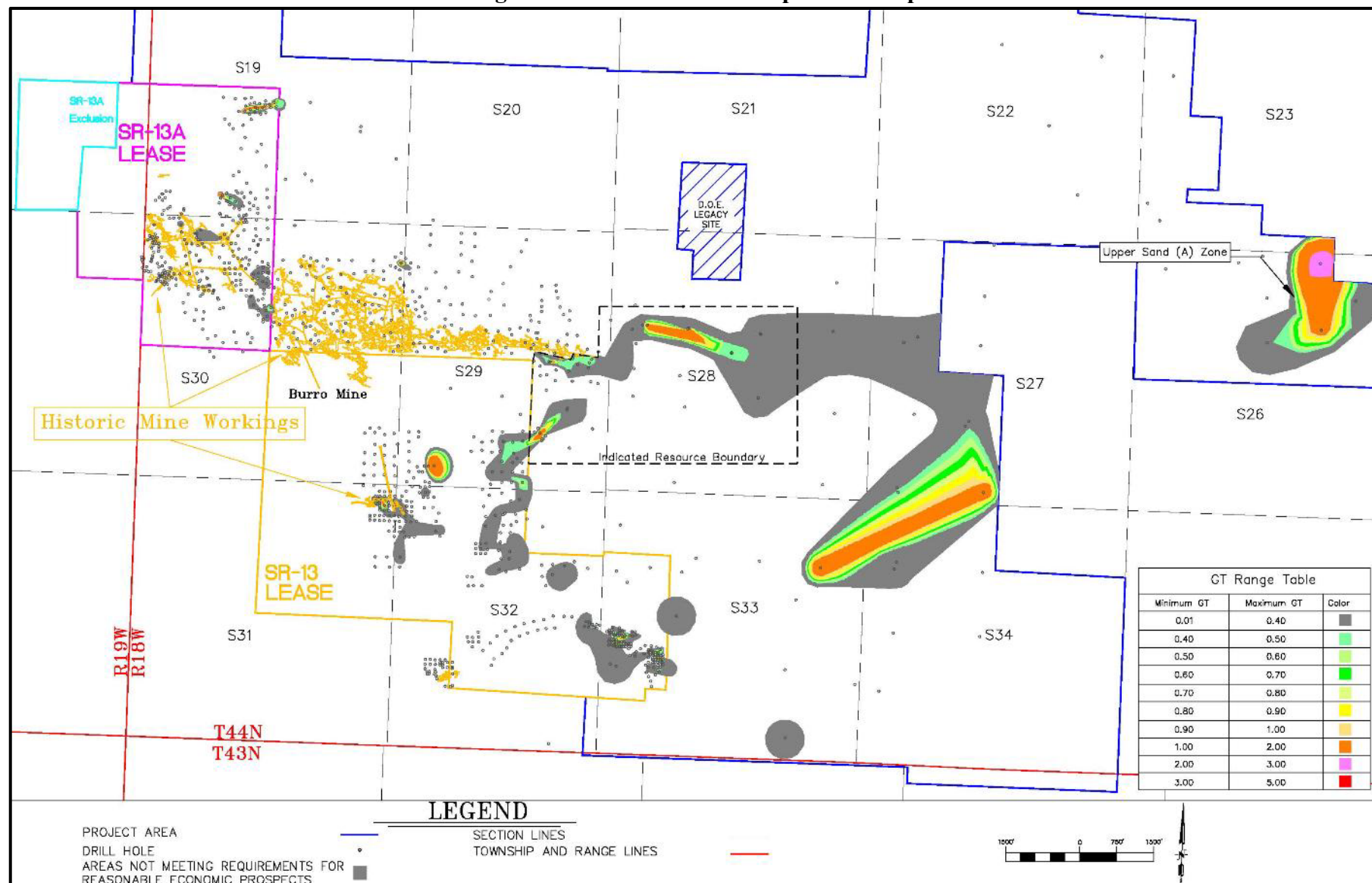
The Slick Rock Complex is located within the Uravan Mineral Belt which was defined as early as 1952 by the USGS as an elongated area in southwestern Colorado wherein uranium-vanadium deposits in the Salt Wash Member of the Morrison Formation are concentrated (Chenoweth, 1981). The district was first mined for radium and later vanadium. Early geologic reports (Garrels and Larsen, 1959) refer to the mineral deposits in the Salt Wash Member of the Morrison Formation as “vanadium-uranium deposits with the V:U ratio between 5:1 and 10:1 in the Uravan mineral belt of western Colorado.” Chenoweth further states that the Uravan area produced 14,675,000 tons with average grades of 1.24% V₂O₅ and 0.24% U₃O₈, or a V:U ratio of 5.2:1 (Chenoweth, 1981). Production from the Slick Rock area is reported as approximately 9,000 tons of U₃O₈ and 50,000 tons of V₂O₅ or a V:U ratio of 6:1. The authors recommend use of a V:U ratio of 6:1 for estimating the Slick Rock vanadium mineral resource.

It is the authors’ opinion that relying on the V:U ratio demonstrated by mine production at the Burro mine which is within the Slick Rock District to estimate vanadium grade based on uranium grades is reasonable, especially in the category of Inferred Mineral Resource which is defined in Table 14.2.2 as:

Table 14.2.2 Slick Rock District Resource Summary – Vanadium

Area/Classification	GT cutoff (Based on Uranium)	Thousand Pounds V₂O₅	Thousand Tons	Avg Grade %V₂O₅
Slick Rock Claims / Inferred	0.4	56,190	2,345	1.20
SR-13 Lease / Inferred	0.4	2,803	132	1.06
SR-13A Lease / Inferred	0.4	879	25	1.79
SR-11 Lease / Inferred	0.4	4,646	163	1.42
TOTAL INFERRED MINERAL RESOURCE VANADIUM	0.4	64,518	2,665	1.21

Figure 14.2.1 Slick Rock Complex GT Map



Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.2.2 Slick Rock Complex Resource Estimate

The Slick Rock Complex is made up of 3 contiguous properties modeled using separate but overlapping datasets. The datasets covering the Slick Rock Claims were used to estimate the resources on the project as described in previous resource reports from Anfield. For the context of this report, resources for DOE Leases SR-13 and SR-13A are added to the Slick Rock Claims resource, and a portion of the previous Slick Rock Resource has changed category from inferred to indicated following a 2024 drilling program in the Slick Rock Claims area.

For Slick Rock Claims, SR-13, and SR-13A drill data, all individual drill hole intercept data meeting or exceeding the minimum reported grades (0.02% eU₃O₈) were first calculated individually. Then by multiplying the thickness in feet by the average eU₃O₈ % grade results in a GT value in feet times % eU₃O₈ for each intercept. Intercept GT values were summed within each drill hole by zone (host sandstone horizon) and composited to the total thickness within each zone. At 0.4 ft% eU₃O₈ GT cutoff, the average thickness of all individual intercepts within the Slick Rock Claims is approximately 4.2 feet, or nominally 4 feet. Similarly, the SR-13 dataset has an average thickness of intercepts of 3.9 ft at or above 0.4 ft% eU₃O₈ GT. Meanwhile, at SR-13A individual intercepts at or above the 0.4% GT cutoff are an average of 2.8 ft in thickness.

Minimum mining thickness is dictated by mining method, which in this case is underground random room and pillar. Mine height is typically 7-8 ft with minimum mining thickness of 4 feet requiring split blasting at the working mine face. In the case of Slick Rock Claims and SR-13, the average thickness was 3.8 - 4.1 feet, or essentially equal to the typical minimum mining thickness, so a minimum thickness was not applied to the drill data. In the case of SR-13A, that average thickness is 2.8 ft or nominally 3 ft. As such, room and pillar mining in this portion of the resource area would better be approached by jackleg rather than jumbo drill headings and using split-shots. That would limit the necessary mine height to 5-6 ft while still achieving similar economic extraction given SR-13A's proximity to the main Slick Rock Claims body.

Summed GT and thickness for the mineralized intercepts of each zone were then contoured using standard ACAD Civil-3D algorithms creating a three-dimensional surface for GT and thickness in

each zone. These surfaces were then bounded based upon the geological interpretation of each deposit. Verification of the contour models was performed by inspection against all the available data prior to calculating the resource estimate. From the contoured GT ranges, the contained pounds of uranium were calculated volumetrically using the Civil-3D surface volumetrics toolset.

Validation of each of the sum GT and sum thickness contour models is performed via inspection of the model contours to all available data prior to resource calculation. All interpolation within the maximum radius of influence is performed via the inverse distance square method from available data when manually constructing contours. Interpolation between manual contours and points is performed by the Civil 3D standard algorithm parameters.

Modeling parameters are dictated by several factors including density of drilling data, deposit characteristics and interpreted geologic model. Mineralization at the Slick Rock project is a stratigraphically controlled, sand-stone hosted uranium/vanadium deposit typical of the Colorado Plateau style of mineralization, as discussed above. Key criteria and assumptions applied in the mineral resource modeling include those referenced in Table 14.0.4 above.

Minimum grade and thickness criteria are used to define mineralized intercepts for resource modeling purposes. These are applied to each individual mineralized intercept and then to the sum GT of intercept composites are applied to the data prior to contour modeling. Data not meeting these minimum requirements are removed from the modeling data set and have no influence on the contour model other than establishing its boundaries.

Maximum radius of influence is determined by the drilling density and the continuity of the deposit with respect to both the host sands and in situ mineralization. Portions of the resources which had larger spacings have a lower resource classification of Inferred. Portions of the resource which have drill spacings closer than 200 ft and have recent drilling data and/or data which is verifiable using available geophysical logs or sampling have a higher classification of Indicated.

Mineral resources for the Slick Rock Complex were evaluated based on reasonable prospects for future economic extraction through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed conceptual mining. As such, economic considerations were exercised by screening out areas of which were below these cutoffs or of isolated mineralization and thus would not support the cost of conventional mining under current and reasonably foreseeable conditions.

The minimum sum GT contour resource model cutoff is the primary cutoff criteria applied to the contour model volume as the initial screening of those portions of the model quantities not meeting the criteria for reasonable economic extraction. In addition, individual model areas outside the conceptual mine limits not meeting a minimum of 10,000 lbs of eU_3O_8 resource were excluded from the resource totals as not meeting a minimum expectation of reasonable economic extraction.

It is the opinion of the authors that the resource models are reasonably valid within the mineral resource classifications assigned to each area of the complex.

A sensitivity analysis was performed on the mineral resource models for each zone as shown on Tables 14.2.3, 14.2.4 and 14.2.5. The authors recommend the 0.40 GT cutoff for the Slick Rock

Complex mine (See Figure 14.2.1). With further definition of the mineral resource via drilling and additional mine design and cost evaluation, it is the authors' opinion that the minimum GT cutoff may be lowered.

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. At a minimum, a Preliminary Feasibility Study (PFS) is required to demonstrate the economic viability of the measured and indicated mineral resources and qualify an initial estimate of mineral reserves.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Table 14.2.3 Indicated and Inferred Mineral Resources Uranium, Slick Rock Claims

Zone / Classification	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
B / Indicated	0.1	2.8	0.11	941,648	2,020,896
	0.25	3.5	0.13	538,227	1,416,672
	0.4	4.2	0.16	247,068	815,004
A / Inferred	0.1	3.6	0.17	1,250,878	4,142,412
	0.25	4.0	0.23	826,067	3,638,448
	0.4	4.7	0.26	658,741	3,403,188
B / Inferred	0.1	3.7	0.11	3,371,263	7,408,944
	0.25	4.4	0.16	1,897,333	5,925,420
	0.4	4.7	0.18	1,438,816	5,146,776
Slick Rock Claims Total / Indicated	0.1	2.8	0.11	941,648	2,020,896
	0.25	3.5	0.13	538,227	1,416,672
	0.4	4.2	0.16	247,068	815,004
Slick Rock Claims Total / Inferred	0.1	3.6	0.12	4,622,141	11,551,356
	0.25	4.3	0.18	2,723,400	9,563,868
	0.4	4.7	0.20	2,097,556	8,549,964

Table 14.2.4 Inferred Mineral Resources Uranium, SR-13 Lease

Zone / Classification	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
B / Inferred	0.1	2.9	0.09	659,428	1,152,360
	0.25	2.8	0.16	20,232	63,072
	0.4	4.3	0.17	125,105	434,376
Ellison Mine Remaining / Inferred	0.1	2.2	0.10	72,643	144,504
	0.25	3.3	0.15	269,309	782,388
	0.4	3.8	0.23	6,998	32,724
SR-13 / Total Inferred	0.1	2.8	0.09	732,071	1,296,864
	0.25	3.2	0.15	289,541	845,460
	0.4	4.2	0.18	132,104	467,100

Table 14.2.5 Inferred Mineral Resources Uranium, SR-13A Lease

Zone / Classification	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
SR-13A / Total Inferred	0.1	2.3	0.14	88,288	253,044
	0.25	2.5	0.23	40,678	187,308
	0.4	2.6	0.30	24,563	146,556

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.2.3 SR-11 Project Resource Estimate

The SR-11 Project is located approximately 8 miles southwest of the Slick Rock Complex and includes the SR-11 DOE Lease. The Lease was previously held and operated by Cotter Corporation into the Mid 2000's. This is the initial resource estimate for the property performed by Anfield. The data set acquired from Cotter was validated using existing and available geophysical logs. Drilling density would otherwise justify a higher resource classification. However, more field validation of historic drill hole locations or new confirmatory drilling is needed to raise the classification above Inferred.

The existing data for SR-11 consists of 741 drill collars, of which 605 drill holes had associated grade and thickness data. The 136 drill holes without data were limited to the margins of the SR-11 resource area and thus are considered by the authors to have low impact on the data set overall. GT Contour modeling was performed using under the key assumptions described in Table 14.0.4, and was performed at 0.1ft%, 0.3ft% and 0.5 ft% eU₃O₈ GT cutoffs for sensitivity analysis. Nominal minimum thickness at the 0.4 ft% GT cutoff is 4 feet. However, lower GT cutoffs would reduce the nominal mining thickness to closer 3ft, meaning that jackleg room and pillar mining would likely dominate the method of extraction of the SR-11 resource.

The minimum sum GT contour resource model cutoff is the primary cutoff criteria applied to the contour model volume as the initial screening of those portions of the model quantities not meeting the criteria for reasonable economic extraction. In addition, individual model areas outside the conceptual mine limits not meeting a minimum of 10,000 lbs of eU₃O₈ resource were excluded from the resource totals as not meeting a minimum expectation of reasonable economic extraction. It is the opinion of the authors that the resource models are reasonably valid within the mineral resource classifications assigned to each area of the complex.

A sensitivity analysis was performed on the mineral resource models for each zone as shown on Table 14.2.6. The authors recommend the 0.40 GT cutoff for the SR-11 Project. See Figure 14.2.2. With further definition of the mineral resource via drilling and additional mine design and cost evaluation, it is the authors' opinion that the minimum GT cutoff may be lowered with appropriate adjustments to mining methods made.

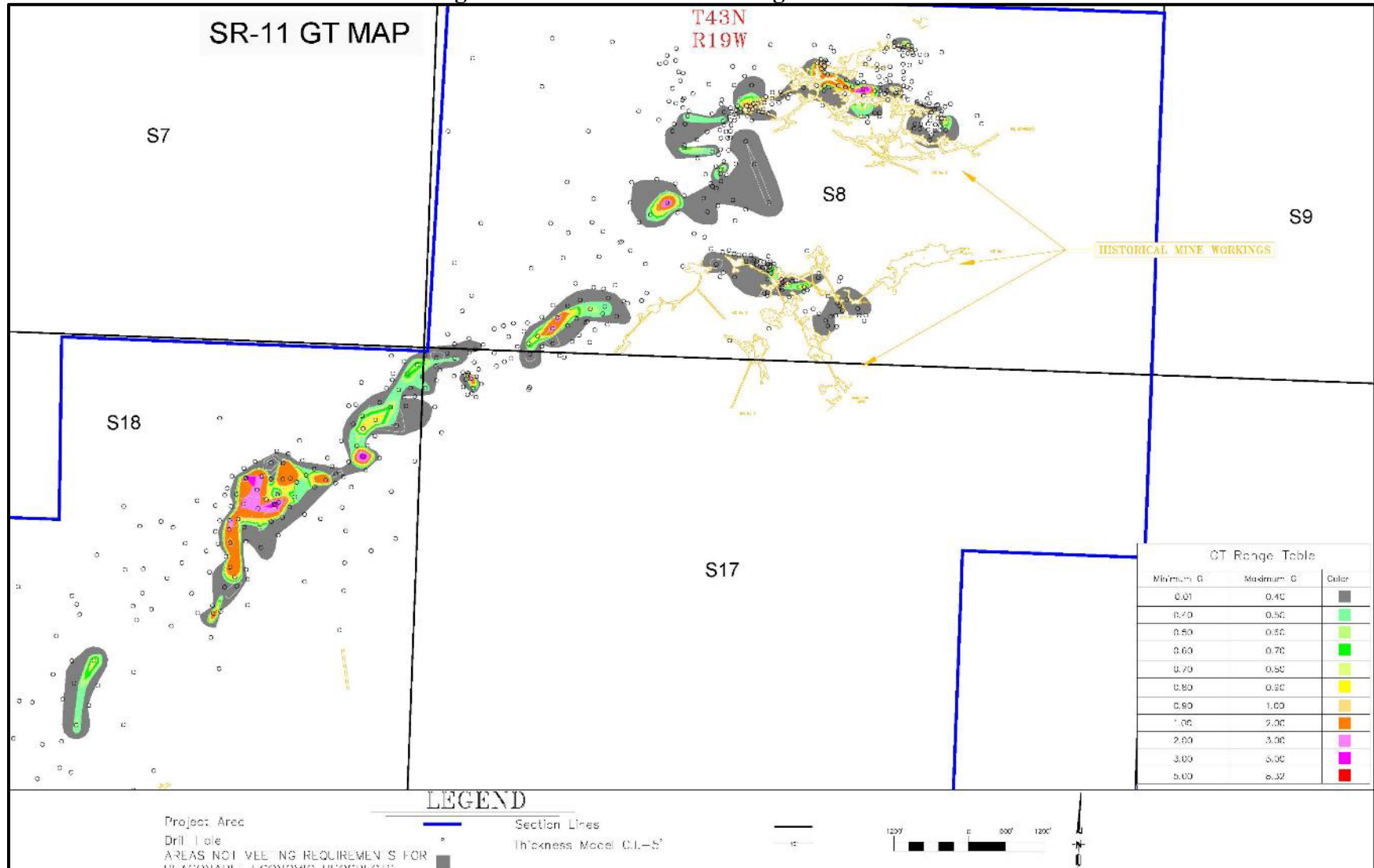
Table 14.2.6 Inferred Mineral Resources Uranium, SR-11 Lease

Zone / Classification	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
SR-11 / Total Inferred	0.1	3.2	0.15	361,217	1,064,700
	0.25	3.6	0.20	229,039	909,504
	0.4	3.9	0.24	163,480	774,360

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.2.2 SR-11 GT Banding & T Contours



14.3 Mineral Resource Estimate – Uravan District

14.3.1 Uravan District Resource Summary

The Uravan District discussed herein contains resources for the JD-6, JD-7, JD-8 and JD-9 DOE Leases as well as the SM-18 DOE Lease. The JD-6 through 9 resources were previously discussed in the report “US DOE Uranium/Vanadium Leases JD-6, JD-7, JD-8, and JD-9 Montrose County, Colorado, USA” prepared for Anfield Energy Inc. by Douglas L. Beahm, Carl Warren, and Joshua Stewart, April 10, 2022, and were formerly called the West Slope Uranium Project. This project and its resources are here renamed as the Paradox Complex as they are located within the Paradox Valley. The SM-18 project, located approximately 11 miles north of the Paradox Complex, is in the Uravan District, and is across the San Miguel River from the historic location of Uravan, Colorado.

All Indicated Mineral resources in this district for uranium are reported at a cutoff of 0.5ft% eU₃O₈ GT and 0.4 ft% eU₃O₈ GT for inferred uranium resources in Table 14.3.1 which follows.

Table 14.3.1 Total Mineral Resources Uranium

Project Area/Classification	GT Cutoff (ft%)	Pounds eU₃O₈ x 1,000	Tons x 1,000	Grade %eU₃O₈
JD-6 Lease / Indicated	0.5	171	32	0.27
JD-7 Lease / Indicated	0.5	3,083	722	0.21
JD-8 Lease / Indicated	0.5	960	199	0.24
JD-9 Lease / Indicated	0.5	453	108	0.21
SM-18 Lease / Inferred	0.4	755	179	0.21
Total Indicated Mineral Resource - Uranium	0.5	4,667	1,061	0.22
Total Inferred Mineral Resource - Uranium	0.4	755	179	0.21

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 in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein.

Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Vanadium grade was estimated using the historical results of mining and comparative review of the limited number of intercepts assayed for vanadium content for each of the lease tracts. In general, the ratio of vanadium to uranium (V:U) in the Uravan mineralized deposits is typically 5:1 to 7:1. Past production from the JD-6 through JD-9 leases shows a V:U ratio of 5.8:1. Vanadium resources were estimated using the more conservative 5:1 ratio. It was industry practice when these leases were developed to estimate mineral resources and control grade during mining based on the uranium grade with only limited vanadium assays. Whereas there are limited vanadium assays available for vanadium mineral resource estimation, the mineral resource estimate is considered as an Inferred Mineral Resource for vanadium (See Table 14.3.2).

Table 14.3.2 Total Inferred Mineral Resources Vanadium

Vanadium Inferred Mineral Resource	GT Cutoff (ft%) Based on Uranium	AVG. Grade %V₂O₅	Tons x 1,000	Pounds (V₂O₅) x 1,000
JD-6 Lease/ Inferred	0.5	1.36	32	855
JD-7 Lease/ Inferred	0.5	1.07	722	15,415
JD-8 Lease/ Inferred	0.5	1.21	199	4,800
JD-9 Lease/ Inferred	0.5	1.05	108	2,265
SM-18 Lease / Inferred	0.4	1.06	179	3,777
Total	0.4-0.5	1.09	1,239	27,112

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 in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

14.3.2 Paradox Complex Resource Summary – JD 6, 7, 8 and 9 (Formerly West Slope Project)

Overall, for the Paradox Complex, drill data was available for 2,198 drill holes, totaling at least 1,250,370 feet drilled. Key criteria and assumptions applied in the mineral resource modeling include those referenced in Table 14.0.5 above. All mineral resources within the Paradox Complex 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 eU_3O_8 . Radiometric equilibrium was evaluated, and a disequilibrium factor of 1 was used; no chemical enrichment was applied to the resource estimate. The minimum uranium grade included in the estimate was 0.05% eU_3O_8 . Recent drilling in the JD-7 has not yet been added to the modeling but has been used to confirm the depth and continuity of the mineralization within the floor of the JD-7 Pit.

Mineral resources were estimated by zone correlation to sand horizon, based on geologic interpretation. Mineral resources are reported at various cutoff grades for Indicated Mineral Resources, to illustrate the effect of varying cutoff on the mineral resource. The preferred cutoff of 0.50 ft% GT is shaded in the respective tables.

Drill spacing in JD-7, JD-8, and JD-9 varies and was completed on roughly 200-foot centers overall. The nominal average spacing between drill holes in the resource areas is necessarily smaller at approximately 100 feet. For example, drill spacing in JD-6 area varies from roughly 200-foot to 300-foot centers, with the nominal average drill spacing within the mineral resource areas at approximately 100 feet. Drilling depths varied across the four leases with the shallowest being in JD-7 averaging about 340 feet and the deepest in JD-6 with 750 feet on average. JD-8 and JD-9 averaged 630 feet and 670 feet, respectively.

The current geologic and resource model reflects multiple sand zones over the stratigraphic thickness of approximately 350 feet thickness over the mid to lower portion of the Brushy Basin and upper portion of the Salt Wash member of the Jurassic-age Morrison Formation. Multiple normal faults in JD-7 split the resource into four zones for modeling. In JD-6, JD-8, and JD-9, three to four discrete mineralized zones of the fluvial sandstone were identified for modeling. The mineralized bodies are elongated, tabular, horizontal pods or trends. An anisotropy favoring the general direction of the trend of the deposits was applied to model for each of the areas. The general direction of the mineralized trend had an azimuth of 300 degrees.

Following the removal of intercepts which did not meet the grade cutoff criteria of 0.05% eU_3O_8 , the remaining intercept data was separated by discrete zone and grade thickness (GT). To establish an initial geologic limit to the projection of mineralization within each zone, an elliptical area of influence was applied to each drill hole interval location which met the 0.10 ft% GT cutoff. Each ellipse was located with its center drillhole collar location or the linearly drifted location of total depth when the drift data was available.

The major axis of each ellipse of influence was oriented parallel to the direction of mineral anisotropy. The major radius of influence was 200 feet from each drill hole parallel to the mineralization anisotropy and 100 feet perpendicular to that anisotropy. 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 current drill hole database consists of:

- JD-6 Lease; 403 drill holes in total of which 188 were barren
- JD-7 Lease; 705 drill holes in total of which 214 were barren
- JD-8 Lease; 537 drill holes in total of which 245 were barren
- JD-9 Lease; 553 drill holes in total of which 259 were barren

Recent drilling in the JD-7 has not yet been added to the modeling, but has been used to confirm the depth and continuity of the mineralization within the floor of the JD-7 Pit.

For the estimate of contained vanadium, individual assay results were limited. Thus, the historical average (ratio of vanadium to uranium) of mining results from the individual leases is 5.8:1. This ratio is in the range of the Uravan district (typically 5:1 to 7:1), vanadium to uranium. For the estimation of vanadium, a vanadium/uranium ratio of 5:1 was used as a conservative measure.

14.3.3 Indicated Mineral Resources, JD-6 Lease

The mineral resource estimate for the JD-6 Lease Area of the Project is presented in Table 14.3.3. See Figures 14.3.1a and 14.3.1b for the JD-6 Lease GT and T resource models at the 0.50 ft% GT Cutoff. The JD-6 Lease has four discrete mineralized zones distributed across the area and is focused primarily within the Lower Brushy Basin and upper Salt Wash members of the Morrison Formation. All four mineralized zones contain drill hole intercepts which met initial grade cutoff criteria and were modeled at the 0.1 ft% GT Cutoff. However, only two of the four mineralized zones (Zones B and C) meet the preferred scenario of the 0.5 ft% GT cutoff criteria for reporting.

Table 14.3.3 JD-6 Lease Indicated Mineral Resource Estimates by GT Cutoff

Zone	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
A	0.1	3	0.052	13,000	14,000
	0.3	-	-	-	-
	0.5	-	-	-	-
B	0.1	2.7	0.14	28,000	77,000
	0.3	3.4	0.207	14,000	56,000
	0.5	3.4	0.219	10,500	46,000
C	0.1	2	0.15	101,000	304,000
	0.3	2.7	0.237	38,000	182,000
	0.5	2.7	0.298	21,000	125,000
D	0.1	2.2	0.082	39,000	64,000
	0.3	-	-	-	-
	0.5	-	-	-	-
E	0.1	2.2	0.084	36,000	61,000
	0.3	-	-	-	-
	0.5	-	-	-	-
Total	0.1	2.2	0.12	217,000	520,000
	0.3	2.9	0.229	52,000	238,000
	0.5	2.9	0.272	31,500	171,000

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.3.1a JD-6 Lease Zone B GT Banding & T Contours

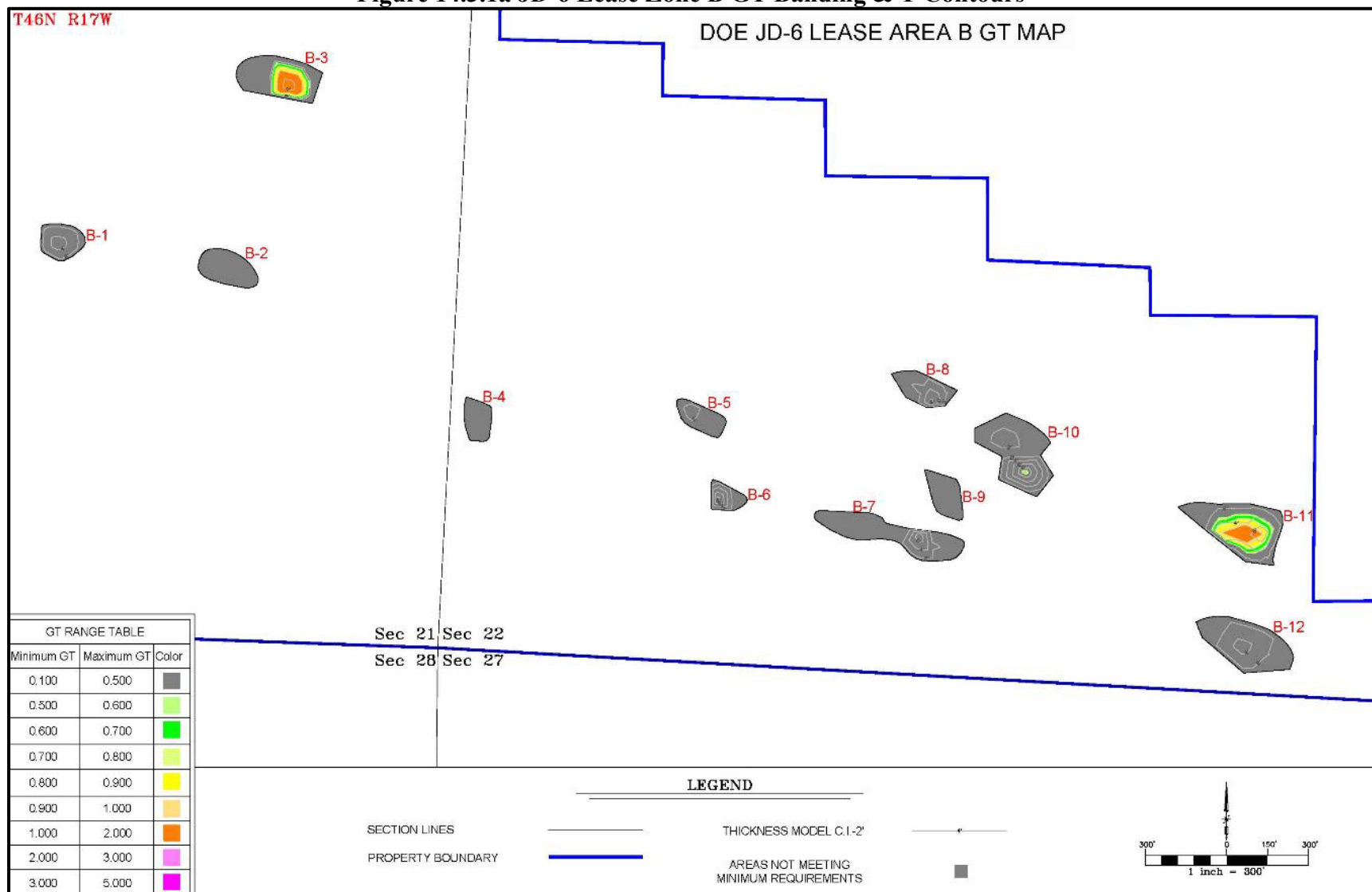
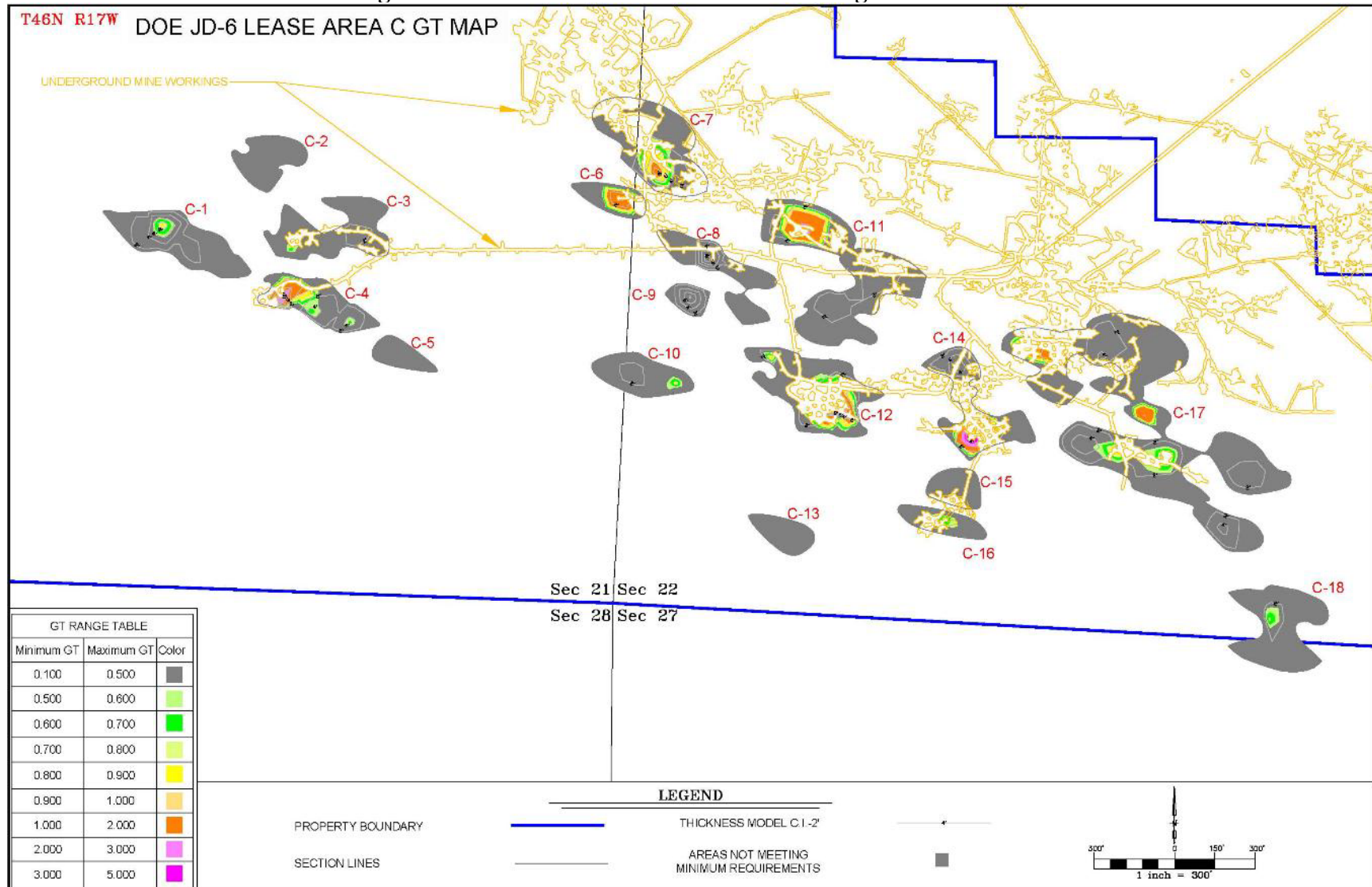


Figure 14.3.1b JD-6 Lease Zone C GT Banding & T Contours



14.3.4 Indicated Mineral Resources, JD-7 Lease

The mineral resource estimate for the JD-7 Lease Area of the Project is presented in Table 14.3.4. See Figures 14.3.2a to 14.3.2d for the JD-7 Lease GT and T resource models at the 0.50 ft% GT Cutoff. The JD-7 Lease has four discrete mineralized zones distributed across the area and is focused primarily within the Lower Brushy Basin and upper Salt Wash members of the Morrison Formation. All four mineralized zones contain drill hole intercepts which met initial grade cutoff criteria and were modeled at 0.1 ft% GT, 0.3ft% GT and the preferred 0.5 ft% GT Cutoffs. The average difference in the 0.1 ft% to 0.5 ft% GT cutoff criteria is an increase in thickness and grade of 61% and 34%, respectively. Sensitivity to the increase in GT cutoff from the 0.1 to 0.5 ft% also causes an average decrease in Indicated Mineral Resource in the JD-7 Lease tons in situ resource and pounds eU₃O₈ of 40% and 20%, respectively. Recent drilling in the JD-7 has not yet been added to the modeling but has been used to confirm the zone, depth and continuity of the mineralization within the floor of the JD-7 Pit.

Table 14.3.4 JD-7 Lease Indicated Mineral Resource Estimates by GT Cutoff

Zone	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
A	0.1	2.9	0.090	158,000	285,000
	0.3	4.4	0.131	63,000	166,000
	0.5	4.6	0.173	32,000	109,000
B	0.1	3.9	0.460	155,000	438,000
	0.3	5.3	0.169	109,000	368,000
	0.5	5.8	0.200	78,000	314,000
C	0.1	3	0.146	246,000	720,000
	0.3	4.4	0.211	135,000	568,000
	0.5	4.9	0.240	102,000	491,000
D	0.1	5.5	0.188	638,000	2,399,000
	0.3	6.8	0.204	559,000	2,286,000
	0.5	7.6	0.213	510,000	2,169,000
Total	0.1	4.1	0.160	1,197,000	3,842,000
	0.3	5.9	0.196	866,000	3,388,000
	0.5	6.6	0.214	722,000	3,083,000

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.3.2a JD-7 Lease Zone A GT Banding & T

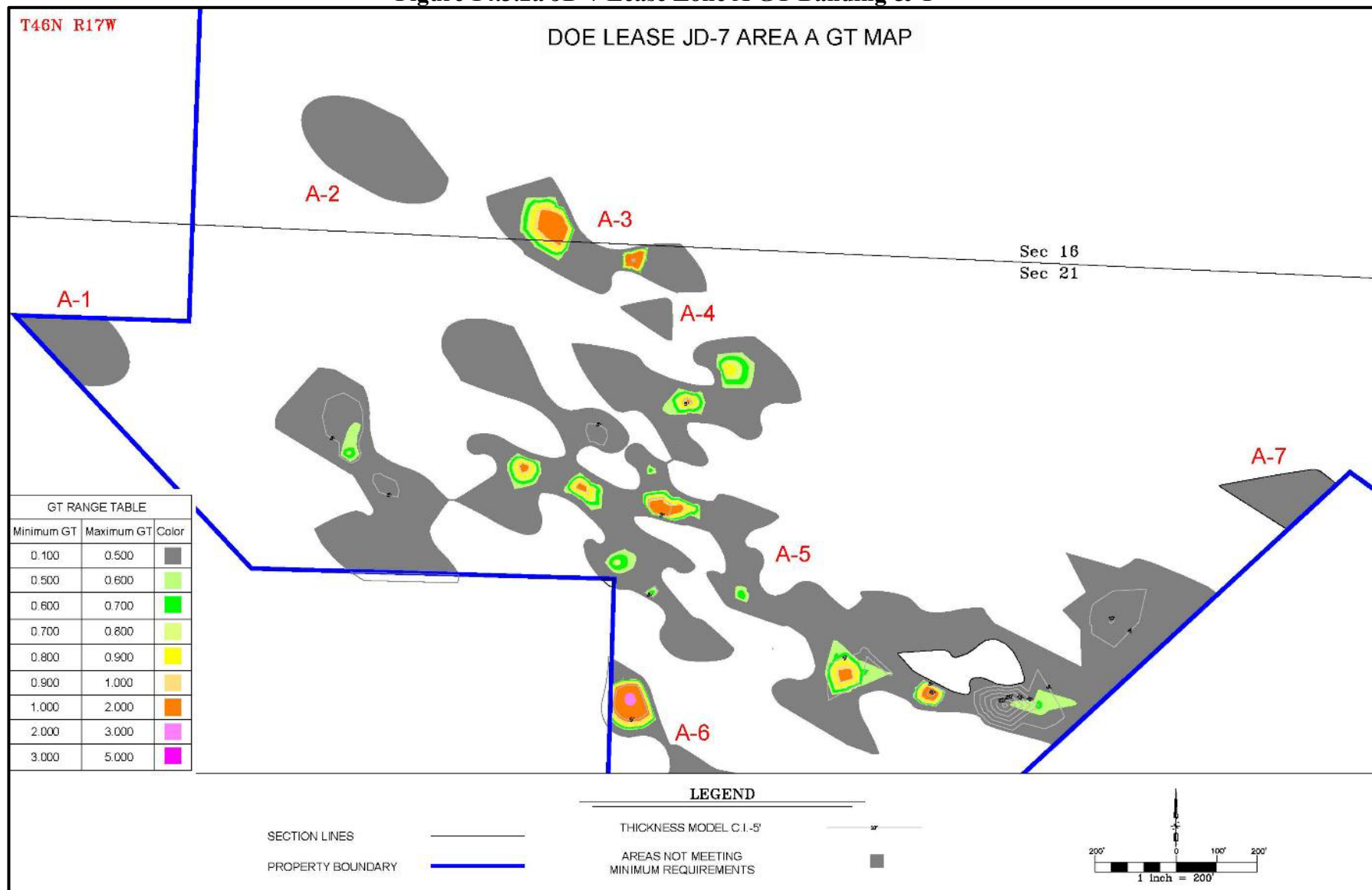


Figure 14.3.2b JD-7 Lease Zone B GT Banding & T

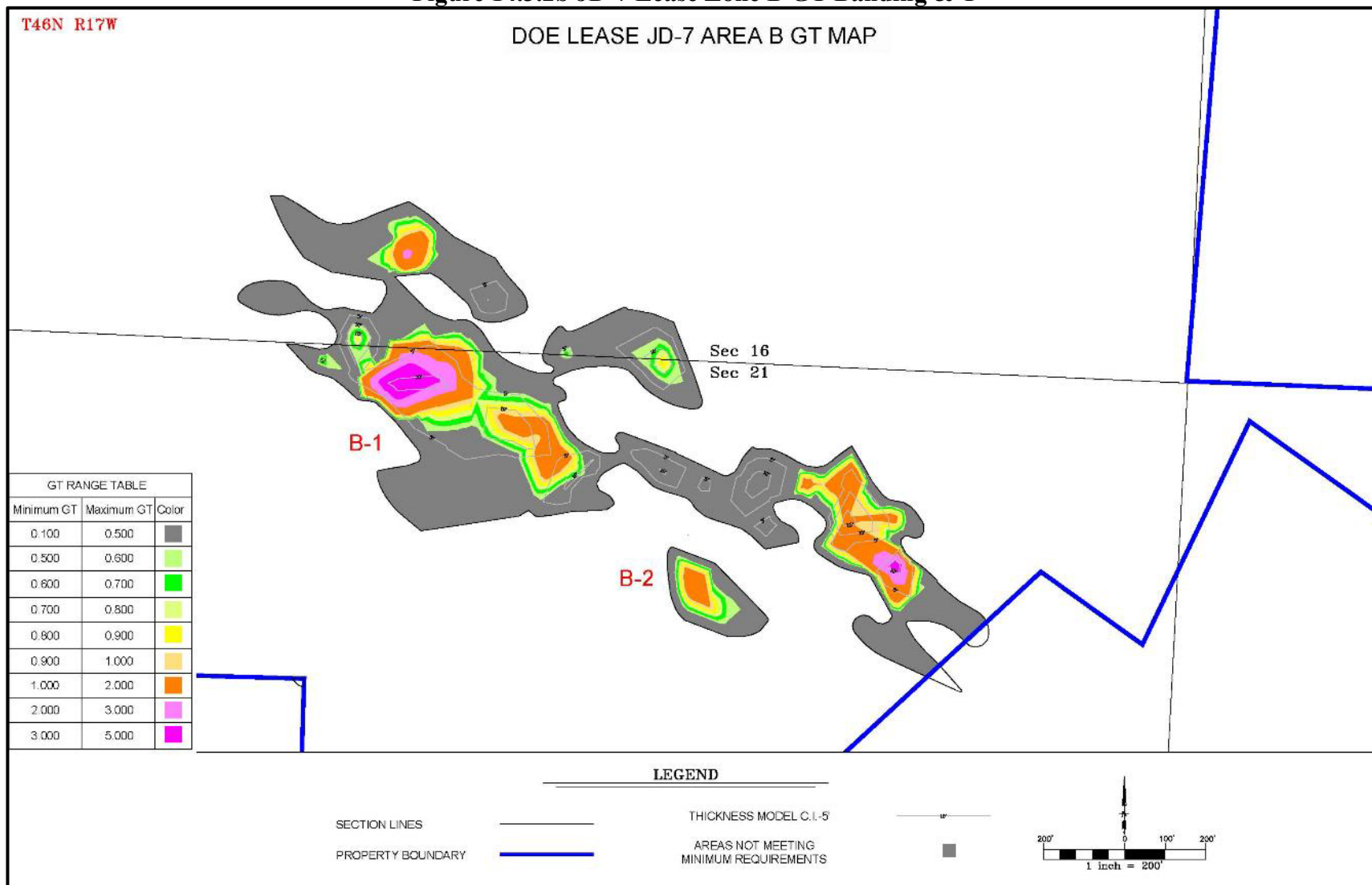


Figure 14.3.2c JD-7 Lease Zone C GT Banding & T Contours

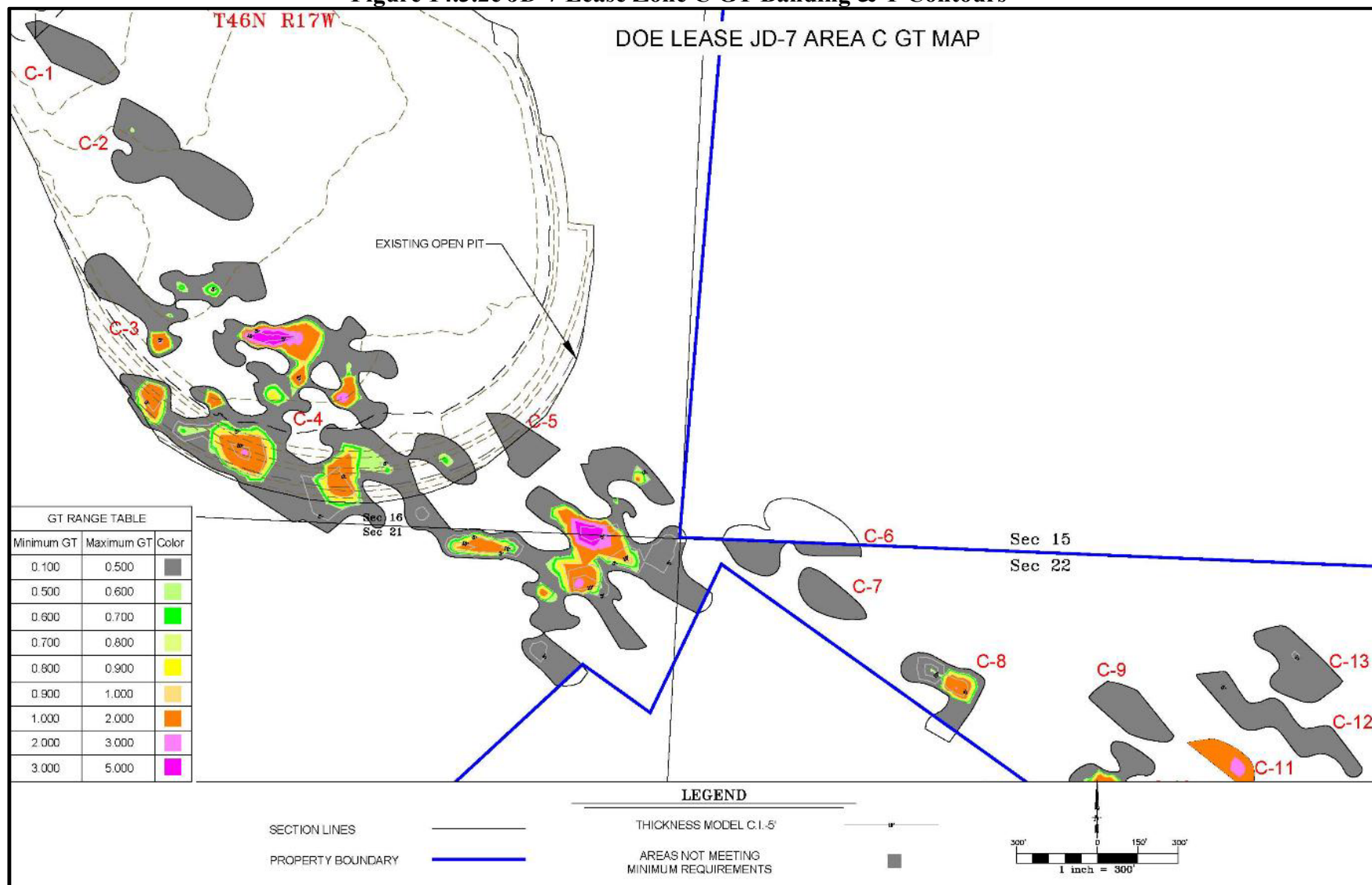
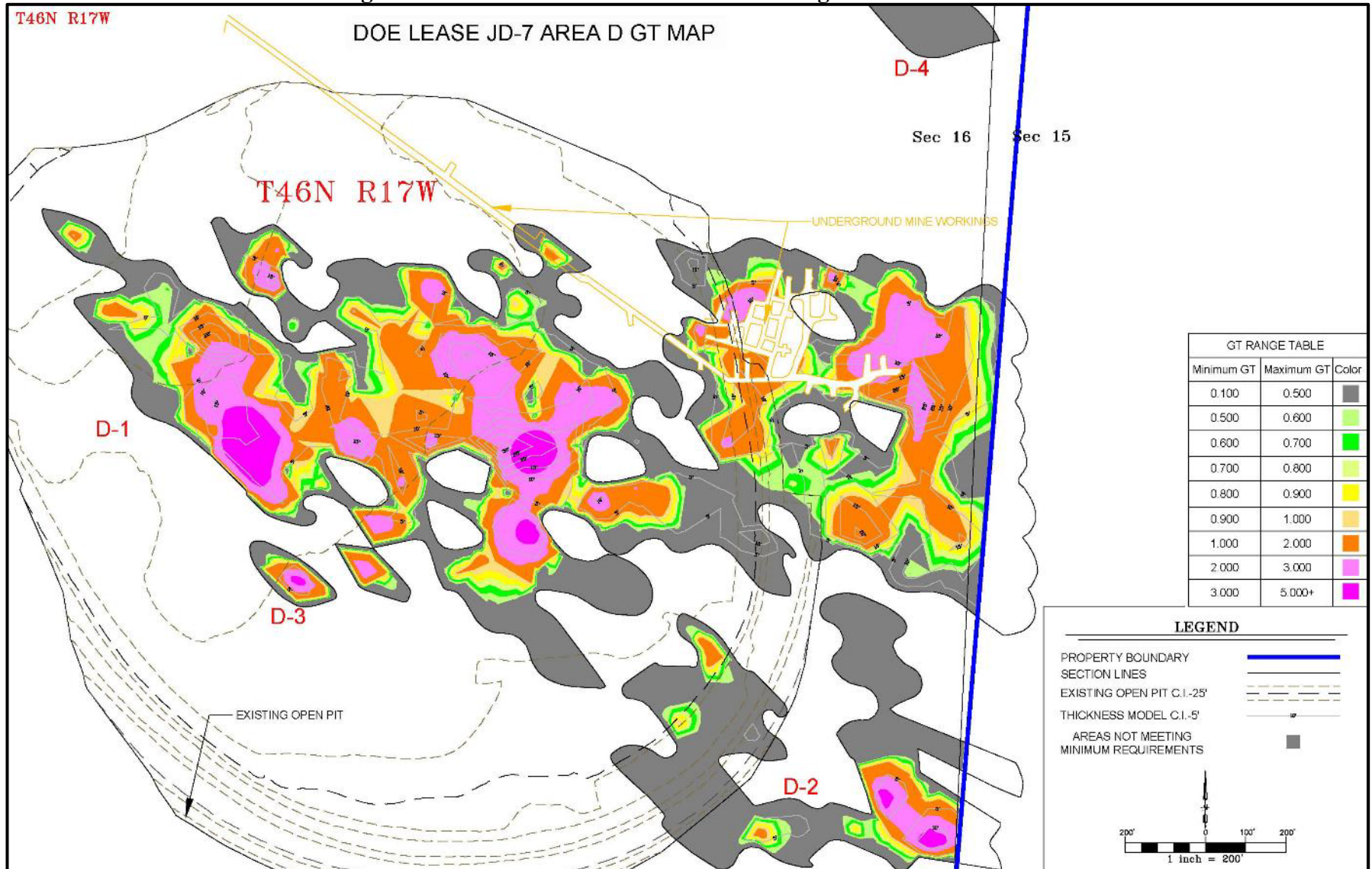


Figure 14.3.2d JD-7 Lease Zone D GT Banding & T Contours



14.3.5 Indicated Mineral Resources, JD-8 Lease

The mineral resource estimate for the JD-8 Lease Area of the Project is presented in Table 14.3.5. See Figures 14.3.3a to 14.3.3c for the JD-8 Lease GT and T resource models at the 0.50 ft% GT Cutoff. The JD-8 Lease has three discrete mineralized zones distributed across the area and is focused primarily within the mid to lower Brushy Basin and upper Salt Wash members of the Morrison Formation. All three mineralized zones contain drill hole intercepts which met initial grade cutoff criteria and were modeled at 0.1 ft%, 0.3ft% and the 0.5 ft% GT Cutoffs. The average difference between the 0.1 ft% to 0.5 ft% GT resource cutoff criteria is an increase in thickness and grade of 18% and 93%, respectively. Sensitivity to the increase in GT cutoff from the 0.1 to 0.5 ft% also causes an average decrease in Indicated Mineral Resource in the JD-8 Lease tons in situ resource and pounds eU₃O₈ of 71% and 43%, respectively.

Table 14.3.5 JD-8 Lease – Indicated Mineral Resource Estimates by GT Cutoff

Zone	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
A	0.1	4.5	0.065	299,000	390,000
	0.3	5.3	0.118	82,000	195,000
	0.5	5.3	0.148	47,000	140,000
B	0.1	2.1	0.136	50,000	135,000
	0.3	2.2	0.480	7,000	62,000
	0.5	2.2	0.512	6,000	59,000
C	0.1	2.9	0.177	327,000	1,159,000
	0.3	3.6	0.233	197,000	917,000
	0.5	3.6	0.260	147,000	761,000
Total	0.1	3.3	0.125	676,000	1,684,000
	0.3	3.9	0.205	286,000	1,174,000
	0.5	3.9	0.241	199,000	960,000

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.3.3a JD-8 Lease Zone A GT Banding & T Contours

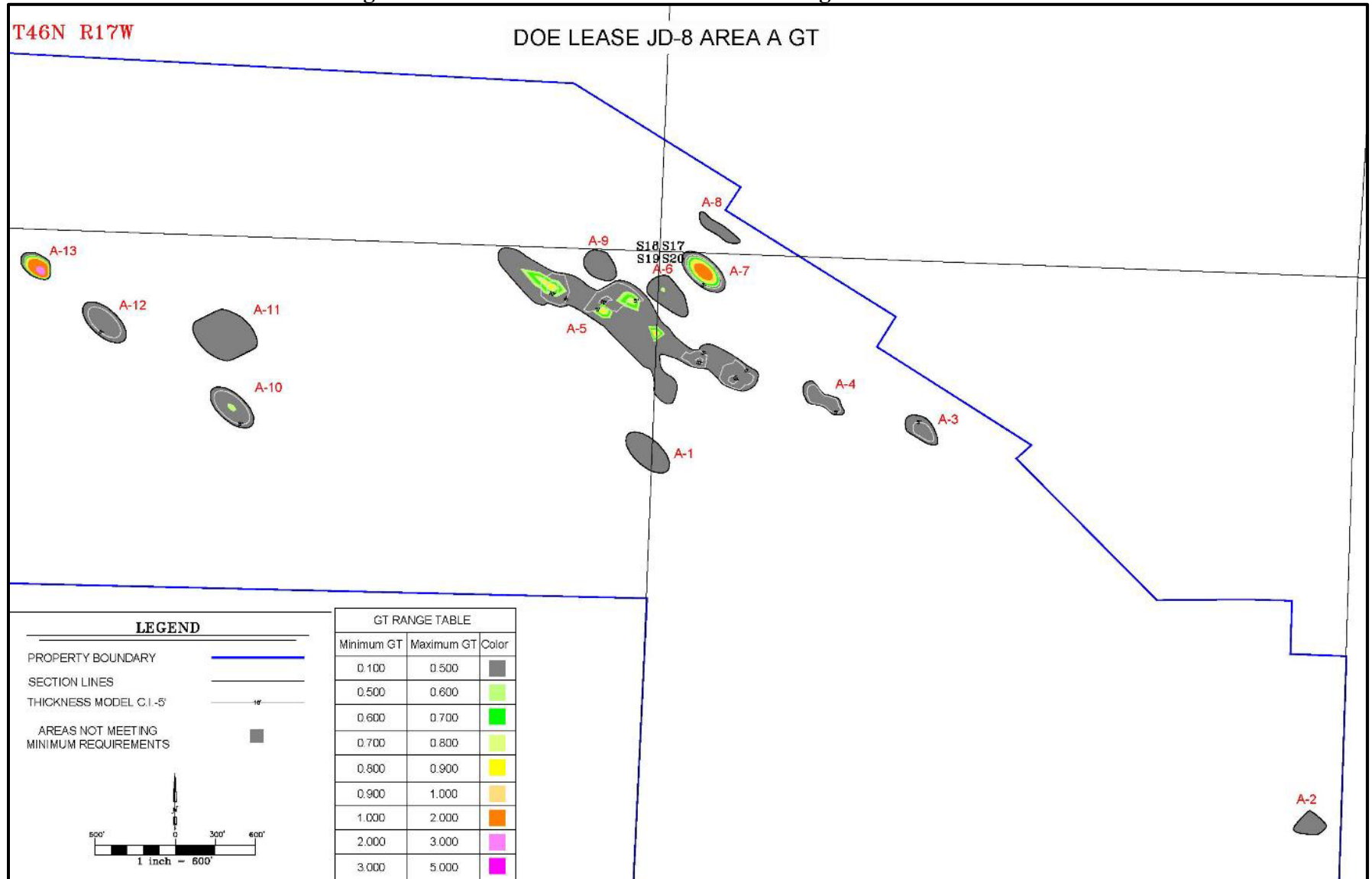


Figure 14.3.3b JD-8 Lease Area B GT Banding & T Contours

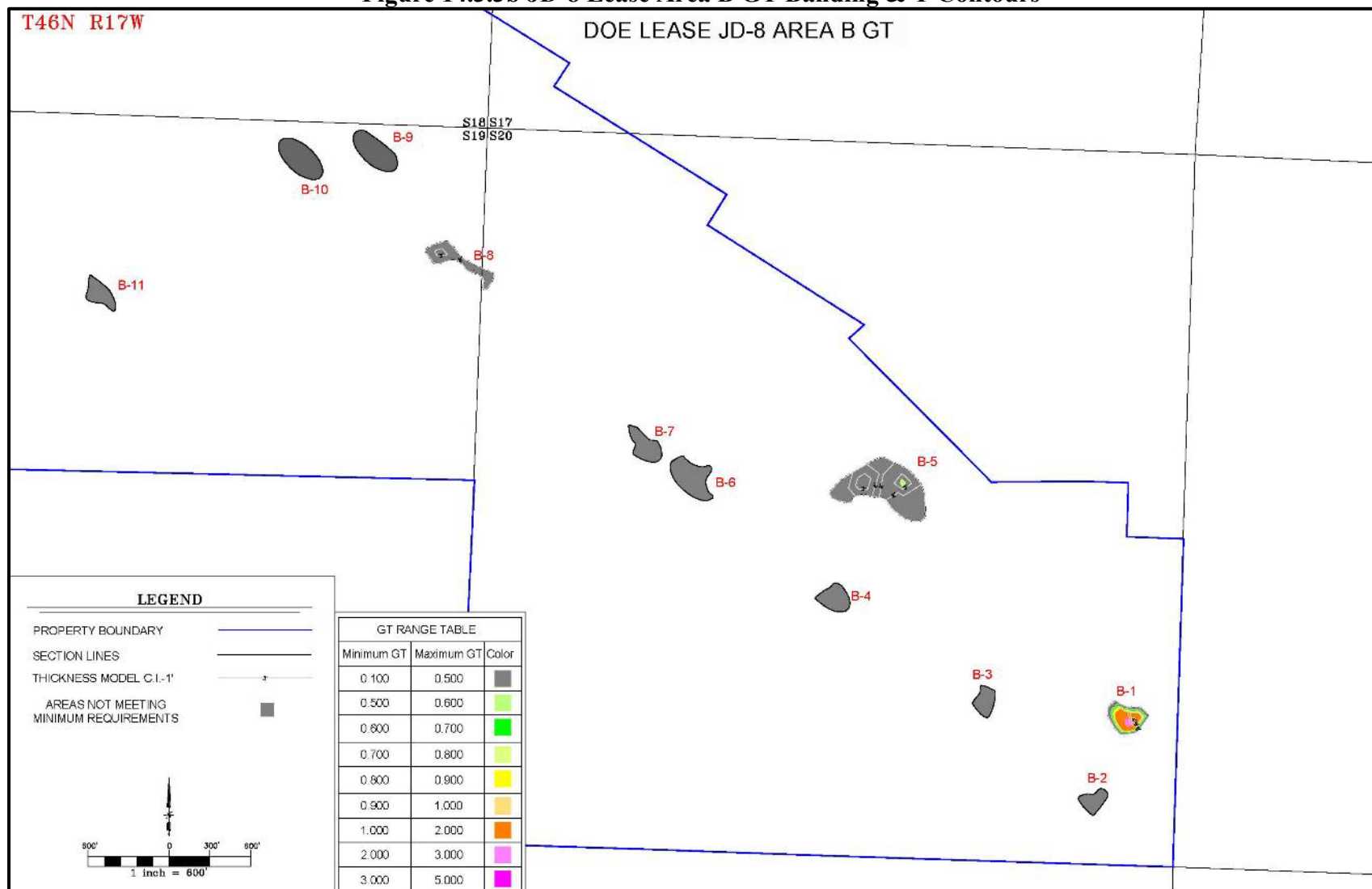
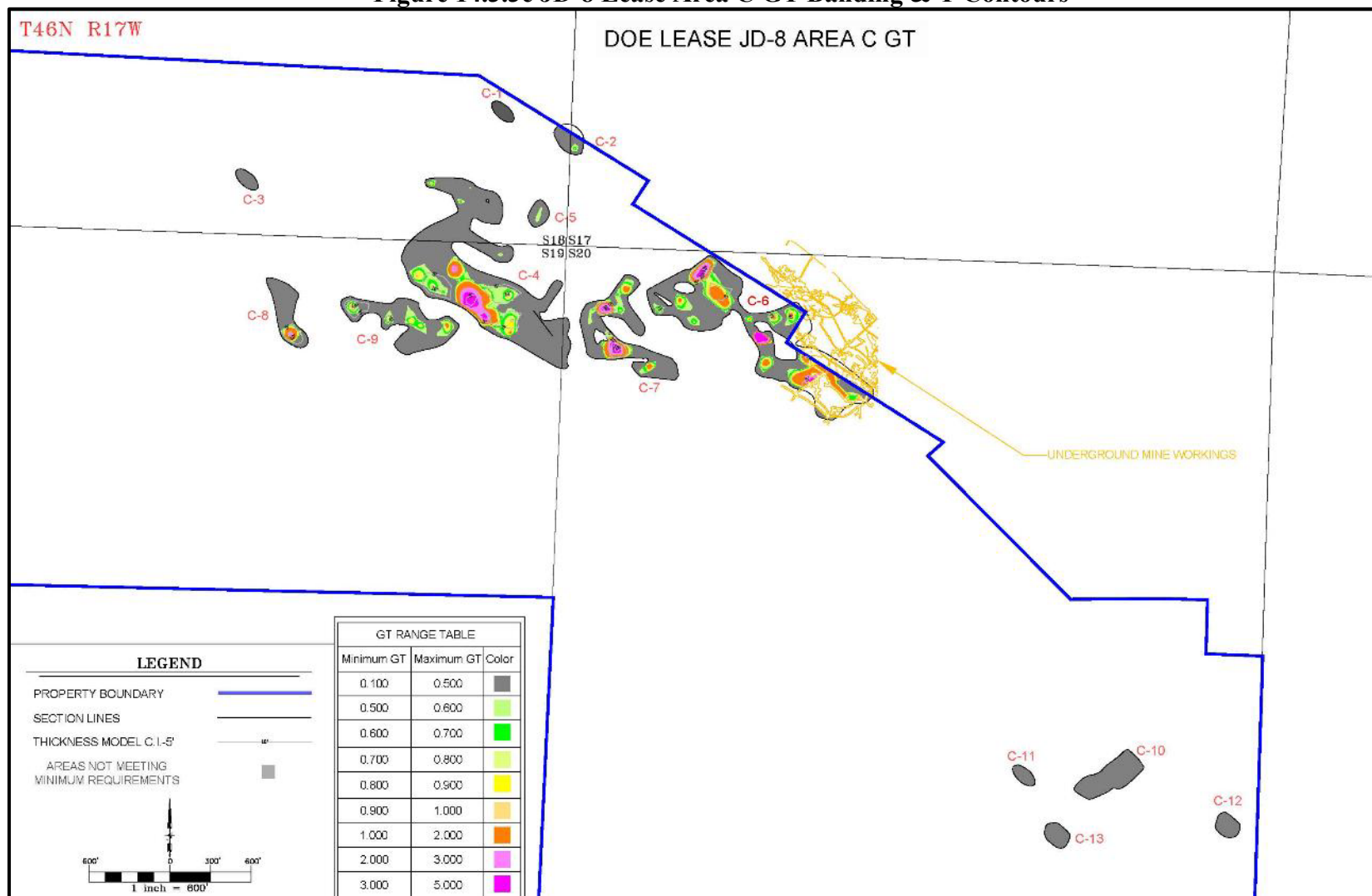


Figure 14.3.3c JD-8 Lease Area C GT Banding & T Contours



14.3.6 Indicated Mineral Resources, JD-9 Lease

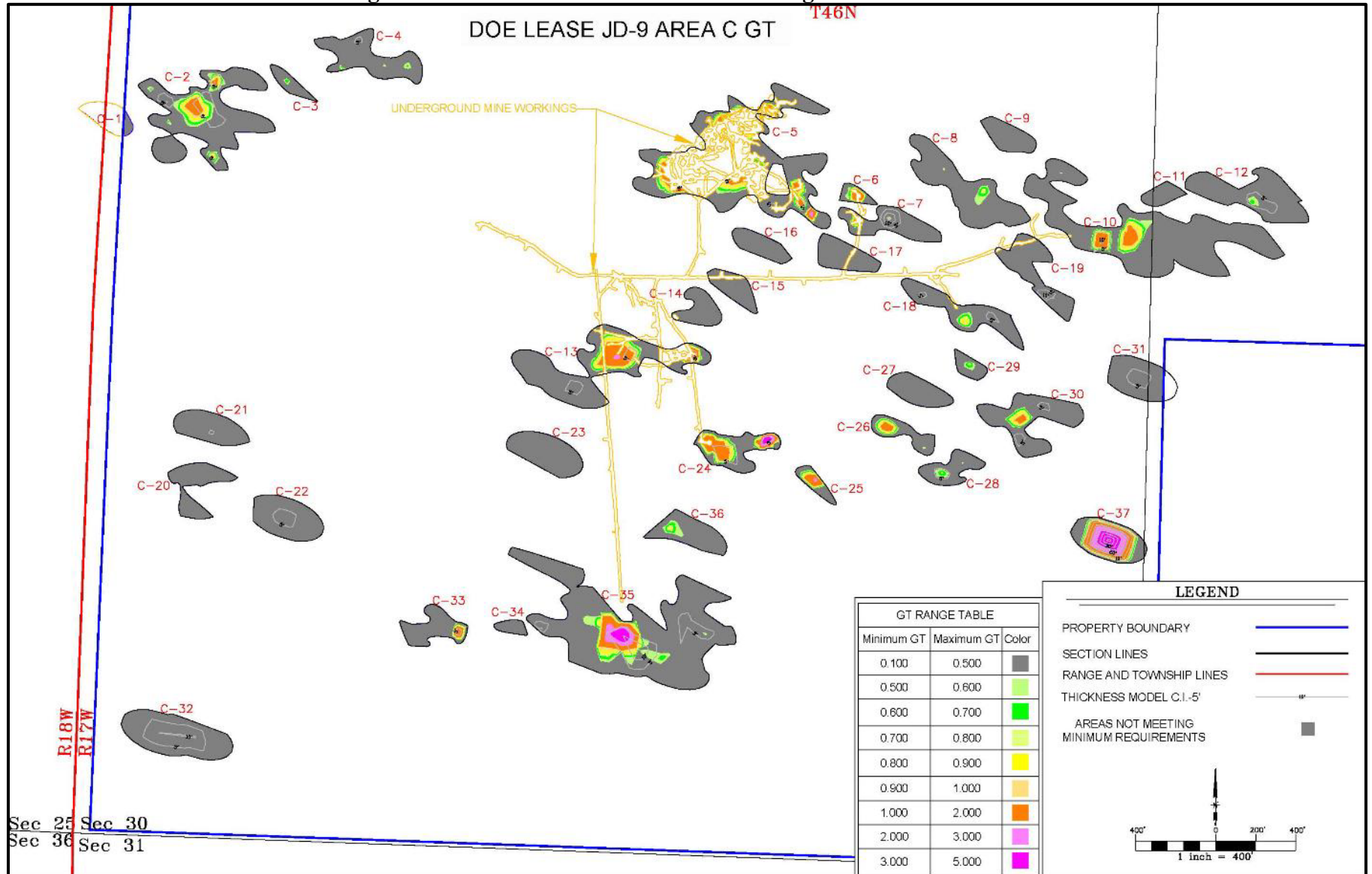
The mineral resource estimate for the JD-9 Lease Area of the Project are presented in Table 14.3.6. See Figure 14.3.4 for the JD-9 Lease GT and T resource models at the 0.50 ft% GT Cutoff. The JD-9 Lease has three discrete mineralized zones distributed across the area and is focused primarily within the upper Salt Wash member of the Morrison Formation. Only one of the three mineralized zones contain drill hole intercepts which met initial grade cutoff criteria and were modeled at 0.1 ft%, 0.3ft% and the 0.5 ft% GT Cutoffs. The average difference between 0.1 ft% to 0.5 ft% GT cutoff criteria is an increase in thickness and grade of 115% and 64%, respectively. Sensitivity to the increase in GT cutoff from 0.1 to 0.5 ft% also causes an average decrease in Indicated Mineral Resource in the JD-9 Lease tons in situ resource and pounds eU₃O₈ of 69% and 49%, respectively.

Table 14.3.6 JD-9 Lease – Indicated Mineral Resource Estimates by GT Cutoff

Zone	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
A	0.1	-	-	-	-
	0.3	-	-	-	-
	0.5	-	-	-	-
B	0.1	-	-	-	-
	0.3	-	-	-	-
	0.5	-	-	-	-
C	0.1	2.6	0.128	349,000	894,000
	0.3	4.4	0.195	141,000	551,000
	0.5	5.6	0.210	108,000	453,000
Total	0.1	2.6	0.128	349,000	894,000
	0.3	4.4	0.195	141,000	551,000
	0.5	5.6	0.210	108,000	453,000

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.3.4 JD-9 Lease Area C GT Banding & T Contours



14.3.7 SM-18 Project Resource Summary

The SM-18 Project is within the SM-18 DOE Lease, located approximately 11 miles north of the Paradox Complex. The SM-18 Lease was previously held and operated by Cotter Corporation into the mid-2000's. This is the initial resource estimate for the property performed by Anfield. The data set acquired from Cotter was validated using existing and available geophysical logs. Drilling density would otherwise justify a higher resource classification. However, more field validation of historic drill hole locations or new confirmatory drilling is needed to raise the classification above Inferred.

The existing data for SM-18 consists of 681 drill collars, of which 677 drill holes had associated grade and thickness data. The 4 drill holes without data were limited to the margins of the SM-18 resource area and thus are considered by the authors to have low impact on the data set overall. GT Contour modeling was performed using the key assumptions described in Table 14.0.5, and was performed at 0.1ft%, 0.3ft% and 0.5 ft% eU₃O₈ GT cutoffs for sensitivity analysis. Nominal minimum thickness at the 0.4 ft% GT cutoff is 4 feet.

The minimum sum GT contour resource model cutoff is the primary cutoff criteria applied to the contour model volume as the initial screening of those portions of the model quantities not meeting the criteria for reasonable economic extraction. In addition, individual model areas outside the conceptual mine limits not meeting a minimum of 10,000 lbs of eU₃O₈ resource were excluded from the resource totals as not meeting a minimum expectation of reasonable economic extraction. It is the opinion of the authors that the resource models are reasonably valid within the mineral resource classifications assigned to each area of the complex.

A sensitivity analysis was performed on the mineral resource models for each zone as shown in Table 14.3.7. The authors recommend the 0.40 GT cutoff for the SM-18 Project. See Figure 14.3.5. With further definition of the mineral resource via drilling and additional mine design and cost evaluation, it is the authors' opinion that the minimum GT cutoff may be lowered with appropriate adjustments to mining methods made.

Table 14.3.7 SM-18 Project Inferred Mineral Resource Estimates by GT Cutoff

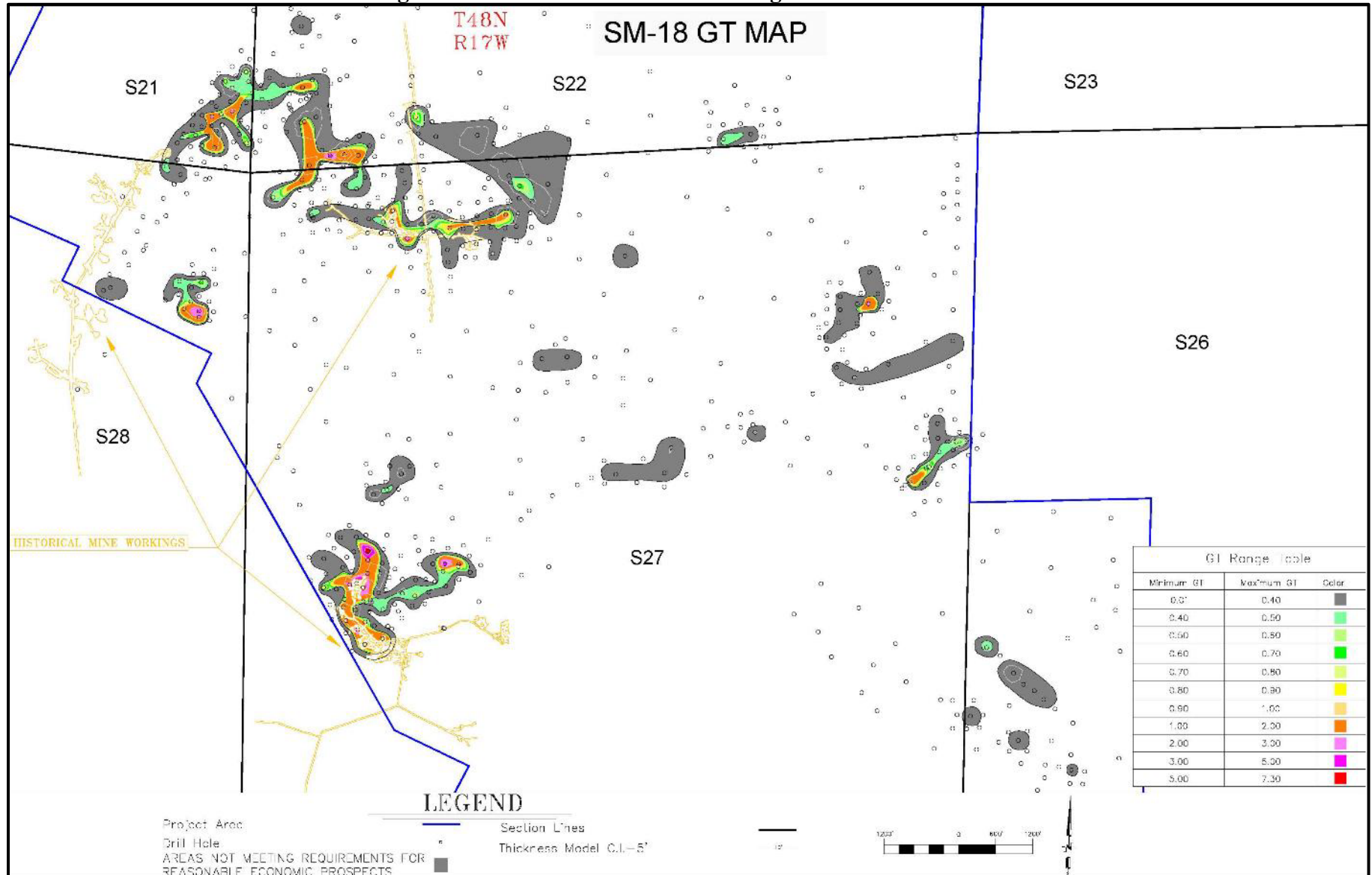
Zone	GT Cutoff (ft%)	AVG. Thickness (ft)	AVG. Grade (%eU₃O₈)	Tons	Pounds (eU₃O₈)
A	0.1	3.2	0.112	574,325	1,286,280
	0.25	4.1	0.152	325,058	985,779
	0.4	4.2	0.211	178,965	755,367
Total	0.1	3.2	0.112	574,325	1,286,280
	0.25	4.1	0.152	325,058	985,779
	0.4	4.2	0.211	178,965	755,367

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction

were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Figure 14.3.5 SM-18 Lease GT Banding & T Contours



14.4 Mineral Resource Estimate – Existing Stockpiles

In addition to in situ mineralization, Anfield controls mineralized stockpiles at two locations:

- A single stockpile at the Patty Ann mine area near the Velvet Mine,
- and several stockpiles at the Shootaring Mill.

In March 2015, BRS completed measurement of the stockpile volumes via ground volumetric surveys using a sub centimeter Trimble GPS system and sampling to determine the average uranium grades of the stockpiles.

Stockpiles were sampled at the same time volumetric surveys were completed in March 2015 by BRS. Prior to sampling, surface gamma surveys were completed, and the sampling sites selected to represent approximate average conditions. The authors consider the sampling to be representative, however, there is a risk that actual concentrations may vary. A description of the stockpile sampling follows.

- The mill stockpiles are located within a licensed mill site. Sampling was conducted by Uranium One personnel at the locations selected by BRS using a small backhoe. The mill stockpiles consist of 4 smaller separate stockpiles (No. 1 through 4) and one large stockpile (No. 5). A single sample was taken from each of the smaller stockpiles which were analyzed separately. Samples from the larger stockpile were taken at 5 separate locations and composited into a single sample for analysis. Approximately 20 kg of sample was taken from Stockpile No. 5 along with approximately 5 kg from each of the stockpiles No. 1 through 4. Uranium One personnel shipped the mill stockpile samples to the laboratory directly along with proper chain of custody forms.
- The Patty Ann stockpiles are located near La Sal, Utah near the junction of the Big Indian and Lisbon Valley roads less than 20 miles from the Velvet mine. The Patty Ann stockpile samples were taken from five separate locations across the pile using a hand auger. Approximately equal volumes were taken from each location then combined into a single composite sample, which was split using a rifling splitter prior to submission to the laboratory. BRS delivered the Patty Ann stockpile to the laboratory along with proper chain of custody forms.

Analysis of the samples was completed by Inter-Mountain Labs (IML) of Sheridan Wyoming. IML is a duly licensed and certified laboratory. Samples were analyzed of both uranium and vanadium content using standard ICP methods (Beahm, et al, 2016). The results of the stockpile volumetric estimation and sampling are summarized in Table 14.4.1.

Key assumptions in the calculation the stockpile mineral resource include:

- The sampling grid used was representative,
- A bulk density of the material of 16.7 tons per cubic yard,
- The base of the stockpiles is flat and projection of the toe of the stockpile thus reasonably reflects the base of the piles, and
- The thickness of cover measured during sampling was representative.

The measurement of the stockpile volumes, sampling, and analyses, was completed under the direction of the authors. In the authors' opinion the determination of the volume, grade and contained pounds of uranium are valid for the purposes of this report and meet the criteria of Measured Mineral Resources.

The effective date of the stockpile mineral resource estimate is March 20, 2015.

Table 14.4.1 Existing Stockpiles

Measured Mineral Resources		Uranium	
Location	Tons	%U₃O₈	Pounds U₃O₈
Shootaring Mill			
Stockpile 1	965	0.238	4,594
Stockpile 2	6,734	0.211	28,418
Stockpile 3	2,680	0.081	4,341
Stockpile 4	2,320	0.061	2,835
Stockpile 5	64,815	0.162	209,999
Total Shootaring Mill*	77,514	0.161	250,188
Patty Ann Stockpile**	48,576	0.123	119,496
Total Stockpiles	126,090	0.147	369,684

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. However, reasonable prospects for future economic extraction were applied to the mineral resource estimates herein through consideration of grade and GT cutoffs as well as mineralization proximity to existing and proposed, conceptual mining. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Section 15: Mineral Reserve Estimates

Not Applicable.

Section 16: Mining Methods

16.1 Mining Basis

The PEA is based on a random room and pillar mining method as was previously employed for underground uranium mining throughout the Colorado Plateau. The Velvet Mine, the Old Wood Mine to the northwest of the Wood resource, the Burro and Ellison Mines which are contiguous with the main Slick Rock area, and the DOE Leases (JD-6, JD-7*, JD-8, JD-9, SM-18, SR-11, SR-13, and SR-13A) were all operated using a random room and pillar and retreat mining method. The room and pillar mining method is a proven method in both districts and is considered the best mining method by the authors for this Project. The characteristics of the mineral deposits are compatible with this method in that their mineralization is generally tabular with some moderate rolls, low to moderate dip, and good rock strength with respect to both roof and floor. The randomness of the room and pillar extraction is due to the variations in uranium grade and thickness encountered. Typically, mining will follow mineralization through underground long-hole drilling in advance of mining, face sampling, and geologic mapping concurrent with mining. Pillars are left where the mineralization is weaker in terms of concentration and/or thickness; however, in some cases temporary roof support will be necessary. The nature of mineralization lends itself to a high extraction rate but requires selective mining. Portions of the JD-7 lease were also developed as an open pit mine. While both underground and open pit extraction is being considered for the JD-7 lease, the PEA incorporated underground mining methods and costs.

The conceptual mine layouts for Velvet and Wood are shown on Figures 16.1.1 and 16.1.2, the conceptual mine layouts for Slick Rock are shown on Figure 16.1.3, and the typical layout of DOE leases on Figures 16.1.4 and 16.1.5. The portions of the mineral resources included within the conceptual mine design and used in the PEA are summarized on Table 16.1.1 which follows.

Table 16.1.1 Mineral Resources Included in PEA

	Portion of Mineral Resource included in PEA					
	Velvet	Wood	Slick Rock*	Uravan	Stockpiles	Total
Tons	429,000	251,000	2,199,000	1,175,000	126,000	4,054,000
Pounds eU ₃ O ₈	2,714,000	1,924,000	9,533,000	5,285,000	370,000	19,826,000
Grade %eU ₃ O ₈	0.316	0.383	0.217	0.225	0.147	0.245
Pounds V ₂ O ₅	3,800,000	2,693,000	58,964,000	25,512,000	nil	90,159,000
Grade %V ₂ O ₅	0.443	0.537	1.312	1.132		1.11
Percent of Estimated Mineral Resource	93%	99%	88%	97%	100%	94%
Percent Inferred Uranium	19%	0%	92%	14%	0%	53%
Percent Inferred Vanadium	100%	100%	100%	100%	0%	100%

*Includes DOE Lease SR-11

At a minimum, a Preliminary Feasibility Study (PFS) is required to demonstrate the economic viability of the measured and indicated mineral resources and qualify an initial estimate of mineral reserves. Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

While not all areas with estimated mineral resources within the Project were included in the PEA, the areas not included may or may not have reasonable prospects for eventual economic extraction. The resource areas included in the PEA are those that are more accessible and/or have better overall economics. However, criteria for reasonable prospects for future economic extraction were applied to all mineral resource areas 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.

Figure 16.1.1 Velvet-Wood Mine Surface Facilities Plan

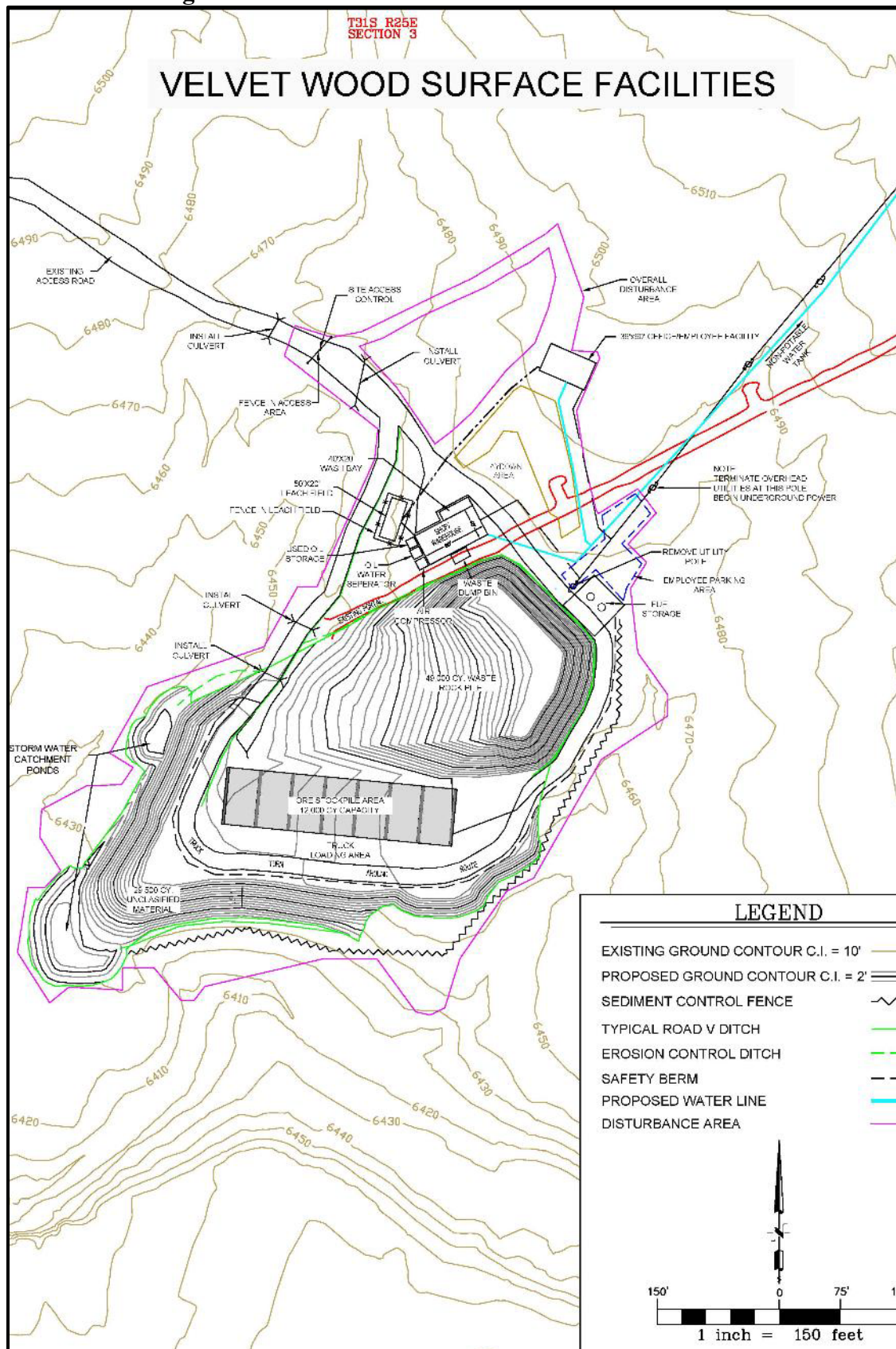


Figure 16.1.2 Isometric of Wood and Velvet Underground Mine Plan

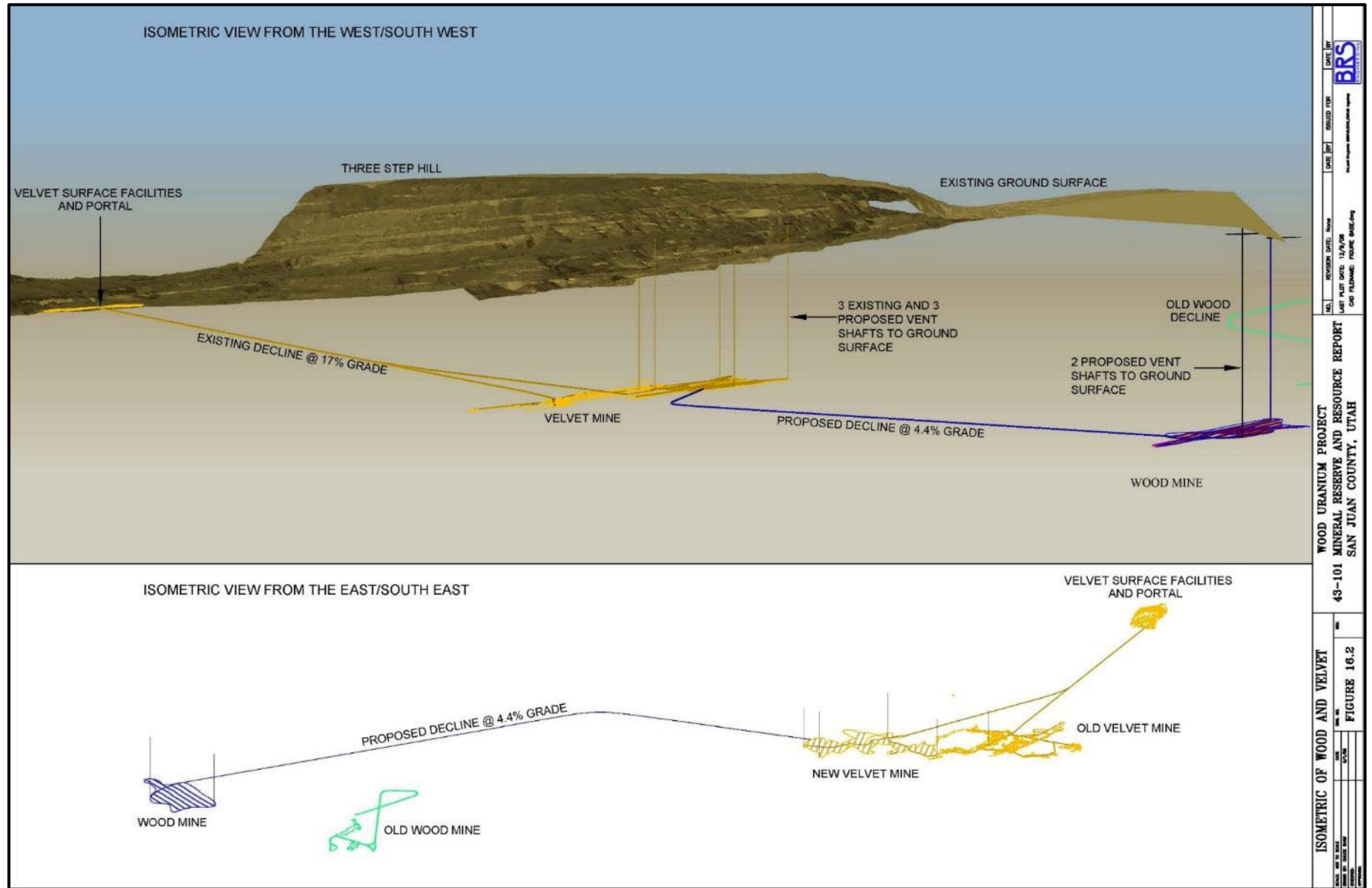


Figure 16.1.3 Slick Rock Conceptual Mine Layout

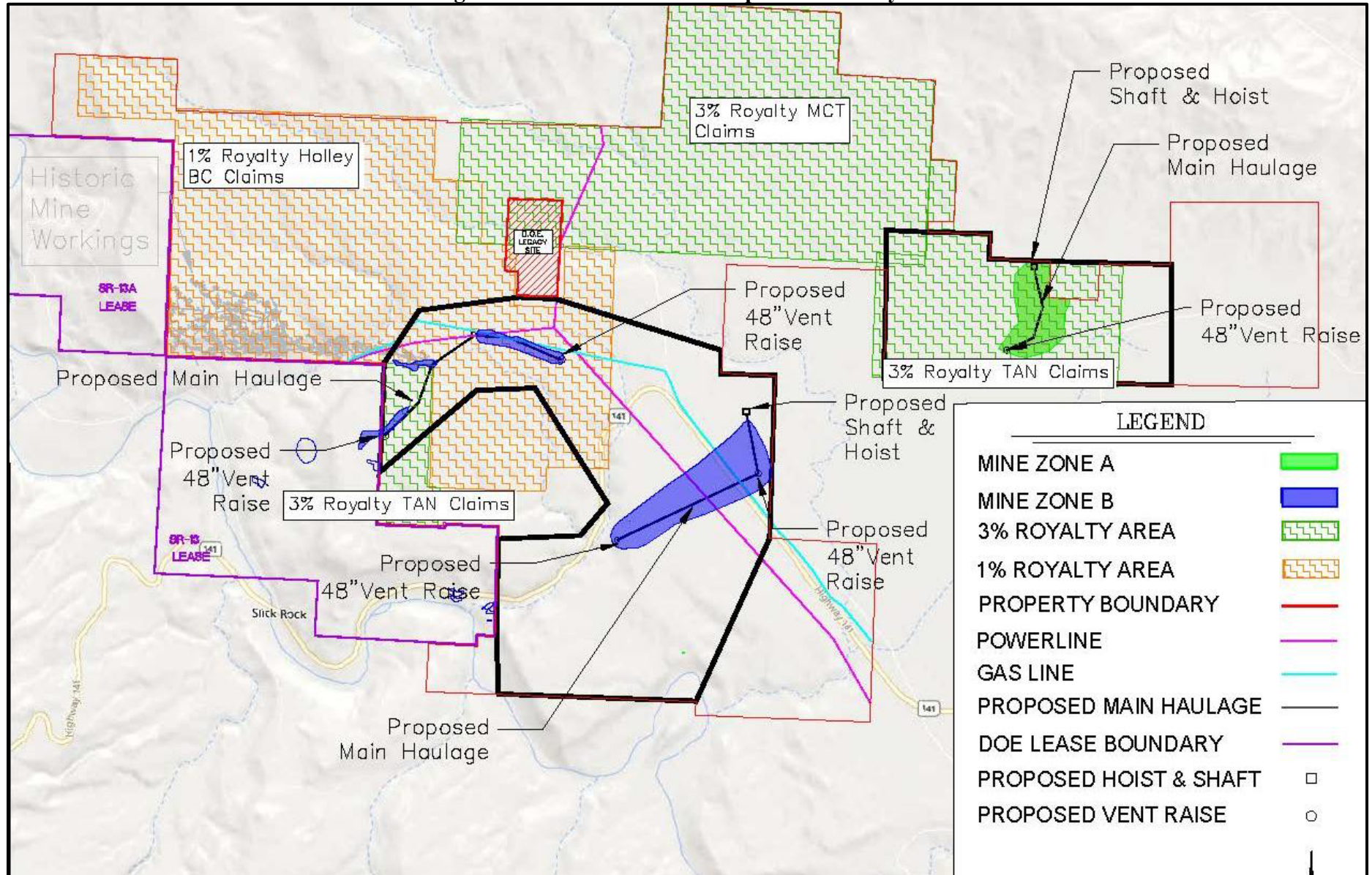


Figure 16.1.4 JD-8 Mine Surface Facilities Plan (Typical of Paradox Mines)

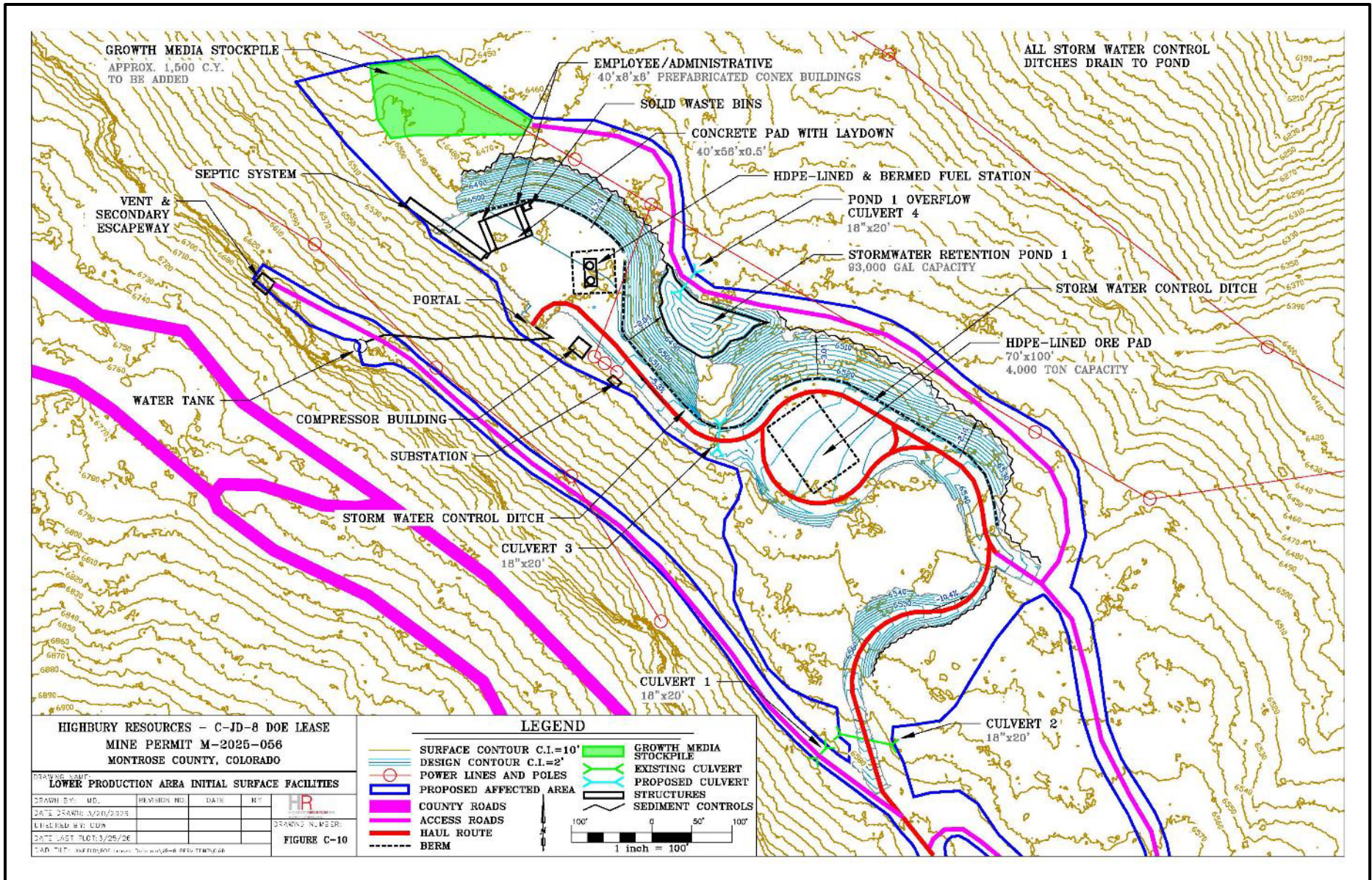
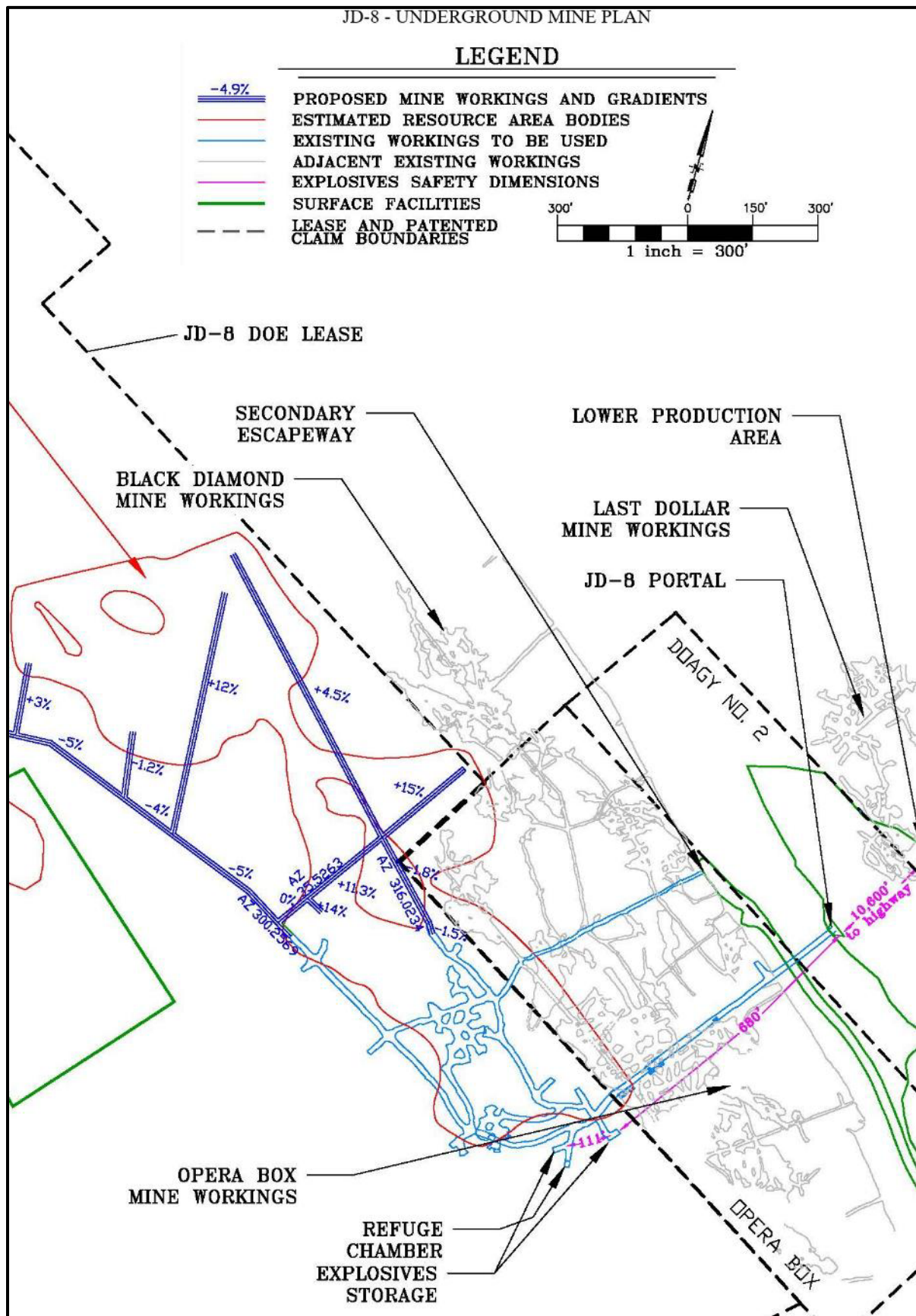


Figure 16.1.5 JD-8 Mine Layout (Typical of Paradox Mines)



16.2 Mining Methods

Mining methods will be very similar for each mine. Mining will be accomplished via random room and pillar mining methods using jacklegs or single boom jumbo drills for face blast holes drilling and 2 to 3 cubic yard Load Haul Dump mining equipment (LHD) used to help maintain clean mucking of mineralized material and of waste. Each mine will have an exploration drill and crew to delineate mineralization ahead of mining. Because of the variable grades, numerous headings are needed to maintain a consistent grade to the mineralized material stockpiles and to achieve the desired tonnage. A minimum mine height of 7 feet is planned. Where mineralization is less than the mine height split shooting will be employed to minimize mining dilution.

16.2.1 Velvet Mine

There is an existing 12' x 9' decline from the surface, 3,500' in length at the Velvet Mine. The PEA is based on re-entry and stabilization of this decline to access the Old Velvet Mineralization. Extending from this decline will be an additional 12' x 9' decline, 3,300' in length, that will branch off to access the New Velvet Mineralization. Main entries, secondary entries, and development drifts (8' x 10') will be driven for the development and access to the New Velvet Mineralization. Main entries, once within the mineralized horizon, will follow the edge of the mineral deposit leaving one rib in waste rock and the other within mineralized material. This will provide some mineralized material and minimize waste while driving the mains and will provide some support along the main entries upon retreat mine. Secondary entries will be driven off the mains on 100' centers and extended to the edge of mineralization using long-hole drilling and probes to map the mineralized material as development proceeds. Once the development drifts are finished, full face retreat mining will start working at the back and retreat toward the main entries. Selective mining will be conducted in these areas separating mineralized material from waste.

16.2.2 Wood Mine

Several options were considered to access the Wood Mine as summarized on Table 16.2.1. The current permit includes the decline from the New Velvet workings to the Wood Mine. As part of the preparation of this PEA, alternatives to this approach were evaluated. As a result, based on cost and timing considerations, the preferred alternative is to access Wood Mine via a shaft independent of the Velvet mine. This approach will require an amendment of the mine permit; however, the current mine permit did allow for the location of mine vents and a mine dewatering system. The change to the current plan would include converting one vent to a production shaft, the design and permitting of surface facilities and stockpiles, and additional site access. These additions are contained within the current mine permit boundary. Any option for a new decline would require property acquisition and would fall outside the current permit boundary.

In the event that mineralization extends either from the Wood or Velvet mines, the mineralization will be defined by underground drilling and the mines extended to exploit any extensions of economic mineralization.

Table 16.2.1 Options for Entry into the Wood Mine

Option	Max Grade	Length	Decline Size	Tons Muck	Additional Requirements
From New Velvet Workings	1.4%	11,442.9	12' x 9'	85,121	
From Old Wood Decline	21.9%	2,858.0	12' x 9'	21,260	Obtain Permits and Land Rights, Surface Facilities, Old Wood Decline Rehabilitation
From Old Wood Workings	12.8%	2,366.0	12' x 9'	17,600	Obtain Permits and Land Rights, Surface Facilities, Old Wood Decline Rehabilitation
New Portal from Surface	10.0%	9,620.0	12' x 9'	71,561	Obtain Permits and Land Rights, Surface Facilities
New Portal from Surface	12.0%	8,017.0	12' x 9'	59,636	Obtain Permits and Land Rights, Surface Facilities
New Portal from Surface	15.0%	6,413.0	12' x 9'	47,704	Obtain Permits and Land Rights, Surface Facilities
New Portal from Surface	20.0%	4,811.0	12' x 9'	35,787	Obtain Permits and Land Rights, Surface Facilities
New Portal: Shaft from Surface*	100.0%	1,112.0	12' diam	8,662	Obtain Permits and Land Rights, Surface Facilities, Hoisting

*Preferred Alternative

16.2.3 Slick Rock

The Slick Rock Mine will use 12-foot diameter main shafts and hoists to access and haul out of the mine workings. There are two proposed shaft and hoist locations. The first main shaft would be located in the east, accessing the resource centered in the A Zone. The second main shaft would access the central portion of the B Zone. Existing portals and declines from the Burro and Ellison mines will provide access to the north-northwest portion of the B zone and would be connected to the B zone shaft. A total of five 48-inch vent raises would provide for primary ventilation, with one in the eastern A Zone and two per B Zone developments.

Initial dewatering will use the existing vents from the Burro Mine. Dewatering wells will be established near the A and B shafts prior to sinking the shafts. Depending on dewatering rates the shafts could also be used for dewatering.

Shafts will be driven at both Zone A and B as depicted on Figure 16.1.3. The first hoist would be installed in the easternmost area of the deposit in the A zone while the driving of the central B Zone shaft concludes. After the first hoist is set, construction of the second hoist in the central area would begin. At the same time, existing declines from the Burro and Ellison mines will be rehabilitated and extended. This will allow access to mineralization on the SR-13 leases and the western side of Area B. The declines will merge and ultimately connect to the shaft allowing for multiple access points and ventilation.

See Figure 16.1.3 for the conceptual mine layout of Slick Rock Mine.

16.2.4 DOE Leases

DOE Leases currently include JD-8 and the adjacent JD-6 and JD-9 on leases Monogram Mesa in Montrose County, the adjacent JD-7 lease which was partially developed as an open pit mine, the SM-18 lease in the Uravan District in Montrose County and the SR-11 lease in the Slick Rock District.

Mineralization at JD-8, JD-6, JD-9, SM-18, and SR-13 leases are above the water table, so no dewatering or water treatment is required. Mineralization can generally be accessed via existing mine portals and decline. JD-7 mineralization may be accessible via open pit and/or underground mining methods. Design alternatives are being evaluated on a technical and cost/benefit basis for JD-7. For the purposes of the PEA, underground methods were assumed as they generally result in a higher per ton mining cost and are thus conservative.

16.3 Pre-Production Mine Development

Before the production of the Velvet Mine begins, several aspects of the mine must first be running. The mine is currently flooded and will require dewatering. Dewatering is anticipated to take 3 to 6 months at a rate of approximately 250 gpm. The Velvet portal has been reopened and rehabilitation is in progress. As dewatering lowers the water level in the main decline, rehabilitation of the main Old Velvet access will begin. In months three and four, access to and stabilization of the existing Vent A will take place. In month five, a second crew will develop access to the west side for further production of Old Velvet, and in months five through ten the first crew will develop a new decline down to the New Velvet. Once these development activities have been completed, production can begin on the New and Old Velvet Mines.

Pre-production mine development for the Wood Mine includes driving the main shaft, installation of hoists, dewatering, development work, and up-reaming the mine vent. Additional permitting for the shaft, vents, and the dewatering treatment and discharge facilities will be required.

Slick Rock pre-production mine development will include driving two main shafts, installation of hoists, and possible dewatering of the mineralized zone. After the first hoist is installed, construction of the second shaft and hoist will coincide with the production of the first resource area.

With the exception of the JD-7 lease, pre-production consists of rehabilitating the portal, extending the decline to the mineralized zone, establishing ventilation, refurbishing or replacing surface facilities and infrastructure, establishing mine stockpile and waste areas, and improving existing access roads.

16.4 Mine Equipment

Table 16.4.1 provides a typical equipment list for a conventional room and pillar mine applicable to the Velvet-Wood and Slick Rock mine complexes.

Table 16.4.1 Major Mining Equipment List

Equipment	Velvet Mine	Wood Mine	Slick Rock Mine (Each)	DOE Lease Mines (Each)
Shaft Hoist (12-foot diameter shaft)	0	1	1	0
Development Jumbo - Single Boom	1	0	0	0
Jackleg Drill w/ Leg	6	6	6	6
Compressor 350 cfm	2	2	2	1
LHD 3 cy	3	2	2	2
Truck 7 to 10 ton	4	4	4	4
Boss Buggy	4	3	3	3
Skid Steer 650	2	2	2	2
Service Vehicle	1	1	1	1
Scissor Lift Truck/Tee Handler	1	1	1	1
Main Ventilation Fan 5'	4	5	5	4
Electric Motor 100 hp	4	5	5	4
Accessories for 5' Fan	4	5	5	4
Auxiliary Fan 14000 cfm	9	9	9	2
Exploration Drill	1	1	1	1
D6 Dozer	1	1	1	1
Motor Grader 14	1	1	1	1
Water Truck 4000 gal (surface)	1	1	1	1
Portable Power Center 150 KVA	4	4	4	4
Refuge Chamber	2	2	2	2

16.4.1 Operating Parameters

The random room and pillar mining method will utilize jacklegs and/or single boom jumbo drilling, 2-3 cubic yard LHD face mucking, and 7-10 ton truck haulage with the associated support equipment. Each mining crew will have 3 personnel working on a 10-hour shift. It is estimated that each mining crew will be capable of drilling, blasting, loading, and hauling 60 tons of material per shift. Multiple working faces will be established to accommodate the cycles of mining activities and multiple crews working in tandem. Equipment can be shared between the crews, and 2 to 3 primary mining crews will be working simultaneously supported surface staff and laborers. The mines will operate two shifts for up to 330 days per year. Thus, 2 crews per shift, 2 shifts per day will be capable of producing 240 tons per day (TPD) or some 79,200 tons per year (TPY). This total tonnage is a combination of ore and waste. Ore production is dependent on the waste ratio, which is typically 1:1 or less depending on the thickness of mineralization.

Table 16.4.2 summarizes the estimated mine productivity.

Table 16.4.2 Mine Productivity

Direct Labor	UG Development Production & Exploration	2 crews Per Shift	UG staffing 2 Shifts per day	Surface Support Staff		TOTAL SITE STAFF	Total TPD
1-Crew (3-man)	3	6	12	Grader/Dozer	1		
Surface Mechanic	1			Mechanic	1		
Toplander	1		2	Loader/Dump Truck	1		
Exploration Drillers (UG)	2		2	Water Truck & Helper	1		
Nipper/utilities	2		4	Mine Supervisor	1		
Total 2 crews			20		5	25	240
Add 3rd Crew	3	6	26		5	31	360

16.5 Mine Production Schedule

16.5.1 Mine Production Schedule

The mine production schedule is based on two primary mining crews for each mine complex, for a total of four mining crews per mine. The production schedule is based on the existing tonnage capacity at the mill of 750 tons per day (TPD) or a maximum of 250,000 tons per year. The current plan is to increase that capacity 30% to 1,000 TPY as the mines reach full capacity in year 3. The expansion has been provided for in the license amendment. Additional capital including the addition of 2 leach and 2 CCD tanks with appurtenances is planned for year 3. These additions can be made without modifying or expanding the leach or CCD areas of the mill.

The mine production schedule shown on Table 16.5.1 shows the existing stockpiles as the initial mill feed. The intent is to use the stockpiled material for the startup of the uranium circuit. There is some vanadium in the stockpiled material, but it may not be recovered and is not included in the plan, as construction of the vanadium circuit will follow the uranium circuit. The mill stockpiles are within the mill license area and require no further permitting. The Patty Ann stockpiles are located in the Lisbon Valley and would require permitting. However, removal of the Patty Ann stockpiles would not result in significant new disturbance, and their removal would also have the benefit of cleaning up and reclaiming the site.

Production from mining will begin with contemporaneous operation of the Velvet and Wood mines. The Velvet-Wood mine complex has been permitted with the State of Utah and the BLM. Anfield has re-opened the Velvet mine portal. The current permit included a decline between the Velvet and Wood mines to access the Wood mine. The plan herein is to construct a shaft at the Wood mine to provide earlier access to mineralization. This will require a permit amendment as previously discussed in Section 20. The decline connection may ultimately be established between the Velvet and Wood if additional mineralization is discovered by underground drilling extending between them. Following the establishment of mine production from Velvet and Wood, mine shafts will be constructed at Slick Rock A and B with additional access to Slick Rock B via the existing Burro and/or Ellison declines.

Mine production is planned from Wood for years 1-4, Velvet for years 1-7, and Slick Rock for years 1-14. Beginning in year 5 additional mines are planned for the DOE leases located at the Paradox, Uravan, and Slick Rock mine complexes. The combination of the DOE leases are planned to provide a portion of the mill feed for years 5-14.

16.5.2 Risks Related to the Mine Production Schedule

Scheduling risks related to the initial mill feed from the existing stockpiles and the Velvet and Wood mines is considered low by the authors. The mine permit is in place for the Velvet and Wood mines. Existing stockpiles are available as previously discussed.

There is a risk that the planned schedule for the Slick Rock mines could be delayed for technical reasons or by delays in permitting. While this risk exists, the impact of a one-year delay in the current plan would reduce the estimated NPV by \$36 million USD pre-tax, if the planned production was not offset by other captive mines or toll milling arrangements.

There is a risk that the DOE leases may not be renewed in 2030 and/or the royalty burden on the leases may not be reduced as discussed in Section 21. Under the worst case this could reduce the NPV by \$209 million USD pre-tax. However, production from the DOE leases is not currently planned until 2032, allowing sufficient time for Anfield to offset this loss from other captive mines or toll milling arrangements.

Table 16.5.1 Production Schedule (units x 1,000)

Production Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	Stockpiles	Wood	Wood	Wood	Wood	JD8/JD9/JD6	JD8/JD9/JD6	JD7	JD7	JD7	JD7	JD7	SM18/SR11	SM18/SR11	SM18/SR11	Total
Tons Product	126	48	61	71	71	117	117	151	151	151	151	151	144	144	72	1,727
Grade % eU ₃ O ₈	0.147	0.353	0.363	0.403	0.403	0.303	0.303	0.204	0.204	0.204	0.204	0.204	0.224	0.224	0.224	0.243
Pounds eU ₃ O ₈	370	339	440	572	572	709	709	617	617	617	617	617	645	645	322	8,408
Grade %V ₂ O ₅	0	0.495	0.508	0.564	0.564	1.51	1.51	1.02	1.02	1.02	1.02	1.02	1.12	1.12	1.12	0.96
Pounds %V ₂ O ₅	0	475	617	801	801	3,545	3,545	3,085	3,085	3,085	3,085	3,085	3,224	3,224	1,612	33,268
	Velvet	Velvet	Velvet	Velvet	Velvet	Velvet	Velvet	Velvet								
Tons Product		39	65	74	71	71	73	37	-							429
Grade % eU ₃ O ₈		0.389	0.319	0.355	0.323	0.320	0.298	0.171								0.316
Pounds eU ₃ O ₈		301	414	524	457	457	435	126								2,714
Grade %V ₂ O ₅		0.000	0.447	0.498	0.452	0.448	0.418	0.239								0.44
Pounds %V ₂ O ₅		421	580	733	640	640	609	177								3,800
		Slickrock A&B	Slickrock A&B	Slickrock A&B	Slickrock A&B	Slickrock A&B	Slickrock A&B	Slickrock A&B	Slickrock A&B	Slickrock B	Slickrock B	Slickrock B	Slickrock B	Slickrock B	Slickrock B	
Tons Product		101	155	155	155	155	155	155	155	160	160	150	150	160	57	2,024
Grade % eU ₃ O ₈		0.233	0.232	0.232	0.232	0.232	0.232	0.232	0.232	0.187	0.187	0.199	0.199	0.187	0.187	0.215
Pounds eU ₃ O ₈		471	719	719	719	719	719	719	719	598	598	598	598	598	213	8,703
Grade %V ₂ O ₅		1.423	1.413	1.413	1.413	1.414	1.414	1.414	1.414	1.139	1.139	1.215	1.215	1.139	1.139	1.31
Pounds %V ₂ O ₅		2,875	4,385	4,385	4,385	4,385	4,385	4,385	4,385	3,645	3,645	3,645	3,645	3,645	1,299	53,091
Tons Total	126	188	281	300	297	343	345	343	306	311	311	301	294	304	129	4,180
Grade % eU ₃ O ₈	0.147	0.296	0.280	0.303	0.294	0.274	0.270	0.213	0.218	0.195	0.195	0.202	0.211	0.204	0.207	0.237
Pounds eU ₃ O ₈	370	1,112	1,573	1,814	1,748	1,885	1,863	1,462	1,336	1,215	1,215	1,215	1,242	1,242	535	19,826
Grade %V ₂ O ₅	0	1.005	0.994	0.987	0.981	1.248	1.238	1.114	1.220	1.081	1.081	1.117	1.168	1.130	1.128	1.08
Pounds %V ₂ O ₅	0	3,771	5,581	5,918	5,825	8,569	8,539	7,646	7,470	6,730	6,730	6,730	6,869	6,869	2,911	90,159

16.6 Mine Labor

Qualified mine labor is available in the region. Table 16.6.1 summarizes the personnel requirements by classification needed to meet the production estimates as summarized in Table 16.5.1.

Table 16.6.1 Labor Requirements

Labor	Per Mine Op 330 Days/yr	3 Mines	4 mines
Mining Crew	18		
Toplander	3		
Exploration Drillers (UG)	4		
Nipper/utilities	6		
Grader/Dozer	2		
Mechanic	2		
Loader/Dump Truck	2		
Water Truck & Helper	2		
Mine Supervisor	2		
2 crews	41	123	164
3 crews	50	150	200
Salaried Staff			
General Manager	1	1	1
Chief Engineer	1	1	1
Mine Engineer	2	3	4
Chief Geologist	1	1	1
Mine Geologist	2	3	4
Personnel/Safety Manager	1	1	1
Environmental Manager	1	1	1
Payroll/Book-keeper/Sect'ry,	1	1	1
Purchasing Agent	1	1	1
Mine Electrician	1	1	1
Utility Person (Laborer)	2	4	6
Total	14	18	22

16.7 Mine Support and Utilities

Mine facilities located on the surface would include a mine office, warehouse, and workshop, change room and dry facility, a lined storage area for mined products, storage for explosives, and various appurtenances. Utilities would include electrical power, a water supply, and a wastewater disposal system. Water would be supplied via treated mine wastewater and stored in a stock tank. Potable water will be trucked in as needed.

16.8 Mine Ventilation

A specific ventilation plan will be developed for each mine including the main fan and raise locations that should, with appropriate controls, enable the mine to meet applicable Mine Safety Health and Administration (MSHA) ventilation requirements. The primary contaminants of concern for the ventilation system include radon, diesel particulate matter (DPM), diesel exhaust gases (CO, CO₂, NO_x, and SO_x), blasting fumes, and silica dust. Once the mine is operational, a sampling program should be instituted to identify and quantify the airway contaminants.

The PEA includes capital and operating cost allowances for mine ventilation reflecting typical expected conditions and requirements.

16.9 Transportation

The PEA includes capital and operating cost allowances for the transportation of mined product to the Shootaring Canyon mill from the mines located in Utah and Colorado which are 180 miles or more distant from the mill. For the purposes of the PEA, Anfield plans to own and operate the transportation system. Contracting the transportation could also be considered. In the PEA transportation costs are considered a direct operating expense.

Trucking laws vary from state to state. In this case, Colorado will allow a maximum gross vehicle weight of 80,000 pounds. By contrast, if appropriately permitted, Utah will allow a maximum gross weight of 129,000 pounds. When the weight of the equipment is considered, this results in the company being able to haul approximately 25 tons of ore in Colorado and up to 38 tons of ore in Utah on each truckload. This is accomplished by different equipment, with different capital and operating costs.

At full operating capacity, the mill is expected to process 1,000 tons of ore per day. This means that the mill will require as few as 27 and as many as 40 truckloads per day to operate at full capacity. Given the distances between the mill and the mines, each truck will only be able to deliver one load per day to the mill. To maximize efficiency and to minimize capital expenditure, the trucks will operate 7 days per week. The monthly equipment costs have been reduced to per day costs for purposes of this assessment.

All loads will be considered by relevant authorities to be hazardous material. As such, all trucks and trailers must be appropriately placarded. Each driver will be required to have a hazmat endorsement on his or her commercial driver's license. The company's operating authority, issued by the Department of Transportation, must allow for the transport of hazardous materials, and the company will need to have appropriate insurance coverage.

The costs set forth assume new equipment to ensure that each piece meets the required specifications. At full capacity, the operation will require 30-50 truck/trailer combinations.

The following cost analysis considers haul from Colorado under Colorado regulations and weight limits, haul from Utah under Utah regulations and weight limits, and a combined approach wherein the mine product is transported to a Utah site and then the material reloaded onto a higher capacity Utah truck for transport to the mill.

16.9.1 Assumptions

Colorado will only allow a maximum weight of 80,000 pounds. Standard tractors that would be capable of hauling any semi-truck load will be utilized. The trucks will be day cabs with 3 total axles (2 drive axles and one steer axle). This would allow a payload of 25 tons per truck. Utah will allow a maximum gross weight of 129,000 pounds. The increased capacity would include one additional load bearing axle. This would allow a payload of 38 tons per truck.

Estimated costs include:

- Equipment purchase
- Insurance
- Labor including Hazmat qualified driver
- Fuel and lubricants
- Tires and wear parts
- Maintenance

One way haulage distance:

- Velvet and Wood Mines, 177 miles.
- DOE leases Uravan and Paradox mines, 238 miles.
- Slick Rock Mines, 200 miles.

Cost Per Summaries:

- Velvet/Wood
 - Trip cost per mile, Utah loads, \$1.06/mile or total trip cost \$375.24.
 - Fixed costs for Utah trucks are \$630.34 per day.
 - Total cost of each Utah trip is \$1,005.58.
 - **At 37 tons per load, the cost is \$27.18 per ton.**
- DOE leases or Slick Rock
 - Worst case is 238 miles from the JD-8 mine
 - Trip cost per mile, Colorado loads, \$.72 or total trip cost \$342.72.
 - Fixed costs for Colorado trucks are \$567.77 per day.
 - Total cost of each Colorado trip is \$910.49
 - **At 25 tons per load, the cost is \$36.42 per ton.**
- Combine Colorado/Utah
 - In this scenario material would be transported 70 miles from the Colorado mines to the Velvet mine using Colorado legal tractor/trailer combinations.
 - The detour to the Velvet Mine would add approximately 10 miles each way to the total trip making the round trip 496 miles.
 - 140 miles are attributable to Colorado trucks, and 356 attributable to Utah trucks.
 - This means that 39% of the load is hauled at the Colorado rate per ton and 61% at the Utah rate per ton.
 - **Proportioned rate per ton for combined loads is \$30.77.**

Administrative, maintenance, and facilities staff will be required to supervise and organize such things as dispatch, maintenance, purchasing, HR and DOT compliance. It is estimated that 4-5 office staff members will be required, and 2-3 full-time mechanics.

Section 17: Recovery Methods

17.1 Summary

The Shootaring Canyon mill is an existing facility which was constructed circa 1980-1981 and operated sporadically until 1982. As discussed in Section 20, the mill has an existing radioactive materials license which has been amended. Although the mill has been on a care and maintenance program, various components have been salvaged and sold, including the Counter Current Decantation (CCD) thickeners and pumps and related equipment. In addition, some of the equipment units, such as the diesel generators, are outdated and are not useable. Nonetheless, the main process building and ancillary structures were well-designed and are generally in very good condition.

Capital and operating/maintenance cost estimates for mineral processing at the mill reflect a few changes to the original conventional grinding and agitated leaching circuit, followed by yellowcake precipitation, drying, and drum filling. The original wood-stave leach tanks will be replaced with steel tanks lined with an acid- and abrasion-resistant elastomer. Most equipment, e.g., the SAG mill, leach tank agitators, and most pumps, will be fitted with variable-frequency adjustable-speed drives to accommodate ranges of flowrates and solids loadings in slurries. New CCD thickeners will be installed and studies are underway to assess the optimum type and number of CCD thickeners. Furthermore, a vanadium processing and refining facility will be constructed. Vanadium recovery begins with leaching at a higher free acid concentration (pH 0.5 to 0.8 versus 1.5 to 2.0) to ensure satisfactory extraction of vanadium. Vanadium recovery from uranium solvent extraction raffinate requires a new building near the existing process building. The new CCD circuit will also be outside and near the main process building.

The Shootaring Canyon Mill was among the last 2 or 3 conventional mills built before the collapse of the uranium industry. Its design benefited from two decades of revolutionary changes, such as solvent extraction, and many evolutionary improvements based on an accumulation of industry-wide experience in operation and maintenance of dozens of mills.

17.2 Shootaring Canyon Mill Partial Refurbishment vs. All New Equipment

An internal report, titled “Definitive Cost Estimate for the Restart of Shootaring Canyon Mill Ticaboo, Utah,” was completed on March 28, 2008, by Lyntek, Inc. (Lyntek, 2008), and that report has provided a general outline for a thorough evaluation by Precision Systems Engineering (PSE). An update and preliminary design were completed by PSE in 2023. (PSE 2023).

The basic processing flowsheet was preserved, but some equipment types that were originally installed will be supplanted with the current generation.

The original flowsheet and processing parameters will be preserved and are as follows:

- A “sizer”, instead of a conventional crusher, will be installed ahead of the SAG mill feed hopper.
- The Waukesha diesel generators could not pass current particulate emission standards and will be replaced by new Volvo equipment.

- The wood stave leach tanks will be replaced by steel tanks with an elastomeric lining for resistance to corrosion and abrasion.
- A new countercurrent decantation circuit will be installed, and a study is underway to enable selection of thickeners. Available options include High-Rate, High-Density, and Deep-Cone paste thickeners. Actual design will await completion of settling tests on leach residues produced from fresh core samples, but the objective will be to establish the optimum balance between capital expense and circuit performance with the ultimate objective of achieving over 99 percent washing efficiency (less than 1 percent soluble loss.). The variables will be the number and type of thickener stages.
- All new instrumentation and process control apparatus will be installed to minimize demand for operators, but local stations for manual control will be provided.

17.2.1 Feed Preparation and Uranium/Vanadium Leaching and Washing Sections plus Uranium Conversion to Finished Yellowcake

The uranium section of the facility will be essentially as originally designed, with an initial capacity of 750 tons per 24-hour day (tpd), expandable to 1,000 tpd or higher, depending on mine production. Since the plant originally was not designed for vanadium recovery, an entirely new vanadium recovery and refining section will be built.

Since the modernized uranium mill will employ the same flowsheet and essentially the same equipment, with some upgrading where necessary, the following paragraphs describe the processing flowsheet as designed and built and depicted in Figure 17.2.1, “Original Shootaring Canyon Mill Flowsheet”.

Run-of-mine (ROM) material will be hauled by truck and dumped onto a graded and paved storage area from which it will be reclaimed by a front-end wheel loader and dumped onto a grizzly with 14-inch square openings. Grizzly oversize will be removed for secondary breaking, and undersize will be fed into a surge bin. Coarse mineralized rock at minus 3-inch will be withdrawn by a variable speed apron feeder and discharged onto a steeply inclined stationary grizzly with 3-inch square openings. Grizzly undersize will fall onto a 42-inch wide by 316-foot mill feed conveyor. Dust released during coarse ore handling will be drawn through a wet scrubber by an exhaust fan. The scrubber slurry will be pumped to the downstream grinding and classification circuits.

Crusher product will be conveyed beneath a metal detector and over a belt scale to a 12-foot diameter by 6½-foot long semi-autogenous grinding (SAG) mill driven by a 250 Hp motor. About 8 to 10 percent of the mill volume will be charged with 4-inch diameter cast steel balls to crush hard rock fragments. A slurry of particles at about 60 to 70% solids (by weight) will overflow through the SAG discharge trunnion into a pump sump and will be pumped to a cluster of hydrocyclone classifiers. Cyclone oversize will return by gravity to the SAG feed spout along with sufficient process water to maintain the desired discharge density. The design circulating load in the grinding/classification circuit is 200 percent.

Cyclone overflow slurry will flow by gravity into a sump and be pumped to two agitated leach feed holding tanks. New elastomer-lined steel tanks will be 20 feet in diameter by 28 feet high with a slurry capacity of 60,000 gallons apiece. Each tank will have a single agitator shaft with two marine-type impellers and a variable-frequency adjustable speed drive

During leaching, tetravalent uranium will be oxidized to the soluble hexavalent state with sodium chlorate, NaClO_3 , and complexed with sulfuric acid. As has historically been done for ores with relatively high acid consumption, the leach circuit will be 2-stage. Current laboratory testing has confirmed this choice. The first stage comprises three agitated tanks 14 feet in diameter by 18 feet high with an effective volume of 16,120 gallons apiece and providing a total retention time of 2 hours at 29% solids. During this stage, the slurry will be mixed with overflow from the #1 countercurrent decantation (CCD) thickener to which will be added sufficient sulfuric acid and sodium chlorate to maintain an optimum pH and EMF. To this thickener and the remainder of the CCD circuit, a flocculent solution will be added as needed to maximize underflow density and to reduce overflow turbidity. Partially leached slurry from the first stage leach circuit will be pumped to a thickener with a 19.5-foot diameter and 8.75-foot side-wall height. The thickener underflow at about 50 percent solids will be pumped to the second stage leach circuit.

The second stage leach circuit consists of four agitated tanks 20 feet in diameter by 24 feet high with an effective volume of 46,400 gallons apiece, providing a total retention time of 16 hours at a design density of 50% solids. Sulfuric acid and sodium chlorate to maintain optimum pH and EMF will again be added. It is anticipated that up to 99% of the uranium and over 90% of the vanadium will dissolve.

Maximum economic recovery of dissolved uranium from the second stage leach circuit discharge will be achieved by washing of the leached residue in a multi-stage CCD thickener configuration. A study is underway to evaluate the optimum economic and operable combination of thickener type (High-Rate vs. High-Density vs. Deep-Cone Paste) and sizes. Leached residue slurry will be pumped to the agitated mix box on the #1 CCD thickener and mixed with solution overflowing the #2 CCD thickener. Recycled solvent extraction raffinate entered the final CCD thickener mix box will be combined with the previous CCD thickener's underflow. In this manner, washing solution will advance through the circuit countercurrent to the flow of solids.

The final CCD thickener underflow slurry at approximately 65-70% solids will be pumped to the tailings impoundment pond from which clear supernatant water will be reclaimed and pumped back to the mill's process water supply.

Overflow from the 1st stage leach discharge thickener may be pumped to a clarifier, following the original design philosophy. However, modern thickeners with the new practice of improving flocculation by recirculating clear solution back to the feed port may not require additional removal of suspended solids, requiring only "polishing" in sand filters. Underflow slurry will be periodically pumped to the head of the second-stage leach circuit while the overflow will be clarified if needed or pumped directly to three sand-type filters. The filters will be operated in parallel and equipped for automatic back-washing. The design hydraulic capacity will be 5 gpm/ft², so each filter will contain about 38 square feet of effective area. Backwashed solids will be pumped to the head of the 2nd stage leach circuit. The filtrate, containing no more than 10 ppm solids, will be pumped to two pregnant leach solution (PLS) storage tanks, each with 23,000 gallons capacity.

Concentration and purification of uranium in the PLS will be accomplished simultaneously with liquid ion exchange (solvent extraction), wherein aqueous uranyl sulfate ions will be contacted with an organic liquid containing an extractant, a modifier, and a diluent. The extractant will be a tertiary amine like Alamine 336. The modifier, a long-chain alcohol like isodecanol, will improve

phase separation and solubility of the amine in the diluent. The diluent will be a type of kerosene with properties, such as a high flash point, that are specific to the needs of SX.

In practice, the uranyl sulfate ion is exchanged out of the aqueous PLS into a tertiary amine complex that remains dissolved in the organic phase. The amine concentration in the organic phase probably will be maintained at 1.0 volume percent per gpl of U_3O_8 in the PLS. Isodecanol concentration will be about 5.0 volumetric percent and diluent will make up the remainder. Mixer retention time will be approximately 2.0 minutes and the settler area will be designed for a specific flow of about 1.25 gpm/ft². Organic will flow countercurrent to the aqueous phase and will be recycled from each extraction settler and combined with the organic from the next stage in order to maintain the desired organic to aqueous (O:A) ratio in each mixer. After mixing, the resulting emulsion of fine droplets of the organic and aqueous phases will overflow from the mixer into its settler, where quiescent laminar flow will permit droplets to coalesce, allowing the denser aqueous phase to settle beneath the lighter organic phase. The uranium-loaded organic from the 1st stage extraction settler will overflow that settler's weir and be pumped to the loaded organic storage tank. The aqueous phase will flow from the 1st stage settler into the 2nd stage mixer where it will be contacted with organic from the 3rd stage settler. The aqueous stream exiting the 4th stage settler will contain only a low concentration of uranium governed by equilibrium chemical relationships and will be pumped to the raffinate storage tank. From that tank, the raffinate will be pumped to the 6th stage CCD thickener's mix box for washing the leached residue.

By the mid-1970s, some uranium operations had abandoned sodium carbonate ("soda ash") stripping of loaded organic in favor of so-called "controlled pH stripping" using ammonium sulfate solution whose pH was regulated by addition of ammonium hydroxide or anhydrous ammonia. This technique is the basis for the loaded organic stripping circuit. Controlling the pH between about 4.0 and 4.3 is critical; below pH 4.0, stripping efficiency is inadequate, and above pH 4.3, phase separation would be slow and stable emulsions would form due to hydrolysis of uranium. A major advantage offered by this approach is the ability to make yellowcake containing very little sodium.

In a countercurrent manner identical to that used in extraction, stripping will be conducted in four mixer/settler stages. Organic loaded with uranium will be pumped from the storage tank to the 1st stage strip mixer along with aqueous ammonium sulfate solution from the 2nd stage strip settler. As in the extraction circuit, pumping mixer impellers will be used to advance organic and aqueous streams between stages and to recycle organic as needed. Ammonia will be added to each strip stage mixer to control pH. Organic overflowing the 3rd stage settler enters the 4th stage mixer along with barren (aqueous strip) solution, and organic overflowing the 4th stage settler will be pumped to the barren (stripped) organic storage tank.

Amine extraction of uranium PLS is not entirely selective, with the result that there will be co-extraction of other metals including molybdenum, if they dissolve during leaching. In order to prevent an accumulation of these impurities in recirculating organic, the plant will have a single mixer/settler unit for "scrubbing" the stripped organic with aqueous sodium carbonate. The scrubbed organic will then be pumped to a surge tank for re-use in the extraction circuit. Most of the aqueous phase will be recycled to the scrub mixer to maintain a low O:A ratio, and a bleed stream will be pumped to the tailings or evaporation ponds.

Precipitation of yellow cake is based on contacting the pregnant ammonium sulfate strip solution with anhydrous ammonia gas. First, the solution from SX is pumped through two carbon columns, arranged in parallel, to remove residual entrained organics. The PLS is then pumped through a steam-fed tube & shell heat exchanger exiting at about 80° C (176° F) into three agitated precipitation tanks arranged in series. Each jacketed precipitation tank will have temperature control valves supplying hot water and the total residence time will be about 9 hours.

Precipitation will be accomplished by direct neutralization with ammonia gas to a final pH in the range 6.5-8.0 at a design consumption of 0.18 pounds NH₃ per pound of U₃O₈. Ideally, the product will be ammonium diuranate (“ADU”), (NH₄)₂U₂O₇, although the precipitate will typically be a mixture of diuranates, basic uranyl sulfate, (UO₂)₂SO₄(OH)₂, hydrated oxides, and adsorbed impurities. Actual composition will depend on pH and temperature, as well as PLS composition.

The precipitate slurry will be pumped to a thickener 12 feet in diameter with 4-foot side-wall height. Thickener overflow will be returned to a small surge tank ahead of precipitation and the underflow will be pumped to two vacuum drum filters arranged in series with a “repulping” tank after the first stage. A centrifuge is being considered as an alternative. Filter cake or centrifuge paste will fall into a trough, thence to a Moyno progressive cavity pump that will extrude the thick paste into a vacuum rotary dryer or a multiple-hearth calciner with rotating hearths. If the existing calciner is used, it will have a maximum operating temperature of 870° C (1,600° F). An option will be a vacuum rotary dryer, and this type of dryer is commonly used by in-situ uranium producers.

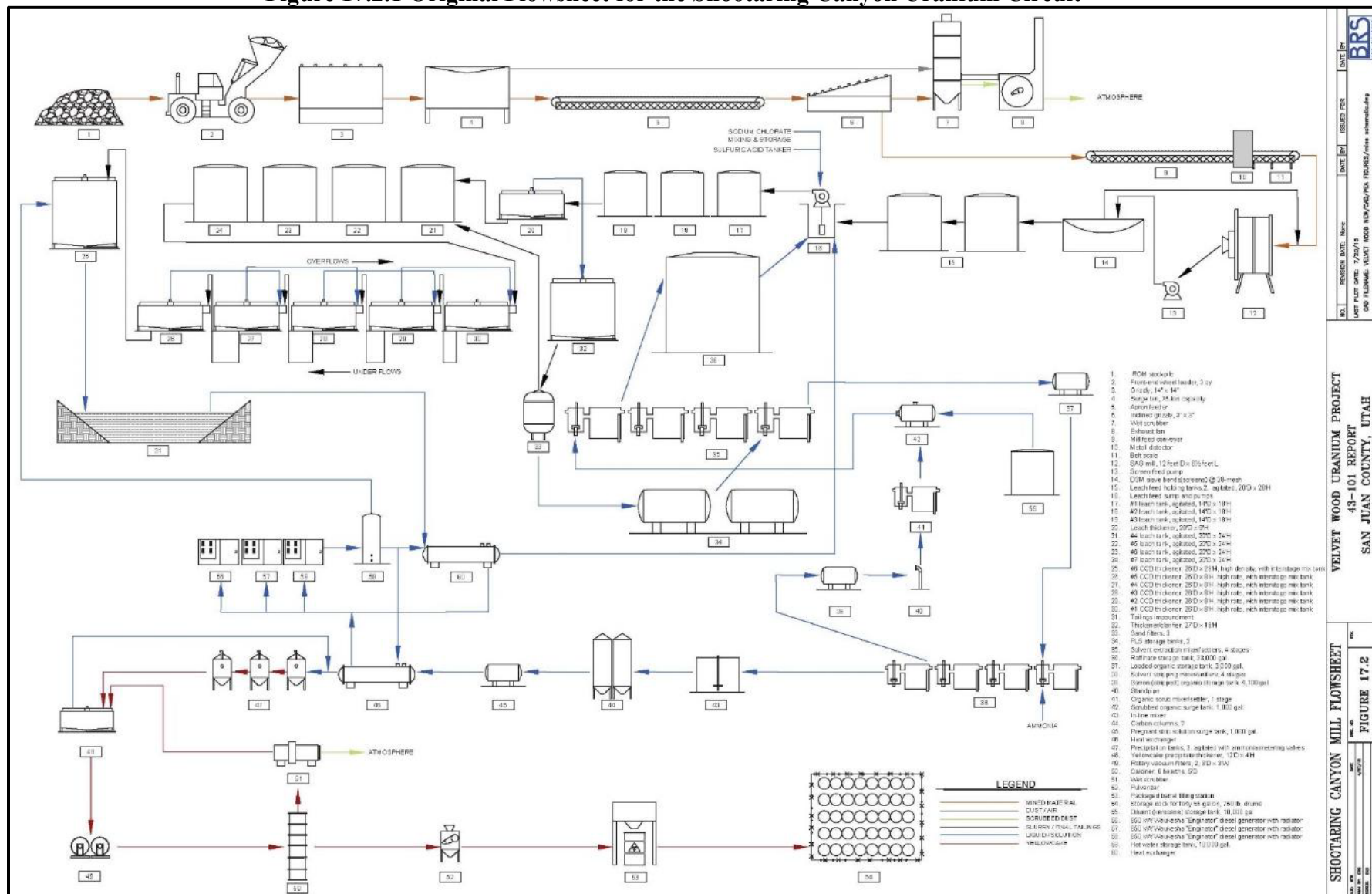
If a calciner is used, drying of the precipitate will occur on the top hearth, then calcining up to about 650-700° C will yield a very dry yellowcake product essentially devoid of ammonia, sulfate, and chloride. The calciner and its enclosure envelope will be operated under a negative pressure to prevent escape of yellowcake into the mill building. A wet scrubber on the exhaust gases will capture fine dust and the slurry will be pumped to the yellowcake thickener. If a vacuum rotary dryer is installed, the process will be simpler.

Dry yellowcake, nearly pure U₃O₈, will pass through a pulverizer to eliminate lumps before being conveyed to a new fully automatic drum filling and weighing machine equipped with a lid attachment mechanism. Drums filled to about 800 pounds, including tare weight, will pass over a roller conveyor to the product loading dock.

Leached and washed residues (tailings) will be pumped to an impoundment cell located about 200 yards from the plant. The impoundment will be upgraded and re-lined with an appropriate membrane and leak detection system,

Figure 17.2.1 depicts the original flowsheet and describes, with a few exceptions, the future uranium processing flowsheet.

Figure 17.2.1 Original Flowsheet for the Shootaring Canyon Uranium Circuit



17.3 Vanadium Recovery Circuit

A facility for the recovery of vanadium is included in the mineral processing CAPEX and OPEX estimates in this PEA. The depleted aqueous solution from uranium solvent extraction, the uranium raffinate, will serve as the feed for vanadium production. The vanadium concentration and refining process will use essentially the same unit operations as the uranium plant up to the point of precipitation, so only a brief description will be given below. Schematics of the vanadium process are presented in Figure 17.2.1.

A new solvent extraction circuit will concentrate the vanadium into a vanadium product liquor (VPL). The VPL will then flow to a conversion tank, anhydrous ammonia will be added, and steam will be used to indirectly heat the solution to above 180° F, precipitating ammonium metavanadate (AMV). The AMV cake will be dried in a fuel-fired rotary dryer, then treated in one of three ways, depending on market requirements:

1. The AMV may be packaged and sold;
2. It may be fed directly to a multiple-hearth calcining furnace (deammoniator), melted in a fusion furnace, tapped into a water-cooled casting wheel, and packaged as “black flake” containing a minimum of 98.0 %V₂O₅; or
3. It may be dissolved with dilute sulfuric acid in an “acidulation” tank, followed by addition of ammonium hydroxide to a neutralization tank, from which the liquor would flow through a water-cooled heat exchanger to a crystallizer. The slurry of re-crystallized AMV would be fed to a washing belt filter, thence to the deammoniator, fusion furnace, and casting wheel described above. This product could contain up to 99.9% V₂O₅ and would also be called “black flake”.

A simplified block flow diagram is presented below as Figures 17.3.1a and 17.3.1b. Some elements of the flowsheet may change during detailed engineering when equipment alternatives will be considered in the interests of increased metallurgical efficiency, improved health and safety for personnel, and reduced operating costs.

Figure 17.3.1a Vanadium Concentration Circuit, Page 1 of 2

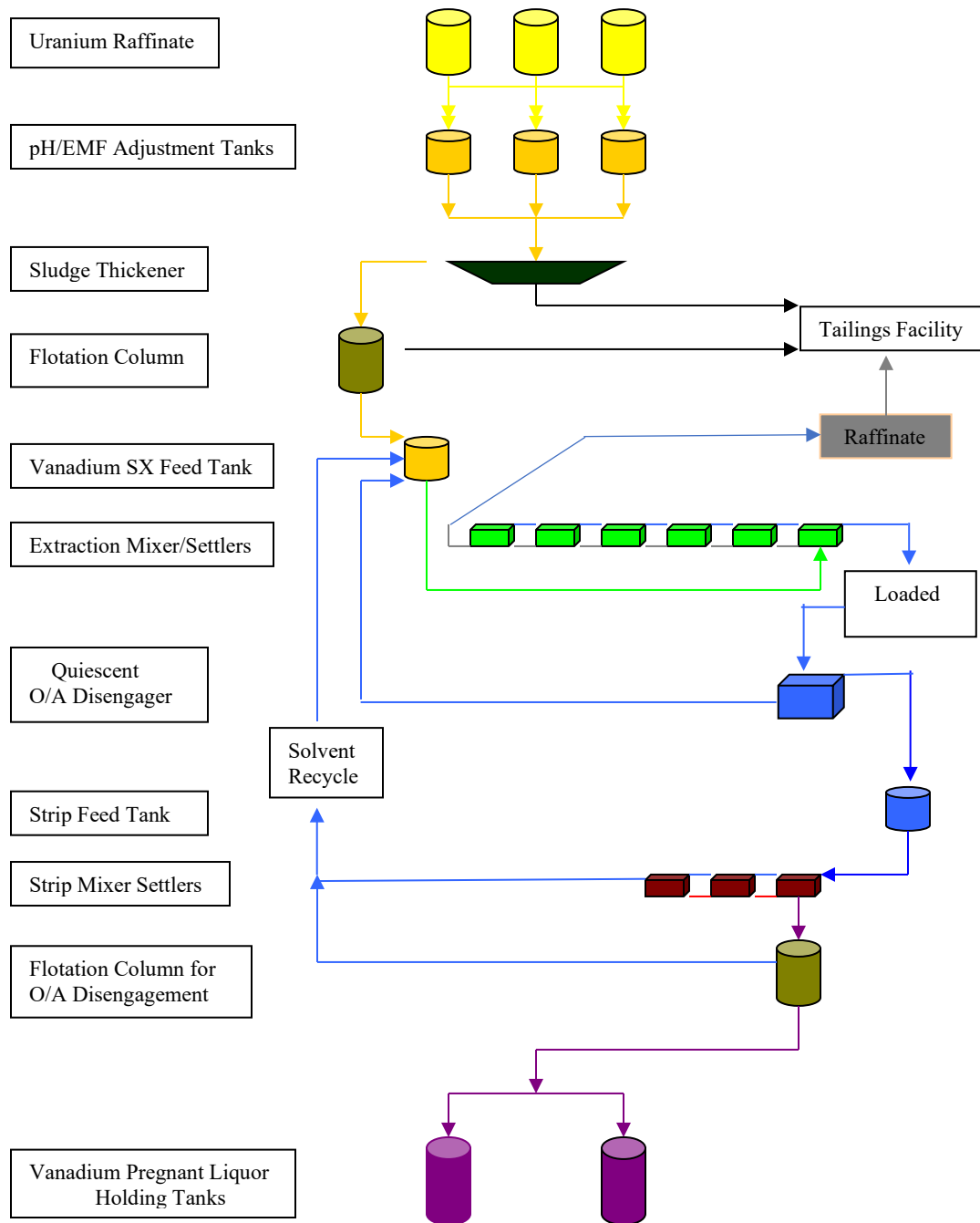


Figure 17.3.1b Vanadium Purification and Precipitation Circuit, Page 2 of 2

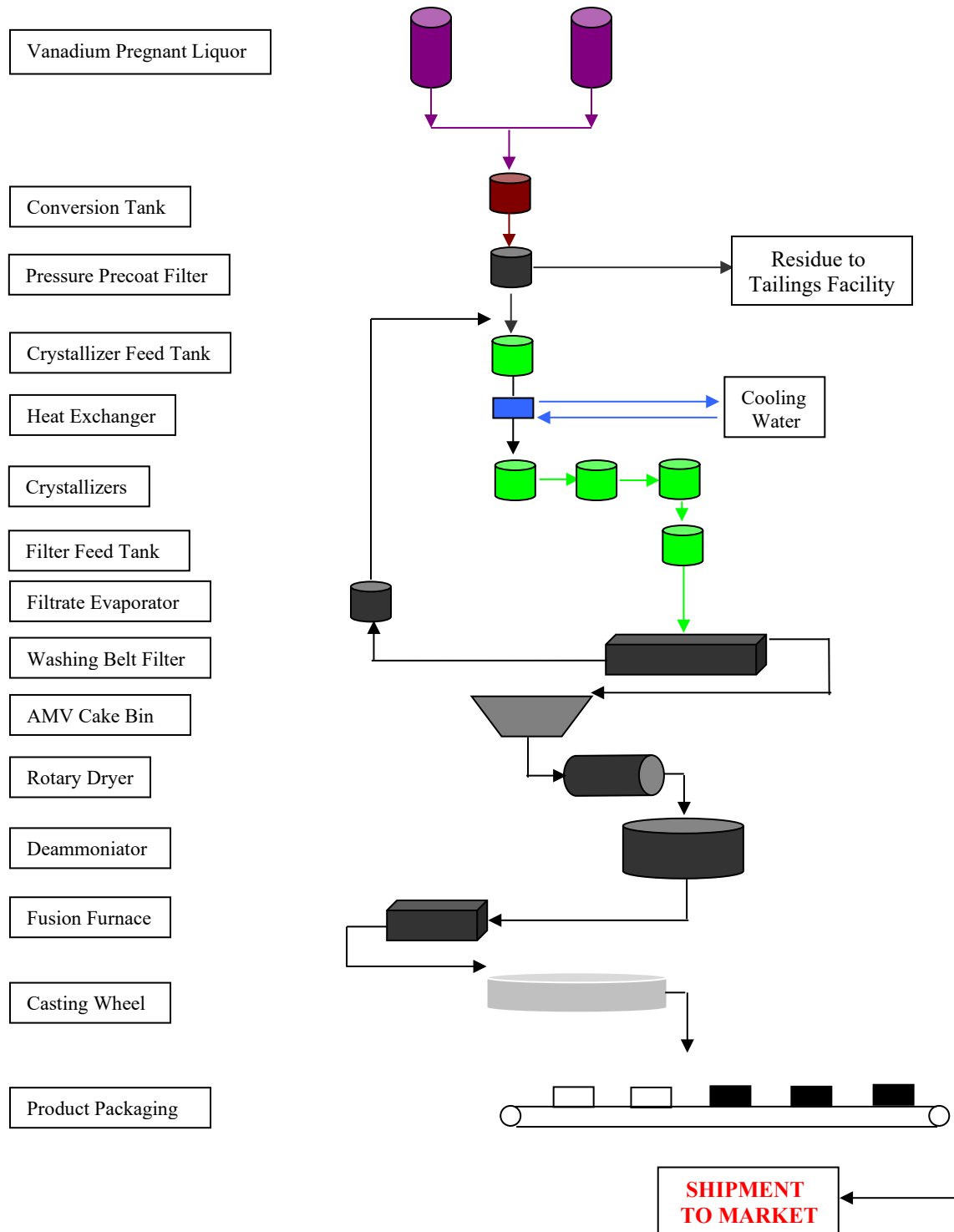


Figure 17.3.2 Shootaring Canyon Property with Existing Facilities at Ticaboo, Utah



17.4 Estimated Personnel Requirements for Uranium and Vanadium Production

Construction of the vanadium facility will begin after start-up of the uranium section. Although uranium and vanadium production will eventually be concurrent, it is convenient to divide the personnel requirements as follows, see Table 17.4.1. Note that the uranium section will immediately require a number of management and administrative staff who will take on extra responsibilities after the onset of vanadium production. The entire operation will run 24 hours daily and 7 days weekly, but actual numbers of hourly personnel may change, depending on future decisions, such as 8-hour versus 12-hour shifts. There may be a single weekly dayshift shutdown for planned maintenance.

Table 17.4.1 Personnel Requirements

CATEGORY	URANIUM	VANADIUM
Superintendent	1	0
Office manager	1	0
Metallurgical accountant	1	0
General foreman	1	1
Chief chemist	1	0
Radiation safety officer (RSO)	1	0
Environmental/RSO technician	1	0
Safety engineer	1	0
Nurse/EMT	4	0
Metallurgist	1	1
Metallurgical technician	4	1
Shift chemist	4	4
Shift foreman	4	4
Shift equipment operator	16	24
Instrumentation technician	4	4
Control room operator	4	0
Electrician (journeyman)	4	4
Electrician (apprentice)	4	4
Mechanic (master)	4	4
Mechanic (helper)	4	4
Generator room mechanic	4	0
Lubrication & routine maintenance	4	4
Tailings and water operator	3	0
Ore receiving/loader operator	3	0
Warehouse/truck dock	1	0
Security	4	0
Janitorial	2	0
Laborer	14	14
TOTALS	100	73

Section 18: Project Infrastructure

18.1 Lisbon Valley District

18.1.1 Velvet-Wood Project

18.1.1.1 Existing Infrastructure

Shown in Figure 18.1.1

18.1.1.2 Access

Portions of the Velvet deposit were previously mined and there is an existing access road to the portal and water treatment location. The Velvet portal is accessible via existing roads beginning with the Big Indian Road, a paved road that exits U.S. Highway 191 about 19 miles north of Monticello, Utah or 34 miles south of Moab, Utah. The Big Indian Road extends eastward and loops into the Lisbon Road to serve properties in the Lisbon Valley area. A gravel road, San Juan County Road 112 (Williams Fork) exits the Big Indian Road about 5.5 miles east of its intersection with Highway 191. A private access road connects with County Road 112 about 6 miles southeast of its intersection with the Big Indian Road. The Velvet Mine portal is about one mile northeast along this road.

The Wood mine area is located about 3 miles east of Velvet along County Road 112 and is also accessible from the east via the Lisbon Valley Road and County Road 112. Access to the site is via existing dirt two-track roads.

18.1.1.3 Power and Utilities

Electrical power will be provided at least initially by onsite generators. Velvet was served by line power in the past but the powerline was removed. Line power is not currently available at Wood.

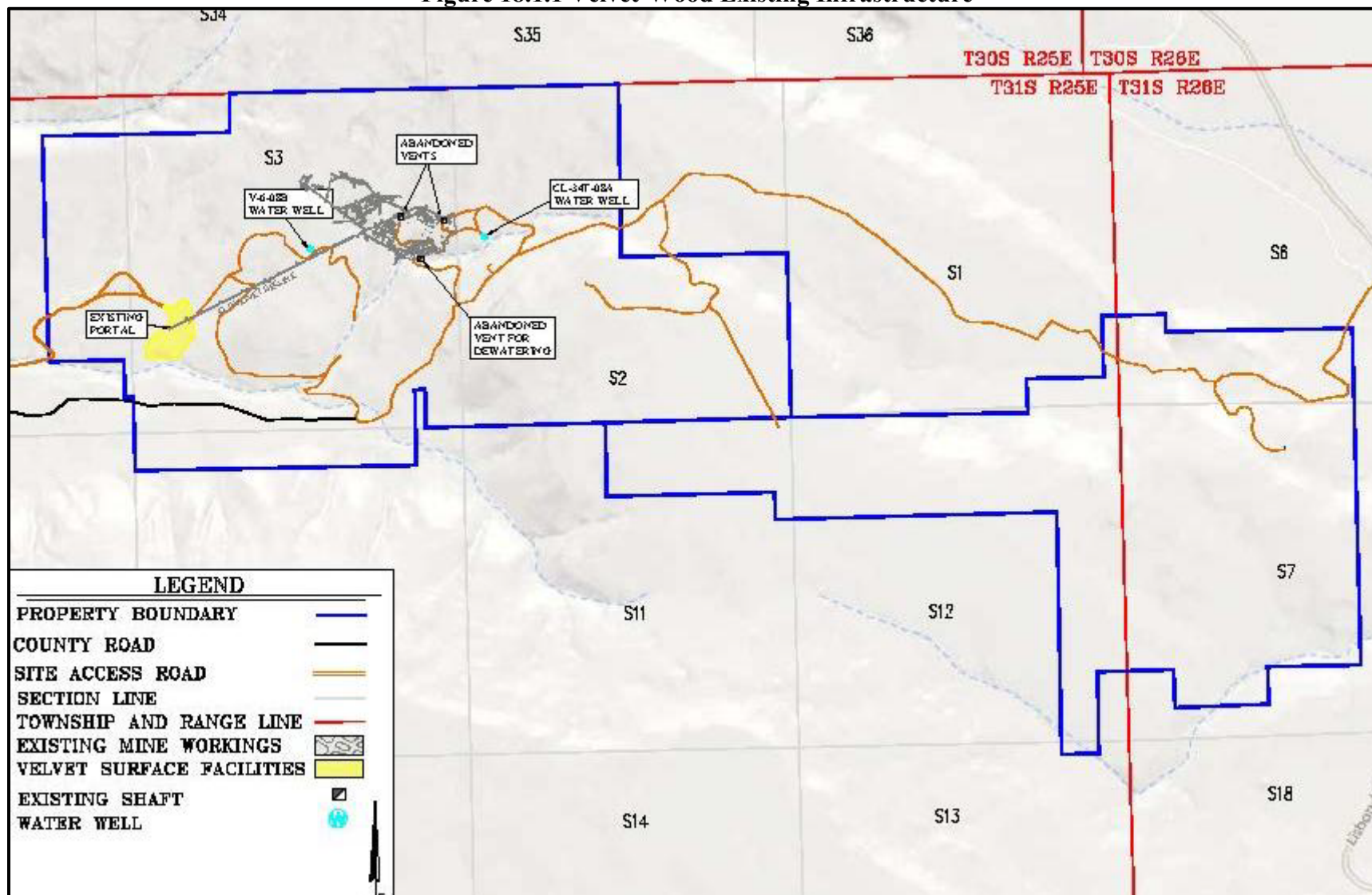
18.1.1.4 Water

Non-potable water is available from wells at the Velvet mine. For Wood, detailed investigation of potential water sources has not been completed. As mineral processing will be accomplished offsite, the only water demand will be for industrial and potable use at the mine site and as such the demand is modest. The preferred alternative for process water is to utilize water developed from the dewatering of the mine, estimated for cost purposes at 200 gpm, which in turn would reduce costs related to water treatment and discharge. This water may not be suitable as a potable water source for the office and dry facility. Potable water sources could be developed from local ground or surface water sources and/or hauled into the site.

18.1.1.5 Surface Facilities

Temporary surface facilities have been erected at the Velvet mine. No surface facilities are present at the Wood Mine. For operations mine support facilities will consist of an office, mine shop and warehouse, and a dry facility.

Figure 18.1.1 Velvet-Wood Existing Infrastructure



18.2 Slick Rock District

18.2.1 Slick Rock Complex

18.2.1.1 Existing Infrastructure

Shown in Figure 18.2.1

18.2.1.2 Access

The Slick Rock District is crossed by Colorado State Highway 141, a paved 2 lane highway providing major access to the site. From Highway 141, gravel county roads and existing dirt and two-track roads provide secondary access to the site.

18.2.1.3 Power and Utilities

For the Slick Rock area, gas pipelines crossing the project area are shown on the USGS base map. Electrical powerlines follow the major access roads, Figure 18.2.1. Slick Rock is an unincorporated locality. Residents have utility and phone service. Utility service was also once provided to the Burro and other mines in the area.

18.2.1.4 Water

For the Slick Rock Complex, detailed investigation of potential water sources has not been completed. As mineral processing will be accomplished offsite, the only water demand will be for industrial and potable use at the mine site, and as such the demand is modest. The preferred alternative for process water is to utilize water developed from the dewatering of the mine, estimated for cost purposes at 200 gpm, which in turn would reduce costs related to water treatment and discharge. This water may not be suitable as a potable water source for the office and dry facility. Potable water sources could be developed from local ground or surface water sources and/or hauled into the site.

18.2.1.5 Surface Facilities

For the Slick Rock Complex no current facilities currently exist. For operations, mine support facilities will consist of an office, mine shop and warehouse, and a dry facility.

18.2.2 SR-11 Project

18.2.2.1 Existing Infrastructure

Currently SR-11 has access roads, a septic system and a water tank on site. See Figure 18.2.2.

18.2.2.2 Access

The SR-11 Project is reached by Colorado State Highway 141, a paved 2 lane highway. From Highway 141, gravel county roads (S8 to Q1 to Q4) and existing dirt and two-track roads provide secondary access to the site.

18.2.2.3 Power and Utilities

No line power is available at the SR-11 Project. Power was previously supplied by diesel generators.

18.2.2.4 Water

For the SR-11 Project, detailed investigation of potential water sources has not been completed. As mineral processing will be accomplished offsite the only water demand will be for industrial and potable use at the mine site and as such the demand is modest.

18.2.2.5 Surface Facilities

For the SR-11 Project, no surface facilities currently exist. For development mine support facilities will consist of an office, mine shop and warehouse, and a dry facility. Utilities would include a water supply, and a wastewater disposal system. A septic system would be permitted and constructed for wastewater if the old one is no longer serviceable.

Figure 18.2.1 Slick Rock Existing Infrastructure

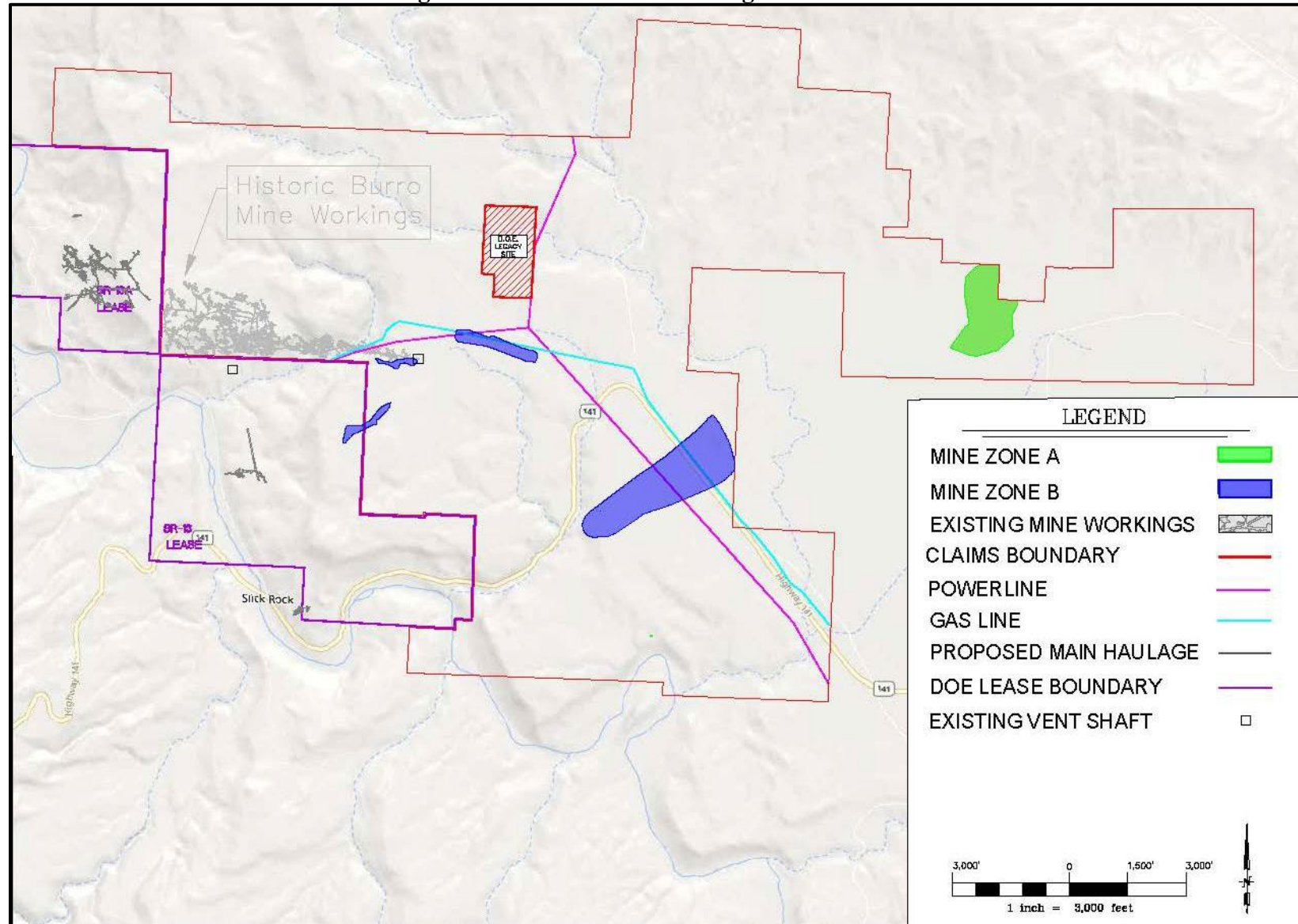
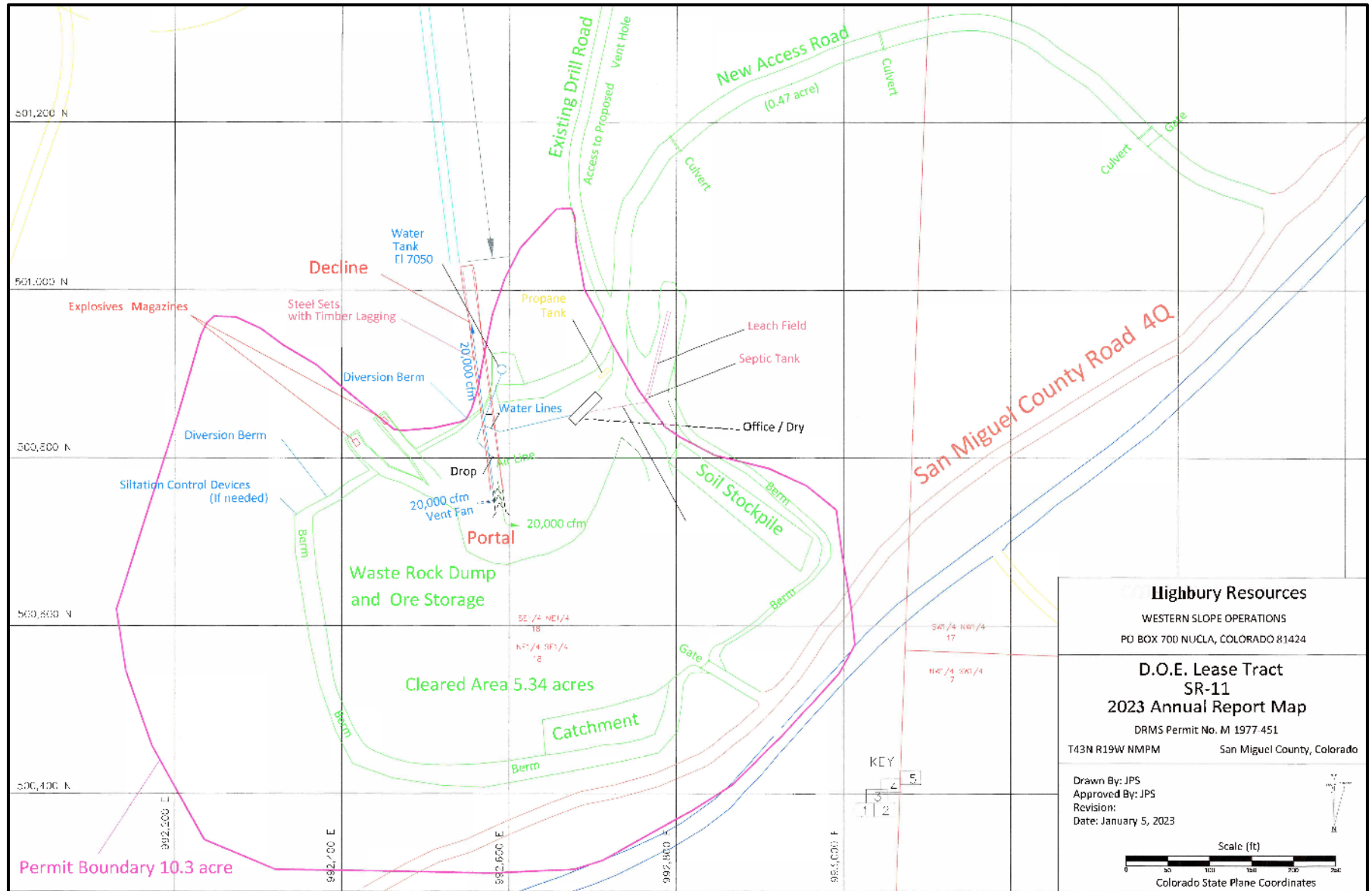


Figure 18.2.2 SR-11 Existing Infrastructure



18.3 Uravan District

18.3.1 Paradox Complex

18.3.1.1 Existing Infrastructure

All of the DOE leases in this complex have existing infrastructure remaining from when they were active mines. They all have access roads. JD-6 has only access roads. JD-7 has two shop buildings, a compressor house, a water tank and a water treatment building. There is a compressor house, a pipe shed and a trailer at JD-8. JD-9 has a shop, a septic system and a water treatment structure. Refer to Figure 18.3.1 for JD-8 infrastructure.

18.3.1.2 Access

The Paradox Complex can be reached by taking Colorado Highway 141 west approximately 1.5 miles from Naturita, turning south on State Highway 90, and then proceeding approximately 9 miles west. There, heading south on a maintained gravel road to Monogram Mesa accesses the JD-6, JD-8, and JD-9 Lease tracts. The JD-7 Lease is accessed by another gravel road, which heads south from State Highway 90, approximately 1.5 miles west from the Monogram Mesa access road.

18.3.1.3 Power and Utilities

Line power is available at the Paradox Complex sites from San Miguel Power.

18.3.1.4 Water

For the Paradox Complex, detailed investigation of potential water sources has not been completed. As mineral processing will be accomplished offsite, the only water demand will be for industrial and potable use at the mine site and as such the demand is modest.

18.3.1.5 Surface Facilities

For the Paradox Complex mine support facilities vary by site but will generally consist of an office, mine shop and warehouse, and a dry facility. Utilities would include electrical power (existing at sites), a water supply, and a wastewater disposal system. Septic systems would be permitted and constructed for wastewater.

18.3.2 SM-18 Project

18.3.2.1 Existing Infrastructure

Currently there is a supply trailer, a water tank, and access roads on site. See Figure 18.3.2

18.3.2.2 Access

The SM-18 Project is adjacent to Colorado State Highway 141, a paved 2 lane highway providing major access to the site. From Highway 141, gravel county roads and existing dirt and two-track roads provide secondary access to the site.

18.3.2.3 Power and Utilities

Electrical powerlines follow Highway 141 and there is a transformer on site.

18.3.2.4 Water

For the SM-18 Project, detailed investigation of potential water sources has not been completed. As mineral processing will be accomplished offsite the only water demand will be for industrial and potable use at the mine site and as such the demand is modest.

18.3.2.5 Surface Facilities

For the SM-18 Project, mine support facilities will consist of an office, mine shop, and warehouse, and a dry facility. Utilities would include electrical power (existing at site), a water supply, and a wastewater disposal system. A septic system would be permitted and constructed for wastewater.

Figure 18.3.1 JD-8 Existing Infrastructure

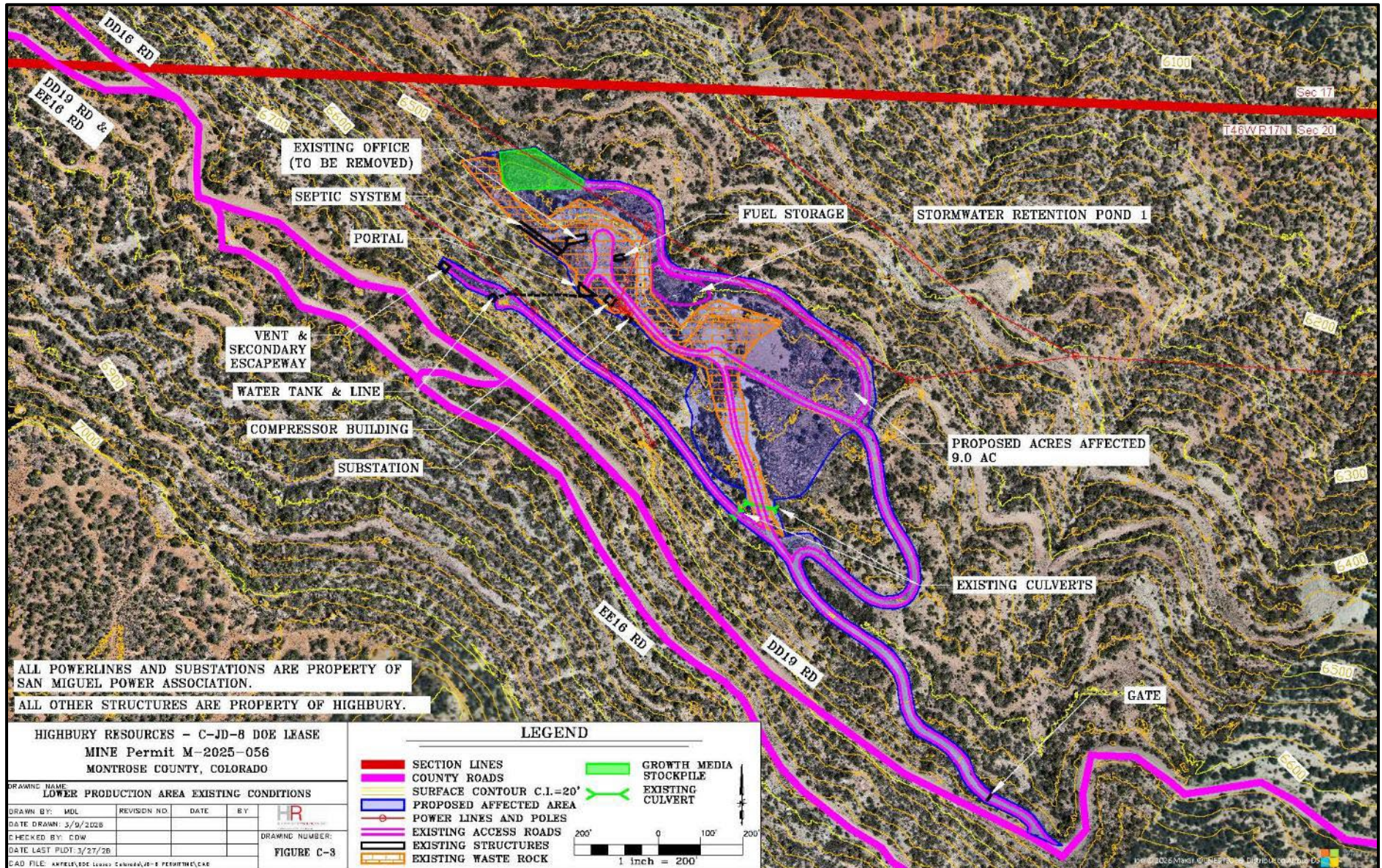
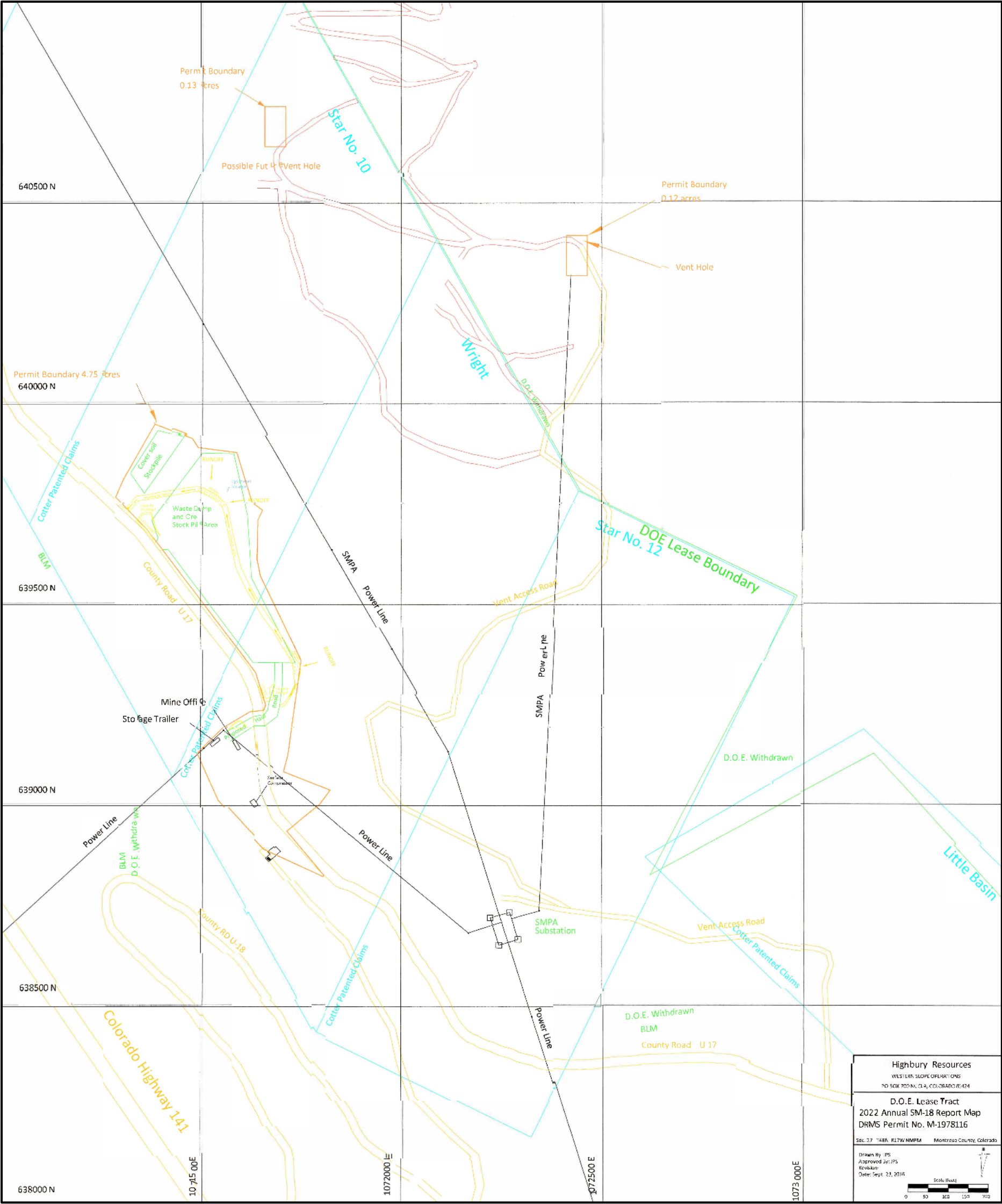


Figure 18.3.2 SM-18 Existing Infrastructure



18.4 Henry Mountain District

18.4.1 Shootaring Canyon Mill

18.4.1.1 Existing Infrastructure

The existing Shootaring Canyon Mill facilities include the main mill building, shop and warehouse, office and security buildings, a non-potable water system for processing and fire suppression, a septic system, and the entire facility is fenced. The existing facilities are discussed in Section 17 and are shown on Figure 17.3.2.

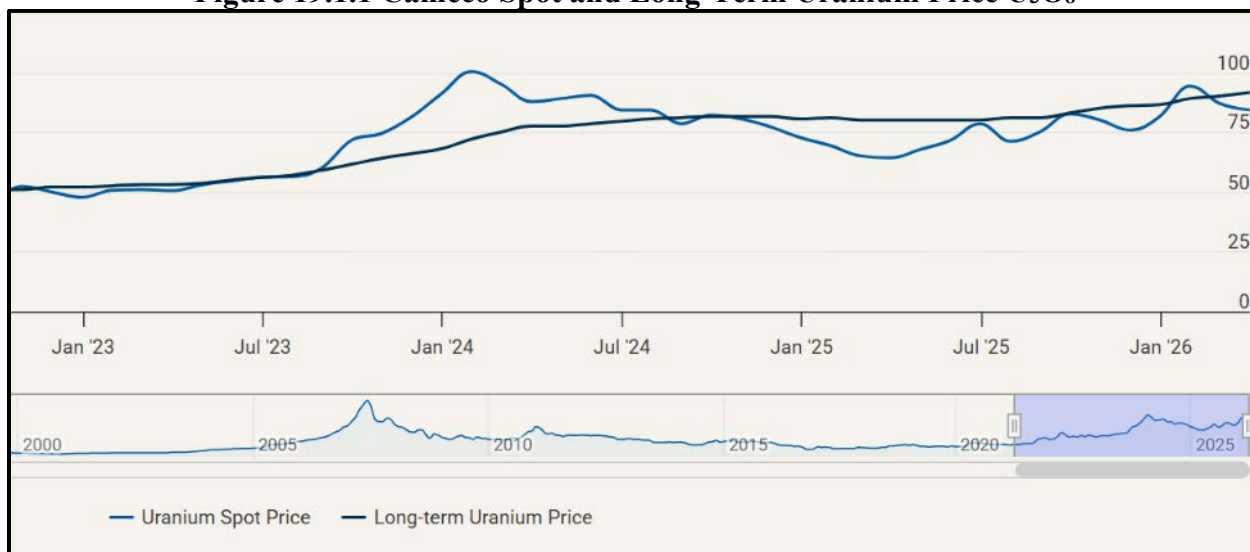
Section 19: Market Studies and Contracts

19.1 Uranium Price Forecast

Uranium does not trade on the open market, and many of the private sales contracts are not publicly disclosed since buyers and sellers negotiate contracts privately. Monthly long-term industry average uranium prices based on the month-end prices are published by Ux Consulting, LLC, and Trade Tech, LLC and are posted on the Cameco Corporation Web page.

The following chart and table (Figure 19.1.1) are from Cameco Corporation, one of the largest global providers of uranium fuel. This price information is updated monthly by Cameco and shows a consistent upward trend in both spot and long-term contracted prices. In addition, in January 2026 the spot price of uranium exceeded \$100/lb for a period of time.

Figure 19.1.1 Cameco Spot and Long-Term Uranium Price U₃O₈



	Spot Price	Long-term Price
2026		
Jan	\$ 94.28	\$ 89.00
Feb	\$ 86.95	\$ 90.00
Mar	\$ 84.25	\$ 91.50

From <https://www.cameco.com/invest/markets/uranium-price>

Uranium price is being driven by demand. According to Cameco, “UxC reports that over the last five years approximately 589 million pounds U₃O₈ equivalent have been contracted in the long-term market, while approximately 815 million pounds U₃O₈ equivalent have been consumed in reactors. We therefore remain confident that utilities have an increasing level of uncovered requirements (<https://www.cameco.com/invest/markets/supply-demand>).”

Analysts and producers, according to reports like this from [The Oregon Group](#), cite increasing demand will drive prices higher in the future. This report further states “*When uncovered requirements become operational risk, contracting accelerates and term pricing can gap higher. This would mean prices in the \$100-\$150/lb become plausible when available supply is exhausted.*”

Other analysts are more conservative in future projections with respect to timing of price increases. As an example, RBC Capital Markets in their Global Mining Commodity Update – 1Q26, March 12, 2026, states “We see growing uranium demand with significant nuclear capacity expansion while we think the corresponding supply response could be challenged due to both geopolitical and operational risks paired with a limited pipeline of Western-aligned supply longer term. We see a long-term price of \$100/lb to incentivize new production to meet the rising demand post-2035.”

19.2 Vanadium Price Forecast

Vanadium is listed as a critical mineral in the United States. The United States Geological Survey (USGS) publishes Mineral Commodity Reports for all metals including vanadium annually. The most recent USGS report, January 2025, states “The estimated average Chinese vanadium pentoxide (V₂O₅) price (98% V₂O₅ content) in 2024 was \$5.45 per pound compared with \$7.50 in 2023. The estimated United States ferrovanadium price (78%–82% vanadium content) was \$12.84 per pound in 2024 compared with \$16.42 in 2023.” Vanadium redox flow battery (VRFB) technology continued to be an increasingly important part of large-scale energy storage as it allows for high-safety, large-scale, environmentally friendly, medium- and long-term energy storage.

Anfield subscribes to Project Blue™ (<https://projectblue.com/>), a recognized market research consultant which provides market analyses for critical minerals including vanadium. In their most recent quarterly report, “Vanadium Medium-Term outlook, Analysis of current market trends and ten-year outlook”, January 2026, Project Blue presents price forecasts for vanadium for high and low cases based on demand (Figure 19.2.1). The high case considers a greater influence of VRFB batteries in the long-term demand.

Figure 19.2.1 Project Blue Vanadium Price Forecast

High-case outlook for European pentoxide prices (US\$/lb)												
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Nomin al	\$ 5.10	\$ 6.10	\$ 8.02	\$ 9.00	\$ 9.69	\$ 10.41	\$ 11.15	\$ 11.92	\$ 12.16	\$ 12.41	\$ 12.66	\$12.92
Real \$2025	\$ 5.10	\$ 6.00	\$ 7.72	\$ 8.50	\$ 8.98	\$ 9.45	\$ 9.93	\$ 10.40	\$ 10.40	\$ 10.40	\$ 10.40	\$ 10.40
Outlook for European pentoxide prices (US\$/lb)												
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Nomin al	\$ 5.10	\$ 5.54	\$ 6.41	\$ 6.92	\$ 7.45	\$ 8.01	\$ 8.58	\$ 9.17	\$ 9.36	\$ 9.55	\$ 9.74	\$ 9.94
Real \$2025	\$ 5.10	\$ 5.44	\$ 6.18	\$ 6.54	\$ 6.91	\$ 7.27	\$ 7.64	\$ 8.00	\$ 8.00	\$ 8.00	\$ 8.00	\$ 8.00

Assuming that the price of vanadium in 2025 dollars remains constant from 2036 throughout the mine life of 2041 used in the PEA, the median price of the two cases would range from \$8.90 to \$9.01 per pound vanadium pentoxide depending on whether sales start in 2028 or 2029. It is the intent of the Project to prioritize the refurbishment of the Shootaring Canyon Mill with the new

construction of the vanadium plant to follow. As the vanadium plant is a standalone facility, the timing of capital investment and production will be based on market conditions.

19.3 Commodity Pricing and Risks

Based on the foregoing, the authors conclude that uranium price will continue to rise in response to increasing demand and recommend a uranium price of \$100 per pound for uranium oxide (yellow cake) as the base case for this PEA.

Based on the foregoing, the authors conclude there is sufficient flexibility in the construction and operation of the vanadium circuit to adjust to market conditions and recommends a price of \$9.00 per pound for vanadium pentoxide as the base case for this PEA.

By their nature, all commodity price assumptions are forward-looking. No forward-looking statement can be guaranteed, and actual future results may vary materially.

Sensitivity of the Project to variations in commodity prices is discussed in Section 22, Economic Analysis.

The authors have reviewed these analyses and confirmed that the results support the assumptions in the report.

Section 20: Environmental Studies, Permitting, and Social or Community Impact

A range of permits and licenses would be needed for the mining and various mineral processing options considered in this report. Similarly, a variety of additional environmental studies would be required. Agencies with jurisdiction include;

- Utah Department of Environmental Quality (UDEQ) Division of Radiation Control (DRC), source material licensing.
- Utah Department of Environmental Quality (UDEQ) Divisions of Air Quality (DAQ), Water Quality (WQD, mill and mines.
- Utah Department of Natural Resources (UDNR) Division of Oil Gas and Mining (DOGM), Velvet-Wood Mine and drilling permits.
- Utah State Engineers Office (SEO) water rights.
- SEO and UDNR tailings dam permit and monitor well permits.
- Bureau of Land Management (BLM) Plan of Operations and Notice of Intent, mining and drilling.
- Colorado Division of Mining Reclamation and Safety (DRMS), Colorado Mine and drilling permits.
- Local county permits depending on project specifics.

20.1 Regulatory Status

Major actions in progress or needed (see Table 20.1.1 and Table 20.1.2) include;

- Reactivation of the mill
 - The mill and its existing source material license is being maintained along with all additional permits and licenses and required environmental monitoring programs.
 - The Shootaring Canyon Mill has an existing radioactive source materials license. The license was originally issued by the US Nuclear Regulatory Commission (USNRC). When Utah became an agreement state they assumed regulatory jurisdiction over the license through the Utah Division of Waste Management and Radiation Control (DWMRC). Anfield submitted a license renewal application to convert the existing license from care-and-maintenance to operational status on April 5, 2024. Anfield has been conducting by-monthly meetings with DWMRC during the license renewal process. DWMRC completed their initial review of the license amendment and provided their Requests for Additional Information (RAIs). Anfield completed response to all RAIs in April 2026 and they are under review by DWMRC. As additional questions arise they are discussed at the bi-monthly meetings. It is anticipated that the licensing process including a public comment period will be completed by Q4 2026.
- Velvet-Wood Mine Complex
 - The Velvet-Wood mines have been permitted through the state of Utah and BLM. The mine portal at Velvet has been opened and work is progressing to rehabilitate the decline. The new permit in Number M0370040 and the current bond is \$539,000.00 USD.

- Amendment of the permit for the addition of a production shaft at Wood will be required.
- Permits are in place for ground water treatment and discharge subject to final pre-construction approval of the treatment facility.
- The current site construction is authorized as temporary construction by DAQ. The air quality permit for mine operations by DAQ is in progress.
- Slick Rock Mine
 - A new Large Mine Permit and Plan of Operations is required issued by DRMS and BLM, respectively.
 - The mine permit requires inclusion of all other State and local permits.
- Uravan District, Uravan and Paradox Mine Complexes
 - A new Large Mine Permit and Plan of Operations is required to be issued by DRMS and BLM, respectively.
 - The mine permit has been submitted for the JD-8 mine and has been accepted as complete. Review and public comment are currently ongoing.
- Permits common to all operations.
 - Air quality permits.
 - Water quality permits, storm water discharge (construction and operations).
 - Monitor well permits.
 - Water rights for consumptive use.
 - Federal Mine Safety for mines and mills are regulated under the Mine Safety and Health Administration (MSHA).

Table 20.1.1 Summary of Regulatory Status for Required Permits and Licenses

Permits/Licenses	Lead Agency/Cooperating Agency	Purpose	Status
Shootaring Canyon Mill			
Radioactive Material License	UDEQ-DWMRC	License to possess and process uranium ores and associated wastes	In timely renewal, partial submittal, submittal completion in process
Bond	UDEQ-DWMRC	Reclamation Surety	In place for current facility reclamation, updated bond required for return to operational
Dam Permit	UDNR-DWR/SEO	Tailings Impoundment Embankment permit	In place, updated submittal pending approval of Radioactive Materials License
Air Authorization Order (minor)	UDEQ-AQD	Air quality	In process
Groundwater Discharge Permit	UDEQ-WQD	Groundwater protection from water treatment	In timely renewal, approval pending
State Well Permits	UDEQ-DWMRC/SEO	Permitting groundwater wells for mill process water supply and environmental monitoring	Water supply wells in place and permitted. New wells proposed for new tailings impoundment approved and installed.
Water Rights	UDEQ-DWMRC/SEO	Mill processing water supply	Transfer from previous owner in process.
Velvet-Wood Mine			
Large Mine Permit	UDNR-DOGM/BLM	Mining permit	Existing, Update in Progress
UPDES Permit	UDNR-DOGM	Discharge of treated mine water	Approved in 2008, expired, renewal in
Groundwater Discharge Permit	UDNR-DOGM/UDEQ-WQD	Groundwater protection from water treatment	Approved in 2008, expired, renewal in
Air Authorization Order (minor)	UDNR-DOGM/UDEQ-AQD	Air quality	Approved in 2008, expired, renewal in
County Septic System	San Juan County	Mine surface operations septic system	Pending application
Source Material License	UDEQ-DWMRC/UDNR-DOGM/BLM	Management or radioactive solid material generated from mine water treatment	Pending application
State Well Permits	UDNR-DOGM/SEO	Permitting groundwater wells for environmental monitoring	Complete
Water Rights	UDEQ-DWMRC/SEO	Mill processing water supply	Transfer from previous owner in process.
Colorado Mines, Slick Rock, Paradox, and Uravan			
Large Mine Permit	CDRMS/BLM	Mining permit	Pending application with exception of JD-8
Stormwater Discharge Permit	CDHPE	Discharge of treated mine water	Pending application with exception of JD-8
Groundwater Discharge Permit	CDHPE	Groundwater protection from water treatment	Only applies to mines which encounter ground
Air Permit (minor source)	CDHPE	Air quality	Pending application

Table 20.1.2 Summary of Environmental Data and Studies

Environmental Data/Studies	Lead Agency/Cooperating Agency	Status
Shootaring Canyon Mill		
Geology and Soil	UDEQ-DWMRC	Complete
Groundwater	UDEQ-DWMRC-WQD	Complete
Surface Water	UDEQ-DWMRC-WQD	Complete
Ecological Resources	UDEQ-DWMRC	Complete
Air Quality and Meteorology	UDEQ-DWMRC-AQD	Complete
Cultural Resources	UDEQ-DWMRC-SHPO	Complete
Velvet Wood Mine		
Geology and Soil	DOGM/BLM	Complete
Groundwater	DOGM/BLM	Complete
Surface Water	DOGM/BLM	Complete
Ecological Resources	DOGM/BLM	Complete
Air Quality and Meteorology	DOGM/BLM	Update study in progress
Cultural Resources	DOGM/BLM	Complete
Colorado Mines, Slick Rock, Paradox, and Uravan		
Geology and Soil	CDRMS /BLM	Complete/Historical Data
Groundwater	CDRMS /BLM	In Progress
Surface Water	CDRMS /BLM	New study required
Ecological Resources	CDRMS /BLM	Complete will require updates
Air Quality and Meteorology	CDRMS /BLM	New study required
Cultural Resources	CDRMS /BLM	Complete will require updates

20.2 Current Status

The Shootaring Canyon Mill is located on private land. The Shootaring Canyon Mill is an existing facility which was constructed in 1980 and operated sporadically until 1982. The mill license has been maintained but will require a major amendment for operations. The tailings dam is in place, however individual lined tailings disposal cells would need to be permitted and constructed within the overall containment facility. The Shootaring Canyon Mill has a Radioactive Materials License (RML; UT0900480) that is administrated by the UDEQ-DWMRC. The mill is currently in the License renewal process as forementioned.

The Velvet-Wood mines are located on BLM and State of Utah lands. The Velvet mine has been permitted and the portal and existing decline re-opened. The mine has an active MSHA number and work is underway to rehabilitate the mine.

The Slick Rock mine has an active drilling permit or Notice of Intent (NOI) from DRMS and BLM. Verification drilling was completed in 2024. Background ground water wells were completed in 2025. NEPA studies were completed for the NOI but will require updating for mine permitting.

Anfield holds 21 active DOE mine leases as described in Section 6. Eight of these leases are included in this PEA. Each of these leases have mine reclamation permits which require overprinting with new mine permits for operations. The JD-8 mine in the Paradox Mine Complex was selected as the first of the leases to permit. As forementioned, the JD-8 permit is complete and awaiting final comments and approval. The JD-8 mine also has an active MSHA mine number. Within the Paradox Mine Complex, a drilling permit (NOI) is active for the JD-7 mine and delineation drilling was completed at the JD-7 in 2025.

20.3 Social and Community Impact

The Shootaring Canyon Mill is isolated in the far eastern portion of Garfield County, Utah. There would be essentially no viewshed impacts to the community from the different processing options, and the net socioeconomic impacts would be positive through increased employment and tax revenue with minimal long-term adverse impact on local civil infrastructure, housing, and services. Despite expected local support there is a risk of opposition from various Non-Government Organizations (NGOs)

The Velvet-Wood, Slick Rock, Uravan and Paradox mines are brownfield sites within the Colorado Plateau, which has a long history of uranium and vanadium mining. The surrounding communities have a long history of working with and for the region's mining and mineral resource industry, and their support for this project has been strong. Despite expected local support, opposition from various Non-Government Organizations (NGOs) should be anticipated for the Slick Rock mines.

No potential social or community related requirements, negotiations, and/or agreements are known to the authors with respect to local communities and/or agencies. No outstanding environmental liabilities other than the bonded reclamation obligations on the DOE leases previously discussed are known to the authors.

According to the Fraser Institute Annual Survey of Mining Companies, 2025, Utah ranks twelfth of sixty-eight ranked jurisdictions with respect to the policy perception index. Within the US, Utah ranks behind Nevada in the policy perception index. Colorado is ranked twenty sixth. The Policy Perception Index provides a comprehensive assessment of the attractiveness of mining policies in a jurisdiction, and can serve as a report card to governments on how attractive their policies are from the point of view of an exploration manager (Fraser Institute, 2025).

Section 21: Capital and Operating Costs

Project cost estimates are based on conventional random room and pillar underground mine operations. Mined material would be hauled by truck to the Shootaring Canyon Mill. The mill would be fully refurbished and would process mined material for both uranium and vanadium recovery.

All costs are estimated in constant 2026 US Dollars. Operating (OPEX) and Capital (CAPEX) costs reflect estimated operating costs going forward including all pre-production costs, permitting costs, mine costs, and reclamation and closure costs for of the mine and mineral processing facility. CAPEX does not include sunk costs or acquisition costs.

Anfield has re-opened the Velvet mine and operates a surface aggregate quarry near the Velvet mine in Lisbon Valley. Anfield has current CAPEX and OPEX costs for various equipment, surface facilities and infrastructure, has refurbished company owned equipment, and has contracted for purchase of additional mining equipment. Where available, actual CAPEX and OPEX costs have been used. Where actual costs are not known the estimate is based on current InfoMine™ Mining Cost Service data.

Shootaring Canyon Mill CAPEX includes refurbishment of the Shootaring Canyon Mill's uranium circuit and the addition of a new vanadium circuit. The major items for refurbishment of the existing uranium circuit include removal and replacement of the leach tanks, replacement of the CCD circuit, and repair and upgrading of the electrical system including generators. The vanadium circuit will be a new build. The firm of Precision System Engineering (PSE) of Salt Lake City, Utah has been retained as the design engineer supported by Dr. Terry McNulty, an extractive metallurgist with over 60 years' experience and the author of this report.

The original design capacity of the mill is 750 tons per day (TPD) or a nominal 250 thousand tons per year (TPY). Initial refurbishment of the Shootaring Canyon Mill is intended provide a 750 TPD capacity. The current plan is to increase that capacity 30% to 1,000 TPD as the mines reach full capacity in year 3. The expansion has been provided for in the license amendment. Additional capital including the addition of 2 leach and 2 CCD tanks with appurtenances is planned for year 3. These additions can be made without modifying or expanding the leach or CCD areas of the Shootaring Canyon Mill.

The Shootaring Canyon Mill tailings area including the primary dam was constructed in the early 1980's and has been inspected and maintained since that time. The tailings facility lacks a synthetic liner and leak detection system. The existing tailings pond area allows for multiple tailings cells. The initial tailing cell is approximately 38 acres. An additional tailings cell will be needed as early as year 8. Additional capital including licensing is planned for year 7. The installed cost of the tailings liner system has been estimated based on vendor quotes.

Mine CAPEX will vary by specific mine layout and design requirements. This PEA includes 8 mines with 3-4 operating at any given time. All the mines use similar underground mining equipment. Most of the mines have existing mine portal entries with declines. At least 3 of the planned mines will require shaft and hoist systems. Mine ventilation requirements are similar for

all mines. For the purposes of the PEA, generic mine CAPEX was estimated for a typical decline mine and a typical shaft mine.

A contingency of 10% has been added to the Mine CAPEX and a contingency of 20% added to the Shootaring Canyon Mill CAPEX.

Mine OPEX estimates were based on continual operations of two 10-hour shifts per production day and productivity was based on 330 days per year or 90% utilization. Salary and labor rates for technical and managerial staff and mine workers are based on current rates within Anfield and its subsidiaries. Transportation of mined product to the Shootaring Canyon Mill was based specific cost for company owned and operated trucking with current vendor quotes and in-house wages.

Shootaring Canyon Mill OPEX assumes operation of the mill 24 hours per day, 7 days per week schedule with allowances for downtime and scheduled maintenance. Salary and mill labor requirements and costs have been estimated for the uranium and vanadium facilities separately and any common elements assigned to the uranium costs. Consumable items and reagents, including the primary lixiviants, sulfuric acid and sodium chlorate, usage rates were derived from current and past metallurgical test work performed by Hazen Research and others. Prices for most chemicals are based on vendor quotes FOB at the Shootaring Canyon Mill.

Estimated CAPEX is summarized on Table 21.1.1. CAPEX estimates include:

- Permitting (Outside Services).
- Mine facilities and equipment.
- Mill facilities and equipment.
- Mill tailings liner system and appurtenances.

Estimated OPEX is summarized on Table 21.1.2. OPEX estimates include:

- Direct mining costs.
- Haulage and handling costs related to the delivery of mined product to the Shootaring Canyon Mill.
- Direct mineral processing costs.
- Reclamation and bonding costs.
- Royalties and taxes.

Royalties

Royalties on all properties other than the DOE leases range from nil to a maximum of 8%. However, it was announced on May 27, 2025, that the state of Utah had reduced the royalty for the Tony M in Garfield County from 8% to 3% to promote development. It is reasonable to assume that the same grace may be afforded to Anfield, potentially resulting in all royalties other than the DOE leases being 4% or less.

The current royalties on DOE mineral leases are approximately 15% to DOE and 15% to Cotter resulting in 30% or more total burden (refer to Table 6.1.1). DOE is a Fair Market Value royalty and Cotter is a Gross Value royalty. These leases, which were executed in 2020 as 10-year

agreements, are scheduled to expire in 2030. However, there is precedence where “Recognizing that the former lessees had a vested interest in their respective lease tracts, DOE granted the lessees access to the lease tracts to maintain their existing operations” (DOE, 2014).

The Company expects to renegotiate the royalty terms as part of the DOE lease renewal process. In support of these negotiations, Anfield intends to reference comparable royalty rates applicable to uranium production on state lands in the region, specifically Wyoming’s 4% royalty rate on state uranium leases and Utah’s 8% royalty rate on state mineral leases which was recently dropped to 3% for one operator. In addition, the Company will seek a further reduction in the royalty rate to account for the incremental transportation distances and associated costs from the Colorado-based DOE lease properties to regional processing facilities, including the Company’s Shootaring Canyon Mill in Utah. These transportation costs reduce netback values and market competitiveness relative to projects located closer to in-state mills, thereby providing additional justification for adjusted royalty terms that better reflect the project’s economic realities.

The Company also expects to renegotiate royalty terms with Cotter. There are some questions whether upon renewal or reissuance of the leases, the Cotter royalties would remain valid but in good faith Anfield intends to renegotiate the rates on a similar basis as with DOE negotiations.

In the PEA, the mine production schedule on the DOE leases is delayed until after 2030 to account for the risks relating to renewal and high royalty rates which make the DOE leases less attractive on a cost basis than other available options for mine production.

As a result of the foregoing, the Company and the authors recommend, for the purpose of the PEA, setting the post-2030 royalty on each DOE lease to 4% to each party for a total of 8%.

There can be no assurance that the Company will be able to secure reduced royalty rates with the DOE or Cotter as contemplated herein or at all. The impact of the risks related to royalties and/or non-renewal of the leases can be assessed as follows:

- Assuming negotiations only result in a reduction to 8% for both parties and a total of 16%, NPV would be reduced by approximately \$30 million USD.
- Assuming royalties were little changed, the NPV would be reduced by approximately \$77 million USD.
- If the leases were not renewed or the properties not mined due to the high royalties, the NPV would be reduced by approximately \$209 million USD.
- However, production from the DOE leases is not currently planned until 2032 allowing sufficient time for Anfield to offset this loss from other captive mines or toll milling arrangements.

Table 21.1.3 compares the OPEX and CAPEX cost per ton to the gross value of the recovered uranium and vanadium.

Table 21.1.1 CAPEX Summary

Capital Expenditures: \$ x 1,000	Initial	Ongoing
Permitting and Licensing	\$1,500	2,000
Mine CAPEX (Velvet-Wood and Slick Rock)		
Mine Facilities and Equipment	15,000	28,100
Contingency 10%	1,500	2,810
Shootaring Mill CAPEX		
Uranium Mill Refurbishment	25,900	4,000
Vanadium Mill	28,800	0
Tailings	12,000	15,000
Contingency 20%	13,340	3,800
Working Capital	One Time	\$6,000
Replacement Mine Equipment LOM	Annual	\$9,000
Replacement Plant Equipment LOM	Annual	10,500
TOTAL CAPITAL EXPENDITURES	\$98,040	\$81,210

Table 21.1.2 OPEX Per Ton Summary

Direct Mine Costs:	Per Ton
Weighted Average Direct Mine Cost Per Ton Product:	\$ 123.80
Weighted Average Haulage/Handling Costs per Ton:	\$ 31.76
Weighted Average Direct Processing Costs Per Ton U&V:	\$ 108.77
Other Direct Costs:	
Reclamation Bond & Bonding per ton	\$ 8.48
Royalties per ton	\$37.25
Severance and Taxes per ton	\$16.80
Weighted Average ALL Direct Operating Costs Per Ton	\$ 326.76

Table 21.1.3 OPEX and CAPEX Summary

Weighted Average ALL Direct OPEX (rounded)	Per Ton Processed	\$ 327.00
CAPEX Cost Per Ton (rounded)	Per Ton Processed	\$ 43.00
Total Cost	Per Ton Processed	\$ 370.00
Gross Value: Uranium (\$100/lb) ~5 Pounds per Ton Vanadium (\$9/lb) ~22 Pounds per ton	Per Ton Processed	\$ 698.00

Section 22: Economic Analysis

22.1 Summary

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

For the purposes of this PEA, the Shootaring Canyon Mill would be initially refurbished to its original 750 TPD capacity and ramped up to a capacity of 1,000 TPD by the end of year 3 to its planned license renewal capacity. A separate vanadium recovery circuit would be added following the uranium refurbishment and depending on vanadium market conditions. The PEA considers initial mine feed from the existing Velvet mine decline, a new shaft at the Wood mine, and two production shafts at Slick Rock. When the mineral resources are mined out at the Wood mine, additional mines will be added from DOE leases in the Slick Rock, Uravan and Paradox mine complexes. Given the selective nature of the mining and the geometry of mineralization, 3-4 producing mines are needed to meet the mill tonnage capacity. Additional mill feed could be sourced as captive feed from other Anfield mineral resource holdings in the Colorado Plateau or from mineral resource holdings of others under toll milling agreements.

The financial evaluations that follow represent constant 2026 US dollars. All costs are forward-looking and do not include any previous project expenditures or sunk costs. Operating costs include all direct taxes and royalties. IRR and NPV are presented, both pre-tax and post-tax scenarios accounting for State of Utah/Colorado Income Tax and US Federal Income Tax. Estimation of US corporate income tax is complex, as income tax relates to the overall income and expenses of the reporting entity, not a specific project. This analysis reflects the taxes that would be due if the Project was stand-alone and subject to State of Utah, State of Colorado, and U.S. income tax. Due to the favorable regular tax depletion deduction, most mining companies' effective tax rate is the Alternative Minimum Tax (AMT) rate. The AMT rate is 20%. The Shootaring Canyon Mill is located in Utah which has a 5% corporate state income tax. Note the corporate tax rate in Colorado is slightly less than Utah at 4.4%. Anfield has Loss Carry Forward from the Project incurred since its acquisition in 2015, which may substantially offset the estimated tax burden, however, this was not applied in the following analysis.

Table 22.1.1 summarizes the estimated internal rate of return (IRR) and net present value (NPV) for the base case at a commodity price of \$100/pound uranium oxide, a commodity price of \$9/pound for vanadium oxide, and a discount rate of 8%.

Table 22.1.1 Base Case Economic Criterion (\$ x 1,000)

Pre-Income Tax		Post-Income Tax	
IRR 106%	NPV @ 8% *\$606,000	IRR 97%	NPV @8% *\$533,000

* Rounded to million USD

22.2 Breakeven Commodity Price

The PEA base case commodity price for uranium and vanadium is \$100/lb and \$9/lb, respectively. Reducing these commodity prices by 45% to \$55/lb and \$5/lb, for uranium and vanadium respectively, results in a near breakeven condition.

22.3 Payback Period

The payback period for initial capital investment is less than 3 years.

22.4 Sensitivity Analysis

22.4.1 Sensitivity to Price

Tables 22.4.1 summarizes the Net Present Value (NPV \$ x1,000) and Internal Rate of Return (IRR) before and after income tax over a 10% fluctuation of commodity prices and a range of discount rates.

Table 22.4.1 Sensitivity to Commodity Price and Discount Rate

Pre Income tax			NPV at 0% discount	\$ 1,090,409	Pre Income tax			NPV at 0% discount	\$ 849,466	Pre Income tax			NPV at 0% discount	\$ 1,331,352
U Price	\$	100.00	NPV at 5% discount	\$ 746,476	U Price	\$	90.00	NPV at 5% discount	\$ 579,962	U Price	\$	110.00	NPV at 5% discount	\$ 912,989
V Price	\$	9.00	NPV at 8% discount	\$ 605,633	V Price	\$	8.10	NPV at 8% discount	\$ 469,064	V Price	\$	9.90	NPV at 8% discount	\$ 742,201
			NPV at 10% discount	\$ 530,358				NPV at 10% discount	\$ 409,649				NPV at 10% discount	\$ 651,067
Base Case			NPV at 12% discount	\$ 466,696	10% Price Reduction			NPV at 12% discount	\$ 359,317	10% Price Increase			NPV at 12% discount	\$ 574,075
			IRR	106%				IRR	85%				IRR	129%
Post Income tax			NPV at 0% discount	\$964,683	Post Income tax			NPV at 0% discount	\$759,239	Post Income tax			NPV at 0% discount	\$1,170,128
U Price	Per Year		NPV at 5% discount	\$658,283	U Price	\$	90.00	NPV at 5% discount	\$515,963	U Price	\$	110.00	NPV at 5% discount	\$800,604
V Price	\$	-	NPV at 8% discount	\$532,924	V Price	\$	8.10	NPV at 8% discount	\$415,994	V Price	\$	9.90	NPV at 8% discount	\$649,854
			NPV at 10% discount	\$465,957				NPV at 10% discount	\$362,476				NPV at 10% discount	\$569,438
Base Case			NPV at 12% discount	\$409,342	10% Price Reduction			NPV at 12% discount	\$317,168	10% Price Reduction			NPV at 12% discount	\$501,516
			IRR	97%				IRR	78%				IRR	118%

Changing the commodity prices for uranium and vanadium equally by 10% varies the NPV @8% approximately +/- \$136 million \$US Pre-Tax, and approximately +/- \$117 million \$US Post-Tax. In both the Pre-Tax and Post-Tax scenarios IRR varies by approximately +/- 20% with a +/- 10% variation **in price**.

To further illustrate the Project's sensitivity to commodity price, Figure 22.4.1 shows the variation in pre-tax NPV with uranium price fixed and vanadium price variable and Figure 22.4.2 shows the variation in pre-tax NPV with vanadium price fixed and uranium price variable.

The figures illustrate that the Project is more sensitive to fluctuations in uranium price than it is to fluctuations in vanadium price.

Figure 22.4.1 Sensitivity to Uranium Price

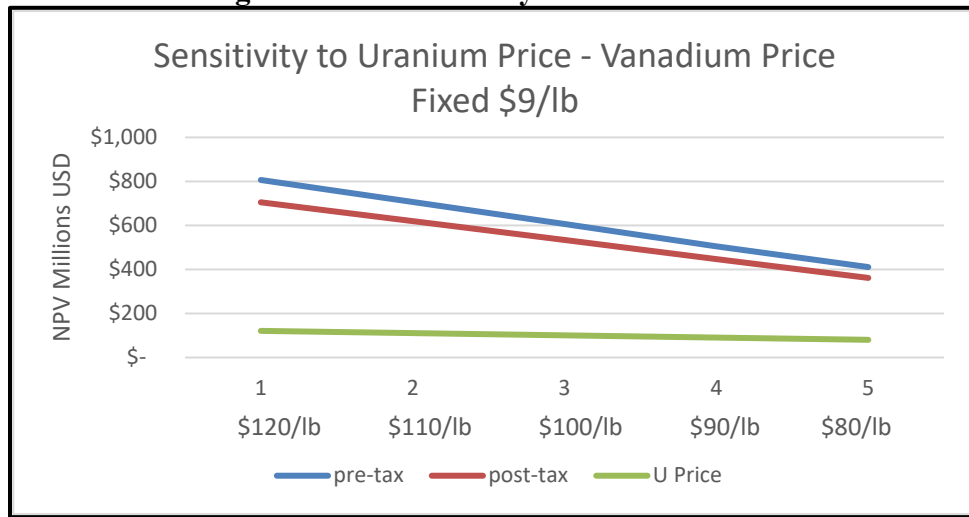
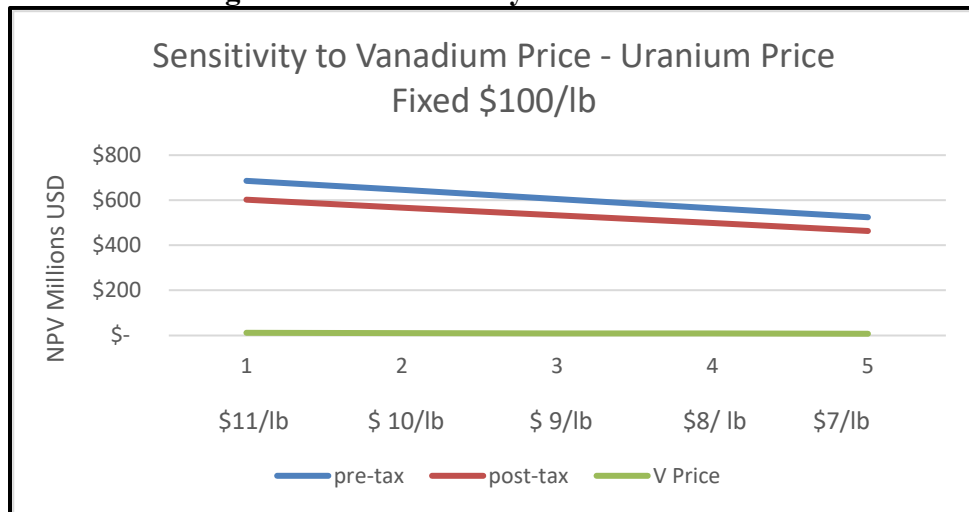


Figure 22.4.2 Sensitivity to Vanadium Price



22.4.2 Sensitivity to Other Factors

Table 22.4.2 summarizes the % Pre-tax variations in IRR and NPV based on a 10% variance in the base case relative to process recovery, CAPEX, and OPEX.

The factors to which the Project has the greatest sensitivity are metal recovery (either losses in mining or milling) followed by OPEX and CAPEX.

Table 22.4.2 Sensitivity to Other Factors

+/- 10 Percent Change	+/- Change in NPV* @8% Discount Pre-Tax \$x1,000	+/- Change in IRR Pre-Tax Percent	+/- Change in NPV* @8% Discount Post-Tax \$x1,000	+/- Change in IRR Post-Tax Percent
Recovery (U & V)	137,000	22	117,000	19
Grade (U & V)	107,000	18	92,000	18
CAPEX	15,000	12	11,000	11
OPEX	75,000	10	62,000	9

NPV rounded to nearest \$1 million USD

22.5 Cash Flow Model

The cash flow model for the base case is provided in Table 22.5.1 which follows.

Table 22.5.1 Cash Flow

Conceptual Cash flow Shooting Mill and Tributary Mines																			
Production Year	Totals		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Mill Feed Sources			Stockpiles	Wood Mine Velvet Mine	Wood Mine Velvet Mine	Wood Mine Velvet Mine	Wood Mine Velvet Mine	JD8/JD9/JD6 Velvet Mine	JD8/JD9/JD6 Velvet Mine	JD7 Velvet Mine	JD7	JD7	JD7	JD7	SM18/SR11	SM18/SR11	SM18/SR11		
				Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine	Slick Rock A Mine Slick Rock B Mine		
Total Tonos Mill Feed	4,054		126	188	281	300	297	343	345	343	306	311	311	301	294	304	129		
Grade % U3O8	0.245		0.147	0.296	0.280	0.303	0.294	0.274	0.270	0.213	0.218	0.195	0.195	0.202	0.211	0.204	0.207		
Pounds contained U3O8	19,826		370	1,112	1,573	1,814	1,748	1,885	1,863	1,462	1,336	1,215	1,215	1,215	1,242	1,242	535		
Pounds recovered U3O8	19,033		355	1,067	1,510	1,742	1,678	1,809	1,789	1,403	1,282	1,166	1,166	1,166	1,193	1,193	514		
Recovery % U3O8	96%		96%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%		
U3O8 price/pound	\$ 100.00	\$	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00		
Uranium Revenue	\$ 1,903,300		\$ 35,483	\$ 106,713	\$ 151,063	\$ 174,175	\$ 167,787	\$ 180,939	\$ 178,856	\$ 140,350	\$ 128,235	\$ 116,597	\$ 116,597	\$ 116,597	\$ 119,266	\$ 119,266	\$ 51,387		
Pounds Contained V2O5	90,159		0	3,771	5,581	5,918	5,825	8,569	8,539	7,646	7,470	6,730	6,730	6,730	6,869	6,869	2,911		
Grade % V2O5	1.11			1.00	0.99	0.99	0.98	1.25	1.24	1.11	1.22	1.08	1.08	1.12	1.17	1.13	1.13		
Pounds Recovered V2O5	81,143			3,394	5,023	5,327	5,243	7,712	7,685	8,882	8,723	8,057	8,057	8,182	8,182	2,620			
Recovery V2O5	90%			90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%		
V2O5 price per pound	\$ 9.00	\$	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00	\$ 9.00		
Vanadium Revenue	\$ 730,288	\$	\$ -	\$ 30,549	\$ 45,207	\$ 47,939	\$ 47,184	\$ 69,412	\$ 69,166	\$ 61,934	\$ 60,503	\$ 54,514	\$ 54,514	\$ 54,514	\$ 55,640	\$ 55,640	\$ 23,576	\$ -	
GROSS REVENUE	2,633,588	\$	\$ 35,483	\$ 137,262	\$ 196,256	\$ 222,118	\$ 214,970	\$ 250,350	\$ 248,022	\$ 202,284	\$ 188,738	\$ 171,111	\$ 171,111	\$ 171,111	\$ 174,905	\$ 174,905	\$ 74,962		
Direct Mine Costs:	\$70 - \$78 per total tons																		
Subtotal Direct Mine Costs:	Avg \$123.80/ton Product	\$	\$ 3,816	\$ 24,226	\$ 35,905	\$ 35,601	\$ 35,828	\$ 34,343	\$ 32,611	\$ 44,574	\$ 41,486	\$ 44,288	\$ 43,711	\$ 44,780	\$ 39,740	\$ 41,199	\$ 18,138	\$ 1,000	
Haulage/Handling Costs	\$27.18 - \$30.17 per ton																		
Subtotal Haulage/Handling Costs:	Avg \$32.75 per ton	\$	\$ 31.76	\$ -	\$ 5,464	\$ 8,188	\$ 8,707	\$ 8,629	\$ 13,489	\$ 13,533	\$ 14,537	\$ 9,422	\$ 9,576	\$ 9,576	\$ 9,268	\$ 9,046	\$ 9,354	\$ 3,969	\$ -
Average Cost per ton	Uranium and Vanadium	\$	\$ 108.77																
Subtotal Direct Processing Costs:		\$	\$ 5,109	\$ 26,145	\$ 31,870	\$ 33,044	\$ 32,866	\$ 35,721	\$ 35,820	\$ 35,710	\$ 33,434	\$ 33,742	\$ 33,742	\$ 33,127	\$ 32,684	\$ 33,299	\$ 18,285	\$ -	
Other Direct Costs:																			
Other Direct Costs:																			
Reclamation and Bonding				460	460	460	460	460	460	460	460	460	460	460	460	460	460	29,000	
Royalties and Taxes				6,053	8,683	9,905	9,333	26,700	15,661	12,002	10,918	10,213	10,213	10,213	10,517	10,517	4,759	0	
Local Property and Severance Tax		\$	\$ 1,037.56	\$ 3,683.81	\$ 5,217.66	\$ 5,890.06	\$ 5,704.22	\$ 6,624.11	\$ 6,563.56	\$ 5,374.38	\$ 5,022.18	\$ 4,563.88	\$ 4,563.88	\$ 4,563.88	\$ 4,662.54	\$ 4,662.54	\$ 2,064.02	\$ -	
Subtotal Other Direct Costs:		\$	\$ 1,038	\$ 10,197	\$ 14,361	\$ 16,255	\$ 15,497	\$ 33,784	\$ 22,685	\$ 17,836	\$ 16,401	\$ 15,237	\$ 15,237	\$ 15,237	\$ 15,639	\$ 15,639	\$ 7,283	\$ 29,000	
TOTAL ALL Direct Costs		\$	\$ 9,962	\$ 66,032	\$ 90,325	\$ 93,607	\$ 92,820	\$ 117,337	\$ 104,649	\$ 112,657	\$ 100,743	\$ 102,843	\$ 102,266	\$ 102,412	\$ 97,110	\$ 99,492	\$ 47,675	\$ 30,000	
Cash Flow Pre-tax		\$	\$ 25,521	\$ 71,230	\$ 105,931	\$ 128,511	\$ 122,150	\$ 133,013	\$ 143,373	\$ 89,627	\$ 87,995	\$ 68,268	\$ 68,845	\$ 68,699	\$ 77,796	\$ 75,414	\$ 27,287	\$ (30,000)	
Capital Expenditures:																			
Permitting and Licensing																			
Subtotal			1,500	200	100	100	100	300	100	100	300	100	100	100	100	100	100	100	
Mine Facilities and Equipment																			
Subtotal			15,000	18,500	0	0	0	4,400	0	4,000	200	0	0	500	500	0	0	0	
Mine CAPEX Contingency 10%			1,500	1,850	0	0	0	440	0	400	20	0	0	50	50	0	0	0	
Refurbish Ticaoob Mill						to 1,000 tpd													
Uranium Plant	\$ 25,900	\$	\$ 25,900			4,000													
Tailings	\$ 12,000	\$	\$ 12,000						2nd tailings w/ permit	15,000									
Vanadium Plant	\$ 28,800	\$	\$ 28,800																
Subtotal		\$	\$ 66,700	\$ -	\$ -	\$ 4,000	\$ -	\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Mill CAPEX Contingency 20%			13,340			800				3,000									
Working Capital - 3Months		\$	\$ 6,000															\$ (6,000)	
Replacement Mine Equipment @5%				\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ -					
Replacement Plant Equipment				\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 500				
TOTAL CAPITAL EXPENDITURES		\$	\$ 98,040	\$ 26,550	\$ 2,100	\$ 6,900	\$ 2,100	\$ 7,140	\$ 2,100	\$ 24,500	\$ 2,520	\$ 2,100	\$ 2,100	\$ 1,650	\$ 1,150	\$ 100	\$ 100	\$ (5,900)	
NET CASH FLOW		\$	\$ (72,519)	\$ 44,680	\$ 103,831	\$ 121,611	\$ 120,050	\$ 125,873	\$ 141,273	\$ 65,127	\$ 85,475	\$ 66,168	\$ 66,745	\$ 67,049	\$ 76,646	\$ 75,314	\$ 27,187	\$ (24,100)	
CUMULATIVE NET CASH FLOW:		\$	\$ (72,519)	\$ (27,839)	\$ 75,992	\$ 197,603	\$ 317,653	\$ 443,526	\$ 584,799	\$ 649,926	\$ 735,401	\$ 801,569	\$ 868,314	\$ 935,363	\$ 1,012,008	\$ 1,087,322	\$ 1,114,509	\$ 1,090,409	

Section 23: Adjacent Properties

There are no adjacent properties which materially affect this project.

Section 24: Other Relevant Data and Information

Anfield is investigating sorting of the mined material at the mine sites as a way of potentially eliminating minimally-mineralized waste rock and upgrading the mined material prior to shipment to the Shootaring Canyon mill and/or sorting mined material at the Shootaring Canyon mill to increase throughput and increase feed grades.

Experience in South Africa by Rados, a supplier of XRF-based sorting, indicates that the reject may contain as little as 15 ppm U_3O_8 . Simultaneous rejection of carbonates could reduce consumption of sulfuric acid, as most of the consumption is due to reactions that convert carbonates to sulfates like gypsum.

Experience in Canada, the US, and overseas with precious metal, copper, and uranium mining has demonstrated that as much as half of the feed to sorters can be rejected. If a significant fraction of the production from Anfield's mines can be rejected on-site, the trucking and reagent expenses used in this PEA will be reduced proportionately. Similarly sorting at the Shootaring Canyon mill could increase throughput and increase feed grades.

Section 25: Interpretations and Conclusions

This Preliminary Economic Assessment (PEA) summarizes the conceptual plans for refurbishing the Shootaring Canyon mill (HUB) and tributary mines (spokes).

Mineral resources included in the PEA include the Velvet-Wood Mine Complex, the Slick Rock Mine complex, the Uravan and Paradox Mine complexes, and the existing stockpiles of mined material. The total estimated in situ uranium mineral resources are summarized in Table 14.0.1. The associated in situ vanadium mineral resource which will be mined as a co-product are summarized in Table 14.0.2. In addition to these in situ mineral resources, Anfield controls mineralized stockpiles at the Shootaring Mill and in the Lisbon Valley near the Velvet-Wood mines, which are summarized in Table 14.0.3.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

25.1 Economic Analysis

Project cost estimates are based on conventional random room and pillar underground mining operations. Mined material would be hauled by truck to the Shootaring Canyon Mill. The Shootaring Canyon Mill would be fully refurbished and would process mined material for both uranium and vanadium recovery.

All costs are estimated in constant 2026 US Dollars. Operating (OPEX) and Capital (CAPEX) costs reflect estimated operating costs going forward including pre-production costs, permitting costs, mine costs, and reclamation and closure costs for of the mine and mineral processing facility. CAPEX does not include sunk costs or acquisition costs.

Shootaring Canyon Mill CAPEX includes refurbishment of the Shootaring Canyon Mill's uranium circuit and the addition of a new vanadium circuit. The major items for refurbishment of the existing uranium circuit include removal and replacement of the leach tanks, replacement of the CCD circuit, and repair and upgrading of the electrical system including generators. The vanadium circuit will be a new build. The firm of Precision Systems Engineering (PSE) of Salt Lake City, Utah has been retained as the design engineer supported by Dr. Terry McNulty, an extractive metallurgist with over 60 years' experience and author of this report.

The original design capacity of the mill was 750 tons per day (TPD) or a nominal 250 thousand tons per year (TPY). Initial refurbishment of the Shootaring Canyon Mill is intended provide a 750 TPD capacity. The current plan is to increase that capacity 30% to 1,000 TPD as the mines reach full capacity in year 3. The expansion has been provided for in the license amendment. Additional capital including the addition of 1 or 2 leach and 1 or 2 CCD tanks with appurtenances is planned for year 3. These additions can be made without modifying or expanding the leach or CCD areas of the Shootaring Canyon Mill.

The Shootaring Canyon Mill tailings area including the primary dam was constructed in the early 1980s and has been inspected and maintained since that time. The tailings facility lacks a synthetic liner and leak detection system. The existing tailings pond area allows for multiple tailings cells. The initial tailing cell is approximately 38 acres which is included in the initial CAPEX. An additional tailings cell will be needed as early as year 8. Additional capital including licensing is planned for year 7.

The base case is based on commodity prices of \$100 per pound for uranium oxide and \$9 per pound for vanadium pentoxide with mill recoveries of 96% and 90%, respectively. Table 22.1 summarizes the estimated IRR and NPV for the base case.

The base case economic evaluation, as discussed in Section 22, shows:

- Pre-Tax IRR 106%
- Post-Tax IRR 97%
- Pre-Tax NPV (8% discount rate) \$606,000 \$US x 1,000
- Post-Tax NPV (8% discount rate) \$533,000 \$US x 1,000

Breakeven, with respect to commodity price, occurs when the base case commodity prices are reduced by 45%.

In order of impact on NPV, the project is sensitive to price, metal recovery, OPEX, and CAPEX.

25.2 Summary of Risks

25.2.1 General

It is the authors' opinion that the technical risks associated are low for the following reasons:

- Portions of each of the Mine Complexes included in the PEA have been successfully mined in the past.
- Uranium has been successfully extracted from mined material via conventional milling.
- The Shootaring Mill has a Radioactive Materials License which is well into the renewal process for refurbishment and operation.
- The Velvet-Wood Mine has all major permits and has the potential to be the most profitable of the Mine Complexes included in the PEA.

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

- Future commodity demand and pricing.
- Environmental and political acceptance of the project.
- Variance in capital and operating costs.
- Mine and mineral processing recovery and dilution.
- Continuity of mineralization with respect to thickness and grade may vary.
- Mining claims are subject to the Mining Law of 1872. Changes in the mining law could affect the mineral tenure.
- There is a risk that underground conditions at any or all of the mines included in the PEA may limit access to mineral resources.

25.2.2 Permitting and Licensing

There are risks associated with any such permitting actions which could affect project schedule and costs. The Velvet-Wood, Slick Rock, Uravan, and Paradox mines are brownfield sites within the Colorado Plateau which has a long history of uranium and vanadium mining. The mill is an existing facility with an existing source material license. Environmental studies under the National Environmental Policy Act (NEPA) have been completed for all of the mine sites included in the PEA. For the Velvet-Wood mine, the BLM Plan of Operations and Utah mine permit were approved under an environmental assessment (EA). It is possible that permitting other mines included in the PEA may require additional environmental studies, additional permits, and/or an environmental impact statement resulting in delays and additional costs.

The surrounding communities have a long history of working with and for the region's mining and mineral resource industry, and their support for this project has been strong. Despite expected local support, recent mineral development in the area has received opposition from various Non-Government Organizations (NGOs) and this should be anticipated in some cases. This is expected to be a specific risk for the Slick Rock mine in San Miguel County, Colorado.

San Miguel promulgated their own county mining regulations earlier this year. The Company expects these regulations to be challenged on a preemptory basis at the state level by the Colorado Mining Association (CMA) and by the US Department of Interior (DOI). Portions of the Slick Rock mineral holdings, leases and claims, are adjacent to a proposed conservation area. In draft legislation leases and claims within the proposed conservation district were excluded as prior existing rights.

There is a risk that the planned schedule for the Slick Rock mines could be delayed for technical reasons or by delays in permitting. While this risk exists, the impact of a one-year delay in the current plan would reduce the estimated NPV by \$36 million USD pre-tax, if the planned production was not offset by other captive mines or toll milling arrangements.

25.2.3 DOE Leases

There is a risk that the DOE leases may not be renewed in 2030 as previously discussed and/or the royalty burden on the leases reduced, as discussed in Section 21.

Past precedence with the renewal of DOE leases as discussed in Section 6 is to renew the leases with the current lessee if they are meeting their obligations under the lease and in recognition of

the fact the lessee has a vested interest and investment in the leases. This was the case for the 2020-2030 10-year renewal.

The Company expects to renegotiate the royalty terms as part of the DOE lease renewal process. The Company also expects to renegotiate royalty terms with Cotter. In this PEA, the production schedule on the DOE leases is delayed until after 2030 to account for the risks relating to renewal and high royalty rates which make the DOE leases less attractive on a cost basis than other available options for mine production.

For the purpose of the PEA, it was assumed that the post-2030 royalty on the DOE leases could be reduced by 4% to each party for a total of 8%.

There can be no assurance that the Company will be able to secure reduced royalty rates with the DOE or Cotter as contemplated herein or at all. The impact of the risks related to royalties and/or non-renewal of the leases can be assessed as follows.

- Assuming negotiations only result in a reduction to 8% for both parties and a total of 16%, NPV would be reduced by approximately \$30 million USD.
- Assuming royalties were little changed, the NPV would be reduced by approximately \$77 million USD.
- There is a risk that the DOE leases may not be renewed in 2030 and/or the royalty burden on the leases may not be reduced as discussed in Section 21. Under the worst case this could reduce the NPV by \$209 million USD pre-tax.
- However, production from the DOE leases is not currently planned until 2032 allowing sufficient time for Anfield to offset this loss from other captive mines or toll milling arrangements.

25.2.4 Vanadium Price:

Should the vanadium price not reach the price used in the PEA by the decision point for CAPEX investment for the vanadium plant, the effect on the project economics can be moderated by delaying construction and operation of the vanadium circuit. To do this and not lose the vanadium, it would be necessary to construct a lined temporary storage pond for the vanadium feed stream from the uranium plant within the tailings area. A 5-acre pond could be constructed for approximately 1 million USD and would be adequate for 2 or more years of storage of raw vanadium concentrate. A sensitivity analysis of delaying the vanadium production and revenue, of approximately 75 million USD for 2 years, offset by delaying project costs including 28 million USD CAPEX and 23 million USD in OPEX, showed little change in the NPV for the project provided the vanadium is recovered in the following 4 years.

Other than the aforementioned risks, the authors are not aware of additional environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which would materially affect the mineral resource estimates, provided the conditions of all mineral leases and options, and relevant operating permits and licenses are met.

Readers are cautioned that this PEA is preliminary in nature and includes a portion of the inferred mineral resources as reported in Section 14 of the report. Mineral resources are not mineral

reserves and do not have demonstrated economic viability in accordance with CIM standards, and as such there is no guarantee the project economics described herein will be achieved. Inferred mineral resources are too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the outcomes estimated in the PEA will be realized. Mineral reserves are not estimated herein. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

Section 26: Recommendations

The following recommendations relate to potential improvement and/or advancement of the Project and to further define the in situ mineral resources. The following recommendations are for the Velvet, Wood and Slick Rock mines as they are the earliest mines in the production schedule. The recommendations are independent of one another and may be conducted contemporaneously.

Mines:

The Velvet Mine Area and resources are well delineated in the west and fairly well delineated in the east. The eastern portion of the Velvet mine resource will need to be drilled from the underground workings during any future development to classify resources into the Measured and/or Reserve categories ahead of mining extraction operations. The Wood resource area is less well delineated and will require additional surface and/or underground drilling to better define and quantify the resource prior to development as shown in Table 26.0.1.

The Slick Rock mineral resource estimate is dominantly classified as inferred due to the drill hole spacing. The 2024 verification drilling at Slick Rock did increase the total estimated mineral resource and elevate approximately 8% of the mineral resource to an indicated mineral resource classification. Slick Rock will require additional surface drilling to better define and quantify the resource prior to development as shown in Table 26.0.2. under the current drilling permit (NOI) up to 100 drill holes could be added without reaching the 5-acre disturbance limit which requires ad BLM plan of operations.

Table 26.0.1 Wood Exploration Drilling Cost Estimate

Item	Cost (USD)
15 rotary dill holes for verification and delineation. Total estimated cost per hole with geophysical logging and well site geologist, \$32,000.	\$480,000
4 Diamond Core intervals from selected rotary drill holes 100 feet per hole for assay, metallurgical testing, and geotechnical testing. Estimate \$100 per foot of core.	\$40,000
3 Groundwater wells for determination of background water quality, water level, and dewatering parameters. Total estimated cost per hole with geophysical logging, well site geologist, casing, pumps and hydrological testing. \$170,000 pr well.	\$510,000
Lab analysis of core and water samples.	\$100,000
Resource estimate and mine design update and mine permit amendment.	\$300,000
Metallurgical and geotechnical testing of core samples.	\$100,000
Site access and reclamation	\$50,000
Total	\$1,580,000

Table 26.0.2 Slick Rock Phase 2 Exploration Drilling Cost Estimate

Item	Cost (USD)
Amendment of NOI	\$80,000
90 rotary dill holes for verification and delineation. Total estimated cost per hole with geophysical logging and well site geologist, \$32,000.	\$2,880,000
10 Diamond Core intervals from selected rotary drill holes 100 feet per hole for assay, metallurgical testing, and geotechnical testing. Estimate \$100 per foot of core.	\$100,000
4 Groundwater wells, Area A, for determination of background water quality, water level, and dewatering parameters. Total estimated cost per hole with geophysical logging, well site geologist, casing, pumps and hydrological testing. \$170,000 per well.	\$680,000
Lab analysis of core and water samples.	\$250,000
Metallurgical and geotechnical testing of core samples.	\$200,000
Resource estimate and mine design	\$400,000
Site access construction and reclamation.	\$50,000
Total	\$4,640,000

Section 27: References

Previous Reports:

Agapito Associates, Inc., “Ground Support Recommendations for the Velvet and Wood Mines”, P. 1-1 to 5-19, November 7, 2008.

Beahm, D.L., “Velvet-Wood Uranium Project, Technical Report, Mineral Resources, Amended and Restated, National Instrument 43-101, San Juan County, Utah, USA”, June 5, 2015. Available on SEDAR+.

Behre Dolbear and Company (USA) Inc., “Technical Report on Nine Properties Held by Cotter Corporation in Montrose and San Miguel Counties, Colorado, USA”, 80p, 2007.

Crossland, D. J., Atlas Minerals, “Preliminary Property Evaluation of the Velvet – Section 2 Project”, January 1990. (Two Reports)

Energy Fuels Resources, “Preliminary Feasibility Study for the Sheep Mountain Uranium Project, Fremont County, Wyoming, USA”, December 31, 2021.

Hazen Research, Inc., “Feedstock Amenability Program for Shootaring Canyon Mill Feasibility”, P. 1-10, 42-84, July 11, 2008.

JS Redpath Corporation, “The Conceptual Mine Design for Section 2, Lisbon Valley Project, Utah”, July 1980.

MRC, “Section 2 Mine Plan”, January 1983.

Nuclear Regulatory Commission, “Environmental Assessment for Plateau Resources Limited’s Shootaring Canyon Uranium Project Garfield County, Utah”, September 2003.

Price, Michael J., “Updated Measure Geologic Reserves, Measured Mining Reserves and Indicated and Inferred Reserves, Velvet Mine, San Juan County, Utah”, April 1987.

Publications Cited:

Beahm DL and McNulty, TP, “Velvet-Wood Mine Uranium Project, Preliminary Economic Assessment, National Instrument 43-101, Utah, USA”, June 2016.

Beahm DL, “Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg Counties, Texas, USA”, January 2023.

Bon, RL and Krahulec, KA, “2007 Summary of Mineral Activity in Utah”, Utah Geological Survey, 2007.

Botinelly, Theodore, and Weeks, A. D., “Mineralogic Classification of Uranium-Vanadium Deposits of the Colorado Plateau”, U.S. Geological Survey Bulletin 1074-A, P. 1-5, 1957.

Bush, A.L., Stager, H.K., "Appraisal of the Accuracy of U.S Geological Survey Ore Reserves Estimates for Uranium-Vanadium Deposits on the Colorado Plateau", U.S. Geological Survey Trace Elements Investigations Report 288, 1954.

Bush, A.L., Stager, H.K., "Accuracy of Ore-Reserve Estimates for Uranium-Vanadium Deposits on the Colorado Plateau", Geological Survey Bulletin 1030-D, 1956.

Campbell, John A. and Steel-Mallory, Brenda A., "Depositional Environments of the Uranium bearing Cutler Formations, Lisbon Valley", Utah: U.S. Geological Survey Open-File Report 79-994, 1979.

Canadian Institute of Mining, Metallurgy, and Petroleum, "CIM Definition Standards on Mineral Resources and Reserves", May 10, 2014.

Cater, F.W., Jr., "Geologic Map of the Bull Canyon Quadrangle, Colorado", USGS Geological Quadrangle Map 33, 1 plate, 1:24,000 scale, 1954.

Cater, Jr., FW, "USGS Hamm Canyon and Horse Range Mesa Geologic Maps", 1955.

Chenoweth, William L., "The Uranium-Vanadium Deposits of the Uravan Mineral Belt and Adjacent Areas, Colorado and Utah", in New Mexico Geological Society Guidebook, 32nd Field Conference, Western Slope Colorado, p. 165-170, 1981.

Chenoweth, WL, "Lisbon Valley, Utah's premier uranium area, a summary of exploration and ore production", Utah Geological and Mineral Survey, OFR-188, 1990.

Cohenour, R, "Uranium in Utah", Utah Geological and Mineral Survey, B-82, 1969

Denis, John R., "The Location and Origin of Uranium Deposits in the Cutler", December 1982.

Dodd, P. H., and Drouillard, R. F., "Borehole logging methods for exploration and evaluation of uranium deposits", U.S. Atomic Energy Commission, 1967.

Doelling, H. H., "Geologic Map of the La Sal 30' x 60' Quadrangle, San Juan, Wayne, and Garfield Counties, Utah, and Montrose and San Miguel Counties, Colorado", 1:100,000 scale, 2004.

Doelling, H. H., "Uranium-Vanadium Occurrences of Utah", Utah Geological and Mineral Survey, OFR-18, 1974.

Fischer, R. P., Hilpert, L. S., "Contributions to the Geology of Uranium: U.S. Geology of the Uravan Mineral Belt", in USGS Bulletin 988-A, 1952.

Garrels, R. M. and Larsen, E. S., "Geochemistry and Mineralogy of the Colorado Plateau Uranium Ores", USGS Professional Paper 320, 1959.

Grimaldi, F. S., May, I., and Fletcher, M. H., "U.S. Geological Survey Fluorimetric Methods of Uranium Analysis", Geological Survey Circulation 199, 1952.

Hasan, Mohammad, “Geology of Active Uranium Mines During 1982 in Parts of Paradox Basin, Southeastern, Utah”, Utah Geological and Mineral Survey, OFR-89, 1986.

Hunt, Charles B., “Cenozoic Geology of the Colorado Plateau,” U.S. Geological Survey Professional Paper 279, 1956.

Internal Revenue Service, “Publication 535, Business Expenses”, 2004.

Kelley, J.C., “Tectonics of the Region of the Paradox Basin”, in Intermountain Association of Petroleum Geologists Guidebook 9th Annual Field Conference, Uinta Basin, 1958: p. 31-38, 1958.

Lyntek, “Definitive Cost Estimate for the Restart of Shootaring Canyon Mill, Ticaboo, Utah”, Prepared for Uranium One, March 28, 2008.

Mathisen, M., “Technical Report on the Tony M Mine Utah, USA, Report for NI 43-101”, 2022.

McKay, A. D. et al, “Resource Estimates for In Situ Leach Uranium Projects and Reporting Under the JORC Code”, Bulletin November/December 2007.

McNulty, T. P., “Innovative Technology: Its Development and Commercialization”, Plant Operators’ Forum, SME Annual Conference, Orlando, Florida, March 1998.

McNulty, T. P., “Minimization of Delays in Plant Startups”, Plant Operators’ Forum, SME Annual Conference, Denver, Colorado, February 25, 2004.

McNulty, T. P., “Plant Ramp-up Profiles”, CIM Conference of Metallurgists, Vancouver, British Columbia, September 30, 2014.

McNulty, T. P., “Plant Ramp-up Performance Profiles – An Update”, CIM Conference of Metallurgists, Halifax, Nova Scotia, August 20, 2024.

McNulty, T. P., Mackey, P. J., and McKinnon, B., “McNulty Curves – An Update and New Perspectives”, Copper 2025, Phoenix, Arizona, November 18, 2025.

Merritt, R. C., “The Extractive Metallurgy of Uranium”, prepared for the USAEC by the Colorado School of Mines Research Institute, 1971.

Nelson-Moore L., James, Collins B., Donna, Hornbaker A.L., “Radioactive mineral Occurrences of Colorado”, in Colorado Geological Survey/Department of Natural Resources, Bulletin 40, 1978.

Page, Lincoln R., Stocking, Hobart E., & Smith, Harriet B., “Contributions to the Geology of Uranium and Thorium by the United States Geological Survey and Atomic Energy Commission for the United Nations International Conference on Peaceful Uses of Atomic Energy, Geneva, Switzerland 1955”, (U.S. Geological Survey Professional Paper 300), 1956.

PSE, “Prefeasibility Study for the Reactivation of the Shootaring Canyon Mill”, 2023.

Rogers, William B., & Shawe, Daniel R., “Exploration For Uranium-Vanadium Deposits by U.S. Geological Survey 1948-56 in Western Disappointment Valley Area, Slick Rock District, San Miguel County, Colorado (East Half)”, Mineral Investigations Field Studies Map MF-241, U.S. Atomic Energy Commission, 1962.

Roscoe Postle Associates, “Technical Report on the Lisbon Valley Uranium Properties, Utah, Prepared for U.S. Energy Corp., Report NI 43-101”, dated September 14, 2005

Shawe, Daniel R., “Structure of the Slick Rock District and Vicinity, San Miguel and Dolores Counties, Colorado”, U.S. Geological Survey Professional Paper 576-C, 1970.

Shawe, D. R. et. al, “Uranium-Vanadium Deposits of the Slick Rock District, Colorado”, USGS Professional Paper 576-F, p. 19-20, 27, 2011.

Talbot, David, “Metals and Mining, Uranium Sector”, Dundee Capital Markets, pp21-26, January 13, 2016

State of Utah, “Tax Bulletin 12-93”, July 1993.

Tyler, Noel, & Ethridge, Frank G., “Depositional Setting of the Salt Wash Member of the Morrison Formation, Southwest Colorado”, Journal of Sedimentary Petrology, Vol. 53, No. 1, P. 0067-0082, 1983.

U.S. Department of Energy, “Final Uranium Leasing Program Programmatic Environmental Statement”, March 2014.

U.S. Geological Survey, “Mineral Commodity Summaries”, January 2022.

Utah, Prepared for U.S. Energy Corp., “Report NI 43-101”, dated September 14, 2005

Weeks, A.D., “Mineralogy and Oxidation of the Colorado Plateau Uranium Ores, US Geological Survey Paper 300”, p. 187-193, 1956.

Weir, D.B., “Geologic Guides to Prospecting for Carnotite Deposits on the Colorado Plateau, in U.S. Geological Survey Bulletin 988-B”, P. 15-27, 1952.

Weir, Gordon W., and Puffett, Willard P., “Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area”, Utah-Colorado: Open-File Report 81-39, U.S. Geological Survey, 292p, 1981.

West, J., “Uranium Logging Techniques”, Century, 1975.

Williams, P. L., compiler, “Geology, Structure, and Uranium Deposits of the Moab Quadrangle, Colorado and Utah”, U. S. Geol. Survey Misc. Geol. Inv. Map I-360, 2 sheets, scale 1:250,000, 1964.

Section 28: Signature Page and Certification of Qualified Person

Terence P. (“Terry”) McNulty

I, Terence P. (“Terry”) McNulty, D. Sc., P.E., do hereby certify that:

1. I am the owner and President of T. P. McNulty and Associates, Inc., located at 4321 North Camino de Carrillo, Tucson, AZ, 85750-6375. My email address is tpmacn1@aol.com.
2. I am the principal author of “The Shootaring Canyon Mill and Velvet-Wood and Slick Rock Mines, Preliminary Economic Assessment, National Instrument 43-101”, dated May 6, 2023 (the “Technical Report”).
3. I obtained a Bachelor of Science degree in Chemical Engineering from Stanford University in 1961, a Master of Science degree in Metallurgical Engineering from Montana School of Mines in 1963, and a Doctor of Science degree from Colorado School of Mines in 1966. I am a Registered Professional Engineer in the State of Colorado (License # 24789) and a Registered Member (# 2,152,450RM) of the Society of Mining, Metallurgy, and Exploration, Inc.
4. I have worked as a metallurgical engineer for a total of 66 years, including years worked between degrees. My recent experience for the purpose of the Study is as follows:
 - a. I have worked as a consultant on 35 uranium projects during the last 23 years and have contributed to NI 43-101 compliant studies for many of those.
 - b. I was Manager of Corporate R&D and Technical Services for a large, diversified mining firm, The Anaconda Company, which was a major uranium producer.
5. I have visited the Shootaring Canyon plant during 2007-2008, in 2025, and in 2026. On June 9, 2026, I completed a site visit of all the mine sites pertaining to this report. On June 10, 2026, I completed my most recent site visit to the plant.
6. I am responsible for Sections 13 and 17 of the 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 Anfield. I hold no stock, options, nor have any other form of financial connection to Anfield. Anfield is but one of many clients for whom I consult.
8. I have prior work experience on the project, being involved with an engineering study completed by a former owner of the project during 2004, 2007, and 2008.
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, available 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.

June 15, 2026

“original signed and sealed”

/s/ Terence P. McNulty

Terence P. McNulty, SME Registered Member

SIGNATURE PAGE AND CERTIFICATE OF QUALIFIED PERSON

DOUGLAS L. BEAHM

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

1. I am the Principal Engineer and President of BRS, Inc., 1130 Major Avenue, Riverton, Wyoming 82501.
2. I am the Co-author author of “The Shootaring Canyon Mill and Tributary Mines, Utah and Colorado, Preliminary Economic Assessment, National Instrument 43-101”, dated May 4, 2026 (the “Technical Report”).
3. I graduated with a Bachelor of Science degree in Geological Engineering from the Colorado School of Mines in 1974. I am a licensed Professional Engineer in Wyoming, Colorado, Utah, and Oregon, a licensed Professional Geologist in Wyoming and a Registered Member of the Society for Mining, Metallurgy, and Exploration.
4. I have worked as an engineer and a geologist for over 50 years. My work experience includes uranium exploration, mineral resource estimation, reserves estimation, mine production, and mine/mill decommissioning and reclamation. Specifically, I have worked as an exploration geologist, chief geologist, chief mine engineer and consultant with numerous uranium projects hosted in sandstone environments in the Western US.
5. My most recent site visits were completed in the week of June 8, 2026. On June 9, 2026, I completed a site visit of all the mine sites pertaining to this report. On June 10, 2026, I completed my most recent site visit to the Shootaring Canyon mill. I also made recent site visits to Slick Rock and the Uravan and Paradox mines on March 18th and 19th, 2024, the Shootaring Canyon mill on April 7th and 8th, 2025, and the Velvet-Wood mine on November 6, 2025.
6. I am responsible for all sections of the report of the Technical Report as coauthor.
7. I am not independent of the issuer as in addition to my role as Principal Engineer and president of BRS Inc. I served as COO for Anfield Energy.
8. I do have prior work experience on the project for a previous owner during 2007 and 2008 as discussed in the Technical Report.
9. I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by reason of my education, professional registration, and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with same.
11. As of the date of this report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

June 15, 2026

“original signed and sealed”

/s/ Douglas L. Beahm

Douglas L. Beahm, SME Registered Member