



Technical Report on the Cebolleta Uranium Project, Cibola County, New Mexico, USA

Report for NI 43-101

American Future Fuel Corporation

and

Premier American Uranium Inc.

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Prepared by:

SLR International Corporation

Qualified Person:

Mark B. Mathisen, C.P.G.

Hugo M. Miranda, M.Eng., MBA, SME (RM)

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Prepared by

SLR International Corporation

1658 Cole Blvd, Suite 100

Lakewood, CO 80401

for

American Future Fuel Corporation

800 – 1199 W. Hastings St.

Vancouver, BC

V6E 3T5, Canada

and

Premier American Uranium Inc.

217 Queen Street West, Suite 303

Toronto, ON

M5V 0P5, Canada

Effective Date – April 30, 2024

Signature Date – June 17, 2024

Prepared by:

Mark B. Mathisen, C.P.G

Hugo M. Miranda, M.Eng., MBA, SME (RM)

Peer Reviewed by:

Luke Evans, M.Sc., P.Eng.

Dorota El Rassi, P.Geo.

Approved by:

Project Manager:

Mark B. Mathisen, C.P.G

Project Director:

Grant A. Malensek, M.Eng., P.Eng..

Distribution: 1 copy - Premier American Uranium Inc.

1 copy - SLR International Corporation



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1.0 Summary

1.1 Executive Summary

SLR International Corporation (SLR) was retained by American Future Fuel Corporation (AMPS) to prepare a current Mineral Resource estimate and an independent National Instrument 43-101 (NI 43-101) Technical Report (the Technical Report) on AMPS's Cebolleta Uranium Project (Cebolleta or the Project), located in Cibola County, New Mexico (NM), United States of America (USA).

AMPS is a Canadian-based resource company focused on the strategic acquisition, exploration, and development of uranium projects. AMPS holds a 100% interest in the Cebolleta Uranium Project, situated in the northern portion of the Laguna Mining District within the Grants Mineral Belt, a prolific mineral belt responsible for approximately 37% of all uranium produced in the USA. AMPS's Cebolleta project is an advanced exploration project.

On March 20, 2024, the Company entered into an arrangement agreement with Premier American Uranium Inc. (PUR) pursuant to which, among other things, PUR agreed to acquire all of the issued and outstanding common shares of AMPS pursuant to a plan of arrangement under the *Business Corporations Act* (British Columbia) (the Arrangement). The Arrangement is expected to be completed in June 2024 and upon completion AMPS will become a wholly owned subsidiary of PUR.

The Project is located in the northeastern corner of Cibola County, approximately 40 miles (mi) west of the city of Albuquerque, NM, and approximately 10 mi north of the town of Laguna, NM. The Project area encompasses 6,717 acres of mineral rights and approximately 5,700 acres of surface rights owned in fee by *La Merced del Pueblo de Cebolleta* (Cebolleta Land Grant (CLG)). Cibola Resources, LLC (Cibola) a wholly owned subsidiary of AMPS, owns a mining lease from 2007 on private surface and minerals owned by the CLG. The CLG is a political subdivision of the State of New Mexico, the result of the USA agreeing to uphold private property within land grants in the territory ceded by Mexico to the USA in 1848. Cibola was originally formed by Neutron Energy Inc. (NEI) in 2007, which was acquired by Uranium Resources, Inc. (URI), predecessor to Westwater Resources, Inc. (WWR), followed by enCore Energy (enCore). AMPS acquired the property from enCore in May 2022.

Historical exploration led to the development of the Climax M-6 Mine, the St. Anthony Mine Complex, and the Sohio JJ#1 Mine. The main shaft to the Sohio JJ#1 Mine is situated 164 ft (50 m) to the west of the property boundary, however, most of the underground workings fall within the Project area. The production history of Cebolleta is as follows:

- Between 1954 to 1956, Climax Uranium Company (Climax) discovered, and subsequently began production of, the underground Climax M-6 Uranium Mine. Climax produced uranium from the Climax M-6 Mine from July 1957 to October 1960, yielding 78,722 short tons (st) (71,415 metric tonnes (t)) that averaged 0.204% U_3O_8 and contained 320,942 lb (145,577 kg) of U_3O_8 (McLemore and Chenoweth, 1991).
- United Nuclear Corp (UNC) and its subsidiary, Teton Drilling Co., acquired the St. Anthony lease from Climax in the 1970s. UNC developed the St. Anthony North and South open pit mines and the Willie P underground mine, known as the St. Anthony Mine Complex (Baird et al., 1980). Mining occurred from 1975 to 1979, with milling continuing until 1980. The total production of the St. Anthony operation amounted to approximately 1.6 million pounds (lb) of U_3O_8 (Moran and Daviess, 2014). Ore from the mines was processed primarily at UNC's Church Rock Mill near Gallup, NM.



- The Sohio JJ#1 underground mine extracted uranium from the Area II and Area V deposits and operated by Sohio Western from late 1976 to mid-1981. The Sohio JJ#1 mine shaft is situated off the Cebolleta property, approximately 164 ft (50 m) to the west of the boundary; however, most of the underground workings fall within the Cebolleta property boundaries. The mine is estimated to have delivered 898,600 st (815,000 t) of material to the L-Bar mill, averaging 0.123% and yielding 2,218,800 lb (1,006,492 kg) of U₃O₈ (Boyd et al., 1984).

1.1.1 Conclusions

SLR offers the following interpretations and conclusions on the Project:

- The Cebolleta deposits are classified as sandstone hosted - uranium deposits. Sandstone-type uranium deposits typically occur in fine to coarse grained sediments deposited in a continental fluvial environment.
- The majority of the potentially economic uranium mineralization is hosted by the Jackpile Sandstone, although minor amounts of mineralization are hosted in sandstones of the Brushy Basin Member of the Morrison Formation.
- The Project is an exploration stage property 100% owned by AMPS. The property encompasses 6,717 acres (2,718 hectares (ha)) of privately held mineral rights (fee or deeded) and approximately 5,700 acres (2,307 ha) of surface rights owned in fee by *La Merced del Pueblo de Cebolleta* (Cebolleta Land Grant or CLG).
- The Project is located in a region that has a lengthy history of uranium exploration and mining activity dating to the 1950s and is close to necessary infrastructure and resources.
- Rotary and diamond drilling (core) on the property was the principal method of exploration and delineation of uranium mineralization. As of the effective date of this report, AMPS and its predecessor companies have completed a reported total of 3,644 drill holes, from 1951 to 2014 and 2023, of which 3,594 totaling 1,868,457 feet (ft) of drilling are contained in the drilling database provided to SLR.
- In the QP's opinion, the drill hole logging and sampling procedures meet industry standards and are adequate for Mineral Resource estimation. The QP is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.
- The QP reviewed and verified the resource database including a search for unique missing, and overlapping intervals, a total depth comparison, duplicate holes, property boundary limits, and verifying the reliability of the % eU₃O₈ grade conversion as determined by downhole gamma logging. No limitations were placed on SLR's data verification process.
- Mineral Resources have been classified in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions), The QP considers that the knowledge of the deposit setting, lithologies, structural controls on mineralization, and the mineralization style and setting, is sufficient to support the Mineral Resource Estimate (MRE) to the level of classification assigned.
- The QP considers that the resource cut-off grade and mining shapes used to identify those portions of the Mineral Resource that meet the requirement for the reasonable



prospects for eventual economic extraction (RPEEE) to be appropriate for this style of uranium deposit and mineralization.

- Mineral Resource estimate is based on a \$80/lb uranium price using an underground mining cut-off grade of 0.072% eU₃O₈ and an open pit mining cut-off grade of 0.024% eU₃O₈, with an effective date of April 30, 2024. Estimates account for depletion from past production having an Indicated Mineral Resource totaling 6.6 million short tons at an average grade of 0.14% eU₃O₈ equivalent to 18.6 million pounds of eU₃O₈ and an Inferred Mineral Resource totaling 2.6 million short tons at an average grade of 0.10% eU₃O₈ equivalent of 4.9 million pounds eU₃O₈.
- Mineral Reserves have not yet been estimated for the Project.
- The mineralized horizons of the Jackpile sandstone are open ended and trend beyond the external limits of the drill hole grid. Potential exists to extend mineralization into previously untested areas of the Project, where this mineralized zone is present but not drill tested in a comprehensive manner.
 - o The exploration potential to increase total resources and upgrade Inferred material to Indicated remains strong throughout Cebolleta with the completion of infill drilling along currently mapped uranium mineralization and obtaining radiometric logs and uranium grade information from the Willie P area, which is not included in this MRE but was the site of previous underground mine operations occurring between 1975 to 1979.
- The level of uncertainty has been adequately reflected in the classification of Mineral Resources for the Project. The MRE presented may be materially impacted by any future changes in the break-even cut-off grade, which may result from changes in mining method selection, mining costs, processing recoveries and costs, metal price fluctuations, or significant changes in geological knowledge.
- In the opinion of the QP, the resource estimation reported herein is an appropriate representation of the % eU₃O₈ Mineral Resources found at the Cebolleta Project at the current level of sampling. The QP is of the opinion that with consideration of the recommendations summarized in Sections 1 and 26 of this Technical Report, any issues relating to all relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.

1.1.2 Recommendations

AMPS has proposed a two Phase (two year) exploration program with a total budget of US\$4,375,000 to advance the Project, beginning in 2024 (Table 1-1). The QP has reviewed the 2024 to 2025 drilling program proposed by AMPS and is of the opinion that it is a reasonable approach to the advancement of the Project. The objectives of the drill program are summarized below:

- 1 Explore for additional Mineral Resources on the property to further improve Project economics.
- 2 Collect additional bulk density and chemical assays in future drilling conducted on the Project to confirm historical reported density and radiometric equilibrium results.
- 3 Update the MRE with additional drill hole data and complete a NI 43-101 Preliminary Economic Assessment (PEA).



Table 1-1: Proposed Cebolleta 2024 and 2025 Exploration Budget

Category	Item	Budget (US\$)
2024 Phase 1		
Confirmation Drilling	Drilling up to 14 locations with a principal objective of evaluating historical data using downhole radiometric gamma surveys and geochemical and bulk density analysis of core samples.	\$490,000.00
Exploration Drilling	Drilling at up to 65 locations for extension drilling and resource expansion.	\$2,125,000.00
Total Phase 1		\$2,615,000.00
2025 Phase 2		
Confirmation Drilling	Drilling up to 11 locations with a principal objective of evaluating historical data using downhole radiometric gamma surveys and geochemical and bulk density analysis of core samples.	\$385,000.00
Exploration Drilling	Drilling at up to 35 locations for extension drilling and resource expansion.	\$1,125,000.00
PEA and MRE Update	NI 43-101 Preliminary Economic Assessment and updated Mineral Resource Estimate	\$250,000.00
Total Phase 2		\$1,760,000.00
Grand Total		\$4,375,000.00

1.2 Technical Summary

1.2.1 Property Description and Location

Cebolleta lies to the east of Mount Taylor and Mesa Chivato, in the northern portion of the Laguna Mining District in west central New Mexico. The Property location is in the northeastern corner of Cibola County, approximately 40 mi (64 km) west of the city of Albuquerque, NM, and approximately 10 mi (16 km) north of the town of Laguna, NM. Three small villages, Bibo, Moquino, and Seboyeta, are located a short distance west and northwest of the property.

The approximate center of the Cebolleta property has the following coordinates:

- Universal Transverse Mercator (UTM): 291,532 mE, 3,893,400 mN, (NAD83 UTM Zone 13)
- Geographic: 35°9'42.97" N latitude and 107°17'19.87" W longitude (decimal degrees: 35.161936, -107.288853)

1.2.2 Land Tenure

The Project encompasses 6,717 acres (2,718 ha) of privately held mineral rights (fee or deeded) and approximately 5,700 acres (2,307 ha) of surface rights owned in fee by *La Merced*



del Pueblo de Cebolleta (Cebolleta Land Grant or CLG) (Figure 4-1). Three tracts of land make up the Cebolleta property, including the South L Bar (1,917 acres – Tracts 1 and 2) and the St. Anthony Tract (4,800 acres – Tract 3). The tracts of land known as the South L Bar Tract comprises a portion of lands that were originally known as the L Bar Ranch.

The CLG is a political subdivision of the State of New Mexico. It originally formed part of an expansive Spanish land grant that was made to certain individuals by the King of Spain when Mexico (and certain portions of New Mexico) was a Spanish colony. The two major types of land grants were private grants made to individuals, and communal grants made to groups of people for the purpose of establishing settlements. Most of the land area within grants was designated as common land for residents. Common land was mostly used for grazing cattle and sheep and harvesting timber. Small acreages within the grants were devoted to irrigation agriculture and home sites. The principal objectives of the land grants were to encourage the foundation of new communities and to expand the settled area on the frontiers of New Mexico for defense from Native American raids.

The CLG is a private entity managed by a board of trustees whereby the trustees have the authority to approve the use of assets and natural resources within the grant boundary. Under the Treaty of Guadalupe Hidalgo, which ended in the Mexican American War in 1848, the USA agreed to uphold private property within land grants in the territory ceded by Mexico to the USA (Byers, 2006; Uranium Energy Corp., 2008).

1.2.3 Existing Infrastructure

Primary infrastructure on the Cebolleta property is limited to access roads and power supply. Electrical lines extend to the central portion of the property and a high-voltage electrical line and sub-station are present approximately five miles (eight kilometres) northeast of the property.

There are no buildings or other mining-related surface facilities present in the project area.

There are no significant developed infrastructure facilities for access, power, or water at the project site. Water for exploration/mining is sourced from groundwater sources. The Jurassic Westwater Canyon Member of the Morrison Formation and Cretaceous Dakota Sandstone are known aquifers.

1.2.4 Exploration Development History

The Laguna Mining District has a lengthy history of exploration and mining activity dating to the 1950s. Uranium mineralization was discovered in the district in 1951 by Anaconda Copper Company (Anaconda) following a helicopter-borne radiometric geophysical survey. Anaconda's identification of surface uranium mineralization (Beck, et. al 1980) in the Laguna Mining District led to the discovery of the Jackpile-Paguete Uranium Mine, which is adjacent to the southern boundary of Cebolleta. The Jackpile-Paguete Uranium Mine was later developed as the largest uranium mine in the United States, with production of 95 million pounds U_3O_8 between 1953 to 1982.

The first record of uranium exploration at Cebolleta dates between 1955 to 1957, with an exploratory drill program conducted by Anaconda at Evans Ranch (site of the present-day Cebolleta property). Following this, several extensive exploration and development programs have been conducted at Cebolleta from the 1950s to 1981 by Anaconda, Climax, Sohio, and United Nuclear Corp (UNC). This exploration led to the discovery of seven sandstone hosted uranium deposits within Cebolleta.



1.2.5 Geology and Mineralization

Cebolleta is located in the Laguna Mining District, near the eastern end of the Grants Mineral Belt, on the southern flank of the San Juan Basin.

The San Juan Basin encompasses an area of approximately 21,600 square miles (55,943 km²) primarily in southwestern Colorado and northwestern New Mexico, with smaller portions extending into northeastern Arizona and southeastern Utah. The basin is a circular, asymmetrical structural depression primarily located in the east-central part of the Colorado Plateau measuring 140 mi (225 km) wide and 200 mi (322 km) long (Craig, 2001). During the Late Jurassic, the San Juan Basin area was part of a back-arc basin that formed inland of an Andean-type magmatic arc (Burchfield, 1979). This magmatic arc and its landward upland area, provided much of the clastic sedimentary rocks that formed the Upper Jurassic Morrison Formation (Craig et al., 1955), which is the primary host for uranium mineralization. During the Laramide orogeny, the Late Cretaceous and older rocks were deformed into a subsiding structural basin (San Juan Basin) and the depression that formed was filled with early Tertiary and younger sedimentary rocks. Older strata were exposed along the uplifts along the margins of the basin (Stevenson and Baars, 1977).

The geology of the Cebolleta property area comprises a thick sequence of gently north-dipping sedimentary rocks ranging in age from Late Jurassic through Late Cretaceous (Baird and others, 1980; Jacobsen, 1980; Moench and Schlee, 1967; Schlee and Moench, 1963). This sedimentary sequence includes the Jurassic San Rafael Group, which is overlain by the Jurassic Morrison Formation, the dominant host of significant uranium deposits within the Grants Mineral Belt. The Morrison Formation is unconformably overlain by the Cretaceous Dakota Sandstone, which is then interfingered and overlain by the Mancos Shale.

Eight sandstone uranium deposits occurring as a series of tabular bodies are hosted within the Jackpile Sandstone Member of the Upper Jurassic Morrison Formation within the boundaries of the Cebolleta property. These deposits are part of a broad and extensive area of uranium mineralization, including the Jackpile-Paguete deposit located adjacent to the southern boundary of the property, which was one of the largest concentrations of uranium mineralization in the United States (Moran and Daviess, 2014). The L-Bar occurrence area contains five distinct deposits, including Areas I, II, III, IV, and V. The historical JJ#1 Mine is situated in the northwest corner of the Area II Deposit area. The entrance to the JJ#1 Mine lies 50 m to the west of the property boundary; however, most of the underground workings fall within the Cebolleta property boundaries. In addition to the L-Bar deposits, three distinct deposits occur in the St. Anthony area of the property.

1.2.6 Drilling

The Project has been the site of considerable mining and exploration since 1951, with rotary and diamond drilling (core) as the principal method of exploration and delineation of uranium mineralization.

Drilling can generally be conducted year-round on the property.

To date, AMPS and its predecessor companies have completed a reported total of 3,644 drill holes, from 1951-2014 and 2023, of which 3,594 totaling 1,868,457 feet of drilling are contained in the drilling database provided to SLR for use to prepare the Mineral Resource estimates.



1.2.7 Mineral Resources

Mineral Resources have been classified in accordance with CIM (2014) definitions, which are incorporated by reference in NI 43-101.

The Mineral Resource estimate was completed using a conventional block modelling approach. The general workflow used by SLR included the construction of a geological or stratigraphic model representing the Jurassic Morrison Formation in Seequent's Leapfrog Geo (Leapfrog Geo) from mapping, drill hole logging, and sampling data, which was used to define discrete domain and surfaces representing the upper and lower contact of the Jackpile Sandstone Member. The geologic models were then used to constrain resource estimation completed using Seequent's Leapfrog Edge (Leapfrog Edge) software. The resource estimate used a regularized, unrotated whole block approach, inverse distance cubed (ID³) interpolation methodology, and one foot uncapped composites to estimate the eU₃O₈ grades in a three-pass search approach. Hard boundaries were used with ellipsoidal search ranges, and search ellipse orientation was informed by geology and mineralization wireframing. Density values were assigned based on historical bulk density records.

Estimates were validated using standard industry techniques including statistical comparisons with composite samples and parallel inverse distance squared (ID²), ordinary kriging (OK) and nearest neighbor (NN) estimates, swath plots, and visual reviews in cross section and plan. A visual review comparing blocks to drill holes was completed after the block modelling work was performed to ensure general lithologic and analytical conformance and was peer reviewed prior to finalization.

Table 1-2 summarizes the Mineral Resource estimate based on a \$80/lb uranium price using both an underground mining cut-off grade of 0.07% eU₃O₈ and open pit mining cut-off grade of 0.024% eU₃O₈ with an effective date of April 30, 2024.

Table 1-2: Summary of Mineral Resources – Cebolleta Uranium Project - April 30, 2024

Classification	Grade Cut-Off	Tonnage	Grade	Contained Metal	AMPS Basis	Recovery U ₃ O ₈
	(% eU ₃ O ₈)	(Million st)	(% eU ₃ O ₈)	(Million lb eU ₃ O ₈)	(%)	(%)
Indicated						
Underground	0.072	4.1	0.189	15.6	100	95
Open Pit	0.024	3.4	0.081	5.5	100	95
Subtotal Indicated		7.6	0.140	21.2	100	95
<i>Depletion (JJ#1 + Climax M6)</i>		-1.0	0.130	-2.5		
Total Indicated		6.6	0.142	18.6	100	95
Inferred						
Underground	0.072	1.0	0.135	2.6	100	95
Open Pit	0.024	1.6	0.072	2.3	100	95
Total Inferred		2.6	0.095	4.9	100	95

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.



2. Mineral Resources are estimated at a cut-off grade of 0.072% eU₃O₈ for underground based on Deswik MSO stope shapes and 0.024% eU₃O₈ for open pit using Whittle pit optimization.
3. Mineral Resources are estimated using a long-term uranium price of US\$80 per lb U₃O₈,
4. Mineral Resources have been depleted based on past reported production numbers from the underground JJ#1 and Climax M6 mines.
5. A minimum mining width of two ft was used.
6. Tonnage Factor is 16 ft³/st (Density is 0.625 st/ft³ or 2.00 t/m³).
7. Numbers may not add due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.



2.0 Introduction

SLR International Corporation (SLR) was retained by American Future Fuel Corporation (AMPS) to prepare a current Mineral Resource estimate and independent National Instrument 43-101 (NI 43-101) Technical Report (Technical Report) on AMPS's Cebolleta Uranium Project (Cebolleta or the Project), located in Cibola County, New Mexico (NM), United States of America (USA).

AMPS is a Canadian-based resource company focused on the strategic acquisition, exploration, and development of uranium projects. AMPS holds a 100% interest in the Cebolleta Uranium Project, situated in the northern portion of the Laguna Mining District within the Grants Mineral Belt, a prolific mineral belt responsible for approximately 37% of all uranium (U_3O_8) produced in the USA (McLemore and Chenoweth, 1989).

On March 20, 2024, AMPS entered into an arrangement agreement with Premier American Uranium Inc. (PUR) pursuant to which, among other things, PUR agreed to acquire all of the issued and outstanding common shares of AMPS pursuant to a plan of arrangement under the *Business Corporations Act* (British Columbia) (the Arrangement). The Arrangement is expected to be completed in June 2024 and upon completion AMPS will become a wholly owned subsidiary of PUR.

The Project is located in the northeastern corner of Cibola County, approximately 40 miles (mi) west of the city of Albuquerque, NM, and approximately 10 miles (mi) north of the town of Laguna, NM. The Project property encompasses 6,717 acres of mineral rights and approximately 5,700 acres of surface rights owned in fee by *La Merced del Pueblo de Cebolleta* (Cebolleta Land Grant or CLG). Cibola Resources, LLC (Cibola) a wholly owned subsidiary of AMPS owns a mining lease from 2007 on private surface and minerals owned by the CLG. The CLG is a political subdivision of the State of New Mexico, the result of the USA agreeing to uphold private property within land grants in the territory ceded by Mexico to the USA in 1848. Cibola was originally formed by Neutron Energy Inc. (NEI) in 2007 which was acquired by Uranium Resources, Inc. (URI), predecessor to Westwater Resources, Inc. (WWR), followed by enCore Energy (enCore). AMPS acquired the property from enCore in May 2022.

Historical exploration led to the development of the Climax M-6 Mine, the St. Anthony Mine Complex, and the Sohio JJ#1 Mine. The entry portal to the Sohio JJ#1 Mine is situated 50 m to the west of the property boundary; however, most of the underground workings are located within the property boundary. The production history of Cebolleta is as follows:

- Climax M-6 Mine (1956 to 1960): 78,722 short tons (st) (71,415 tonnes (t)) that averaged 0.20% uranium oxide (U_3O_8) and contained 320,942 lb of U_3O_8 .
- St. Anthony Mine Complex (1975 to 1979): 1.6 million pounds of U_3O_8 .
- Sohio JJ#1 Mine (1976-1981): 898,600 st averaging 0.123% U_3O_8 and yielding 2,218,800 lb of U_3O_8 .

These deposits are part of a broad and extensive area of uranium mineralization, including the Jackpile-Paguete deposit which produced over 95 million pounds U_3O_8 . At Cebolleta, the L-Bar occurrence area, formerly known as Sohio, contains five distinct deposits, including Areas I, II, III, IV, and V. In addition, three distinct deposits occur in the St. Anthony area of the property. The deposits range in depth from approximately 200 feet (ft) (61 metres (m)) in the St. Anthony area, to nearly 700 ft (213 m) in the vicinity of the Area II and Area III deposits in the central and northern (down-dip) parts of the Project area.



2.1 Sources of Information

This Technical Report was prepared by Mark B. Mathisen, C.P.G., SLR Principal Geologist, and Hugo Miranda, M.Eng., MBA, SME (RM), SLR Principal Mining Engineer. Both individuals are Qualified Persons (QPs) and independent of AMPS and PUR for the purposes of NI 43-101.

Mr. Mark B. Mathisen visited the Project on September 11 to 13, 2023 during AMPS 2023 Phase 1 drilling campaign. Mr. Mathisen toured ongoing drilling operations, reviewed downhole logging operations and procedures, toured various parts of the property, visited historic drill sites and infrastructure, and conducted discussions with AMPS personnel on the future exploration plans to advance the Project and update previous resource estimations to current.

Discussions were held with the following AMPS personnel:

- Mike Thompson, C.P.G., Vice President of Exploration, AMPS
- Robert Newcomer, C.P.G., Permitting Specialist, Toltec Mesa Resources LLC
- Jordan Fowler, Consulting Geologist, AMPS

Mr. Mathisen is responsible for all sections of this Technical Report excluding Sections 14.11.1.1 through 14.11.1.3, and 14.11.1.6, which were prepared by Mr. Miranda.

The documentation reviewed and other sources of information are listed at the end of this Technical Report in References.



2.2 List of Abbreviations

Units of measurement used in this Technical Report conform to the metric system. All currency in this Technical Report is US dollars (US\$) unless otherwise noted.

μ	micron	kVA	kilovolt-amperes
μg	microgram	kW	kilowatt
a	annum	kWh	kilowatt-hour
A	ampere	L	litre
bbl	barrels	lb	pound
Btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C\$	Canadian dollars	M	mega (million); molar
cal	calorie	m ²	square metre
cfm	cubic feet per minute	m ³	cubic metre
cm	centimetre	MASL	metres above sea level
cm ²	square centimetre	m ³ /h	cubic metres per hour
d	day	mi	mile
dia	diameter	min	minute
dmt	dry metric tonne	μm	micrometre
dwt	dead-weight ton	mm	millimetre
°F	degree Fahrenheit	mph	miles per hour
ft	foot	MVA	megavolt-amperes
ft ²	square foot	MW	megawatt
ft ³	cubic foot	MWh	megawatt-hour
ft/s	foot per second	oz	Troy ounce (31.1035g)
g	gram	oz/st, opt	ounce per short ton
G	giga (billion)	ppb	part per billion
Gal	Imperial gallon	ppm	part per million
g/L	gram per litre	psia	pound per square inch absolute
Gpm	Imperial gallons per minute	psig	pound per square inch gauge
g/t	gram per tonne	RL	relative elevation
gr/ft ³	grain per cubic foot	s	second
gr/m ³	grain per cubic metre	st	short ton
ha	hectare	stpa	short ton per year
hp	horsepower	stpd	short ton per day
hr	hour	t	metric tonne
Hz	hertz	tpa	metric tonne per year
in.	inch	tpd	metric tonne per day
in ²	square inch	US\$	United States dollar
J	joule	USg	United States gallon
k	kilo (thousand)	USgpm	US gallon per minute
kcal	kilocalorie	V	volt
kg	kilogram	W	watt
km	kilometre	wmt	wet metric tonne
km ²	square kilometre	wt%	weight percent
km/h	kilometre per hour	yd ³	cubic yard
kPa	kilopascal	yr	year



3.0 Reliance on Other Experts

This Technical Report has been prepared by SLR for AMPS. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this Technical Report.
- Assumptions, conditions, and qualifications as set forth in this Technical Report.

For the purpose of this Technical Report, SLR has relied on ownership information provided by AMPS in Section 4.1 and Section 6.1. The client has relied on the following title opinions and review:

- Rodey Dickason Law Firm, Mineral Fee Title Report, April 6, 2007 (Dickason, 2007)
- Land Services LLC, Title Document Review for Cebolleta Lease, July 27, 2021 (Land Services LLC, 2021a)
- Maldegen, Templeman and Indall, LLP; Title Review for Lease with Cebolleta Land Grant, September 14, 2021 (Maldegen, et. al., 2021)
- Land Services LLC, Title Document Update Review for Cebolleta Lease, January 19, 2024 (Land Services LLC, 2024)
- Modrall Sperling Law Firm, Title Review of Lands Leased from La Merced del Pueblo de Cebolleta, January 25, 2024 (Model et. al., 2024)

SLR has not researched property title or mineral rights for the Cebolleta Uranium Project and expresses no opinion as to the ownership status of the property.

Except for the purposes legislated under provincial securities laws, any use of this Technical Report by any third party is at that party's sole risk.



4.0 Property Description and Location

4.1 Location

Cebolleta lies to the east of Mount Taylor and Mesa Chivato in the northern portion of the Laguna Mining District in west central New Mexico (Figure 4-1). The Project is located in the northeastern corner of Cibola County, approximately 40 mi (64 km) west of the city of Albuquerque, NM, and approximately 10 mi (16 km) north of the town of Laguna, NM. Three small villages, Bibo, Moquino, and Seboyeta, are located a short distance west and northwest of the property.

The approximate center of the Cebolleta property has the following coordinates:

- Universal Transverse Mercator (UTM): 291,532 mE, 3,893,400 mN, (NAD83 UTM Zone 13)
- Geographic: 35°9'42.97" N latitude and 107°17'19.87" W longitude (decimal degrees: 35.161936, -107.288853)

4.2 Land Tenure

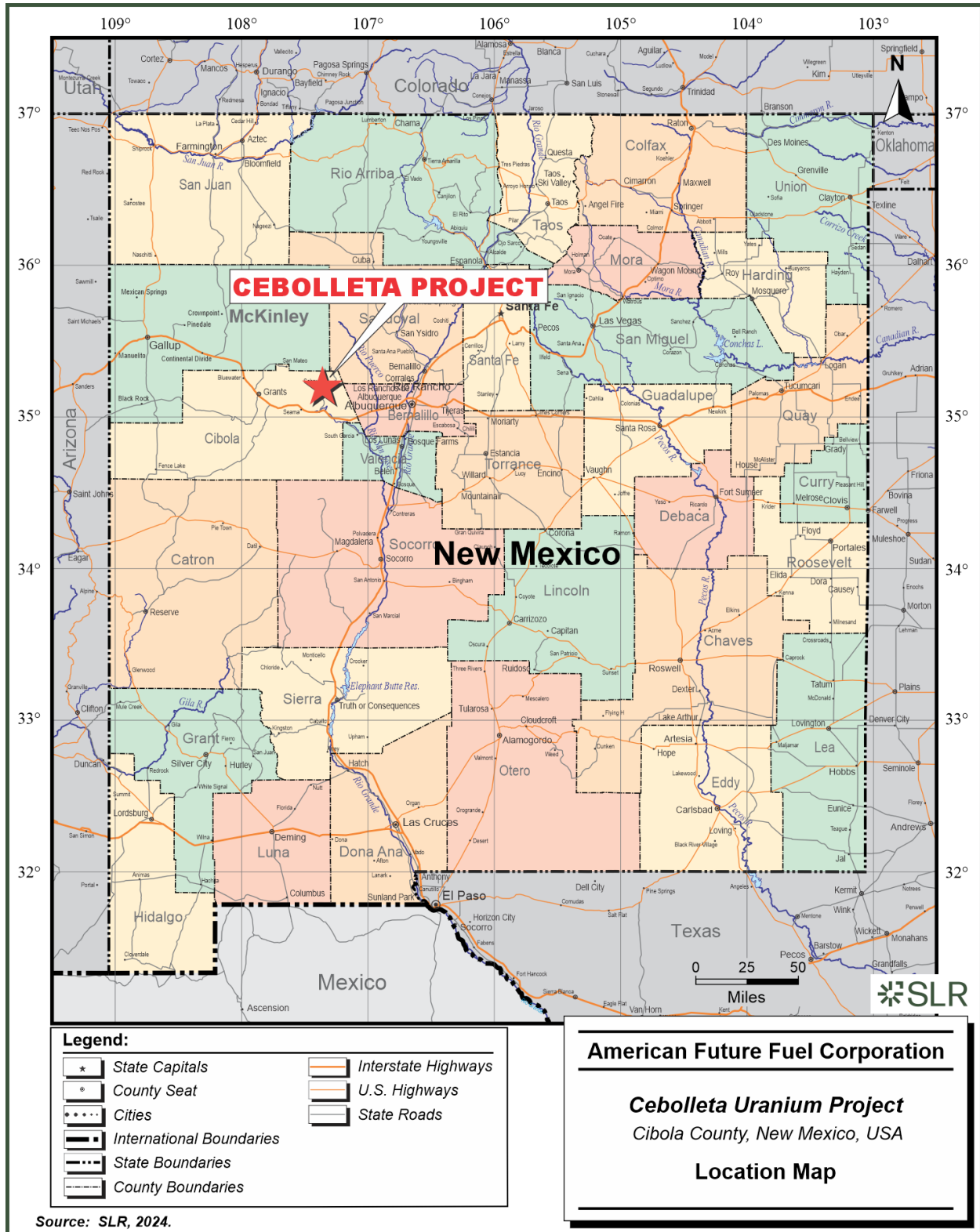
The Project encompasses 6,717 acres (2,718 hectares (ha)) of privately held mineral rights (fee or deeded) and approximately 5,700 acres (2,307 ha) of surface rights owned in fee by *La Merced del Pueblo de Cebolleta* (Cebolleta Land Grant or CLG) (Figure 4-2). Three tracts of land comprise the Cebolleta property, including the South L Bar (1,917 acres – Tracts 1 and 2) and the St. Anthony Tract (4,800 acres – Tract 3). The tracts of land known as the South L Bar Tract comprise a portion of lands that were previously known as the Evans Ranch or the L Bar Ranch.

The CLG is a political subdivision of the State of New Mexico. It originally formed part of an expansive Spanish land grant that was made to certain individuals by the King of Spain when Mexico (and certain portions of New Mexico) was a Spanish colony. The CLG is a private entity managed by a board of trustees whereby the trustees have the authority to approve the use of assets and natural resources within the grant boundary. Under the Treaty of Guadalupe Hidalgo, which ended in the Mexican American War in 1848, the USA agreed to uphold private property within land grants in the territory ceded by Mexico to the USA (Byers, 2006; Uranium Energy Corp., 2008).

The legislation that admitted New Mexico as a State into the Union (enacted in 1912) contained further provisions recognizing and honoring the ownership rights of the CLG owners and their heirs. As a result of the federal legislation, the lands of the CLG are part of the USA, however, they are not subject to federal land management (Moran and Daviess, 2014). Additionally, most of the CLG was never subdivided under the Public Land Survey System (PLSS) of the USA, although the Project has been legally surveyed by a registered land surveyor, and the appropriate monuments have been put in place.



Figure 4-1: Location Map



4.2.1 Mineral Titles

The Cebolleta Property is held by the Cebolleta Lease, originally an agreement between the Cebolleta Land Grant and Neutron Energy Inc. (“NEI”), a private company. The lease was affirmed by the New Mexico District Court in April 2007 and provided NEI with the right to explore for, mine, and process uranium in the lease area inclusive with surface, access, and water rights. NEI assigned the lease to Cibola Resources, LLC (“Cibola”) in 2007, a joint-venture subsidiary owned by NEI (51%) and Uranium Energy Corp (“UEC”, 49%). UEC assigned all of its rights to Cibola to NEI in 2011. NEI, including Cibola, was acquired by Uranium Resources Inc. (URI) in 2012, which changed its name to Westwater Resources Inc. (WRI) in 2017. enCore Energy (enCore) acquired all the uranium assets of WRI in 2021 including NEI and its wholly owned subsidiary Cibola. In August 2021, Elephant Capital Corporation (ECC) entered into a share purchase agreement with enCore and NEI, whereby ECC completed the acquisition of Cibola in May 2022.

On May 24, 2022, AMPS completed the acquisition of all the outstanding share capital of ECC including Cibola and the Cebolleta property held under the Cebolleta Lease. The sole asset of Cibola was and continues to be the Cebolleta Lease, which has been maintained in good standing since its inception in 2007.

On March 20, 2024, AMPS entered into an arrangement agreement with PUR pursuant to which, among other things, PUR agreed to acquire all of the issued and outstanding common shares of AMPS pursuant to a plan of arrangement under the *Business Corporations Act* (British Columbia) (the Arrangement). The Arrangement is expected to be completed in June 2024 and upon completion AMPS will become a wholly owned subsidiary of PUR.

4.2.2 New Mexico Uranium Mine Permitting

New Mexico agencies involved in the permitting of uranium mining and exploration include the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD), the New Mexico Environmental Department (NMED), the New Mexico Office of State Engineer (NMOSE), the Department of Game and Fish (DGF), and the Department of Cultural Affairs (DCA). The MMD of the EMNRD is the primary mine permitting authority of New Mexico and regulates operations through the issuance of exploration and mining permits. The NMED regulates mining operations through the issuance of a Discharge Permit and applicable surface water, waste management, drinking water, radiation control, and air quality permits. The NMOSE regulates any mine water supply and dewatering through the issuance of applicable well, appropriation, and mine dewatering permits.

Jurisdiction over uranium mining operations on non-Indigenous land in New Mexico is held by:

- MMD and the *Mining Act* for exploration and conventional mining.
- NMED and the *Water Quality Act* for discharges to groundwater.
- United States Nuclear Regulatory Commission (NRC) and the *Atomic Energy Act*, and NMED and the *Water Quality Act* for In Situ Leach Operations and Uranium Milling.

New Mexico Mining Act exploration and mining permitting categories include:

- Regular Existing: two years production between 1970 and 1993; >10 acres (4.04 ha) of disturbance.
- Minimal Impact Existing: two years production between 1970 and 1993; <10 acres (4.04 ha) of disturbance.



- Regular New: Operation started in 1993 or later; >10 acres (4.04 ha) of disturbance.
- Minimal Impact New: Operation started in 1993 or later; <10 acres (4.04 ha) of disturbance.
- Regular Exploration: >5 acres (2.02 ha) of disturbance and environmental concerns.
- Minimal Impact Exploration: <5 acres (2.02 ha) of disturbance and limited environmental impacts.

For new mining operations, the *New Mexico Mining Act* and Rules require a two-phase submission to the MMD: (1) A Sampling and Analysis Plan (SAP) for Phase 1, and (2) A complete Permit Application Package (PAP) for Phase 2. The SAP is a detailed work plan that describes how baseline data will be collected. The PAP must comprise a copy of the SAP, a Baseline Data Report (BDR) detailing the results of the SAP, a Mining Operation and Reclamation Plan (MORP), and an Environmental Evaluation (EE) to be completed by the MMD (New Mexico Energy, Minerals and Natural Resources Department, 2010a). Select requirements of the PAP, as summarized from the New Mexico Energy Minerals and Natural Resources Department (2009), are as follows:

- An environmental evaluation that includes 12 months of baseline data and an analysis of the reasonably foreseeable impacts of the proposed activities on the environment and the local community (69-36-9.F, G).
- A determination of the probable hydrological consequences of the mining and reclamation, both on and off the permit area, including water quantity and quality of surface and groundwater (69-36-7.I(6)).
- The proposed mining operation must be designed to meet without perpetual care all applicable environmental requirements imposed by the *Mining Act* and other laws (69-36-12.B(4)).
- The new mine reclamation must achieve a self-sustaining ecosystem appropriate for the surrounding life zone (69-36-7.H).
- All pits and waste units must be designed to facilitate contemporaneous reclamation to the extent feasible (69-36-7.H).
- Financial assurance must be filed by the applicant sufficient to assure completion of permit requirements if the work had to be done by the State of New Mexico (69-36-7.Q).
- Before the *Mining Act* permit can be issued, the New Mexico Environment Department Secretary must determine that the mining activities will achieve compliance with all applicable environmental standards (69-36-7.P).

For regular exploration projects with proposed disturbance of > 5 acres (2.02 ha) a draft of the public notice language must be submitted to the MMD for review and approval prior to submitting the permit application. Following review by the MMD, the application is sent to several agencies for review, including NMED, NMOSE, DGF, State Forestry Division, State Historic Preservation Office, as well as any federal agency that must approve certain aspects of the proposed mine (i.e., Bureau of Land Management), US Forest Service, US Army Corps of Engineers, etc.) or other agency and tribes deemed appropriate by the MMD. Once an application is deemed “technically approvable” by the MMD, a proposal for financial assurance sufficient to cover all final reclamation costs must be submitted and approved by the MMD before a permit is issued (New Mexico Energy, Minerals and Natural Resources Department, 2010b).



4.3 Encumbrances

4.3.1 Environmental Liabilities and Historical Mine Reclamation

Historical mining and exploration related surface disturbances are evident at Cebolleta. The property is the former site of several underground and open pit uranium mining operations. None of the historical mining disturbances are the result of activities of NEI, Cibola, enCore, or AMPS; therefore, AMPS is not responsible for any closure, closeout, water quality impact abatement or reclamation liabilities resulting from historical mine and mineral processing disturbances on or near the property area.

United Nuclear Corp. (UNC), a subsidiary of General Electric and the former operator of the St. Anthony Mine, commenced reclamation closure and closeout planning for the St. Anthony Mine site in January 2006. An updated Closeout Plan was completed by Stantec Consulting Services Inc. (Stantec), on behalf of UNC, in March 2019 (Fritz and Leeson, 2019). The historical St. Anthony Mine site includes underground workings comprising one mine shaft and several vent shafts that are now sealed at the surface, two open pits (one containing groundwater), several piles of revegetated and non-revegetated non-economical mine materials and three topsoil and/or overburden piles. According to Stantec's Closeout Plan, the St. Anthony Pit 1 will be partially backfilled with existing site materials to an elevation above the anticipated final groundwater level and the St. Anthony Pit 2 will be backfilled to prevent the ponding of surface water within the pit. The waste piles will remain in place, all temporary roads will be reclaimed and revegetated, and all disturbed areas will be stabilized using grading, erosion control measures, and revegetation (Fritz and Leeson, 2019). Stantec, on behalf of UNC, submitted a Work Plan to investigate the stability of the pit walls of the St. Anthony Pit 1 to the MMD of New Mexico on May 5, 2021.

There is no discharge permit for the St Anthony Mine site. Therefore, the historical impacts to groundwater quality are being addressed through the abatement requirements in the Water Quality Control Commission Rules under the jurisdiction defined in the Water Quality Act. UNC has completed both Stage 1 and Stage 2 of the abatement under these rules. This has included development of operational, monitoring, contingency, and closure requirements and conditions for the site that are established for the prevention, investigation, and abatement of the water pollution at the site. Due to potential issues arising from the partial backfill of Pit 1, a modified Stage 2 Abatement Plan is being discussed with state regulators.

Sohio Western Mining (Sohio) developed and operated an underground mine (JJ#1) and uranium mill on a portion of the Cebolleta project. Surface disturbances associated with the former mine and mill complex have been restored by the successor company to Sohio, with the formal approval of the MMD of the NMED. The area of the former Sohio L-Bar uranium processing mill and tailings storage facility were previously reclaimed, and the site has been deeded to the US Department of Energy for long-term monitoring. Lands that comprise the former mill site are excluded from the Cebolleta project lease, however, most of the underground workings occur beneath CLG- controlled property.

4.3.2 Other Significant Factors and Risks

There are no known significant land, legal, or operational factors or risks that will prevent AMPS from continuing to pursue exploration and evaluation for possible development of the Cebolleta Uranium Project.



4.4 Required Permits and Status

AMPS holds a Part 3 Minimal Impact Permit granted by the New Mexico MMD in 2024 that authorizes exploration drilling at identified sites in the Cebolleta project area as well as reclamation. The permit allows for drilling at 22 locations to an average depth of approximately 350 ft. A second Part 3 permit for drilling an additional 25 locations on the property was submitted by AMPS in March 2024 and is under review by MMD. Additional exploration permits are being prepared by AMPS. AMPS has prepared a list of all permits or regulatory approvals that would be required for mining operations at Cebolleta.

4.5 Royalties

The following sections contained in this Technical Report have been derived, and in some instances extracted from documentation (Moran and Daviess, 2014, Eccles and Wilton, 2022) and supplied to SLR by AMPS for review and audit.

Cebolleta is held under the Mining Lease between CLG and Cibola. The Mining Lease provides Cibola with the right to explore for, mine, and process uranium deposits present on the Project and includes surface use and access rights. The Mining Lease provides for the following:

- 1 An initial term of 10 years, subject to extension so long as operations continue on the Cebolleta property.
- 2 Initial payments to the CLG of US\$5,000,000.
- 3 A recoverable reserve payment equal to US\$1.00 multiplied by the number of pounds of recoverable uranium reserves upon completion of a feasibility study to be completed within six years of entry into the Mining Lease, less:
 - a) the US\$5,000,000 referred to in item (2) above.
 - b) not more than US\$1,500,000 in annual advance royalties previously paid pursuant to item (4) below.
- 4 Annual advanced royalty payments of US\$500,000.
- 5 Gross proceeds royalties ranging from 4.50% to 8.00% based on the current price of uranium.
- 6 Employment opportunities and job skills training for the members of the CLG.
- 7 Funding of annual higher education scholarships for the members of the CLG.

The Mining Lease was subsequently amended in 2012 to extend the feasibility study completion date, subject to a reduction in the initial payment and annual advance royalty payments. A second amendment to the Mining Lease was negotiated in 2017, which provided for a temporary reduction of the advance royalty payment. In addition, the reserve payment has been eliminated in favor of a single payment of US\$4,000,000 upon commencement of production and the gross proceeds royalty has been fixed at 5.75%. A third amendment was entered in 2021, which included a temporary reduction of the advance royalty payment and a further extension of the lease until 2023. A fourth amendment was entered into in 2023, which included a further extension of the lease until 2029, at which time the lease must either be extended through another negotiated extension, held by production, or it would terminate.



A portion of the Cebolleta property is subject to a pre-existing 2.08% royalty payable to a third party on the “Uranium Value”. However, this royalty does not represent a further economic burden as it is deductible from the production royalties payable to the CLG.

On December 31, 2020, NEI executed a 2.5% net profits interest agreement with Westwater Resources Inc.



5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Cebolleta is located in the northeastern corner of Cibola County in west central New Mexico, USA, approximately 10 mi (16 km) north of the town of Laguna, NM, and approximately 40 mi (64 km) west of the city of Albuquerque, NM. Three small villages, Bibo, Moquino, and Seboyeta, are located a short distance west and northwest of the property. From Albuquerque, the Project can be accessed by travelling westbound along Interstate-40 for approximately 45 mi (72.4 km) to exit 114. At exit 114, travel north along paved New Mexico Highway 279 for 15 mi (24 km) to the village of Seboyeta, NM, and continue for an additional 3 mi (4.8 km) over a well-maintained county owned gravel road to the northern edge of the property boundary.

Numerous unmaintained private gravel roads transect the Project and provide access to most of the Project area, although they can become impassable after heavy precipitation during summer thunderstorms and winter snowstorms.

5.2 Climate

The climate at Cebolleta is typical of west-central New Mexico, dry and windy. Summers are warm, with temperatures ranging from approximately 50°F (9.9°C) at night to 80°F (26.6°C) during the day. Winter temperatures range from approximately 10°F (-12°C) at night to 40°F (4.4°C) during the day. Annual overall precipitation is approximately 11 inches (in.) (279 millimeters (mm)) of water, mostly from afternoon thunder showers in July and August. The project area receives approximately 12 in. (305 mm) of snow annually.

Climatic conditions do not generally inhibit field-related activities in the project area at any time of the year, although wet ground conditions caused by melting snow may prevent access to the Project for short periods not extending for more than one week at a time.

5.3 Local Resources

The nearest large city to the Project is Albuquerque, NM, and is located approximately 40 miles (64 km) to the east of the Project. According to 2022 United States census data, Albuquerque has a population of 561,008 and is a full-service community that includes accommodation, food and restaurants, hospitals, an international airport and skilled and un-skilled experienced labor for the exploration and mining industries.

Additional skilled labor and goods and services are available from Grants, NM, which hosts a population of 9,071 according to 2022 US census data and is located approximately 40 mi (64 km) to the southwest of the property, as well as Laguna, NM, which hosts a population of 655 according to 2022 US census data.

5.4 Infrastructure

Primary infrastructure on the Project property is limited to access roads and power supply. Electrical lines extend to the central portion of the property and a high-voltage electrical line and sub-station are present approximately five miles (eight kilometres) northeast of the Project.

There are no buildings or other mining-related surface facilities present in the project area.



There are no significant developed infrastructure facilities for access, power, or water at the Project site. Water for exploration/mining is sourced from groundwater sources. Jurassic Westwater Canyon Member of the Morrison Formation and Cretaceous Dakota Sandstone are known aquifers.

As reported by Hatchell and Wentz (1981) and various reports about the former Sohio JJ#1 Mine, groundwater inflows from the Jackpile Sandstone range from 25 gallons per minute (Gpm) to 100 Gpm (94 litres per minute (Lpm) to 378 Lpm). Water wells capable of producing between 25 Gpm and 35 Gpm (94 Lpm and 132 Lpm) were completed into the Jackpile Sandstone at the Sohio JJ#1 Mine, and other wells capable of producing 35 Gpm to 50 Gpm (132 Lpm and 189 Lpm) from the Westwater Canyon Member (Geo-Management, 1972).

5.5 Physiography

The Project is situated along the southern margin of the San Juan Basin, a circular, asymmetrical structural depression primarily located in the east-central part of the Colorado Plateau. The topography is characterized by mesa-and-canyon landforms. The Project elevation ranges from approximately 5,900 ft to 6,500 ft (1,798 m to 1,981 m) above sea level (asl). Sharp variations in elevation occur locally, on the order of 100 ft to 300 ft (31 m to 91 m) over short distances.

Notable topographic features within the boundaries of the Project property include a series of rounded hills in the central Project area, raising 200 ft to 300 ft (61 m to 91 m) above the surrounding landscape, and Gavilan Mesa, a broad flat-topped mesa occurring in the southwest Project area. In the St. Anthony Mine Complex, prominent canyons occur along Meyer Draw and Arroyo Pedro Padilla.

Vegetation is consistent with a semi-arid high desert climate and consists of sparse mixed grasses and isolated strands of mesquite, pinion pine, and oak trees. In the Project area, mesas and hillslopes are vegetated with a mixture of grasses, shrubs and trees, and vegetation is limited to dispersed grasses and shrubs in the valley floors.

The Project lies within the Arroyo Del Valle watershed, with total drainage area to the downstream point of discharge on the property being approximately equal to 30 square miles (77.7 km²) (Fritz and Leeson, 2019).



6.0 History

The following sections contained in this TRS have been derived, and in some instances extracted from documentation (Moran and Daviess, 2014, Eccles and Wilton, 2022) and supplied to SLR by AMPS for review and audit.

6.1 Prior Ownership

The lands that comprise Cebolleta were originally part of an expansive grant that was made to certain individuals by the King of Spain when Mexico (and this part of New Mexico) was a Spanish colony. When the territory of New Mexico was acquired by the USA under the settlement provisions that terminated the Mexican American War, all rights and title first conveyed by the creation of the CLG were honored by the US Senate through the ratification of the Treaty of Guadalupe Hidalgo (Byers, 2006). A portion of the CLG was severed through legal action in the early 1900s, with a large portion of the Project property transferred to private ownership not related to the descendants of the original grantees. Portions of the former land grant that were transferred to private ownership became the Evans Ranch (later to be known as the L-Bar and Lobo ranches). Anaconda Copper Company (Anaconda) acquired a lease for a portion of the Evans Ranch in 1955 and conducted an exploration drilling program, comprised of approximately 350 holes, but relinquished the property in 1957.

In the early to mid 1950s, Climax Uranium Company (Climax), a subsidiary of American Metals Climax (now Freeport McMoRan Copper & Gold) obtained a lease from the CLG on a portion of what is now the southern part of Cebolleta. Climax explored for and discovered several small uranium deposits, one of which was developed as an underground mine (Climax M6) between 1953 and 1960. The Climax lease was acquired by UNC (now a subsidiary of General Electric) and its subsidiary Teton Exploration Drilling Company, which operated the property as the St. Anthony Mine until 1980.

Reserve Oil and Minerals (Reserve), a New Mexico-based mineral resource company, purchased the Evans Ranch, which adjoins the St. Anthony Mine area to the north, in 1968. Reserve sold an undivided 50% interest in the ranch, including the mineral rights, to Sohio, formerly a subsidiary of the Standard Oil Company of Ohio and now a part of the Rio Tinto group, in 1969 and the two companies formed a joint venture to explore for and mine uranium deposits on the property (Melting, 1980 (a) (b)). Sohio operated the joint venture and discovered extensive uranium mineralization, and subsequently developed an underground mine and uranium mill complex (the Sohio JJ#1 mine and L-Bar mill). In 1982 Sohio acquired Reserve's interests in the property, and after final closure of the Sohio mill and underground mine, deeded a portion of their property interests in the area to the CLG in 1989.

6.1.1 Cebolleta Property Lease

6.1.1.1 Neutron Energy Inc Agreement 2007

In March 2007, NEI, a private company, entered into an agreement with the CLG to lease the Project property (the Cebolleta Lease). The New Mexico District Court in Cibola County affirmed the lease in April 2007. The Cebolleta Lease provided NEI with the right to explore for, mine, and process uranium deposits present on the Project and included surface use and access rights. NEI assigned the lease Cibola in 2007, a joint venture subsidiary owned by NEI (51%) and Uranium Energy Corp (UEC, 49%).



The lease encompasses 6,717 acres (2,718 ha) of privately owned mineral rights (fee or deeded) and approximately 5,700 acres (2,307 ha) of surface rights owned in fee by *La Merced del Pueblo de Cebolleta* (Cebolleta Land Grant or CLG). The remaining acres of surface rights are owned by Lobo Ranch and cover a portion of the eastern part of the leased mineral rights. The deed that conveyed ownership of these surface lands to Lobo Ranch's predecessor reserved the right to explore for and develop any mineral resources present to the holders of the mineral estate. Lobo Ranch has recognized the pre-existing development rights of the owners of the mineral estate, as leased by NEI. UEC assigned all its rights to Cibola to NEI in 2011.

NEI, including Cibola, was acquired by URI in 2012, which changed its name to Westwater Resources Inc. (WRR) in 2017.

enCore acquired all the uranium assets of WRR in 2021 including NEI and its wholly owned subsidiary Cibola in August 2021.

Pre-AMPS Amendments to the Cebolleta Lease

In February 2012, NEI entered an amendment of the Cebolleta Lease, subject to the approval of the Thirteenth Judicial District. Pursuant to the Cebolleta Lease Amendment, the feasibility study completion date was extended from April 2013 to April 2016 with a reduction in the \$6,500,000 initial payment and annual advance royalty payments deductions to the recoverable reserve payment.

A second amendment to the Cebolleta Lease was negotiated in the fall of 2017. The second amendment included a reduction of the advance royalty payment to \$350,000 for three years, from 2018 to 2020, after which payments will return to the prior formula. In addition, the requirement for a feasibility report has been removed and the reserve payment has been eliminated in favor of a single payment of \$4,000,000 upon commencement of production and the gross proceeds royalty has been fixed at 5.75%.

On December 31, 2020, NEI executed a 2.5% net profits interest agreement with WWR. NEI negotiated a third amendment to the Cebolleta Lease in April 2021 which included a reduction of the advance royalty payment to \$150,000 for three years from 2021 to 2023 (enCore Energy Corp., 2021). The third amendment extends the lease for three years from 2021 until 2023, at which time the lease either must be extended through another negotiated extension, held by production, or it would terminate.

6.1.2 Elephant Capital Corporation Share Purchase Agreement 2021

On August 27, 2021, ECC entered into a Share Purchase Agreement with enCore and NEI whereby ECC completed the acquisition of Cibola in May 2022. The sole asset of Cibola was and continues to be the Cebolleta Lease which has been maintained in good standing since its inception in 2007.

6.1.3 American Future Fuel Corporation Agreement 2022

On May 24, 2022, AMPS completed the acquisition of all the outstanding share capital of ECC including the Cebolleta property held under the Cebolleta Lease.

6.1.4 AMPS Amendment to the Cebolleta Lease

In October 2023, a fourth amendment was entered which included a further extension of the lease until 2029, at which time the lease must either be extended through another negotiated extension, held by production, or it will terminate.



6.2 Exploration and Development History

6.2.1 Exploration from 1951 to 1989

The Laguna Mining District has a lengthy history of exploration and mining activity dating to the 1950s. Uranium mineralization was discovered in the district in 1951 by Anaconda following a helicopter-borne radiometric geophysical survey. Anaconda's identification of surface uranium mineralization (Beck, et. al 1980) in the Laguna Mining District led to the discovery of the Jackpile-Paguete deposit, which is situated adjacent to the southern boundary of the Project. The Jackpile-Paguete uranium deposit was later developed as the largest uranium mine in the USA.

The first record of uranium exploration at the Project dates between 1955 to 1957, with an exploratory drill program conducted by Anaconda at Evans Ranch (site of the present-day Cebolleta property). Following this, several extensive exploration and development programs have been conducted at Cebolleta from the 1950s to 1981 by Anaconda, Climax, Sohio, and UNC. This exploration led to the discovery of seven sandstone hosted uranium deposits within the Cebolleta property boundary.

6.2.2 Exploration 2007 to 2014 (NEI)

NEI's primary focus was on modeling of the known mineral resources, mine planning, and conducting environmental baseline studies to support an application for a mining permit at Cebolleta. Additionally, NEI acquired an extensive amount of historical data from previous operators of Cebolleta, and compiled and digitized the historical data sets. NEI prepared detailed geological analyses of the distribution and magnitude of uranium mineralization.

From 2007 to 2014, groundwork conducted by NEI consisted of surface examination and surveying of historical drill hole collars, channel sampling at the St. Anthony open pits, sampling and assaying of select portions of core from two water monitoring holes within the northern part of the main St. Anthony's uranium deposit, and open hole probing and gamma-ray logging of historical drill holes in the areas between the two open pits and north of the North pit. In addition, NEI evaluated the historical studies of the equilibrium state of the Sohio L-Bar and the St. Anthony deposits.

Exploration ceased in 2014 with a general downturn in the uranium spot price and, in 2017, NEI's exploration permit for Cebolleta expired with the State of New Mexico.

6.2.2.1 Surface Channel Sampling

NEI collected channel samples from the highwalls of the St. Anthony North and South open pits to verify the presence and tenor of mineralization, as well as the results of historical drill holes completed by UNC. A total of 83 channel samples were collected from 29 sample sites in the St. Anthony North and South pits. The channel samples were representative of the nature and intensity of the uranium deposits hosted in the Jackpile Sandstone at St. Anthony and the adjoining Sohio segments.

Sampling locations were selected during geological mapping and radiometric traverses of the highwalls of the open pits and compared to the locations of adjacent and contiguous drill hole polygons. The radiometric anomalies were identified using a hand-held Delta Epsilon Instrument Co. SC-133 scintillometer. Individual sample intervals were selected to include an unmineralized interval above and below the mineralized intervals, if access allowed. Different mineralized



lithologies were sampled separately and all samples measured less than 2.5 ft (0.76 m) in vertical sample length.

The channels were excavated using a handheld diamond saw and the surface oxidized material was removed from the channel sample sites using an electric chipping hammer. Each vertical cut was approximately 8 in. (20.3 centimetres (cm)) deep. Samples were placed in cloth sample bags and the weight of the samples ranged from 3 lb to 49 lb (1.36 kilograms (kg) to 22.22 kg) and averaged 19.5 lb (8.86 kg). The sample sites were marked with aluminum sample tags. The channel samples were transported by NEI staff to the independent American Assay Laboratories in Sparks, Nevada.

6.2.2.2 Drill Core Sampling and Down-hole Gamma Logging

Core samples were collected by Broad Oak Associates, on behalf of NEI, from two monitoring wells (MW-7 and MW-8) that were completed within a mineralized zone of the Jackpile sandstone (?) on the Project property by UNC in 2007. The sampling was part of a 2010 field examination of the Project by Broad Oak Associates, an independent Toronto based engineering firm retained to prepare a technical report on the Cebolleta property (Carter, 2011). The samples were transported to independent American Assay Laboratories (American Assay) in Elko, Nevada, and SGS Canada Inc. Mineral Services in Toronto, Ontario, Canada for analysis.

At American Assay, the samples were prepped and analyzed for U_3O_8 using a two-acid digestion process (?) followed by inductively coupled plasma – optical emission spectrometry (ICP-OES). The assay results are consistent with historical drill results from the same part of the property area and indicate the presence of significant uranium mineralization within the host rocks of the former St. Anthony Mine (Moran and Daviess, 2014).

6.2.3 Exploration 2021 (ECC)

During November and December 2021, ECC commissioned Southwest Geophysical Consulting, LLC (Southwest Geophysical), of Albuquerque, New Mexico, to complete surface geophysical surveys on the Cebolleta property that included (Decker, 2021):

- 1 Uncrewed aerial system – gamma-ray spectrometry (UAS-GRS) drone surveys were conducted within 10 separate grid regions that ranged in size from 10.6 acres to 124.0 acres within the Area I, II, III and V deposits, St. Anthony North open pit, and four other areas of interest. In areas of sandstone-hosted uranium mineralization, the dose rates ranged between 600 nano-Sievert/hour (nSv/hr) and 3,000 nSv/hr in comparison to background dose rates of between 50 nSv/hr and 250 nSv/hr.
- 2 Electrical resistivity imaging/induced polarization (ERI/IP) surveys that included four ground resistivity lines within Area III, St. Anthony North, and St. Anthony South deposits for a total survey length of 902 ft (275 m). The 2D inverted resistivity and IP inverted resistivity sections clearly mapped sandstone (higher resistivity, non-chargeable) stratigraphic horizons in comparison to clay and mudstone (low to medium resistivity, moderate to high chargeability).
- 3 Pedestrian gamma-ray spectrometry hand-held surveys within the Area III, St. Anthony North, and St. Anthony South deposits for a total survey length of 15.5 mi (24.9 km). These surveys validated some of the gamma-ray spectrometry drone survey results and provided information around cliff faces where it was too hazardous to fly the drone manually.



The objective of the surveys was to test and evaluate the UAS-GRS radiometric and ERI/IP techniques and provide geophysical based evidence of uranium mineralization at Cebolleta.

For the surface geophysical surveys, the lease area was separated into three zones (Figure 6-1):

- 1 A primary survey area, which has not been exploited for its mineral resources.
 - a) Each measurement included the measurement number, date, time, location in latitude and longitude, elevation, dose rate, and the spectra of the data collected. The background dose rate at Cebolleta was 125 ± 50 nSv/hr. In areas of sandstone-hosted uranium mineralization, the dose rates ranged between 600 nSv/hr and 3,000 nSv/hr.
- 2 A secondary survey area, which has four mines associated with it, is reportedly not exhausted of its mineral resources.
 - a) The 2D resistivity and induced polarization results indicate a layered geologic system with moderate resistivities between eight Ohm-m and 2,300 Ohm-m. This is typical in an area with intercalated sandstone, shale, and clay.
- 3 A tertiary survey area, which has limited prospecting due to its limited known historical information and difficulty of access.
 - a) PGR01 has slightly higher than background activity crossing over a fracture zone above a known mineralized portion of Area IV. This is potentially due to radon escaping through vertical fractures in the area.
 - b) PGR02 was conducted in the arroyo west of Area III in the primary survey area to get as close as possible to the known uranium deposit. The entire portion, or the route within the confines of the arroyo, had elevated dose rates, both inside and outside of the confines of the known mineralization as established by drilling (Moran and Daviess, 2014). This is possibly due to the radon being heavier than air and settling in the base of the arroyo after being emitted by the deposit.
 - c) PGR03 was conducted along the road to the mine and the bottom of the western cliff face in the primary survey area. The route encompassed both Area I and Area IV. Only background levels of radiation were noted along the cliff face in Area I directly above the known mineralization in that area, supporting the data from the UAS-GRS test flights.
 - d) The dose rate along the road in Area IV was elevated. This could be attributed to uranium-bearing sandstone that spilled on the haul road as it was being transported by truck to the milling site in Grants. The deposit is too deep (65 m) at this location for the high levels to be attributed directly to the mineralized zone. A UAS-GRS flight over this area was planned but not conducted. The QP recommends a flight over this area to delineate the higher dose rates further to determine if they are confined to the road or are more broadly distributed.
 - e) PGR04 showed higher than background activity while traversing the west side of the arroyo east of the St. Anthony South pit. The elevated activity was supported by data from UAS-GRS flight FLTVII and was expected as the location is along the eastern edge of the known deposit that was being mined in the St. Anthony South open pit. The activity may stem from radon gas; however, the spectra would have to be verified to confirm this.



Based on the results of the 2021 surveys and numerous prior studies (e.g., Moench, 1963; Rautman, 1980; Moran and Daviess, 2014), Southwest Geophysical concluded that the survey results showed that the Jurassic Morrison and Jackpile Sandstone members at Cebolleta are partially mineralized with sandstone-hosted uranium mineralization.

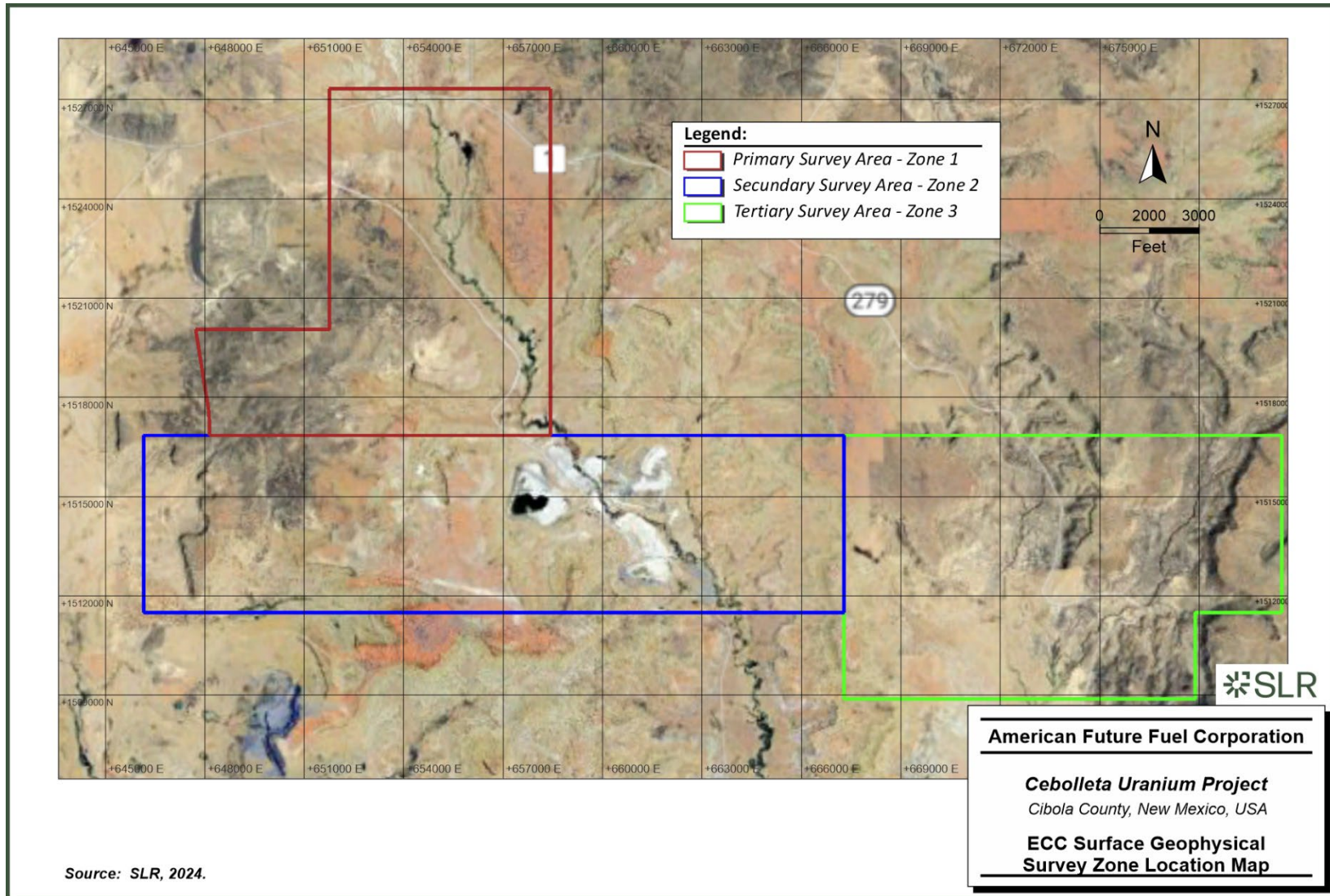
There may be more mineralized zones than indicated in previous studies; however, additional geophysical and/or geotechnical work is required to confirm this. There are still mineralized zones around both the St. Anthony North and St. Anthony South open pit mines. Radon seepage above the other known deposits in the lease area suggests the possibility of other areas of mineralization in these areas.

Southwest Geophysical recommended that ECC utilizes deeper geophysical methods such as Induced Potential (IP) with electrode spacing of 10 m, and further work with the UAS-GRS may be useful in the southern portion of the lease including the area to the east of St. Anthony South pit designated as the tertiary survey area.

Further work with the UAS-GRS may be useful in the southern portion of the lease including the area to the east of St. Anthony South pit designated as the tertiary survey area. The UAS-GRS method is not recommended within the area designated as the primary survey due to the depth of the deposits; however, the method is recommended to rapidly prospect for surface or near-surface deposits that have not yet been located by other methods.



Figure 6-1: ECC Surface Geophysical Survey Zone Location Map



6.3 Historical Resource Estimates

As the Cebolleta project is the site of former open pit and underground uranium mines, there are numerous historical mineral resource and ore reserve estimates for the Cebolleta project. Mineral resource estimates for the former Sohio and St. Anthony mines and deposits were prepared by the technical staffs of Sohio, UNC, and NEI using a range of geometric methods and geostatistical estimation and 3D block modeling methods.

The St. Anthony deposits were estimated by UNC (UNC Mining and Milling, 1979; UNC Resources, 1979), while Sohio (L-Bar), and Area I to V deposits as estimated by independent contractors (Geo-management, 1972; Robertson and Associates, 1978) and Sohio Western personnel (Boyd, 1981; Olsen and Kopp, 1982). The historical and in-place mineral resources presented in 2010 were derived from several studies undertaken by independent contractors and prepared prior to the adoption of National Instrument 43-101 (Table 6-1).

In 2014, Allan V. Moran, CPG (Moran) and Frank Daviess MAusIMM, SME (Registered Member) on behalf of URI (through its wholly owned subsidiary NEI), prepared historical mineral estimates for the Area I, II, III, and V deposits within the Cebolleta Property (Table 6-2). At the time of the 2014 resource estimate, the data for St. Anthony had not been synthesized into a useable database for resource estimation, therefore the St. Anthony deposits were excluded in the Moran and Daviess (2014) resource estimates.

AMPS and SLR have not reviewed in detail the 2010 and 2014 estimates and considered these estimates to be historical in nature and should not be relied upon. These estimates provide, however, an indication of mineralization on the property, which is now superseded by the Mineral Resource estimate contained in this report.

The mineral resource estimates presented in this Section are presented solely for the purpose of full disclosure of the historical work on the property.

Table 6-1: Cebolleta 2010 Historic Mineral Resource Estimate

Category	Area	Grade Cut-Off	Tonnage	Metal Grade	Contained Metal
		(% eU ₃ O ₈)	(Million st)	% eU ₃ O ₈	(Million lb eU ₃ O ₈)
Inferred	Area I	0.05	1.4	0.15	4.4
	Area II	0.07	3.1	0.18	11.0
	Area III	0.10	1.5	0.17	5.1
	Area IV	0.05	0.1	0.07	0.2
	Area V	0.07	0.7	0.21	3.0
	St. Anthony	NA	4.3	0.10	8.2
Total Inferred			11.1	0.14	31.9

Notes:

1. Resource estimates were initially made using both the 'general outline' and 'polygonal methods' ((UNC Mining and Milling, 1980 and Geo-Management, 1972)
2. All resource grades were calculated from down-hole gamma-ray logging (Century Geophysical, Dalton Well Logging, Data-Line and Geoscience Associates)
3. Historical uranium resources at the St. Anthony Mine were estimated from more than 600 drill holes.
4. Historical uranium resources at Sohio were estimated from more than 996 core and conventional drill holes totaling more than 601,000 ft (183,200 m) of drilling.



- All mineralized intervals at St. Anthony were “diluted” with one-half foot (0.15 m) of barren material at the top and bottom of each mineralized interval.

St Anthony:

- All mineralized zones used in the resource calculations were a minimum of 6 ft (1.828 m) thick; those mineralized intervals that were less than 6 ft thick were “diluted” to the minimum 6-ft thick interval.
- All mineral resource estimates were based upon surface drilling, at a nominal 100 ft by 100-ft (20.4 m by 20.4 m) drill hole spacing (a portion of the Area III deposit was drilled on a 200 ft by 200 ft [60.96 m by 60.96 m] grid), underground long-hole drilling, and underground exposures.
- None of the resource estimates were adjusted to reflect a disequilibrium factor as various studies (Geo-Management, 1971; Boyd, 1981) indicated that the mineralization at the Cebolleta project is in chemical equilibrium.

Sohio:

- From that data set holes that contained a grade-times-thickness (GT) product of 0.50 or greater, with a minimum grade of 0.08% eU₃O₈ were utilized in the resource estimations.
- Cutoff grades and thicknesses were applied by Sohio in the 1980s to the mineralized zones as follows for the purpose of calculating updated resources in each of the deposits:
- Areas I and II, with cut off grades of 0.05% eU₃O₈ over minimum thicknesses of 2 ft, were considered to be open pit development targets by Sohio (Boyd, 1981; Olsen and Kopp, 1982), while the remaining deposits were considered to be underground mining targets only.

Table 6-2: Cebolleta 2014 Historic Mineral Resource Estimate (Davies and Moran, 2014)

Category	Area	Grade Cut-Off	Tonnage	Metal Grade	Contained Metal
		(% eU ₃ O ₈)	(Million st)	% eU ₃ O ₈	(Million lb eU ₃ O ₈)
Inferred	Area I-II-V	0.08	4.6	0.17	15.7
	Area III	0.08	1.0	0.16	3.2
Total Inferred			5.6	0.17	19.0

Notes:

- Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.
- Mineral resources are stated at a 0.08% eU₃O₈ cut-off grade; sufficient to define potentially underground mineable resources; however, mineable underground shapes have not yet been defined.
- The lower cut-off was ascertained using a uranium price of US\$50.00/lb, at the current term price underground mining costs at US\$60/ton and milling plus G&A costs at US\$16.50/ton.
- A tonnage factor of 16.0 cubic feet per ton was used for all tonnage calculations.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- Mineral resources are reported on a 100% basis for URRE controlled lands, as in situ resources without reference to potential mineability except for the referenced cut-off grade.
- The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues, although such issues are not known.

6.4 Past Production

Between 1954 to 1956, Climax discovered, and subsequently began production of, the underground Climax M-6 Uranium Mine. Climax produced uranium from the Climax M-6 Mine from July 1957 to October 1960, yielding 78,722 st (71,415 t) that averaged 0.204% U₃O₈ and contained 320,942 lb (145,577 kg) of U₃O₈ (McLemore and Chenoweth, 1991).

UNC and its subsidiary, Teton Exploration Drilling Co., acquired the St. Anthony lease from Climax in the 1970s. UNC developed the St. Anthony North and South open pit mines and the Willie P underground mine, known as the St. Anthony Mine Complex (Baird et al., 1980). Mining occurred from 1975 to 1979, with milling continuing until 1980. The total production of the



St. Anthony operation amounted to approximately 1.6 million pounds of U_3O_8 (Moran and Daviess, 2014). Ore from the mines was processed primarily at UNC's Church Rock Mill near Gallup, NM.

The Sohio JJ#1 underground mine extracted uranium from the Area II and Area V deposits and operated by Sohio Western from late 1976 to mid-1981. The Sohio JJ#1 mine shaft is situated off the Cebolleta property, approximately 164 ft (50 m) to the west of the boundary; however, most of the underground workings fall within the Cebolleta property boundaries. The mine is estimated to have delivered 898,600 st (815,000 t) of material to the L-Bar mill, averaging 0.123% and yielding 2,218,800 lb (1,006,492 kg) of U_3O_8 (Boyd et al., 1984).

These deposits are part of a broad and extensive area of uranium mineralization, including the Jackpile-Paguete deposit. At the Property, the L-Bar occurrence area, contains five distinct deposits, including Areas I, II, III, IV, and V. In addition, three distinct deposits occur in the St. Anthony area of the Project. The deposits range in depth from approximately 200 ft (61 m) in the St. Anthony area, to nearly 700 ft (213 m) in the vicinity of the Area II and Area III deposits in the central and northern (down-dip) parts of the Project area.



7.0 Geological Setting and Mineralization

The following sections contained in this Technical Report have been derived, and in some instances extracted from documentation (Moran and Daviess, 2014, Eccles and Wilton, 2022) and supplied to SLR by AMPS for review and audit.

The Cebolleta Uranium Project is in the Laguna Mining District, situated in the northeastern corner of Cibola County, New Mexico. The Project property lies on the eastern end of the prolific, northwest-southeast oriented Grants Mineral Belt and on the southern flank of the San Juan Basin (Figure 7-1). The Grants Mineral Belt of New Mexico is host to one of the largest concentrations of sandstone-hosted uranium deposits in the world.

The regional and property scale geological and mineralization information in the following subsections is largely derived from previous studies in the area by Craigg (2001), Wilton (2017), Wilton et al. (2021), previous technical reports on the Property by Carter (2008; 2011), Moran and Daviess (2014) and references therein. The QP of this technical report has reviewed these sources and consider them to contain all the relevant geological information regarding the Cebolleta property area.

7.1 Regional Geology

Cebolleta is located in the Laguna Mining District, near the eastern end of the Grants Mineral Belt, on the southern flank of the San Juan Basin.

The San Juan Basin encompasses an area of approximately 21,600 square miles (55,943 km²) primarily in southwestern Colorado and northwestern New Mexico, with smaller portions extending into northeastern Arizona and southeastern Utah. The basin is a circular, asymmetrical structural depression primarily located in the east-central part of the Colorado Plateau measuring 140 mi (225 km) wide and 200 mi (322 km) long (Craigg, 2001). During the Late Jurassic, the San Juan Basin area was part of a back-arc basin that formed inland of an Andean-type magmatic arc (Burchfield, 1979). This magmatic arc and its landward upland area, provided much of the clastic sedimentary rocks that formed the Upper Jurassic Morrison Formation (Craig et al., 1955), which is the primary host for uranium mineralization. During the Laramide orogeny, the Late Cretaceous and older rocks were deformed into a subsiding structural basin (San Juan Basin) and the depression that formed was filled with early Tertiary and younger sedimentary rocks. Older strata were exposed along the uplifts along the margins of the basin (Stevenson and Baars, 1977).

The principal tectonic elements (Figure 7-2) that bound the San Juan Basin include:

- The San Juan Uplift to the north, a northwest trending feature measuring at 75 mi (120 km) long and 35 mi (56 km) wide with a structural relief of 20,000 ft (6,100 m) (Kelley, 1957)
- The Zuni Uplift to the south, a domal feature approximately 80 mi (129 km) long and as much as 35 mi (56 km) wide. The southwestern limb of the uplift is known as the Nurtia Monocline (Kelley, 1950).
- The Defiance Uplift and Hogback Monocline to the west. The Defiance Uplift is approximately 100 mi (161 km) long and 30 mi (48.3 km) wide. This prominent uplift forms the structural divide between the San Juan Basin and the Black Mesa Basin to the west. The Defiance Monocline is a sinuous, steeply dipping feature that forms the eastern face of the Defiance Uplift (Kelley, 1957).



- The Nacimiento Uplift to the southeast, a north trending mountain block approximately 50 mi (80.5 km) long and 6-10 mi (9.6 km to 16.1 km) wide. This uplift also represents the southwestern limit of the Rocky Mountains (Woodward, 1987).
- The Rio Grande Rift, the Ignacio Monocline, and the Lucero Uplift to the southeast. (Craig, 2001). The Rio Grande Rift is a late Cenozoic extensional feature that terminates the gradual structural rise of the southeastern part of the San Juan Basin. The Ignacio Monocline partly bounds the western area of the Rio Grande Rift. The Lucero Uplift is a northeast trending structure about 30 miles (48.3 km) long and 14 miles (22.5 km) wide (Kelley, 1950).
- The Acoma Sag to the southeast, a broad, syncline that is located between the Lucero Uplift (east) and the Zuni Uplift (west).
- The Archuleta Anticlinorium to the northeast, a northwest trending asymmetric anticlinorium (Woodward and Callender, 1977).

As a result of this tectonism, the San Juan Basin represents a large structural and topographic basin. These structures formed primarily during the Late Cretaceous and early Tertiary Laramide orogeny (Kirk and Condon, 1986), although many of them are related to earlier tectonic events and/or were reactivated during Tertiary Rio Grande rifting (Kelley, 1957; Slack and Campbell, 1976; Woodward, 1987)

The Grants Mineral Belt is situated on the northeastern flank of the Laramide-aged Zuni Uplift and the southern edge of the San Juan Basin. The Basin is a significant geological and topographic feature that covers much of the northwest portion of New Mexico and is an important geological and physiographic feature within the Colorado Plateau geologic province. Within the area of the Grants Mineral Belt, rocks ranging in age from Pennsylvanian through upper Cretaceous are exposed, with surface exposures of the older rocks generally restricted to the area immediately north of the Zuni Uplift. Younger marine Cretaceous rocks cover the northerly portion of the mineral belt and obscure the host rocks for the uranium deposits.

The Mt. Taylor volcanic field, which is comprised of dominantly basalt flows and “plugs”, covers a portion of the eastern segment of the Grants Mineral Belt immediately to the west of the Cebolleta property. These igneous rocks, which are Pliocene in age, range from basalt and diabase to rhyolite in composition (Moench and Schlee, 1967).

The Grants Mineral Belt is a west-northwest trending zone of sandstone-hosted (and lesser limestone-hosted) uranium deposits that extends from the western edge of the Rio Grande Rift, east of the Pueblo of Laguna and Cebolleta, west-northwesterly to the vicinity of the city of Gallup, for a distance of more than 100 mi (161 km). Locally, the belt attains a maximum width of approximately 25 mi (40 km), however, is more commonly six to 10 mi (9.6 to 16 km) in width. This belt of uranium deposits includes mining districts north of Laguna, Marquez (that portion of the Laguna district that contains uranium deposits only in the Westwater Canyon Member of the Morrison Formation), the Ambrosia Lake-San Mateo area (north of Grants), Smith Lake, Crownpoint, and Church Rock. Collectively, the deposits of the belt have provided more than 340 million pounds of U₃O₈, ranking as the fourth largest uranium producing region in the world (McLemore and others, 2013), and the world’s largest sandstone-hosted uranium district.

Sandstone-hosted uranium deposits of the Grants Mineral Belt are hosted primarily in the Jackpile Sandstone, Poison Canyon sandstone (informal unit of economic usage only), and the Westwater Canyon Member of the Jurassic aged Morrison Formation. Limestone-hosted uranium deposits have been discovered in the Todilto Member of the Jurassic aged Wanakah Formation (Armstrong, 1995).



Two major northeast trending structural features occur within the southeastern limit of the San Juan Basin and the Colorado Plateau in proximity to Cebolleta: the Puerco Platform and Puerco Fault Zone (Figure 7-3). Collectively, these structure features measure approximately 35 mi (56.3 km) long and seven miles to 22 mi (11.3 km to 35.4 km) wide (Kelley, 1957). The Puerco Platform merges with the Puerco Fault Zone and the Chaco Slope to the north while the platform merges with the Acoma Sag to the south.



Figure 7-1: Generalized Outline of the Grants Mineral Belt and Mining Districts

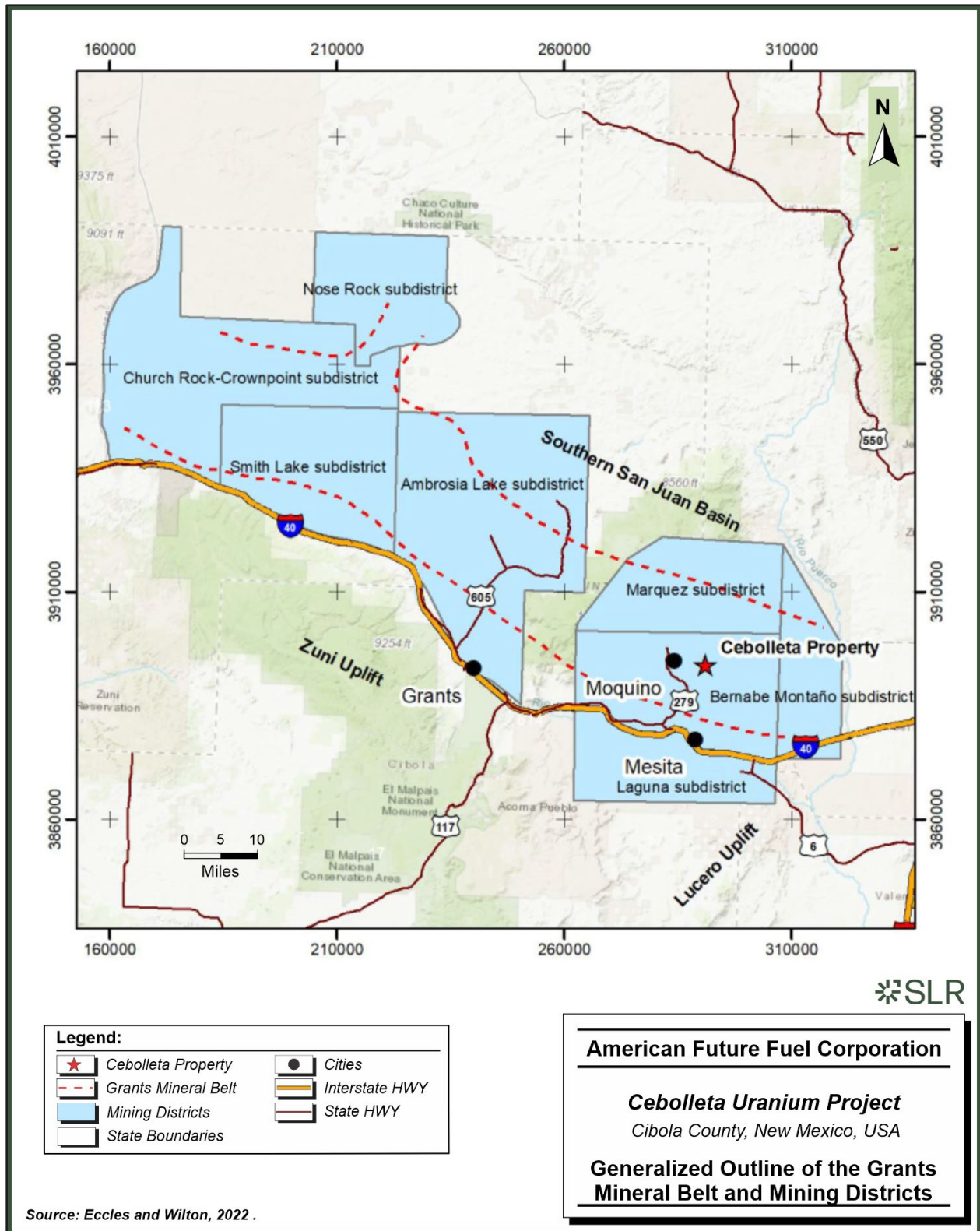


Figure 7-2: Structural Features of the San Juan Basin and Neighbouring Areas

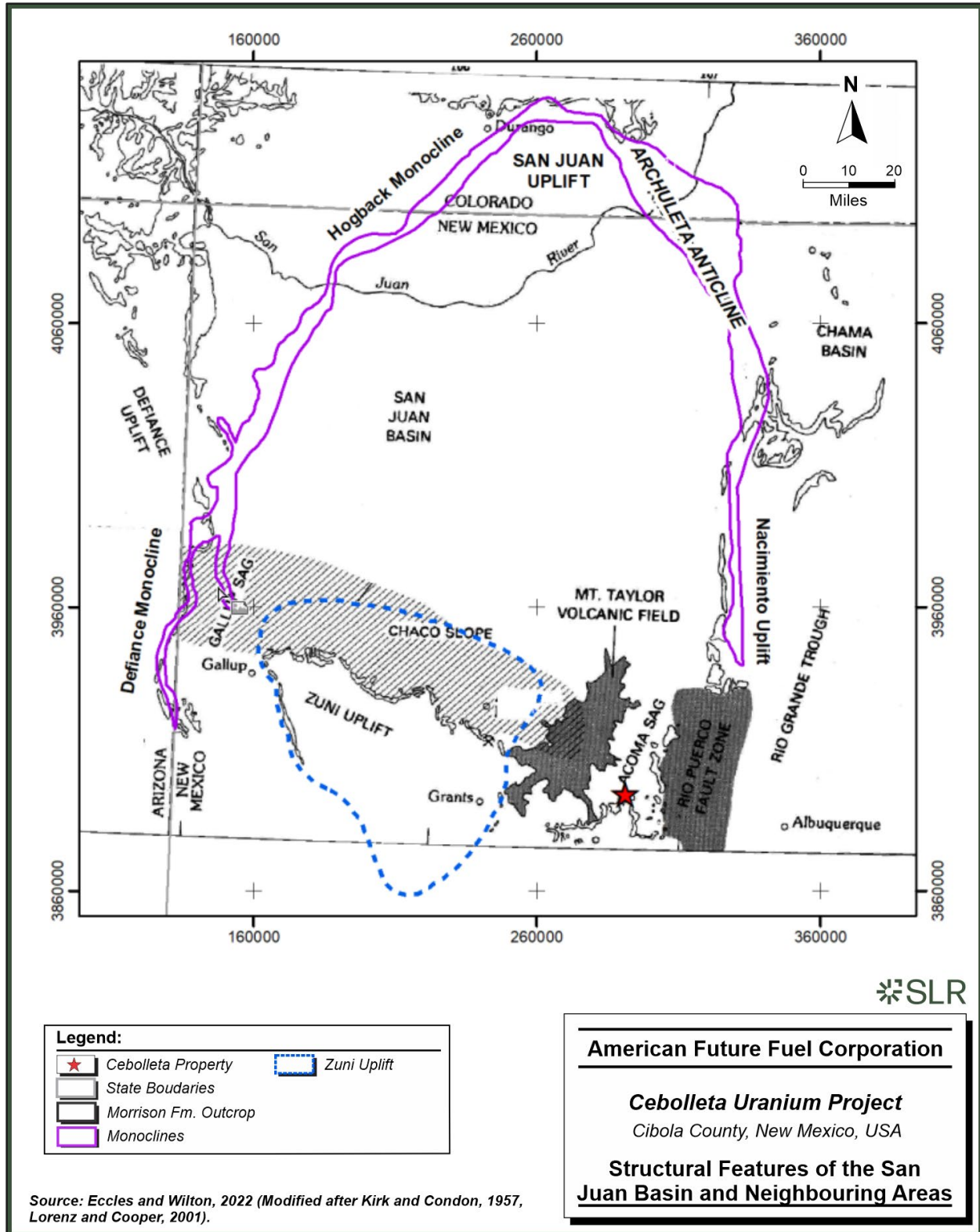
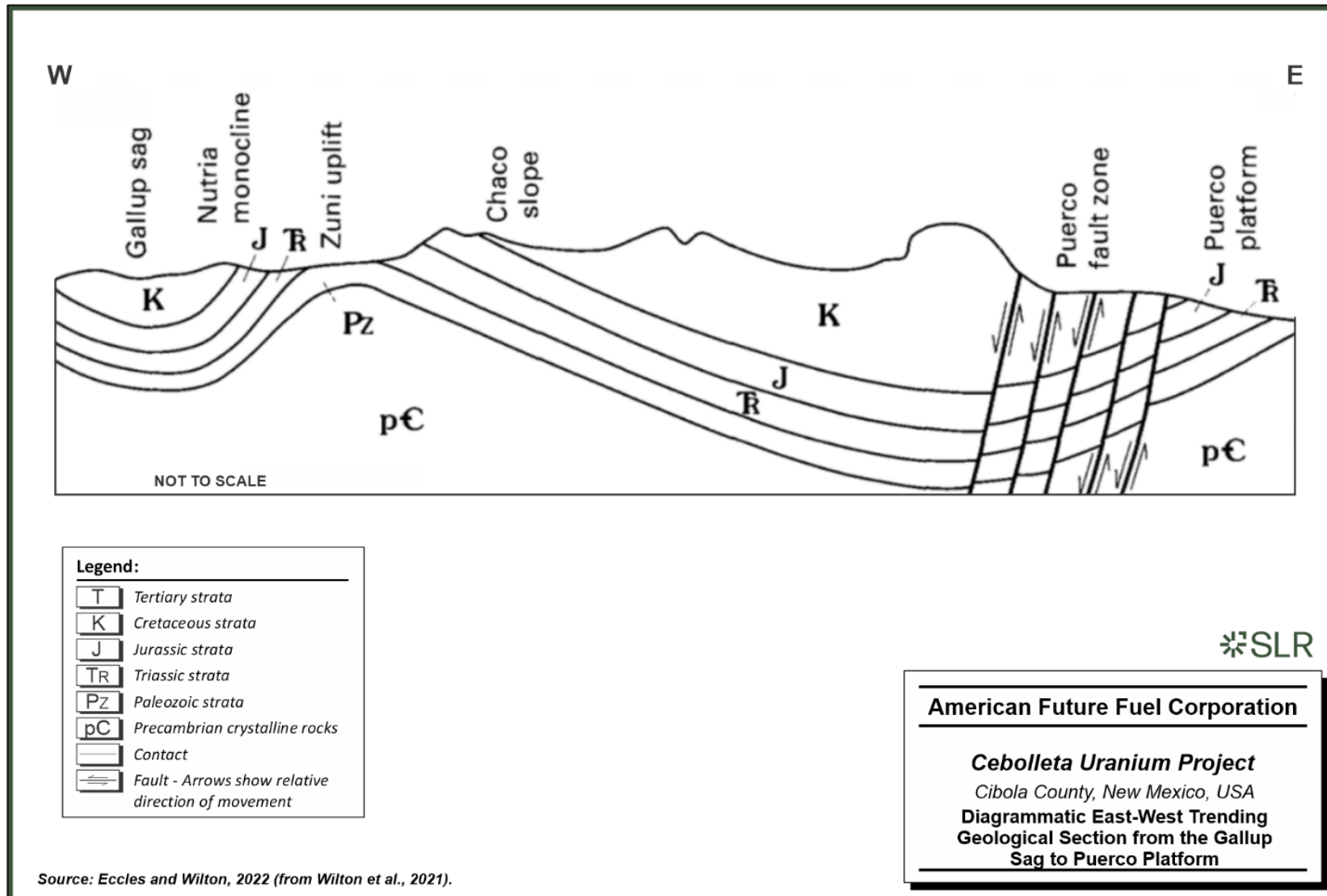


Figure 7-3: Diagrammatic East-West Trending Geological Section from the Gallup Sag to Puerco Platform



7.2 Local Geology

7.2.1 Stratigraphy

The geology of the Cebolleta property area comprises a thick sequence of sedimentary rocks ranging in age from Late Jurassic through Late Cretaceous (Baird and others, 1980; Jacobsen, 1980; Moench and Schlee, 1967; Schlee and Moench, 1963) (Figure 7-4).

This sedimentary sequence includes the Jurassic San Rafael Group, which is overlain by the Jurassic Morrison Formation, the dominant host of significant uranium deposits within the Grants Mineral Belt. The Morrison Formation is unconformably overlain by the Cretaceous Dakota Sandstone, which is then interfingered and overlain by the Mancos Shale. The Project geology is illustrated in Figure 7-5 and generalized stratigraphic columns are presented in Figure 7-6.

The Morrison Formation comprises four distinct members (in ascending order): the Recapture (Jmr), Westwater Canyon (Jmw), Brushy Basin (Jmb) and Jackpile Sandstone (Jmj) members.

The Recapture Member (Jmr) is described as a sequence of inter-bedded mudstones, siltstone, sandstone, and occasional limestone. In surface (weathered) exposures, it appears to be greyish red but in fresh exposures it appears as grey (limestone), greyish green (mudstone) or greyish yellow (sandstone) (Moench and Schlee, 1967). In the Laguna area, the Recapture Member is approximately 50 ft (15 m) in thickness. It is reported, however, that the member is not exposed at surface on the CGL (Wilton et al., 2021). The Recapture Member is conformably overlain by the Westwater Canyon Member and on a local scale, evidence of scouring by the Westwater Canyon channels can be seen in the uppermost parts of the Recapture Member (Moran and Daviess, 2014).

The Westwater Canyon Member (Jmw) is a greyish yellow to pale orange sandstone with a thin interval, measuring approximately three feet (one metre) of greyish red siltstone dividing it into upper and lower units. The sandstones are generally poorly sorted with grain sizes ranging from fine to coarse grained with a composition ranging from sub-arkosic to arkosic (Moench and Schlee, 1967). The Westwater Canyon Member is the principal host for uranium mineralization in the Grants Mineral Belt and ranges in thickness from 10 ft to 90 ft (three metres to 27 m) in the Project area. This member is overlain by the Brushy Basin Member.

The Brushy Basin Member (Jmb) is a visually distinctive unit comprised dominantly of variegated mudstone, claystone, and shale, with lesser sandstone beds near the base of the unit (Wilton et al., 2021). Volcanic ash beds have also been observed in this unit (Aubrey 1992; Santos, 1970). The mudstone and claystone units are greyish red, greyish green to greenish grey in color and form distinctive rounded outcrops. The Brushy Basin Member ranges in thickness from 220 ft to 300 ft (67 m to 91 m) in the Project area. In the mining districts of Ambrosia Lake, Smith Lake and Church Rock, the lesser sandstone beds near the base of this member are known to be hosts for uranium mineralization (Wilton et al., 2021). Overlying the uppermost part of the Brushy Basin, as well as the Morrison Formation, is the Jackpile Sandstone Member.

The Jackpile Sandstone Member (Jmj) generally forms vertical exposures of white to light gray/light tan sandstone, with pinkish hues in local areas where the feldspar content is relatively high. Minor zones of hematite and limonite staining is evident in the vicinities of some mineralized zones in the St. Anthony pit. At Cebolleta, the sandstone ranges from sub-arkosic to arkosic in composition (Moench and Schlee, 1967; Owen et al., 1984) with minor lenses of quartzose sandstone in the upper portion of the unit in the St. Anthony South pit (Caldwell,



2018). The Jackpile Sandstone was deposited in a northward-flowing braided stream. It is best characterized as having few persistent shale or mudstone interbeds since it is dominated by strongly cross-bedded sands that often display channel scours into the underlying sandstone (sand-on-sand relationship). The sandstone is generally fine to medium grained (with local zones of coarse-grained material) and feldspathic in composition (Moran and Daviess, 2014). Carbonaceous material has been observed within the Jackpile Sandstone, described as “coalified in situ” and as “sand-sized material” interstratified in cross-beds in the Willie P Underground Mine. In the St. Anthony north pit, carbonaceous material (humate) was found in proximity to zones of uranium mineralization, occurring as pore filling between sand grains. The humate occurs as small, near vertical “rods” and occasional zones of carbonaceous “trash” along bedding planes, especially along bedding planes of trough cross-beds. Strong concentrations of thinly bedded carbonaceous material have been observed in historical drill core (Moran and Daviess, 2014).

The Jackpile Sandstone extends in a northeasterly trending belt measuring approximately 13 mi (21 km) wide by more than 65 mi (105 km) long and ranges in thickness from 80 ft to 120 ft (24 m to 37 m) (Jacobsen, 1980). This unit is a known host of major uranium deposits at the former Jackpile-Paguete, Woodrow, St. Anthony, and L-Bar mines (Wilton et al., 2021). Exposure of this member is limited to narrow bands along the base of the Gavilan Mesa, south of the St. Anthony Mine, and in Arroyo Pedro Padilla (east of the St. Anthony mines). The Jackpile Sandstone is unconformably overlain by the Cretaceous Dakota Sandstone, a light grey to pale tan quartzose sandstone with lenses of black carbonaceous shale.

7.2.2 Structure

The Cebolleta property lies within a feature known as the Acoma Sag (Kelley, 1955; Nash, 1968) near the southeastern end of the Chaco Shelf. The Acoma Sag is a regional syncline that is bounded on the west by the southeastern end of the Zuni Uplift and on the east by the Lucero Uplift (Kelley, 1955). Structure within the sag is relatively simple, with rocks displaying shallow dips and small folds that generally trend to the northwest (Woodward, 1982).

The sedimentary rocks dip very gently (less than 2°) into the San Juan Basin at a north-northwest direction. Several miles north of the Project, numerous small-scale dip-slip faults, down-dropped to the west have been mapped. Immediately northeast and southwest of the Project area, similar small-scale dip-slip faults that were down-dropped to the east were mapped (Schlee and Moench, 1963). No major faulting has been recognized in the Project area. Several small-scale high-angle faults were observed in the workings of the former JJ#1 underground mine (Jacobsen, 1980), but these structures do not appear to have disrupted uranium mineralization in the mine, and do not appear to have influenced the localization of mineralization.

A very small fold, or “dome”, was reported to be present in the southern part of the Willie P underground mine. An increase in concentration of carbonaceous material north of this dome corresponded with an increase of uranium mineralization. A second, larger northeast trending fold is present in the “Lobo Camp” three miles (4.8 km) northeast of St. Anthony (Schlee and Moench, 1963).

Historical modeling included modeling of mineralized zones: three zones for Area III, and six primary zones and one sub-zone for Area I-II-IV deposits. No offsets of mineralization were noted in any of the mineralized zones (Moran and Daviess, 2014).



Figure 7-4: Regional Stratigraphy of the Cebolleta Property

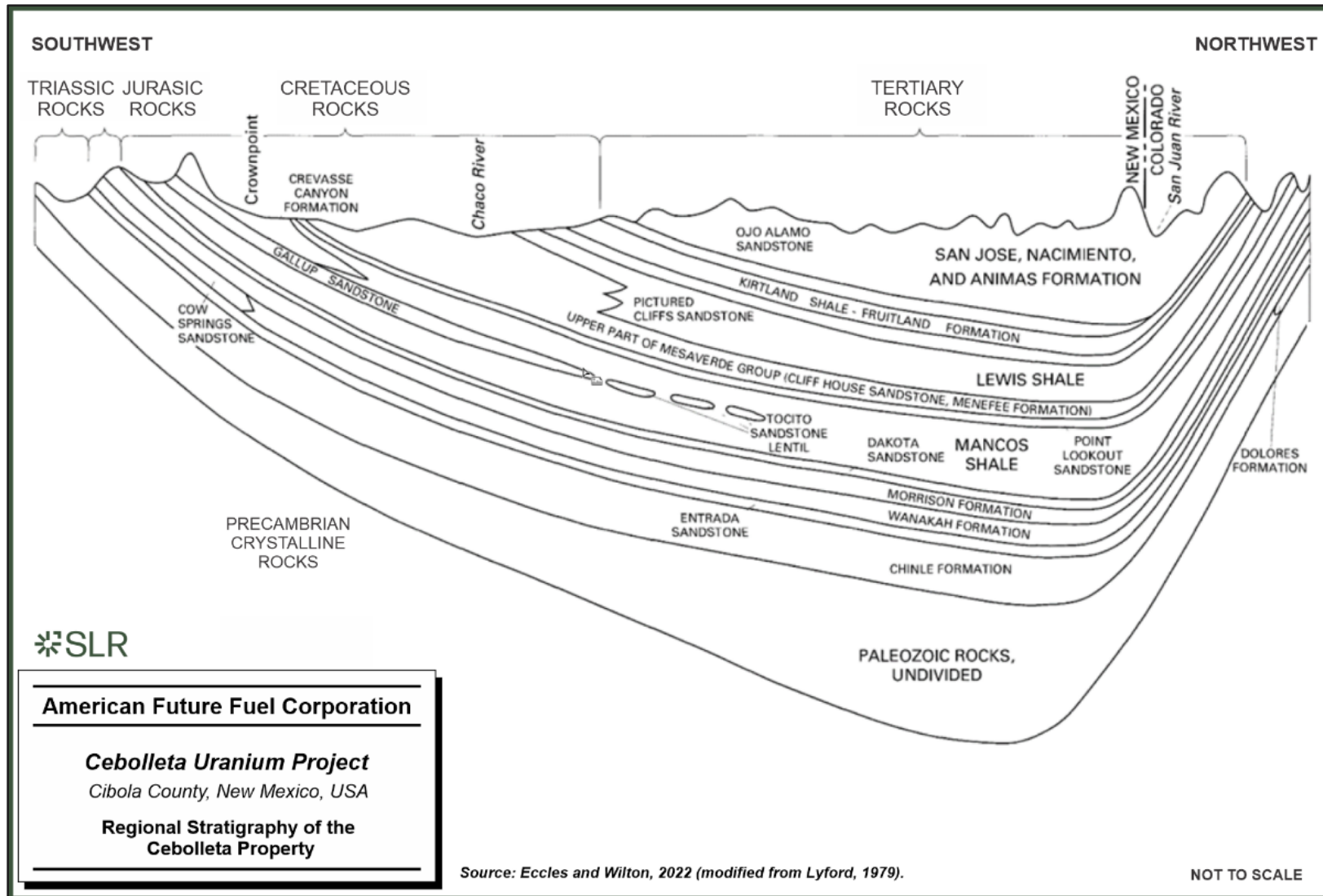


Figure 7-5: Property Geology

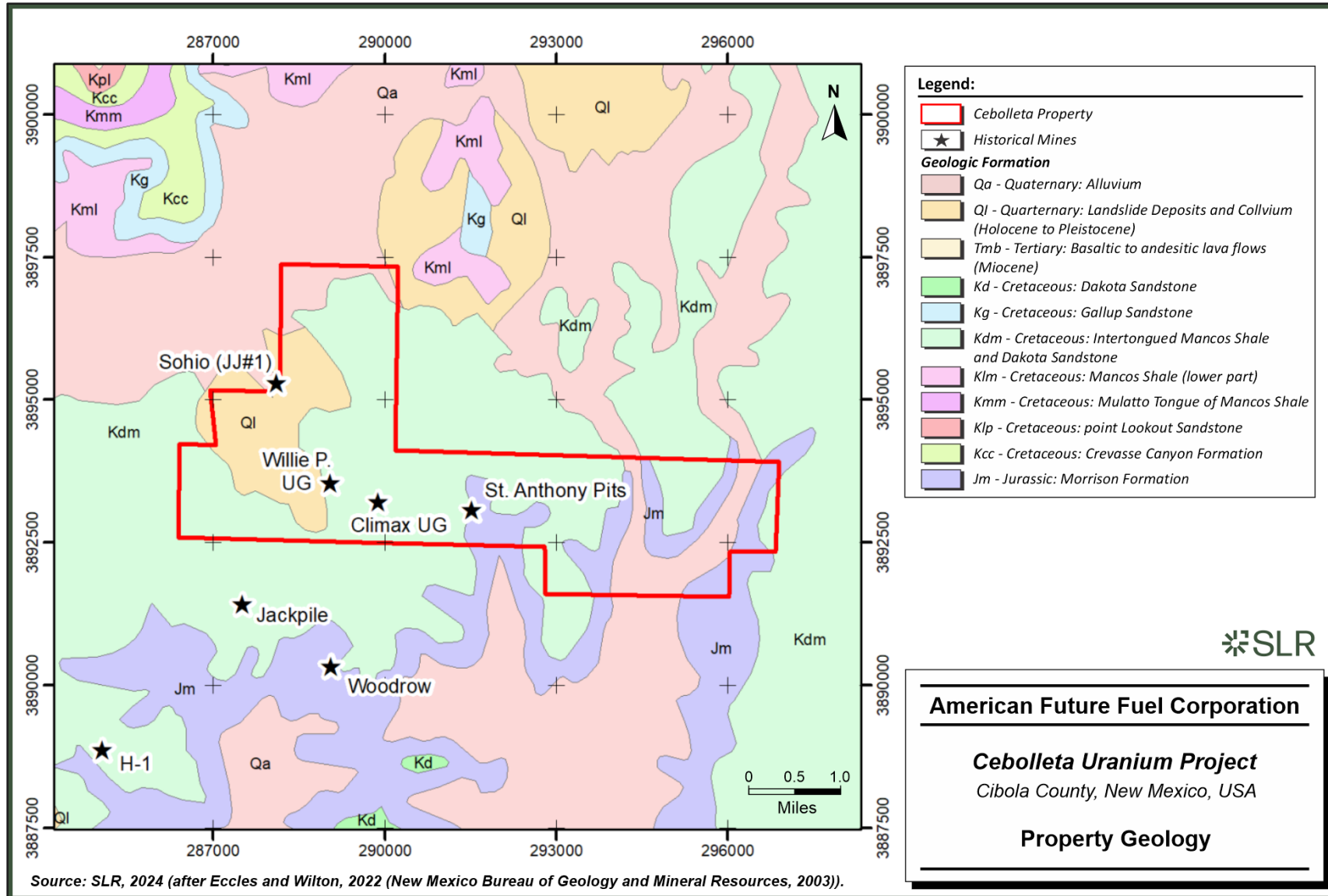
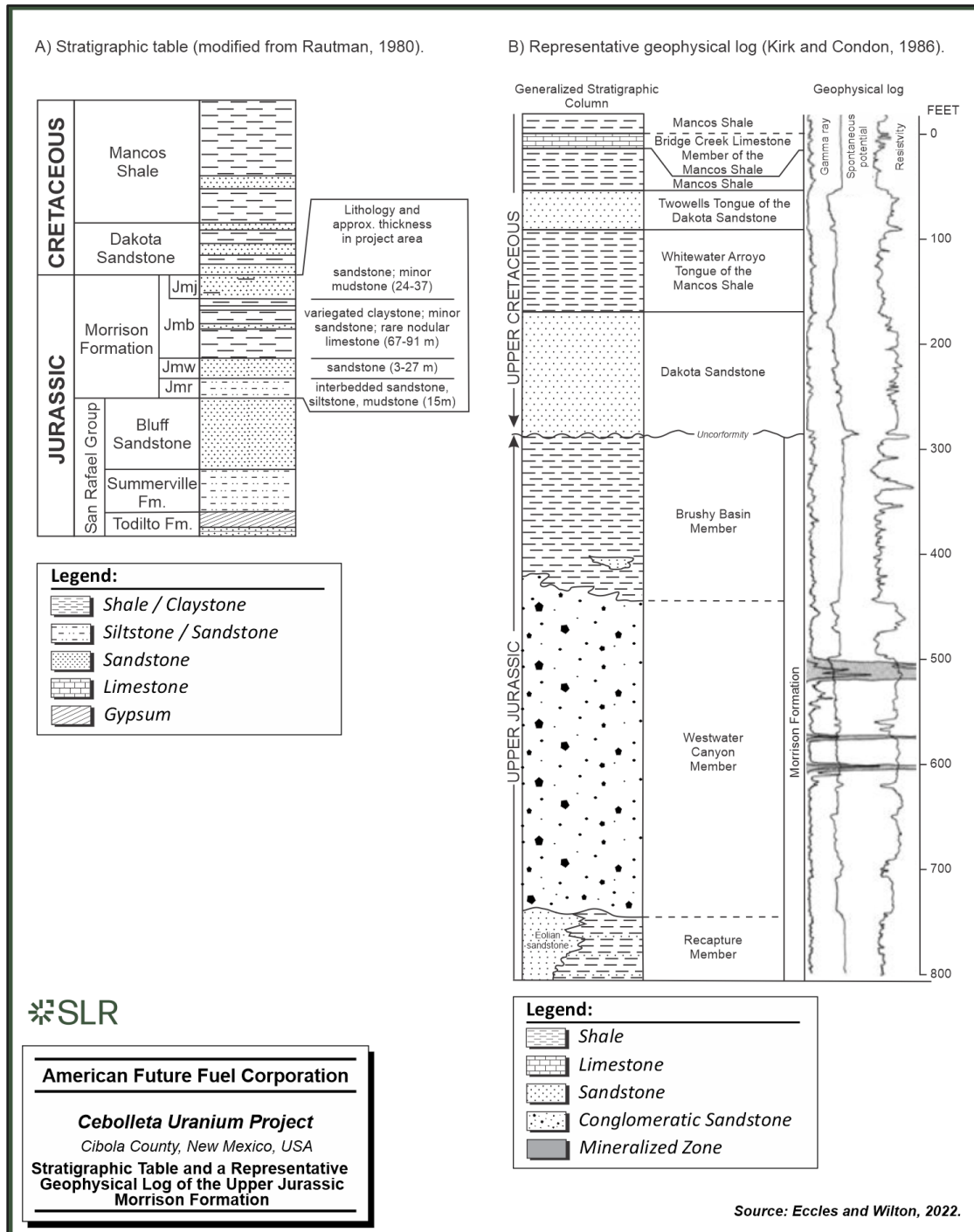


Figure 7-6: Stratigraphic Table and a Representative Geophysical Log of the Upper Jurassic Morrison Formation



Notes: The stratigraphic table Nomenclature is used in this report. Abbreviations: Jmr – Recapture Member; Jmw – Westwater Canyon Member; Jmb – Brushy Basin Member; Jmj – Jackpile Sandstone Member.



7.3 Mineralization

7.3.1 Grants Mineral Belt

The Project area lies on the eastern end of the prolific, northwest-southeast oriented Grants Mineral Belt (Figure 7-1). The belt is positioned on the Chaco Slope which is between the southern part of the central San Juan Basin and the northeastern flank of the Zuni Uplift along with the adjoining Acoma Sag. The belt measures approximately 100 mi (160 km) long and up to approximately 25 mi (40 km) wide. The Grants Mineral Belt encompasses several mining districts including the Laguna, Marquez, the Ambrosia Lake-San Mateo area, Smith Lake, Crownpoint, and Church Rock mining districts. The Marquez district is the portion of the Laguna district that contains uranium deposits hosted only in the Westwater Canyon Member of the Morrison Formation. In total, the mining districts produced more than 340 million pounds of U_3O_8 making it one of the largest concentrations of sandstone-hosted uranium deposits in the world and has been the single largest source of uranium production for the United States (Turner-Peterson et al., 1986; Dahlkamp, 1993; Kyser and Cuney, 2008).

Middle Jurassic to Late Cretaceous sedimentary rocks is exposed in the Grants Mineral Belt. Jurassic sedimentary rocks in the Morrison Formation are exposed in narrow bands that is generally parallel to the northwest trend of the Zuni Uplift. The Morrison Formation is the predominant host for the major uranium deposits in the Grants Mineral Belt. To the north of the belt, Cretaceous rocks are exposed and cover much of the Morrison Formation toward the south of the belt. The eastern part of the belt is covered by the basalt flows and “plugs” of the Mt. Taylor volcanic field. This volcanic field lies immediately to the west of the Project area (Moench and Schlee, 1967; Goff et al., 2015). Limestone-hosted uranium deposits have been discovered and developed in the Middle Jurassic Todilto Formation, however, these deposits produced smaller amounts of uranium compared to the Morrison Formation (Moench and Schlee, 1967; Armstrong 1995).

7.3.2 Significant Mineralized Zones

At least seven distinct sandstone uranium deposits occurring as a series of tabular bodies hosted within the Jackpile Member of the Upper Jurassic Morrison Formation are contained within the boundaries of the Cebolleta property (Figure 7-7).

These deposits are part of a broad and extensive area of uranium mineralization, including the Jackpile-Paguete deposit located 0.6 mi (one kilometre) south of the property, which was one of the largest concentrations of uranium mineralization in the United States (Moran and Daviess, 2014). The Sohio occurrence area, formerly known as L-Bar, contains five distinct deposits, including Areas I, II, III, IV, and V. The historical JJ#1 Mine is situated in the northwest corner of the Area II and Area V deposit areas. The entrance to the JJ#1 Mine lies 50 m to the west of the Project boundary; however, most of the underground workings fall within the Project boundary. The Area I deposit, located in the southern part of the Sohio complex, extends south into the St. Anthony area adjacent to the St. Anthony open pits and the Willie P. underground mine (McLemore and Chenoweth, 1991; McLemore, 2000).

The common geological characteristics of the uranium deposits at Cebolleta are summarized from Carter (2008; 2011) and Moran and Daviess (2014), as follows:

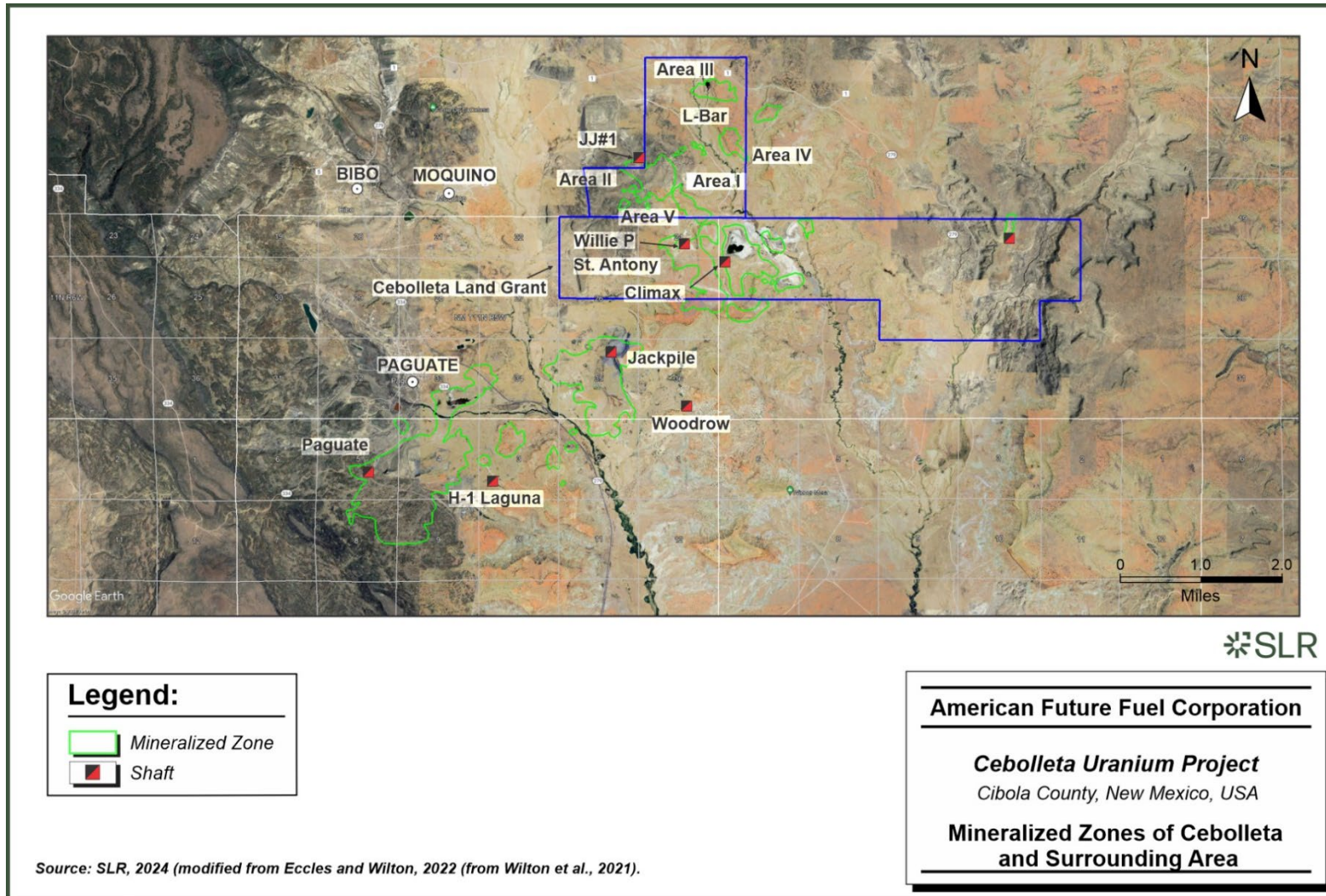
- The majority of the potentially economic significant uranium mineralization is hosted by the Jackpile Sandstone, although minor amounts of mineralization is hosted in sandstones of the Brushy Basin Member of the Morrison Formation and the Dakota Sandstone in the St. Anthony area.



- Most of the mineralization is hosted in medium to coarse-grained sandstones that exhibit a high degree of large-scale tabular cross-stratification (Baird et al., 1980).
- Near the margins of the deposits the mineralization thins appreciably, although halos of low grade mineralization surround the deposits.
- Higher grade mineralization usually occurs in the centers of the mineralized zones.
- Strong mineralization appears to be concentrated in the lower half portions of the Jackpile Sandstone, although anomalous concentrations of uranium are present throughout the vertical extent of the unit (Jacobsen, 1980).
- Most of the mineralization appears to be “reduced” with only isolated small pods, especially in the St. Anthony underground area, of discontinuous mineralization exhibiting oxidation (Baird et al., 1980). Mineralization in the St. Anthony South pit appears to be a “remnant” deposit, which has been partially depleted of uranium, that was redeposited in the nearby (down-dip) North pit.
- Extensive chemical and radiometric analyses on core holes by Sohio demonstrated that the mineralization is generally within equilibrium (Geo-Management, 1972; Olsen and Kopp, 1982, Moran and Daviess, 2014).
- Individual deposits do not show an overall preferred orientation or trend, and do not fully reflect the orientation of the main Jackpile Sandstone channel trend. Previous resource modeling efforts have demonstrated a north-northwest to south-southeast trending orientation to the better grade-thickness product (GT) mineralization.
- Nearly all of the deposits show some spatial relationship with carbonaceous material, although the mineralized zones exposed in the highwalls of the two open pits do not exhibit such a relationship.
- The deposits range in depth from approximately 200 ft (61 m) in the St. Anthony area, to nearly 700 ft (213 m) in the vicinity of the Area II and Area III deposits in the central and northern (down-dip) parts of the Project area.
- Grades greater than 0.10% eU₃O₈ are commonly seen in the sections, with numerous intercepts of 0.20% eU₃O₈ or better. This mineralization with thicknesses of several feet to tens of feet (six feet to 12 ft (1.8 m to 3.7 m)) occur throughout the Jackpile Sandstone unit which is 80 ft to 100 ft (24 m to 30.5 m) thick in the Cebolleta area.
- The upper and lower boundaries of these mineralized bodies are generally abrupt. Individual deposits are observed to develop into clusters. Locally, these clusters may be related to the coalescence of separate channel sandstone bodies. In this instance, mineralization is often thicker and higher grade than adjoining areas.
- Robertson and Associates (1978) reported that the uranium minerals at Cebolleta include Coffinite [U(SiO₄)-x(OH_{4x})], Uraninite [UO₂], organo-uranium complexes, and unidentified oxidized uranium complexes.



Figure 7-7: Mineralized Zones of Cebolleta and Surrounding Area



Note: The QP has been unable to verify the information outside of the Cebolleta property boundary, and therefore, that information is not necessarily indicative to the mineralization on the property that is the subject of the Technical Report.



7.3.3 Controls on Mineralization

The key controls of uranium mineralization at Cebolleta are: (1) primary sedimentary structures including channel fills, bars, and crossbedding in the Jackpile Sandstone, and (2) the concentration of carbonaceous material to precipitate uranium (Jacobsen, 1980; Baird et al., 1980). Carbonaceous material, including humate and/ or carbonaceous plant debris, serve as reductants to precipitate uranium from circulating groundwater. The distribution of carbonaceous material tends to be localized as observed in the former JJ#1 Mine and in the pit walls of the two St. Anthony open pits. Jacobsen (1980) reports that there are no significant accumulations of uranium without carbonaceous material, however, this relationship is not well developed in low grade mineralized areas (0.03% to 0.06% U_3O_8) (Moran and Daviess, 2014).

In the Willie P Mine, medium to coarse grained sandstones that exhibit large-scale tabular crossbedding is associated with substantial zones of uranium mineralization (Baird et al., 1980). This relationship between sedimentary features and uranium mineralization is also evident in the St. Anthony pit. In the St. Anthony area, there is an apparent northwest trend of the mineralization that may have resulted from the erosional retreat of the Jackpile Sandstone outcrop as well as the subsequent oxidation and redistribution of uranium mineralization closer to the outcrop (Baird et al., 1980; Jacobsen, 1980).



8.0 Deposit Types

The Cebolleta deposits are classified as sandstone-hosted uranium deposits. Sandstone-type uranium deposits typically occur in fine to coarse grained sediments deposited in a continental fluvial environment. The uranium may be derived from a weathered rock containing anomalously high concentrations of uranium, leached from the sandstone itself or an adjacent stratigraphic unit. It is then transported in oxygenated water until it is precipitated from solution under reducing conditions at an oxidation-reduction interface. The reducing conditions may be caused by such reducing agents in the sandstone as carbonaceous material, sulphides, hydrocarbons, hydrogen sulphide, or brines.

8.1.1 Sandstone-Hosted Uranium Deposits in North America

Uranium resources in North America occur in well defined metallogenic provinces as unconformity-related, quartz-pebble conglomerate, sandstone, volcanic, and phosphorite types of uranium deposits. Sandstone-hosted uranium deposits are the focus of this Technical Report and occur within two principal subtypes:

- 1 Tabular sandstone uranium deposits are mainly in upper Paleozoic and Mesozoic rocks in the Colorado Plateau Uranium Province (CPUP).
- 2 Roll-front sandstone uranium deposits are in Tertiary rocks of the Rocky Mountain and Intermontane Basins Uranium Province, and in a narrow belt of Tertiary rocks that form the Gulf Coastal Uranium Province in south Texas and adjacent Mexico (Granger and Finch, 1988; Finch, 1996).

The Cebolleta uranium deposit classifies within the CPUP sandstone uranium deposit subtype, which typically occur in mineralized clusters as tabular sandstone deposits hosted by Upper Paleozoic and Mesozoic fluvial sedimentary rocks. They formed within three major epochs of mineralization (Finch, 1996):

- Late Triassic-Early Jurassic (210 million years before present (Ma) to 200 Ma)
- Late Jurassic (155Ma to 150 Ma)
- Early Cretaceous (135 Ma)

Some of the tabular sandstone uranium deposits in the CPUP, including the deposits in the San Juan Basin, were redistributed into roll-front type deposits and in veins along faults in Late Cretaceous and early Tertiary time in conjunction with Laramide orogeny deformation (McCammon et al., 1986). The ore mineralogy within this Uranium Province is dominantly uraninite, coffinite, montroseite, and chalcocite. The alteration includes bleaching of host sandstone by organic reduction of iron oxides. Consequently, the genetic model hinges on the divalent nature of uranium, i.e., strongly soluble in oxidizing conditions and relatively insoluble in reducing conditions (Bell, 1986).

8.1.2 Sandstone-Hosted Uranium Deposits in New Mexico

New Mexico ranks second in uranium reserves in the USA (Energy Information Administration, 2021) with the Jurassic Morrison Formation in the Grants district which includes the Laguna Mining District that encompasses the Project, accounting for 97% of the total production in New Mexico and more than 30% of the total production in the USA (McLemore, 2007).

Favourable target areas for sandstone-hosted uranium deposits typically include closed back-arc basins filled with post-Devonian, carbonaceous, fluvial, oxidized, continental sandstone



deposits situated proximal to volcanic/intrusive centres and with syn- and post-depositional deformation that has further localized the uranium deposits (Le Roux, 1982).

The Grant's uranium district and the Cebolleta deposit fulfill this exploration criteria. For example:

- During the Late Jurassic, the San Juan Basin area was part of a back-arc basin, formed inland of an Andean-type magmatic arc that bounded the continent on the west (Burchfield, 1979). The large structural and topographic basin assumed its present shape during the Late Cretaceous and early Tertiary Laramide orogeny.
- This magmatic arc and a landward upland area provided much of the sediment that now comprises the Upper Jurassic Morrison Formation. The Westwater Canyon Member within the Morrison Formation consists of reddish-brown to yellowish-orange, fine to medium grained, locally conglomeratic, poorly sorted, feldspathic to arkosic sandstone deposited in a high energy braided stream environment.
- The source of the uranium and vanadium is not well constrained but could be derived from alteration of volcanic detritus and shales within the Morrison Formation or from ground water derived from a volcanic highland to the southwest.
- The uranium and humate were deposited during diagenesis by reduction at the interface of meteoric fresh water and ground water brines (Granger and Santos, 1986). The groundwater flow is impeded by up-thrown blocks of Precambrian crust. During the Tertiary, after formation of the primary sandstone uranium deposits, oxidizing ground waters migrated through the uranium deposits and remobilized some of the primary sandstone uranium deposits (Saucier, 1981).

Three sandstone uranium deposit types are recognized in the Morrison Formation: tabular (primary, trend, blanket, black-band), roll-front (redistributed, post-fault, secondary), and fault-related (redistributed, stack, post-fault; Kittel et al., 1967; Devoto, 1978; Nash et al., 1981; Granger and Santos, 1986; Wilton et al., 2021). A schematic of the three Grants district uranium deposit types is presented in Figure 8-1 and described in the text that follows:

- 1 Primary deposits: Include broad, undulatory layers of uranium mineralization controlled primarily by the stratigraphic characteristics of the host sandstones. Mineralization is localized by humic acids (humates) which acted as the reductants to precipitate uranium from groundwater. These deposits are characteristically less than 2.5 m thick, average more than 0.20% U_3O_8 , and have sharp ore-to-waste contacts (McLemore, 2007).
- 2 Redistributed deposits: Are the product of destruction of primary deposits by oxidation, and have little, if any, humate remaining associated with the mineralization. They form irregularly shaped zones of mineralization controlled by stratigraphic characteristics of the host rocks and structural features within the deposits. The average redistributed deposit contains approximately 18.8 million pounds U_3O_8 with an average grade of 0.16% (McLemore, 2007). Some redistributed uranium deposits are vertically stacked along faults.
- 3 Remnant deposits: Are remnants of primary deposits that were partially or mostly mobilized and redistributed. These deposits tend to be discrete bodies of mineralization entirely enclosed within otherwise oxidized host rocks. Mineralization is often localized by small accumulations of carbonaceous material. The average size is approximately 2.7 million pounds U_3O_8 at a grade of 0.20% (McLemore, 2007).

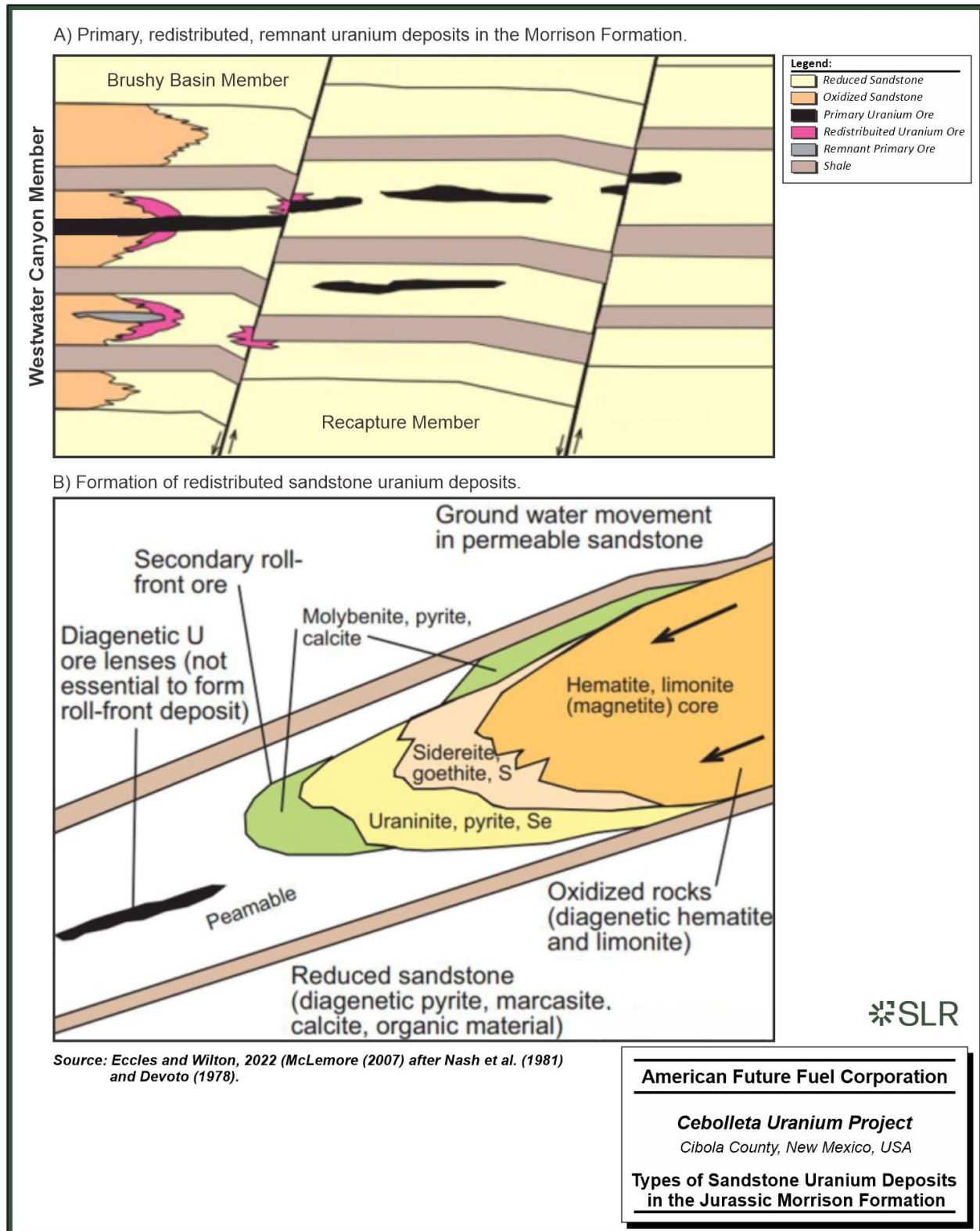


At Cebolleta, the mineralization occurs as a series of generally tabular-shaped bodies that were deposited within various lenses of the Jackpile Sandstone Member of the Upper Jurassic Morrison Formation. Individual uranium deposits at the Project exhibit many of the characteristics of primary, redistributed, and remnant types of uranium deposits that are hosted in the Westwater Canyon Member of the Morrison Formation elsewhere within the Grants Mineral Belt. Coffinite and minor uraninite are the principal primary uranium minerals in the deposits.

Primary deposits hosted in the Westwater Canyon Member commonly reflect the overall orientation of the sandstone bodies (Jacobsen, 1980; Wilton, 2017). In contrast, the geometry of primary deposits in the Jackpile Sandstone Member does not necessarily reflect the overall geometry or architecture of individual channel sands or individual lenses of the Jackpile Sandstone Member. In addition, redistributed deposits in the Jackpile Sandstone Member within the Project area are not localized along faults or fractures while redistributed deposits in the Westwater Canyon Member are localized along faults or fractures.



Figure 8-1: Types of Sandstone Uranium Deposits in the Jurassic Morrison Formation



Source: Eccles and Wilton, 2022 (McLemore (2007) after Nash et al. (1981) and Devoto (1978)



9.0 Exploration

AMPS and PUR have not conducted exploration work at Cebolleta since acquiring the property, with the exception of drilling, which is detailed in Section 10. A summary of the historical exploration programs completed by previous owners is presented in Section 6.0 of this Technical Report. Rotary and diamond drilling on the Project property is the principal method of exploration and delineation for uranium.



10.0 Drilling

PUR has not conducted any drilling on the Project property.

The Project has been the site of considerable mining and exploration since 1951, with rotary and diamond drilling (core) as the principal method of exploration and delineation of uranium mineralization.

As of the effective date of this report, AMPS and its predecessor companies have completed a reported total of 3,644 drill holes, from 1951-2014 and 2023, of which 3,594 totaling 1,868,457 ft of drilling are contained in the drilling database provided to SLR for use to prepare the Mineral Resource estimates. A drilling summary up to and including all drilling information available as of December 31, 2023, is presented in Table 10-1. A map of drill locations is shown in Figure 10-1.

From August to November of 2023, AMPS drilled a total of 26 drill holes (combination of rotary and core) totaling 9,530 ft within the Area I target zone. The drill holes were designed to confirm the stratigraphic position of uranium mineralization, the relative thicknesses of mineralized intervals, and the range of uranium grades that was encountered in the historical (legacy) drill holes and are included in the Mineral Resource Estimate.

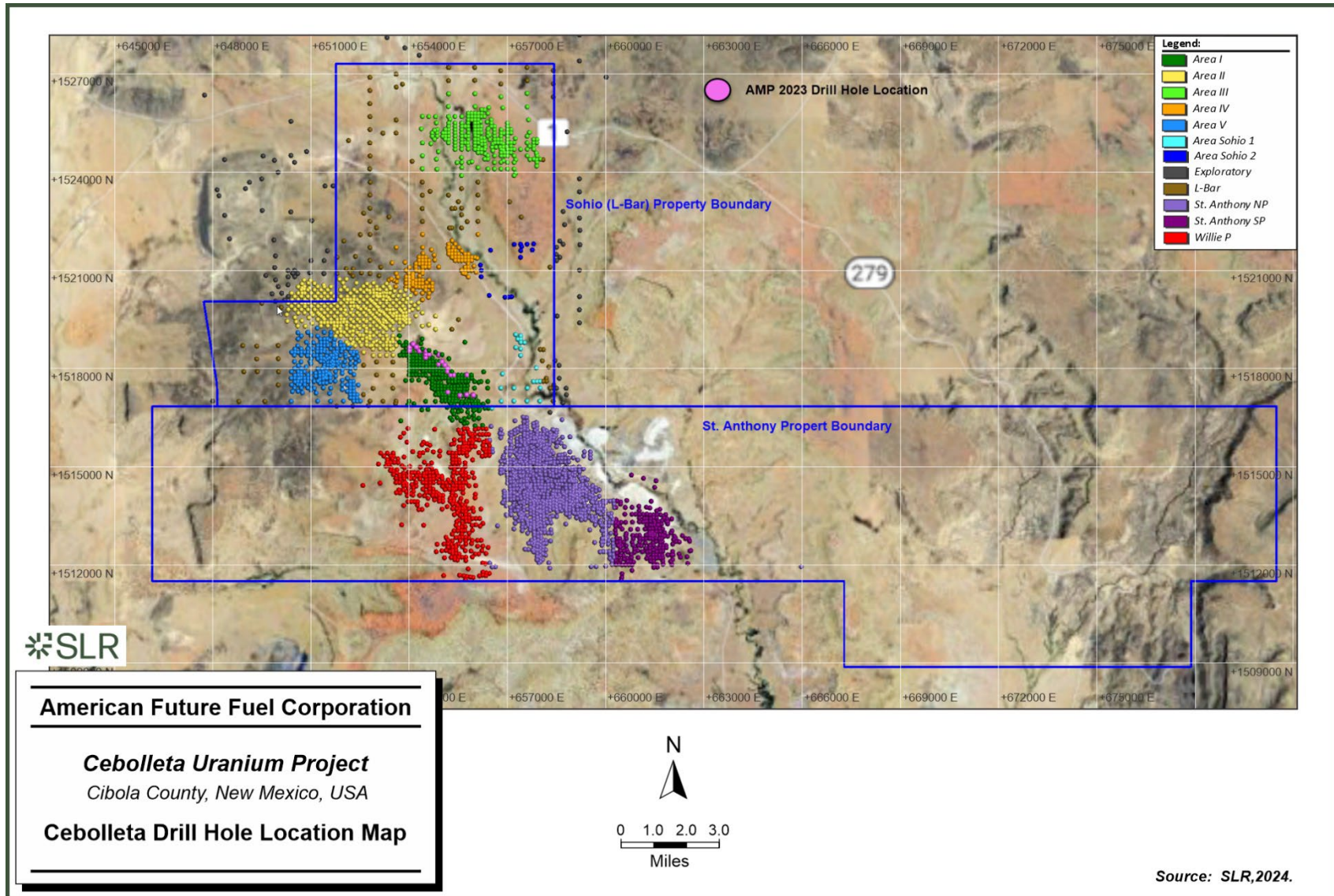


Table 10-1: Cebolleta Drill Hole Database

Year	Property	Area	Number of Drill Holes	Total Depth Drilled (ft)	
1951-2014	Cibola	Exploratory	241	138,831	
	Cibola Total		241	138,831	
	Sohio	Area_I		234	90,046
		Area_II		380	243,232
		Area_III		234	116,021
		Area_IV		125	81,464
		Area_Sohio_1		22	8,985
		Area_Sohio_2		16	8,354
		Area_V		223	139,712
		L-Bar		118	65,890
		Sohio Total		1,352	753,703
	St. Anthony	Area_I		36	15,766
		Area_Sohio_1		1	501
		St. Anthony North Pit		1,292	606,254
		St. Anthony South Pit		234	125,978
		Willie_P		411	217,343
		Exploratory		1	529
	St. Anthony Total		1,975	966,371	
	1951-2014 Total			3,568	1,858,904
	2023	Sohio	Area_I	26	9,553
Sohio Total			26	9,553	
2023 Total			26	9,553	
Grand Total			3,594	1,868,457	



Figure 10-1: Cebolleta Drill Hole Location Map



10.1 Drilling by Previous Owners (1957- 2014)

AMPS predecessors completed a reported total of 3,618 drill holes at the Project including:

- 2,806 rotary and 113 core holes in the St. Anthony deposit area.
- 795 rotary and 17 core holes in the Sohio (L-Bar) deposit area.
- 264 rotary and core holes outside the current property boundaries.

Two lithological horizons were targeted within the Project with the legacy drilling:

- 1 The Jackpile Sandstone/Upper Brushy Basin Member of the Morrison Formation.
- 2 The Westwater Canyon Member in the northern portion of the Project area.

The target depths ranged from less than 200 ft to greater than 800 ft (61 m to 244 m) below surface. An overview of the historical drill holes contained within AMPS's database (n=3,568 within the Project property) is presented in Table 10-1.

Most of the drilling was completed using a conventional open hole rotary drilling technique. The core drilling was completed using conventional rotary drills to a "core point", at which a core barrel (typically 20 ft (6.1 m) in length) would replace the rotary drill bit and core drilling would commence.

Samples of rotary cuttings were collected at five feet or 10 ft (1.5 m to 3.0 m) intervals. Lithological logs included information on the rock type, alteration, presence and nature of carbonaceous material, accessory minerals such as pyrite, hematite and/or limonite and the oxidation state of the target sediments.

The holes were drilled vertically, and upon completion, each hole was logged with a geophysical tool for gamma-ray (Natural Gamma), spontaneous potential (SP), and single point resistivity (SPR). This process provided a continuous reading of gamma radioactivity through the entire length of the drill hole.

For rotary drilling, physical samples were retrieved at five-foot intervals; for core drilling, core samples were collected in one foot intervals. Both sets of drilling samples were used for lithologic determinations and comparison to the SP and resistivity curves from the geophysical logs. Additionally, cored samples were retrieved for metallurgical studies, including leach amenability, in situ recovery (ISR) processes, and post-ISR groundwater restoration, and assayed for disequilibrium determinations. Drill cuttings samples were rarely used for geochemical analysis. Downhole drift surveys of the drill holes were also conducted.

10.2 AMPS (2023)

From August to November 2023, Cibola, under the control of AMPS, conducted an initial confirmation Phase 1 drilling program at the Project. The purpose of the drilling program was to validate historical drilling results and determine whether the historical data could be relied on for preparation of an NI 43-101 compliant mineral resource estimate. The holes were designed to confirm the stratigraphic position of uranium mineralization, the relative thicknesses of mineralized intervals, range of uranium grades that were encountered in the historical drill holes and provide drill core for retention as lithological references and radiometric equilibrium analysis.

Best practicable efforts were made to locate historic drill collars on the surface and each confirmation hole was intended to be located within approximately 30 ft of an historic drill collar.



The drill program resulted in 26 twinned drill holes at 22 locations ranging from 220 ft to 400 ft (60.1 m to 122 m) deep, averaging 367 ft (112 m) deep for a total of 9,530 ft (2,912 m).

Drilling techniques consisted of vertical rotary and conventional core. Rotary cuttings were collected along five foot intervals, examined for lithology, and retained in chip trays. Core samples through mineralized zones were collected from six holes for retention as lithological references and radiometric equilibrium analysis.

Company management provided the drilling and geophysical logging oversight. Stewart Brothers Drilling Company of Milan, NM provided the drilling and abandonment services for each borehole. Borehole geophysical surveys (including natural gamma, self-potential, and resistivity) were performed by both Century Wireline Services (Century) and AMPS.

The boreholes were plugged and abandoned with a bentonite mixture, in adherence with the regulations of the State of New Mexico for uranium exploration drill holes.

10.2.1 Rotary and Core Drilling

All holes were vertical, and drilling was performed using a 2002 GEFECO 30K Deep Hole drill rig. Rotary drilling with an approximately six inch wide bit was used from surface to either the core-point or to total depth (TD). Rotary was used for the entirety of 20 boreholes and spot-coring was used to complete six boreholes. The combined methods resulted in approximately 9,030 ft drilled using rotary and 500 ft using core.

Core-point and TD were determined from the elevations of mineralized horizons identified by historical data. The six core holes were started using rotary down to the core-point. At the core-point, the rotary bit was exchanged for a Christiansen three inch Mining Core Barrel, which was advanced in conventional, 20 ft runs to TD (except for RLB-23 Twin which was completed with 40 ft of rotary after the final core run). Each run of core was brought to surface using the same conventional technique, requiring the drillers to trip out the entirety of the drill pipe to retrieve the loaded core barrel.

10.2.1.1 Core Logging and Recovery

Each 20 ft run of core was removed from the core barrel by the drillers into a rigid, 20 ft steel tray. Company geologists then measured, cleaned, and photographed the core prior to placing it into five foot, heavy-duty plastic core boxes, orienting the core to fit together where possible. Company geologists inserted core blocks denoting runs and depths and labeled the core box with the drill hole ID, box number, and start/finish depths on the side of core box and the core box lid. If core was not recovered during a run, a wooden block was placed in the core box with the "from" and "to" depths of no recovery (if known). All core holes were drilled vertical and core intervals completed in the Jackpile Sandstone (Jmj) horizon represent true thickness of the mineralization horizon.

Table 10-2 provides a summary of the Phase 1 core drilling Intervals at each of the six core holes. Overall core recovery averaged 80%. Recovery through mineralized zones was lower than desired by AMPS and after the fifth hole (RLB-23 Twin), the decision was made to finish the Phase 1 confirmation drilling program using only rotary to TD. Conventional coring was attempted again at the fifteenth hole (A-8 Twin A) with similar recovery results. AMPS determined that adequate core recovery would require wireline drilling techniques and intends to use wireline drilling as part of its future drilling programs. Figure 10-2, Figure 10-3, and Figure 10-4 show the location of the 2023 drilling, stratigraphy, and downhole radiometric probe results respectively.



Following each drilling day, a Company geologist transported the core boxes from the drill site to AMPS's secure storage container at the CGL's equipment yard. The core boxes were checked into the storage facility and placed on shelves in numerical box order number. The core samples are retained in their entirety in the storage container for repeated use as reference material and future radiometric equilibrium analysis to be implemented during a future core drilling program.

Table 10-2: Cebolleta 2023 Phase 1 Drilling Core Summary

Twin Drill Hole ID	Core Run	Depth (ft)			Core Recovery		Downhole Radiometric Probe Results		
		from	to	interval	Feet	%	Top Depth (ft)	Thickness (ft)	% eU ₃ O ₈
RLB-83 TWIN	Rotary Run 1	0	220	220	-	-			
	Core Run 1	220	240	20	20.0	100%	231.4	16.7	0.17
	Core Run 2	240	260	20	17.7	89%	253.1	7.4	0.10
	Core Run 3 TD	260	280	20	15.0	75%			
	Core summary	220	280	60	52.7	88%			
LJ-25 TWIN	Rotary Run 1	0	220	220	-	-			
	Core Run 1	220	240	20	19.8	99%	227.5 230.3 234.1	0.9 1.2 14.4	0.06 0.10 0.20
	Core Run 2	240	260	20	20.0	100%	253.0	2.1	0.07
	Core Run 3	260	280	20	20.0	100%			
	Core Run 4 TD	280	300	20	20.0	100%			
	Core summary	220	300	80	59.8	75%			
LJ-5 TWIN	Rotary Run 1	0	230	230	-	-			
	Core Run 1	230	250	20	20.0	100%	235.5 242.5	1.4 9.8	0.06 0.36
	Core Run 2	250	270	20	20.0	100%			
	Core Run 3	270	290	20	20.0	100%			
	Core Run 4	290	310	20	18.3	92%			
	Core Run 5 TD	310	320	10	10.0	100%			
	Core summary	230	320	90	88.3	98%			
RLB-20 TWIN A	Rotary Run 1	0	290	290	-	-			
	Core Run 1	290	300	10	9.5	95%			
	Core Run 2	300	320	20	12.1	61%			
	Core Run 3	320	340	20	17.3	87%			
	Core Run 4	340	360	20	6.0	30%	351.0 354.8	2.0 2.7	0.10 0.10
	Core Run 5 TD	360	380	20	17.1	86%	360.1	4.6	0.09
	Core summary	290	380	90	62.0	69%			



Twin Drill Hole ID	Core Run	Depth (ft)			Core Recovery		Downhole Radiometric Probe Results		
		from	to	interval	Feet	%	Top Depth (ft)	Thickness (ft)	% eU ₃ O ₈
RLB-23 TWIN	Rotary Run 1	0	300	300	-	-			
	Core Run 1	300	320	20	15.5	78%			
	Core Run 2	320	340	20	12.3	62%	338.9	13.6	0.26
	Core Run 3	340	360	20	10.8	54%			
	Core summary	300	360	60	38.6	64%			
	Rotary Run 2 TD	360	400	40	-	-			
A-8 TWIN A	Rotary Run 1	0	280	280	-	-			
	Core Run 1	280	300	20	19.7	99%			
	Core Run 2	300	320	20	20.0	100%			
	Core Run 3	320	340	20	17.5	88%	322.9 325.2	1.5 12.3	0.08 0.16
	Core Run 4	340	360	20	16.6	83%	343.3	3.2	0.50
	Core Run 5	360	380	20	16.1	81%	363.2	1.9	0.07
	Core Run 6 TD	380	400	20	10.0	50%			
	Core summary	280	400	120	99.9	83%			
Total Phase 1 Drilling Core Summary				500.0	401.3	80%			



Figure 10-2: 2023 Drill Hole Locations and Longitudinal Section Index Map

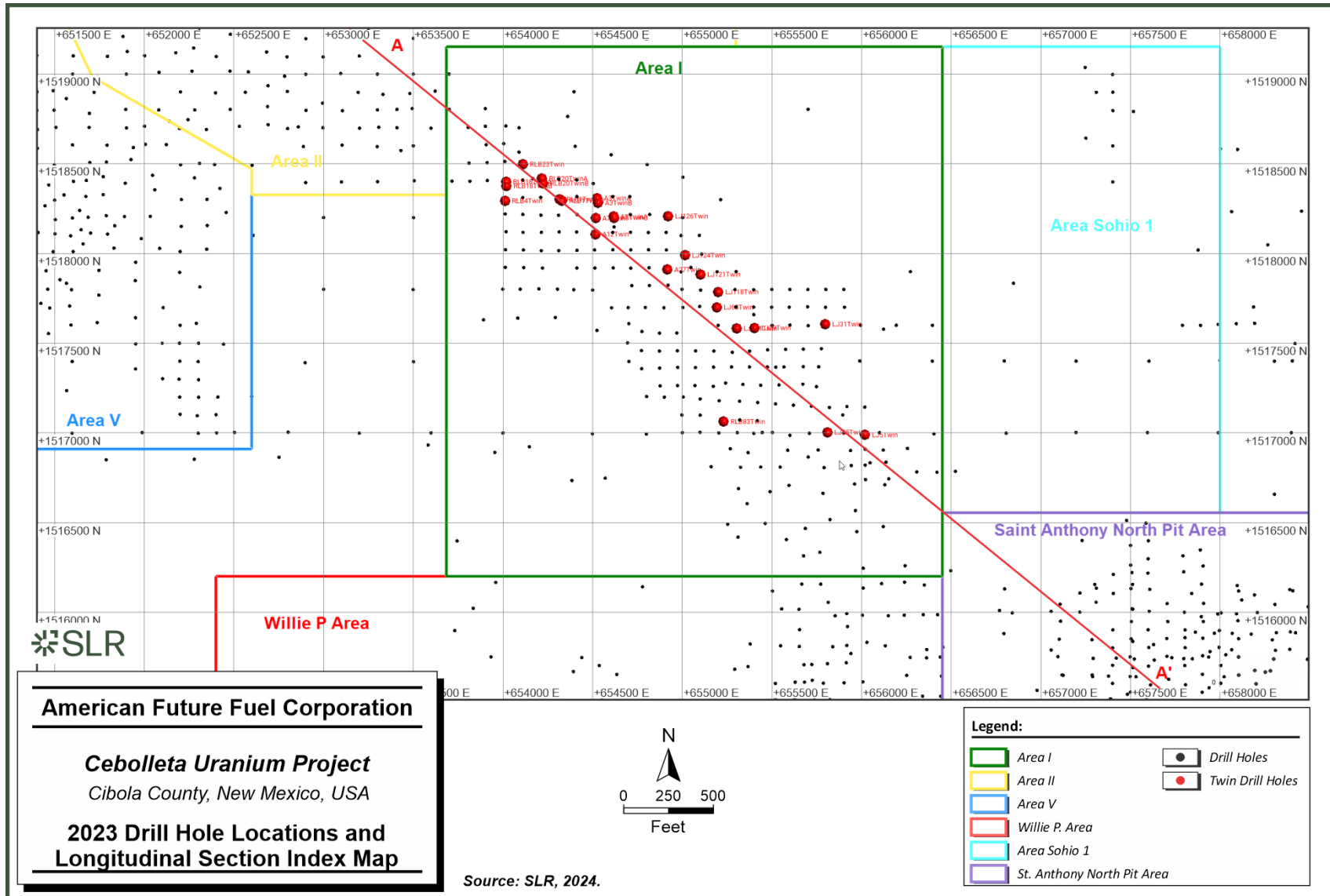


Figure 10-3: 2023 Drill Hole Stratigraphic Longitudinal Section View

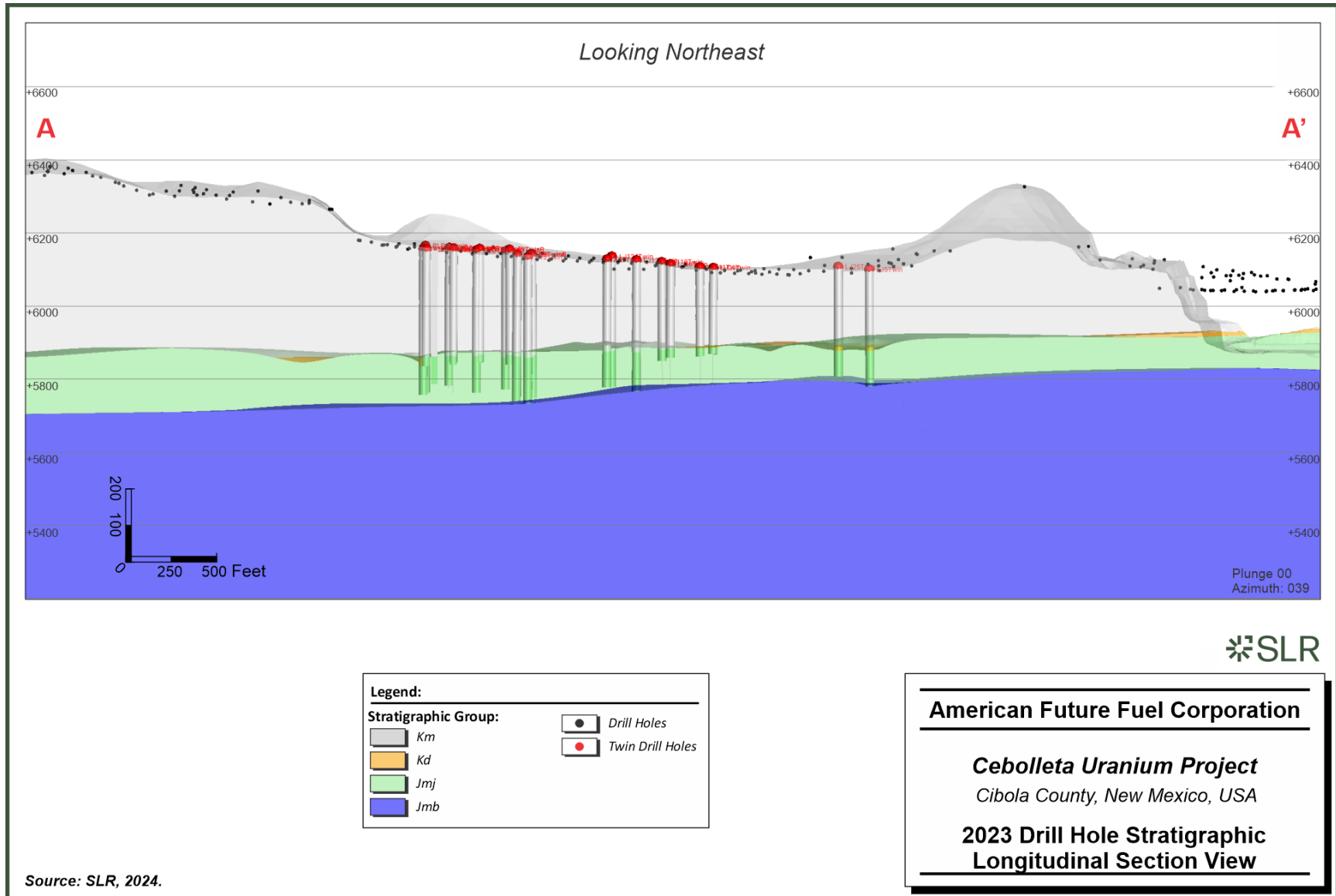
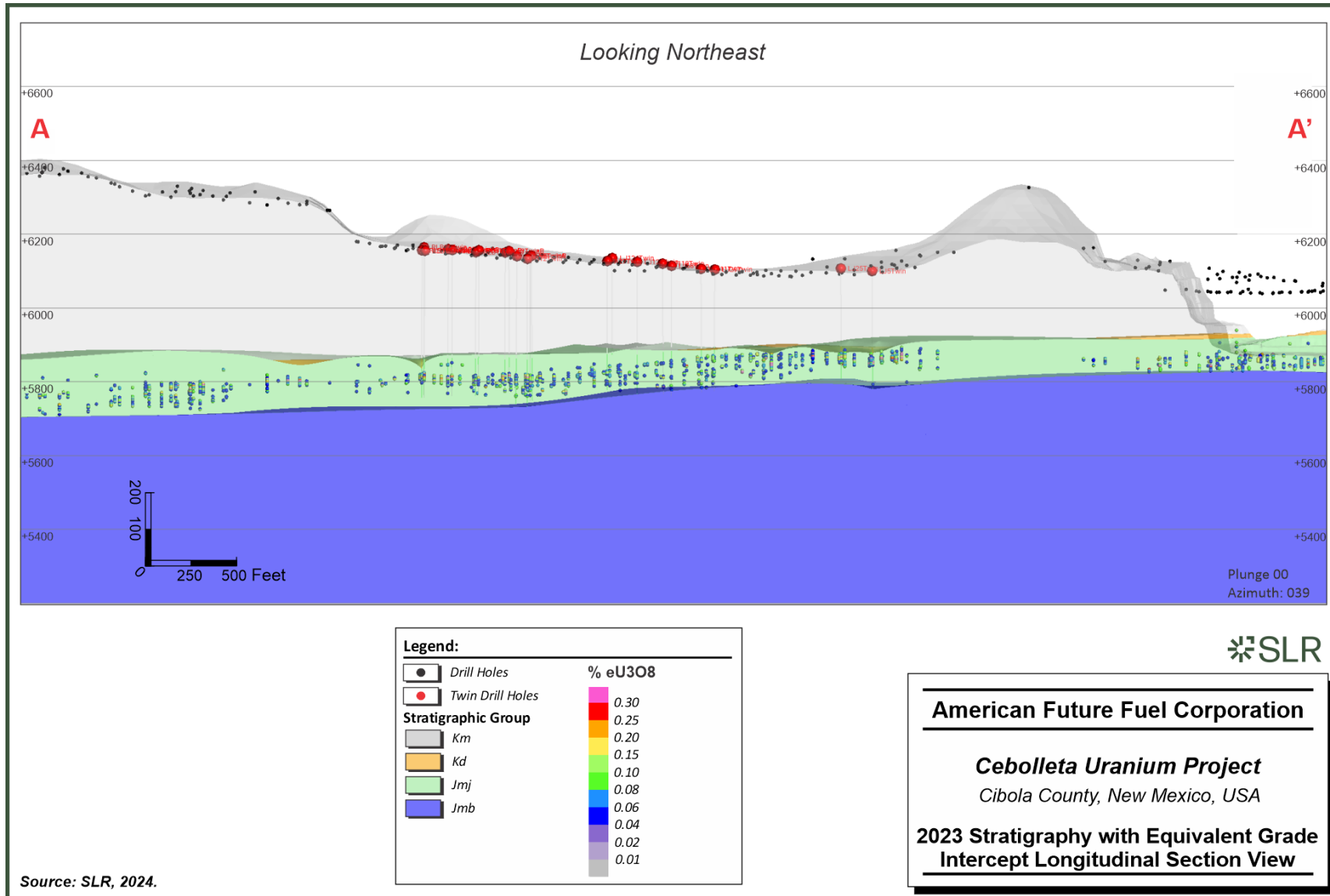


Figure 10-4: 2023 Stratigraphy with Equivalent Grade Intercept Longitudinal Section View



11.0 Sample Preparation, Analyses, and Security

The primary assay data used in estimating Mineral Resources for Cebolleta are downhole radiometric logs. The following sections contained in this report have been derived, and in some instances extracted, from previous documentation supplied by SLR and AMPS and its predecessors.

11.1 Sampling Method and Approach

11.1.1 Radiometric (Natural Gamma) Logging

Exploration drilling for uranium is unique in that core does not need to be recovered from a hole to determine the metal content. Due to the radioactive nature of uranium, probes that measure the decay products, or “daughters”, can be measured with a downhole gamma probe; this process is referred to as gamma logging. While gamma probes do not measure the direct uranium content, the data collected (in counts per second (CPS)) can be used along with probe calibration data to determine an equivalent U_3O_8 grade in percent (% e U_3O_8). Calculated equivalent U_3O_8 grades are very reliable for uranium mineral resource estimation provided the values have been adjusted using a correction (\pm) factor for any disequilibrium that may occur in the area.

This method limits the amount of core needed to evaluate a uranium deposit. It is common practice to use this data in place of core assay data for Mineral Resource estimates. Typically, core is only collected to validate gamma log data, determine disequilibrium, or for use in amenability or geotechnical studies. The disequilibrium correction factor is established by correlating the count rate obtained from the probe against chemical assay results and adjusting the probe count rates accordingly into equivalent % e U_3O_8 grades.

11.1.1.1 Calibration

For the gamma probes to report accurate % e U_3O_8 values the gamma probes must be calibrated regularly. The conversion coefficients for conversion of probe CPS to % e U_3O_8 grades include, k-factor (K), dead time (DT), hole size, water correction (WF) and casing correction (CF) are based on calibration results obtained at certified calibration facilities operated by the US AEC, now US Department of Energy (DOE), in Grants, New Mexico, and Grand Junction, Colorado. Other test pits exist in Casper, Wyoming, and George West, Texas.

- K - sometimes referred to as sensitivity, is a constant that relates economic grade to measured gamma-ray intensity and is unique for each probe calculated based on readings from high- and low grade calibration pits.
- DT - the difference in time between the actual time at which the data are counted and the time the system takes to process this data.
- Hole Size and WF must be made as the size of the hole and presence of water or drilling mud in the borehole will reduce the count rate.
- CF must be made as casing will also reduce the count rate.

Quarterly or semi-annual calibration is usually sufficient. Calibration should be performed more frequently if variations in data are observed, or if the probe is damaged.



11.1.1.2 Method

Following the completion of a rotary hole, a geophysical logging truck will be positioned over the open hole and a probe will be lowered to the hole's total depth. In uranium deposits, these probes take different readings, including gamma, resistivity, standard potential, and hole deviation. Only gamma is used in grade calculation. Once the probe is at the bottom of the hole, the probe begins recording as it is raised. The quality of the data is impacted by the speed at which the probe is removed from the hole. Experience shows a speed of 20 feet per minute (ft/min) or less is adequate to obtain data for resource modeling. Data is recorded in CPS, which is a measurement of uranium decay of uranium daughter products, specifically Bismuth-214. That data is then processed using the calibration factors to calculate a % eU₃O₈ grade. Historically, % eU₃O₈ grades were calculated using the AEC half amplitude method, which gives a grade over a thickness. Currently, the % eU₃O₈ grades tend to be calculated on 0.1 or 0.5 ft intervals by software. Depending on the manufacturer of the probe truck and instrumentation, different methods are used to calculate the % eU₃O₈ grade, however, all including the AEC method are based on two equations:

The first equation calculated the DT corrected CPS (N) from the dead time determined as part of the calibration process:

$$DT \text{ Corrected CPS (N)} = CPS / (1 - (CPS * DT))$$

The second equation converts the DT Corrected CPS (N) to % eU₃O₈ utilizing the k-factor (K):

$$\% eU3O8 = 2KN$$

Depending on the drilling and logging environment, additional multipliers are added to correct for various environmental factors, including water factor (WF), pipe factor (PF) and a radiometric equilibrium factor discussed in Section 11.2.

11.1.1.3 Previous Owners

Gamma-ray log values were then used to calculate radiometric assay grades (% eU₃O₈) from the mineralized holes using calculation techniques developed by the former United States Atomic Energy Commission. The gamma logging services were undertaken by various experienced independent geophysical contractors, including Century Geophysical Corp., Dalton Well Logging Company, Data-Line, Geoscience Associates, and Wilson's Logging Company on behalf of the former Project operators. Calibration of the gamma logging equipment was completed periodically at test pits of the Department of Energy near Milan, New Mexico, and Grand Junction, Colorado, in accordance with the standard operating procedures in the industry at the time (Carter, 2011; Moran and Daviess, 2014).

11.1.1.4 AMPS (2023)

At each of AMPS' 2023 boreholes, Century Wireline Services (Century), of Tulsa Oklahoma, performed calibrated downhole geophysical surveys in each hole including deviation, caliper, and natural gamma to determine radiometric equivalent U₃O₈ grades (% eU₃O₈) along with Self-Potential (SP) and SPR to determine changes in lithology. AMPS also completed its own calibrated downhole geophysical surveys using Mount Sopris equipment to compare with Century's results. Radiometric equivalent U₃O₈ grade (% eU₃O₈) values were calculated from the gamma-ray data by Century's logging unit. Radiometric equivalent U₃O₈ grade (% eU₃O₈) collected by the Mount Sopris logging unit were calculated applying the 2KN method to gamma results as follows:

$$\text{Grade} = 2K \left(\frac{CPS}{(1 - CPS \times DT)} \right) MF$$



For drill holes that were logged with both Century and Mount Sopris radiometric probes, AMPS geologists compared and audited the downhole gamma curves and found the overall shape and amplitude of equivalent grade estimate were in good agreement, with the Mount Sopris output producing a slightly more representative equivalent grade output through the mineralized zones. Based on these observations AMPS chose to use the results from the Mount Sopris system for the final grade estimate. The QP reviewed the information and results and agrees with these findings for use in Mineral Resource estimation.

Key elements to compare geophysical results with historical logs are lithology, along with depth and amplitude of uranium mineralization. Results from the 26-hole program show very good correlation compared with the historical values. Radiometric % eU₃O₈ grade values closely match historical data from nearby holes completed by Sohio from over 50 years prior. The geophysical logging methodologies utilized by Century in the 2023 drilling program are consistent with those employed by previous operators of the Project, and these methodologies are considered to be “industry standard” techniques for evaluation of sandstone-hosted uranium deposits.

Table 11-1 and Table 11-2 below provide highlights from the drill program and a direct comparison of the 2023 twinned drilling probe data with the nearby historical drilling data. The positive results are indicative for the quality of the mineralization at Cebolleta and Sohio’s previous work that is the foundation of the historical resource estimate.

As part of the confirmation program, AMPS plans to evaluate the radiometric equilibrium of uranium mineralization using chemical assays of core samples to compare with radiometric results.

Table 11-1: Cebolleta Phase 1 Drilling Program Highlights (GT>1)

Twin Hole	Top Depth		Thick		Grade	GT (grade x thickness)
	(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)	(%-ft)
RLB-83 Twin	231.0	70.4	18.8	5.7	0.160	3.01
LJ-5 Twin	242.5	73.9	9.8	3.0	0.360	3.53
LJ-25 Twin	234.1	71.5	14.4	4.3	0.200	2.88
RLB-20 Twin B	339.4	103.5	6.7	2.0	0.270	1.81
RLB-23 Twin	338.9	103.3	13.6	4.1	0.260	3.54
RLB-18 Twin A	334.9	102.1	10.6	3.2	0.160	1.70
RLB-18 Twin B	339.2	103.4	9.6	2.9	0.150	1.44
A-3 Twin B	331.6	101.1	22.8	6.9	0.170	3.88
A-12 Twin	315.3	96.1	10.4	3.2	0.220	2.29
A-8 Twin A	325.2	99.1	12.3	3.7	0.160	1.97
	343.3	104.6	3.2	1.0	0.500	1.60
A-8 Twin B	325.4	99.2	13.9	4.2	0.110	1.53
LJ-126 Twin	361.0	110.0	2.8	0.9	0.470	1.32
LJ-121 Twin	305.3	93.1	9.7	3.0	0.110	1.07



Table 11-2: Cebolleta Project Phase 1 Drilling Results, August-November 2023

HISTORICAL RESULTS						PHASE 1 TWIN RESULTS					
Historical Hole	Top Depth		Thick		Grade	Twin Hole	Top Depth		Thick		Grade
	(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)		(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)
RLB-83 Historical	230.5	70.3	15.5	4.7	0.150	RLB-83 Twin	231	70.5	16.7	5.1	0.170
	251.5	76.7	10.0	3.0	0.060		253	77.1	7.4	2.3	0.100
LJ-5 Historical	247.0	75.3	6.0	1.8	0.410	LJ-5 Twin	236	71.8	1.4	0.4	0.060
	253.0	77.1	4.5	1.4	0.050		243	73.9	9.8	3.0	0.360
LJ-25 Historical	231.0	70.4	1.0	0.3	0.130	LJ-25 Twin	228	69.3	0.9	0.3	0.060
	235.5	71.8	13.0	4.0	0.190		230	70.2	1.2	0.4	0.100
							234	71.5	14.4	4.3	0.200
							253	77.3	2.1	0.5	0.070
RLB-20 Historical	310.0	94.5	1.0	0.3	0.150	RLB-20 Twin A	351	107.0	2.0	0.6	0.100
	343.0	104.5	6.5	2.0	0.340		355	108.1	2.7	0.8	0.100
	363.0	110.6	5.5	1.7	0.110		360	109.8	4.6	1.4	0.090
						RLB-20 Twin B	306	93.1	0.8	0.2	0.050
							339	103.5	6.7	2.0	0.270
							359	109.3	2.6	0.8	0.160
RLB-23 Historical	339.5	103.5	13.0	4.0	0.240	RLB-23 Twin	339	103.3	13.6	4.1	0.260
RLB-18 Historical	334.0	101.8	13.0	4.0	0.190	RLB-18 Twin A	335	102.1	10.6	3.2	0.160
						RLB-18 Twin B	339	103.4	9.6	2.9	0.150
RLB-4 Historical	332.0	101.2	2.5	0.8	0.090	RLB-4 Twin	332	101.2	1.8	0.5	0.090
	346.5	105.6	1.5	0.5	0.100		348	106.0	1.8	0.5	0.090
RLB-1 Historical	343.0	104.5	3.5	1.1	0.300	RLB-1 Twin A	334	101.9	2.1	0.6	0.080
	356.5	108.7	2.0	0.6	0.190		345	105.1	3.5	1.1	0.210
	375.5	114.5	1.5	0.5	0.090		350	106.8	7.5	2.3	0.090
						RLB-1 Twin B	344	105.0	2.5	0.8	0.140
							349	106.5	1.4	0.4	0.070
							357	108.9	1.8	0.5	0.100
A-3 Historical	330.0	100.6	2.5	0.8	0.060	A-3 Twin A	333	101.4	3.8	1.2	0.150
	332.5	101.3	16.0	4.9	0.240		338	103.0	2.2	0.7	0.050
	353.0	107.6	4.0	1.2	0.060		352	107.2	5.3	1.6	0.170
						A-3 Twin B	332	101.2	10.0	3.0	0.260
							344	104.9	9.7	3.0	0.120
A-12 Historical	314.0	95.7	9.0	2.7	0.290	A-12 Twin	315	96.1	10.4	3.2	0.220



HISTORICAL RESULTS						PHASE 1 TWIN RESULTS					
Historical Hole	Top Depth		Thick		Grade	Twin Hole	Top Depth		Thick		Grade
	(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)		(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)
	331.0	100.9	1.5	0.5	0.130		330	100.7	4.4	1.3	0.200
	341.0	103.9	4.0	1.2	0.160		342	104.3	4.1	1.2	0.100
	369.0	112.5	1.5	0.5	0.110		351	106.9	0.6	0.2	0.050
							354	107.8	1.8	0.5	0.080
							371	113.2	1.3	0.4	0.070
A-7 Historical	323.0	98.5	1.5	0.5	0.140	A-7 Twin	323	98.4	1.8	0.5	0.080
	324.5	98.9	4.0	1.2	0.050		330	100.7	3.6	1.1	0.070
	329.0	100.3	3.5	1.1	0.140		341	103.8	4.4	1.3	0.140
	336.5	102.6	3.0	0.9	0.070		346	105.5	2.0	0.6	0.080
	339.5	103.5	4.0	1.2	0.180		379	115.6	1.5	0.5	0.070
	378.0	115.2	1.5	0.5	0.100						
A-8 Historical	324.0	98.8	14.5	4.4	0.150	A-8 Twin A	323	98.4	1.5	0.5	0.080
	345.5	105.3	1.5	0.5	0.940		325	99.1	12.3	3.7	0.160
	364.5	111.1	2.0	0.6	0.100		343	104.6	3.2	1.0	0.500
							363	110.7	1.9	0.6	0.090
						A-8 Twin B	325	99.2	13.9	4.2	0.110
							351	107.0	1.9	0.6	0.070
A-27 Historical	295.5	90.1	3.0	0.9	0.060	A-27 Twin	298	90.9	8.0	2.4	0.110
	298.5	91.0	5.5	1.7	0.140						
	321.0	97.8	4.5	1.4	0.050						
LJ-126 Historical	329.5	100.4	2.0	0.6	0.060	LJ-126 Twin	304	92.7	1.1	0.3	0.070
	352.5	107.4	4.5	1.4	0.080		347	105.7	1.4	0.4	0.070
	360.0	109.7	2.0	0.6	0.640		352	107.4	3.2	1.0	0.070
							361	110.0	2.8	0.9	0.470
LJ-121 Historical	311.5	94.9	2.0	0.6	0.090	LJ-121 Twin	301	91.7	1.6	0.5	0.060
							305	93.1	9.7	3.0	0.110
LJ-124 Historical	287.5	87.6	1.0	0.3	0.180	LJ-124 Twin	287	87.6	0.7	0.2	0.060
	300.0	91.4	1.0	0.3	0.120		300	91.4	1.1	0.3	0.070
	311.5	94.9	4.5	1.4	0.080		307	93.6	2.6	0.8	0.070
	330.5	100.7	6.5	2.0	0.120		313	95.4	6.1	1.9	0.130
	337.0	102.7	4.0	1.2	0.050		334	101.9	3.6	1.1	0.070
LJ-118 Historical	270.0	82.3	2.0	0.6	0.060	LJ-118 Twin	269	82.0	0.9	0.3	0.060



HISTORICAL RESULTS						PHASE 1 TWIN RESULTS					
Historical Hole	Top Depth		Thick		Grade	Twin Hole	Top Depth		Thick		Grade
	(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)		(ft)	(m)	(ft)	(m)	(% eU ₃ O ₈)
	305.5	93.1	3.0	0.9	0.160		305	92.9	3.6	1.1	0.190
							332	101.2	2.9	0.9	0.230
LJ-68 Historical	270.0	82.3	2.0	0.6	0.320	LJ-68 Twin	257	78.5	1.4	0.4	0.060
	299.5	91.3	5.5	1.7	0.070		265	80.8	1.4	0.4	0.070
	334.5	102.0	1.5	0.5	0.090		270	82.2	0.9	0.3	0.060
							302	92.1	0.8	0.2	0.060
							324	98.8	1.3	0.4	0.080
							333	101.5	0.8	0.2	0.060
LJ-111 Historical	248.0	75.6	5.0	1.5	0.100	LJ-111 Twin	243	74.1	8.1	2.5	0.110
	256.5	78.2	9.5	2.9	0.050		278	84.6	2.0	0.6	0.080
	281.5	85.8	4.5	1.4	0.130		282	86.0	2.0	0.6	0.060
	301.0	91.7	1.0	0.3	0.130		310	94.5	1.5	0.5	0.100
	311.0	94.8	1.0	0.3	0.290						
LJ-29 Historical	242.5	73.9	4.5	1.4	0.090	LJ-29 Twin	236	72.0	1.1	0.3	0.070
	276.0	84.1	7.0	2.1	0.120		246	75.0	2.7	0.8	0.170
	283.0	86.3	7.0	2.1	0.060		275	83.9	5.5	1.7	0.080
	304.5	92.8	1.0	0.3	0.140		287	87.4	1.7	0.5	0.070
LJ-31 Historical	246.5	75.1	2.0	0.6	0.080	LJ-31 Twin	264	80.6	0.7	0.2	0.020
	263.5	80.3	2.5	0.8	0.350		271	82.6	19.8	6.0	0.020

Century, a highly experienced borehole geophysical contractor, logged all of the drill holes. The Cebolleta borehole geophysical logs collected natural gamma-ray, conductivity, and resistivity values continuously for each drill hole using a surface-recording logging unit and all data were plotted (analog) on log charts and entered into a digital database. Equivalent uranium grades (% eU₃O₈) were calculated from the gamma-ray data by Century’s logging unit. The geophysical logging methodologies utilized by Century and AMPS in the 2023 drilling program are consistent with those employed by previous operators of Cebolleta, and these methodologies are considered “industry standard” techniques for evaluation of sandstone-hosted uranium deposits.

11.2 Channel Sampling

NEI completed channel sampling at the St. Anthony open pits and sampling and assaying of select portions of core from two water monitoring holes within the northern part of the main St. Anthony’s uranium deposit. The channel samples were collected from the highwalls of the St. Anthony North and South open pits to verify the presence and tenor of mineralization and the results of historical drill holes completed by UNC.



The channel samples were transported by NEI staff to American Assay, in Sparks, Nevada, and an independent laboratory located in Elko, Nevada. There is no documentation of the insertion of standard reference materials or blanks by NEI personnel into the channel sample stream.

At the laboratory, the samples were prepped and analysed for eU_3O_8 using a 2-acid digestion followed by ICP-OES. All results exceeding 50 parts per million (ppm) eU_3O_8 were checked by X-ray fluorescence (XRF) and a sodium peroxide/zirconium fusion ICP-OES.

The reported results of the channel sampling program confirmed the nature and extent of the mineralization previously extracted from the St. Anthony open pits and indicate that the mineralization is an extension of similar Jackpile Sandstone-hosted uranium mineralization of the Sohio area (Moran and Daviess, 2014).

11.3 Core Sampling

Several core samples were collected by Broad Oak Associates (Broad Oak), on behalf of NEI, from two mineralized water monitoring wells (MW-7 and MW-8) that were completed on the Cebolleta property by UNC in 2007. The sampling intervals were selected based on a review of the downhole gamma ray logs, as well as radiometric anomalies determined by using a hand-held Radiation Solutions RS-125 “Super-Spec” spectrometer.

The core samples were split in half using a tile saw, with one half of the core retained for future reference. The other half of the core was split in half, with one half sent to American Assay for preparation and analysis. At the laboratory, the samples were prepared and analyzed for eU_3O_8 using a 2-acid digestion followed by ICP-OES. The other half was sent to SGS Canada Inc. Mineral Services (SGS) in Toronto, Ontario, for analysis by Broad Oak personnel. Both American Assay and SGS were independent and are well known laboratories within the energy sector. American Assay and SGS are ISO/IEC 17025 accredited laboratories.

There is no documentation of the insertion of standard reference materials or blanks by NEI personnel into the core sample stream.

11.4 Bulk Density

AMPS collected no density measurements since acquiring the property or during the 2023 drilling program.

Historical bulk density records were reviewed across the Grants Minerals Belt with densities ranging from 14 ft^3/st to 17 ft^3/st . Prior operators and mines on the property and in the vicinity (including United Nuclear and Kerr-McGee in the Churchrock sub-district; a Kerr-McGee, Homestake Mining, and others in the Ambrosia Lake sub district; and for the Mt. Taylor deposit) have been producing uranium since the late 1950s using a tonnage factor of 16 ft^3/st (0.0665 st/ft^3) and no major issues have been reported. The QP considers the density factor of 16 ft^3/st to be reliable and reasonable for resource estimation.

There is no mention of the quantity of density measurements included in the historical records. The QP recommends to AMPS that a bulk density sampling program should be implemented as part of any future exploration work and for all units within the geological model.

11.5 Radiometric Equilibrium Uranium

Radiometric equilibrium or “disequilibrium” in uranium deposits is the difference between equivalent (eU_3O_8) grades and assayed U_3O_8 grades. Disequilibrium can be either positive, where the assayed grade is greater than the equivalent grades, or negative, where the assayed



grade is less than the equivalent grade. A uranium deposit is in equilibrium when the daughter products of uranium decay accurately represent the uranium present. Equilibrium occurs after the uranium is deposited and has not been added to or removed by fluids after approximately one million years. Disequilibrium is determined during drilling when a piece of core is taken and measured by one of two different methods, by a counting method (closed-can) and/or by chemical assay.

By definition, radiometric equilibrium is radioactive isotopes decay until they reach a stable non-radioactive state. The radioactive decay chain isotopes are referred to as daughters. When all the decay products are maintained in close association with the primary uranium isotope uranium 238 (^{238}U) for the order of one million years or more, the daughter isotopes will be in equilibrium with the parent isotope (McKay et al., 2007). Disequilibrium occurs when one or more decay products are dispersed because of differences in solubility between uranium and its daughters.

Disequilibrium is considered positive when there is a higher proportion of uranium present compared to daughters and negative where daughters accumulate, and uranium is depleted. The radiometric equilibrium factor (REF) is determined by comparing radiometric equivalent uranium grade eU_3O_8 to chemical uranium grade. Radiometric equilibrium is represented by a REF of one, positive radiometric equilibrium by a factor greater than one, and negative radiometric equilibrium by a factor of less than one.

Except in cases where uranium mineralization is exposed to strongly oxidized conditions, most of the sandstone roll front deposits reasonably approximate radiometric equilibrium. The nose of a roll-front deposit tends to have the most positive REF and the tails of a roll-front would tend to have the lowest REF (Davis, 1969).

The degree of disequilibrium will vary with the mineralogy of the radioactive elements and their surroundings which may create a reducing or oxidizing environment, climate, topography, and surface hydrology.

The sample volume will also affect the determination of disequilibrium, as a small core sample is more likely to show extreme disequilibrium than a larger bulk sample. In some cases, the parents and daughters may have moved apart over the length of a sample, but not over a larger scale, such as the mineralized interval.

11.5.1 Previous Owners

In 2010, NEI evaluated the historical disequilibrium studies completed by previous operators on the Sohio L-bar and St. Anthony uranium mineralization. A large portion of the historical analytical data was calculated using gamma-ray logging which is susceptible to errors arising from radiochemical disequilibrium between uranium and its gamma-emitting daughter nuclides. A comparison of the chemical versus radiometric assays for the Sohio (L-Bar) area and the St. Anthony area is presented in Table 11-3 and Table 11-4, respectively.

The Sohio (L-Bar) Area II and Area III data show no clear bias toward either the chemical or radiometric analyses in the core with an average ratio of chemical to radiometric equal to 1.004 (Table 11-3 and Figure 11-1). This comparison includes samples from eight core holes and is in agreement with historical Sohio Western reports that conclude that the radiometric assays correspond well with the chemical assays (Olsen and Kopp, 1982) and verify earlier studies by Sohio Western that the deposits were generally in radiometric equilibrium (Geo-Management, 1972; Moran and Daviess, 2014).



A total of 1,546 samples from 47 core holes drilled by UNC within the St. Anthony Mine area were used for the St. Anthony disequilibrium study. All core samples were one foot (0.3 m) in length and were analyzed by Grants Assay Laboratory or Core Labs (Moran and Daviess, 2014). The depths of the St. Anthony core samples used in the study ranged from 11 ft to 489 ft (3.4 m to 149 m) whereas most of the core samples from the historical Sohio studies were from depths below 350 ft (106.7 m). The St. Anthony disequilibrium data tends to favor a slight positive equilibrium of chemical assays, with the radiometric assays reporting lower assays compared to the chemical assays for a given sample.

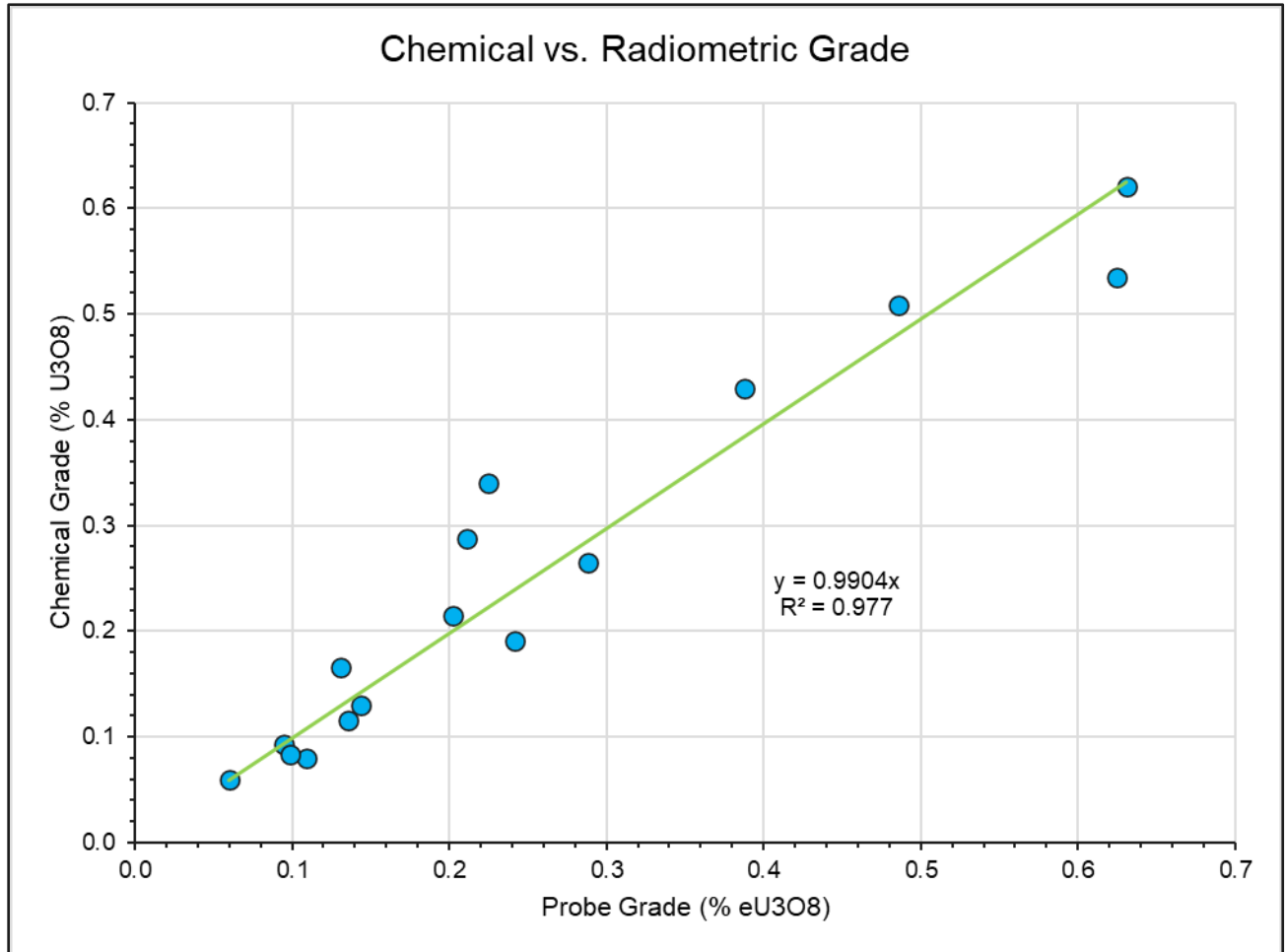
While the QP reviewed the detailed results of the reported radiometric equilibrium verification data described above, the QP did not have access to the original analyses for this investigation, however, concludes the results are reasonable for this type of uranium deposit.

Table 11-3: Comparison of Chemical vs Radiometric Assays for Selected Core Holes in the Sohio Area (modified from Moran and Daviess, 2014)

Area	Drill Hole	From (ft)	To (ft)	Thick (ft)	Chemical Grade (% U ₃ O ₈)	Radiometric Grade (% eU ₃ O ₈)	Ratio
Area II	RLB - 271 C	568.50	573.50	5.00	0.166	0.131	1.267
	RLB - 279 C	542.00	546.50	4.50	0.191	0.242	0.789
		552.00	556.00	4.00	0.130	0.144	0.903
		555.50	557.50	2.00	0.080	0.109	0.734
		597.50	614.00	16.50	0.093	0.095	0.979
		615.50	619.00	3.50	0.430	0.388	1.108
		642.50	644.00	1.50	0.340	0.225	1.511
	RLB - 301 C	560.50	565.50	5.00	0.060	0.060	1.000
		589.00	612.50	23.50	0.265	0.288	0.920
	RLB - 323 C	546.00	567.50	21.50	0.508	0.486	1.045
RLB - 423 C	548.50	560.50	12.00	0.215	0.202	1.064	
Area III	RLB - 260 C	390.50	398.50	8.00	0.222		
		396.00	399.50	3.50	0.116	0.136	0.853
		409.00	410.00	1.00	0.288	0.211	1.365
		421.00	431.50	10.50	0.535	0.625	0.856
	RLB - 261 C	358.00	363.50	5.50	0.083	0.099	0.838
		410.50	428.00	17.50	0.621	0.631	0.984
Total/Average				145.0	0.255	0.255	1.004



Figure 11-1: Chemical vs Radiometric Assays for Selected Core Holes in the Sohio Area



Source: SLR, 2024



Table 11-4: Comparison of Chemical vs Radiometric Assays for Selected Core Holes in the St. Anthony Area (modified from Moran and Daviess, 2014)

Drill Hole	Number of Samples per Hole	Avg. Disequilibrium Ratio .05 to .08 Grade Range	Avg. Disequilibrium Ratio .08 to .10 Grade Range	Avg. Disequilibrium Ratio .10 to .20 Grade Range	Avg. Disequilibrium Ratio + .20 Grade Range
19-02/25.75C	36	1.234	1.404	1.324	n/a
19-12/11.5C	27	1.132	0.706	0.620	1.283
19-04/20.75C	4	1.085	n/a	n/a	n/a
19-7.5/17.5C	26	1.133	0.843	n/a	n/a
19-08/12.1C	38	1.016	1.091	1.341	1.109
19-1.5/9.5 C	32	1.081	n/a	1.908	1.243
19-08/22C	38	1.273	n/a	n/a	n/a
19-09.5/16C	37	1.020	1.005	1.192	1.194
19-12.5/08C	14	1.302	n/a	1.321	n/a
19-1013C	12	0.707	n/a	1.373	1.387
19-11/16.8C	13	1.156	1.105	n/a	n/a
30-49.5/28.1C	22	1.012	1.157	1.139	n/a
19-0.0/18.75C	65	0.832	1.424	0.983	n/a
19-0.5/12.6C	24	1.306	1.200	1.085	1.278
19-4.5/14.3C	33	1.124	n/a	1.200	n/a
19-05.25/24.5C	26	1.125	1.007	1.885	1.168
19-0.5/12.6C	51	1.306	1.200	1.085	1.278
19-4.5/14.3C	33	1.124	n/a	1.200	n/a
19-05.25/24.5C	26	1.125	1.007	1.885	1.168
19-13/06.25C	51	0.954	0.979	1.284	n/a
24-01.1/24.9C	17	1.275	1.083	1.167	1.338
24-03/27.5C	10	0.785	n/a	0.946	n/a
24-04/37C	5	n/a	1.181	n/a	n/a
24-05.1/37C	6	1.393	n/a	n/a	n/a
24-05.25/35C	20	1.277	n/a	0.981	n/a
24-06/36.75C	20	0.919	n/a	n/a	n/a
24-06.1/35.9C	33	1.133	0.809	0.972	1.056
24-07.5/35C	28	1.509	n/a	n/a	n/a
24-34.5/43.5C	19	n/a	0.938	1.093	1.223
24-1848C	28	0.905	0.568	n/a	1.068



Drill Hole	Number of Samples per Hole	Avg. Disequilibrium Ratio .05 to .08 Grade Range	Avg. Disequilibrium Ratio .08 to .10 Grade Range	Avg. Disequilibrium Ratio .10 to .20 Grade Range	Avg. Disequilibrium Ratio + .20 Grade Range
24-26/46.5C	37	1.200	n/a	1.152	1.114
30-37/49C	10	0.878	0.980	0.742	0.759
30-41/49.5C	16	1.213	1.118	n/a	0.819
30-41/51C	7	0.556	n/a	n/a	n/a
30-43/51C	2	0.949	n/a	0.517	n/a
30-45/10.1C	39	1.114	1.212	1.294	1.402
2/3AE-18C	66	0.692	1.215	0.959	1.224
2/3AE-36C	72	0.511	n/a	1.239	n/a
2/3BE-29C	58	1.180	n/a	0.818	1.626
2/3PE.5-33.5C	46	1.347	1.341	1.007	n/a
2/3TE.5-36C	29	1.223	1.107	1.211	n/a
2/3VE-29C	43	1.465	1.625	n/a	n/a
2/3XE-42C	20	n/a	n/a	1.179	n/a
2/3YE.5-45C	37	1.981	n/a	n/a	n/a
L2-10C	94	1.126	0.500	1.017	n/a
L5-9.5C	85	n/a	n/a	1.010	n/a
L5.5-7C	91	1.027	n/a	n/a	n/a
Total/Average	1,546	1.109	1.069	1.155	1.197

11.5.2 AMPS (2023)

During 2023, AMPS collected drill core for radiometric equilibrium analysis, however, as of this report no core has been sent for analysis.

11.6 Sample Security

Security procedures for previous owners are unknown and the information was not available to the QP for this report. It is reported that all samples collected by AMPS predecessor companies' personnel were transported from the sample sites to the sample preparation facilities of American Assay or SGS. The QP was unable to verify the procedures with the available data provided, however, is of the opinion that industry best practices at the time of exploration were followed.

Drill core is delivered directly to the AMPS core handling facility in a secure storage container at the CLG's equipment yard. After logging, splitting, and bagging, core samples for analysis are stored in a secured shipping container at the same facility. The shipping container is kept locked or under direct supervision of AMPS personnel. As of this Technical Report AMPS has not sent any samples for analysis.



11.7 Quality Assurance and Quality Control

Quality assurance (QA) consists of evidence to demonstrate that the assay data has precision and accuracy within generally accepted limits for the sampling and analytical method(s) used in order to have confidence in a resource estimate. Quality control (QC) consists of procedures used to ensure that an adequate level of quality is maintained in the process of collecting, preparing, and assaying the exploration drilling samples which includes the following components:

- Determination of accuracy – achieved by regular insertion of standards or certified reference materials (CRM) of known grade and composition.
- Determination of precision – achieved by regular insertion of duplicates for each stage of the process where a sample is taken or split.
- Checks for contamination – by insertion of blanks.

In general, QA/QC programs are designed to prevent or detect contamination and allow assaying (analytical), precision (repeatability), and accuracy to be quantified. In addition, a QA/QC program can disclose the overall sampling-assaying variability of the sampling method itself.

QA in uranium exploration benefits from the use of down-hole gamma probes and hand-held scintillometers/spectrometers, as discrepancies between radioactivity levels and geochemistry can be readily identified.

No record of the quality assurance and quality control (QA/QC) procedures from historical operations are known. Historical production based on the available data of hundreds of thousands of pounds of uranium demonstrate that the quality of the historical drilling data justified and sustained production.

AMPS possesses certified reference materials representing low, medium, and high grade uranium and silica for blank material and will implement industry standard QA/QC procedures when the retained core samples are split and delivered for laboratory analysis.

11.8 Adequacy of Sample Collection, Preparation, Security, and Analytical Procedures

The QP's opinion is that although most of the data pertaining to Cebolleta was collected prior to the adoption of NI 43-101, this information appears to meet the technical standards that were employed by the United States uranium exploration and production industry at the time it was collected. The companies who collected this data and information, primarily UNC and Sohio, were highly experienced in the exploration for and the production of uranium from sandstone-hosted uranium deposits in the Grants Mineral Belt of west-central New Mexico.

Gamma logging of open hole and/or reverse circulation rotary drilling is still an acceptable method of exploration for sandstone uranium deposits in the present day, with samples from core holes used to verify chemical assays and radiometric equilibrium. Based upon the review of available information, the QP is of the opinion that there were no issues with respect to the sample collection methodology, sample security, sample preparation, or sample analyses in the historical exploration programs completed at the Cebolleta property.

The QP has noted that there is no documentation of the insertion of standard reference samples into NEI's channel sampling and core sampling streams.



The QP is of the opinion that the gamma logging estimates of equivalent uranium grade (% eU₃O₈) for Cebolleta are marginally conservative, however, the relative difference between chemical and probe assays is not considered material, no correction (disequilibrium ratio of 1:1) to the radiometric data is required, and the data is suitable for resource estimation. The QP notes that, in these types of uranium deposits, equilibrium can change in different parts of the deposit.

SLR recommends that AMPS collect additional chemical assays in future drilling conducted on the property to confirm historical reported equilibrium results.



12.0 Data Verification

Data verification is the process of confirming that data has been generated with proper procedures, is transcribed accurately from its original source into the project database and is suitable for use as described in this Technical Report.

Cebolleta has been the site of extensive exploration and uranium mining since the 1950s and extending into the early 2000s. As such, a large volume of geological data on the property and the nature, distribution, and extent of uranium mineralization has been developed. Some of the data and information related to the geology and uranium mineralization at Cebolleta presented in this Technical Report is historic in nature.

As part of this report, all of the historical data associated with the Project was compiled, organized, and entered into a new database by AMPS personnel and audited by the QP for completeness and validity. The data was in the form of probe data, drill hole maps, drill hole logs, assay data sheets, drill logs, and reports. This includes legacy data from previous owners, NEI. Specifically, any data which appears higher or lower than the surrounding data is confirmed by reviewing the original geophysical log. This data review includes confirming that the drill depth was adequate to reflect the mineralized horizon, that the geologic interpretation of host sand is correct, and that the thickness and grade of mineralization is correct.

Certification of database integrity is accomplished by both visual and statistical inspections comparing geology, assay values, and survey locations cross-referenced to historical paper logs. Any discrepancies identified are corrected by the AMPS resource geologist referring to hard copy assay information or removed from use in the Mineral Resource estimation.

12.1 SLR Data Verification (2023)

The QP visited the Project on September 12, 2023. During the site visit, the QP toured ongoing drilling operations, reviewed downhole logging operations and procedures, toured various parts of the property, visited historic drill sites and infrastructure, and conducted discussions with AMPS personnel on the future exploration plans to advance the Project and update previous resource estimations to current. Discussions were held with the AMPS technical team and the QP found the team members to have a strong understanding of the mineralization types and their processing characteristics, and how the analytical results are related to the results. The QP received the project data from AMPS for independent review as a series of MS Excel spreadsheets which were imported into Leapfrog Geo software for further processing. The QP used the information provided to update the geologic model and Mineral Resource interpolation.

12.1.1 Audit of Drill Hole Database

In preparing this report, the QP conducted audits of AMPS records and a series of verification tests on the drill hole database to assure that the grade, thickness, elevation, and location of uranium mineralization used in preparing the current Mineral Resource estimate correspond to mineralization indicated by the AMPS geologists and confirm the existence, extent, and locations of historical explorations drill holes in the St. Anthony and Sohio areas of the Cebolleta property.

The QP's tests included a search for unique, missing, and overlapping intervals; a total depth comparison; duplicate holes; property boundary limits; and verifying the reliability of the % eU₃O₈ grade conversion as determined by downhole gamma logging. The QP encountered a number of discrepancies with the Cebolleta data, which were subsequently corrected by AMPS geologists prior to being used in the Mineral Resource Estimate.



The QP did not identify any significant problems with the interpretations. The QP conducted a review of grade continuity for the Jackpile Formation. Results indicate continuity of mineralization within the Jackpile sandstone unit in both plan and section in elongate tabular or irregular shapes. The QP is of the opinion that, although continuity of mineralization is variable, drilling confirms that local continuity exists within individual sandstone units.

12.1.2 Limitations

There were no limitations in place restricting the ability to perform an independent verification of the Project drill hole database. The following limitations were noted by the QP:

- There is no archived drill core available for re-logging or re-analysis.
- A bulk density sampling program is required as part of any future exploration work and for all units within the geological model.
- There is no documentation of using standards or blanks with the channel samples. There is no record of QA/QC work in association with assaying the drill cores, and therefore, it is not possible to comment on the accuracy and precision of the laboratory data. It is recommended that a QA/QC protocol be developed in any future exploration programs that includes the random insertion of sample duplicates, sample blanks, and certified sample standards.

The QP is of the opinion that there has been adequate drilling to develop the Mineral Resource models, however, notes there is an overall lack of adequate lithologic logs that hinder geological interpretations. This lack of adequate logs is the principal limitation of the data set. Essentially all of the geophysical logs have SP and resistivity data that can facilitate more robust lithological and stratigraphy interpretations.

- Another issue identified in the database is that most of the historical drill holes had no downhole survey data and thus the holes are represented as vertical.

12.2 Adequacy of the Database

Cebolleta has been subject to several production periods for almost 60 years. There has been adequate drilling to develop the Mineral Resource models that have been used for historically successful mine planning indicating the drill hole database contains valid data.

The radiometric equilibrium work at St. Anthony and Sohio Areas II and III can be considered sufficient confirmation of chemical assays for the Cebolleta deposits, however, there is no AMPS current chemical assay confirmation for those deposits. The QP accepts the historical information as accurate for use in resource estimation with the caveat that further confirmation work is required.

While the exclusion of some gamma logs and downhole deviation data due to missing collar coordinates or radiometric logs requires further investigations, the QP notes that millions of pounds of uranium have been produced from the Project and is of the opinion that the mineralization is present and has been used successfully for mine planning in the past. All previous operators were respected producers in the uranium mining industry and there is no reason to suspect the data is inaccurate.

The QP is of the opinion that there were no issues with respect to the sample collection methodology in either the historical exploration programs or the AMPS 2023 drilling program. The methodologies employed are considered reasonable and were conducted using standard operating procedures, industry standards, and best practice in the USA uranium industry at the



time of exploration. While recent radiometric equilibrium and QA/QC data is lacking, there are no significant issues or inconsistencies that would cause one to question the validity of the data. Hence, the data within the Cebolleta exploration database is suitable for the purposes of Mineral Resource estimation.



13.0 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical test work has been carried out by AMPS.

AMPS does hold various metallurgical test reports, prepared by UNC, and comprehensive laboratory studies conducted by consultants relating to mineralization at the former St. Anthony mine and the adjoining properties. Historical metallurgical test work by Hazen Research suggests that the St. Anthony mineralization is amenable to mill processing and recovery of uranium (Reynolds et al., 1979a); however, historical reports by UNC indicate recovery issues from mineralization in the upper portion of the St. Anthony mineralized zones (Robb and Kasza, 1977). Additional metallurgical test work conducted on fresh drill core representing several horizons of the St. Anthony and Sohio deposit areas is necessary to determine the amenability of uranium recovery at Cebolleta.



14.0 Mineral Resource Estimates

14.1 Summary

Mineral Resources have been classified in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions), which are incorporated by reference in NI 43-101.

The Mineral Resource estimate was completed using a conventional block modeling approach. The general workflow used by SLR included the construction of a geological or stratigraphic model representing the Jurassic Morrison Formation in Seequent's Leapfrog Geo (Leapfrog Geo) from mapping, drill hole logging, and sampling data, which was used to define discrete domain and surfaces representing the upper and lower contact of the Jackpile Sandstone Member. The geologic models were then used to constrain resource estimation completed using Seequent's Leapfrog Edge (Leapfrog Edge) software. The resource estimate used a regularized, unrotated whole block approach, inverse distance cubed (ID³) methodology, and 1.0 ft, uncapped composites to estimate the uranium (eU₃O₈) in a three-pass search approach. Hard boundaries were used with ellipsoidal search ranges, and search ellipse orientation was informed by geology and mineralization wireframing. Density values were assigned based on historical bulk density records.

Estimates were validated using standard industry techniques including statistical comparisons with composite samples and parallel inverse distance squared (ID²), ordinary kriging (OK) and nearest neighbor (NN) estimates, swath plots, and visual reviews in cross section and plan. A visual review comparing blocks to drill holes was completed after the block modeling work was performed to ensure general lithologic and analytical conformance and was peer reviewed prior to finalization.

Table 14-1 summarizes the Mineral Resource estimate based on a \$80/lb uranium price using both an underground mining cut-off grade of 0.072% eU₃O₈ and open pit mining cut-off grade of 0.024% eU₃O₈ with an effective date of April 30, 2024.



Table 14-1: Summary of Mineral Resources – Cebolleta Uranium Project - April 30, 2024

Classification	Grade Cut-off	Tonnage	Grade	Contained Metal	AMPS Basis	Recovery U ₃ O ₈
	(% eU ₃ O ₈)	(Million st)	(% eU ₃ O ₈)	(Million lb eU ₃ O ₈)	(%)	(%)
Indicated						
Underground	0.072	4.1	0.189	15.6	100	95
Open Pit	0.024	3.4	0.081	5.5	100	95
Subtotal Indicated		7.6	0.140	21.2	100	95
<i>Depletion (JJ#1 + Climax M6)</i>		<i>-1.0</i>	<i>0.130</i>	<i>-2.5</i>		
Total Indicated		6.6	0.142	18.6	100	95
Inferred						
Underground	0.072	1.0	0.135	2.6	100	95
Open Pit	0.024	1.6	0.072	2.3	100	95
Total Inferred		2.6	0.095	4.9	100	95

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 0.072% eU₃O₈ for underground based on Deswik MSO stope shapes and 0.024% eU₃O₈ for open pit using Whittle pit optimization.
3. Mineral Resources are estimated using a long-term uranium price of US\$80/lb U₃O₈.
4. Mineral Resources have been depleted based on past reported production numbers from the underground JJ#1 and Climax M6 mines.
5. A minimum mining width of two feet was used.
6. Tonnage Factor is 16 ft³/st (Density is 0.625 st/ft³ or 2.00 t/m³).
7. Numbers may not add due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

14.2 Resource Database

From 1951 to 2014 and 2023, AMPS and its predecessors completed a reported total of 3,644 drill holes, of which 3,594 drill holes totaling 1,868,457 ft of drilling are contained in the drilling database provided to SLR. Of the 3,594 drill holes, 2,713 drill holes totaling 1,380,041 ft of drilling were used in this Mineral Resource estimate. Historic surface holes missing collar information, lithology information, or corresponding radiometric logs, i.e., assay data, were excluded. A summary of the available data used in the modeling of mineralization is presented in Table 14-2. Figure 10-1 shows the location of the drill holes.



Table 14-2: Summary of Drill Hole Data used in Mineral Resource Estimation

Area	No. Holes	Total Depth	Average Depth	Number of Records		
		(ft)	(ft)	Survey	Lithology	Probe
Area I	296	115,364	390	1,337	361	292,349
Area II	380	243,232	640	1,205	15	478,456
Area III	234	116,021	496	447	1439	207,699
Area IV	125	81,464	652	247		112,191
Area V	223	139,712	627	1,720		250,023
Area_Sohio_1	23	9,486	412	23		9,459
Area_Sohio_2	16	8,354	522	16		8,252
St. Anthony North Pit	1,198	550,854	460	1,298	98	5,737
St. Anthony South Pit	215	113,679	529	216	40	367
Exploratory	3	1,875	625	3		2,692
Grand Total	2,713	1,380,041	509	6,512	1,953	1,367,225

14.3 Geological Interpretation

The majority of the uranium mineralization on the Project site is hosted in medium to coarse grained sandstones that exhibit a high degree of large-scale tabular cross-stratification in the Jackpile Member of the Jurassic age Morrison Formation. Strong mineralization appears to be concentrated in the lower half portions of the Jackpile Sandstone, although anomalous concentrations of uranium are present throughout the vertical extent of the unit.

Grades greater than 0.10% eU₃O₈ are commonly seen in the sections, with numerous intercepts of 0.20% eU₃O₈ or better ranging in depth from approximately 200 ft (61 m) in the St. Anthony area, to nearly 700 ft (213 m) in the vicinity of the Area II and Area III deposits in the central and northern (down-dip) parts of the Project area.

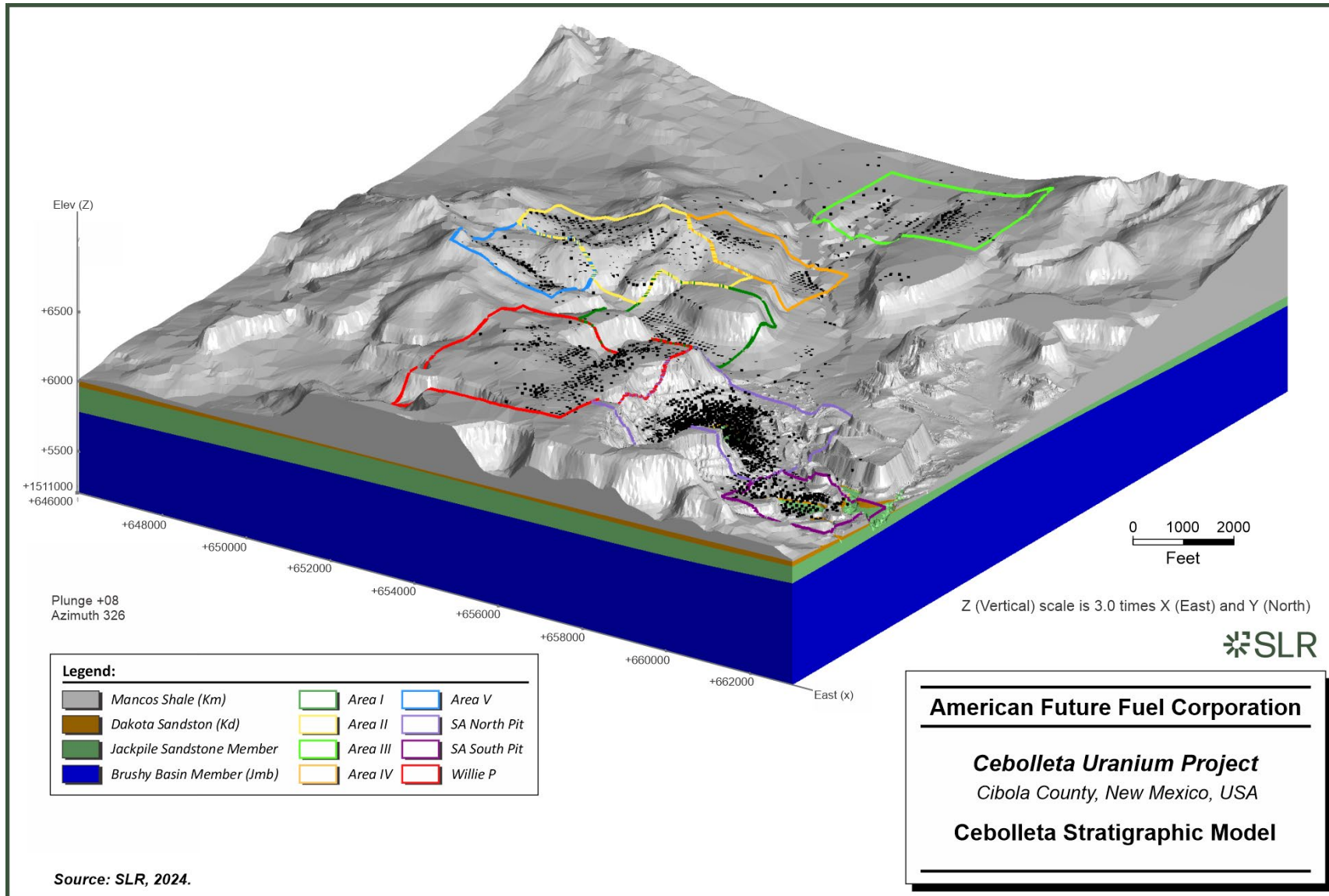
Geological models that reflect key aspects of the Project, including lithological and mineralization domains, were generated by SLR. These models have been used to define the estimation domains to constrain the grade estimates.

14.3.1 Lithological Model

Based on a detailed correlation of the four primary lithologies (Section 7.2.1) contained in 311 drill holes located in Area I and III, SLR constructed a project-wide stratigraphic model in Leapfrog Geo representing the Manco Shale (Km), Dakota Sandstone (Kd), Jackpile Member (Jmj) and Brushy Basin (Jmb) (Figure 14-1).



Figure 14-1: Cebolleta Stratigraphic Model



14.3.2 Mineralization Model

14.3.2.1 Grade Contouring

Mineralization domains at Cebolleta have been constructed by SLR using the GT contour method (Agnerian and Roscoe, 2003). The GT methodology is a technique best applied to estimate horizontal and vertical extension of relatively planar bodies, i.e., where the two dimensions of the mineralized body are much greater than the third dimension. For the Jmj sandstone unit, drill hole intercept composite values of grade, thickness, and GT were plotted in plan view and contoured utilizing the numerical modeling routines in Leapfrog Geo. Contour map values were established from full length composites through the horizon (Figure 14-2, Figure 14-3 and Figure 14-4).

Weighted average grade of each composite was contoured in geometric intervals including the minimum cut-off grade values of 0.01% and 0.005% eU₃O₈. The 0.005% eU₃O₈ grade contour was established as the outward limit for uranium mineralization to be considered as resource, while the GT and Thickness contours were used for assessing grade continuity direction.



Figure 14-2: Cebolleta Grade Contour Model

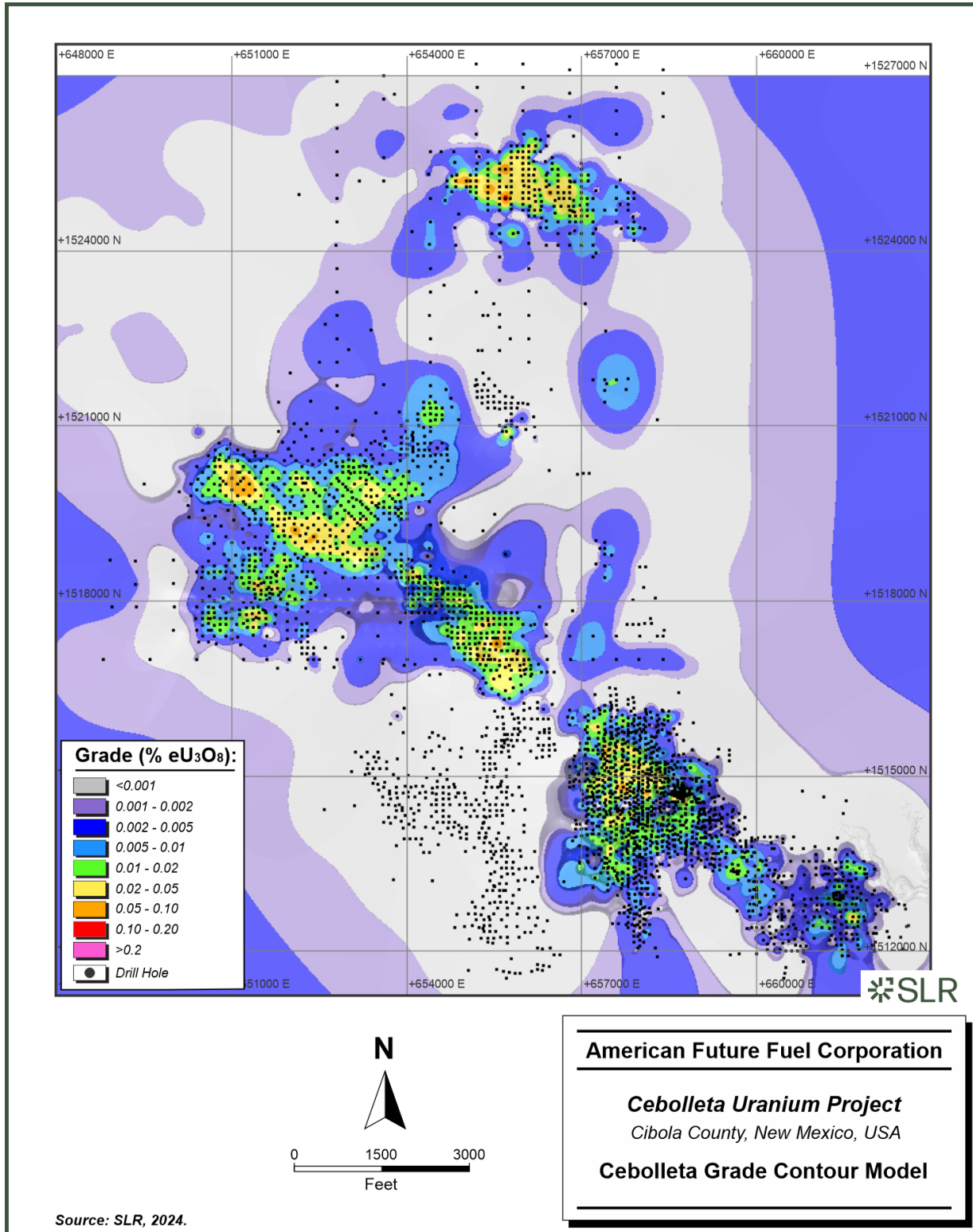


Figure 14-3: Cebolleta GT Contour Model

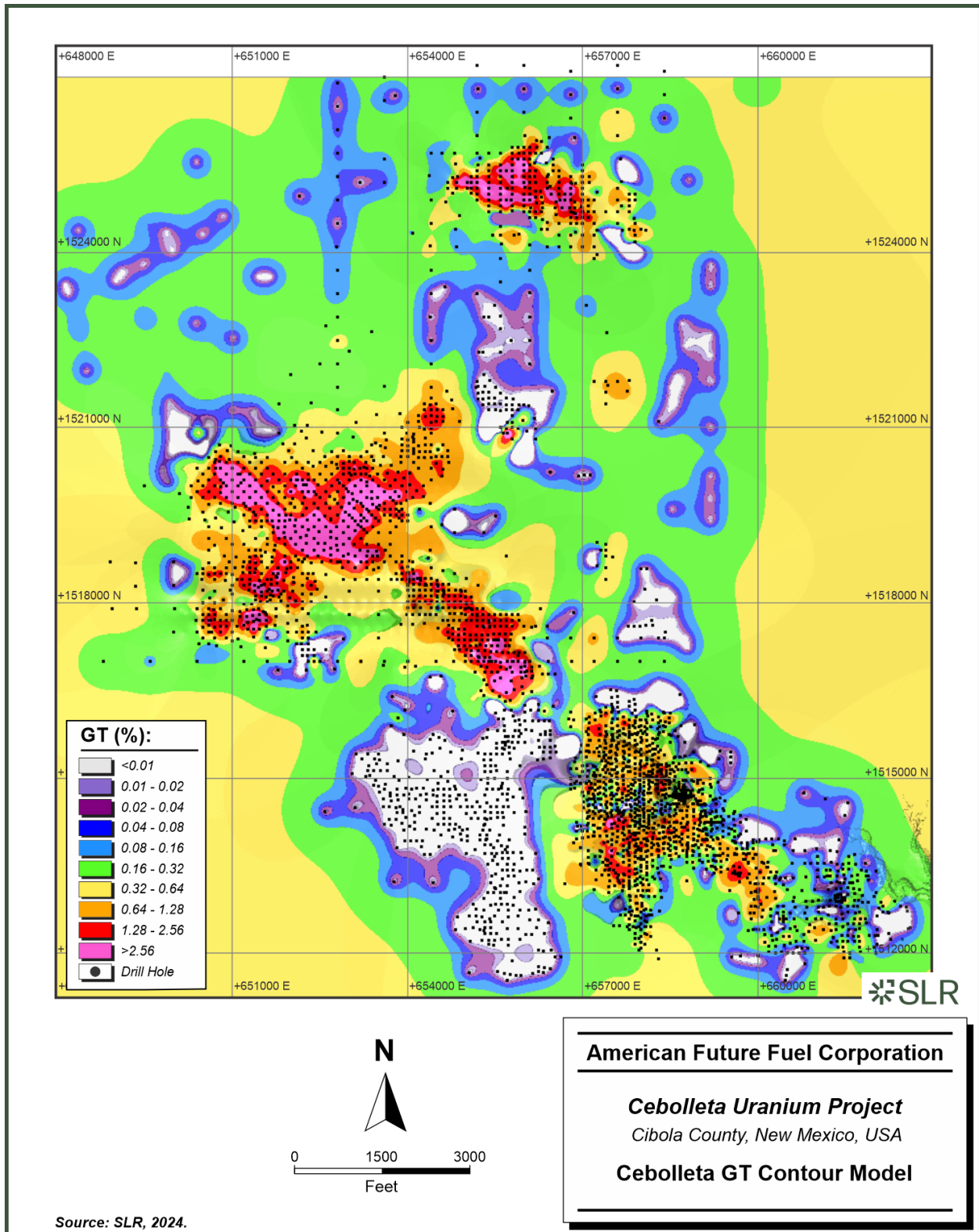
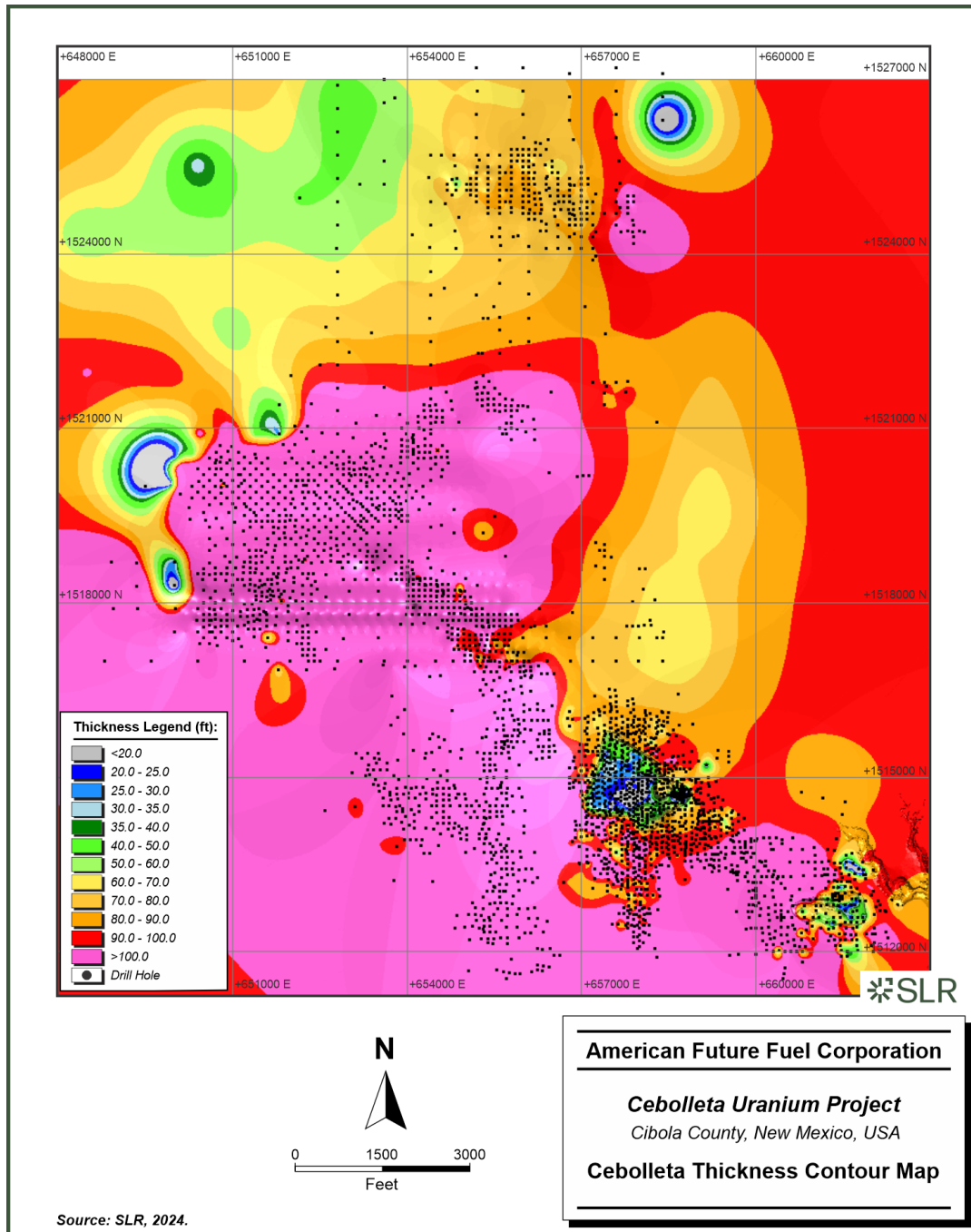


Figure 14-4: Cebolleta Thickness Contour Map

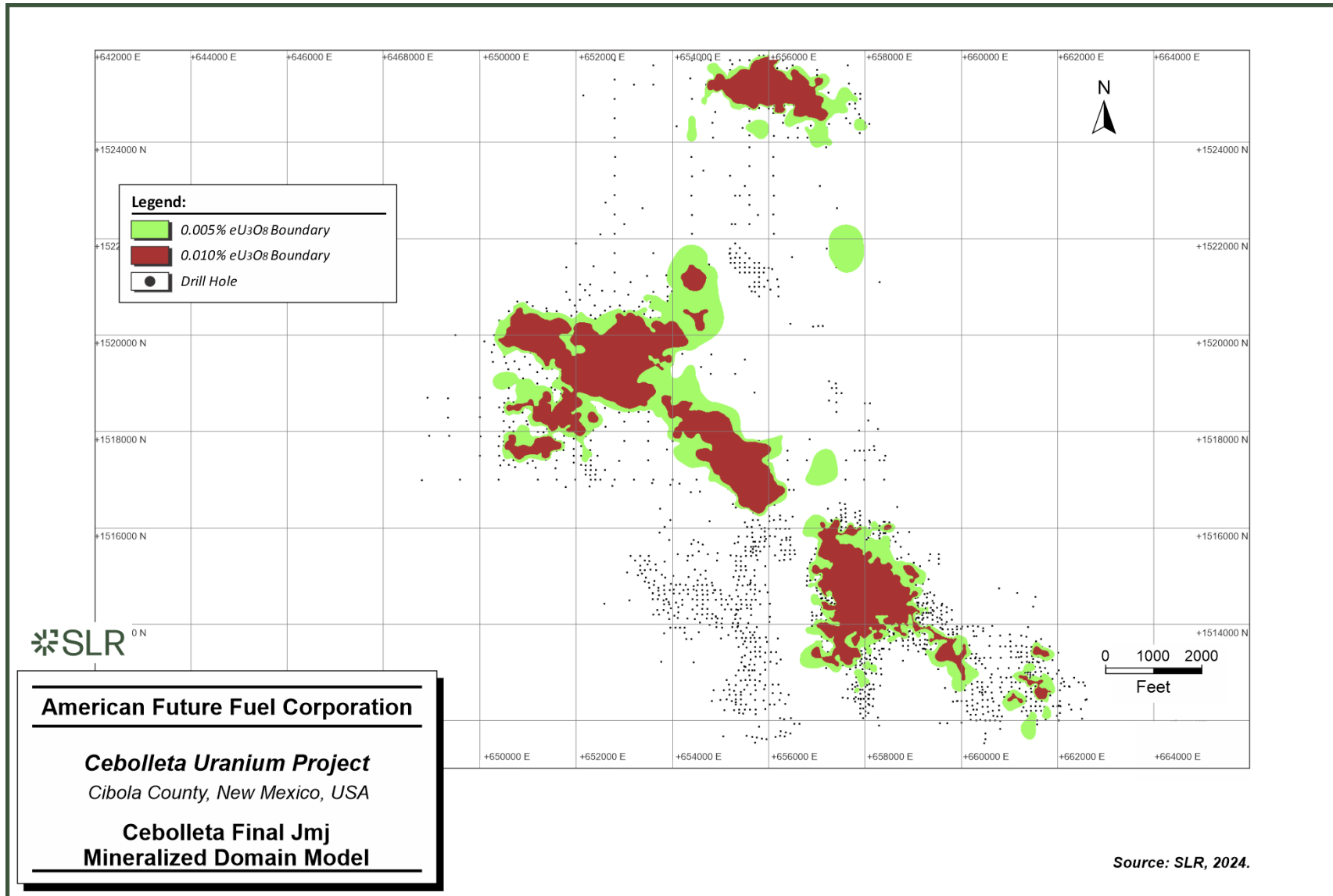


14.3.3 Final Estimation Domain Model

Mineralized wireframe domains were constructed using the natural uranium threshold grades of 0.005% U_3O_8 and 0.01% U_3O_8 , which were then used to cut or limit the mineralization within the Jackpile sandstone unit in the Mineral Resource estimation. Figure 14-5 shows the resulting mineralized wireframes for the Jackpile Member at Cebolleta.



Figure 14-5: Cebolleta Final Jmj Mineralized Domain Model



14.4 Resource Assays

The geologic model was used to code the drill hole database and to identify samples within the mineralized zones. These samples were extracted from the database on a group-by-group basis, subjected to statistical analyses for their respective domains, and then analyzed by means of histograms and probability plots.

Grade statistics were generated for each of the three Lower Salt Wash horizons (UL, ML and LL) to better understand the uranium mineralization. Samples represent those contained within the mineralized wireframe models. Some barren intervals (0.00% U₃O₈) were included in the wireframes to maintain continuity. General uranium statistics for each of the horizons are presented in Table 14-3.

Table 14-3: Assays for Cebolleta (% U₃O₈)

Area	Count	Length	Mean	SD	CV	Variance	Min	Lower Quartile	Median	Upper Quartile	Max
		(ft)	% eU ₃ O ₈	% eU ₃ O ₈			% eU ₃ O ₈	% eU ₃ O ₈	% eU ₃ O ₈	% eU ₃ O ₈	
Area_I	86,557	34,516	0.015	0.048	3.2	0.002	0.000	0.002	0.004	0.010	2.210
Area_II	115,068	57,539	0.016	0.055	3.5	0.003	0.000	0.002	0.003	0.008	1.690
Area_III	33,398	16,699	0.019	0.065	3.5	0.004	0.000	0.002	0.004	0.010	2.540
Area_IV	22,003	25,848	0.003	0.019	5.8	0.000	0.000	0.000	0.000	0.002	0.860
Area_V	56,315	28,204	0.010	0.048	5.0	0.002	0.000	0.001	0.002	0.004	2.260
SA_North_Pit	6,907	56,162	0.014	0.056	4.1	0.003	0.000	0.000	0.000	0.000	4.590
SA_South_Pit	324	10,681	0.003	0.019	6.5	0.000	0.000	0.000	0.000	0.000	0.423
Sohio_1	2,302	1,151	0.004	0.008	1.8	0.000	0.000	0.001	0.003	0.005	0.150
Sohio_2	1,455	4,424	0.001	0.007	5.3	0.000	0.000	0.000	0.000	0.000	0.270
Final_2KN	335,573	261,409	0.011	0.048	4.3	0.002	0.000	0.000	0.001	0.005	4.590

14.5 Treatment of High Grade Assays

14.5.1 Capping Levels

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers to reduce their influence on the average grade is to cut or cap them at a specific grade level.

Grade capping is a technique used to mitigate the potential effect that a small population of high grade sample outliers can have during grade estimation. These high grade samples are not considered to be representative of the general sample population and are therefore capped to a level that is more representative of the general data population. Although subjective, grade capping is a common industry practice when performing grade estimation for deposits that have significant grade variability. In the absence of production data to calibrate the capping level, inspection of the assay distribution can be used to estimate a “first pass” cutting level.

SLR employed several statistical analytical methods to investigate the presence of high grade outlier values for grade estimation\ including preparation of frequency histograms, probability plots % eU₃O₈ grade, decile analysis, as well as visualizing these composites and their distribution in space. All mineralization intercepts located inside the mineralized Jackpile (Jmj)



sandstone were used together to assess the risk and determine whether a cap of high grade values was needed to limit their influence.

SLR is of the opinion that high grade capping is not required for Mineral Resource Estimation for this Project.

14.6 Compositing

Composites were created from the uncapped raw assay values using the downhole compositing function of the Leapfrog modeling software package.

The selected composite lengths used during interpolation were informed by the predominant sampling length, the minimum mining width, estimated block size, style of mineralization, and continuity of grade. More than 93% of the samples inside estimation domains were collected at 0.5 ft and shorter intervals (Figure 14-6).

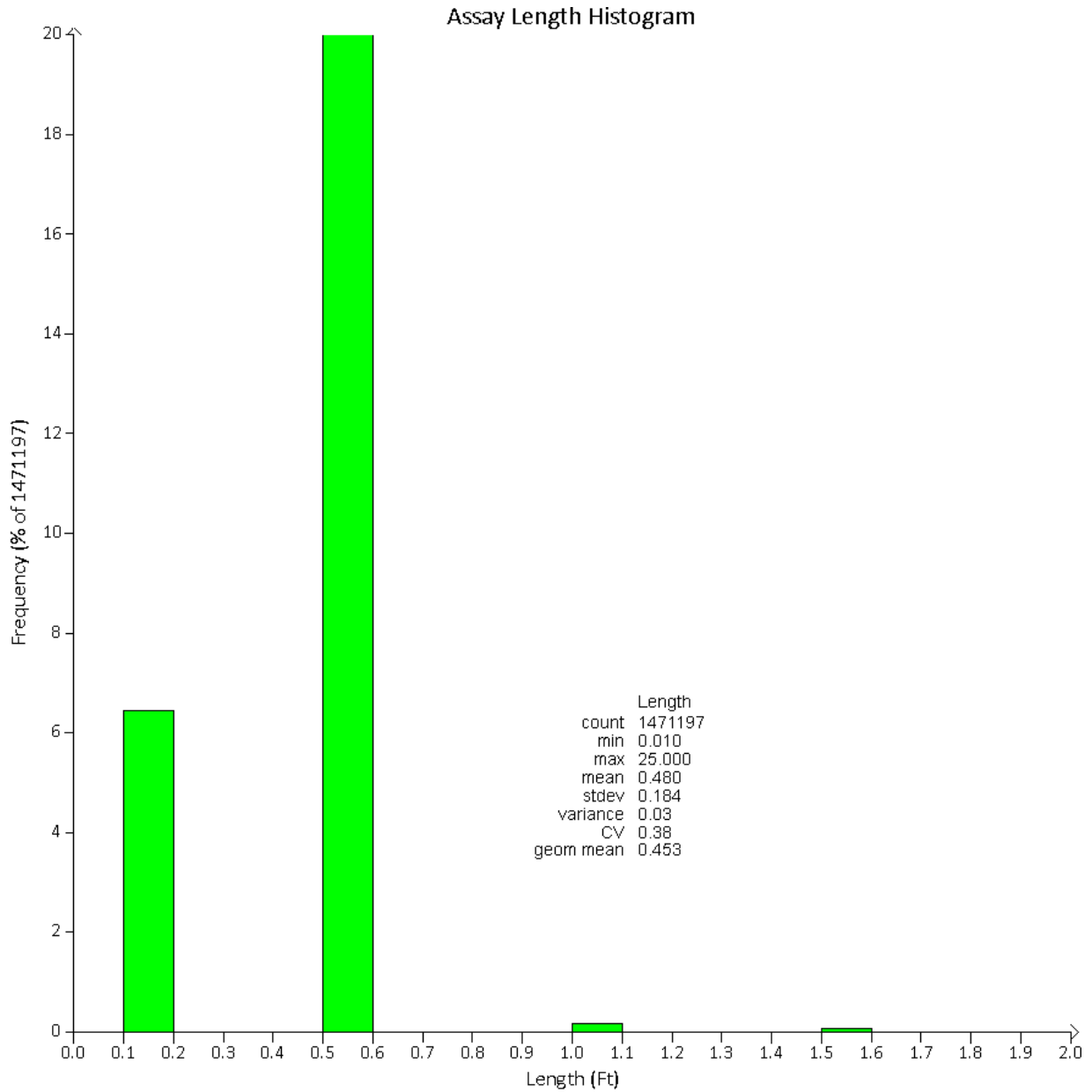
The average % eU₃O₈ grades were reviewed and compared at various sample lengths to assess the grade characteristics at the different lengths, where it was found that shorter (≤0.5 ft) displayed higher grade on average, although there are very few samples with length greater than one foot.

Given this distribution and considering the width of the mineralization SLR chose to composite to one foot, starting at the mineralized domain wireframe pierce point and continuing to the point at which the hole exited the domain (hard boundaries). The composite statistics by area are summarized in Table 14-4.

The QP is of the opinion that the compositing methods and lengths are appropriate for this style of mineralization and deposit type. The QP recommends treating the missing and unsampled intervals contained within a wireframe as waste and assigning an equivalent uranium value of 0.0%.



Figure 14-6: Histogram of Sample Lengths in the Estimation Domains



Source: SLR, 2024



Table 14-4: Summary of Uranium Composite Data by Area

Area	Count	Length	Mean	SD	CV	Variance	Min	Lower Quartile	Median	Upper Quartile	Max
		(ft)	% eU ₃ O ₈	% eU ₃ O ₈			% eU ₃ O ₈	% eU ₃ O ₈	% eU ₃ O ₈	% eU ₃ O ₈	
Area_I	31,857	31,714	0.016	0.048	3.0	0.002	0.000	0.003	0.005	0.010	2.038
Area_II	52,632	52,465	0.017	0.056	3.3	0.003	0.000	0.002	0.003	0.009	1.504
Area_III	13,989	13,901	0.022	0.069	3.2	0.005	0.000	0.002	0.005	0.010	2.085
Area_IV	10,184	10,147	0.007	0.016	2.2	0.000	0.000	0.002	0.003	0.007	0.350
Area_V	23,394	23,314	0.011	0.051	4.6	0.003	0.000	0.001	0.002	0.004	1.700
SA_North_Pit	66,638	66,224	0.010	0.044	4.3	0.002	0.000	0.000	0.000	0.000	2.659
SA_South_Pit	2,563	2,541	0.005	0.024	4.4	0.001	0.000	0.000	0.000	0.000	0.350
Sohio_1	259	258	0.006	0.012	1.9	0.000	0.000	0.001	0.002	0.006	0.124
Sohio_2	639	635	0.008	0.013	1.7	0.000	0.000	0.003	0.005	0.010	0.215
Final_2KN	202,258	201,299	0.014	0.050	3.7	0.002	0.000	0.000	0.002	0.007	2.659

14.7 Trend Analysis

14.7.1 Variography

Semi-variogram models for continuity analysis of uranium mineralization was conducted using one foot composites for the mineralized domain for equivalent grade (% eU₃O₈) using Leapfrog Edge software. Downhole variograms were used to model nugget effects (i.e., assay variability at very close distance).

Examples of experimental and modeled semi-variograms along specific directions of continuity for % eU₃O₈ at Cebolleta are presented in Table 14-5 and Figure 14-7.

Most of the drilling at Cebolleta was carried out with a very regular 100 ft grid, that historically was considered adequate to efficiently delineate the geometry and extent of the zones of mineralization. It is noted that there is a relatively moderate anisotropy in the variography that generally mirrors the historic drill pattern and grid and illustrates continuity more than 100 ft. The downhole variogram displays a relatively short range and low nugget that is probably reflective of the average thickness and grade distribution of the mineralized zones.

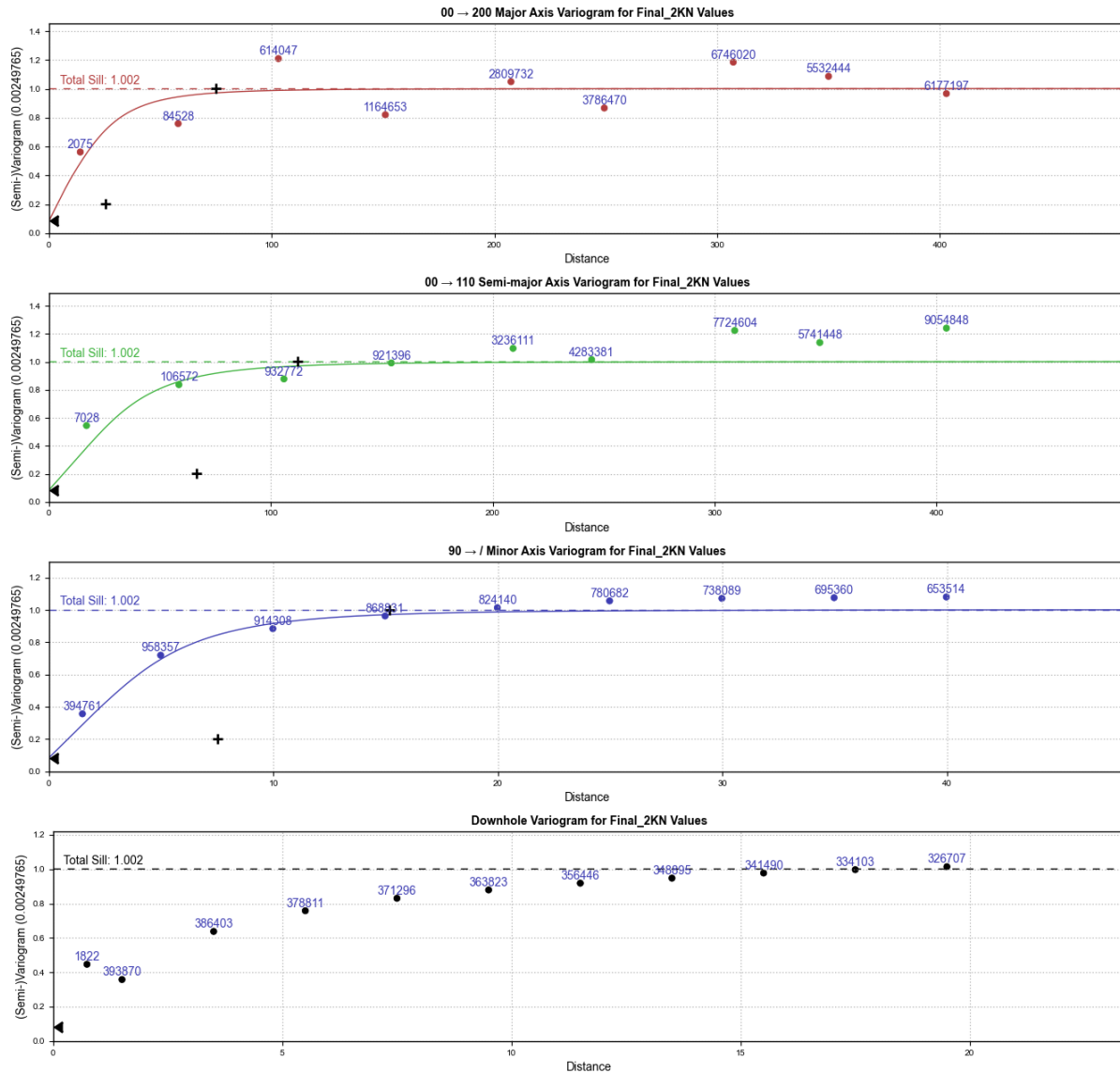
The QP review of the variograms found them to be reasonable and appropriate to be used in the Mineral Resource estimation.

Table 14-5: Variogram Values

Structure	Normalized Sill	Model	Alpha	Major (ft)	Semi-Major (ft)	Minor (ft)
Nugget	0.084					
Structure 1	0.118	Spheroidal	3	25.2	66.4	7.5
Structure 2	0.800	Spheroidal	3	74.9	112.1	15.2
Total Sill:	1.002					



Figure 14-7: Variograms



Source: SLR, 2024

14.8 Bulk Density

AMPS has collected no density measurements since acquiring the property.

Historical bulk density records were reviewed across the Grants Minerals Belt with densities ranging from 14 ft³/st to 17 ft³/st. Prior operators and mines on the property and in the vicinity (including United Nuclear and Kerr-McGee in the Churchrock sub-district; a Kerr-McGee, Homestake Mining, and others in the Ambrosia Lake sub-district; and for the Mt. Taylor deposit) have been producing uranium since the late 1950s using a tonnage factor of 16 ft³/st (0.0625 st/ft³) and no major issues have been reported. SLR considers the density factor of 16 ft³/st to be reliable and reasonable for resource estimation. The QP recommends that AMPS collect additional density measurements and confirm the historical density values prior to any future resource estimations.



14.9 Block Models

A regularized, unrotated whole block approach was used whereby the block was assigned to the domain where its centroid was located. The block model was constructed using Leapfrog Edge version 2023.1 software oriented with an azimuth of 0.0°, dip of 0.0°, and a plunge of 0.0° with a block size of 50 ft by 50 ft in the X (along strike) and Y (across strike) directions and 2.0 ft in the Z (vertical or bench height) direction, honoring modeled geological surfaces.

The model fully enclosed the modeled lithologic wireframes, with the model origin (upper left corner at highest elevation) at State Plane 1983 New Mexico FIPS 4303 (US feet) system 649,500 E, 1,511,300 N, and 6,600 feet above sea level (FASL).

A summary of the block extents and variables is provided in Table 14-6 and Table 14-7.

The QP concludes that the block model parameters are appropriate for this type of deposit and are adequate for use in estimating Mineral Resources.

Table 14-6: Summary of Block Model Setup

Description	Easting (X)	North (Y)	Elevation (Z)
	(ft)	(ft)	(FASL)
Block Model Origin (lower left corner)	649,500	1,511,300	5,600
Block Dimension (ft)	50	50	2
Number of Blocks	266	298	500
Rotation	0	0	0

Table 14-7: Summary of Block Model Variables for all Block Models

Variable	Type	Default	Description
eU3O8_ID3_final_1ft_rev2	Numerical	0	ID ³ estimated U ₃ O ₈ equivalent grade (%)
eU3O8_OK_final_1ft	Numerical	0	OK estimated U ₃ O ₈ equivalent grade (%)
eU3O8_ID2_final_1ft	Numerical	0	ID ² estimated U ₃ O ₈ equivalent grade (%)
NN,ID3_Final_2KN_1ft	Numerical	-99	equivalent uranium grade NN estimate (%)
Density	Numerical	0.0625	density equal to a tonnage factor of 16 ft ³ /st
Tonnage Factor (TF)	Numerical	16	Tonnage factor of 16 ft ³ /st
ID3_1ft_var2_rev2_est	Numerical	0	Estimation Pass (1-3)
ID3_1ft_var2_rev2_NS	Numerical	0	Number of samples used in estimation
ID3_1ft_var2_rev2_MinD	Numerical	0	Distance to nearest sample
ID3_1ft_var2_rev2_AvgD	Numerical	0	Average distance to samples
Classification	Numerical	4	Resource Classification (1=Measured, 2=Indicated, 3=Inferred)
Stratigraphy	Text	Unknown	Km, Kd, Jmj and Jmb
Area	Text	Unknown	I, II, III, IV, V, SA North Pit, SA South Pit, Sohio_1 and Sohio_2



14.10 Search Strategy and Grade Interpolation Parameters

14.10.1 Search Neighbourhood Design

The key element variable, uranium, was interpolated using the ID³ methodology. Estimation of grades was controlled by mineralized geologic zones and target area boundaries. Hard boundaries were used to limit the use of composites between different mineralization domains.

The selection of the search radii and rotation of search ellipsoids were guided by modelled continuity from the variograms of % eU₃O₈. In addition, the search radii were established to assure that all blocks in the estimation domain were estimated.

The search neighbourhood was designed with three successive passes. The first pass considered a relatively small search ellipsoid (designed at 100% of the modelled continuity range of the respective variograms), which was increased to approximately 200% in major and semi-major radii of the continuity range for the second pass and 300% for the third pass. The minor search radius remained unchanged and constant and was set to five feet or 2.5 times the block thickness (Table 14-8).

Table 14-8: Sample Selection Parameters Employed in the Estimation by Domain

Pass	Search Ellipse						Sample Selection		
	Dip (°)	Azimuth (°)	Pitch (°)	Major (ft)	Semi-Major (ft)	Minor (ft)	Minimum Samples	Maximum Samples	Max Samples Per Drill Hole
1st Pass	0	0	110	75	115	5	2	2	2
2nd Pass	0	0	110	150	230	5	3	10	2
3rd Pass	0	0	110	300	460	5	1	6	2

14.10.2 Estimation Methodology

The key element variable, uranium, was interpolated using the ID³ methodology. Estimation of grades was controlled by mineralized geologic zones and target area boundaries. Hard boundaries were used to limit the use of composites between different mineralization domains.

The resource estimation methodology was based on the following:

- All sampling gaps in the % eU₃O₈ assays were treated as 0.0% eU₃O₈ grade for resource estimation.
- One foot composited data were not capped for estimation and no high grade search restriction was employed.
- Hard boundary conditions were employed in the estimation.
- Only samples from within the mineralization model domains were used to estimate blocks within those domains.
- The uranium grade was interpolated by ID², ID³, NN, and OK.
- The interpolation strategy involved setting up search parameters in three nested estimation runs.



14.10.3 High Grade Restriction

In addition to capping thresholds, a secondary approach to reducing the influence of high grade composites is to restrict the search ellipse dimension (high yield restriction (HYR)) during the estimation process. The threshold grade levels, chosen from the basic statistics and from visual inspection of the apparent continuity of very high grades within each estimation domain, may indicate the need to further limit their influence by restricting the range of their influence, which is generally set to approximately half the distance of the main search.

SLR is of the opinion that HYR is not required for Mineral Resource Estimation for this Project.

14.11 Reasonable Prospects for Eventual Economic Extraction for Mineral Resources

Mineral Resources must demonstrate reasonable prospects for eventual economic extraction (RPEEE), which generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade taking into account extraction scenarios.

Metal prices used for determining Mineral Reserves are based on consensus, long-term forecasts from banks, financial institutions, and other sources. For determining Mineral Resources, the metal prices used are typically higher than those used for determining Mineral Reserves.

A reporting cut-off grade was established for the Project based on assumed costs for both underground and open pit mining and commodity prices that provide a reasonable basis for establishing RPEEE for Mineral Resources.

Cost assumptions from other uranium development projects and recently published studies in the Grants Mineral District were referenced to ascertain certain operating parameters as they relate to the estimation of a Mineral Resource cut-off grade (COG):

- Churchrock Property – NI 43-101 Technical Report on the Churchrock Uranium Project (SLR, 2024)
- Roca Honda, S-K 1300 / NI 43-101 Technical Report on the Roca Honda Project (SLR, 2022)

These cost references were modified to align with the assumed production rate for the Project. These cost and price assumptions have been used to inform an optimization process using the underground Deswik Stope Optimizer (DSO) software, which utilizes a Mineable Shape Optimizer (MSO) and open pit Whittle optimized pit shell software. The processing scenario assumption for the Project is a heap leach process, based on historical mine operations at St. Anthony.

14.11.1 Cut-off Grade Estimation

The cut-off grade has been estimated according to the following assumptions.

14.11.1.1 Underground and Open Pit Mining Assumptions

The underground mining scenario assumed for the Project is primarily a combination of step room-and-pillar (SRP) and drift-and-fill (DF) mining methods. Historical underground mining recovery was 85% for the SRP mining method and 90% for the DF mining method.



The underground stope and open pit optimization parameters used are summarized in Table 14-9 and Table 14-10.

Table 14-9: Stope Optimization Parameters

Parameters	Parameters	Unit	Value
Room and Pillar / Drift and Fill	Minimum Stope Height	ft	6
	Maximum Stope Height	ft	100
	Block horizontal dimensions	ft	50x50

Table 14-10: Open Pit Optimization Parameters

Description	Units	Value	Notes
Open Pit Mining Cost	\$/st	2.50	Ore and Waste
Process Cost (Heap Leach)	\$/st	20.00	
Administration Cost	\$/st	13.00	
Transport	\$/st	0.90	
U ₃ O ₈ Price	\$/lb	80	
Mill Recovery	%	90	
Payable	%	100	
Pit Slope	Degrees (°)	50	

Mining costs have been estimated based on similar projects and general experience with similar operations. The following underground mining costs were assumed to establish the prospects for economic extraction of Mineral Resources, which were also used in assessing classification:

- Underground Mining Cost - \$70/t
- Open Pit Mining Cost - \$2.50/t

14.11.1.2 Processing Assumptions

Processing costs have been estimated based on similar projects and general experience with similar operations. The following processing costs and overall metallurgical recovery were assumed to establish the prospects for economic extraction of Mineral Resources:

- Metallurgical Recovery – 90%
- Processing Cost – US\$20/st processed.

14.11.1.3 General and Administration Costs (G&A)

G&A costs have been estimated based on similar projects and general experience with similar operations. G&A costs include assumptions for costs of travel to and from the project site,



insurance premiums, marketing and accounting, and general maintenance of site buildings. The following G&A costs were assumed to establish the prospects for eventual economic extraction of Mineral Resources:

- G&A – US\$13/st processed.

14.11.1.4 Market Studies and Contracts

Markets

Most of the uranium is traded via long-term supply contracts, negotiated privately without disclosing prices and terms. Spot prices are generally driven by current inventories and speculative short-term buying. Monthly long-term industry average uranium prices based on the month-end prices are published by Ux Consulting, LLC, and Trade Tech, LLC. An accepted mining industry practice is to use Consensus Forecast Prices obtained by collating commodity price forecasts from credible sources.

Supply

According to the World Nuclear Association (World Nuclear 2024), world uranium requirements totaled more than 67,517 t uranium (U) in 2024:

2016 – 63,404 t U

2017 – 65,014 t U

2018 – 67,244 t U

2020 – 68,240 t U

2021 – 62,496 t U

2022 – 62,496 t U

2023 – 65,651 t U

2024 forecast – 67,517 t U

The top five producing countries (Kazakhstan, Canada, Namibia, Australia, and Uzbekistan) accounted for over 85% of world uranium production in 2022.

The share of uranium produced by ISR mining has steadily increased mainly due to the addition of ISR operations in Kazakhstan, and now accounts for over 55% of production.

Over half of uranium mine production is from state-owned mining companies, some of which prioritize secure supply over market considerations.

Demand

Demand is primarily driven by the use of uranium as a source for nuclear power plants. The use of nuclear power generation plants has become increasingly acceptable politically. Both China and India have indicated an intention to increase the percentage of power generated by nuclear plants. The largest increase in demand will come from those two countries.

Demand for uranium fuel is more predictable than for most other mineral commodities due to the cost structure of nuclear power generation, with high capital and low fuel costs. Once reactors are built, it is very cost effective to maintain operation at high capacity and for utilities to make any adjustments to load trends by cutting back on fossil fuel use. Demand forecasts for



uranium thus depend largely on installed and operable capacity regardless of economic fluctuations.

The World Nuclear Association website notes that mineral price fluctuations are related to demand and perceptions of scarcity. The price cannot indefinitely stay below the cost of production, nor can it remain at a high price for longer than it takes for new producers to enter the market and for supply anxiety to subside.

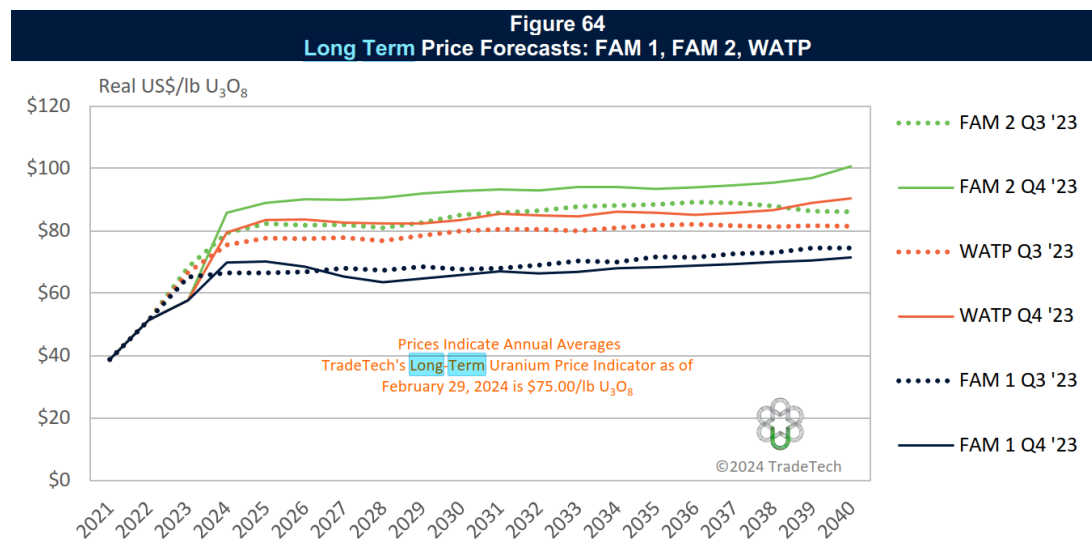
Price

The key to understanding any mineral market is knowing how the mineral price is determined. There are generally considered to be two prices in the uranium market: (1) long-term contract prices, and (2) spot prices. These two prices are published by companies that provide marketing support to the industry. The price report UxC is the most commonly followed report in the industry. Over the long term, price follows the classic market force of supply demand balance with a speculative investment market that creates price volatility.

TradeTech LLC (TradeTech) generates a composite price forecast based on a weighted average of the Forward Available Model 1 and 2 (FAM 1 and FAM 2) projections. Each FAM scenario has a distinct trajectory, however, TradeTech expects reality to fall between the two FAM scenarios. The Weighted Average Term Price (WATP) is TradeTech’s opinion of where the market will reside. Figure 14-8 provides a Long-Term Uranium Price Forecast through 2040 from TradeTech from the first quarter of 2024. FAM 1 and 2 forecasts differ in assumptions as to how future uranium supply enters the market.

"The FAM 1 model represents a good level of uranium production growth incorporating TradeTech’s assessment of delays to current planned production. To provide insight into the implications of more significant supply delays, a FAM 2 model has been evaluated. The FAM 2 scenario assumes further restricted project development reflecting additional delays and cancellations." (TradeTech 2024). Currently, most US producers are in a mode of beginning to revive their projects that were on care and maintenance. At this time in the US, there are some new projects that are being seriously considered for licensing and permitting and/or a restart. This condition aligns more with the FAM 2 projections.

Figure 14-8: Long Term Uranium Price Forecast



Source: TradeTech 2024

Consensus forecasts collected by SLR are in line with the FAM 2 spot prices in Figure 14-8, with long-term averages of approximately \$75.00/lb. General industry practice is to use a consensus long-term forecast price for estimating Mineral Reserves, and 10% to 20% higher prices for estimating Mineral Resources.

For Mineral Resource estimation and cash flow projections, SLR selected a U₃O₈ price of \$80.00/lb, on a Cost, Insurance, and Freight (CIF) basis to customer facility, based on independent forecasts. SLR considers this price to be reasonable and consistent with industry practice based on independent long-term forecasts and a mark-up for use with Mineral Resource estimation.

SLR has reviewed the market studies and analysis reports and is of the opinion they support the findings of this Technical Report and disclosure of the Mineral Resource estimates.

14.11.1.5 Royalties and Tax

No royalties or tax were used in the assumptions.

14.11.1.6 Summary of Cut-Off Grade Assumptions

The assumed costs for underground and open pit operations and commodity prices presented in the preceding sections have been used to provide a reasonable basis for establishing the prospects of eventual economic extraction for Mineral Resources. These assumptions, along with the calculated cut-off grades are presented in Table 14-11 and Table 14-12.

Table 14-11: Assumptions for Underground RPEE

Description	Units	Value	Notes
Underground Mining Cost	\$/st	70.00	Included
Process Cost	\$/st	20.00	
Admin Cost	\$/st	13.00	
Transport	\$/st	0.90	
Cost	\$/st	103.90	
U ₃ O ₈ Price	\$/lb	80	
Mill Recovery		90%	
Payable		100%	
Net Revenue	\$/lb	72.00	
	\$/st	144,000.00	
Underground COG	% U₃O₈	0.072	



Table 14-12: Assumptions for Open Pit RPEEE

Description	Units	Value	Notes
Open Pit Mining Cost	\$/st	2.5	Excluded from COG cost
Process Cost	\$/st	20.00	
Admin Cost	\$/st	13.00	
Transport	\$/st	0.90	
Cost	\$/st	33.90	
U ₃ O ₈ Price	\$/lb	80	
Mill Recovery		90%	
Payable		100%	
Net Revenue	\$/lb	72.00	
	\$/st	144,000.00	
Open Pit COG	% U₃O₈	0.024	

14.11.1.7 Optimization Results

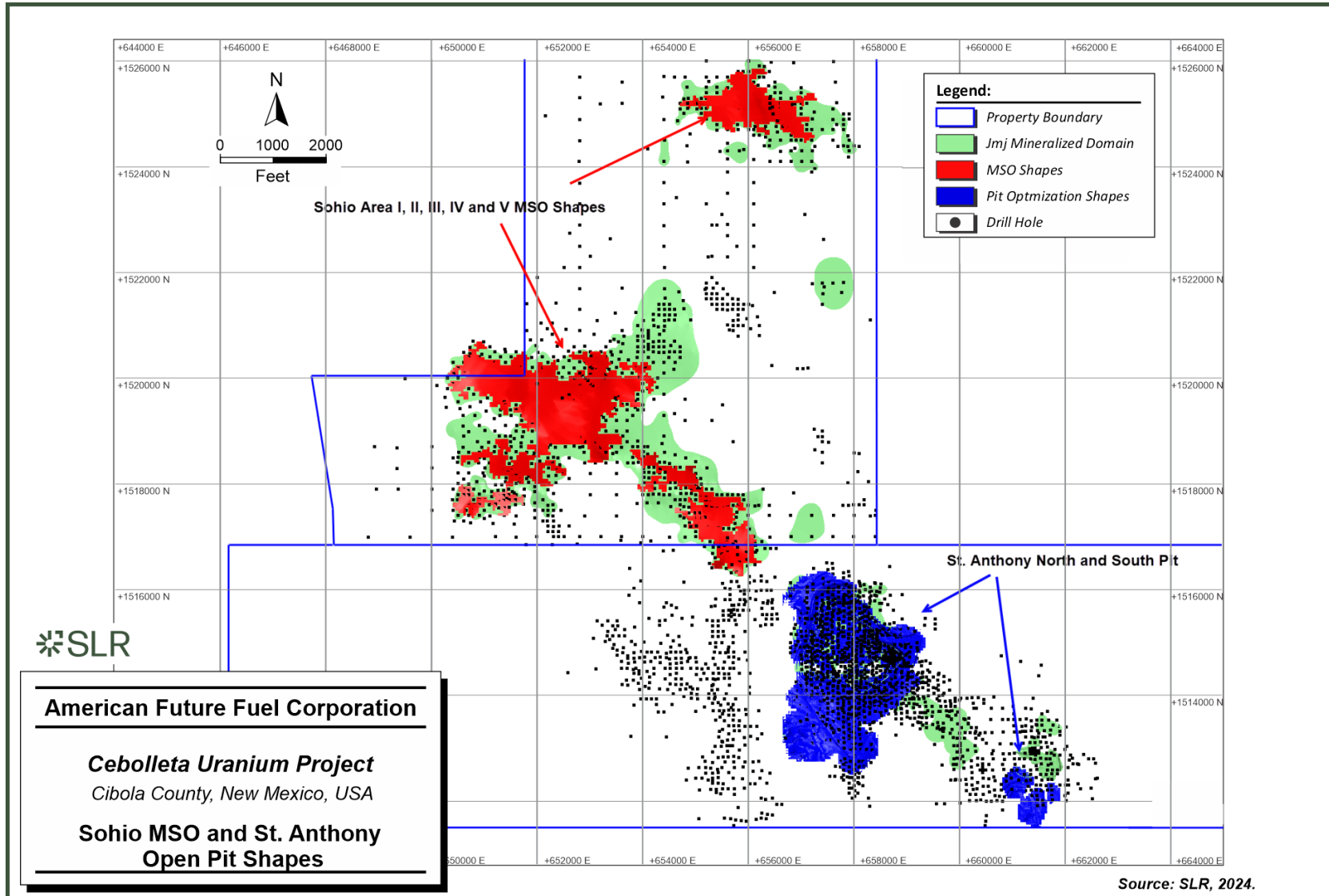
The cost and price assumptions have been used for the optimization processes in the underground stope optimization and open pit optimization software. These are mine planning tools that automate the design of mineable shapes and maximize the value of the deposit according to the cost and price assumptions and provided design parameters.

The QP cautions that the results from the optimization software are used solely for the purpose of testing the RPEEE by underground methods and do not represent an attempt to estimate Mineral Reserves. There are no Mineral Reserves on the Project. The results are used as a guide to assist in the preparation of a Mineral Resource statement, classification criteria, and to select an appropriate resource reporting cut-off grade.

The resulting shapes are presented in Figure 14-9. The QP notes that the reported Mineral Resources include internal dilution within the underground MSO shapes and surface Whittle pit. No additional dilution or recovery factors were applied.



Figure 14-9: Sohio MSO and St. Anthony Open Pit Shapes



14.11.1.8 Contracts

At this time, AMPS has not entered into any long-term agreements for the provision of materials, supplies, or labor for the Project. The construction and operations will require negotiation and execution of a few contracts for the supply of materials, services, and supplies.

14.11.2 Environmental, Social, and Governance

In terms of environmental, social, and governance (ESG), the two key risks that could affect the prospect for economic extraction are 1) the time required to obtain all regulatory agency approvals, and 2) the time and costs to obtain a “social license” or its equivalent from the affected Native American groups and other non-Indigenous stakeholders. As is the case with every mining project, there are several ESG-related factors that have the potential to influence the success of obtaining these approvals and becoming Modifying Factors for future reporting of Mineral Resources.

14.11.3 QP Comments on the Prospect of Eventual Economic Extraction

In the opinion of the QP, the U_3O_8 price assumption is moderately conservative based on recent trends in the uranium sector, however, it is consistent with expert uranium market analysts’ studies while the mining and processing cost assumptions are consistent with assumptions for similar uranium deposits in the Grants Mineral District based on current benchmarks. The Mineral Resource presented in Section 14.0 may be materially impacted by any future changes in the break-even cut-off grade (both up or down), that may result from changes in mining method selection, mining costs, processing recoveries and costs, metal price fluctuations, significant changes in geological knowledge, or issues obtaining regulatory approvals and/or social license.

14.12 Classification

Mineral Resource estimates were classified in accordance with definitions provided by the CIM (2014) definitions. The Mineral Resource estimates summarized in this Technical Report have an effective date of April 30, 2024.

A Mineral Resource is defined as a concentration or occurrence of material of economic interest in or on the Earth’s crust in such form, grade or quality, and quantity that there are reasonable prospects for eventual economic extraction (RPEEE). A mineral resource is a reasonable estimate of mineralization, considering relevant factors such as cut-off grade, likely mineral recovery dimensions, location, or continuity that with the assumed and justifiable technical and economic conditions is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

Based on this definition of Mineral Resources, the Mineral Resources estimated in this Technical Report have been classified according to the definitions below based on geology, grade continuity, and drill hole spacing.

Measured mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed project planning and final evaluation of the economic viability of the deposit. Because a Measured mineral resource has a higher level of confidence than the level of confidence of either an Indicated Mineral Resource or an Inferred Mineral Resource, a



Measured Mineral Resource may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Indicated Mineral Resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an Indicated Mineral Resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support the ISR project planning and evaluation of the economic viability of the deposit. Because an Indicated Mineral Resource has a lower level of confidence than the level of confidence of a Measured Mineral Resource, an Indicated Mineral Resource may only be converted to a Probable Mineral Reserve.

Inferred Mineral Resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an Inferred Mineral Resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an Inferred Mineral Resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a ISR project and may not be converted to a Mineral Reserve.

The QP has considered the following factors that can affect the uncertainty associated with the class of Mineral Resources:

- Reliability of sampling data:
 - o Drilling, downhole radiometric logging, and sampling procedures follow industry standards.
 - o Data verification and validation work confirm drill hole sample databases are reliable.
 - o The area deposits are drilled generally at 100 ft spacings. The data spacing, compared to the nature of the mineralization, results in well constrained domain and reliable % eU₃O₈ grade continuity models (variograms).
- Confidence in interpretation and modeling of geological and estimation domains:
 - o Resources were estimated using conventional block modeling approach.
 - o Mineralization domain was interpreted from grade intercepts intersecting favorable lithological boundaries. All estimated mineralization at Cebolleta is within the Jackpile Member of the Morrison Formation.
 - o Block grades correlate well, both spatially and statistically, with composite data, both locally and globally.
 - o The estimates of % eU₃O₈ and density are supported by reliable data that has been collected at a spacing sufficient to model reasonable estimation domains and develop variograms for the Jackpile Member.

Blocks were classified as Indicated or Inferred based on drill hole spacing, confidence in the geological interpretation, apparent continuity of mineralization, and RPEEE MSO and pit optimization shape.



14.12.1 Indicated Mineral Resource

- Maximum average distance to samples used to estimate the block is less than the range of the modeled (variogram) continuity at 90% of the sill (≤ 100 ft drill hole spacing)
- Estimated within the first pass and corresponding to MSO and pit optimization shapes for RPEEE.

14.12.2 Inferred Mineral Resource

- All remaining block estimates within the modeled estimation domain were classified as Inferred.

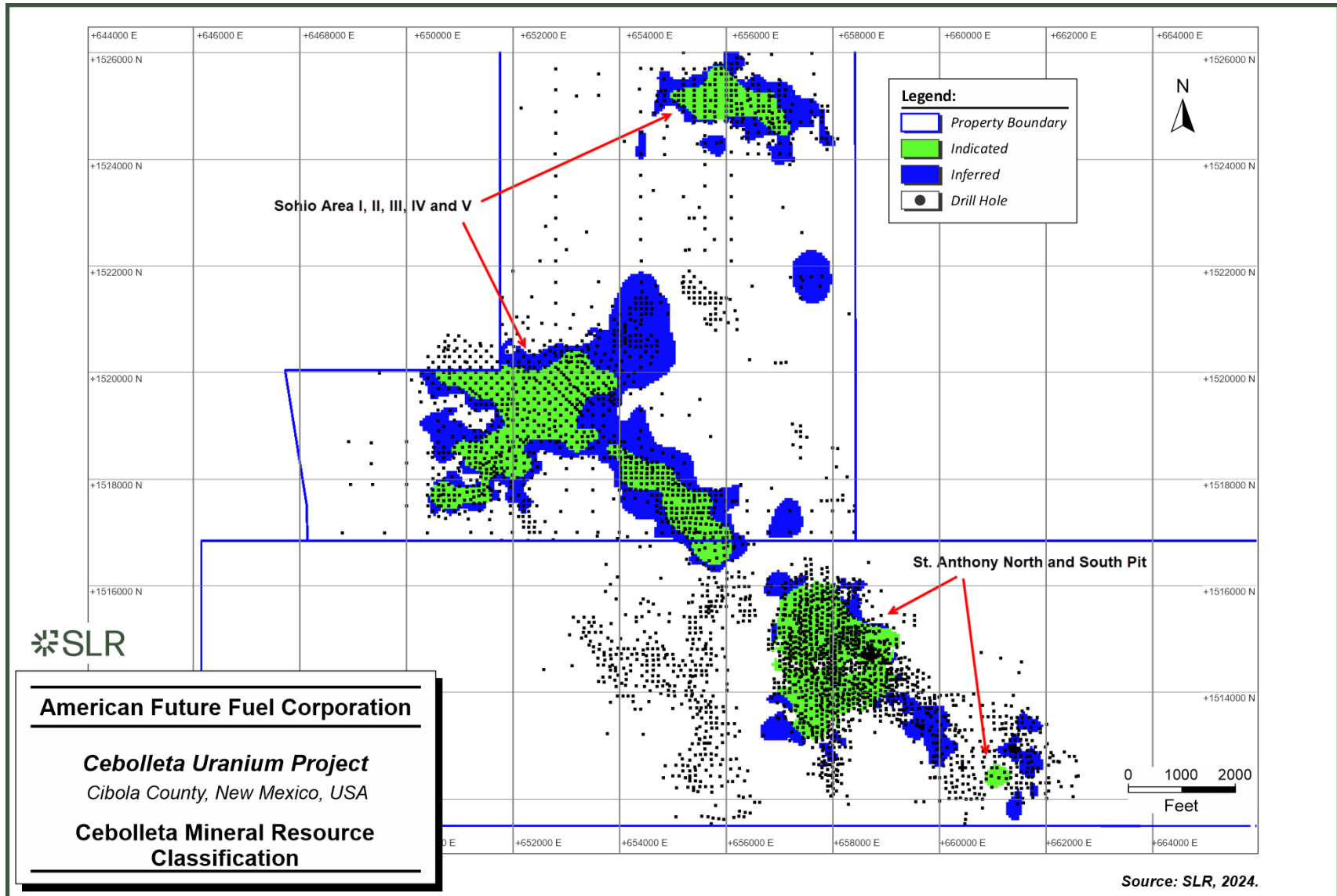
14.12.3 QP Comments on Classification

After the blocks were coded as either Indicated or Inferred according to the criteria described above, clipping wireframes on classification were used in a final stage of the classification process to ensure continuity and consistency of the classified blocks in the model. In this process, some Indicated candidate blocks were reassigned as Inferred and vice versa. The final classification assignments for Indicated and Inferred Mineral Resources are presented in Figure 14-10.

In the QP's opinion, the classification of Mineral Resources is reasonable and appropriate for Mineral Resource disclosure and there is reasonable expectation that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.



Figure 14-10: Cebolleta Mineral Resource Classification



14.13 Block Model Validation

Blocks were validated using industry standard techniques including:

- Statistical comparison.
- Swath plots (Figure 14-11 to Figure 14-13).
- Visual inspection of assays and composites versus block grade (Figure 14-14 and Figure 14-15).

SLR found grade continuity to be reasonable and confirmed that the block grades were reasonably consistent with local drill hole composite grades.

14.13.1 Global Statistics

Statistics of the block grades are compared with statistics of composite grades in Table 14-13 for all blocks and composites within the Sohio and St. Anthony areas.

Table 14-13: Summary of Composite vs Block Model Mean % eU₃O₈

Area	Area_I		Area_II		Area_III		Area_IV		Area_V	
	1 m Comp	Block Model	1 m Comp	Block Model	1 m Comp	Block Model	1 m Comp	Block Model	1 m Comp	Block Model
Count	31,857	99,428	52,632	195,277	13,989	52,911	10,184	53,858	23,394	78,043
Mean	0.016	0.012	0.017	0.016	0.022	0.018	0.007	0.007	0.011	0.009
SD	0.048	0.036	0.056	0.051	0.069	0.055	0.016	0.013	0.051	0.039
CV	3.0	3.0	3.3	3.3	3.2	3.0	2.2	1.8	4.6	4.3
Variance	0.002	0.001	0.003	0.003	0.005	0.003	0.000	0.000	0.003	0.001
Min	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Lower Quartile	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001
Median	0.005	0.004	0.003	0.003	0.005	0.004	0.003	0.003	0.002	0.002
Upper Quartile	0.010	0.009	0.009	0.008	0.010	0.010	0.007	0.007	0.004	0.004
Max	2.038	2.012	1.504	1.353	2.085	1.735	0.350	0.260	1.700	1.053

Area	Sohio_1		Sohio_2		SA_North_Pit		SA_South_Pit	
	1 m Comp	Block Model	1 m Comp	Block Model	1 m Comp	Block Model	1 m Comp	Block Model
Count	259	6,343	639	12,156	66,638	115,824	2,563	15,636
Mean	0.006	0.007	0.008	0.006	0.010	0.011	0.005	0.007
SD	0.012	0.011	0.013	0.008	0.044	0.038	0.024	0.026
CV	1.9	1.6	1.7	1.3	4.3	3.5	4.4	3.7
Variance	0.000	0.000	0.000	0.000	0.002	0.001	0.001	0.001
Min	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Lower Quartile	0.001	0.001	0.003	0.002	0.000	0.000	0.000	0.000
Median	0.002	0.003	0.005	0.004	0.000	0.000	0.000	0.000
Upper Quartile	0.006	0.007	0.010	0.008	0.000	0.000	0.000	0.000
Max	0.124	0.081	0.215	0.145	2.659	1.897	0.350	0.319



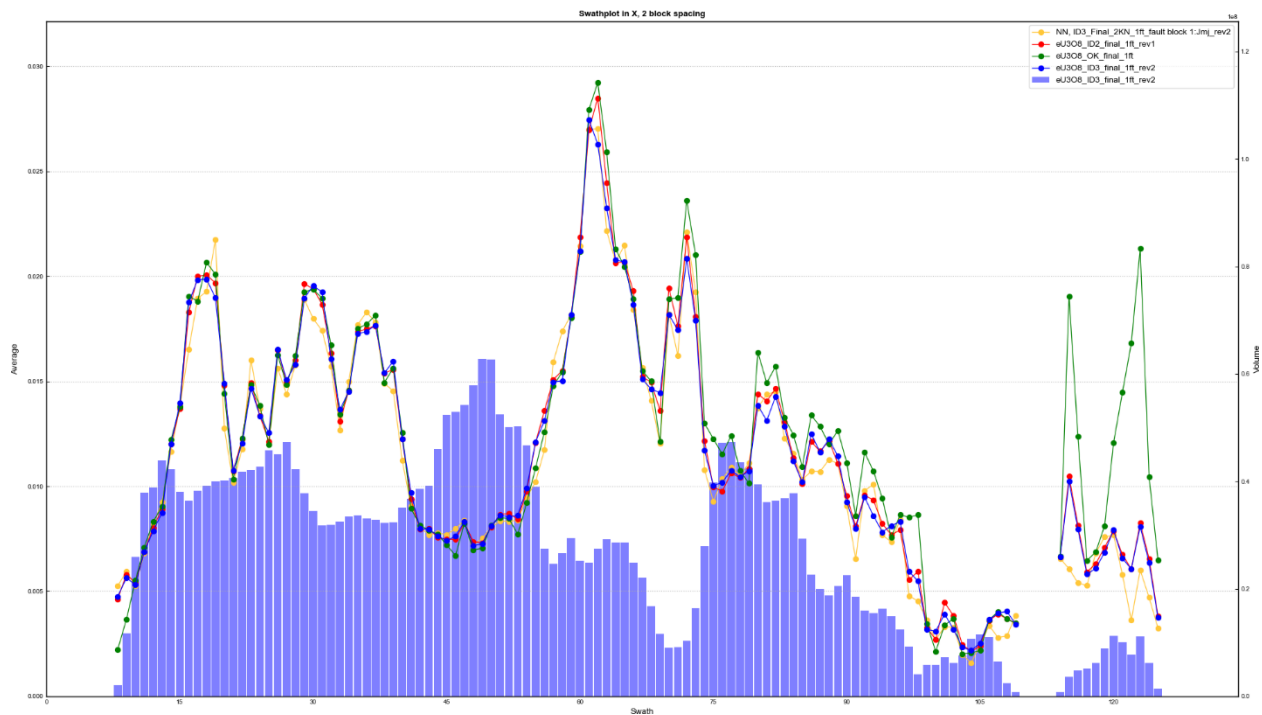
14.13.2 Swath Plots

The block model grades, and the grades of the informing composites were compared by swath plots, examples of which are shown in Figure 14-11 to Figure 14-13. The swath plots show that there is good spatial correlation between the composite grades and block model grades.

14.13.3 Visual Comparison

Visual validation involved comparing mineralization intercepts and composite grades to block grade estimates. The comparisons showed good correlation with no significant overestimation or overextended influence of high grades. Cross section through the Sohio Area II and St. Anthony North Pit deposit are shown in Figure 14-14 and Figure 14-15, respectively.

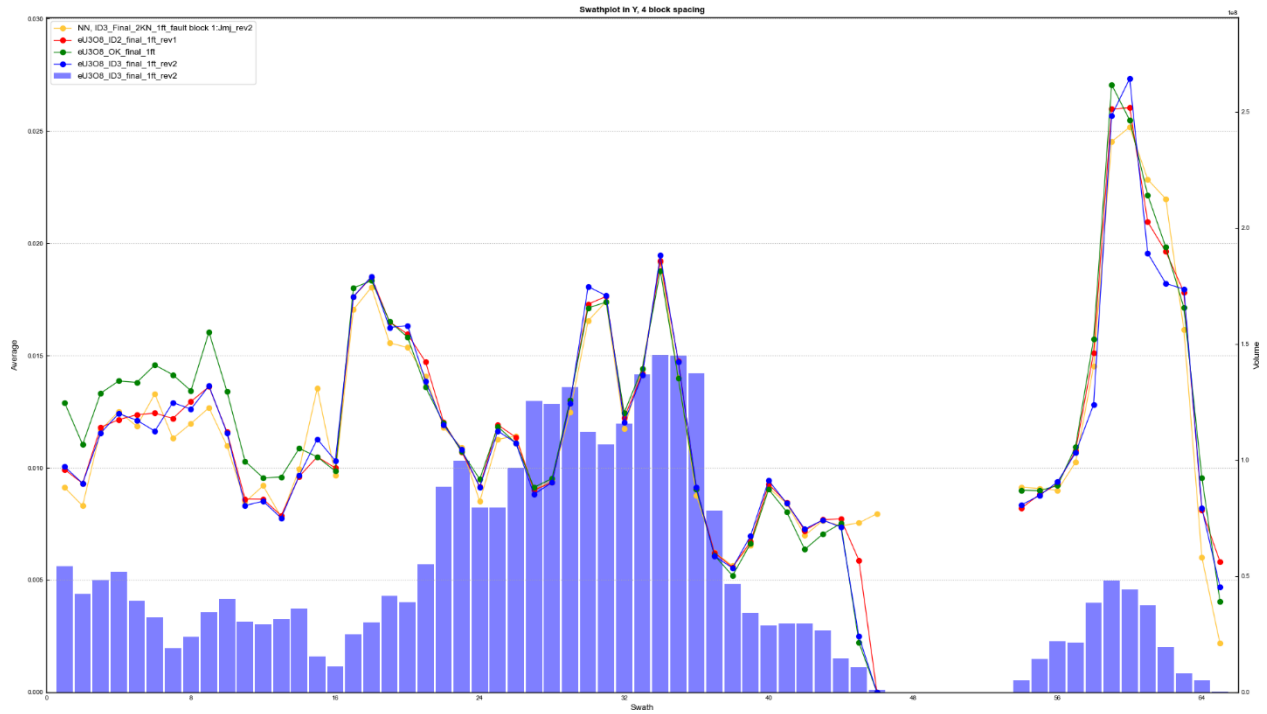
Figure 14-11: Swath Plots in the X Direction



Source: SLR, 2024

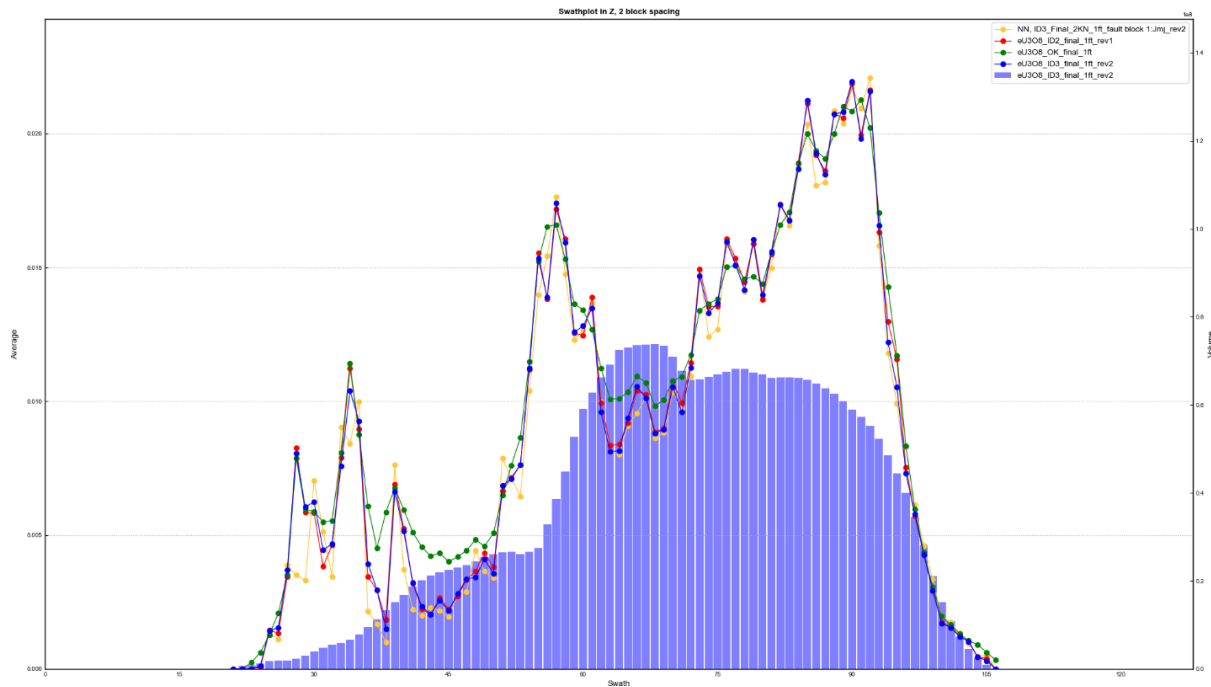


Figure 14-12: Swath Plots in the Y Direction



Source: SLR, 2024

Figure 14-13: Swath Plots in the Z Direction



Source: SLR, 2024



Figure 14-14: Sohio Area II Cross Section 1,519,300 N

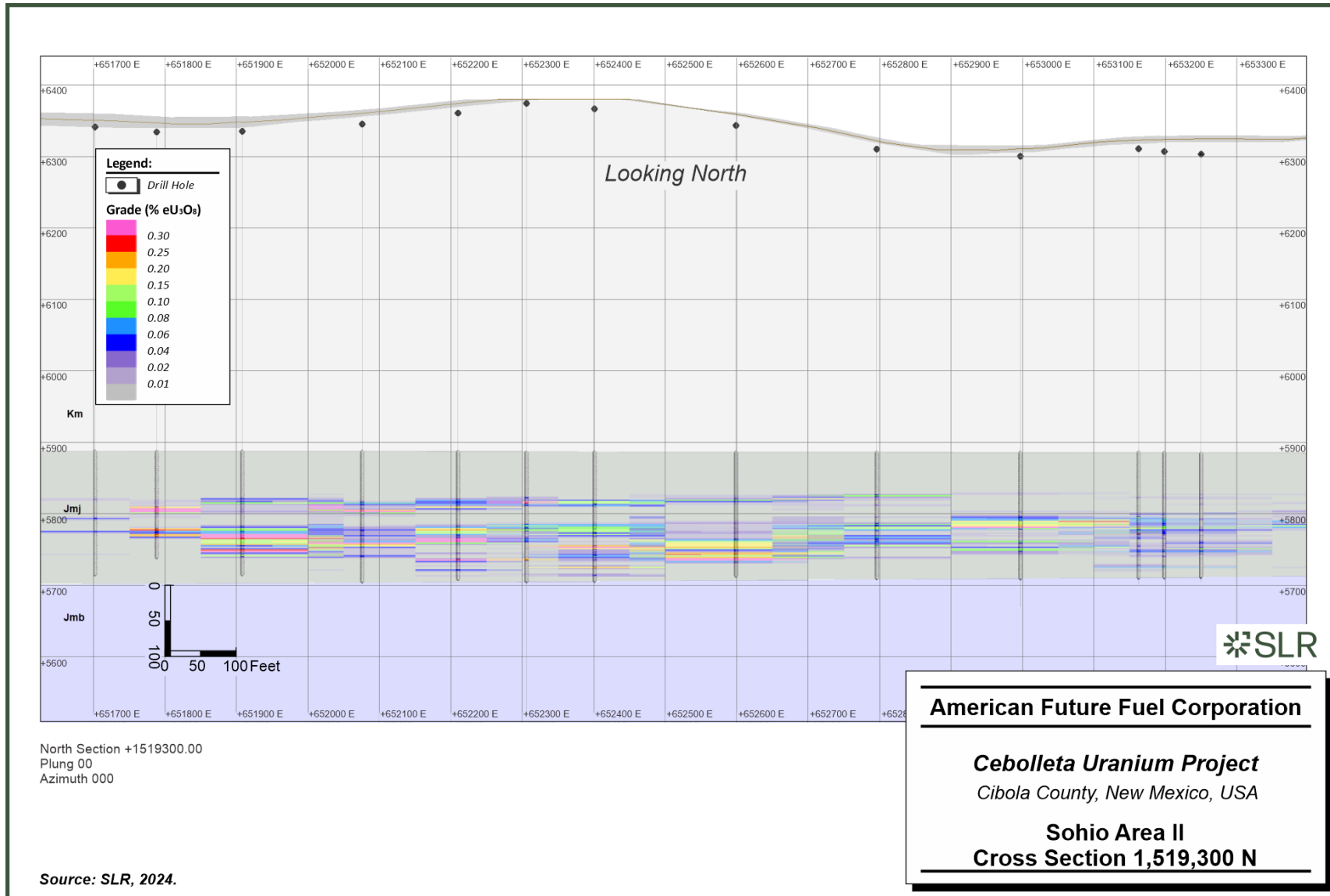
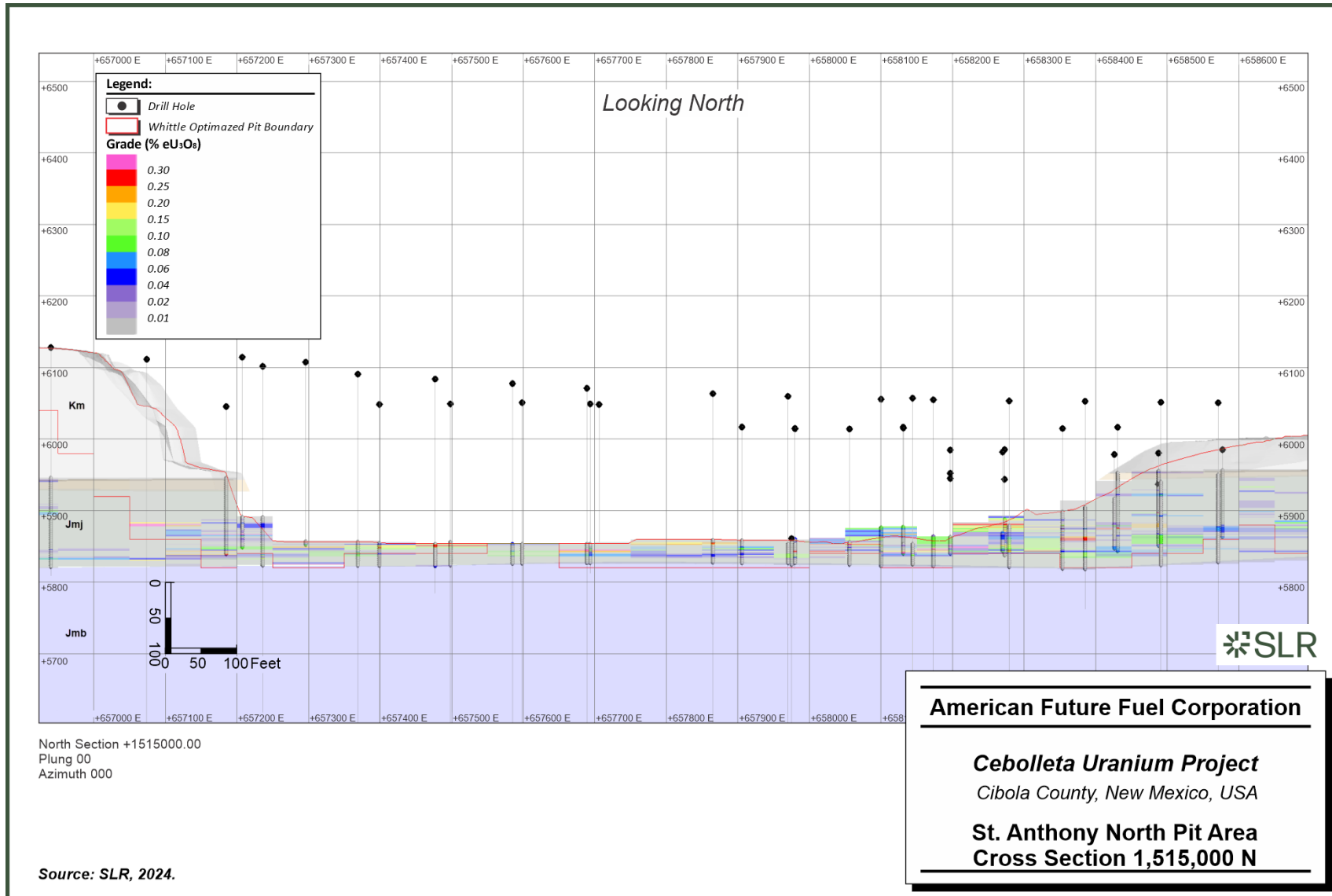


Figure 14-15: St. Anthony North Pit Area Cross Section 1,515,000 N



14.14 Sensitivity to Reporting Cut-off

The Mineral Resources of the Project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, open pit (Table 14-14 and Figure 14-16) and underground (Table 14-15 and Figure 14-17) block model short tons and grade estimates are presented in grade-tonnage curves at different U_3O_8 grade cut-off values based on various uranium price per pound rates for Indicated Mineral Resources. A combined grade-tonnage curve is presented in Table 14-16 and Figure 14-18.

The reader is cautioned that the numbers presented in these tables should not be misconstrued with a Mineral Resource statement. The numbers are only presented to show the sensitivity of the block model estimates to the selection of the U_3O_8 grade cut-off value.



Table 14-14: Open Pit Grade vs Tonnage for Indicated Resources

Price (\$/lb U ₃ O ₈)	Cut-Off Grade (%U ₃ O ₈)	Tonnage (Million st)	Grade (%U ₃ O ₈)	Contained Metal (Mlb U ₃ O ₈)
\$105	0.018	3.85	0.074	5.70
\$100	0.019	3.77	0.075	5.68
\$95	0.020	3.70	0.076	5.65
\$90	0.021	3.63	0.077	5.62
\$85	0.022	3.55	0.079	5.58
\$80	0.024	3.42	0.081	5.52
\$75	0.025	3.35	0.082	5.49
\$70	0.027	3.20	0.085	5.41
\$65	0.029	3.06	0.087	5.33
\$60	0.031	2.94	0.090	5.26
\$55	0.034	2.77	0.093	5.15
\$50	0.038	2.53	0.099	4.98
\$45	0.042	2.33	0.104	4.82
\$40	0.047	2.09	0.110	4.60
\$35	0.054	1.81	0.120	4.32
\$30	0.063	1.52	0.131	3.98
\$25	0.075	1.19	0.139	3.53

Figure 14-16: Open Pit Grade Tonnage Curve for Indicated Mineral Resources

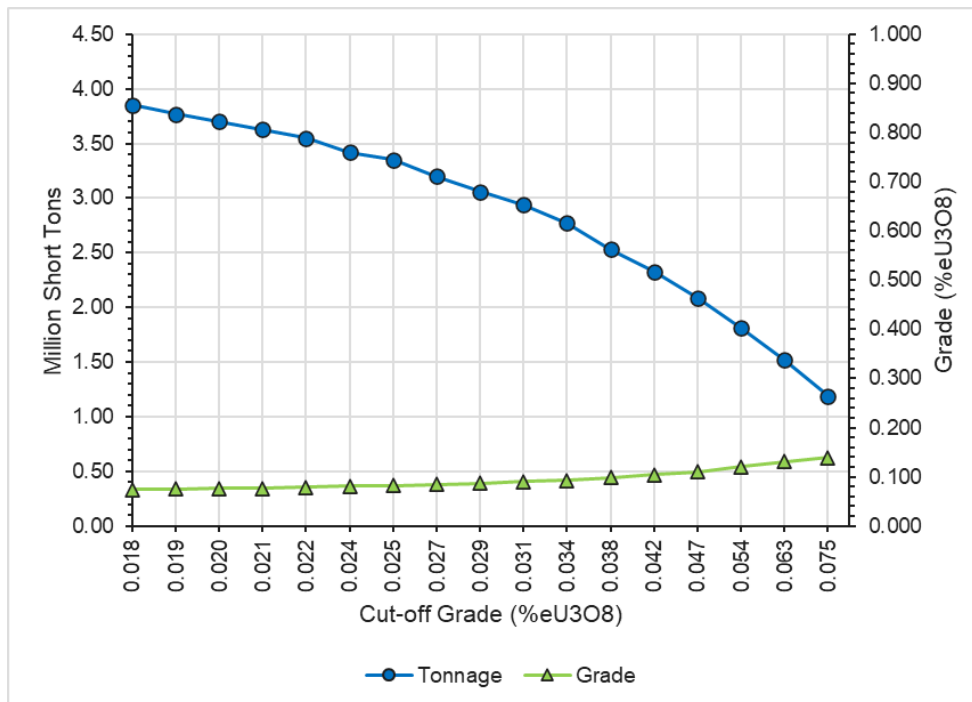


Table 14-15: Underground Grade vs Tonnage for Indicated Resources

Price (\$/lb U ₃ O ₈)	Cut-Off Grade (%U ₃ O ₈)	Tonnage (Million st)	Grade (%U ₃ O ₈)	Contained Metal (Mlb U ₃ O ₈)
\$105	0.055	5.24	0.163	17.03
\$100	0.058	4.98	0.168	16.74
\$95	0.061	4.76	0.173	16.48
\$90	0.064	4.55	0.178	16.22
\$85	0.068	4.32	0.184	15.92
\$80	0.072	4.12	0.190	15.64
\$75	0.077	3.86	0.198	15.24
\$70	0.082	3.62	0.205	14.86
\$65	0.089	3.34	0.215	14.39
\$60	0.096	3.11	0.224	13.96
\$55	0.105	2.83	0.237	13.39
\$50	0.115	2.55	0.251	12.78
\$45	0.128	2.23	0.269	12.00
\$40	0.144	1.94	0.289	11.23
\$35	0.165	1.60	0.318	10.18
\$30	0.192	1.29	0.352	9.06
\$25	0.231	0.97	0.398	7.75

Figure 14-17: Underground Grade Tonnage Curve for Indicated Mineral Resources

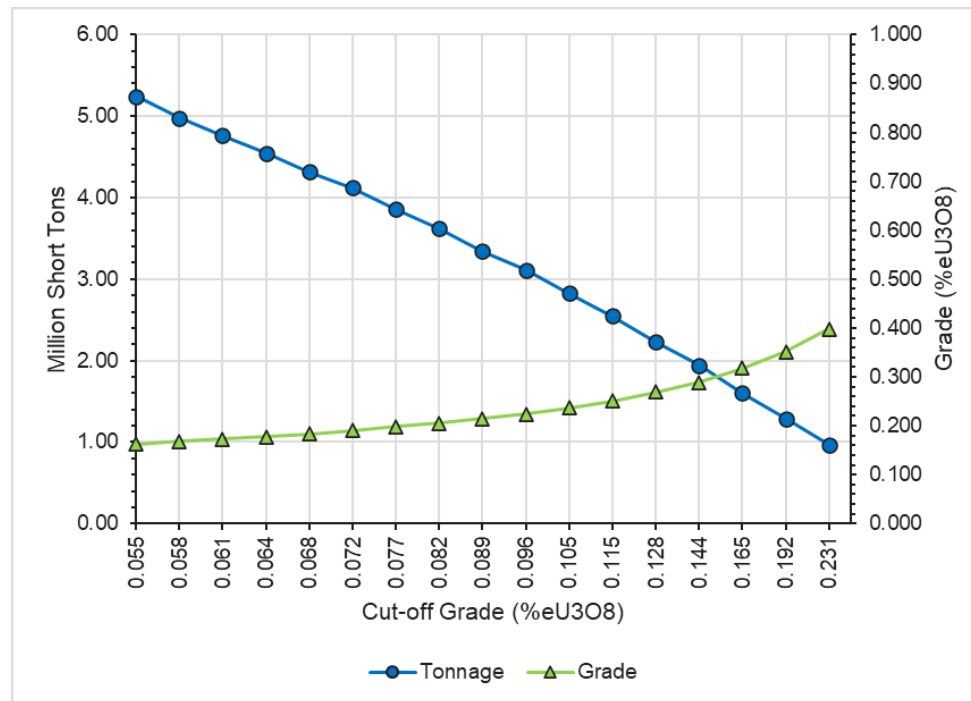
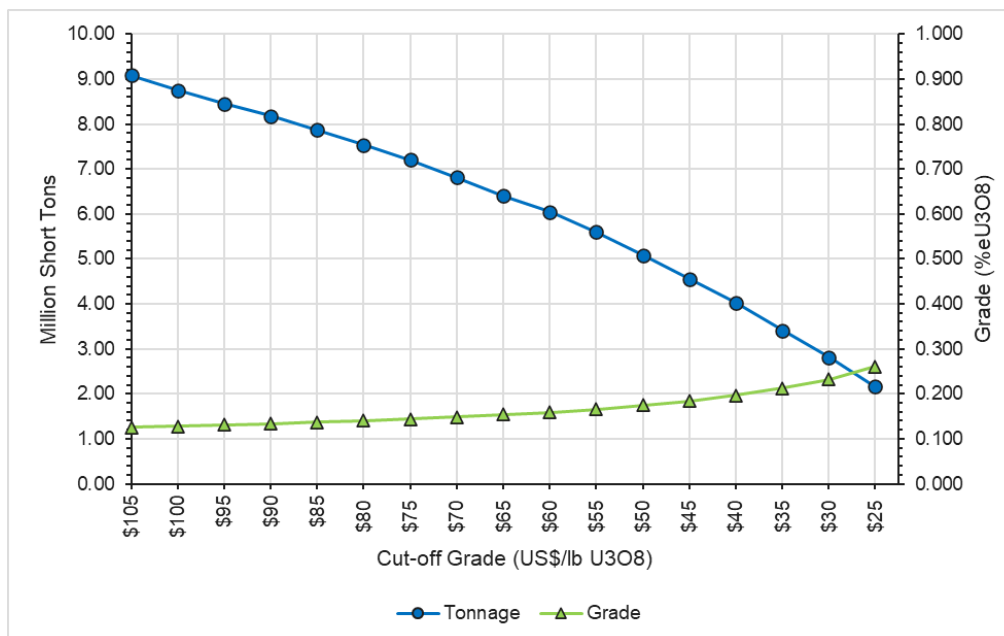


Table 14-16: Combined Open Pit and Underground Grade vs Tonnage for Indicated Resources

Price (\$/lb U ₃ O ₈)	Tonnage (Million st)	Grade (%U ₃ O ₈)	Contained Metal (Mlb U ₃ O ₈)
\$105	9.09	0.125	22.73
\$100	8.75	0.128	22.42
\$95	8.46	0.131	22.13
\$90	8.18	0.133	21.84
\$85	7.87	0.137	21.50
\$80	7.54	0.140	21.16
\$75	7.21	0.144	20.73
\$70	6.82	0.149	20.27
\$65	6.40	0.154	19.72
\$60	6.05	0.159	19.22
\$55	5.60	0.166	18.54
\$50	5.08	0.175	17.76
\$45	4.56	0.184	16.82
\$40	4.03	0.196	15.83
\$35	3.41	0.213	14.50
\$30	2.81	0.232	13.04
\$25	2.16	0.261	11.28

Figure 14-18: Combined Open Pit and Underground Grade Tonnage Curve for Indicated Mineral Resources



14.15 Mineral Resource Reporting

The QP has reviewed and accepted the relevant factors and underground MSO shapes and constraining open pit optimization, as described in Section 14.11, to identify the volumes within which the Project Mineral Resource is considered to have prospects for eventual economic extraction and can be reported as an Indicated Mineral Resource.

Table 14-17 summarizes the Project's Mineral Resources with an effective date of April 30, 2024. The Project is an exploration stage property 100% owned by AMPS. All numbers have been rounded to appropriate significant figures to reflect the accuracy of the estimates of quantity and grade. Mineral Resources have been estimated for equivalent U_3O_8 only. No Mineral Reserves have been estimated for the Project.



Table 14-17: Summary of Mineral Resources – April 30, 2024

Classification	Zone	Grade Cut-off	Tonnage	Grade	Contained Metal	AMPS Basis	Recovery U ₃ O ₈
		(% eU ₃ O ₈)	(Million st)	(% eU ₃ O ₈)	(Million lb eU ₃ O ₈)	(%)	(%)
Underground							
Indicated	Area 1	0.072	0.8	0.168	2.6	100	95
	Area II	0.072	2.3	0.193	8.7	100	95
	Area III	0.072	0.7	0.192	2.7	100	95
	Area IV	0.072	0.0	—	0.0	100	95
	Area V	0.072	0.4	0.208	1.6	100	95
Total Indicated			4.1	0.189	15.6	100	95
Subtotal Indicated			4.1	0.189	15.6	100	95
<i>Depletion JJ#1</i>			-0.9	0.123	-2.2		
Total Indicated			3.2	0.208	13.4		
Inferred	Area 1	0.072	0.2	0.118	0.4	100	95
	Area II	0.072	0.3	0.131	0.8	100	95
	Area III	0.072	0.2	0.156	0.6	100	95
	Area IV	0.072	0.1	0.105	0.3	100	95
	Area V	0.072	0.2	0.161	0.5	100	95
Total Inferred			1.0	0.135	2.6	100	95
Open Pit							
Indicated	Saint Anthony North Pit	0.024	3.3	0.081	5.4	100	95
	Saint Anthony South Pit	0.024	0.1	0.084	0.2	100	95
Total Indicated			3.4	0.081	5.5	100	95
Subtotal Indicated			3.4	0.081	5.5	100	95
<i>Depletion Climax M6</i>			-0.1	0.205	-0.3		
Total Indicated			3.3	0.078	5.2		
Inferred	Saint Anthony North Pit	0.024	1.3	0.070	1.8	100	95
	Saint Anthony South Pit	0.024	0.3	0.078	0.5	100	95
Total Inferred			1.6	0.072	2.3	100	95

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a cut-off grade of 0.072% eU₃O₈ for underground based on Deswik MSO stope shapes and 0.024% eU₃O₈ for open pit using Whittle pit optimization.
3. Mineral Resources are estimated using a long-term uranium price of US\$80 per lb U₃O₈.



4. Mineral Resources have been depleted based on past reported production numbers from the underground JJ#1 and Climax M6 mines.
5. A minimum mining width of two feet was used.
6. Tonnage Factor is 16 ft³/st (Density is 0.625 st/ft³ or 2.00 t/m³).
7. Numbers may not add due to rounding.



15.0 Mineral Reserve Estimate

There are no current Mineral Reserves at the Project.



16.0 Mining Methods

This section is not applicable.



17.0 Recovery Methods

This section is not applicable.



18.0 Project Infrastructure

This section is not applicable.



19.0 Market Studies and Contracts

This section is not applicable.



20.0 Environmental Studies, Permitting, and Social or Community Impact

This section is not applicable.



21.0 Capital and Operating Costs

This section is not applicable.



22.0 Economic Analysis

This section is not applicable.



23.0 Adjacent Properties

The 6,017 acres comprising the Cebolleta Lease are the southeastern-most portion of the much larger CLG property which exceeds 30,000 acres in total and extends for several miles to the north and west of the Project, based on digital files purchased by AMPS from the Cibola County GIS Department in 2024 (Figure 23-1).

Private lands belonging to Lobo Ranch exceeding 40,000 acres join the CGL's eastern boundary and surround the Project to the north and east for several miles, and approximately 900 acres overlie the lease area (Cibola County GIS Department, 2024). The mineral rights and expressly deeded access to develop the mineral rights of the overlapping surface are owned by CLG and are included in the Cebolleta Lease (Dickason, 2007; Land Services LLC, 2021 and 2024; Indall, 2021; Modrall, 2024).

UNC owns surface rights to a 295 acre parcel, of which approximately 100 acres overlies the lease area. The mineral rights and access to develop the mineral rights are deeded to CLG and are included in the Cebolleta Lease (Dickason, 2007; Land Services LLC, 2021 and 2024; Indall, 2021; Modrall, 2024). This parcel is held by UNC for the exclusive purpose of sourcing reclamation materials for the St. Anthony mines.

The US DOE controls a 740 acre inholding within the CGL that is adjacent to a portion of the western boundary of the Project (Cibola County GIS Department, 2024). This parcel contains the tailings impoundment of the former L-Bar Mill which processed ores from the JJ#1 Mine. Since 2004, this parcel has been in the custody of the US DOE as part of the *Uranium Mill Tailings Radiation Control Act* (US DOE, 2023).

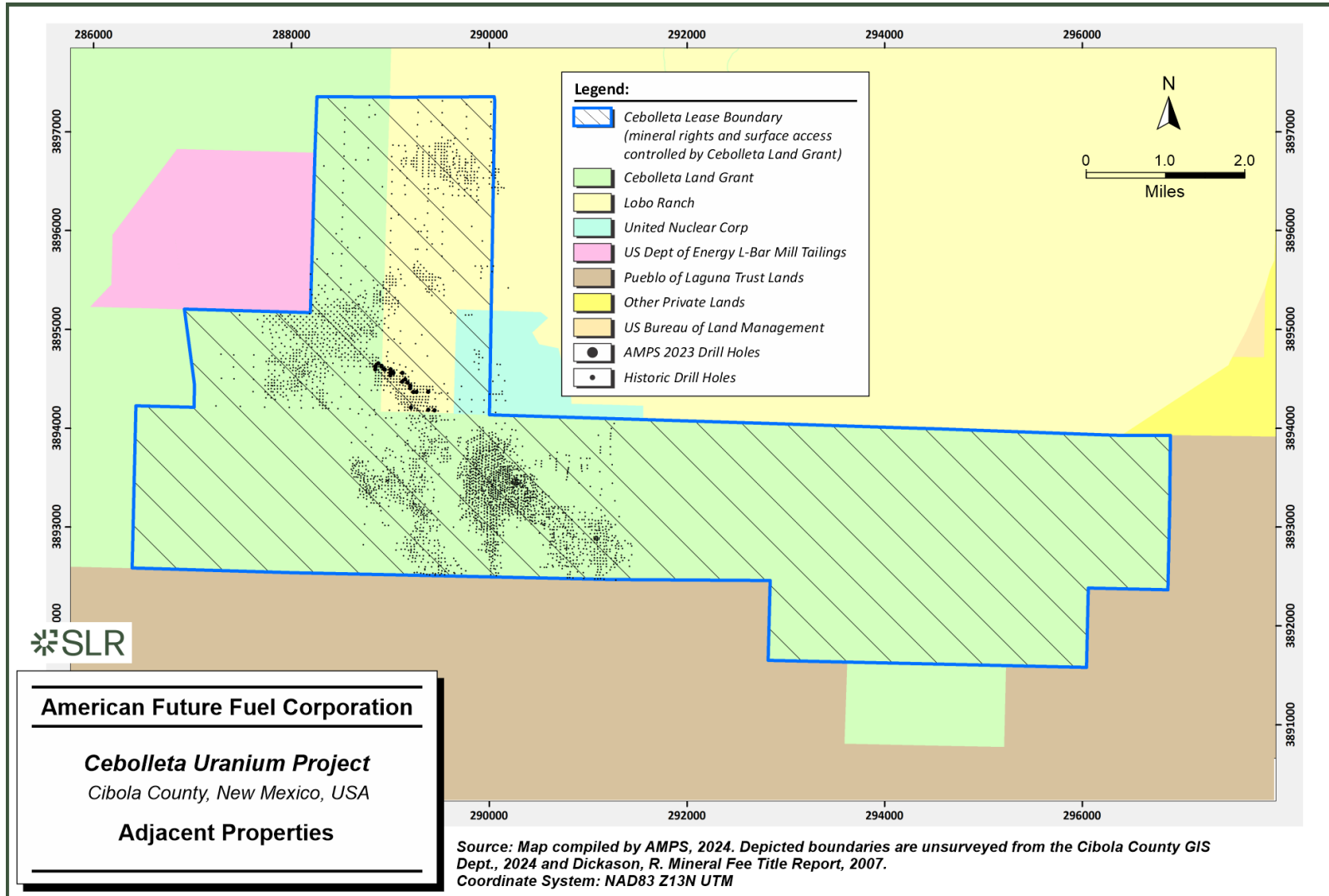
Tribal lands belonging to the Pueblo of Laguna are adjacent to the southern boundary of the Project and extend for several miles south (Cibola County GIS Department, 2024). The closed Jackpile-Paguete uranium mine occurs along the southern boundary of the Project and is contained entirely on Pueblo of Laguna lands.

There may be exploration potential on the adjacent properties, however the QP and AMPS are not aware of any current or historic mineral resources that occur on adjacent properties and these properties have no impact on the estimation of mineral resources at the Project.

The QP has not independently verified this information and this information is not necessarily indicative of the mineralization at the Cebolleta property.



Figure 23-1: Adjacent Properties



24.0 Other Relevant Data and Information

All relevant data and information regarding the Project are included in other sections of this Technical Report. There is no other relevant data or information available that is necessary to make the Technical Report understandable and not misleading.



25.0 Interpretation and Conclusions

SLR offers the following interpretations and conclusions on the Project:

- The Cebolleta deposits are classified as sandstone hosted - uranium deposits. Sandstone-type uranium deposits typically occur in fine to coarse grained sediments deposited in a continental fluvial environment.
- The majority of the potentially economic uranium mineralization is hosted by the Jackpile Sandstone, although minor amounts of mineralization are hosted in sandstones of the Brushy Basin Member of the Morrison Formation.
- The Project is an exploration stage property 100% owned by AMPS. The property encompasses 6,717 acres (2,718 hectares (ha)) of privately held mineral rights (fee or deeded) and approximately 5,700 acres (2,307 ha) of surface rights owned in fee by *La Merced del Pueblo de Cebolleta* (Cebolleta Land Grant or CLG).
- The Project is located in a region that has a lengthy history of uranium exploration and mining activity dating to the 1950s and is close to necessary infrastructure and resources.
- Rotary and diamond drilling (core) on the property was the principal method of exploration and delineation of uranium mineralization. As of the effective date of this report, AMPS and its predecessor companies have completed a reported total of 3,644 drill holes, from 1951 to 2014 and 2023, of which 3,594 totaling 1,868,457 feet (ft) of drilling are contained in the drilling database provided to SLR.
- In the QP's opinion, the drill hole logging and sampling procedures meet industry standards and are adequate for Mineral Resource estimation. The QP is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.
- The QP reviewed and verified the resource database including a search for unique missing, and overlapping intervals, a total depth comparison, duplicate holes, property boundary limits, and verifying the reliability of the % eU₃O₈ grade conversion as determined by downhole gamma logging. No limitations were placed on SLR's data verification process.
- Mineral Resources have been classified in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves dated May 10, 2014 (CIM (2014) definitions), The QP considers that the knowledge of the deposit setting, lithologies, structural controls on mineralization, and the mineralization style and setting, is sufficient to support the Mineral Resource Estimate (MRE) to the level of classification assigned.
- The QP considers that the resource cut-off grade and mining shapes used to identify those portions of the Mineral Resource that meet the requirement for the reasonable prospects for eventual economic extraction (RPEEE) to be appropriate for this style of uranium deposit and mineralization.
- Mineral Resource estimate is based on a \$80/lb uranium price using an underground mining cut-off grade of 0.072% eU₃O₈ and an open pit mining cut-off grade of 0.024% eU₃O₈, with an effective date of April 30, 2024. Estimates account for depletion from past production having an Indicated Mineral Resource totaling 6.6 million short tons at an



average grade of 0.14% eU₃O₈ equivalent to 18.6 million pounds of eU₃O₈ and an Inferred Mineral Resource totaling 2.6 million short tons at an average grade of 0.10% eU₃O₈ equivalent of 4.9 million pounds eU₃O₈.

- Mineral Reserves have not yet been estimated for the Project.
- The mineralized horizons of the Jackpile sandstone are open ended and trend beyond the external limits of the drill hole grid. Potential exists to extend mineralization into previously untested areas of the Project, where this mineralized zone is present but not drill tested in a comprehensive manner.
 - The exploration potential to increase total resources and upgrade Inferred material to Indicated remains strong throughout Cebolleta with: (1) the completion of infill drilling along currently mapped uranium mineralization, and (2) obtaining radiometric logs and uranium grade information from the Willie P area, which is not included in this MRE but was the site of previous underground mine operations occurring between 1975 to 1979.
- The level of uncertainty has been adequately reflected in the classification of Mineral Resources for the Project. The MRE presented may be materially impacted by any future changes in the break-even cut-off grade, which may result from changes in mining method selection, mining costs, processing recoveries and costs, metal price fluctuations, or significant changes in geological knowledge.
- In the opinion of the QP, the resource estimation reported herein is an appropriate representation of the % eU₃O₈ Mineral Resources found at the Cebolleta Project at the current level of sampling. The QP is of the opinion that with consideration of the recommendations summarized in Sections 1 and 26 of this Technical Report, any issues relating to all relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.



26.0 Recommendations

AMPS has proposed a two Phase (two year) exploration program with a total budget of US\$4,375,000 to advance the Project, beginning in 2024 (Table 26-1). The QP has reviewed the 2024 to 2025 drilling program proposed by AMPS and is of the opinion that it is a reasonable approach to the advancement of the Project. The objectives of the drill program are summarized below:

- 1 Explore for additional Mineral Resources on the property to further improve Project economics.
- 2 Collect additional bulk density and chemical assays in future drilling conducted on the Project to confirm historical reported density and radiometric equilibrium results.
- 3 Update the MRE with additional drill hole data and complete a NI 43-101 Preliminary Economic Assessment (PEA).

Table 26-1: Proposed Cebolleta 2024 and 2025 Exploration Budget

Category	Item	Budget (US\$)
2024 Phase 1		
Confirmation Drilling	Drilling up to 14 locations with a principal objective of evaluating historical data using downhole radiometric gamma surveys and geochemical and bulk density analysis of core samples.	\$490,000.00
Exploration Drilling	Drilling at up to 65 locations for extension drilling and resource expansion.	\$2,125,000.00
Total Phase 1		\$2,615,000.00
2025 Phase 2		
Confirmation Drilling	Drilling up to 11 locations with a principal objective of evaluating historical data using downhole radiometric gamma surveys and geochemical and bulk density analysis of core samples.	\$385,000.00
Exploration Drilling	Drilling at up to 35 locations for extension drilling and resource expansion.	\$1,125,000.00
PEA and MRE Update	NI 43-101 Preliminary Economic Assessment and updated Mineral Resource Estimate	\$250,000.00
Total Phase 2		\$1,760,000.00
Grand Total		\$4,375,000.00



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28.0 Date and Signature Date

This report titled “Technical Report on the Cebolleta Uranium Project, Cibola County, New Mexico, USA” with an effective date of April 30, 2024 was prepared and signed by the following authors:

(Signed and Sealed) *Mark B. Mathisen*

Dated at Lakewood, CO
June 17, 2024

Mark B. Mathisen, C.P.G.

(Signed and Sealed) *Hugo M. Miranda*

Dated at Lakewood, CO
June 17, 2024

Hugo M. Miranda, M.Eng., MBA, SME (RM).



29.0 Certificate of Qualified Person

29.1 Mark B. Mathisen

I, Mark B. Mathisen, C.P.G., as an author of this report entitled "Technical Report on the Cebolleta Uranium Project, Cibola County, New Mexico, USA" with an effective date of April 30, 2024, prepared for Premier American Uranium Inc. (AMPS) and Premier American Uranium Inc. (PUR), do hereby certify that:

1. I am Principal Geologist with SLR International Corporation, of Suite 100, 1658 Cole Boulevard, Lakewood, CO, USA 80401.
2. I am a graduate of Colorado School of Mines in 1984 with a B.Sc. degree in Geophysical Engineering.
3. I am a Registered Professional Geologist in the State of Wyoming (No. PG-2821), a Certified Professional Geologist with the American Institute of Professional Geologists (No. CPG-11648), and a Registered Member of SME (RM #04156896). I have worked as a geologist for a total of 23 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Mineral Resource estimation and preparation of NI 43-101 Technical Reports.
 - Director, Project Resources, with Denison Mines Corp., responsible for resource evaluation and reporting for uranium projects in the USA, Canada, Africa, and Mongolia.
 - Project Geologist with Energy Fuels Nuclear, Inc., responsible for planning and direction of field activities and project development for an in situ leach uranium project in the USA. Cost analysis software development.
 - Design and direction of geophysical programs for US and international base metal and gold exploration joint venture programs.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Cebolleta Uranium Project on September 11-13, 2023.
6. I am responsible for all sections of this Technical Report excluding Sections 14.11.1.1 through 14.11.1.3 and 14.11.1.6.
7. I am independent of each of AMPS and PUR applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 17th day of June, 2024,

(Signed and Sealed) *Mark B. Mathisen*

Mark B. Mathisen, C.P.G.



29.2 Hugo M. Miranda

I, Hugo M. Miranda, SME(RM), as an author of this report entitled “Technical Report on the Cebolleta Uranium Project, Cibola County, New Mexico, USA” with an effective date of April 30, 2024, prepared for Premier American Uranium Inc. (AMPS) and Premier American Uranium Inc. (PUR), do hereby certify that:

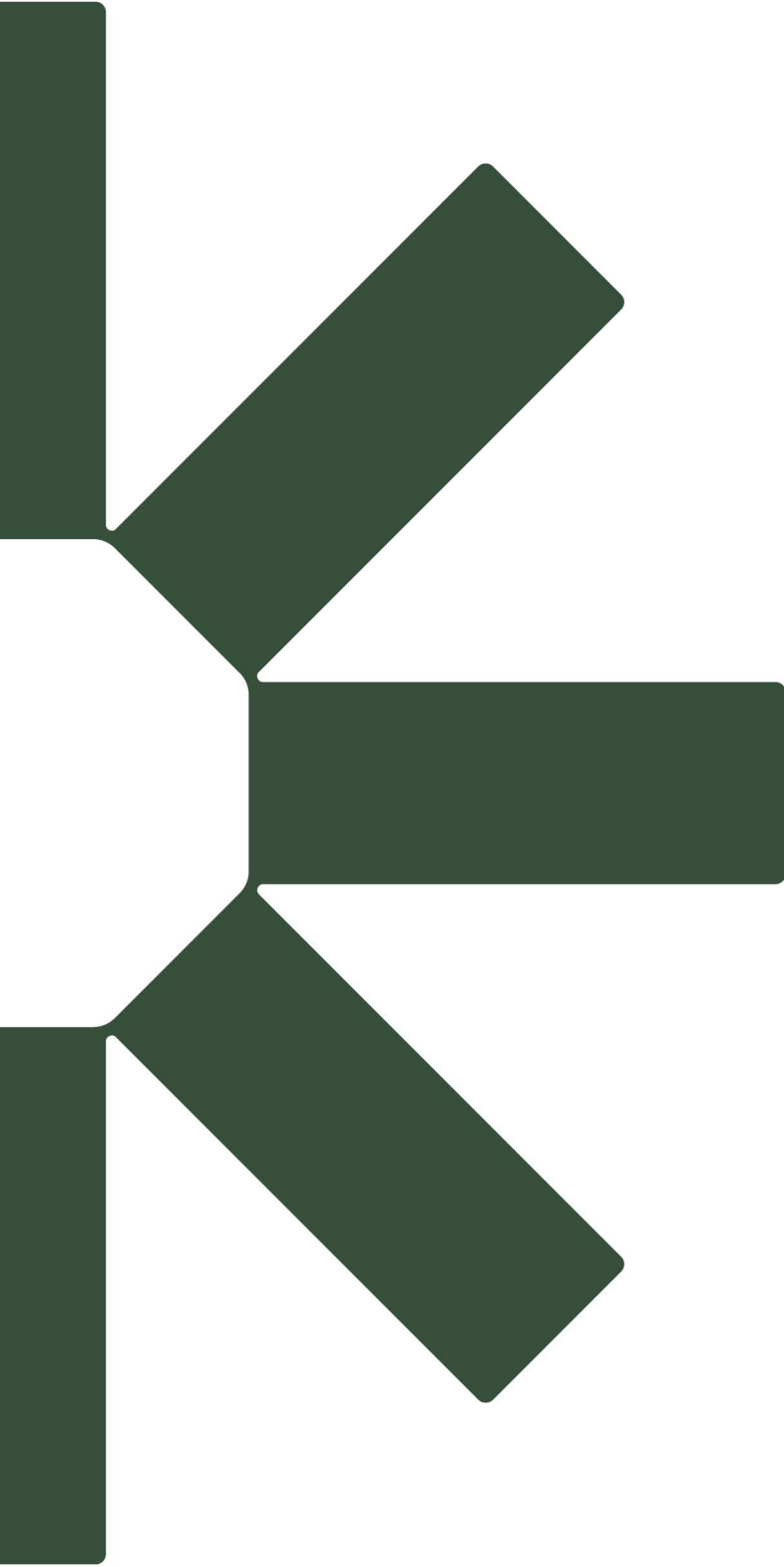
1. I am a Principal Mining Engineer with SLR International Corporation, of Suite 100, 1658 Cole Boulevard, Lakewood, CO, USA 80401.
2. I am a graduate of Santiago University, Chile, in 1993 with a Bachelor of Science degree in Mining Engineering, and in 2004 with a Master of Business Administration degree.
3. I am a Registered Member of the Society for Mining, Metallurgy & Exploration (Reg.# 4149165). I have worked as a mining engineer for over 25 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Principal Mining Engineer – RPA, Colorado. Review and report as a consultant on mining projects and operations, including mine plan and pit optimization, pit design, and economic evaluation.
 - Principal Mining Consultant – Pincock, Allen, and Holt, Colorado. Review and report as a consultant on numerous development and production mining projects.
 - Project Manager for an open pit prefeasibility study with underground mining influences, El Teniente Mine, CODELCO, Chile.
 - Mine Planning Chief, El Tesoro Open Pit Mine - Antofagasta Minerals, Chile.
 - Open Pit Planning Engineer, Radomiro Tomic Mine and Andina Mine, CODELCO, Chile.
 - Underground Cost Engineer and Production Foreman, Andina Mine, CODELCO, Chile.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I have not visited the Cebolleta Uranium Project.
6. I am responsible for Sections 14.11.1.1 through 14.11.1.3 and 14.11.1.6 of the Technical Report.
7. I am independent of each of AMPS and PUR applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 17th day of June, 2024,

(Signed and Sealed) Hugo M Miranda

Hugo M. Miranda, SME(RM)





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