Mesteña Grande Uranium Project
Brooks and Jim Hogg Counties, Texas, USA

National Instrument 43-101
Preliminary Economic Assessment

Effective Date: December 31, 2024
Report Date: February 19, 2025

Prepared for enCore Energy Corporation by:

Stuart Bryan Soliz, PG, Registered Member of SME

Table of Contents

Tables

Figures

Units of Measure and Abbreviations

Avg .... Average

° .... Degrees

feet...................................... Feet

ft^3 .... Feet Cube

°F .... Fahrenheit

g/L.. Grams per liter

GT.. Mineralization Grade times (x) Mineralization Thickness

gpm...................................... Gallons per minute

kWh .... Kilo Watt Hour

Lbs .... Pounds

M.. Million

Ma.. One Million Years

mg/l .... Milligrams per liter

Mi .... Mile

ml .... Milliliter

MBTUH................................. Million British Thermal Units per Hour

U_3O_8..................................... Chemical formula used to express natural form of uranium

eU_3O_8................................... Radiometric equivalent U_3O_8 measured by a calibrated total gamma downhole probe

pCi/L .... Picocuries per liter of air

pH .... Potential of hydrogen

ppm...................................... Parts per Million

% .... Percent

+/- .... Plus, or Minus

USD .... United States Dollar

Definitions and Abbreviations

BRS	BRS Engineering
CIM	Canadian Institute of Mining
Cogema	Compagnie Générale des Matières Nucléaires
CO	County
D&D	Decontamination and Decommissioning
DDW	Deep Disposal Well
DEF	Disequilibrium Factor
ELI	Energy Laboratories Incorporated
enCore	enCore Energy Corporation
Energy Fuels	Energy Fuels Resources Incorporated
Energy Metals	Energy Metals Corporation
EPA	Environmental Protection Agency
FC	Flood Control
FM	Farm to Market
GEIS	Generic Environmental Impact Statement
Goliad	Goliad Formation
FSEIS	Final Supplemental Environmental Impact Statement
ISD	Independent School District
ISR	In Situ Recovery
IX	Ion Exchange
LLC	Limited Liability Company
LOM	Life of Mine
MBTUH	Million British Thermal Units per Hour
MCL	Maximum Contaminant Level
MSL	Mean Sea Level
Mesteña	Mesteña Uranium Limited Liability Company
NI 43-101	National Instrument 43-101 – Standards of Disclosure for Mineral Projects
NI 43-101F1	Form 43-101 Technical Report Table of Contents
NPV	Net Present Value
NRC	Nuclear Regulatory Commission

PAA .... Production Area Authorization

PFN .... Prompt Fission Neutron

Project .... Alta Mesa ISR Project

PV... Pore volume

QP .... Qualified Person

RIX.. Remote Ion Exchange

RO .... Reverse Osmosis

SOP .... Standard Operating Procedure

SP... Spontaneous Potential

TCEQ.................................... Texas Commission on Environmental Quality

TDH .... Texas Department of Health

Total Minerals .... Total Minerals Incorporated

TSX....................................... Toronto Stock Exchange

U .... Uranium

URI .... Uranium Resources Incorporated

US... United States

USDW.................................. Underground Source of Drinking Water

USGS .... United States Geological Survey

11.e.(2) .... Tailings or wastes produced by the extraction or concentration of uranium from processed ore

1.0 SUMMARY

1.1 Property Description and Ownership

The Project is an ISR uranium project located in south Texas. The Project lies within the southern part of the South Texas Uranium Province. Uranium deposits in the South Texas Uranium Province extend from Starr County at the international border with Mexico northeastward through Zapata, Jim Hogg, Brooks, Webb, Duval, Kleberg, McMullen, Live Oak, Bee, Atascosa, Karnes, Wilson, Goliad, and Gonzales counties.

Part of enCore's operational plan is to mine uranium from satellite properties processing IX resin at one of the company's CPPs. At the Alta Mesa Project, enCore has an active mine and CPP. Portions of the Project are located adjacent to the south and to the north of the Alta Mesa Project, with other parts located as much as 50 miles northwest of the CPP. enCore plans to develop and advance the Project and process uranium at Alta Mesa.

The Project is located entirely within private land holdings of the Jones Ranch. The Jones Ranch is an approximately 380,000-acre ranch that was founded in 1897, and enCore controls over 200,000 of the 380,000 acres with mineral leases and options for uranium exploration and development.

Mineral leases and options include provisions for reasonable use of the land surface. Surface use agreements have also been entered into with all surface owners and provide, amongst other things, for stipulated damages to be for certain activities related to the exploration and production of uranium. Royalty agreements are established with mineral and surface owners, and surface owners are also paid an annual surface holding rental.

1.2 Geology and Mineralization

The Texas Gulf Coast comprises the western flank of the Gulf of Mexico sedimentary basin with active deposition throughout the mid to late Mesozoic Era and into the Cenozoic Era. Deposition is dominated by clastic sediments transported from continental highlands into the Gulf of Mexico basin for a period exceeding 50 million years. These sediments were transported to the coast by rivers and deposited in a variety of fluvial to marine depositional environments.

Structurally the Texas Gulf Coast consists of three regions, the Rio Grande Embayment, the San Marcos Arch, and the Houston Embayment. Other structural features found in the Texas Gulf Coast include the Stuart City and Sligo Shelf Margins, and the Wilcox, Frio, and Vicksburg Fault Zones.

The San Marcos Arch is a broad gently sloping positive structural feature extending from the Llano Uplift in Central Texas to the Gulf Coast during the Ouachita Orogeny. The Rio Grande and Houston Embayment's are thought to have resulted from subsidence induced by high rates of sedimentation (Dodge and Posey, 1981).

The Tertiary sediments deposited in the Rio Grande and Houston Embayment's are characterized by deltaic sands and shales. High rates of clastic deposition resulted in the formation of normal listric growth faults. Constant sediment loading and coastal subsidence into the basin led to the accumulation of over 50,000 feet of Cenozoic strata into the Gulf Coast Basin.

Jurassic salt and younger shale diapirs are also present in the subsurface along the Gulf Coastal

Plain. The displacement of shale and salt is generated by the accumulation of an excessive thickness of overburden sediment causing plastic flow of the more ductile sediments. The resulting structures may cause local faulting and/or dip reversal along with the formation of domes and anticlinal structures.

Within the South Texas Uranium Province, uranium mineralization occurs primarily in the Cenozoic sediments of the Miocene/Pliocene Goliad Formation, Miocene Oakville Formation, Oligocene/Miocene Catahoula Formation, and the Eocene Jackson Group. Project deposits occur in the Goliad Formation which is a major fluvial system that represents a low to moderate energy environment composed of isolated mixed-load channel-fill sands separated by thick inter-channel clays.

Uranium deposits are roll-fronts, typical to others found in the South Texas Uranium Province. Deposit genesis is related to the presence of highly reduced groundwater systems generated from the biogenic decomposition of natural gas and/or hydrogen sulfide seepage derived from deeper formations through localized faulting. At Alta Mesa, uranium bearing groundwater moved from northwest to southeast within the Goliad Formation and encountered reduction zones associated with the Vicksburg fault system and the Alta Mesa salt dome and associated faulting which allowed the introduction of organics and other fluids upward through faults and fractures. At Mesteña Grande, uranium mineralization occurs in numerous locations within the Goliad, Oakville, and Catahoula Formations and is formed in much the same way as at Alta Mesa. Uranium bearing groundwater within each of these formations encountered reduction within the groundwater associated with major growth fault systems within the region.

The deposits at Mesteña Grande are characterized by vertically stacked roll-fronts controlled by stratigraphic heterogeneity, host lithology, permeability, reductant type and concentration, and groundwater geochemistry. Individual known roll-fronts may be few tens of feet wide, 2 to 10 feet thick, and often thousands of feet long. Collectively, roll-fronts are inferred to result in an overall deposit that is up to a few hundred feet wide, 50 to 75 feet thick and continuous for miles in length.

1.3 Exploration Status

The Mesteña Grande deposits were discovered by Mesteña Uranium, LLC in 2006. Prior to enCore's acquisition, 420 exploration holes had been drilled on the Project.

1.4 Project Development

In February 2023, enCore completed acquisition of the Project from Energy Fuels. enCore did conduct a drilling program in 2024. Drilling started in June and was ongoing through year-end. Both greenfield and brownfield programs were conducted targeting the Catahoula, Oakville, Lagarto and Goliad formations. The objectives of the program were to establish a stratigraphic framework across the property, identification of regional and local fault zones and salt structures over the 35-mile x 30-mile project area.

As of December 31, 2024, enCore drilled forty-one (41) holes for total footage of 49,850 feet. Hole depths range from 700 to 1,550 feet, with an average drill depth of approximately 1,216 feet.

1.5 Mineral Resource Estimates

A summary of the Project's mineral resources is provided in Table 1.1.

Table 1.1: Mineral Resources Summary

Category	Tons (x 1,000)	Avg Grade (%) U_3O_8	Total Lbs (x 1000) U_3O_8
Measured	0.0	0.000	0.0
Indicated	0.0	0.000	0.0
Total Measured and Indicated	**0.0**	**0.000**	**0.0**
Inferred	5,852.8	0.119	13,887.9
Total Inferred	**5,852.8**	**0.119**	**13,887.9**

Notes:

1. enCore reports mineral reserves and mineral resources separately. Reported mineral resources do not include mineral reserves.
2. The geological model used is based on geological interpretations on section and plan derived from surface drillhole information.
3. Mineral resources have been estimated using a minimum grade-thickness cut-off of 0.30 feet% U_3O_8.
4. Mineral resources are estimated based on the use of ISR for mineral extraction.
5. Inferred mineral resources are estimated with a level of sampling sufficient to determine geological continuity but less confidence in grade and geological interpretation such that inferred resources cannot be converted to mineral reserves.
6. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

1.6 Cost Estimates and Economic Analysis

The economic assessment is preliminary in nature as all the Project's mineral resources are inferred and inferred mineral resources are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the economics in this report will ever be realized and there is the risk to the project of economic failure.

Estimated capital costs are $108.1 M and includes $13.7 M for processing facilities and $94.4 M for sustained wellfield development.

Operating costs are estimated to be $25.49 per pound of U_3O_8. The basis for operating costs is planned development, production sequence, production quantity, and past production experience. Operating costs include plant and wellfield operations, product transactions, administrative support, decontamination and decommissioning, and restoration.

Taxes, royalties, and other interests are applicable to production and revenue. Total Federal income tax is estimated at $90.1 M for a cost per pound U_3O_8 of $10.82. The state of Texas does not impose a corporate income tax, but the Project is subject to property taxes in the form of ad valorem in the amount of $2.5 M or $0.30 per pound of U_3O_8. The project is subject to a cumulative 3.6% surface and mineral royalty at an average LOM sales price of $85.48 per lb. U_3O_8 for $30.0 M or $3.60 per pound.

The economic analysis assumes that 60% of the mineral resources are recoverable. The pre-tax net cash flow incorporates estimated sales revenue from recoverable uranium, less costs for surface and mineral royalties, property tax, plant and wellfield operations, product transactions, administrative support, D&D and restoration. The after-tax analysis includes the above information plus depreciated plant and wellfield capital costs, to estimate federal income tax.

Less federal tax, the Project's cash flow is estimated at $366.6 M or $41.48 per pound U_3O_8. Using an 8% discount rate, the Project's NPV is $205.8 M. The Projects after tax cash flow is estimated at $276.5 M for a cost per pound U_3O_8 of $53.18. Using an 8.0% discount rate, the Projects NPV is $154.4 M.

1.7 Conclusions and Recommendations

Based on the quality and quantity of geologic data, stringent adherence to geologic evaluation procedures and thorough geological interpretative work, deposit modeling, resource estimation methods, quality and quantity of cost inputs, and an economic analysis, the QP responsible for this report considers that the current mineral resource estimates are relevant and reliable to evaluate the Project's economic potential.

As with any mining property there are risks and the key risk to the Project is with respect to the quantity of mineral resources that can be converted to mineral reserves.

When assessing the Project's scientific, technical and economic potential, it is important to consider the size and continuity of the Project's land position, like geologic setting and proximity to the Alta Mesa Project. No other ISR uranium property in the United States has a land position with these characteristics as well as the amount of geologic evidence to imply geological and grade continuity over such a large area.

To de-risk the project by increasing the quantity of mineral resources that can be converted to mineral reserves, it is recommended that enCore mitigate risk to ensure economics in the report are realized by:

- Continue drilling campaign with larger programs verifying the geological and grade continuity of inferred mineral resources and identify new mineralization.
- Drill 400-hole programs using following cost per hole of $12,300, for total program cost of $4.92 M (Table 1.2). It is anticipated that a minimum of 3 programs will be needed to adequately assess the Project to make a go-no-go decision to advance the Project to mine development. Anticipated investment to reach this stage gate is approximately $14.76 M.

Table 1.2: Drilling Costs

Item	Quantity	Unit Cost		Total	
Drilling	1,000 ft	$	8.00	$	8,000
Muds & Polymers	1,000 ft	$	0.67	$	670
Cement Service	each hole	$	600.00	$	600
Cement	each hole	$	200.00	$	600
Drill Bits & Underream Blades	each hole	$	300.00	$	300
Dirt Work & Reclamation	each hole	$	300.00	$	470
Washout	1,000 ft	$	1.65	$	1,650
				$	12,300

- Drill at least one core hole in any new PAAs to confirm deposit mineralogy, the state of uranium secular equilibrium, and uranium content. Coring is estimated to cost $30 K per hole. Analyses, leach testing, and mineralogical work is estimated to be $25 K per hole.

2.0 INTRODUCTION

2.1 Issuer

SOLA Project Services LLC. was retained by enCore to independently review and update the Project's 2023 technical report and prepare this report. enCore Energy Corporation is incorporated in British Columbia, Canada and its subsidiary, enCore Energy US Corporation is a US-based uranium exploration and development company with projects located in Texas, Colorado, Utah, Arizona, South Dakota, Wyoming and New Mexico. enCore is listed on the TSX (symbol EU) and the NASDAQ (symbol EU) and is subject to Terms of Reference

2.2 Terms of Reference and Purpose

On behalf of enCore, in 2023, NI 43-101 Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg Counties, Texas, USA was prepared by BRS Engineering with effective date of January 19, 2023 (ref., BRS Engineering 2023). The 2023 report was an update to previous Project BRS technical reports.

Since that writing, enCore has commenced development activities at the Project and has prepared this PEA that includes an economic analysis of the potential viability of mineral resources. The PEA is preliminary in nature and is based solely on inferred mineral resources. Inferred resources are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

The basis for the report is Project's technical and scientific information. Due to the speculative nature of inferred mineral resources, the QP has qualified the LOM resources by reducing the typical ISR mine recovery from 80% to 60%. It is also assumed that technical, scientific and financial information from enCore's Alta Mesa Project is applicable in the assessment of the Project.

The report has an effective date of December 31, 2024, and has been prepared for enCore in accordance with the guidelines set forth under NI 43-101 and NI 43-101F1 for the submission of technical reports on mining by the following individual:

- Stuart Bryan Soliz, P.G., Principal, SOLA Project Services LLC

2.3 Sources of Information and Data

The report has been prepared with internal enCore technical and financial information, as well as data prepared by others. Documents and files used to prepare this report are listed in Section 27 REFERENCES.

2.4 Personal Inspection

Stuart Bryan Soliz is the QP responsible for the content of this report. He visited the Project on January 7, 2025. The purpose of the visit was to inspect the site and to meet with the enCore team to review current work and project development plans.

3.0 RELIANCE ON OTHER EXPERTS

The QP has relied upon information provided by enCore regarding, legal, environmental and tax matters relevant to the technical report, as noted in Table 3.1.

Table 3.1: Reliance on Other Experts

Source	Category	Document	Section
Paul Goranson (enCore Chief Executive Officer)	Legal	Amended and Restated Uranium Solution Mining Lease, June 16, 2016.	4.3.1 Amended and Restated Uranium Solution Mining Lease including royalties
		Amended and Restated Uranium Testing and Lease Option Agreement, June 16, 2016.	4.3.2 discussion of Amended and Restated Uranium Testing Permit and Lease Option Agreement including royalties
		Membership Interest Purchase Agreement, 2004.	4.4 discussion of surface rights

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Description and Location

The Project is an ISR uranium project located in south Texas. The Project forms part of the South Texas Uranium Province. Uranium deposits in the South Texas Uranium Province extend from Starr County at the international border with Mexico northeastward through Zapata, Jim Hogg, Brooks, Webb, Duval, Kleberg, McMullen, Live Oak, Bee, Atascosa, Karnes, Wilson, Goliad, and Gonzales counties. The Project is located within a portion of the private land holdings of the Jones Ranch. The Jones Ranch was founded in 1897 and is comprised of approximately 380,000 acres.

The Project properties includes multiple project areas, including Mesteña Grande North (MGN), Mesteña Grande Central (MGC), Mesteña Grande South (MGS) Mesteña Grande Alta Vista (MGAV), Mesteña Grande El Sordo (MGES), Mesteña Grande North Alta Mesa (MGNAM) and Mesteña Grande South Alta Mesa (MGSAM) project areas. The properties collectively total 194,119 acres. The northwest corner of the Project is adjacent to and extends for about 36 miles north-northwest of the Alta Mesa CPP from Brooks County into Jim Hogg County, Texas. The center point of the Project is at approximately 27.089° North Longitude and 98.501° West Latitude. The project extents cover approximately 30 miles in an east-west direction, and approximately 35 miles in a north-south direction.

Figure 4.1 shows the location of the Project.

Figure 4.1: Project Location Map

4.2 **Mineral Titles**

Mineral ownership in Texas is private estate. Private title to all land in Texas emanates from a grant by the sovereign of the soil (successively, Spain, Mexico, the Republic of Texas, and the state of Texas). By a provision of the Texas Constitution, the state released to the owner of the soil all mines and mineral substances therein. Under the Relinquishment Act of 1919, as subsequently amended, the surface owner is made the agent of the state for the leasing of such lands, and both the surface owner and the state receive a fractional interest in the proceeds of the leasing and production of minerals (https://www.tshaonline.org/handbook/entries/mineral-rights-and-royalties).

The Jones Ranch holdings include private surface and mineral rights for oil and gas and other minerals, including uranium.

4.3 **Royalties, Agreements and Encumbrances**

4.3.1 **Amended and Restated Uranium Solution Mining Lease**

Uranium recovered at the Project will be processed at the Alta Mesa CPP under the current Uranium Solution Mining Lease, as described below.

The Uranium Solution Mining Lease, originally dated June 1, 2004, covers approximately 4,598 acres, out of the "La Mesteñas" Ysidro Garcia Survey, A-218, Brooks County, Texas and the "Las Mesteñas Y Gonzalena" Rafael Garcia Salinas Survey, A-480, Brooks County, Texas. These have been superseded by the Amended and Restated Uranium Solution Mining Lease dated June 16, 2016, as part of the share purchase agreement between enCore and the various holders of the Mesteña project. The Lease now comprises Tract 5 and a portion of Tracts 1, 4, and 6 of "W.W. Jones Subdivision", said tract being out of the "La Mesteña Y Gonzalena" Rafael Garcia Salinas Survey, Abstract N0. 480 and the "La Mesteñas" Ysidro Garcia Survey, Abstract No. 218, Brooks County, Texas. The Lease now covers uranium, thorium, vanadium, molybdenum, other fissionable minerals, and associated minerals and materials under 4,597.67 acres.

The term of the amended lease is fifteen (15) years which commenced on June 16, 2016, or however long as the lessee is continuously engaged in any mining, development, production, processing, treating, restoration, or reclamation operations on the leased premises. The amended lease can be extended by the Lessee for an additional 15 years.

The lease includes provisions for royalty payments on net proceeds, less allowable deductions, received by the Lessee. The royalties range from 3.125 to 7.5% depending on the price received for the uranium. The lease also calls for a royalty on substances produced on adjacent lands but processed on the leased premises. Table 4.1 illustrates royalty details.

Table 4.1: Amended Uranium Solution Mining Lease Royalties

Royalty Holders	Acres	Lessor Royalty	Primary Term
Mesteña Unproven Ltd., Jones Unproven Ltd., Mesteña Proven Ltd. Jones Proven Ltd.	4597.67+/-	7.5% Market value > $95.00/lb. U3O8 6.25% of Market Value > $65/lb. & </= $95/lb. U3O8 3.125% of Market Value </= $65/lb. U3O8	15 years from amendment date with option for additional 15 years or if uranium mining operations continue

4.3.2 Amended and Restated Uranium Testing Permit and Lease Option Agreement

The Uranium Testing Permit and Lease Option Agreement (Table 4.2), originally dated August 1, 2006, covers all land containing mineral potential as identified through exploration efforts and covers uranium, thorium, vanadium, molybdenum, and all other fissionable materials, compounds, solutions, mixtures, and source materials. This agreement has been superseded by the Amended and Restated Uranium Testing and Lease Option Agreement dated June 16, 2016, as part of the share purchase agreement between enCore Energy and the various holders of the Mesteña project. It now covers 195,501 acres.

The term of the amended lease and option agreement is for eight (8) years which commenced on June 16, 2016. The amended lease and option agreement has been extended by the grantee for an additional seven (7) years by certain payments conducted in April 2024. The Lease Option was further amended to extend the lease option period by an additional five (5) years in June 2024.

Table 4.2: Amended and Restated Uranium Testing Permit and Lease Option Agreement Royalties

Royalty Holders	Acres	Lessor Royalty	Primary Term
Mesteña Unproven Ltd., Jones Unproven Ltd., Mesteña Proven Ltd. Jones Proven Ltd.	195,501 +/-	7.5% of Market value > $95.00/lb U3O8 6.25% of Market Value > $65/lb. & </= $95/lb. U3O8 3.125% of Market Value </= $65/lb. U3O8	8 years from amendment date with option for additional 7 years or if uranium mining operations continue

4.4 Surface Rights

The mineral leases and options include provisions for reasonable use of the land surface for the purposes of ISR mining and mineral processing.

Amended surface use agreements have been entered into with all the surface owners on the various prospect areas as part of the Membership Interest Purchase Agreement between Energy Fuels Inc and the various holders of the Mesteña Project. These amended agreements, unchanged from those originally entered into on June 1, 2004, provide, amongst other things, for stipulated damages to be paid for certain activities related to the exploration and production of uranium.

Specifically, the agreements call for US Consumer Price Index (CPI) adjusted payments for the following disturbances: exploratory test holes, development test holes, monitor wells, new roads, and related surface disturbances. The lease also outlines an annual payment schedule for land taken out of agricultural use around the area of a deep disposal well, land otherwise taken out of agricultural use, and pipelines constructed outside of the production area.

Surface rights are expressly stated in the lease and in general provide the lessee with the right to ingress and egress, and the right to use so much of the surface and subsurface of the leased premises as reasonably necessary for ISR mining. Open pit and/or strip mining is prohibited by the lease.

4.5 Royalties, Agreements and Encumbrances

Royalty agreements have been established with mineral and surface owners. Furthermore, surface owners are paid an annual rental to hold the surface on behalf of enCore. Additionally, the agreements also provide for additional charges to the surface owner to cover surface damages and for reduction of husbandry grazing during field operations.

4.6 Environmental Liabilities

For uranium mining operation, financial assurance instruments are held by the state for completed wells, ISR mining, and uranium processing to ensure reclamation and restoration of the affected lands and aquifers in accordance with State regulations and permit requirements.

The amount of the bond is reviewed annually by the TCEQ and adjusted. The cost estimate assumes that the work is accomplished by a third-party contractor and therefore includes contractor overhead and profit. The cash flow calculations include estimates of reclamation and restoration cost performed by enCore and do not include contractor overhead and profit.

4.7 Permitting and Licensing

Permits and licenses that will be required to operate the Project are discussed in Section 20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT.

4.8 Other Significant Factors and Risks

There are no other known factors or risks that may affect access, title or the right or ability to perform work on the property that have not been addressed elsewhere in this report.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

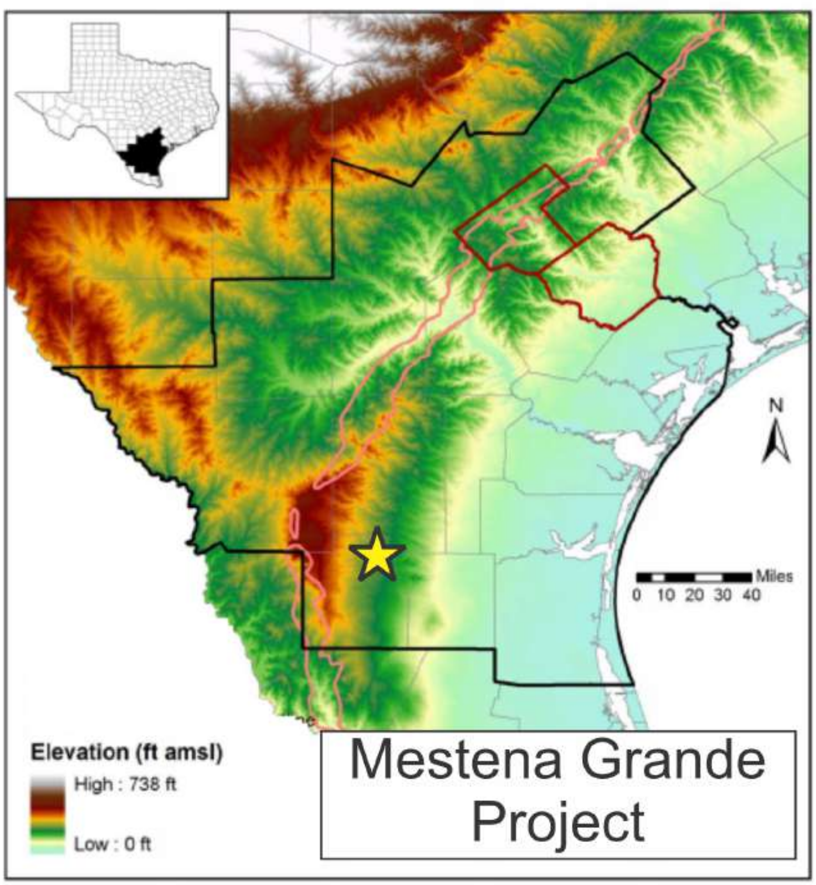
5.1 Access

The Project is accessible year-round from two primary locations: 1) a ranch gate located approximately 5 miles east of Hebbronville, Texas along State Highway 285 (paved); and 2) a ranch gate located approximately 19 miles south of Hebbronville along Farm to Market Road 1017 (paved), as well as from the adjacent the Alta Mesa Project. The Alta Mesa Project location is approximately 11 miles west of the intersection of US Highway 281 (paved) and North Farm to Market Road 755 (paved), 22 miles south of Falfurrias, Texas.

5.2 Physiography

The Project is located on the coastal plain of the Gulf of Mexico. Three major rivers in the region from south to north are: the Rio Grande, the Nueces, and the San Antonio. The Rio Grande flows into the Gulf of Mexico south of the project area. The Nueces River flows into the Corpus Christi Bay, and the San Antonio River flows into San Antonio Bay southeast of Victoria (Nicot, et al 2010). Figure 5.1 shows the general topographic conditions for the Project and region.

Figure 5.1: Topography of the South Texas Uranium Province



5.3 Climate and Vegetation

Overall, the climate in the area is warm and dry, with hot summers and relatively mild winters. However, the region is strongly influenced by its proximity to the Gulf of Mexico and, as a result, has a much more marine-type climate than the rest of Texas, which is more typically continental.

Monthly mean temperatures in the region range from 55°F in January to 96°F in August (Nicot, et al 2010). The area rarely experiences freezing conditions and as a result most of the processing facility and infrastructure is located outdoors, and wellfield piping and distribution lines do not require burial for frost protection.

Annual precipitation ranges from 20 to 35 inches. Primary risk for severe weather is related to thunderstorms and potential effects of Gulf Coast hurricanes.

Regionally, the area is classified as a coastal sand plain. Jim Hogg County comprises 1,152 square miles of brushy mesquite land. The near level to undulating soils are poorly drained, dark and loamy or sandy; isolated dunes are found. In the northeast corner of the county the soils are light-colored and loamy at the surface and clayey beneath. The vegetation, typical of the South Texas Plains, includes live oaks, mesquite, brush, weeds, cacti and grasses. In addition to domestic stock, wildlife is abundant in the area including a variety of reptiles, amphibians, birds, small mammals, and big game (White Tail Deer and exotics).

5.4 Topography and Elevation

The project area is located within the South Texas Plains Ecoregion of Texas (TPWD 2011). Topography in the project area is relatively flat to gently rolling, ranging from approximately 750 feet (northwest) to 250 feet (southeast) above mean sea level.

5.5 Infrastructure

The Project is well supported by nearby towns and services. Larger cities, Corpus Christi, McAllen and Laredo, are each about 100 miles or less from the site and are ready sources of materials and equipment. Major power lines are located across the Project and are accessed for electrical service. The road system is comprehensive and well maintained and used for shipment of materials and equipment.

Human resources are employed from nearby population centers. Numerous local communities provide sources for labor, housing, offices and basic supplies. enCore utilizes local resources when and where possible supporting the local economy.

The site has uranium drill holes and related infrastructure (e.g., small mud pits temporarily constructed to facilitate drill operations and water supply ponds), and trucks and other equipment. Because of the Project's proximity to Alta Mesa, Alta Mesa does serve as a base of operation for, administration, shop and warehouse, environmental support, and logging services.

Water supply for the Project is from established and permitted local wells. Solid waste is disposed off-site at licensed disposal facilities. No tailings or other related waste disposal facilities are needed.

5.6 Land Use

Other land uses and associated infrastructure include, water wells, agricultural stock tanks/ponds, an aircraft landing strip located approximately 4 miles NE of Alta Mesa CPP, cattle/horse ranches, and numerous caliche pits. In addition, agricultural cattle and horse grazing occurs in portions of the Project area and hunting stands and blinds are scattered throughout the area and are connected through a series of roads and senderos.

Oil and gas-related infrastructure on the Project includes oil and gas exploration and production wells, tank batteries, and numerous transmission and gathering pipelines.

5.7 Sufficiency of Surface Rights

The mineral leases and options described in Section 4 include provisions for reasonable use of the land surface for the purposes of mining and mineral processing. There are no significant limitations to surface access and usage rights that will affect the company's ability to conduct exploration, development or operations. Since waste rock and tailings will not be generated there is no requirement for surface mine waste disposal and no requirement for acquiring surface rights for on-site disposal. All 11.e.(2) designated waste will be disposed of at an off-site licensed facility, all non 11.e.(2) waste will be disposed of at a local licensed landfill and fluid byproduct waste will be disposed of by deep injection into a subsurface aquifer using the Projects permitted Class I Non-Hazardous Deep Disposal Wells.

It is the QP's opinion that enCore has sufficient surface rights for mining operations, the availability and sources of power, water, mining personnel, waste disposal, and processing facilities to sustain current and future operations.

6.0 HISTORY

6.1 Ownership

In 1999, Mesteña Uranium LLC was formed by the landowners. Mesteña completed most of the drilling on the adjacent Alta Mesa project and began construction of the Alta Mesa ISR facility in 2004. Production began in the fourth quarter of 2005 and Mesteña operated the facility through February 2013. Due to a downturn in the uranium market, in 2013 the project was put into care and maintenance standby.

Mesteña Uranium, LLC acquired the Mesteña Grande projects in 2006 as an exploration option to provide additional uranium feed to the Alta Mesa plant.

On June 17, 2016, Energy Fuels acquired the Project, including both the Alta Mesa and Mesteña Grande projects.

In November 2022, enCore entered into a Membership Interest Purchase Agreement dated November 14, 2022, with EFR White Canyon Corp., a subsidiary of Energy Fuels, to acquire four limited liability companies that together hold 100% of the Project. Acquisition cost was US$120 million USD payable in a combination of cash and vendor take-back convertible note secured against the assets.

In February, the Company entered a joint venture with Boss Energy, Ltd. to develop and advance the Project. enCore retains ownership of 70% of the project and Boss Energy holds 30%.

6.2 Past Exploration and Development

Uranium was first discovered in Texas via airborne radiometric surveys in 1954 along the northern boundary of the South Texas Uranium Province where host formations outcrop. These initial discoveries led to the development of numerous conventional open pit mines. Subsequent exploration primarily, by drilling, extended mineralization down dip from the outcrop. At Alta Mesa, oil and gas drilling had been ongoing since the 1930's.

The deposits were discovered by Mesteña Uranium, LLC in 2006.

Mesteña Uranium, LLC had access to 3D seismic data developed for oil and gas exploration and used the results of that work as an exploration tool to locate sand channels and define geologic structures. This exploration technique led to the exploration of the Indigo Snake area and to a lesser extent has aided exploration in the Mesteña Grande Central and Mesteña Grande North areas, as well as of the South Alta Mesa property. Limited exploratory drilling was completed in both the South Alta Mesa and North Alta Mesa project areas and a single hole was completed on the Indigo Snake.

Mesteña had access to 3D seismic data developed for oil and gas exploration and used the results of that work as an exploration tool to locate sand channels and define geologic structures. This exploration technique led to the exploration of the Indigo Snake area and to a lesser extent has aided exploration of the South Alta Mesa property. Some exploratory drilling was completed in the South Alta Mesa project area and a single hole was completed on the Indigo Snake.

6.3 Historic Mineral Resource Estimates

There are no historical mineral resources and mineral reserve estimates within the meaning of NI-43-101 to report.

6.4 Historic Production

Uranium has never been produced from the Project.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

7.1.1 Surface Geology

The surface geology of the Texas Gulf Coast is an active sedimentary depositional basin characterized by numerous marine transgressions and regressions. These variations are manifested in the stratigraphic record as facies changes along strike and dip of the coast.

Geologic units outcrop at the surface as relatively broad coast-parallel bands. The relative width of bands reflects the thickness of the stratigraphic units, with broader outcrop bands corresponding to greater stratigraphic thickness. The relative age of the exposures becomes progressively younger toward the present margin of the coast. Strata dip at low angles and thicken toward the coast, except where strata is influenced locally by structural deformation (Mesteña, 2000).

7.1.2 Subsurface Geology

The Texas Gulf Coast is a sedimentary basin with active deposition throughout the Cenozoic Era. Deposition is dominated by clastic sediments transported from highlands in West Texas and northern Mexico. Most of these sediments were transported to the coast by rivers and deposited in a variety of fluvial-deltaic environments.

Structurally the Texas Gulf Coast consists of three regions, the Rio Grande Embayment, the San Marcos Arch, and the Houston Embayment. Other structural features found in the Texas Gulf Coast include the Stuart City and Sligo Shelf Margins, and the Wilcox, Frio, and Vicksburg Fault Zones.

The San Marcos Arch is a broad gently sloping positive structural feature extending from the Llano Uplift in Central Texas to the Gulf Coast during the Ouachita Orogeny. The Rio Grande and Houston Embayment's are thought to have resulted from subsidence induced by high rates of sedimentation (Dodge and Posey, 1981).

The Tertiary sediments deposited in the Rio Grande and Houston Embayment's are characterized by deltaic sands and shales. High rates of clastic deposition resulted in the formation of normal listric growth faults. Deltaic sedimentation combined with growth faulting and continued subsidence have led to the accumulation of up to 40,000 feet of Cenozoic strata in the Gulf Coast Basin.

Salt and shale diapirs are also present in the subsurface along the Gulf Coastal Plain. The displacement of shale and salt is generated by the accumulation of an excessive thickness of overburden sediment causing plastic flow of the more ductile sediments. The resulting structures may cause local faulting and/or dip reversal along with the formation of domes and anticlinal structures.

7.2 Local and Property Geology

7.2.1 Surface Geology

In Jim Hogg County and across the Project area, the Eocene Jackson Group, the Miocene Catahoula and Frio Formations, the Pliocene Goliad Formation and Quaternary windblown deposits outcrop at the surface. In most of the county these units subcrop beneath a blanket of Holocene sediments brought inland by easterly and southeasterly winds. The Miocene age Oakville Formation and Lagarto

Clays do not outcrop in this area. Figure 7.1 is a geologic map of the project area.

7.2.2 **Subsurface Geology**

The deposits are roll-fronts, typical to others found in the South Texas Uranium Province. The ore bodies are isolated within several sand units, which occur within the middle portion of the Goliad Formation.

Genesis of the ore deposits are related to the presence of chemical reductants trapped in the various host formations (Goliad, Oakville, and Catahoula). Reductants are believed to be associated with natural gas and/or hydrogen sulfide seepage from deeper formations through localized faulting.

The significant structural features in the vicinity of Alta Mesa include the Vicksburg Fault and the associated Vicksburg Flexure and Alta Mesa Dome. The Vicksburg Fault is a large-scale, deep-seated growth fault, mainly affecting deeper stratigraphic units. Little, if any, displacement has occurred in Goliad and younger units. Activity on the Vicksburg Fault and related structural features has, however, influenced sedimentation patterns in the Goliad.

The Alta Mesa Dome is a deep-seated, non-piercement shale diapir structure associated with the Vicksburg Flexure. Deformation of the subsurface strata is considerable at depth but at the Goliad level, maximum uplift is on the order of only 100 to 125 feet. The location of the ore deposit closely coincides with the top of the dome at the Goliad stratigraphic level. Domal uplift is believed to have been active but subdued during deposition of the Goliad Formation. The rate of uplift was insufficient to divert fluvial deposition but did limit its extent.

As a result, strata thin over the dome and thicken off the dome. Clay interbeds are more abundant and more continuous over the dome. At the Goliad stratigraphic level, symmetry of the dome is broken on the western and northwestern flanks by a pair of subparallel, normal faults. These appear to be zones of structural failure associated with sporadic reactivation of domal uplift. The throw of these faults is opposite to each other, creating an intervening graben structure. Surface expression of faulting did not occur until after the ore mineralization phase.

Figure 7.2 is a generalized cross section illustrating the stratigraphic, structural and deposit characteristics of the Alta Mesa project area (Collins and Talbott, 2007). The presence and effects of salt domes are also recognized at other uranium deposits such as Palangana (UEC, 2010). Note that the location of the Figure 7.2 cross-section shown is referenced as section line A-A’ on Figure 7.1.

The significant structural features in the vicinity of the Project include the Vicksburg and Midway Fault Zones, along with numerous, regional and local scale growth faults. Analyses of cross-sections indicate significant faulting has occurred during Catahoula and Oakville time, with the degree of faulting lessening upward into Goliad time. Lagarto sediments include thick fluvial sequences of bedload and mixed-load channel systems indicating increased fluvial processes were active during deposition in this region of south Texas.

Fluvial systems within the Catahoula, Oakville, Lagarto, and Goliad sequences all exhibit a significant reduction in energy toward the coast, with sediment size and process complexity decreasing in each to the east.

7.3 Stratigraphy

The Project is part of the South Texas Uranium Province, which is known to contain more than 100 uranium deposits (Nicot, et al., 2010). Within the South Texas Uranium Province, uranium mineralization is primarily hosted in the Miocene/Pliocene Goliad Formation, Miocene Oakville Formation, Oligocene/Miocene Catahoula Formation, and the Eocene Jackson Group, respectively described in the following. Figure 7.3 is a stratigraphic column of the South Texas Uranium Province and Figure 7.4 is a detailed cross section of the project area.

7.3.1 Goliad Formation

The Goliad Formation unconformably overlies the Oakville and Fleming Formation outcropping in the northwest part of Brooks County. In the area, the Goliad ranges in thickness from approximately 400 to 1000 feet thick and consists of fine to medium-grained sands and poorly cemented sandstone (Meyers and Dale, 1967).

The Goliad is divided into three major zones (Basal, Middle and Upper) based on major fluvial regimes. The Lower Goliad is interpreted to represent a fluvial environment of low to moderate energy and is composed primarily of isolated mixed- load channel-fill sands separated by thick inter-channel clays. Basal Goliad sediments consist of bimodal sand and gravel conglomerates with poor bed form development and little sedimentary structure.

Middle Goliad sediments are finer grain and have well developed sedimentary structures and bedforms and contain relic caliche cementation. A slight increase in fluvial energy during the Middle Goliad deposition resulted in an extensive stack of onlapping mixed-load to bed-load channel-fill sands with subordinate amount of interchannel clays. Because stacking and onlapping of sands and claystone is common within the Middle Goliad, detailed distinction of upper and lower boundaries or lettered sand units is somewhat tenuous in places. Tops and bottoms are established at claystone interbeds which are most continuous on a large scale, although locally these may not be the most prominent claystones. Continuity of claystones is generally consistent on top of the dome and within the ore deposit but decreases off the dome where the sand units commonly merge and lose individual identity.

Fluvial energy appears to have fluctuated considerably in the Upper Goliad. Peak fluvial energy levels occurred with the deposition of significant amounts of bed-load channel fill sand and is locally conglomeratic. This change in texture in the upper Goliad Formation indicates decreasing bed load energy, reduced source input, and a change to an arid or semi-arid climate (Hosman, 1996). Figure 7.5 is a type-log for the Project which illustrates the local stratigraphy.

7.3.2 Oakville Formation

The Miocene-age Oakville Formation overlies the Catahoula Formation and represents a major pulse in sediments thought to be due to uplift along the Balcones Fault Zone. The Oakville Sandstone is composed of sediments deposited by several fluvial systems, each of which had distinct textural and mineralogical characteristics (Smith et al., 1982). Together with the overlying Fleming Formation, they comprise a major depositional episode. These two units are commonly grouped because they are both composed of varying amounts of interbedded sand and clay. Average thickness varies from 300 to 700 feet at the outcrop (Galloway et al., 1982), and the formation is thicker in the subsurface (Henry et al., 1982).

Oakville sediments grade into the mixed-load sediments of the Fleming and into the thicker deltaic and barrier systems farther downdip. Sand percentage is high in the paleochannels, whereas finer-grained floodplain deposits are more common in adjacent interchannel environments. Paleosols are not as frequent as in the Catahoula Formation and Jackson Group. Farther downdip the amount of sand increases as the formation thickens, but the sand fraction decreases because of additional mud facies.

Unlike the Jackson Group, Oakville sediments do not contain significant amounts of organic material.

7.3.3 **Catahoula Formation**

The Catahoula Formation unconformably overlies the Oligocene sediments of the Jackson Group. Catahoula sediments are fluvial rather than marine derived and are composed in varying proportions of sands, clays, and volcanic tuff, depending on location. Sediments of the Catahoula Formation reflect a strong volcanic influence, including numerous occurrences of airborne volcanic ash (Galloway 1977).

Thicknesses of strata at the outcrop range from 200 to 1,000 feet and thickens gulfward as is typical of other Gulf Coast sequences. Sand content ranges from <10% to a maximum of about 50% (Galloway, 1977). Sediments in the lower Catahoula Formation are predominantly gray tuff, whereas pink tuffaceous clay is more common in the upper strata, suggesting a change to more humid climatic conditions during deposition. Volcanic conglomerates and sandstone are most common in the midlevel of the unit. Bentonite and opalized clay layers and alteration products of volcanic glass (zeolites, Camontmorillonite, opal, and chalcedony) are present throughout the formation and indicate syndepositional alteration of tuffaceous beds. Widespread areas of calichification indicate long periods of exposure to soil-forming conditions at the surface (McBride et al., 1968).

7.3.4 **Jackson Group**

The Jackson Group is part of a major progradational cycle that also includes the underlying Yegua Formation. The Jackson Group includes, from older to younger, the Caddell, the Wellborn, the Manning, and the Whitsett Formations (Eargle, 1959; Fisher et al., 1970).

Total thickness averages 1,100 feet in the subsurface but becomes thinner in the outcrop area and is characterized by a complex distribution of lagoon, marsh, barrier-island, and associated facies. The lower part of the Jackson Group consists of a basal 100-feet sequence of marine muds (Caddell Formation) overlain by 400 feet of mostly sands: Wellborn / McElroy Formation with the Dilworth Sandstone, Conquista Clay, and Deweesville / Stones Switch (Galloway et al., 1979) Sandstone members toward the top. The middle part consists of 200 to 400 feet of mostly muds (including the Dubose Clay Member). Several sand units are present in the 400- to 500-feet-thick upper section, including the Tordilla / Calliham Sandstone overlain by the Flashing Clay Member.

Units from the Dilworth unit up are grouped under the Whitsett Formation name (Eargle, 1959). Only the latter contains significant amounts of uranium mineralization in the Deweesville and Tortilla sand members. Kreitler et al. (1992, 38 Section 2) provided more details on these units near the Falls City Susquehanna-Western mill. Uranium mineralization occurs where the strike-oriented barrier sand belt intersects the outcrop. Sand is generally fine and heavily bioturbated with burrows and roots and contains lignitic material and silicified wood. Discontinuous lignite beds are also present (Fisher et al., 1970).

Figure 7.1: Geologic Map

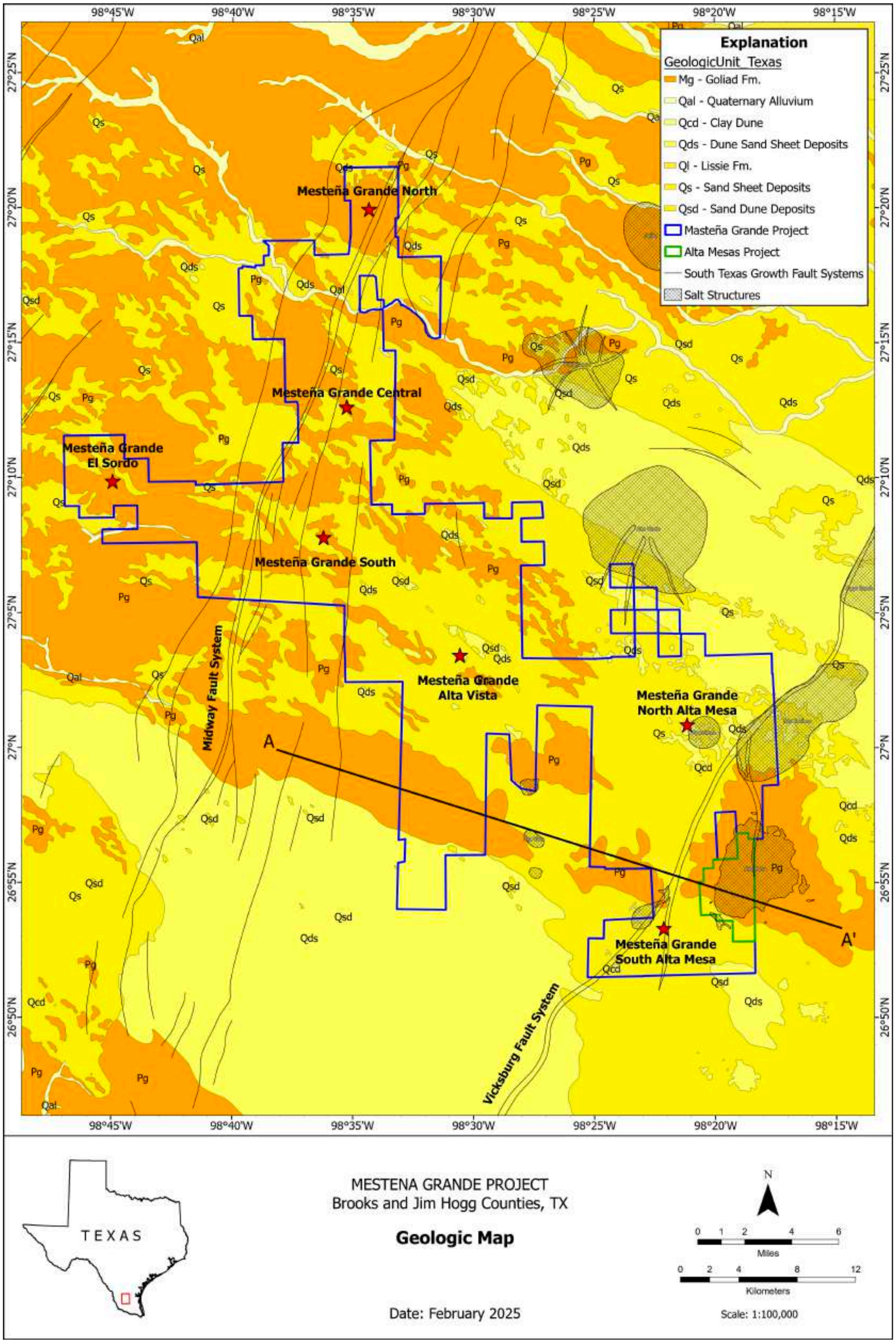


Figure 7.2: Generalized Cross Section

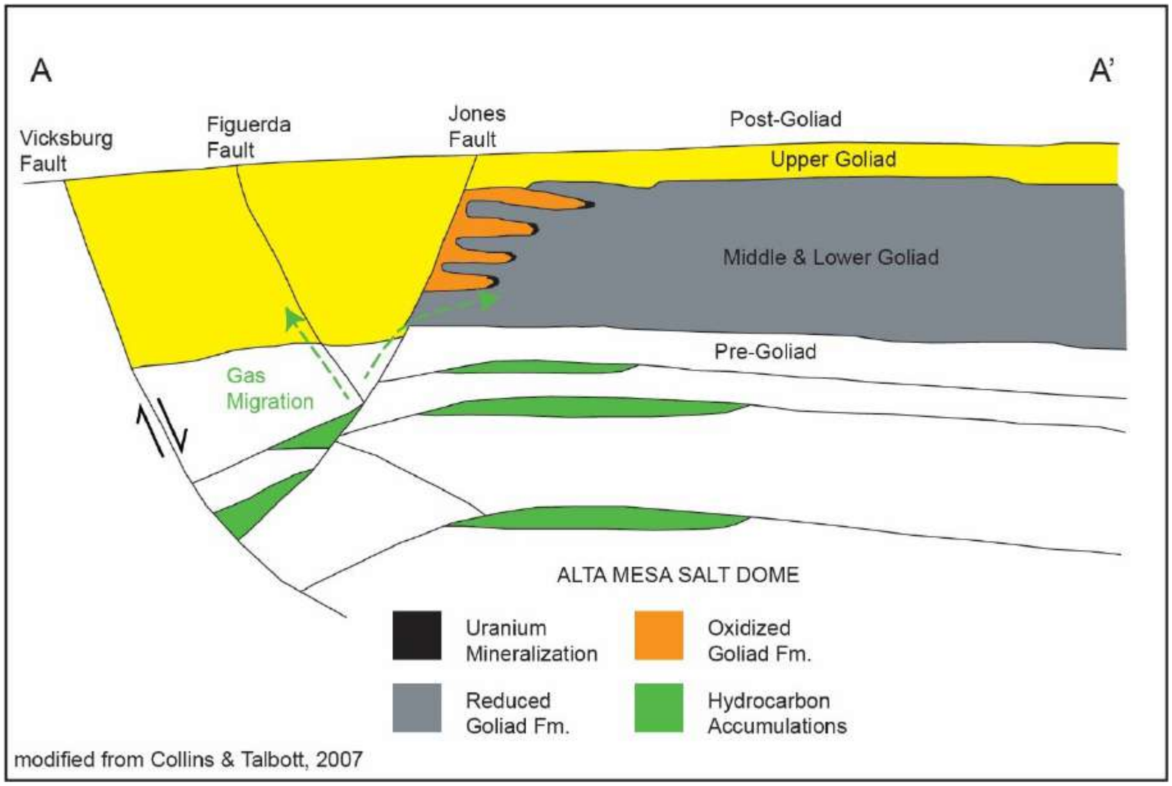


Figure 7.3: Regional Stratigraphic Column

System	Series	Group	Formation	Geologic Unit	Description
QUATERNARY	Holocene			Flood-plain Alluvium	Sand, Gravel, Silt, Clay
QUATERNARY	Holocene			Fluvial Terrace Deposits	Sand, Gravel, Silt, Clay
QUATERNARY	Pleistocene			Plestocene Deweyville Formation, Beaumont Clay, Montgomery Formation, Bentley Formation, and Pliocene (?) Willis Sand	Sand, Gravel, Silt, Clay
TERTIARY	Pliocene			Goliad Sand ★★★	Fine to coarse sand and conglomerate; calcareous clay; basal medium to coarse sandstone. Strongly calichified
TERTIARY	Miocene			Fleming Formation	Calcareous clay and sand
TERTIARY	Miocene			Oakville Sandstone ★★	Calcareous, cross-bedded, coarse sand. Some clay and silt and reworked sand and clay pebbles near base
TERTIARY	Miocene / Oligocene		Catahoula Formation	Chusa Tuff	Calcareous tuff; bentonitic clay; some gravel and varicolored sand near base. Soledad in Duval County, grades into sand lenses in northern Duval and adjacent counties
TERTIARY	Oligocene		Catahoula Formation	Soledad Conglomerate ★	
TERTIARY	Oligocene		Catahoula Formation	Fant Tuff	
TERTIARY	Oligocene			Frio Clay	Light-gray to green clay; local sand-filled channels
TERTIARY	Eocene	Jackson	Whitsett Formation	Fashing Clay	Chiefly clay; some lignite, sand, *Corbicula* coquina, oysters
TERTIARY	Eocene	Jackson	Whitsett Formation	Tordilla Sandstone	Very fine sand
TERTIARY	Eocene	Jackson	Whitsett Formation	Dubose Clay	Silt, sand, clay, lignite
TERTIARY	Eocene	Jackson	Whitsett Formation	Deweesville Sandstone	Mostly fine sand; some carbonaceous silt and clay
TERTIARY	Eocene	Jackson	Whitsett Formation	Conquista Clay	Carbonaceous Clay
TERTIARY	Eocene	Jackson	Whitsett Formation	Dilworth Sandstone	Fine sand, abundant *Ophiomorpha*

★ Host Formations in order of economic importance (Uranium)

Stratigraphic Column - modified from Nicot et al, 2010

Figure 7.4: Detailed Cross Section

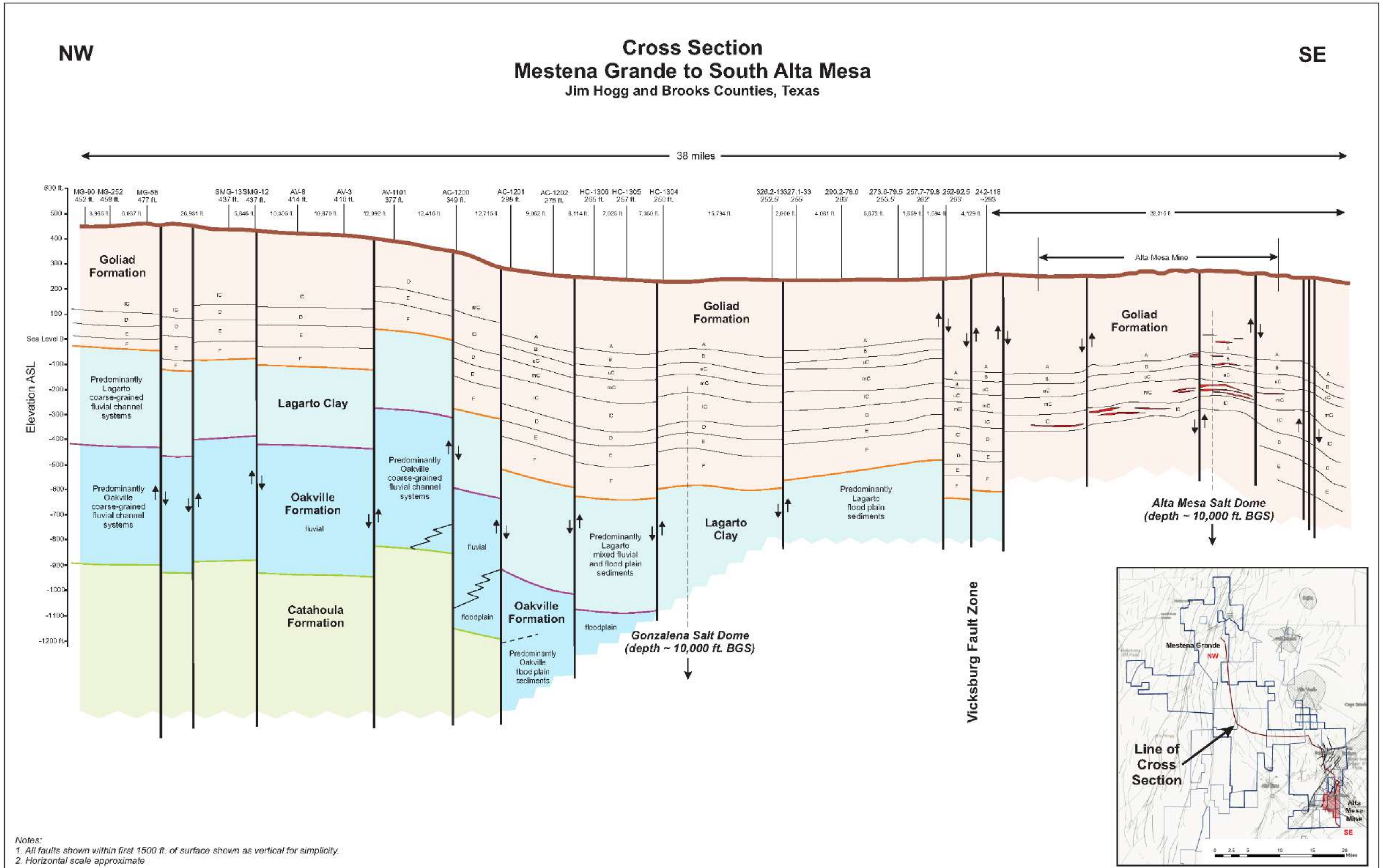
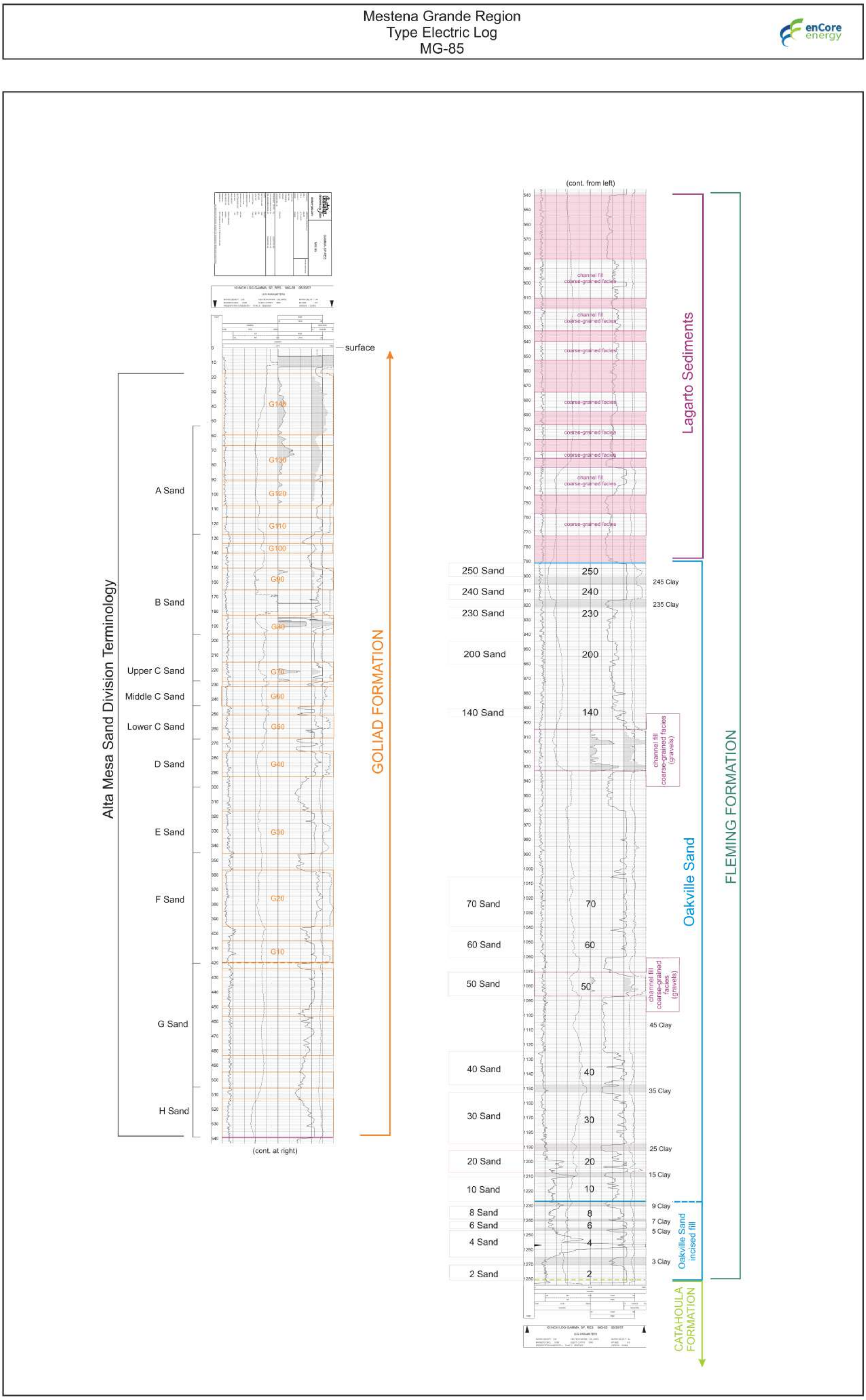


Figure 7.5: Type Log



7.4 Significant Mineralized Zones

7.4.1 Mineralization

Uranium mineralization occurs primarily as uraninite with some coffinite and like other deposits within the South Texas Uranium Province, is stratabound in clay-bounded sandstone packages. Mineralization occurs as roll front type deposits with "C" shaped configurations in cross section and elongated sinuous ribbons in plan-view. Deposits are diagenetic and/or epigenetic forming because of a geochemical process whereby oxidized surface water leaches uranium from source rocks (Finch, 1996). Source rocks of the south Texas deposits are generally agreed to be Miocene and Oligocene age volcanic ash from west Texas and/or Mexico (Galloway et al, 1977 and Aguirre-Diaz and Renne, 2008).

This ash was deposited by wind and fluvial systems and uranium was leached from the ash by oxygenated surface waters. Uranium bearing waters were transported to outcrop areas where sandstone formations were exposed and began to move downdip as groundwater. The movement of uranium continued in groundwater until a reductant source was encountered, such as hydrogen sulfide gas, pyrite or carbonaceous material resulting in uranium precipitating out of solution.

At Alta Mesa, uranium bearing groundwater moved from northwest to southeast and encountered a reduction zone associated with the Alta Mesa oil and gas field, caused primarily by hydrogen sulfide gas introduction through faults and fractures. Mineralization away from the oil and gas field occurs by the same geochemical processes; however, possibly from different reductant source.

The deposits at Mesteña Grande are characterized by vertically stacked roll-fronts controlled by stratigraphic heterogeneity, host lithology, permeability, reductant type and concentration, and groundwater geochemistry. Individual known roll-fronts are a few tens of feet wide, 2 to 10 feet thick, and often thousands of feet long. Collectively, roll-fronts are inferred to result in an overall deposit that is up to a few hundred feet wide, 50 to 75 feet thick and continuous for miles in length.

Depth of known mineralization occurs at various depths, from 400 to over 1,200 feet.

7.5 Relevant Geologic Controls

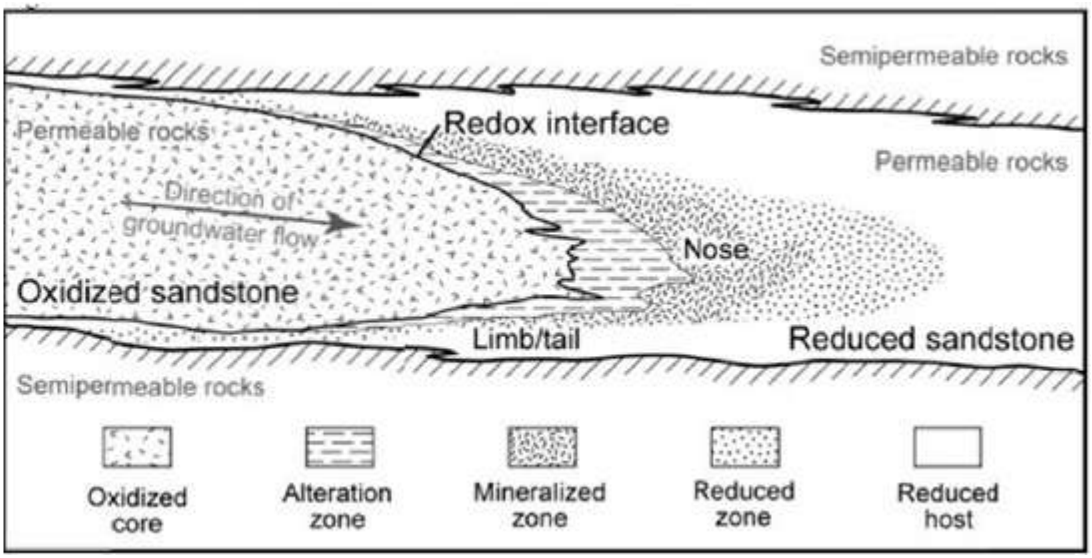
The primary geologic controls for development of the Project's deposit are:

- Miocene and Oligocene volcanic ash uranium source,
- Permeable sandstones within the Goliad, Oakville and Catahoula Formations,
- Groundwater and formation geochemical conditions suitable for uranium transport,
- Reductant source (hydrocarbons, pyrite or carbonaceous materials) within the sandstones to interact with uranium bearing groundwater modifying oxidation/reduction potential of geochemical conditions and precipitation of uranium.

8.0 DEPOSIT TYPE

The deposit type is being investigated and mined are sandstone hosted uranium roll-fronts, as defined in the "World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification", (IAEA, 2009). The geological model being applied in investigation and mining is illustrated in Figure 8.1.

Figure 8.1: Idealized Cross Section of a Sandstone Hosted Uranium Roll-Front Deposit



(Modified from Granger and Warren -1974 and De Voto- 1978)

- A permeable host formation:
  - Sandstone units of the Goliad, Oakville, and Catahoula formations.
- A source of soluble uranium:
  - Volcanic ash-fall tuffs coincidental with Catahoula deposition containing elevated concentration of uranium is the probable source of uranium deposits for the South Texas Uranium Province (Finch, 1996).
- Oxidizing groundwaters to leach and transport the uranium:
  - Groundwaters regionally tend to be oxidizing and slightly alkaline.
- Adequate reductant within the host formation:
  - Conditions resulting from periodic H_2S gas migrating along faults and subsequent iron sulfide (pyrite) precipitation created local reducing conditions.
  - Time sufficient to concentrate the uranium at the oxidation/reduction interface.
  - Uranium precipitates from solution at the oxidation/reduction boundary (REDOX) as uraninite which is dominant (UO_2, uranium oxide) or coffinite ($USiO_4$, uranium silicate).
- The geohydrologic regime of the region has been stable over millions of years with groundwater movement controlled primarily by high-permeability channels within the predominantly sandstone formations of the Tertiary.

9.0 EXPLORATION

enCore has not done any exploration work other than drilling on the Project. Exploration drilling conducted by enCore in discussed in Section 10.0 DRILLING.

10.0 DRILLING

10.1 Exploration and Development Drilling

Drilling is performed by surface drilling vertical holes. Holes are drilled using direct mud rotary drilling system, where drilling fluid is pumped through the drill pipe, drill bit ports, and back to surface between the pipe and borehole wall. Drilling fluid is typically a mix of clean water and industrial materials added to the water to lift cuttings, stabilize hole to prevent sidewall caving and sloughing, and to clean and lubricate the drilling system.

Hole depth is determined by depth of the deepest stratigraphic unit to be investigated. Hole diameter is determined by drill bit and pipe diameter used.

Drill holes are sampled by collection of drill cuttings, downhole geophysics and core. Cuttings are typically collected every 5 feet and assessed for lithology and color. If core is collected, a coring tool is used to drill and sample lithological material without comprising its natural condition. Holes are also logged for downhole geophysical characteristics to assess lithology type, stratigraphic and structural geologic features, and mineralization location and quality. The collar or surface location of each drill hole is surveyed for elevation, latitude and longitude. Since mineralized stratigraphic horizons are nearly horizontal and drill holes are nearly vertical, the mineralization's true thickness is represented in geophysical and core data.

Initial Project exploration was wide spaced drilling at miles or thousands of feet between drill holes. Closer spaced drilling was conducted increasing geologic knowledge and confidence.

Since Project inception, 501 holes have been drilled. See Figure 10.1 Drill Hole Locations.

10.2 Exploration

In 2024, enCore conducted a drilling program on the Project. Drilling started in June and was ongoing at the time of report completion. Both greenfield and brownfield programs were conducted targeting the Catahoula, Oakville, Lagarto and Goliad formations, primarily at central Mesteña Grande, Alta Vista and North Alta Mesa.

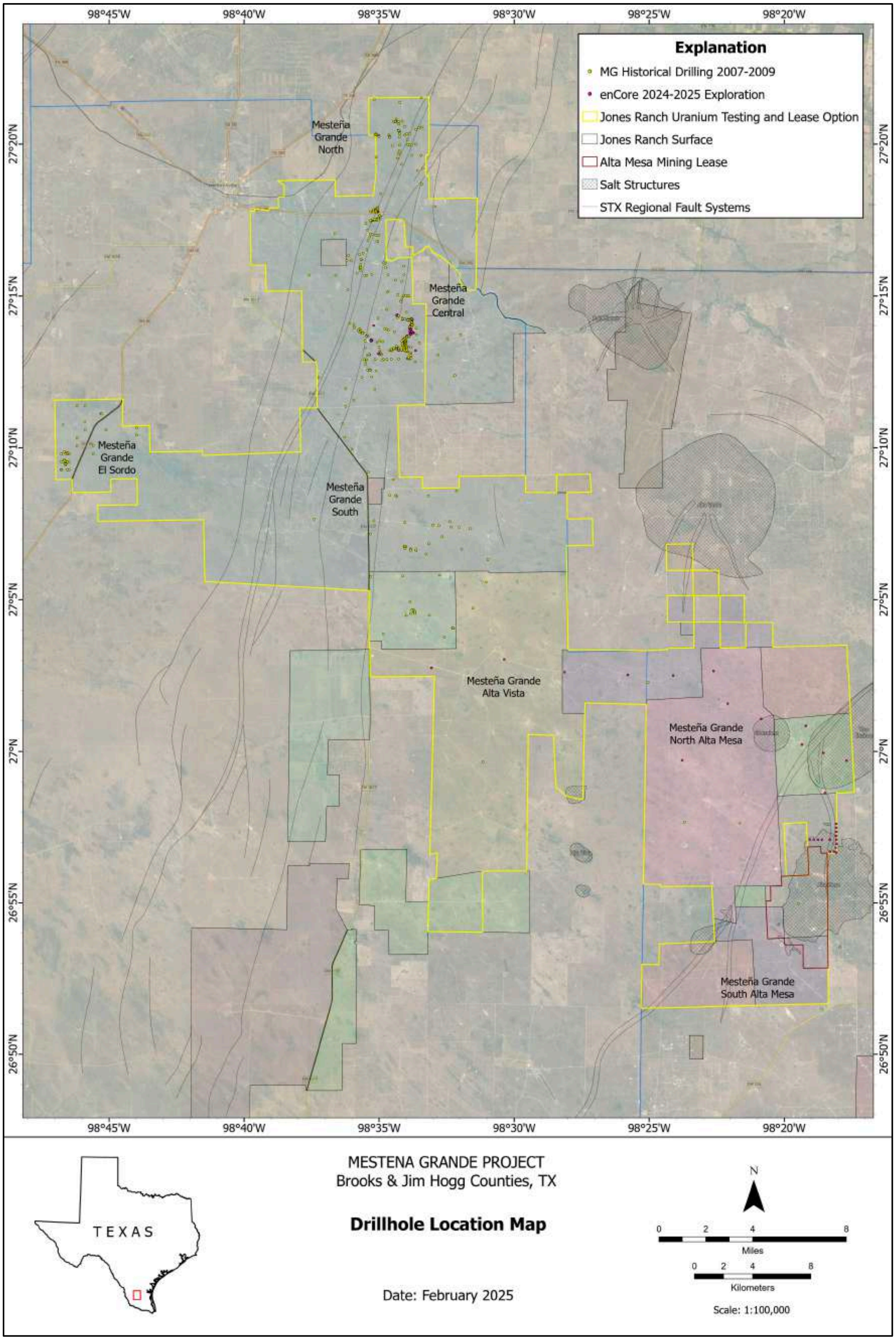
Drilling has been wide spaced with the objective of establishing a stratigraphic framework across the region, identification of regional and local fault zones and salt structures over the 35-mile x 30-mile project area.

As of December 31, 2024, enCore has drilled 41 holes for a total footage of 49,850 feet. Hole depths range from 700 to 1,550 feet, with an average drill depth of approximately 1,216 feet. Drill results are presented in Table 10.1. Drill locations are illustrated on Figure 10.1.

Table 10.1: Drill Results

Hole_ID	Northing	Easting	~Elev	Dev. Ft.	Azimuth°	Drilled TD
AC-1200	500,334	2,010,231	349.5	15.6	99.3	1,300
AC-1201	499,782	2,022,933	298.0	6.0	276.6	1,300
AC-1202	499,676	2,032,035	273.0	18.5	24.0	1,200
AV-1100	501,219	1,983,483	409.0	10.5	25.5	1,550
AV-1101	502,894	1,998,084	377.0	18.7	180.5	1,300
HC-1301	482,754	2,033,857	269.0	3.8	30.4	1,200
HC-1304	491,010	2,049,674	251.0	10.9	191.4	1,000
HC-1305	494,081	2,042,997	257.5	8.9	7.7	900
HC-1306	500,571	2,040,143	265.0	4.9	79.5	900
MG-1008	571,599	1,976,549	452.5	5.4	60.0	1,330
MG-1011	570,551	1,979,625	452.5	14.2	156.4	1,330
MG-1023	568,920	1,979,163	453.0	17.6	264.1	1,325
MG-1024	568,694	1,979,355	455.0	7.3	18.7	1,325
MG-1025	568,645	1,979,403	456.0	6.2	291.3	1,310
MG-1026	568,350	1,979,181	457.0	11.5	9.6	1,320
MG-1027	568,021	1,979,311	463.0	14.5	254.8	1,330
MG-1028	568,013	1,979,226	462.5	11.4	287.7	1,320
MG-1029	567,843	1,979,297	463.5	14.5	321.7	1,330
MG-1030	567,805	1,979,353	464.0	17.2	53.1	1,320
MG-1033	564,490	1,980,351	476.0	8.8	6.1	1,310
MG-1034	569,513	1,971,921	459.5	ND	ND	1,330
MG-1035	568,018	1,979,963	460.0	7.4	94.4	1,340
MG-1036	568,177	1,979,652	460.5	4.8	321.1	1,340
MG-1037	568,093	1,979,797	456.0	11.9	57.9	1,340
MG-1050	566,568	1,971,484	473.5	32.3	49.0	1,330
MG-1051	563,810	1,973,065	455.5	14.0	258.3	1,300
MG-1052	563,892	1,972,855	455.0	10.1	282.0	1,300
MG-1054	568,229	1,979,563	460.0	22.9	98.8	1,340
MG-1055	568,272	1,979,470	459.0	27.1	36.8	1,340
MG-1056	568,263	1,979,509	459.5	50.1	7.3	1,340
TFP-1500	485,908	2,057,950	245.0	17.0	278.6	1,200
TFP-1502	476,201	2,062,547	253.0	10.0	86.2	1,000
TFP-1505	482,725	2,066,912	240.0	4.5	175.7	1,000
TFP-1506	484,259	2,062,263	239.0	5.8	157.6	1,000
TFP-1511	489,676	2,058,679	239.0	7.6	163.9	1,200
TFP-1550	464,319	2,064,853	283.0	17.0	127.2	900
TFP-1553	464,502	2,064,352	282.0	14.4	24.2	700
TFP-1552	465,299	2,064,751	270.0	9.0	62.1	700
TFP-1585	466,096	2,064,918	270.0	8.7	186.3	900
TFP-1586	466,895	2,064,871	272.0	12.1	180.8	900
TFP-1587	467,691	2,064,854	267.0	8.1	120.7	900

Figure 10.1: Drill Hole Locations



10.3 Sampling Methods

Samples are collected from drill holes by collecting drill cuttings, downhole geophysics and core samples, as described in the following.

10.3.1 Drill Cuttings

Drill cuttings are collected at 5-foot intervals while drilling. Samples are arranged on the ground in order of depth to show changes in lithology and color. Lithology and color are recorded on a lithology log for entire hole depth. Particular attention is paid to color in the mineralized sand to assess oxidation/reduction potential. Cuttings are not chemically assayed as drilling mud will contaminate samples and precise sample location or depth cannot be determined from cuttings.

10.3.2 Downhole Geophysical Data

Continuous measurement of downhole geophysical properties is measured from total hole depth to surface. Geophysical data is collected using logging probes equipped with gamma, resistivity, SP, PFN and downhole survey logging tools. This suite of logs is ideal for defining lithologic units in the subsurface. The resistivity and spontaneous potential tools are used to define lithology by qualitative measurements of water conductivities.

The gamma tool provides an indirect measurement of uranium content. Gamma radiation is measured in one-tenth foot intervals and converted to gamma ray readings measured in counts-per-second into %-eU_3O_8. Equivalent percent uranium grades are reported in one-half foot increments.

The PFN tool provides a direct measurement of uranium around the borehole. The pulsed neutron source electronically generates neutrons which cause fission of U^{235} in the formation. Tool detectors count epithermal and thermal neutrons returning from the formation, thereby providing a direct measurement of uranium content within the formation.

Drill holes are also downhole surveyed measuring deviation by azimuth and declination, providing a holes true bottom location and depth.

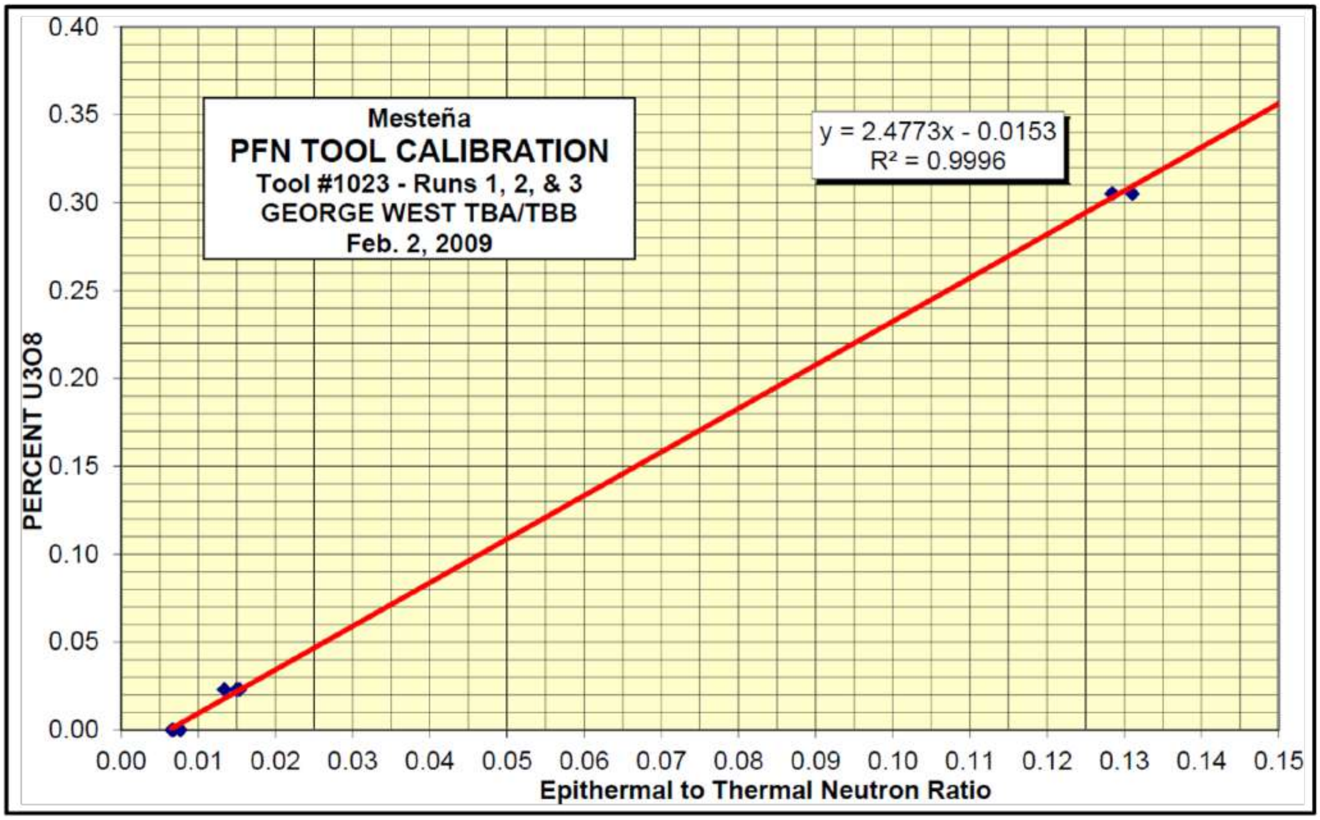
enCore samples all drill holes with gamma, resistivity, spontaneous potential and downhole survey. Due to cost and time, enCore only PFN samples mineralized intervals with gamma measured grades above 0.02 %-eU_3O_8.

To ensure geophysical data quality control, gamma and PFN tools are calibrated at a US Department of Energy test pit in George West, Texas. Tools are also calibrated using onsite test pits at enCore's Kingsville Dome Project. Test pit have known uranium source concentration and using industry calibration procedures tools are calibrated, to ensure consistent measurement and reporting of uranium concentrations from US deposits.

10.3.2.1 PFN Calibration

Figure 10.2 shows a typical calibration curve for the PFN tool.

Figure 10.2: PFN Tool Calibration

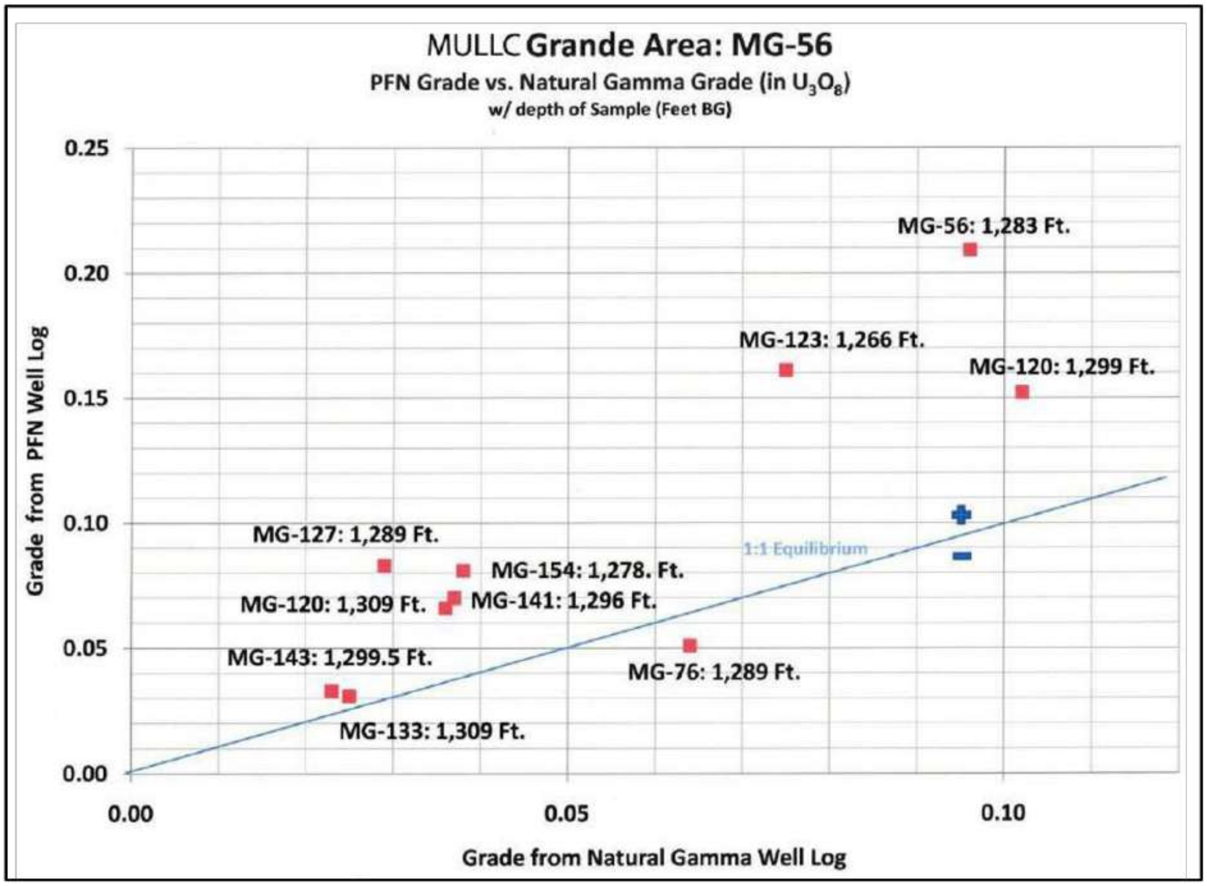


10.3.2.2 Disequilibrium

Radioactive isotopes decay until achieving a stable non-radioactive state. The radioactive decay chain isotopes are referred to as daughters. When decay products are maintained in close association with the primary uranium isotope U^{238} on the order of a 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 due to 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 DEF is determined by comparing radiometric equivalent uranium grade eU_3O_8 to chemical uranium grade. Radiometric equilibrium is represented by a DEF of 1, positive DEF by a factor greater than 1, and negative DEF by a factor of less than 1. Figure 10.3 illustrates the disequilibrium relationship between natural gamma U_3O_8 equivalent and PFN measured grades

Total applied a DEF of 1.13 to mineral resource estimates (Total, 1989). Mesteña used PFN measurements to determine uranium grade. enCore also uses PFN for uranium grade determination.

Figure 10.3: Disequilibrium Graph Natural Gamma vs PFN Grade



10.3.3 **Core Samples**

Core samples are collected to conduct chemical analyses, metallurgical testing, and testing of physical parameters of lithologic units.

Mesteña and Energy Fuels drilled no core, and to date enCore has not collected any core.

10.4 **Drilling and Sampling Reliability**

enCore maintains SOPs for drilling procedures, lithological and geophysical logging, and coring. SOP's were reviewed by the QP, and procedures do align with industry standard drilling practices.

In the 2023 technical report, the author conclude that enCore's drilling practices were conducted in accordance with industry standard procedures and that data was reliable for mineral resource estimation; however, recommended that drill collar locations be surveyed pre and post drilling as an average variance of 6.06 feet was observed between planned and actual drill hole location. It was also the author's opinion that for the purposes of mineral resource estimating data is reliable.

The QP of this report agrees with the 2023 report author, that survey variance between pre and post drill location accuracy should be addressed by post drilling survey, more precise drill rig setup on planned drill location or both. It is also the QP's opinion that for the purposes of mineral resource estimation, data is reliable. Furthermore, it is the QP's opinion that there are no known drilling factors that could materially affect the accuracy and reliability of results.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Samples are collected from drill holes for drill cuttings, downhole geophysics and core samples. Cores are the only samples that are prepared and dispatched to an analytical or testing laboratory. Cuttings and geophysical data are prepared and analyzed in house. Sampling, sample preparation and security are described in the following sections.

11.1 Laboratory Analysis

When core is collected in the field, it is rinsed, measured for length and photographed. One half of the core is sampled in 1-foot increments and either wrapped in plastic or vacuum sealed to maintain moisture content and prevent oxidation, boxed, frozen or iced and transferred to an analytical or testing laboratory.

The other half of core is preserved and used to describe lithologic characteristics (i.e., lithology, color, grain size and fraction).

Core preserved for testing is used for leach amenability determination. Leach amenability studies are intended to demonstrate that the uranium mineralization is capable of being leached and determination of the optimal mining lixiviant chemistry. Typically, sodium bicarbonate is used as the source for a carbonate complexing agent to form uranyldicarbonate (UDC) or uranyltricarbonate ion (UTC), and Oxygen or Hydrogen peroxide are used as the uranium-oxidizing agent. Tests are not designed to approximate in-situ conditions (permeability, porosity, pressure) but are an indication of an ore's reaction rate and potential uranium recovery.

enCore adheres to security measures using Chain of Custody procedures to ensure the validity and integrity of samples through the analysis process. enCore may sample and transfer duplicate samples to assess reliability and precision of analytical results for quality control of sample collection or laboratory analysis procedures.

Core samples are submitted to an analytical or testing laboratory that is certified through the National Environmental Laboratory Accreditation Program, which establishes and promotes mutually acceptable performance standards for the operation of environmental laboratories. The standards address analytical testing, with State and Federal agencies and serve as accrediting authorities with coordination facilitated by the EPA to assure uniformity.

11.2 Opinion on Adequacy

Since enCore's acquisition of the Project, there has been no sampling of natural materials for the assessment of geologic or hydrologic conditions that require preparation, analysis and security to submit samples to a laboratory; however, enCore does have sample preparation, methods of analysis, and sample and data security procedures that meet acceptable industry standards.

With respect to historical sample preparation, analysis and security of other previous operators, this information was not available and cannot be confirmed.

It is the opinion of this QP that there are no known sampling preparation, analysis and security factors that when used will materially affect the accuracy and reliability of results.

12.0 DATA VERIFICATION

The QP visited the site on January 7, 2025, to inspect the site and verify data in the technical report.

12.1 Data Verification

To verify data, the following steps were taken by the QP to review:

- SOPs for drilling procedures, lithological and geophysical logging, and coring,
- Drilling, lithological and geophysical logging in the field,
- Geologists' interpretation of lithology comparing drill cuttings to resistivity and SP geophysical results,
- Raw downhole geophysical data, grade calculations from raw data, and compositing method used to calculate average mineral grade and determine thickness,
- Geologists' interpretation of deposit characteristics from gamma and PFN downhole geophysical data,
- Workflow and data management including collection, processing, interpretation, digital documentation and database storage; and,
- Geophysical calibration records.

12.2 Limitations

Coring was not observed in the field as no coring activities were conducted during the duration of the site visit and no historic core data exists for the Project.

12.3 Data Adequacy

A considerable amount of work has been done by enCore and previous operators to ensure an adequate data set exists for the Project. It is the QP's opinion that the data used in this technical report is adequate for technical reporting.

Based on data quality, efforts of others, and the QP's review, it is the opinion of the QP that there are no known data factors that will materially affect the accuracy and reliability of results.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

enCore has not performed any mineral processing or metallurgical testing for the Project.

14.0 MINERAL RESOURCE ESTIMATES

The classification of mineral resources and their subcategories conforms to the CIM Definition Standards adopted by the CIM on May 10, 2014, which are incorporated by reference in NI 43-101. enCore reports mineral reserves and mineral resources separately. The amount of reported mineral resources does not include those amounts identified as mineral reserves. Mineral resources that are not mineral reserves have no demonstrated economic viability and do not meet the requirement for all the relevant modifying factors. Stated mineral resources are derived from estimated quantities of mineralized material recoverable by ISR methods.

14.1 Key Assumptions, Parameters and Methods

14.1.1 Key Assumptions

- Mineral resources have been estimated based on the use of the ISR extraction method and yellowcake production,
- Price forecast, production costs and an average wellfield recovery of 60% that accounts for dilution from mining hydrologic efficiency and metallurgical recovery, were used to estimate mineral resources.
- Average plant recovery of 98%; and,
- Average LOM uranium price of $85.48 based on TradeTech's Uranium Market Study 2023: Issue 4.

14.1.2 Key Parameters

- The mineral resources estimates are based on data collected from drillholes,
- Grades (% U_3O_8) were obtained from gamma radiometric and PFN probing,
- Average density of 17.0 cubic feet per ton was used, based on historical sample measurements,
- Minimum grade to define mineralized intervals is 0.020% eU_3O_8,
- Minimum mineralized interval thickness is 1.0 feet,
- Minimum GT (Grade x Thickness) cut-off per hole per mineralized interval for grade-thickness contour modeling is 0.30 feet% U_3O_8,
- Mineralized interval with GT values below the 0.30 feet% U_3O_8 GT cut-off is used for model definition but are not included within the mineral resource estimation,
- Average annual production rate of approximately 1.2 M pounds,
- Average annual estimated operating costs of $25.49 per pound,
- Average annual estimated wellfield development costs of $11.33 per pound; and,
- Average annual restoration and reclamation costs of $2.94 per pound.

14.1.3 Key Methods

- Geological interpretation of the orebody was done on section and plan from surface drillhole information,
- The orebody was modeled creating roll-front outlines for each of the deposit's individual mineralized zones; and,
- Geological modeling and mining applications used was ArcGIS Pro.

14.2 Resource Classification

Mineral resources are classified according to the CIM Definition Standards adopted by the CIM on May 10, 2014, which are incorporated by reference in NI 43-101 and categories are denoted as Measured, Indicated and Inferred. The following classification criteria for each resource category are applied for alignment with the CIM Definition Standards for the mineral resources categories.

14.2.1 Measured Mineral Resources

Drilling is denser than 50 x 100 feet spacing for mineralized zones characterized by a uniform and easily correlatable roll-front morphology, from one drilling fence line to another. Mineralization must be continuous between drill fences. The hydrogeological properties of the hosting horizon are studied by aquifer pump tests. The amenability of mineralization to ISR mining is demonstrated by laboratory leach tests. Mineralization is characterized by sufficient confidence in geological interpretation to support detailed wellfield planning and development with no or very little changes expected from additional drilling.

14.2.2 Indicated Mineral Resources

Drilling density equivalent to or denser than 200 x 400 feet spacing for mineralized zones characterized by a uniform and easily correlatable roll-front morphology, from one drilling fence line to another. Mineralization must be continuous between drill fences. The hydrogeological properties of the hosting horizon are studied by aquifer pump tests. The amenability of mineralization to ISR mining is demonstrated by laboratory leach tests. Mineralization is characterized by sufficient confidence in geological interpretation to support wellfield planning and development with some changes expected from additional drilling.

14.2.3 Inferred Mineral Resources

Drilling density equivalent to about 800 feet spacing for mineralized zones characterized by less uniformity and not easily correlatable roll-front morphology, from one drilling fence line to another. Mineralization must be continuous between drill fences but there is less confidence in geologic interpretation. The hydrogeological properties of the hosting horizon are studied by aquifer pump tests. The amenability of mineralization to ISR mining is demonstrated by laboratory leach tests. Mineralization is characterized by insufficient confidence in geological interpretation to support wellfield planning and development due to significant changes expected from additional drilling.

14.3 Mineral Resource Estimates

A summary of the Project's mineral resource estimates is provided in Table 14.1.

Table 14.1: Summary of Mineral Resource Estimates

Category	Tons (x 1,000)	Avg Grade (%) U_3O_8	Total Lbs (x 1000) U_3O_8
Measured	0.0	0.000	0.0
Indicated	0.0	0.000	0.0
Total Measured and Indicated	**0.0**	**0.000**	**0.0**
Inferred	5,852.8	0.119	13,887.9
Total Inferred	**5,852.8**	**0.119**	**13,887.9**

Notes:

1. enCore reports mineral reserves and mineral resources separately. Reported mineral resources do not include mineral reserves.
2. The geological model used is based on geological interpretations on section and plan derived from surface drillhole information.
3. Mineral resources have been estimated using a minimum grade-thickness cut-off of 0.30 feet% U_3O_8.
4. Mineral resources are estimated based on the use of ISR for mineral extraction.
5. Inferred mineral resources are estimated with a level of sampling sufficient to determine geological continuity but less confidence in grade and geological interpretation such that inferred resources cannot be converted to mineral reserves.
6. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

14.4 Material Affects to Mineral Resources

It is the QP's opinion that the quality of data, geological evaluation and modeling are valid for mineral resource estimation. All mineral resources reported are inferred. Inferred resources are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the economics in this report will ever be realized.

Due to the speculative nature of inferred mineral resources, the QP has qualified the LOM resources by reducing the typical ISR mine recovery from 80% to 60%. It is also assumed that technical, scientific and financial information from enCore's Alta Mesa Project is applicable in the assessment of the Project.

To the extent that mineral resources may be impacted by environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors, impacts could result in a material loss or gain to the Project's mineral resources. The QP is not aware of any relevant factors that could materially affect the Project's mineral resource estimates.

15.0 MINERAL RESERVE ESTIMATES

enCore reports mineral reserves and mineral resources separately. The point at which mineral reserves are defined is where mineralization occurs under existing wellfields. No mineral reserves are defined for the Project.

16.0 MINING METHODS

enCore will mine uranium using ISR. An alkaline leach system of carbon dioxide and oxygen is used as the extracting solution. Bicarbonate, resulting from the addition of carbon dioxide to the extracting solution, is the complexing agent. Oxygen is added to oxidize the uranium to a soluble +6 valence state.

ISR has been successfully used for over five decades in the United States as well as in other countries such as Kazakhstan and Australia. ISR mining was developed independently in the 1970s in the former Soviet Union and US for extracting uranium from sandstone hosted uranium deposits that were not suitable for open pit or underground mining. Many sandstones host deposits that are amenable to ISR, which is now a well-established mining method. enCore's Alta Mesa Project is an operating mine that was in production from 2005 to 2013, with resumption of production in 2024, demonstrates that uranium can be mobilized and recovered with an oxygenated carbonate lixiviant.

16.1 Mine Designs and Plans

16.1.1 Wells, Patterns, Wellfields and Mine Units

Production and injection wells will be installed to facilitate the in-situ mining process. Injection wells are used to inject chemically fortified natural groundwater into the ore body liberating uranium. Production wells are used to recover the uranium rich waters by pumping the production fluid to the surface. Wells are completed in only one mineralized zone at a time and in a manner that focuses fluid flow across the deposit.

The fundamental production unit for design and production planning or scheduling is the pattern. A pattern is comprised of a production well and some number of injection wells.

Typical well patterns that will be used are alternating single line drive, staggered line drive and five-spot. Pattern configuration is determined by the size and shape of the deposit, hydrogeological properties of the uranium bearing formation and mining economics.

Patterns will be grouped into production units referred to as wellfields or modules. Modules form a practical means for design, development and production, where groups of 10-15 production wells and their associated injections wells are designed, constructed and operated, serving as the operating unit for distribution of the alkaline leach system.

To further facilitate planning, wellfields will be grouped into PAAs. PAAs represent a collection of wellfields for which baseline data, monitoring requirements, and restoration criteria have been established. These data are included in Production Area Authorization Application that will be submitted to the TCEQ for approval prior to injection into a new mine unit.

An economic wellfield must cover the construction costs associated with well installation, connection of wells to piping that conveys the leach system between wellfields and the processing plant, and wellfield and plant operating costs.

16.1.2 Monitoring Wells

To establish baseline data, monitoring requirements and restoration criteria, baseline production zone and non-production zone monitor wells will be installed for each mine unit.

Baseline monitor wells will be completed in the wellfield within the deposit hosting sandstone to establish baseline water restoration criteria of the wellfield production zone. Perimeter monitor wells are installed in a ring around the entire wellfield. This ring is setback approximately 400 feet from the patterns and 400 feet apart. This monitor well ring will be used to ensure mining fluids are contained within the wellfield.

Monitor wells will also be completed in non-production zone hydro-stratigraphic units above (overlying) and, if required below (underlying), the production zone to monitor the potential for vertical lixiviant migration. These monitor wells will be completed in the first overlying aquifer. In the event a second overlying aquifer is identified, the thickness and integrity of the intervening aquitard will be evaluated to determine if the second aquifer will require monitoring.

16.1.3 **Wellfield Surface Piping**

Each injection and production well will be connected within a network of polyethylene pipe to an injection or production manifold. Manifolds are fitted with meters, valves, and pressure gauges to measure and regulate flow to and from the wells. The manifolds are connected to larger trunk line pipes that convey fluids to and from the wellfield and RIX.

Since the climate is mild with winter temperatures rarely below freezing for prolonged periods of time, the production and injection pipelines and manifolds are not required to be buried below the ground. In colder climates ISR wellfields also need structures to house the manifolds and associated valves and instrumentation to prevent them from freezing. This expense is not necessary in south Texas where the Project is located. The ability to use surface piping reduces wellfield capital costs and reclamation costs.

16.1.4 **Wellfield Production**

Uranium will be produced in wellfields by the dissolution of water-soluble uranium minerals from the deposit using a lixiviant at near neutral pH ranges. The lixiviant contains dissolved oxygen and carbon dioxide. The oxygen oxidizes the uranium, which is then complexed with the bicarbonate formed by addition of carbon dioxide to the solution. The uranium-rich solution will then be pumped from the production wells to a RIX for uranium concentration with ion exchange resin. A slightly greater volume of water will be recovered from the hydro-stratigraphic unit than is injected, referred to as “bleed”, to create an inward flow gradient towards the wellfields. Thus, overall production flow rates will always be slightly greater than overall injection rates. This bleed solution will be disposed via injection into a Class I DDW.

16.2 **Production Rates and Expected Mine Life**

Flow rate and head grades will be maintained to achieve annual production objectives. New wellfields will be developed and commissioned at a rate to ensure adequate head grades are maintained as operating wellfields are depleted.

Production was estimated based on the following parameters, which are like the neighboring Alta Mesa Project, applied to mineral resources.

- Average recovery well flow rate of 45 gpm
- Maximum RIX flow rate of 3,000 gpm each

- Average feed grade of 60 ppm U_3O_8
- 60% mineral recovery in 32 months

Based solely on existing inferred mineral resources future site production is 8,333 M pounds of U_3O_8. Production forecast by year is illustrated in Tables 22.1 and 22.2.

16.3 Mining Fleet and Machinery

enCore will need to increase its rolling stock for production and restoration. Rolling stock and equipment that will need to be acquired includes backhoes, pump hoists, cementers, forklifts, pickups, resin transport trailers, tractors to pull trailers, and generators. In addition, several pieces of heavy equipment will need to be on-site for excavation of mud pits, road maintenance, and reclamation activities.

17.0 RECOVERY METHODS

17.1 Processing Facilities

enCore's operational plan is to mine uranium from satellite properties processing product at one of the company's CPPs. At the Alta Mesa Project, enCore operates an active mine and CPP and the Project is located about 30 miles northwest of the CPP. enCore plans to develop and advance the Project and process the RIX resin at Alta Mesa.

enCore plans to recover uranium using RIX. RIX are self-contained stand-alone processing facilities with an IX circuit and a resin transfer system. The process flow of the RIX is the same as the IX circuit in the CPP. Once uranium is recovered at the RIX, the loaded resin will be transferred via the resin transfer system to a resin trailer and trucked to the CPP for elution, precipitation, drying, and packaging. Figures 17.1 and 17.2 are the P&ID and general arrangement drawings for a modular 1,000 gpm RIX design that can be expanded by adding 1,000 gpm RIX modules. The RIXs at the Mesteña Grande will be larger to accommodate an increased flowrate. Infrastructure at the Alta Mesa Project will allow for processing of all RIX resin at the Alta Mesa CPP.

A description of the uranium recovery process is provided in the remainder of the section.

17.1.1 Ion Exchange

Uranium is recovered from the wellfield lixiviant solution using a downflow IX circuit. The IX circuit at the RIX will have a 3,000 gallons per minute operational capacity. Each vessel will contain 500 cubic foot of anionic ion exchange resin that will capture uranium from the pregnant lixiviant. An Injection booster pump will be located downstream of the IX columns. The RIX will also include a resin transfer system to accommodate transfer of resin between the resin trailer and IX columns.

Vessels will be designed to provide optimum contact time between pregnant lixiviant and IX resin. An interior stainless-steel piping manifold system distributes lixiviant evenly across the resin. The dissolved uranium in the pregnant lixiviant will be exchanged onto the ion exchange resin. The resultant barren lixiviant exiting the IX vessels will contain less than 2 ppm of uranium and will be returned to the wellfield where oxygen and carbon dioxide will be added prior to reinjection.

17.1.2 Production Bleed

A bleed will be drawn from the injection stream prior to reinjection into the wellfield to maintain control of hydraulic conditions in the production zone. Bleed water will be directed into the liquid waste stream and disposed of as discussed is Section 17.3.

Figure 17.1: RIX Facility P&ID

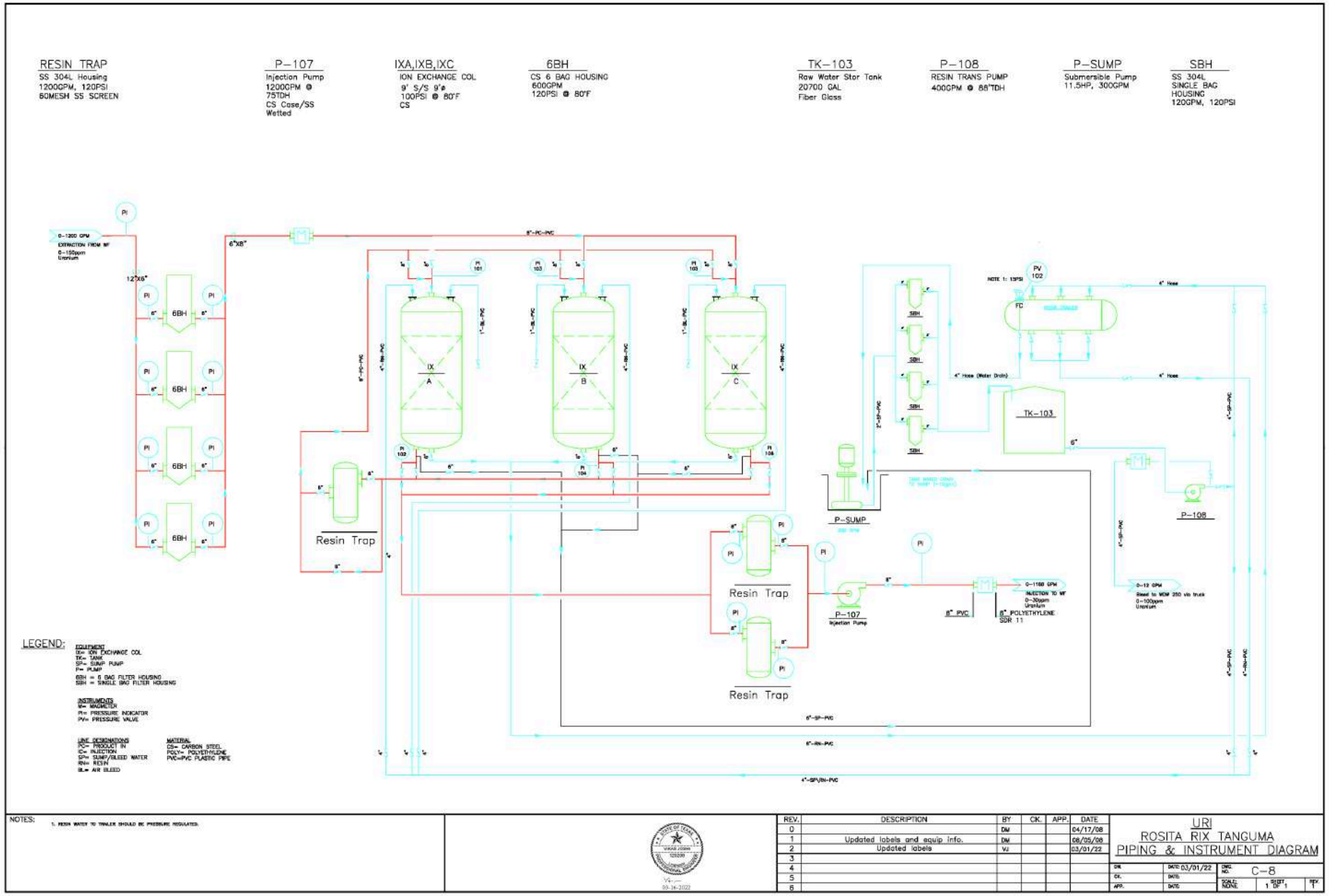
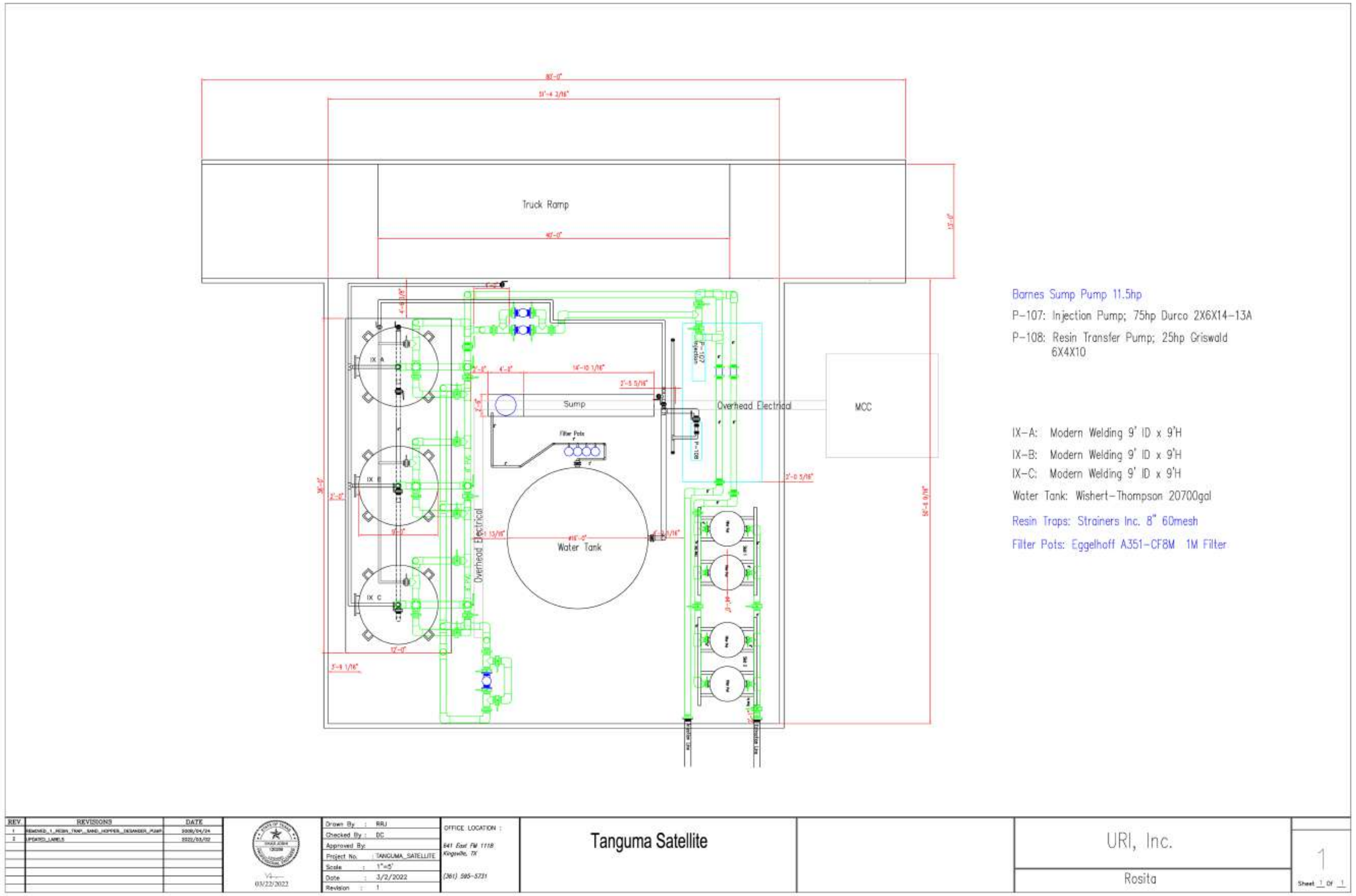


Figure 17.2: RIX Facility General Arrangement



17.2 Water Balance

The water balance is based on a production flow rate of 6,000 gpm with a 1% or 60 gpm bleed to maintain hydraulic control of the mine units. In the RIX fresh water will be used for make-up and washdown at a rate of approximately 12 gpm from a local fresh water supply well. Restoration activities will include 250 gpm feed to an RO, with 175 gpm of clean permeate returned to the wellfield and 75 gpm to RO concentrate sent to a liquid effluent management system that includes several above ground 44,000-gallon storage tanks and water injection into permitted Class I injection wells.

17.3 Liquid Waste Disposal

The Project will use deep disposal wells for disposal of liquid waste generated during production and restoration. The Project plans on two disposal wells that will be permitted under the TCEQ's Underground Injection Control Class I permit program. Based upon proximity to the Alta Mesa CPP, liquid waste disposal may be achieved at one of the existing WDWs.

17.4 Solid Waste Disposal

Waste classified as non-contaminated (non-hazardous, non-radiological) will be disposed of in the nearest permitted sanitary waste disposal facility. Waste classified as hazardous (non-radiological) will be segregated and disposed of at the nearest permitted hazardous waste facility. Radiologically contaminated solid waste, that cannot be decontaminated, are classified as 11.e.(2) byproduct material. This waste will be packaged and stored on-site temporarily and periodically shipped to a licensed 11.e.(2) byproduct waste facility or a licensed mill tailings facility.

17.5 Energy, Water and Process Material Requirements

17.5.1 Energy Requirements

Power requirements for an RIX are limited to the needs of the injection, sump, and transfer pumps, electrically actuated valves and monitoring equipment. The wellfields need power for the downhole pumps as well as the monitoring equipment. Power will be provided from one of the main lines supplied to the property and power lines interior to the property will be installed and maintained by enCore.

17.5.2 Water Requirements

Bleed from the production stream will be stored in an RIX located water tank and used for resin transfer, tank back wash and wash down. Excess bleed will be sent to the WDW. An RO unit will be installed at the RIX after production is completed for groundwater restoration. The brine from the RO during groundwater restoration will be sent to the WDW.

18.0 PROJECT INFRASTRUCTURE

The basic infrastructure (power, water and transportation) necessary to support the project is located within reasonable proximity of the site as described below and illustrated in Figure 18.1.

18.1 Utilities

18.1.1 Electrical Power

TXU Energy is the Project's power provider.

Site electrical is provided via two established power lines run into the plant. AEP Texas is the owner of the main power lines that provide the plant power. Power lines inside the property are owned and installed by enCore.

18.1.2 Domestic and Utility Water Wells

Water wells will be used for domestic and utilities water supply water.

18.1.3 Sanitary Sewer

Sanitary sewer waste will be managed with above ground septic tanks.

18.2 Transportation

18.2.1 Roads

The Project is accessible year-round from two primary locations: 1) a ranch gate located approximately 5 miles east of Hebbronville, Texas along State Highway 285 (paved); and 2) a ranch gate located approximately 19 miles south of Hebbronville along Farm to Market Road 1017 (paved), as well as from the adjacent the Alta Mesa Project. The Alta Mesa Project location is approximately 11 miles west of the intersection of US Highway 281 (paved) and North Farm to Market Road 755 (paved), 22 miles south of Falfurrias, Texas.

Roads within the Project area are unimproved or have an improved caliche base.

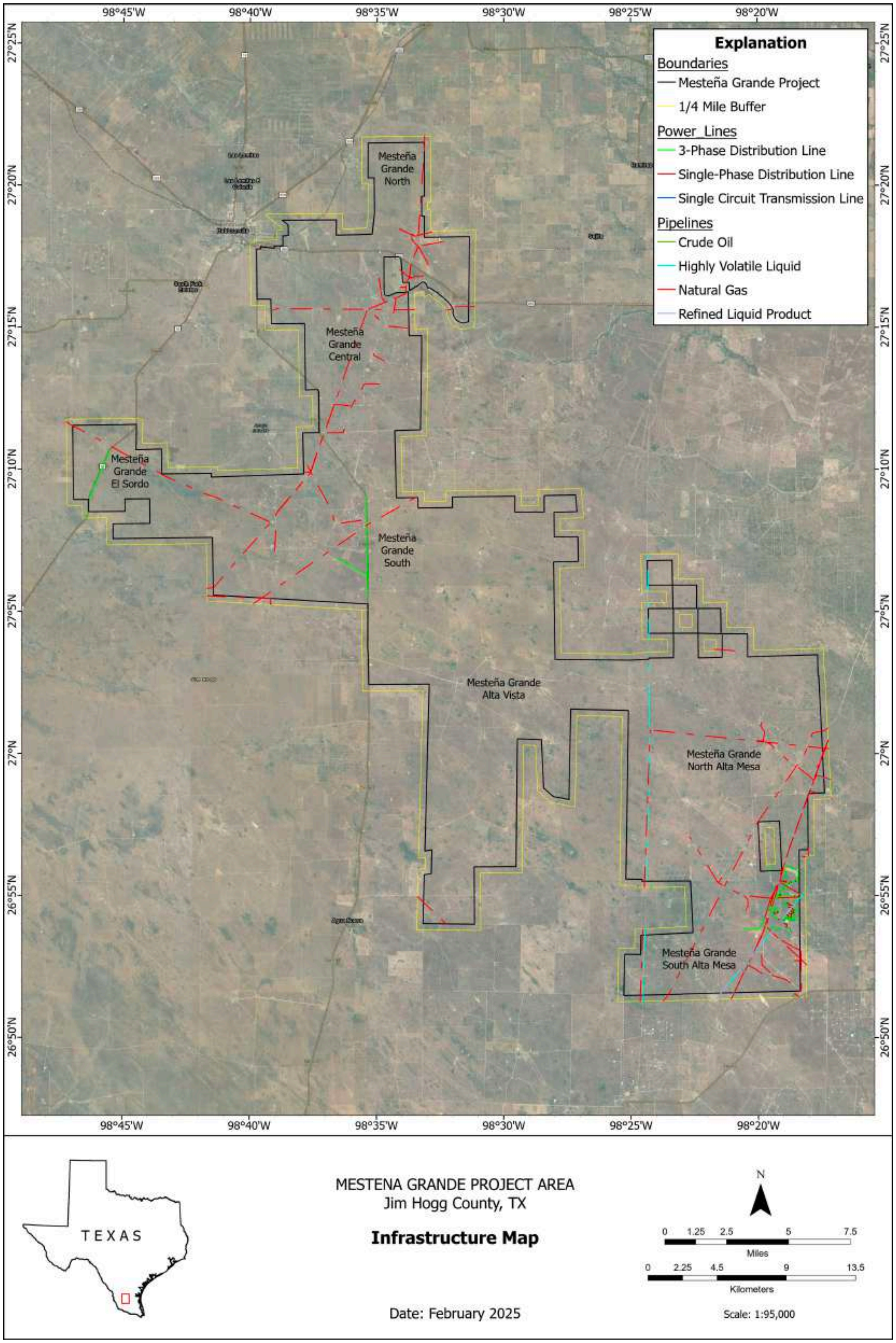
18.3 Buildings

18.3.1 RIX Facilities

The RIX will be an open-air facility located on a fully contained concrete foundation. The IX columns, tankage, pumps, and the resin transfer circuit will all be open-air. The MCC and control rooms will be enclosed. Chemical storage will also be located within foundation containment.

The RIX will have a portable building for operations. This facility will include office, lunchroom and laboratory space as well as detached portable restrooms.

Figure 18.1: Project Infrastructure



19.0 MARKET STUDIES AND CONTRACTS

The uranium market is experiencing a global renaissance as people around the world work to develop clean and reliable sources of energy. This market rise is supported by growing support for nuclear power and government efforts through legislative subsidies to reduce carbon emission, advancements nuclear technologies, and to ensure domestic fuel supplies.

The United States, which is the world's largest consumer of uranium is also a minimal producer. Production in the United States has dropped from varying levels of 2.0 to 5.0 million pounds U_3O_8 produced, between 2000 to 2017, to less than 0.5 million pounds produced in 2023 (ref., USEAI, 2023). To meet US demand, which is more than 48.0 million pounds of U_3O_8 annually, the US is importing supply from around the world.

Therefore, companies such as enCore are positioning themselves to participate in this improving market producing and supplying uranium from its diverse asset portfolio.

19.1 Uranium Price Forecast

enCore's uranium price forecast is based on TradeTech's Uranium Market Study 2023: Issue 4 and the report has been read by the qualified person. Based on TradeTech's study and analysis of the uranium market, TradeTech forecasts SPOT LOW, SPOT HIGH, and TERM prices in Real US$/lb U_3O_8. enCore has assumed that spot pricing will be an average of the annual spot high and spot low prices. enCore has also assumed portfolio pricing will be a mix of average spot and term sales prices. Using this approach, enCore's is using a uranium sales price that ranges from $83.50 to $88.00, with an average LOM sales price of $85.48, for the economic analysis.

19.2 Contracts

enCore's contracting and sales strategy is defined by a blend of pricing collars and exposure to the spot market. enCore has six sales agreements with five U.S. nuclear utilities that includes three large multi-reactor operators and one legacy contract with a trading firm. Contracts are structured with pricing that reflects market conditions at the time of execution with floors and ceilings that are adjusted annually for inflation. Inflation adjusted floor and ceiling prices provide base levels of revenue assuring an operating margin while providing significant upside exposure to spot market pricing. At current prices, enCore plans to contract less than 50% of planned production rates but contracting will likely increase if spot prices begin to spike. enCore's current contracts represent less than 30% of planned production through 2032 and the company is reviewing other contracting opportunities.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Studies

enCore will conduct an environmental baseline data collection program the results of which will be included in an RML application. The company will conduct environmental sampling programs to characterize pre-mining conditions related to wetlands, air quality, vegetation, soils, wildlife, archeology, meteorology, and background radionuclide concentrations in the environment. The application will also address geology, surface hydrology, sub-surface hydrology, and geochemistry.

In addition to the baseline environmental data, TCEQ staff will prepare an Environmental Assessment of the Project. The EA will address environmental issues associated with the construction, operation, and decommissioning of the proposed ISR facility, as well as ground water restoration. The applications submitted by enCore for the Class I and Class III IUC permits will be used as the basis for approval of the Alta Mesa UIC permits and aquifer exemption.

Typically, at other ISR operations agencies responsible for evaluating and issuing licenses and permits have determined that moderate to significant environmental impacts are unlikely. At this time there are no known environmental issues that could materially impact enCore's ability to extract the mineral resource.

The license and mine permit applications will be developed to document baseline conditions, describe the proposed operations and evaluate the potential for impacts to the environment. The applications are submitted to and approved by the TCEQ. Based on data supplied by enCore in their applications, the TCEQ will evaluate subjects including existing and anticipated land use, transportation, geology, soils, seismic risk, water resources, climate/meteorology, vegetation, wetlands, wildlife, air quality, noise, and historic and cultural resources. Additionally, socioeconomic characteristics in the vicinity of the Property will be evaluated.

Discussion of the generic results of the potential impacts of the Project as determined by TCEQ and NRC are included below.

20.1.1 Potential Wellfield Impacts

The injection of treated groundwater as part of uranium recovery or as part of restoration of the production zone is unlikely to cause changes in the groundwater quality since enCore is required to restore the water quality to levels consistent with baseline or other TCEQ approved limits and to reduce mobility of any residual radionuclides. Further, industry standard operating procedures, which are accepted by TCEQ and other regulating agencies for ISR operations, include a regional pump test prior to licensing, followed by more detailed pump tests after licensing and before production, for each individual mine area (mine unit).

During wellfield operations, potential environmental impacts include consumptive use, horizontal fluid excursions, vertical fluid excursions, and changes to groundwater quality in production zones. As the federal regulator under the Atomic Energy Act, the U.S. Nuclear Regulatory Commission ("NRC") has conducted a thorough analysis in the Generic Environmental Impact Statement for In-Situ Uranium Leach Uranium Milling Facilities (NUREG-1910), the NRC concluded that that impacts of wellfield operations on the environment will be small. Wellfield operations will have environmental effects that are either not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the area's groundwater resources.

TCEQ staff will determine the potential environmental impact of consumptive groundwater use during wellfield operation. The TCEQ will only grant approval of the permit after considering important site-specific conditions such as the proximity of water users' wells to wellfields, the total volume of water in the production hydro-stratigraphic units, the natural recharge rate of the production hydro-stratigraphic units, the transmissivities and storage coefficients of the production hydro-stratigraphic units, and the degree of isolation of the production hydro-stratigraphic units from overlying and underlying hydro-stratigraphic units.

TCEQ staff will also evaluate the potential environmental impact from horizontal excursions. At similar facilities the impacts from horizontal excursions are considered small because i) EPA will exempt a portion of the uranium-bearing aquifer from protection as a source of underground drinking water, according to the State equivalent criteria under 40 CFR 146.4, ii) the company is required to submit wellfield operational plans for TCEQ approval, iii) inward hydraulic gradients will be maintained to ensure groundwater flow is toward the production zone, and iv) the company's TCEQ mandated groundwater monitoring plan will ensure that excursions, if they occur, are detected and corrected.

Potential impacts from vertical excursions at similar facilities were concluded by TCEQ staff to be small. The reasons given for the conclusion included:

- uranium-bearing production zones in Goliad and Oakville Formation are hydrologically isolated from adjacent aquifers by thick, low permeability layers,
- there is a prevailing upward hydraulic gradient across the major hydro-stratigraphic units; and,
- enCore is required to implement a mechanical integrity testing program to mitigate the impacts of potential vertical excursions resulting from borehole failure.

Lastly, potential impacts of wellfield operations on groundwater quality in production zones have been concluded by TCEQ staff to be small because the company must initiate groundwater restoration in the production zone to return groundwater to Commission-approved background levels, EPA MCL's or to TCEQ approved alternative water quality levels at the end of ISR operations.

20.1.2 **Potential Soil Impacts**

The NRC and TCEQ have concluded that potential impacts to soil during all phases of construction, operation, groundwater restoration, and decommissioning of similar ISR facilities are small. During construction, earthmoving activities (topsoil clearing and land grading) associated with the construction of the RIXs, access roads, wellfields, and pipelines will be minimal. Topsoil removed during these activities will be stored and reused later to restore disturbed areas. The limited areal extent of the construction area, the soil stockpiling procedures, the implementation of best management practices, the short duration of the construction phase, and mitigative measures such as reestablishment of native vegetation will minimize the potential impact on soils due to construction activities.

During decommissioning, disruption or displacement of soils will occur during facility dismantling and surface reclamation; however, disturbed lands will be restored to their pre-ISR land use. Stored topsoil will be spread on reclaimed areas, and the surface will be graded to its original topography.

The following proposed measures will be used to minimize the potential impacts to soil resources:

- Salvage and stockpile topsoil from disturbed areas.
- Reestablish temporary or permanent native vegetation as soon as possible after disturbance utilizing the latest technologies in reseeding and sprigging, such as hydroseeding.
- Decrease runoff from disturbed areas by using structures to temporarily divert and/or dissipate surface runoff from undisturbed areas.
- Retain sediment within the disturbed areas by using silt fencing, retention ponds, and hay bales.
- Drainage design will minimize potential for erosion by creating slopes less than 4 to 1 and/or provide riprap or other soil stabilization controls.
- Construct roads using techniques that will minimize erosion, such as surfacing with a gravel road base, constructing stream crossings at right angles with adequate embankment protection and culvert installation.
- Use a spill prevention and cleanup plan to minimize soil contamination from vehicle accidents and/or wellfield spills or leaks.

20.1.3 **Potential Impacts from Shipping Resin, Yellowcake and 11.e.(2) Materials**

20.1.3.1 Ion Exchange Resin Shipment

Loaded resin will be transported by tanker trucks from RIXs to the Alta Mesa CPP. The radiological risk of these shipments is lower than shipping finished yellowcake because,

- loaded resin has lower uranium concentrations than yellowcake concentrates,
- uranium is chemically bound to resin beads; therefore, it is less likely to spread and easier to remediate in the event of a spill, and
- loaded resin shipments are transported over shorter distances between the satellite and CPP versus over-the-road yellowcake shipments which are transported from site to a conversion facility.

The NRC regulations at 10 CFR Part 71 and the U.S. Department of Transportation regulations for shipping ion exchange resins, which are enforced by TCEQ, also provide confidence that safety is maintained and the potential for environmental impacts regarding resin shipments remains small. (ref. US NRC, 2009 and 2014).

20.1.3.2 Yellowcake Shipment

After yellowcake is produced at the Alta Mesa processing facility, it will be transported to a US approved conversion plant for sampling and conversion to uranium hexafluoride (UF6). NRC and others have previously analyzed the hazards associated with transporting yellowcake and have determined potential impacts are small. Previously reported accidents involving yellowcake indicate that in all cases spills were contained and cleaned up quickly (by the shipper with state involvement) without significant health or safety impacts to workers or the public. Safety controls and compliance with existing transportation regulations in 10 CFR Part 71 add confidence that yellowcake can be shipped safely with a low potential for adversely affecting the environment. Transport drums, for example, must meet specifications of 49 CFR Part 173, which is incorporated in NRC regulations at 10 CFR Part 71. To further minimize transportation-related yellowcake releases, delivery trucks are recommended to meet safety certifications and drivers must hold appropriate licenses.

20.1.3.3 11. e.(2) Shipment

Operational 11.e.(2) byproduct materials (as defined in the Atomic Energy Act of 1954, as amended) will be shipped from the Project by truck for disposal at a licensed disposal site. All shipments will be completed in accordance with applicable NRC requirements in 10 CFR Part 71 and U.S. Department of Transportation requirements in 49 CFR Parts 171–189. Risks associated with transporting yellowcake were determined by NRC to bound the risks expected from byproduct material shipments, owing to the more concentrated nature of shipped yellowcake, the longer distance yellowcake is shipped relative to byproduct material, and the relative number of shipments of each material type. Therefore, potential environmental impacts from transporting byproduct material are considered small (ref., USNRC, 2009 and 2014).

20.2 Socioeconomic Studies and Issues

The Texas Mining and Reclamation Association (TMRA) commissioned a study in May 2011 by the Center for Economic Development and Research at the University of North Texas that examined the economic and fiscal impacts of uranium production in Texas. It found that the Texas uranium mining industry not only contributes $311 million annually in economic impact to local economies but also helps those economies grow by attracting additional business and industry.

All phases of the Project will require materials and supplies needed for construction, operation, and closure which will be purchased from local, state, and regional suppliers and vendors. The most common growth because of the project has been seen in sectors such as food services, wholesale trade, mining support services, architectural and engineering, real estate and healthcare.

Effects to infrastructure and services such as roads/traffic, school enrollment, utilities (supply and capacity), commodity prices, tax burden, and emergency medical services are sensitive to the ultimate location or relocation of additional workers. enCore expects that most of the workers employed during the operational phase will come from various communities in the immediate area such as Falfurrias, Hebbronville, and Bruni resulting in no additional impacts to the above-mentioned infrastructure and services.

In summary, since the maximum increase in population due to anticipated employment needs for the project is insignificant, effects to infrastructure and services are not anticipated in Jim Hogg, Brooks or neighboring counties. The construction and operation of the Project should therefore have minimal negative impacts to the community.

20.3 Permitting Requirements and Status

The Project is not permitted or licensed to operate except for the permits necessary for exploration.

The most significant permits and licenses that will be required to operate the Project are (1) the TCEQ Source and Byproduct Materials License, (2) the Mine Area Permit issued by TCEQ and (3) Production Area Authorizations (UIC Class III) that are issued at various times through LOM, Class I non-hazardous disposal wells issued by TCEQ, and an USEPA aquifer exemption.

The timing to prepare the applications and for agency review and approval is estimated to be 3 to 4 years. The length of time is not entirely in enCore's control. The TCEQ's ability to process enCore's applications is dependent on the workload of the agency. With the renewed interest in uranium recovery, the application process timeline could be longer due to additional requests for ISR permits and licenses.

The costs to obtain these licenses and permits is estimated to be $2.87 M. These costs include environmental baseline sampling of the air, water (surface and subsurface), soils, and vegetation in the vicinity of the proposed activities. The background radionuclide concentrations in the environment will also be determined. For the UIC Class III permits monitor wells will be installed and sampled to establish baseline water quality prior to mining.

20.4 Community Affairs

The Project is located within the private land holdings of the Jones Ranch, founded in 1897. The Jones Ranch comprises approximately 380,000 acres. The ranch holdings include surface and mineral rights including oil and gas and other minerals including uranium. Active uses of the ranch lands in addition to uranium exploration and production activities include agricultural use (Cattle), oil and gas development, and private hunting.

The Project is primarily located Jim Hogg County, Texas. The County is generally rural and according to the 2020 United States Census, there were 4,538 people living in the county. The population density was 4.3 people per square mile.

It is anticipated that the Project will be well received by the community. The Alta Mesa Project located in adjacent Brooks County is permitted for ISR mining and recovery of uranium and has been in operation (active and standby) since 2002. Since both projects are located on the same large ranch that controls both surface and mineral rights and is in rural south Texas, it is anticipated that there will be positive reactions from the local community. In the past 20 years of operations the Alta Mesa project has been well received by the surrounding community and there have been no public objections to the project.

20.5 Project Closure

Decommissioning, reclamation, and restoration will be comprised of the following:

- Groundwater restoration within affected wellfields,
- Plugging and abandonment of injection, production, and monitor wells,
- Radiological decontamination and/or demolition of buildings, process vessels, and other structures, in the affected areas,
- Decontamination and/or demolition of the RIXs and auxiliary structures,
- Soil reclamation of restored wellfields and processing areas; and,
- Plugging and abandonment of WDWs.

When site decommissioning is complete, the land and underlying water will have been returned to those conditions described in baseline environmental programs within applicable permits and licenses, mitigating any long-term impact of the mining activity. Final decommissioning will take place after all mining and groundwater restoration is complete.

Groundwater restoration is accomplished as wellfields are mined out. Cased wells will be plugged as soon as groundwater restoration is complete and approved by the TCEQ.

Before release of an area to unrestricted use, enCore will provide information to TCEQ verifying that radionuclide concentrations meet applicable regulatory standards. Specifically, any byproduct contaminated soils will be removed to levels required in 30 TAC §336.356(a).

Equipment will not be released unless it meets the surface contamination criteria of 30 TAC §336.364. Solid byproduct material which does not meets the release criteria of 30 TAC §336.364 will be disposed of off-site at a licensed uranium mill tailings facility. Currently, enCore utilizes the White Mesa Mill in Blanding, Utah for disposal of byproduct material.

Both the surface reclamation plan and groundwater restoration plan are intended to return areas affected by mining activities to a condition which supports the pre-mining land uses of cattle grazing, and wildlife habitat.

20.5.1 **Byproduct Disposal**

The 11.e.(2) or non-11.e.(2) byproduct disposal methods are discussed in Section 17. Deep disposal wells, landfills, and licensed 11.e.(2) facilities will be used depending on waste classification and type.

20.5.2 **Well Abandonment and Groundwater Restoration**

Groundwater restoration will begin as soon as practicable after uranium recovery is completed in each wellfield. If a depleted wellfield is near an area that is being recovered, a portion of the depleted area's restoration may be delayed to limiting interference with the on-going mining operations.

Groundwater restoration will require the circulation of native groundwater and extraction of mobilized ions through reverse osmosis treatment and subsequent reinjection of the RO permeate. The intent of groundwater restoration is to return the groundwater quality parameters consistent with that established during the pre-operational sampling for each wellfield.

Restoration estimates assume up to six pore volumes of groundwater will be extracted and treated by reverse osmosis. Following completion of successful restoration activities, stability monitoring, and regulatory approval, the injection and recovery wells will be plugged and abandoned in accordance with TCEQ regulations. Monitor wells will also be abandoned following verification of successful groundwater restoration.

20.5.3 **Demolition and Removal of Infrastructure**

Simultaneous with well abandonment operations, the trunk and feeder pipelines will be removed, tested for radiological contamination, segregated as either solid 11.e.(2) or non-11.e.(2), then chipped and transported to appropriate disposal facilities. The facilities' processing equipment and ancillary structures will be demolished, tested for radiological properties, segregated and either scrapped or disposed of in appropriate disposal facilities based on their radiological properties.

20.5.4 **Reclamation**

All disturbances will be reclaimed including, wellfields, plant sites and roads. The site will be re-graded to approximate pre-development contours, and the stockpiled topsoil placed over disturbed areas. The disturbed areas will then be seeded.

20.6 **Financial Assurance**

The Project will have financial security in the form of a bond for the estimated total facility closure costs which include groundwater restoration, facility decommissioning and reclamation. The financial surety will be based on the estimated previous year's costs plus the cost for reclamation for a current year planned activities. The cost estimates assume closure by a third-party contactor including overhead and contractor profit, with a 25% contingency. These cost estimates are reviewed and approved by TCEQ annually. The financial security instrument is in the name of the TCEQ.

21.0 CAPITAL AND OPERATING COSTS

Capital and operating costs are on a 100% cost basis. All costs are based on 2024 USD and the estimated production throughput. Cost projections contain estimates associated with development, mining and processing solely of inferred mineral resources.

21.1 Capital Costs

Estimated capital costs are $106,131 with major component costs listed in Table 21.1. Labor costs for wellfield construction are included in wellfield development costs. Table 21.2 is the capital cost forecast by year.

Table 21.1: Major Capital Components

Major Components	Number	Cost US$000s
RIX & Resin	2	$9,716
Elution	1	$1,284
DDW	1	$2,669
Wellfields	7	$92,462
		$106,131

21.1 Capital Cost Basis

enCore is operating and developing multiple projects in the United States and specifically Texas using the same or like technical solutions. Therefore, detailed engineering and costs estimates from other projects, or similar environments, were used and serve as the cost basis for capital cost estimates.

Table 21.2: Capital Cost Forecast by Year

Cash Flow Line Items	Units	Total or Average	$ per Pound	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Less: Plant Development Costs	US$000s	**$13,669**	$1.67	$0	$0	$0	$7,477	$4,858	$0	$1,334	$0	$0	$0	$0	$0	$0
Less: Wellfield Development Costs	US$000s	**$92,462**	$11.33	$0	$0	$0	$0	$11,330	$16,995	$16,995	$16,995	$16,995	$8,498	$4,654	$0	$0
Capital Costs	**US$000s**	**$106,131**	**$13.00**	**$0**	**$0**	**$0**	**$7,477**	**$16,188**	**$16,995**	**$18,329**	**$16,995**	**$16,995**	**$8,498**	**$4,654**	**$0**	**$0**

21.2 Operating Costs

Estimated operating costs are $205.1 M or $25.49 per pound of U_3O_8. Major operating costs care listed in Table 21.3.

Table 21.3: Major Operating Categories

Cash Flow Line Items	Units	Total or Average	$ per Pound
Less: Surface & Mineral Royalties	US$000s	**$30,015**	$3.60
Less: Property Tax	US$000s	**$2,500**	$0.30
Less: Plant & Wellfield Operating Costs	US$000s	**$156,994**	$18.84
Less: Product Transaction Costs	US$000s	**$4,872**	$0.58
Less: Administrative Support Costs	US$000s	**$26,048**	$3.13
Less: D&D and Restoration Costs	US$000s	**$17,149**	$2.06

21.3 Operating Cost Basis

enCore is operating the Alta Mesa Project and actual and budgeted operating costs from the project serve as the cost basis for operating cost estimates.

Estimated operating costs by year for plant and wellfield operations, product transaction, administrative support, decontamination and decommissioning, and restoration are presented in Table 21.4.

Wellfield operating costs include electricity, replacement wells and associated equipment, rental equipment, rolling stock, equipment fuel and maintenance, and wellfield chemicals.

Plant operating expenses include plant chemicals, electricity, equipment fuel and maintenance, waste management operations, rentals and supplies, RO operations and product handling.

Product transaction costs include costs for product shipping and conversion fees.

D&D and restoration costs include costs for restoration of the wellfields, decontamination and decommissioning of facilities, and reclamation of the site.

Administrative support costs include corporate overhead and technical support costs as well as taxes, insurance, salaries, rent, legal fees, land and mineral acquisitions, permit and license application costs, regulatory fees, insurance, office supplies and financial assurance.

Operating costs are estimated to be $25.49 per pound of U_3O_8. The basis for operating costs is planned development and production sequence and quantity, in conjunction with past production knowledge.

Labor costs associated with wellfield and plant operations, restoration and administration are included in operating costs.

21.4 Cost Accuracy

Project cost accuracy for certain factors is more accurate than required for an IA, because of the availability of engineering data and cost estimates from other enCore projects currently in development and operations in south Texas.

To assess the accuracy of the capital and operating cost estimates, the QP has considered the risks associated with the specific engineering estimation methods used to arrive at the estimates. As part of this analysis, the QP has taken into consideration the completeness of relevant factors in determining the estimation accuracy compared to prior similar environments. Relevant factors considered include site infrastructure, mine design and planning, processing plant, environmental compliance and permitting, capital costs, operating costs and economic analysis.

With respect to site infrastructure, there is access to site and power, and site infrastructure locations for RIX's, power lines, and required access roads is assumed. The source of utilities is defined and are suitable for cost estimating.

The preferred mining method is defined but mine layouts are assumed. Development and production plans are broadly defined. Since the Project will be a satellite operation to Alta Mesa Project, the required equipment fleet has been considered. The fleet will eventually be shared between projects; however, it is anticipated some additional equipment will be required.

For processing, detailed bench lab tests have not been conducted; however, a detailed process flow sheet is defined based on technical information from other enCore projects, and equipment sizes, general arrangement and plant throughput are detailed.

Identification and detailed analysis of environmental compliance and permitting requirements is complete. Detailed baseline studies with impact assessments, as well as detailed disposal, reclamation and mitigation plans have not been done.

Regarding other relevant factors, appropriate assessment of other reasonably assumed technical and economic factors are considered to demonstrate reasonable prospect for economic extraction.

An economic analysis is included. Taxes are described in detail. Revenues are estimated based on assumed production. The discounted cash flow analysis is also based on assumed production and revenues are estimated solely from inferred mineral resources.

Table 21.4: Operating Cost Forecast by Year

Cash Flow Line Items	Units	Total or Average	$ per Pound	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Less: Surface & Mineral Royalties	US$000s	**$30,015**	$3.60	$0	$0	$0	$0	$2,614	$3,920	$3,991	$4,026	$8,133	$4,125	$3,207	$0	$0	$0	$0	$0
Taxable Revenue	**US$000s**	**$682,289**	-	**$0**	**$0**	**$0**	**$0**	**$80,886**	**$121,330**	**$123,509**	**$124,599**	**$121,992**	**$61,875**	**$48,098**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Property Tax	US$000s	**$2,500**	$0.30	$0	$0	$0	$0	$300	$450	$450	$450	$450	$225	$175	$0	$0	$0	$0	$0
Net Gross Sales	**US$000s**	**$679,789**	-	**$0**	**$0**	**$0**	**$0**	**$80,586**	**$120,880**	**$123,059**	**$124,149**	**$121,542**	**$61,650**	**$47,923**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Plant & Wellfield Operating Costs	US$000s	**$156,994**	$18.84	$0	$0	$0	$0	$18,840	$28,260	$28,260	$28,260	$28,260	$14,130	$10,984	$0	$0	$0	$0	$0
Less: Product Transaction Costs	US$000s	**$4,872**	$0.58	$0	$0	$0	$0	$585	$877	$877	$877	$877	$438	$341	$0	$0	$0	$0	$0
Less: Administrative Support Costs	US$000s	**$26,048**	$3.13	$0	$957	$957	$957	$2,130	$4,260	$4,260	$4,260	$4,260	$2,130	$1,420	$457	$0	$0	$0	$0
Less: D&D and Restoration Costs	US$000s	**$17,149**	$2.94	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,410	$4,410	$4,410	$2,205	$1,714
Net Operating Cash Flow	**US$000s**	**$474,727**	-	**$0**	**-$957**	**-$957**	**-$957**	**$59,032**	**$87,483**	**$89,662**	**$90,752**	**$88,145**	**$44,952**	**$35,178**	**-$4,867**	**-$4,410**	**-$4,410**	**-$2,205**	**-$1,714**

22.0 ECONOMIC ANALYSIS

22.1 Economic analysis

The economic assessment is preliminary in nature as all the Project's mineral resources are inferred and inferred mineral resources are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the economics in this report will ever be realized and there is the risk to the project of economic failure.

The Project economic analysis illustrates a cash flow forecast on an annual basis using inferred mineral resources and an assumed annual production schedule for the LOM NPV. A summary of taxes, royalties, and other interests, as applicable to production and revenue are also discussed. The analysis assumes no escalation, no debt, no debt interest, no capital repayment and no state income tax since Texas does not impose a corporate income tax.

enCore is using a uranium sales price ranging from $83.50 to $88.00, with an average sales price of $85.48. Price basis is discussed in Section 19.

The economic analysis assumes that 60% of the inferred mineral resources are recoverable. The pre-tax net cash flow incorporates estimated sales revenue from recoverable uranium, less costs for surface and mineral royalties, property tax in the form of ad valorem, plant and wellfield operations, product transaction, administrative and technical support, D&D, and restoration. The after-tax analysis includes the above information plus depreciated plant and wellfield capital costs, to estimate federal income tax.

Less federal tax, the Projects cash flow is estimated at $366.6 M or $41.48 per pound U_3O_8. Using an 8% discount rate, the Projects NPV is $205.8 M (Table 22.1). The Projects after tax cash flow is estimated at $276.5 M for a cost per pound U_3O_8 of $53.18. Using an 8.0% discount rate, the Projects NPV is $154.4 M (Table 22.2).

Table 22.1: Economic Analysis Forecast by Year with Exclusion of Federal Income Tax

Cash Flow Line Items	Units	Total or Average	$ per Pound	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Uranium Production as U_3O_8 [1,2]	Lbs 000s	**8,333**	-	**0**	**0**	**0**	**0**	**1,000**	**1,500**	**1,500**	**1,500**	**1,500**	**750**	**583**	**0**	**0**	**0**	**0**	**0**
Uranium Price for U_3O_8 [3]	US$/lb	**$85.48**	-	$ 84.25	$ 83.75	$ 83.25	$ 82.00	$ 83.50	$ 83.50	$ 85.00	$ 85.75	$ 86.75	$ 88.00	$ 88.00	$ 88.25	$ 89.00	$ 89.00	$ 88.00	$ 86.25
Uranium Gross Revenue	**US$000s**	**$712,304**	-	**$0**	**$0**	**$0**	**$0**	**$83,500**	**$125,250**	**$127,500**	**$128,625**	**$130,125**	**$66,000**	**$51,304**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Surface & Mineral Royalties	US$000s	**$30,015**	$3.60	$0	$0	$0	$0	$2,614	$3,920	$3,991	$4,026	$8,133	$4,125	$3,207	$0	$0	$0	$0	$0
Taxable Revenue	**US$000s**	**$682,289**	-	**$0**	**$0**	**$0**	**$0**	**$80,886**	**$121,330**	**$123,509**	**$124,599**	**$121,992**	**$61,875**	**$48,098**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Property Tax	US$000s	**$2,500**	$0.30	$0	$0	$0	$0	$300	$450	$450	$450	$450	$225	$175	$0	$0	$0	$0	$0
Net Gross Sales	**US$000s**	**$679,789**	-	**$0**	**$0**	**$0**	**$0**	**$80,586**	**$120,880**	**$123,059**	**$124,149**	**$121,542**	**$61,650**	**$47,923**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Plant & Wellfield Operating Costs	US$000s	**$156,994**	$18.84	$0	$0	$0	$0	$18,840	$28,260	$28,260	$28,260	$28,260	$14,130	$10,984	$0	$0	$0	$0	$0
Less: Product Transaction Costs	US$000s	**$4,872**	$0.58	$0	$0	$0	$0	$585	$877	$877	$877	$877	$438	$341	$0	$0	$0	$0	$0
Less: Administrative Support Costs	US$000s	**$26,048**	$3.13	$0	$957	$957	$957	$2,130	$4,260	$4,260	$4,260	$4,260	$2,130	$1,420	$457	$0	$0	$0	$0
Less: D&D and Restoration Costs	US$000s	**$17,149**	$2.06	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,410	$4,410	$4,410	$2,205	$1,714
Net Operating Cash Flow	**US$000s**	**$474,727**	-	**$0**	**-$957**	**-$957**	**-$957**	**$59,032**	**$87,483**	**$89,662**	**$90,752**	**$88,145**	**$44,952**	**$35,178**	**-$4,867**	**-$4,410**	**-$4,410**	**-$2,205**	**-$1,714**
Less: Plant Development Costs	US$000s	**$13,669**	$1.64	$0	$0	$0	$7,477	$4,858	$0	$1,334	$0	$0	$0	$0	$0	$0	$0	$0	$0
Less: Wellfield Development Costs	US$000s	**$94,413**	$11.33	$0	$0	$0	$0	$11,330	$16,995	$16,995	$16,995	$16,995	$8,498	$6,605	$0	$0	$0	$0	$0
Net Before-Tax Cash Flow	**US$000s**	**$366,645**	-	**$0**	**-$957**	**-$957**	**-$8,434**	**$42,843**	**$70,488**	**$71,333**	**$73,757**	**$71,150**	**$36,454**	**$28,573**	**-$4,867**	**-$4,410**	**-$4,410**	**-$2,205**	**-$1,714**
		Total cost per pound:	**$41.48**																
		Discount Rate			8%														
		NPV			$205,751														

Table 22.2: Economic Analysis Forecast by Year with Inclusion of Federal Income Tax

Cash Flow Line Items	Units	Total or Average	$ per Pound	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Uranium Production as U_3O_8 [1,2]	Lbs 000s	8,333	-	0	0	0	0	1,000	1,500	1,500	1,500	1,500	750	583	0	0	0	0	0
Uranium Price for U_3O_8 [3]	US$/lb	$85.48	-	$84.25	$83.75	$83.25	$82.00	$83.50	$83.50	$85.00	$85.75	$86.75	$88.00	$88.00	$88.25	$89.00	$89.00	$88.00	$86.25
Uranium Gross Revenue	**US$000s**	**$712,304**	-	**$0**	**$0**	**$0**	**$0**	**$83,500**	**$125,250**	**$127,500**	**$128,625**	**$130,125**	**$66,000**	**$51,304**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Surface & Mineral Royalties	US$000s	$30,015	$3.60	$0	$0	$0	$0	$2,614	$3,920	$3,991	$4,026	$8,133	$4,125	$3,207	$0	$0	$0	$0	$0
Taxable Revenue	**US$000s**	**$682,289**	-	**$0**	**$0**	**$0**	**$0**	**$80,886**	**$121,330**	**$123,509**	**$124,599**	**$121,992**	**$61,875**	**$48,098**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Property Tax	US$000s	$2,500	$0.30	$0	$0	$0	$0	$300	$450	$450	$450	$450	$225	$175	$0	$0	$0	$0	$0
Net Gross Sales	**US$000s**	**$679,789**	-	**$0**	**$0**	**$0**	**$0**	**$80,586**	**$120,880**	**$123,059**	**$124,149**	**$121,542**	**$61,650**	**$47,923**	**$0**	**$0**	**$0**	**$0**	**$0**
Less: Plant & Wellfield Operating Costs	US$000s	$156,994	$18.84	$0	$0	$0	$0	$18,840	$28,260	$28,260	$28,260	$28,260	$14,130	$10,984	$0	$0	$0	$0	$0
Less: Product Transaction Costs	US$000s	$4,872	$0.58	$0	$0	$0	$0	$585	$877	$877	$877	$877	$438	$341	$0	$0	$0	$0	$0
Less: Administrative Support Costs	US$000s	$26,048	$3.13	$0	$957	$957	$957	$2,130	$4,260	$4,260	$4,260	$4,260	$2,130	$1,420	$457	$0	$0	$0	$0
Less: D&D and Restoration Costs	US$000s	$17,149	$2.94	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,410	$4,410	$4,410	$2,205	$1,714
Net Operating Cash Flow	**US$000s**	**$474,727**	-	**$0**	**-$957**	**-$957**	**-$957**	**$59,032**	**$87,483**	**$89,662**	**$90,752**	**$88,145**	**$44,952**	**$35,178**	**-$4,867**	**-$4,410**	**-$4,410**	**-$2,205**	**-$1,714**
Less: Depreciated Fixed Assets	US$000s	$0	$0.00	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Less: Depreciated Plant Development Costs	US$000s	$13,669	$1.64	$0	$0	$0	$1,953	$1,953	$1,953	$1,953	$1,953	$1,953	$1,953	$0	$0	$0	$0	$0	$0
Less: Depreciated Wellfield Development Costs	US$000s	$94,413	$11.33	$0	$0	$0	$0	$0	$0	$1,927	$7,158	$10,893	$15,488	$16,842	$12,373	$9,869	$7,827	$6,017	$4,215
Taxable Income	US$000s	**$366,646**	-	**$0**	**-$957**	**-$957**	**-$2,910**	**$57,079**	**$85,530**	**$85,782**	**$81,642**	**$75,300**	**$27,511**	**$18,336**	**-$17,240**	**-$14,279**	**-$12,237**	**-$8,222**	**-$5,929**
Less: Federal Tax [4]	US$000s	$90,138	$10.82	$0	$0	$0	$0	$11,987	$17,961	$18,014	$17,145	$15,813	$5,777	$3,441	$0	$0	$0	$0	$0
Net Income	US$000s	**$276,508**	-	**$0**	**-$957**	**-$957**	**-$957**	**$45,093**	**$67,569**	**$67,768**	**$64,497**	**$59,487**	**$21,734**	**$12,943**	**-$17,240**	**-$14,279**	**-$12,237**	**-$8,222**	**-$5,929**
Plus: Non-Cash Deductions	US$000s	$108,082	$12.97	$0	$0	$0	$0	$1,953	$1,953	$3,880	$9,111	$12,845	$17,440	$18,795	$12,373	$9,869	$7,827	$6,017	$4,215
Less: Plant Development Costs	US$000s	$13,669	$1.64	$0	$0	$0	$7,477	$4,858	$0	$1,334	$0	$0	$0	$0	$0	$0	$0	$0	$0
Less: Wellfield Development Costs	US$000s	$94,413	$11.33	$0	$0	$0	$0	$11,330	$16,995	$16,995	$16,995	$16,995	$8,498	$6,605	$0	$0	$0	$0	$0
After Tax Cash Flow	**US$000s**	**$276,507**	-	**$0**	**-$957**	**-$957**	**-$8,434**	**$30,857**	**$52,526**	**$53,319**	**$56,612**	**$55,337**	**$30,677**	**$25,132**	**-$4,867**	**-$4,410**	**-$4,410**	**-$2,205**	**-$1,714**

Total cost per pound: **$53.18**

Discount Rate	8%
NPV	$154,438

22.2 **Taxes, Royalties and Other Interests**

22.2.1 **Federal Income Tax**

Total federal income tax for LOM is estimated at $90.1 M for a cost per pound U_3O_8 of $10.82. Federal income tax estimates do account for depreciation of plant and wellfield capital costs.

22.2.2 **State Income Tax**

The state of Texas does not impose a corporate income tax.

22.2.3 **Production Taxes**

Production taxes in Texas include property tax in the form of ad valorem tax.

Alta Mesa personal property (i.e., uranium facilities, buildings, machinery and equipment) are subject to property tax by the following taxing jurisdictions: Brooks County, Brooks County Roads & Bridges, Brooks County Independent School District, Brooks County Farm to Market & Flood Control Fund and Brush Country Groundwater Conservation District.

In 2024, Alta Mesa personal property was valued at $1,352 M and subject to the following tax rates resulted in 2024 property tax of $0.03 M (Table 22.3).

Table 22.3: 2024 Property Tax Information

Taxing Jurisdiction	Tax Rate	Market Value	Estimated Tax
Brooks County	0.792191	$1,351,720	$10,708
Brooks County Rd & Bridges	0.069828		$943.88
Brooks County ISD	1.323800		$17,894
Brooks CO FM & FC	0.038828		$524.85
Brush County Groundwater Conservation District	0.010791		$145.86
	2.24		$30,216

(https://esearch.brookscad.org/Property/View/162755?year=2024&ownerId=138685)

Ad valorem tax is estimated to increase by 15% per year over LOM. The total production tax burden for LOM is estimated at $0.62 M for a cost per pound U_3O_8 of $0.30.

22.2.4 **Royalties**

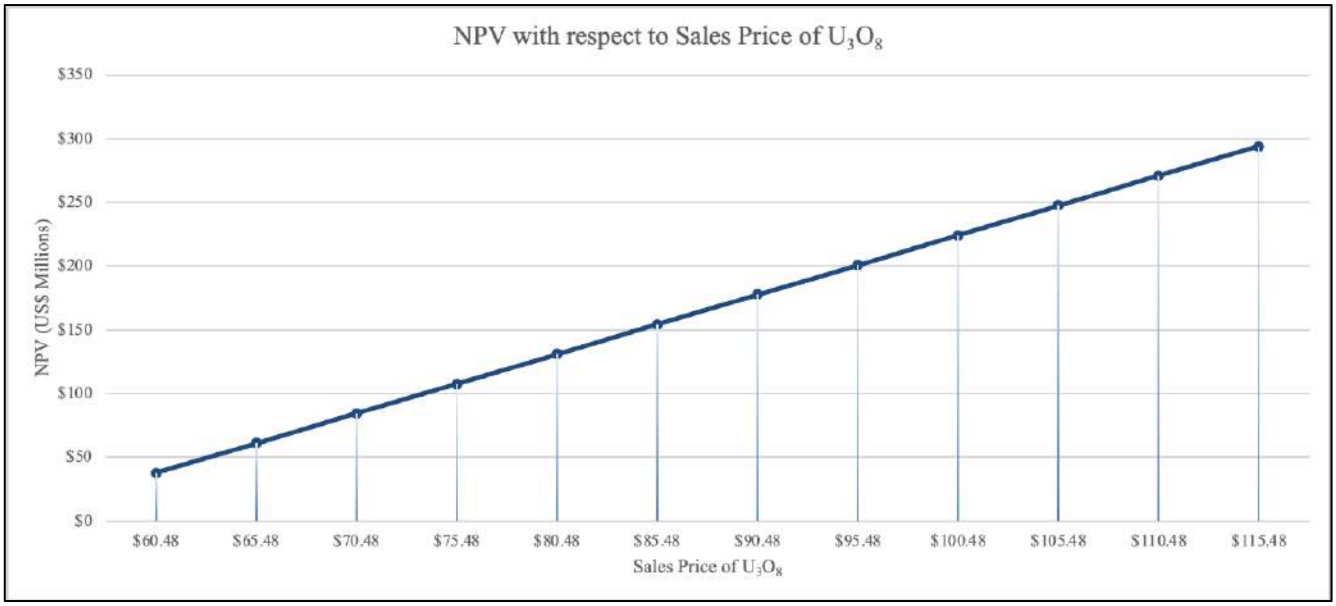
Royalties are assessed on gross proceeds. The project is subject to a cumulative 3.0% surface and mineral royalty at an average LOM sales price of $85.48 per lb. U_3O_8 for $30.0 M or $3.60 per pound.

22.3 **Sensitivity Analysis**

22.3.1 **NPV v. Uranium Price**

This analysis is based on a variable commodity price per pound of U_3O_8 and the cash flow results. The Project is most sensitive to changes in the price of uranium. A $5.0 change in the price of uranium can have an impact to the NPV of more than $23.0 M at a discount rate of 8%. See Figure 22.1.

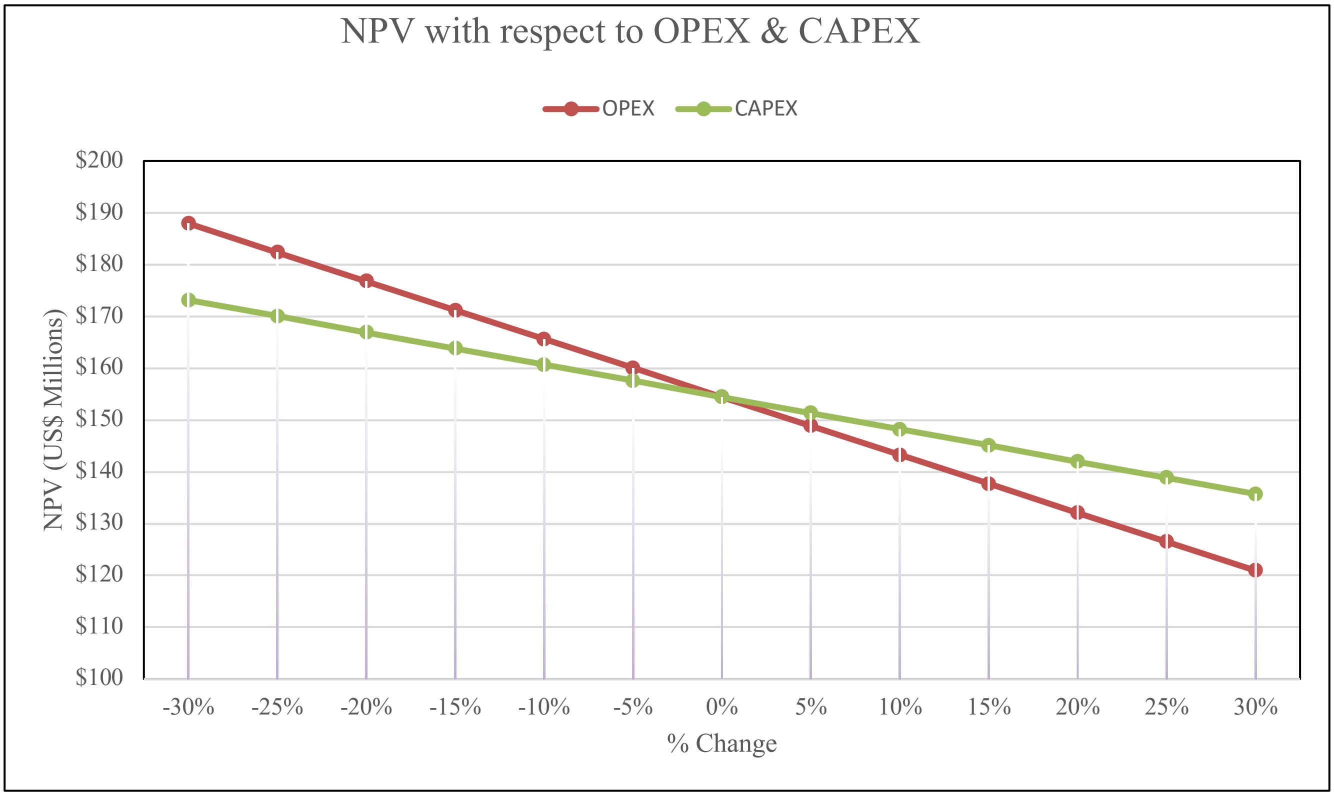
Figure 22.1: NPV v. Uranium Price



22.3.2 **NPV v. Variable Capital and Operating Cost**

The Project NPV is also sensitive to changes in either capital or operating costs as shown on Figure 22.2 (NPV v. Variable Capital and Operating Cost). A 5% change in the operating cost can have an impact to the NPV of approximately $3.0 M based on a discount rate of 8% and a uranium price of $85.48 per pound of U_3O_8. Using the same discount rate and sales price, a 5% change in the capital cost can have an impact to the NPV of approximately $7.0 M.

Figure 22.2: NPV v. Variable Capital and Operating Cost



23.0 ADJACENT PROPERTIES

The Project is located northwest of the company's Alta Mesa Project. Areas of extensive ISR mining did occur in Jim Hogg County in 1970s through the 1990s but with the sustained low price of uranium toward the end of that period those facilities were closed with successful restoration, reclamation and decommissioning.

24.0 OTHER RELEVANT DATA AND INFORMATION

When assessing the Project's scientific, technical and economic potential it is important to consider the size and continuity of the Project's land position, and its proximity to the Alta Mesa Project.

No other ISR uranium property in the United States has a land position with these characteristics as well as the amount of geologic evidence to imply geological and grade continuity over such a large area.

25.0 INTERPRETATION AND CONCLUSIONS

Based on the quality and quantity of geologic data, stringent adherence to geologic evaluation procedures and thorough geological interpretative work, deposit modeling, resource estimation methods, quality and quantity of historic and recent detailed cost inputs, and a detailed economic analysis, the QP responsible for this report considers that the current mineral resource estimates are relevant and reliable to evaluate the Project's economic potential.

Less federal tax, the Projects cash flow is estimated at $366.6 M or $41.48 per pound U_3O_8. Using an 8% discount rate, the Projects NPV is $205.8 M. The Projects after tax cash flow is estimated at $276.5 M for a cost per pound U_3O_8 of $53.18. Using an 8.0% discount rate, the Projects NPV is $154.4 M.

Estimated capital costs are $108.1 M and includes $13.7 M for processing facilities and $94.4 M for sustained wellfield development.

Operating costs are estimated to be $25.49 per pound of U_3O_8. The basis for operating costs is planned development and production sequence and quantity, in conjunction with historic site production results.

25.1 Risk Assessment

As with any mining property, there are project risks. Project risks have been identified and can be de-risked with proper planning. The following sections discuss these risks.

25.2 Mineral Resources and Mineral Reserves

All of the Project's mineral resources are inferred. Inferred resources are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the economics in this report will ever be realized and there is the risk to the project of economic failure.

Due to the speculative nature of inferred mineral resources, the QP has qualified the LOM resources by reducing the typical ISR mine recovery from 80% to 60%.

Considering the Project's quantity of inferred mineral resources, like geologic setting and proximity to the Alta Mesa Project, the Project does merit further assessment, and additional drilling will be conducted to increase certainty that the economics of this report will be realized.

25.3 Uranium Recovery and Processing

Alta Mesa's production history and enCore's 2024 production demonstrates that uranium recovery is economically achievable, grade, flow rate and mine recovery can be determined with a high level of certainty.

A potential risk to meeting the production and thus financial results will be associated with the success of wellfield operation and the efficiency of recovering uranium. A potential risk in the wellfield recovery process depends on whether geochemical conditions that affect solution mining uranium recovery rates from the mineralized zones are comparable to previously mined area. If they prove to be different, then potential efficiency or financial risks might arise.

Capacity of wastewater disposal systems is another process risk. Limited capacity of deep disposal wells can affect the ability to achieve production and timely groundwater restoration. enCore has two Class I wells in operation at the Alta Mesa Project that may be used for the Project; however, if disposal capacities were to decrease, then operational and financial risks might arise. To reduce the risk of limited liquid waste disposal, additional WDW may be installed.

25.4 Permitting and Licensing Delays

The Project is not permitted or licensed to operate.

The most significant permits and licenses that will be required to operate the Project are (1) the TCEQ Source and Byproduct Materials License, (2) the Mine Area Permit issued by TCEQ and (3) Production Area Authorizations (UIC Class III) that are issued at various times through LOM, deep injection non-hazardous disposal wells (V wells) issued by TCEQ, and an USEPA aquifer exemption

To Permit and license the Project it is anticipated to take three years. Typically, the regulatory review and approval process is timely; however, if this process were to slow then approval to operate the Project might be delayed impacting project startup and production objectives.

25.5 Social and/or Political

Texas is an industry business-friendly state with low taxes, minimal regulations, large workforce, and considerable infrastructure, making it one of the more favorable mineral development jurisdictions in the United States. The Project does not draw negative attention from environmental NGO's, and individuals in the public. Local communities are supportive of enCore's activities and the company's contribution to the local job market, money invested into local goods and services and financial benefits to the local tax base. Texas also has a balanced regulatory philosophy that strives to protect public health and natural resources that are consistent with sustainable economic development.

26.0 RECOMMENDATIONS

The key risk to the Project is with respect to the quantity of mineral resources that can be converted to mineral reserves. As discussed in Section 24, the Project has a substantial inferred mineral resources inventory. To de-risk the project by increasing the quantity of mineral resources than can be converted to mineral reserves it is recommended that enCore actively works to mitigate risk to ensure a profitable and successful project by:

- Continue drilling campaign with larger programs to develop previously identified mineralization and to identify new mineralization.
- Drill 400-hole programs using following cost per hole of $12,300, for total program cost of $4.92 M (Table 26.1). It is anticipated that a minimum of 3 programs will be needed to adequately assess the Project to make a go-no-go decision to advance the Project to mine development. Anticipated investment to reach this stage gate is approximately $14.76 M.

Table 26.1: Drilling Costs

Item	Quantity	Unit Cost		Total	
Drilling	1,000	$	8.00	$	8,000
Muds & Polymers	1,000	$	0.67	$	670
Cement Service	1	$	600.00	$	600
Cement	1	$	200.00	$	600
Drill Bits & Underream Blades	1	$	300.00	$	300
Dirt Work & Reclamation	1	$	300.00	$	470
Washout	1,000	$	1.65	$	1,650
				$	12,300

- Drill at least one core hole in any new PAAs to confirm deposit mineralogy, the state of uranium secular equilibrium, and uranium content. Coring is estimated to cost $30 K per hole. Analyses, leach testing, and mineralogical work is estimated to be $25 k per hole.

27.0 REFERENCES

BRS Engineering, 2023. Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg Counties, Texas, USA, National Instrument 43 101, Technical Report, January 19, 2023.

CIM Council, 2003. Estimation of Mineral Resources and Mineral Reserves, Best Practice Guidelines, adopted November 23, 2003.

Finch, W.I., 1996. Uranium Provinces of North America - Their Definition, Distribution and Models. U.S. Geological Survey Bulletin 2141, 24 p.

Neuman, S.P. and Witherspoon, P.A., 1972. Field Determination of the Hydraulic Properties of Leaky Multiple Aquifer Systems, Water Resources Research, Vol. 8, No. 5, pp. 1284-1298, October 1972.

TradeTech, 2023. Uranium Market Study Issue 4.

U.S. Energy Information Administration, 2023. Domestic Uranium Production Report (2009-23), Table 9.

U.S. Nuclear Regulatory Commission, 2009. Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, NUREG-1910, Volumes 1 and 2, May 2009.

Beahm, Douglas L, BRS Engineering Inc., "Alta Mesa Uranium Project Technical Report, Mineral Resources and Exploration Target, National Instrument 43-101, Brooks and Jim Hogg Counties, Texas, USA", June 1, 2014, prepared on behalf of Mesteña Uranium LLC.

Beahm, Douglas L, BRS Engineering Inc., "Alta Mesa Uranium Project, Alta Mesa and Mesteña Grande Mineral resources and Exploration Target, Technical Report National 43-101" and with an effective date of the report of July 19, 2016, prepared by BRS Inc., on behalf of Energy Fuels Inc.

Beahm, Douglas L, BRS Engineering Inc., "Alta Mesa Uranium Project, Brooks and Jim Hogg counties, Texas, USA" which has an effective date of December 31, 2021, prepared by BRS Inc. and Energy Fuels Inc. as a non-independent report on behalf of Energy Fuels Inc.

Collins, J. and H. Talbot, U2007 Conference, Corpus Christi, Presented by Mesteña Uranium LLC

Hosman, R.L., and Weiss, J.S.,1991, Geohydrologic units of the Mississippi Embayment and Texas Coastal uplands aquifer systems, South Central United State-regional aquifer system analysis-Gulf Coastal Plain: U.S. Geological Survey Professional Paper 1416-B, 1996.

Brogdon, L.D., C.A. Jones, and J.V Quick, "Uranium favorability by lithofacies analysis, Oakville and Goliad Formations, South Texas: Gulf Coast Association of Geological Societies, 1977.

Smith, G. E., W. E. Galloway, and C. D. Henry, Regional hydrodynamics and hydrochemistry of the uranium-bearing Oakville Aquifer (Miocene) of South Texas: The University of Texas at Austin, Bureau of Economic Geology Report of Investigations No. 124, 1982.

Galloway, W. E., Epigenetic zonation and fluid flow history of uranium-bearing fluvial aquifer systems, south Texas uranium province: The University of Texas at Austin, Bureau of Economic Geology Report of Investigations No. 119, 1982.

Galloway, W. E., Catahoula Formation of the Texas coastal plain: depositional systems, composition, structural development, ground-water flow history, and uranium deposition: The University of Texas at Austin, Bureau of Economic Geology Report of Investigations No. 87, 1977.

Galloway, W. E., R. J. Finley, and C. D. Henry, South Texas uranium province geologic perspective: The University of Texas at Austin, Bureau of Economic Geology Guidebook No. 18, 1979.

McBride, E. F., W. L. Lindemann, and P. S. Freeman, Lithology and petrology of the Gueydan (Catahoula) Formation in south Texas: The University of Texas at Austin, Bureau of Economic Geology Report of Investigations No. 63, 1968.

Eargle, D. H., Stratigraphy of Jackson Group (Eocene), South-Central, Texas: American Association of Petroleum Geologists Bulletin, 43, 1959.

Fisher, W. L., C. V. Proctor, W. E. Galloway, and J. S. Nagle, Depositional systems in the Jackson Group of Texas-Their relationship to oil, gas, and uranium: Gulf Coast Association of Geological Societies Transactions, 20, 1970.

Kreitler, C. W., T. J. Jackson, P. W. Dickerson, and J. G. Blount, Hydrogeology and hydrochemistry of the Falls City uranium mine tailings remedial action project, Karnes County, Texas: The University of Texas at Austin, Bureau of Economic Geology, prepared for the Texas Department of Health under agreement No IAC(92-93)-0389, September, 1992.

De Voto, R. H. "Uranium Geology and Exploration" Colorado School of Mines, 1978.

Finch, W. I., Uranium provinces of North America—their definition, distribution, and models: U.S. Geological Survey Bulletin 2141, 1996.

Finch, W. I. and Davis, J. F., "Sandstone Type Uranium Deposits – An Introduction" in *Geological Environments of Sandstone-Type Uranium Deposits Technical Document*, Vienna: IAEA, 1985.

Granger, H. C., Warren, C. G., "Zoning in the Altered Tongue Associated with Roll-Type Uranium Deposits" in *Formation of Uranium Ore Deposits, Sedimentary Basins and Sandston-Type Deposits*, IAEA, 1974.

IAEA, "World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification" 2009 Edition, Vienna: IAEA, 2009.

Nicot, J. P., et al, "Geological and Geographical Attributes of the South Texas Uranium Province", Prepared for the Texas Commission on Environmental Quality, Bureau of Economic Geology, April, 2010.

United States Nuclear Regulatory Commission Office of Federal and State Materials and Environmental Management Programs Wyoming Department of Environmental Quality Land Quality Division, NUREG-1910 Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities. Final Report Manuscript Completed and Published: May 2009.

McKay, A. D. et al, "Resource Estimates for In Situ Leach Uranium Projects and Reporting Under the JORC Code", Bulletin November/December 2007.

Mesteña Uranium, LLC, Radioactive Material License (RML)Application, 2000.

Stoeser, D.B., Shock, Nancy, Green, G.N., Dumonceaux, G. M., and Heran, W.D., in press, A Digital Geologic Map Database for the State of Texas: U.S. Geological Survey Data Series.

US Securities and Exchange Commission, 17 CFR Parts 229, 230, 239 and 249, Modernization of Property Disclosures for Mining Registrants.

TradeTech, Uranium Market Study.

Unpublished Reports:

Goranson, P., Mesteña Uranium LLC, Internal Memorandum Re: Review of Reserve Estimates, July

2007.

Personal Communication Goranson, P., enCore Energy Corp. , Alta Mesa Wellfield Economics, January 2023.

Web Sites:

Texas Monthly Magazine: https://www.texasmonthly.com/articles/the-biggest-ranches/

Texas State Historical Association- Handbook of Texas: https://www.tshaonline.org/handbook/entries/mineral-rights-and-royalties

United States Nuclear Regulatory Commission-Nuclear Materials: https://www.nrc.gov/materials/uranium-recovery/extraction-methods/isl-recovery-facilities.html

28.0 DATE, SIGNATURE AND CERTIFICATION

This NI 43-101 Technical Report titled "Mesteña Grande Uranium Project, Brooks and Jim Hogg Counties, Texas, USA" dated February 19, 2025, with an effective date of December 31, 2024, has been prepared under the supervision of the undersigned.

Stuart Bryan Soliz
SOLA Project Services, LLC

February 19, 2025
4912 Stoneridge Way
Casper, Wyoming 82601
United States of America

SME
Society for Mining, Metallurgy & Exploration
Stuart Bryan Soliz
SME Registered Member No. 4068345
Signature
Date Signed 02-19-25
Expiration date 12-31-25

CERTIFICATE OF QUALIFIED PERSON

I, Stuart Bryan Soliz, P.G., of 4912 Stoneridge Way, Casper, Wyoming, United States of America, do hereby certify that:

- I have been retained by enCore, to manage, coordinate, develop and write certain sections of the NI 43-101 Technical Report, Alta Mesa Uranium ISR Project, Texas, USA, dated February 19, 2025.
- I am a principal of SOLA Project Services LLC., 4912 Stoneridge Way, Casper, Wyoming, United States of America.
- I graduated with a Bachelor of Science degree in Geology from Midwestern State University in 1994.
- I graduated with a Master of Science degree in Geology from Texas Tech University in 1996.
- I am a Professional Geologist in Wyoming, a Registered Member of the Society for Mining, Metallurgy and Exploration.
- I have worked in the mining industry for 28 years and in ISR uranium mining for 20 years. My experience includes geologic evaluations of sandstone hosted uranium deposits, wellfield design, mineral resources and mineral reserves estimation, mineral resources and mineral reserves management, drilling and mine construction oversight, cost estimating and control, economic analyses, feasibility studies, project and construction management for numerous metal mining operations, numerous technical report reviews and a QP for Cameco Corporation's January 2018 Inkai Operation Technical Report. I have evaluated sandstone hosted uranium deposits and conducted mine development in the United States, Australia and Kazakhstan. I have read the definition of "qualified person" set out in NI 43-101 and certify by reason of my education, professional registration and relevant work experience, I fulfill the requirements to be a "qualified person".
- I have read the NI 43-101 and the Technical Report which has been prepared in accordance with the guidelines set forth in NI 43-101 and Form 43-101F1.
- I am responsible for the coordination, compilation and preparation of the report. I reviewed enCore geologic and mineral resources, permitting and licensing schedule and work plan, coordinated and assisted in the review and update of the production model, processing plan revisions, cost estimates, economic analysis, risk evaluation and recommendations.
- 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.
- I visited the Project on January 7, 2025.
- I am independent of the issuer applying all the tests of NI 43-101.
- I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the company files on websites accessible by the public.

Effective Date: December 31, 2024

Stuart Bryan Soliz

Wyoming Board of Professional Geologists License Number PG-3775

Society for Mining, Metallurgy, & Exploration Registered Member Number 4068645