Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg Counties, Texas, USA

National Instrument 43-101, Technical Report

Prepared for:





Douglas Beahm, PE, PG, BRS Inc. Riverton, Wyoming Registered Member of the SME



Effective Date: January 19, 2023

Date and Signature Page

Technical Report **Douglas L. Beahm:**

The Technical Report titled "Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg counties, Texas, USA" which has an effective date of January 19, 2023. I am the author of the report.

Dated this 19th Day of January 2023.

"original signed and sealed" <u>/s/ Douglas L. Beahm</u> Douglas L. Beahm, PE, PG, SME Registered Member

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1.0 EXECUTIVE SUMMARY

This Technical Report has been prepared for enCore Energy Corp. (enCore) by BRS Inc. for the Alta Mesa Uranium Project (the Project), located in Brooks and Jim Hogg Counties, Texas, USA and is based on and supersedes previous NI 43-101 Technical Reports by independent geologic mining consultant Douglas Beahm, PE, Principal Engineer for BRS Engineering Inc. (BRS) on the project.

Mr. Beahm is an independent consultant and Principal Engineer of BRS Inc. This Technical Report is prepared pursuant to the requirements of the Canadian Securities Administrators National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining (CIM) Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves ("CIM standards").

enCore is incorporated in British Columbia, Canada. enCore Energy US Corp., a US-based subsidiary, is a uranium development and exploration company, with projects located in Colorado, Utah, Arizona, Wyoming, Texas and New Mexico. enCore is currently advancing its production capacity in South Texas at its Rosita Project, one of the two licensed uranium production facilities it owns in South Texas. Additionally, through its subsidiary, Azarga Uranium Corp. it owns a licensed in-situ uranium recovery project located in South Dakota. enCore is listed on the OTCQB (symbol ENCUF), and the TSX Venture Exchange (symbol EU) and is subject to the disclosure requirements of NI 43-101. All costs and prices are listed in US dollars (US\$).

The Alta Mesa Uranium Project, (the Project) is an in-situ recovery (ISR) mining project, and past producer consisting of two distinct properties; the Alta Mesa property, which is composed of the Alta Mesa mine area and processing facility, South Alta Mesa (SAM) and Indigo Snake. The second property is Mesteña Grande, which is composed of Mesteña Grande Goliad (MGG) Mesteña Grande North (MGN), Mesteña Grande Central (MGC), Mesteña Grande Alta Vista (MGAV), and El Sordo. The Project's central processing facility and mine office are located at the Alta Mesa property approximately 11 miles west of the intersection of US 281 and Ranch Road 755, which is also 22 miles south of Falfurrias, Texas. Figure 3-1 shows the location of both properties making up the project in South Texas.

The Project is located within a portion of the private land holdings of the Jones Ranch, founded in 1897 and includes surface and mineral rights as well as oil and gas and other minerals including uranium. Active uses of the lands in addition to uranium exploration and production activities include agricultural use (cattle), oil and gas development, and private hunting. Previous owners include Chevron Minerals, Total Minerals, Cogema, Uranium Resources Inc., Mesteña Uranium LLC (MULLC), formed by landowners, and Energy Fuels Inc,. In 2016, Energy Fuels, Inc. acquired the Project from MULLC. In November 2022, enCore and a subsidiary of Energy Fuels Inc. executed a Membership Interest Purchase Agreement whereby enCore agreed to acquire four limited liability companies that together hold 100% of the Project. Section 5.2 (Ownership History) discusses this in more detail.

The Project consists of Uranium Mining Leases for uranium ISR mining (4,598 acres) and Mineral Options (195,501 acres) comprising some 200,099 total acres consisting of acreage associated with currently approved mining permits issued by the Texas Commission on Environmental Quality (TCEQ) and 9 prospect areas as described in Section 4.2.

The Project produced approximately 4.6 million pounds of uranium oxide between 2005 and 2013 via in-situ recovery (ISR) mining using an alkaline lixiviant and is processed at a plant located in Alta Mesa. The facility was in production from 2005 until primary production ceased February 2013. The Project operated in a groundwater clean-up mode until February 2015; therefore, any uranium mined since 2013 remains as in-circuit inventory. The first wellfield (PAA-1) has completed final groundwater restoration and was approved by the Texas Commission on Environmental Quality in March 2018. All other wellfields are being maintained by a small bleed (less than 100 gpm) for permit compliance. The bleed solutions are disposed of in the deep disposal wells.

Mineralization within the South Texas Uranium Province is interpreted to be dominantly roll-front type mineralization and primarily of epigenetic origin (Finch, 1996). Roll-fronts are formed along an interface between

oxidizing groundwater solutions which encounter reducing conditions within the host sandstone unit. This boundary between oxidizing and reducing conditions is often referred to as the Reduction/Oxidation (REDOX) interface or front.

This report provides estimates of Mineral Resources within the Project area. Only the Alta Mesa property has had previous ISR mining. No preliminary economic assessment, pre-feasibility study or feasibility study has been completed to NI 43-101 standards; and, no mineral reserves are stated in this report.

Exploration Target(s) have been identified within the project areas and the range of possible quantity and grade of mineralization as discussed in Section 24 of this report.

The current Mineral Resource estimate for the Project is summarized in Table 1-1.

	COG			Grade	Contained Metal
Classification	(G.T.)	Area	Tonnage	(% U ₃ O ₈)	(Ibs. U ₃ O ₈)
Measured	0.3	Alta Mesa	54,000	0.152	164,000
Total Measured	0.3		54,000	0.152	164,000
Indicated	0.3	Alta Mesa	1,397,000	0.106	2,959,000
	0.3	Mesteña Grande	119,000	0.120	287,000
Total Indicated	0.3	-	1,516,000	0.107	3,246,000
Total Measured & Indicated	0.3		1,570,000	0.109	3,410,000
Inferred	0.3	Alta Mesa	1,263,000	0.126	3,192,000
	0.3	Mesteña Grande	5,733,000	0.119	13,601,000
Total Inferred	0.3		6,996,000	0.120	16,793,000

Table 1-1 Alta Mesa and Mesteña Grande Mineral Resource Summary

Notes:

1. NI 43-101 and CIM definitions were followed for all Mineral Resource categories.

2. Mineral Resources are estimated at a 0.3 GT (0.02% U₃O₈ minimum grade)

3. Mineral Resources are estimated using a long-term Uranium price of US\$70 per pound

Total measured Mineral Resource is that portion of the in-place or in situ Mineral Resources that is estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred Mineral Resources but were considered in establishing the minimum GT cutoff with respect to reasonable prospects for future economic extraction.
 Bulk density is 0.0598 tons (#3/17.0 #3/ton)

5. Bulk density is 0.0588 tons/ft³ (17.0 ft³/ton)

6. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

7. Numbers may not add due to rounding

1.1 Conclusions

The author considers the data and information available for this report to be accurate and reliable for the purposes of estimating Mineral Resources for the Project. Significant Mineral Resources remain within the Project area which may be tributary to the Alta Mesa central processing facility which is licensed and operated continuously from 2005 until production standby in February 2013.

Mineral Resources have been estimated for both the Alta Mesa and Mesteña Grande areas in accordance with NI 43-101 and CIM standards and definitions and are summarized in Table 1-1 in the measured, indicated and inferred mineral resource category.

The author considered the risks to put the Alta Mesa portion of the Project into production are low since all permit for operating are in place and is tributary to the existing Alta Mesa ISR production facility, which is licensed to operate. For each new wellfield a production area authorization (PAA) permit will need to be obtained through the permitting process with TCEQ. The Mesteña Grande portion of the Project, which will operate as a satellite facility to the Alta Mesa ISR facility, will require the permitting and construction of a satellite facility and wellfields prior to operations.

The Project does have some risks similar in nature to other mining projects and uranium mining projects specifically, including:

- Future commodity demand and pricing;
- Environmental and political acceptance of the project;
- Variance in capital and operating costs; and
- Mine and mineral processing recovery and dilution.

There is a risk that additional drilling may not locate additional Mineral Resources and that mineralization may not be found or may not be continuous along the REDOX boundary and that the actual grade times thickness (GT) along the trends will fall outside the estimated range, either higher or lower. A substantial portion of the Mineral Resource is based on wide-spaced drilling and has been classified as inferred. Inferred Mineral Resources are too speculative to have economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred Mineral Resources can be assessed in the context of a Technical Report which is allowed under NI 43-101 standards, the latter as a Preliminary Economic Assessment (PEA). The tonnages, grades, and contained pounds of uranium, as stated in this report, for exploration targets should not be construed to reflect a estimated Mineral Resource (inferred, indicated, or measured). The potential quantities and grades for exploration targets, as stated in this report, are conceptual in nature, and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in any of the exploration targets being delineated as a Mineral Resource.

The author is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which would materially affect the Mineral Resource estimates presented in this report. To the author's knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property provided the conditions of all mineral leases and options, and relevant operating permits and licenses, are met. The reader is cautioned that additional drilling may or may not result in discovery of an economic Mineral Resource on the property.

1.2 Recommendations

A phased project approach is recommended. Phase 1 would include delineation of the PAA7 and PAA8 mineral resource areas. These areas are within the aquifer exemption area and proximate to the Alta Mesa facility. Phase 1 would include some rehabilitation and modernization of the facility and preparation of a Potential Economic Assessment (PEA). Phase 2 would include wellfield planning, installation of baseline monitor wells, hydrologic studies and related activities to advance permitting of the wellfields. Phase 2 would include a Preliminary Feasibility Study (PFS). Phase 2 would be contingent on the outcome of Phase 1 and favorable market conditions.

1.3 Phase 1 – Delineation of the PAA7 and PAA8 Mineral Resource Areas:

Phase 1a Delineation Drilling: PAA7 is reasonably well delineated and is permitted and has baseline monitor wells in place. Additional Forty additional exploration drill holes are recommended. PAA8 requires an estimated 330 exploration drill holes. Drilling costs for the project have been estimated on a per hole basis in two categories.

- Exploration drilling including all costs for site preparation, drilling, geophysical logging, drill hole abandonment and sealing, and site reclamation. Estimated cost per each \$4,800.00 USD.
- Cased exploration wells including all costs for site preparation, drilling, geophysical logging, casing and screening, and site reclamation. Estimated cost per each \$16,000.00 USD.

Phase 1b Facility Rehab: In preparation for restarting the processing facility, rehabilitation and modernization of the facility is recommended. This work would be necessary to fully evaluate the operational readiness of the facility and determine if any additional components would need rehabilitation or replacement.

Phase 1c PEA: Following the completion of phase 1a and 1b, it is recommended that the mineral resources within PAA7 and PAA8 will be re-evaluated, and a PEA prepared for the project.

Total costs are estimated at \$2,856,000.00 USD as summarized in Table 26.1.

1.4 Phase 2 – Permitting and Economic Evaluation:

Phase 2 is contingent on the outcome of Phase 1 and favorable market conditions. Phase 2 includes,

- Completion of cased wells for hydrological assessment and determination of baseline water quality for PAA8,
- Permitting and related studies of the PAA8 wellfield,
- Completion of a PFS.

Total costs are estimated at \$1,340,000.00 as summarized in Table 26.2.

2.0 INTRODUCTION

2.1 Introduction

This Technical Report was prepared on behalf of encore Energy (ENCORE) for the Alta Mesa Uranium Project (the Project), located in Brooks and Jim Hogg Counties, Texas, USA pursuant to the requirements of the Canadian Securities Administrators National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining (CIM) Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves ("CIM standards").

Previous Technical Reports for the Alta Mesa project include:

- The report titled "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 by BRS Inc. on behalf of Mesteña Uranium LLC.
- The report titled, "ALTA MESA URANIUM PROJECT, ALTA MESA AND MESTEÑA GRANDE MINERAL RESOURCES AND EXPLORATION TARGET, TECHNICAL REPORT NATIONAL INSTRUMENT 43-101" and with an effective date of the report of July 19, 2016, prepared by BRS Inc., on behalf of Energy Fuels Inc.
- The report titled "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.

The Alta Mesa Uranium Project (Project) is made up of the Alta Mesa and Mesteña Grande properties. The Alta Mesa property produced approximately 4.6 million pounds of uranium oxide between 2005 and 2013 via in-situ Recovery (ISR) mining. The facility was in production from 2005 until primary production ceased February 2013. The Project operated in a groundwater clean- up mode until February 2015; therefore, any uranium mined since 2013 remains as an in-circuit inventory.

This report supports disclosure by enCore Energy of estimates of Mineral Resources for the Alta Mesa and Mesteña Grande properties and in addition identifies exploration target(s) within the project areas and discloses the potential quantity and grade of mineralization, expressed as ranges, for further exploration. The tonnages, grades, and contained pounds of uranium, as stated in this report for exploration targets are estimates and could change once exploration activities are completed. Such exploration targets are conceptual in nature and not a calculated Mineral Resource (inferred, indicated, or measured) under NI 43-101 regulations. Furthermore, it is uncertain if additional exploration will result in any of the exploration targets being delineated as a Mineral Resource.

2.2 Registrant of Filing

enCore Energy Corp. is incorporated in British Columbia, Canada; its subsidiary, enCore Energy US Corp. is a US-based uranium exploration and development company with projects located in Colorado, Utah, Arizona, Wyoming, Texas, and New Mexico. enCore is listed on the TSX Venture Exchange (symbol EU) and the OTCQB (symbol ENCUF) and is subject to Terms of Reference

This Technical Report updates previous Technical Reports for the project completed by BRS on the Alta Mesa Uranium Project, as previously cited, which are available on the Canadian Securities Administrators (CSA) filing system ("SEDAR", <u>www.sedar.com</u>).

The Project has been on care and maintenance since the effective date of the previous report, The author is not aware of any material changes in the project since the issuance of the 2016 Technical Report other than a change in ownership of the project.

2.3 Sources of Information

This Technical Report builds on previous Technical Reports completed under Canadian NI 43-101 Standards of Disclosure for Mineral Projects completed by BRS on the Alta Mesa and Mesteña Grande Project. The author, Douglas Beahm, PE, PG, visited the Project first in April of 2014 and more recently on January 12, 2023.

Douglas Beahm, PE, PG, BRS Inc. is responsible for all sections of the report.

The documentation reviewed and other sources of information utilized in this report are listed in Section 24 (References).

2.4 Site Visit

Douglas Beahm visited the project and local geologic offices during the period of April 15 through April 17, 2014, after reviewing data at the main Corpus Christi office of Mesteña Uranium on April 14, 2014.

During this time Mr. Beahm:

- Reviewed drill data including original geophysical and lithological logs;
- Reviewed quality control procedures relating to drilling and geophysical logging;
- Reviewed procedures and data relating to geophysical logging and instrument calibration;
- Visited numerous drill sites and;
- Observed and reviewed surveying methodology.

During the site visit copies of all drill data pertinent to the current evaluation was provided in electronic format. Based on review of the data collection and preservation methods employed by operator, at that time the author was of the opinion that the drilling and exploration practices employed are in keeping with industry standards and the author concludes that the drill hole database available for the project is reliable.

Douglas Beahm completed a recent site visit on January 12, 2023, to determine whether the primary data for the project remains preserved and maintained and to assess whether any apparent material change has occurred since the previous site visit in 2016. During this site visit the author,

- Reviewed the original hard copies of the drill data including geophysical logs.
- Obtained a current copy of the drill hole database and confirmed there has been no material change in the database since 2014.
- Obtained an updated status on environmental permits and reviewed documentation of the same.
- Visited the PAA-7 well field.
- Visited the processing facility.

Following the recent site visit it is the author's opinion that no material change has occurred at the project since his previous site visitation and that the basic data for the purposes of this report is reliable.

2.5 Purpose of Report

The author has prepared this Technical Report on the Alta Mesa project pursuant to the requirements of NI 43-101. The purpose of this report is to support disclosure by enCore Energy Corp. of Mineral Resources for the Project.

2.6 Effective Date

The effective date of the Mineral Resource in this report is January 19, 2023, The author previously completed a mineral resource estimate in April 2014. There has been no additional drilling since that time as operations have been on standby. The Mineral Resource is lower than the 2014 mineral resource estimate due to the exclusion of mineral resource estimated as remaining wellfields that have been substantially depleted. The Mineral Resource estimate is based on a cutoff criteria, 0.3 GT. The author reviewed the 0.3 GT cutoff in light of current projections of commodity price (Section 19) and expected operating costs and concludes that the cutoff criteria is appropriate, and the resource estimate reflects current considerations for reasonable prospect for future economic extraction.

2.7 List of Abbreviations

Table 2-1 summarizes the list of terms and abbreviations used in this report:

URANIUM SPECIFIC TERMS AND ABBREVIATIONS							
Grade Parts Per Million ppm U ₃ O ₈ Weight Percent %U ₃ O ₈							
Radiometric Equivalent Grade		ppm eU ₃ O ₈		% eU ₃ O ₈			
Thickness	meters	m	Feet	Ft			
Grade Thickness Product	grade x meters	GT(m)	grade x feet	GT(Ft)			

Table 2-1 Terms and Abbreviations

GENERAL TERMS AND ABBREVIATIONS						
	METRIC Term	Abbreviation	US Term	Abbreviation	Metric : US Conversion	
Area	Square Meters	M ²	Square Feet	Ft ²	10.76	
	hectare	Ha	Acre	Ac	2.47	
Volume	Cubic Meters	m ³	Cubic Yards	Су	1.308	
Length	Meter	m	Feet	Ft	3.28	
	Meter	m	Yard	Yd	1.09	
Rod	Meter	5.03	Feet	Ft	16.5	
Distance	Kilometer	km	Mile	mile	0.6214	
Weight	Kilogram	Kg	Pound	Lb	2.20	
	Metric Ton	km ³	Short Ton	Ton	1.10	

3.0 RELIANCE ON OTHER EXPERTS

The author fully relied the following:,

- Commodity pricing in Section 19 is based on information available online from TradeTech™.
- All information contained in Section 4 of the report including land status, mineral holdings and leases, surface rights, taxes, permitting status and requirements, and environmental liabilities was provided by enCore Energy.

The author has reviewed the information provided by enCore and considers it reasonable and reliable for the purposes of this report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Introduction

The Project is a ISR recovery mining project consisting of two distinct properties; the Alta Mesa property, which is composed of the Alta Mesa mine area and processing facility, South Alta Mesa (SAM), and Indigo Snake; and the Mesteña Grande property, which is composed of Mesteña Grande Goliad (MGG) Mesteña Grande North (MGN), Mesteña Grande Central (MGC), Mesteña Grande Alta Vista (MGAV), and El Sordo. The Project's central processing facility and mine office is located at the Alta Mesa project area at 755 CR 315, Encino, Texas 78353, in Brooks County, Texas, at approximately 26° 54' 08" North Longitude and 98° 18' 54" West Latitude. The site is located approximately 11 miles west of the intersection of US 281 and Ranch Road 755, which is 22 miles south of Falfurrias, Texas. Figure 3-1 shows the location of both project areas in South Texas

The Project is located within a portion of the private land holdings of the Jones Ranch, founded in 1897. The 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 lands in addition to uranium exploration and production activities include agricultural use (cattle), oil and gas development, and private hunting. Previous owners include Chevron Minerals, Total Minerals, Cogema, Uranium Resources Inc., Mesteña Uranium LLC (MULLC), formed by landowners, and energy Fuels Inc. 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, Inc., to acquire four limited liability companies that together hold 100% of the Project at a total acquisition cost of US\$120 million payable in a combination of cash and a vendor take-back convertible note that is secured against the assets to be acquired. Section 6.2 (Ownership History) discusses this in more detail.

The Project consists of Uranium Mining Leases for uranium ISR mining (4,598 acres) and Mineral Options (195,501 acres) comprising some 200,099 total acres.

For the purposes of this report the Project is defined as constituting several project areas, as shown on Figure 3-2. Alta Mesa and Mesteña Grande Property Map.

The Alta Mesa project area, Brooks County, Texas, comprising 16,010 acres, including,

- The Alta Mesa mine area and central processing facility;
- The South Alta Mesa and
- The Indigo Snake.

The Mesteña Grande project areas, Jim Hogg County, Texas, comprising 47,088 acres, including,

- Mesteña Grande Goliad;
- Mesteña Grande North;
- Mesteña Grande Central;
- Mesteña Grande Alta Vista and
- El Sordo

An additional 137,001 acres are leased by enCore outside the designated project areas. These areas have mineral potential but have not been explored.

4.2 Land Tenure

Mineral ownership in Texas is a 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 (http://www.tshaonline.org/handbook/online/articles/gym01).

The Project consists of a private Mining Lease (4,598 acres) and Options (195,501 acres) for uranium comprising some 200,099 total acres consisting of acreage associated with currently approved mining permits issued by TCEQ and 9 prospect areas as described.

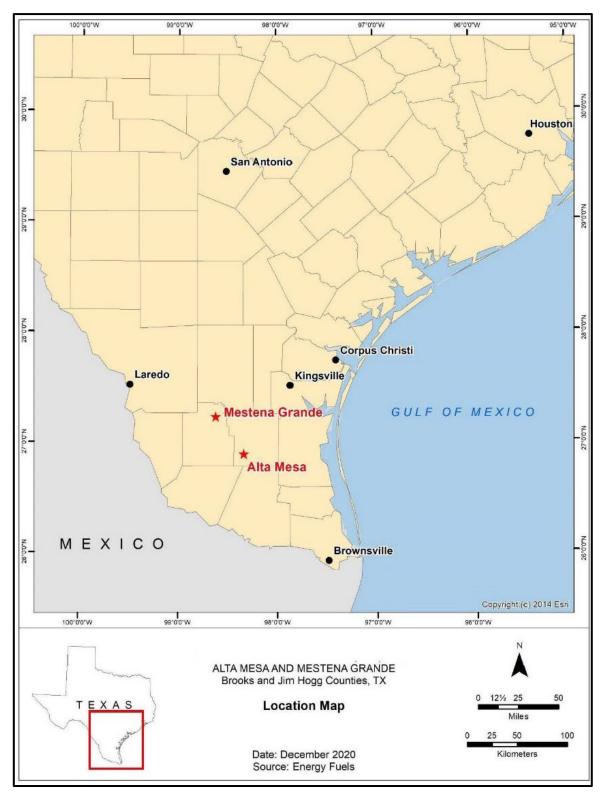


Figure 3-1. Alta Mesa and Mesteña Grande Location Map

ALTA MESA URANIUM PROJECT

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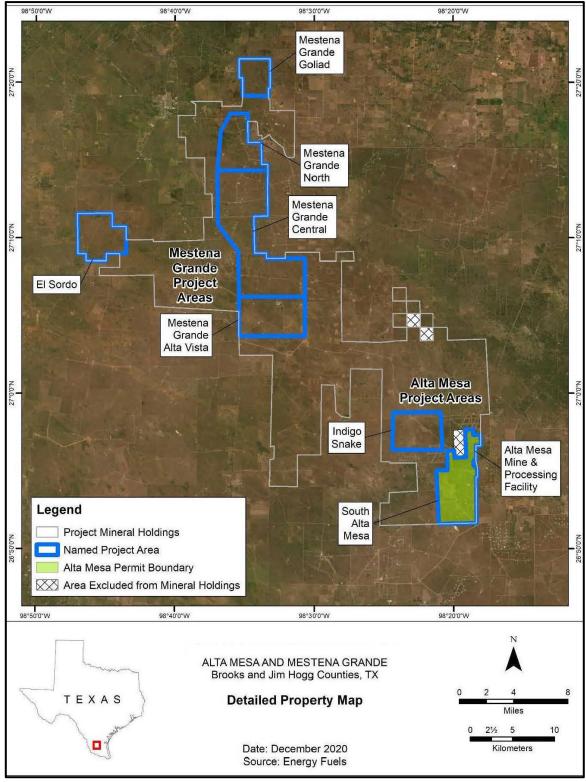


Figure 3-2. Alta Mesa and Mesteña Grande Property Map

4.2.1 Amended and Restated Uranium Solution Mining Lease

The Uranium Solution Mining Lease, originally dated June 1, 2004, covers approximately 4,575 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 the 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 as shown on Table 4.1.

Royalty Holders	Number of Acres	Lessor Royalty	Primary Term
Mesteña Unproven Ltd., Jones Unproven Ltd., Mestaña Proven Ltd. Jones Proven Ltd.	4597.67 +/-	7.5% Market value > \$95.00/lb. U ₃ O ₈ 6.25% of Market Value > \$65/lb. & = \$95/lb. U<sub 3O ₈ 3.125% of Market Value = \$65/lb. U<sub 3O ₈	15 years from amendment date with option for additional 15 years or as long uranium mining operations continue

Table 4.1 Amended Uranium Solution Mining Lease Royalties

4.2.2 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 can be extended by the grantee for an additional seven (7) years. Certain payments by the Grantee to the Grantor are required prior to year three (3) of the initial eight (8) year lease. The amended Lease Option Agreement provides for designating acreage to be leased for production by making certain payments to the Grantor (cash or stock). If acreage designation occurs within the first three (3) years of the initial eight (8) year lease, the payments will be deducted from the certain payments required by year

three (3) in the lease option agreement. The grantor then has sixty (60) business days to execute and return the lease.

Mesteña Unproven Ltd, Jones Unproven Ltd, Mesteña Proven Ltd Jones Proven Ltd	195,501 +/-	7.5% of Market value > \$95.00/lb U ₃ O ₈ 6.25% of Market Value > \$65/lb. & = \$95/lb. U<sub 3O ₈ 3.125% of Market Value = \$65/lb. U<sub 3O ₈	8 years from amendment date with option for additional 7 years or as long uranium mining operations continue
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Table 4.0 Amounded and Destated Unamismo Tablin	- Demoit and Lease Outline Arms and Develting
Table 4.2 Amended and Restated Uranium Testin	g Permit and Lease Option Agreement Royalties

4.2.3 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. Alta Mesa is a fully licensed, operable facility with sufficient sources of power, water, and waste disposal facilities for operations and aquifer restoration. While the current staff level has been reduced, sufficient local personnel were available for mine operations. Alta Mesa LLC either has in place or can obtain the necessary permits and/or agreements, and local resources are sufficient for current and future ISR operations within the Project.

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.

4.3 Permits

The Alta Mesa Project area is permitted for ISR mining and recovery of uranium. These permits include a Radioactive Materials License, Class III Underground Injection Control (UIC) Mine Area Permit, Aquifer Exemption, Production Area Authorizations, and a Class I UIC Deep Disposal Well Permit from the Texas Commission on Environmental Quality (TCEQ). Similar permits would be required for the Mesteña Grande project area depending upon the nature of operations and their integration with the Alta Mesa facility.

Table 14.3 summarizes the current permits held by EFR Alta Mesa LLC (previously known as MULLC). Similar permits would be required for the Mesteña Grande project area depending upon the nature of operations and their integration with the Alta Mesa facility.

Permit/License or Action	Frequency	Permit Expiration Date or Date Due	Permit Status
FCC - Radio License FRN0020106654	10 years	10/25/2026	Active
Sewage System OSSF	N/A	no expiration	Active
PAA-1	N/A	no expiration	Active
PAA-2	N/A	no expiration	Active
PAA-3	N/A	no expiration	Active
PAA-4	N/A	no expiration	Active
PAA-5	N/A	no expiration	Active
PAA-6	N/A	no expiration	Active
PAA-7	N/A	no expiration	Active
Uranium Exploration Permit 125	Annual	7/24/2023	Active
Radioactive Material License - R05360	Until Terminated	9/20/2009	Timely Renewal
L05939 - Sealed Source RML for PFN	10 years	9/30/2025	Active
TCEQ Aquifer Exemption	N/A	no expiration	Active
EPA Aquifer Exemption	as needed	no expiration	Active
UIC Class III Mine Area Permit UR03060	10 years	4/4/2023	Timely Renewal
USCOE 404 exemption SWG-1998-02466	as needed	no expiration	Active
UIC Class I disposal well permit WDW-365	10 years	10/20/2032	Active
UIC Class I disposal well permit WDW-366	10 years	10/20/2032	Active

Table 4-1 ENCORE Alta Mesa Permit Register

4.3.1 Environmental Liabilities

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 current (November, 2022) approved closure cost estimate for the Alta Mesa Project is provided in Table 4-2.

Table 4-2 Decommissioning Cost Summary

Program	Amount
TCEQ – Radioactive Materials License	\$8,502,109
TCEQ – UIC Class I and Class III Permits	\$1,754,649
	\$10,256,758

4.4 State and Local Taxes and Royalties

Ad valorem tax rates per \$ 100 of taxable value applicable to tangible property and royalty for 2022 were as follows:

Brooks County	0.773160
Brooks County Rd and Bridge	0.072987
Brooks County ISD	1.411298
Brooks County FM FC	0.042863
Brush Country Groundwater	0.015263

Production from properties is discussed in Section 4.22.

4.5 Encumbrances and Risks

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

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access

The Project is accessible year-round and is located approximately 11 miles west of the intersection of US Highway 281 (paved) and Ranch Road 755 (paved), 22 miles south of Falfurrias, Texas. Commercial airlines serve both San Antonio and Corpus Christi. Many of the local communities have small airfields and there are numerous private airfields in the region.

5.2 Physiography

The Project is in the Texas counties of Brooks and Jim Hogg, on the coastal plain of the Gulf of Mexico. Three major rivers in the region from south to north are: the Nueces River, which flows into Corpus Christi Bay, and the San Antonio and Guadalupe Rivers, which flow into San Antonio Bay southeast of the city of Victoria (Nicot, et al 2010). Figure 4-1 shows the general topographic conditions for the Project and region.

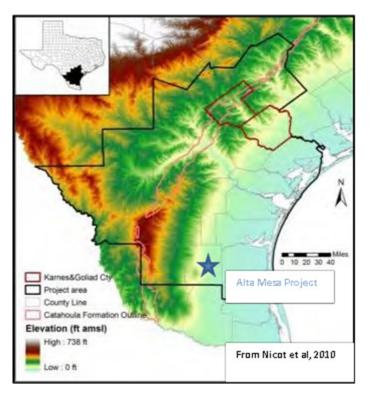


Figure 4-1. Topography of the South Texas Uranium Province

5.2 Topography and Elevation

Topography of the lower Gulf Coast is relatively flat, whereas the upper Gulf Coast, including most of the current and past mining operations of the South Texas Uranium Province, generally has low relief, rolling plains, except where it is locally dissected by rivers and streams. Elevations range from sea level to about 800 feet above sea level in the southwest.

5.3 Climate, Flora and Fauna

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 in the area. Primary risk for severe weather is related to heavy thunderstorms and potentially effects of hurricanes of the Gulf Coast.

Regionally, the area is classified as a coastal sand plain. Brooks County comprises 942 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).

5.4 Infrastructure

Local infrastructure includes electricity service which is adequate for mine and mineral processing activities. Supplies, including consumables and capital equipment can be obtained from the major centers of Corpus Christi and Laredo, Texas. The Alta Mesa facility also has telephone and internet service in the form of a T-1 fiber optics line. The processing plant has an automated control and monitoring system which allows remote monitoring of the facility and includes fail safe systems which can shut down portions of the system in the event of an upset condition. The facility is fully secured with on-site and remote monitoring. Water supply for the Project is from established and permitted local wells. Liquid waste from the processing facility is disposed via deep well injection through two permitted Underground Injection Control (UIC) Class I disposal wells. Solid waste from the processing facilities is disposed off-site at licensed disposal facilities. No tailings or other related waste disposal facilities are needed.

5.5 Land Use

The Project is located on an operating cattle ranch. In addition, there is significant local oil and gas development and production. The Alta Mesa area was first developed as an oilfield in the 1930s with production ongoing, primarily for natural gas. Other land uses include farming and recreational uses such as hunting.

5.6 Personnel

While the current staff has been reduced during the care and maintenance stage of the project, sufficient local personnel are available once mine operations are restarted, as has been the case in the past. Senior staff may be transferred from existing enCore locations or recruited from local or regional towns and cities as needed.

5.7 Surface Rights and Local Resources

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. Alta Mesa is licensed operable facility with sufficient sources of power, water, and waste disposal facilities for operations and aquifer restoration. While the current staff level has been reduced, sufficient local personnel were available for mine operations. The author concludes that enCore either has in place or can obtain the necessary permits and/or agreements, and local resources are sufficient for current and future ISR operations within the Project.

6.0 HISTORY

6.1 Introduction

The deposits associated with the Alta Mesa Uranium Project (the Project) were discovered by Chevron in the mid 1970s while researching oil and gas logs for natural gamma geophysical signatures. Since that time the Project has been explored and owned by a number of different operators.

6.2 Ownership History

Ownership of the Alta Mesa Project has changed several times in the past.

- Early 1970's through June 1985, Chevron Minerals.
- June 1985 mineral leases reverted to landowners.
- July 1988 to 1993 Total Minerals.
 - Total Minerals engaged Uranium Resources, Inc. (URI) to complete a feasibility study of the project.
 - o 1993 Total relinquished mineral leases to Cogema under directive form French government.
- 1993 to 1996 Cogema.
- 1996 to 1998 URI, who obtained the Radioactive Materials License for the facility.
- 1999 Mesteña Uranium LLC (MULLC) was formed by landowners.
 - o MULLC completed most of the drilling on the project.
 - MULLC began construction of the ISR facility in 2004
 - \circ Production began in the 4th quarter of 2005.
 - MULLC operated the facility through February 2013 and the project has been on care and maintenance standby since that time.
- June 17, 2016, Energy Fuels Resources (USA) Inc. acquired the Project, including both the Alta Mesa and Mesteña Grande.
- November 13, 2022, enCore Energy Corp. entered into a Management Interest Purchase Agreement with Energy Fuels to acquire the Project including the Alta Mesa and Mesteña Grande resource area.

6.3 Historical Drilling

enCore has not completed any drilling at the Project and therefore, all drilling is considered historical. Initial drilling at the Alta Mesa portion of the project was done by Chevron between 1981 and 1984 when they drilled approximately 360 holes. These holes included exploration, some coring and well completions. Minor drilling and monitor well installation were also completed by Total Metals and Cogema.

Most of the drilling was completed by MULLC between 1999 and 2013. From these drill programs, drill data is available for a total of 10,744 drill holes in the Alta Mesa portion of the project of which 5,620 drill holes were considered barren. Of the remaining 5,124 drill holes approximately 3,000 are within the existing wellfields. However, many of the drill holes within the wellfield have mineralized intercepts in sands that were not mined

either above or below the mining units. Wellfields PAA-1 through PAA-3 were mined within the Goliad middle C sand. Wellfield PAA-5 was mined within the B sand and wellfields PAA-4 and PAA-6 are within the lower C sand. In addition, data is available for 460 drill holes in the Mesteña Grande portion of the Project.

6.4 Historical Production

Between 2005 and 2013, the Project produced approximately 4.6 million pounds of U_3O_8 via ISR mining. The facility was in production from 2005 until primary production ceased February 2013 due to unfavorable market conditions. During this production period, the maximum and average annual production was 1.07 and 0.57 million pounds of concentrate (U_3O_8 or yellowcake) respectively; with maximum and average annual sales volumes of 0.86 and 0.52 million pounds of yellowcake respectively. Production occurred from six permitted wellfields with one additional wellfield permitted but not developed at the time. Documentation of historical production was provided by encore and reviewed by the author (personal communication Goranson, 2023). It is the author's opinion that this information is reliable for the purposes of this report.

6.5 Historical Resource Estimates

Historical Mineral Resource/reserve estimates were prepared before the implementation of Canada's NI 43-101 standards and do not necessarily use the categories for mineral reserve and Mineral Resource reporting as defined by those standards. The reader should not rely on the historical mineral resource or reserve estimates as they are superseded by the Mineral Resource estimate presented in Section 14.0 of this report.

7.0 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT

7.1 Introduction

The Project is located in the South Texas Uranium Province, which is known to contain more than 100 uranium deposits which were developed during the 2nd half of the 20th century (Nicot, et al., 2010). Surface geology of the Texas Gulf Coast is composed of Paleogene through Quaternary sedimentary strata and deposits (Figure 7-1).

7.2 Regional Geology

Within the South Texas Uranium Province, uranium mineralization is primarily hosted by four formations. Those in order of descending age are the Miocene/Pliocene Goliad Formation, the Miocene Oakville Formation, the Oligocene/Miocene Catahoula Formation, and the Eocene Jackson Group. These Paleogene and Neogene aged formations are overlain regionally by Pliocene and Pleistocene sands, gravels, silts, and clays (Figure 7-2). The four host sandstones are described in detail below. Descriptions given below (Sections 7.2.1 through 7.2.4) are summarized from a report by Nicot, et al., 2010 on the South Texas Uranium Province

7.2.1 Goliad Formation

The Goliad Formation overlies the Oakville and Fleming Formations with a low-angle truncation and is the oldest "Pliocene" stratum. It also has a high proportion of coarse-grained sediments, including sands and cobbles (Hosman, 1996). Thickness is between 900 and 1,800 ft (Brogdon et al., 1977). The upper part of the Goliad includes finer-grained sands that are cemented by calcium carbonate caliche (Hosman, 1996). Clays are interbedded locally.

7.2.2 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 formed 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 ft at the outcrop (Galloway et al., 1982), and the formation is thicker in the subsurface (Henry et al., 1982). The Oakville Sandstone grades into the mixed-load sediments of the overlying Fleming Formation 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 previous formations, such as 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. The Jackson Group and Oakville Sandstone also display an important contrast in organic material content, abundant in the Jackson sand bodies (which contain their own reducing material) but lacking in that of the Oakville. An important conclusion related to uranium mineralization is that Oakville- and Goliad-hosted deposits need an external reducing factor, namely reducing fluids coming up faults to precipitate uranium.

ALTA MESA URANIUM PROJECT

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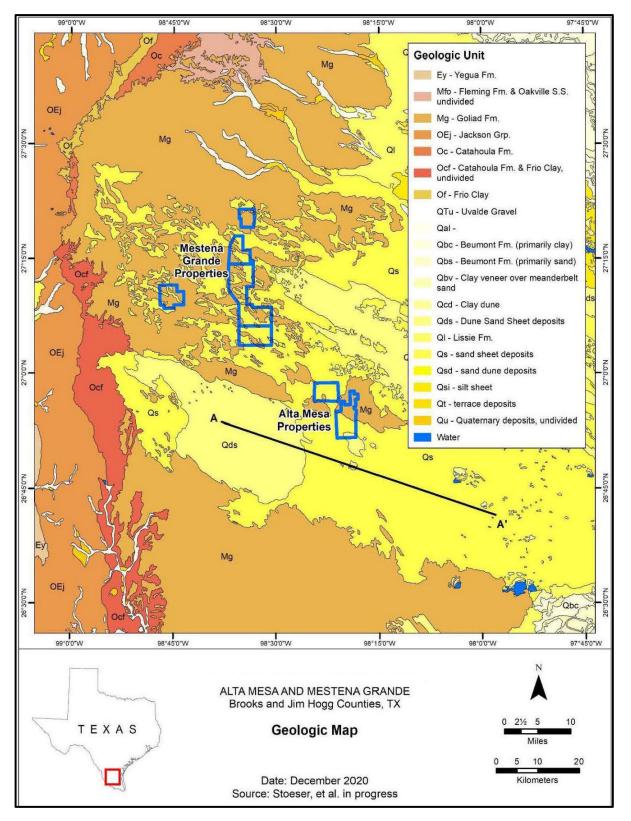


Figure 7-1. Geologic Map of the Alta Mesa Project Area

ALTA MESA URANIUM PROJECT

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System	Series	Group			Geologic Unit	Description	
<u>لا</u>	Holocene	Flood-plain Alluvium			uvium	Sand, Gravel, Silt, Clay	
	Holo	Fluvial Terrace Deposits			Deposits	Sand, Gravel, Silt, Clay	
QUATERNARY	Pleistocene	Plestocene Deweyville Formation, Beau- mont 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	
	Miocene	Fleming Formation			ition	Calcareous clay and sand	
		Oakville Sandstone 🔶 🔶			stone ★ ★	Calcareous, cross-bedded, coarse sand. Some clay and silt and reworked sand and clay pebbles near base	
	Oligocene		la	u	Chusa Tuff	Calcareous tuff; bentonitic clay; some gravel and	
TERI			Catahoula	rmatic	Soledad Conglomerate	varicolored sand near base. Soledad in Duval County, grades into sand lenses in northern Duval and adjacent	
		Oligocene	Oligocene		Ca	Fo	Fant Tuff
			Frio Clay		Light-gray to green clay; local sand-filled channels		
	Eocene		Jackson Whitsett Formation	Fashing Clay Tordilla Sandstone		Chiefly clay; some lignite, sand, Corbicula coquina, oysters	
		Jackson				Very fine sand	
			t For	Du	bose Clay	Silt, sand, clay, lignite	
		Jac	itset	Deweesville Sandstone		Mostly fine sand; some carbonaceous silt and clay	
			Wh	Co	nquista Clay	Carbonaceous Clay	
				Dil	worth Sandstone	Fine sand, abundant <i>Ophiomorpha</i> Stratigraphic Column - modified from Nicot et al. 2010	

Host Formations in order of economic importance (Uranium)

Stratigraphic Column - modified from Nicot et al, 2010

Figure 7-2. Regional Stratigraphic Column

7.2.3 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 ft. The formation also 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).

7.2.4 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 ft 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-ft sequence of marine muds (Caddell Formation) overlain by 400 ft 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 ft of mostly muds (including the Dubose Clay Member). Several sand units are present in the 400- to 500-ft-thick upper section, including the Tordilla / Calliham Sandstone overlain by the Flashing Clay Member. As indicated in Figure 7-2, units from the Dilworth unit on 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, generally fine and heavily bioturbated by burrows and roots, also contains lignitic material and silicified wood. Discontinuous lignite beds are also present (Fisher et al., 1970).

7.3 Local Geologic Detail

Within the Alta Mesa portion of the Project, Quaternary formations are exposed at the surface (Figure 7-1). These are conformably underlain by the Goliad Formation, the primary uranium host. Figure 7-3 is a type-log for the Alta Mesa area which defines the local stratigraphic units and nomenclature used in this report. At the Project, in order of importance, uranium is hosted by the Goliad, Oakville, and Catahoula formations.

Alta Mesa ISR mine units have exploited uranium mineralization in the Goliad C sands within PAA-1, PAA-2, PAA-3, PAA-4, and PAA-6. The B sand was targeted in PAA-5. As discussed in Section 14.0, Mineral Resources have been estimated for the A, B, C, and D sands. Section 9.0 discusses exploration targets in the South Alta Mesa area within successively deeper D, E, F, G, and H sands of the Goliad. Within the Mesteña Grande portion of the project, mineralization is also present in the Goliad Formation but is dominantly found in the Oakville Formation (Refer to Figure 7-2). In the western portion of Mesteña Grande mineralization is found in the Catahoula Formation. The nomenclature between Alta Mesa and Mesteña Grande varies with individual sands at Mesteña Grande designated by number, i.e., 10, 20, 30, etc. rather than by letter A, B, C, etc. as they are in the Alta Mesa portion of the Project. Mineral resources have been estimated for all areas within the Mesteña Grande portion of the project, as discussed in Section 14.0.

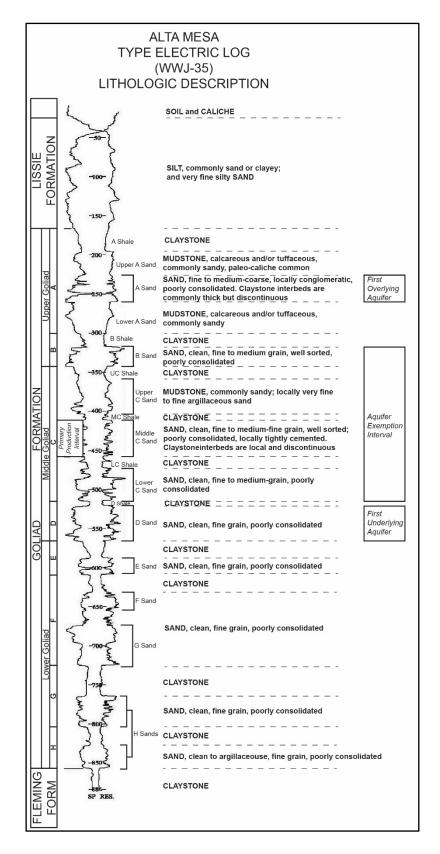
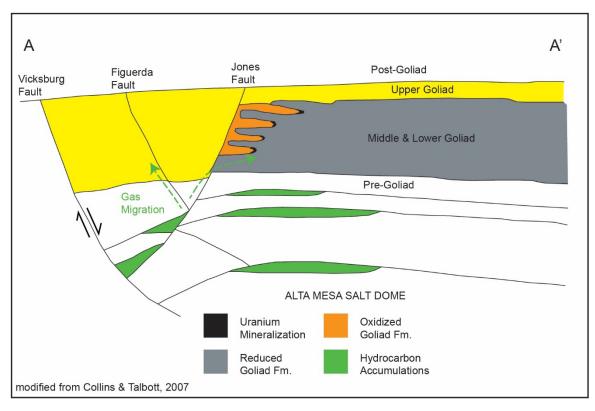


Figure 7-3. Alta Mesa Type Log Showing Individual Sand Units of the Goliad Fm.

7.4 Structural Geology

The structure of the Gulf Coast area is dominated by an abundance of growth faults that trend with, or are slightly oblique to, stratigraphic strike, which is nearly parallel to the Gulf of Mexico. In addition, local structural features such as salt domes influence the distribution and deposition of uranium mineralization potentially through various mechanisms including effects on groundwater flow and the introduction of additional reductant via the migration of H₂S gas along the faulting related to the salt dome intrusion. This mechanism is thought to be of importance at Alta Mesa as shown on Figure 7-4 (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 cross-section shown in Figure 7-4 is shown as section line A-A' on Figure 7-1.





7.5 Mineralization

Mineralization within the South Texas Uranium Province is interpreted to be dominantly roll-front type mineralization and primarily of epigenetic origin (Finch, 1996). Roll-fronts are formed along an interface between oxidizing groundwater solutions which encounter reducing conditions within the host sandstone unit. This boundary between oxidizing and reducing conditions is often referred to as the REDOX interface or front.

Sandstone uranium deposits are typically of digenetic and/or epigenetic origin formed by low temperature oxygenated groundwater leaching uranium from the source rocks and transporting the uranium in low concentrations down gradient within the host formation where it is deposited along a REDOX interface. Parameters controlling the deposition and consequent thickness and grade of mineralization include the host rock lithology and permeability, available reducing agents, groundwater geochemistry, and time in that the groundwater geochemical system responsible for leaching; transportation and re-deposition of uranium must be stable long enough to concentrate the uranium to potentially economic grades and thicknesses.

Significant Mineralized Zones:

Section 10.2 provides a summary of drilling results and significant zones of mineralization for the Alta Mesa and Mesteña Grande portions of the overall project, refer to Tables 10-1 and 10-2, respectively.

Length, Width, Depth and Continuity of Mineralization:

Section 14.3.1 through 14.3.11 provides a summary of the mineralization by area and host sandstone unit. Typically, the width of the mineralization above a 0.3 GT cutoff is approximately 35 feet. Depth of mineralization at Alta Mesa is in the range of 500 to 600 feet and depth of mineralization at Mesteña Grande is up to 1,200 feet. The oxidation/reduction interface (REDOX), which controls the mineralized trends, is often continuous along several miles. The thickness and grade of mineralization varies. Average thickness above a 0.3GT cutoff, ranges from 4-10 feet with average grade ranging from 0.06 to 0.17 %U₃O₈.

Mineralization Type, Character and Distribution:

Section 8 describes the deposit type which is a sandstone hosted roll-front type deposit wherein uranium mineralization is concentrated along the REDOX interface. Uranium mineralization is commonly uraninite (uranium oxide) with some coffinite (uranium silicate). Mineralization tends to be continuous along the REDOX front but varies with respect to width, thickness and grade.

8.0 DEPOSIT TYPES

South Texas uranium deposits are sandstone roll-front uranium deposits as defined in the "World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification", (IAEA, 2009). The key components in the formation of roll-front type mineralization, as shown on Figure 8.1, include:

- 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 H₂S gas migrating along faults and subsequent iron sulfide (pyrite) precipitation created local reducing conditions.
 - Time sufficient to concentrate the uranium at the oxidation/reduction interface.
 - Uranium precipitates from solution at the oxidation/reduction boundary (REDOX) as uraninite which is dominant (UO₂, uranium oxide) or coffinite (USiO₄, uranium silicate).
- The geohydrologic regime of the region has been stable over millions of years with groundwater movement controlled primarily by high-permeability channels within the predominantly sandstone formations of the Tertiary.

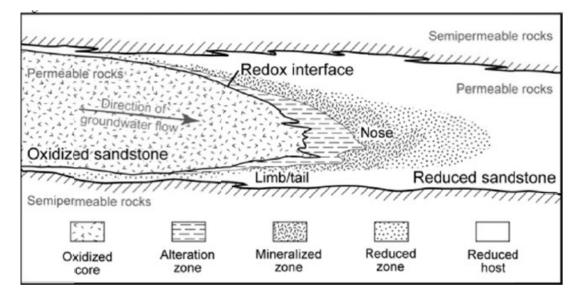


Figure 8-1 Idealized Cross Section of a Sandstone Hosted Uranium Roll-Front Deposit (Modified from Granger and Warren -1974 and De Voto- 1978)

9.0 EXPLORATION

9.1 Historical Exploration

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. Interpretation of oil and gas logs led to the recognition of potential host sand units and, in some cases, gamma anomalies. As a result of these anomalies and additional drilling, Chevron discovered uranium at Alta Mesa in the mid 1970's.

Mesteña Uranium LLC. (MULLC) 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 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. The author has reviewed the anomaly maps from the 3D seismic, however, the historic reports were not available. Some exploratory drilling was completed in the South Alta Mesa area, and area that is further discussed in Section 24. A single hole was completed on the Indigo Snake and follow-up was not warranted.

9.2 Recent Exploration

No exploration has been conducted on the Alta Mesa or Mesteña Grande properties by enCore.

10.0 DRILLING

Drill data is available for a total of 10,744 drill holes in the Alta Mesa portion of the project. Of this total 5,620 drill holes were considered barren. Of the remaining 5,124 drill holes approximately 3,000 are within the existing wellfields. However, many of the drill holes within the wellfield have mineralized intercepts in sands that were not mined either above or below the mining units. Wellfields PAA-1 through PAA-3 were mined within the middle C sand. Wellfield PAA-5 was mined within the B sand and wellfields PAA-4 and PAA-6 are within the lower C sand. In addition, data is available for 460 drill holes in the Mesteña Grande portion of the Project. Maps showing drill hole locations are provided in Section 14 of this report, Figures 14.3 through 14.16.

10.1 Drilling and Logging Procedures

MULLC maintains written standard operating procedures for drilling, lithological logging and geophysical logging, and provided copies of these to the Author. Virtually all drilling for the purposes of exploring and resource development, completed by MULLC, consists of rotary drilling. MULLC collected rotary mud samples for lithological logging by 5 foot increments. Lithological logs of the samples are completed in the field by geologists following the standard written procedures and using standard lithological log forms.

Drill hole locations are staked in the field using a Trimble hand-held GPS capable of sub-meter accuracy. The holes are surveyed prior to drilling. As discussed in Section 12, the BRS surveyed 8 exploration drill holes and one well with the MULLC GPS unit. The well location was within 0.13 feet of the recorded location. The drill hole locations deviated from the reported location by 1.33 to 11.28 feet with an average variance of 6.06 feet. It is BRS's conclusion that the majority of the variance is due to the driller not accurately locating the drill hole location procedure be modified to include both pre and post drilling surveys of the drill holes. Despite this observed variance, it is the Author's opinion that for the purposes of estimating indicated and inferred Mineral Resources the drill hole survey data is reliable. Prior to detailed drilling final wellfield delineation, it is recommended that the drill holes be re-surveyed.

During drilling operations MULLC operated two standard logging trucks which were purchased from Century Geophysical and are capable of natural gamma, resistivity, and Spontaneous Potential (SP) logging. The units are equipped with software to convert downhole gamma measurements to equivalent %eU₃O₈ by user specified depth increments. MULLC processes all natural gamma data at 0.5 foot increments.

These logging trucks are also equipped to measure downhole deviation by azimuth and declination. The location for the bottom of each drill hole and the true depth is included in the electronic database and was used for Mineral Resource calculations. Of the total 10,744 drill holes in the database only 76 did not have downhole drift surveys, thus, drift surveys were available for over 99% of the drill holes. The average depth of all drill holes was 546 feet the corrected depth for all drill holes for downhole deviation was 543.5 feet or a factor of 0.9954. Based on this average, the actual length of a 10 foot mineralized zone is 9.954 feet or a difference of less than one half of one percent. The Author concludes that the effect of downhole deviation with respect to sample thickness is insignificant for the purposes of this report.

In addition to the standard logging trucks MULLC operated two Prompt Fission Neutron (PFN) logging trucks. The PFN logging provides a direct measurement of uranium content in the borehole and is thus considered to provide direct assay results. MULLC logs all gamma intercepts above 0.02 %eU308 with PFN and utilizes only the PFN data for resource calculation. This mitigates the effects of radiometric disequilibrium as the PFN is essentially equivalent to other common uranium assay methods such as X-ray diffraction (XRF). Calibration data for both natural gamma logs and PFN is discussed Section 12. When drilling was active both the natural gamma and PFN logging trucks are calibrated routinely. The Author concludes that the drilling and logging procedures followed by MULLC are in keeping with current industry standards and that the data generated by such procedure is reliable for the purposes of this report.

10.2 Summary of Drilling Results

As previously stated, the Alta Mesa drill hole database consists of some 10,744 drill holes. Of this total 5,620 or 52% of the drill holes were considered barren. All of the drill data was collected using the same procedures and equipment as described in Section 10.1. Historic drilling by other operators generally was limited to the current Alta Mesa wellfields, and, as a matter of procedure, the exploratory drill holes have been replaced with delineation drill holes. Those holes meeting cut-off criteria during wellfield delineation were converted to wells. MULLC's procedure following wellfield installation is to then recalculate Mineral Resources with the results from the new drill data. Table 10-1 summarizes the drilling results by sand horizon for the Alta Mesa portion of the Project.

Alta Mesa	Data	GT> .5	GT> .3	GT> .1
		1.15		-
	GT		0.74	0.43 0.117
A sand	Grade	0.200	0.153 4.81	-
	Thickness	5.74		3.65
	Count	33	72	162
	GT	1.22	0.87	0.54
B sand	Grade	0.176	0.146	0.119
	Thickness	6.90	5.97	4.54
	Count	160	273	527
	GT	1.68	1.33	0.93
MCU sand	Grade	0.220	0.194	0.167
	Thickness	7.65	6.86	5.54
	Count	428	588	911
	GT	1.79	1.46	1.08
MCM sand	Grade	0.245	0.218	0.190
in on our a	Thickness	7.33	6.67	5.69
	Count	402	527	749
	GT	1.51	1.25	0.99
MCL sand	Grade	0.187	0.171	0.157
NICE Sallu	Thickness	8.11	7.30	6.32
	Count	685	894	1186
	GT	1.28	1.00	0.68
LCU sand	Grade	0.171	0.145	0.121
LCO sand	Thickness	7.50	6.86	5.63
	Count	357	526	862
	GT	1.22	0.95	0.64
	Grade	0.178	0.154	0.126
LCL sand	Thickness	6.90	6.17	5.11
	Count	262	390	647
	GT	0.88	0.60	0.40
Dilloand	Grade	0.099	0.089	0.078
DU sand	Thickness	8.82	6.79	5.17
	Count	11	24	44
	GT	1.29	0.83	0.30
D	Grade	0.166	0.147	0.085
DL	Thickness	7.75	5.63	3.47
	Count	2	4	19
Total Interc	epts	2340	3298	5107

Table 10-1– Alta Mesa Drill Holes Summary

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The Mesteña Grande portion of the Project is subdivided into five areas with a total of 460 drill holes. As discussed in Section 14, drill hole spacing is generally widely spaced and as a result the majority of the Mineral Resources are classified as inferred. Table 10-2 summarizes the drill results for the Mesteña Grande portion of the Project.

Zone	Horizon(s) or Formations	Total Drill Holes	Barren Holes	GT >0.1	0.1< GT < 0.3	0.3< GT < 0.5	GT > 0.5
Oakville North	OK10 and OK20	30	28	2	1	0	1
Oakville Central	OK10 and OK20	320	282	38	28	5	5
Goliad	G10 and G20	50	49	1	1	0	0
Alta vista	Alta Vista OK 20	22	19	3	3	0	0
El Sordo	Catahoula	38	33	5	2	1	2
Totals		460	411	49	35	6	8

Table 10-2- Massena Grande Drill Holes Summary

11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

All pertinent data related to the project is housed in a secure facility at the Alta Mesa site. All assay data is in the form of downhole geophysical log data and was completed by the previous owners, MULLC and Alta Mesa LLC. The author of this section has concluded that the data utilized in this report is accurate, reliable and adequate for the purposes of its use in this report and that the sample preparation, security and analytical procedures for all relevant data is adequate.

11.1 Gamma Logging

The primary assay data for the Alta Mesa Uranium Project (the Project) is downhole geophysical log data. Mesteña Uranium LLC, the previous owner of the Project, relied entirely on prompt-fission-neutron (PFN) logging for uranium grade assay and used the natural gamma logging to screen intervals for PFN logging. Of the 10,764 drill holes in the Alta Mesa database, PFN logging data was available for 94.8% of the drill holes. For the Mesteña Grande portion of the Project, all 460 drill holes were completed by Alta Mesa LLC and all gamma intercepts greater than 0.02 %eU₃O₈ were logged by PFN. When drilling is active both the natural gamma and PFN logging trucks are calibrated on a quarterly basis, or after repairs have been made to the equipment. As an example, according to calibration data, the PFN tools were calibrated 8 times per year in both 2009 and 2010. Natural gamma and PFN tool. The most recent calibration of the PFN tools was November 2013. Wince that time there has been no drilling on the project.

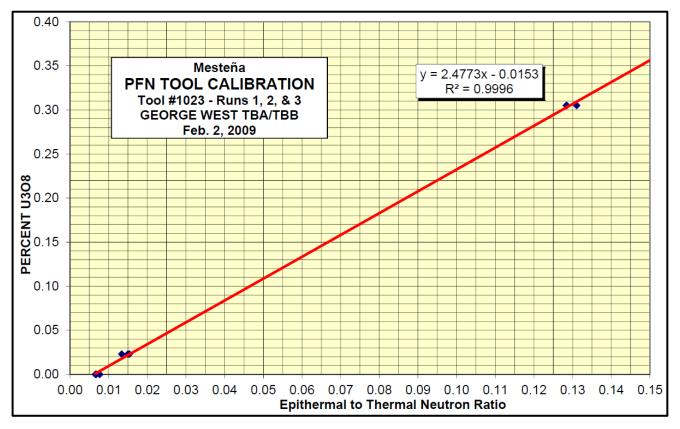


Figure 11-1. PFN Tool Calibration

11.2 Disequilibrium

Core assays are available from historic drilling completed by Chevron and Total Minerals Incorporated; however, only 7.2% of the current database includes any of this historical data. Both Chevron and Total Minerals Incorporated concluded that the Alta Mesa mineral deposit exhibited positive disequilibrium.

Radioactive isotopes decay until they reach a stable non-radioactive state; the radioactive decay chain isotopes are referred to as daughters. When all the decay products are maintained in close association with the primary uranium isotope U²³⁸ for 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 because of differences in solubility between uranium and its daughters. Disequilibrium is considered positive when there is a higher proportion of uranium present compared to daughters and negative where daughters are accumulated, and uranium is depleted. The disequilibrium factor (DEF) is determined by comparing radiometric equivalent uranium grade eU₃O₈ 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. Total Minerals Incorporated applied a positive DEF of 1.13 to their Mineral Resource estimation (Total, 1989). Whereas MULLC relied on PFN log data for determination of uranium grade and this method is a direct measurement of uranium content not equivalent radiometric assay, assessment of DEF is not applicable in this case where 92.8% of the data is PFN assay. Figure 11-2 shows a disequilibrium graph comparing natural gamma U₃O₈ equivalent grades with PFN assays.

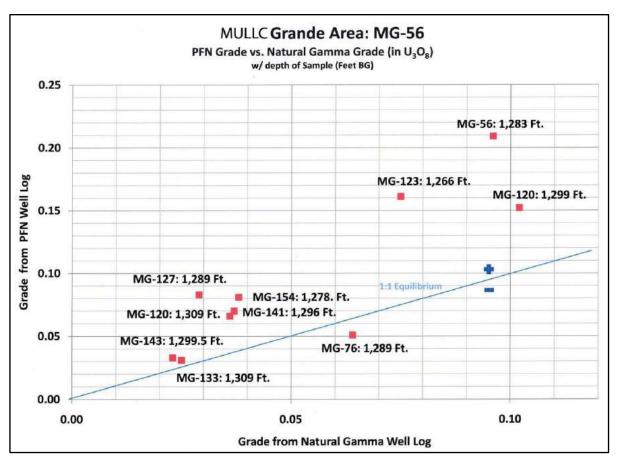


Figure 11-2. Disequilibrium Graph: Natural Gamma vs PFN Grade

11.3 Core Sampling

As is common with uranium projects, the primary assay data for the Project is downhole geophysical log data, including both natural gamma equivalent logs and PFN logs. Core for the Project was not collected by the previous owner/operator, Mesteña Uranium LLC. Alta Mesa has standard operating procedures in place for lithologic logging and core collection should core be collected from future drilling programs.

11.4 Quality Assurance/Quality Control

MULLC maintained written standard operating procedures for drilling, lithological logging and geophysical logging. Virtually all drilling completed by MULLC for the purposes of exploring and resource development consists of rotary drilling. MULLC collected rotary mud samples for lithological logging by 5-foot increments. Lithological logs of the samples are completed in the field by geologists following the standard written procedures and using standard lithological log forms.

Drill hole locations are staked in the field using a Trimble hand-held GPS capable of sub-meter accuracy. The holes are surveyed prior to drilling. Field surveys of 8 exploration drill holes and one well with the Alta Mesa GPS unit as a check. The well location was within 0.13 feet of the recorded location. The drill hole locations deviated from the reported location by 1.33 to 11.28 feet with an average variance of 6.06 feet. It is this author's conclusion that the majority of the variance is due to the driller not accurately locating the drill hole at the staked location rather than the accuracy of the GPS unit, and thus, recommends that the drill hole location procedure be modified to include both pre and post drilling surveys of the drill holes. Despite this observed variance, the author's opinion is that for the purposes of estimating indicated and inferred Mineral Resources the drill hole survey data is reliable. Prior to final wellfield delineation it is recommended that the drill holes be re-surveyed.

MULLC operated two standard logging trucks which were purchased from Century Geophysical and are capable of natural gamma, resistivity, and SP logging. The units are equipped with software to convert downhole gamma measurements to equivalent $\&eU_3O_8$ by user specified depth increments. MULLC processed all natural gamma data at 0.5-foot increments.

These logging trucks are also equipped to measure downhole deviation by azimuth and declination. The location for the bottom of each drill hole and the true depth is included in the electronic database and was used for Mineral Resource calculations. Of the total 10,744 drill holes in the database only 76 did not have downhole drift surveys, thus, drift surveys were available for over 99% of the drill holes. The average depth of all drill holes was 546 feet, the corrected depth for all drill holes for downhole deviation was 543.5 feet or a factor of 0.9954. Based on this average, the actual length of a 10-foot mineralized zone is 9.954 feet or a difference of less than one half of one percent. Based on this, the author concludes that the effect of downhole deviation with respect to sample thickness is insignificant for the purposes of this report.

In addition to the standard logging trucks MULLC operated four Prompt Fission Neutron (PFN) logging trucks along with 8 PFN logging tools. The PFN logging provides a direct measurement of uranium content in the borehole and is thus considered to provide direct assay results. MULLC logged all gamma intercepts above 0.02 $\%eU_3O_8$ with PFN and utilizes only the PFN data for resource calculation. This mitigates the effects of radiometric disequilibrium as the PFN is essentially equivalent to other common uranium assay methods such as X-ray diffraction (XRF). When drilling is active, both the natural gamma and PFN logging trucks are calibrated routinely.

11.5 Density

Bulk density data is available for the Project (Babbitt, 1987) in a study commissioned by Total Mineral Incorporated supporting their bulk density. MULLC uses a bulk density of 17cf/ton. Total Minerals Incorporated used a density factor of 16.5cf/ton (Total, 1989). MULLC's use of 17cf/ton rather than16.5 cf/ton is conservative in that it calculates approximately 3% less tonnage per unit volume. The Author used the conservative value for bulk density of 17 cf/ton in all calculations.

11.6 **Opinion of Author**

The author of this section has concluded that the data utilized in this report is accurate and, reliable and adequate for the purposes of its use in this report and that the sample preparation, security and analytical procedures for all relevant data is adequate.

12.0 DATA VERIFICATION

12.1 Data Verification

In April of 2014, co-author Beahm (BRS, 2014) examined numerous original hard copy drill hole files selected from the various remaining Mineral Resource areas and representing a range of reported drill hole results. Summary and conclusions follow.

The previous owner/operator, Mesteña Uranium LLC, who conducted most of the drilling on the project had written procedures for the collection of drill data including lithological logging, natural gamma logging, and PFN logging, and for the entry of said data into the Geographic Information System (GIS) based master database. All data is stored on a secure server at the Alta Mesa Facility. Hard copies of all original drill hole data are maintained at the facility. The Alta Mesa Facility is secured with external fencing and automated security gates. The building has automatic locking security doors. The facility is continuously monitored by alarm and video surveillance equipment. This equipment is monitored both by on-site staff and remotely.

During drilling both the natural gamma and PFN logging trucks are calibrate routinely as previously discussed (Gamma Logging).

During the January 12, 2023, site visit the author obtained a current drill hole database, compared this database to that which was provided in 2014 and determined that there had been no change in the database. The author also examined the original drill log files and found they were being maintained and secured. The author concludes that there has been no change in the basic drill hole data and that the data remains secure and the previous steps taken to verify the data remain valid.

12.2 Drill Hole Database

During the site visit conducted from April 15 through 17, 2014, BRS examined numerous original hard copy drill hole files selected from the various remaining Mineral Resource areas and representing a range of reported drill hole results. Given the volume of data (over 10,000 drill holes), this review was not complete but did allow the author to reach the following conclusions.

- The data entered into the Mineral Resource database reflected only those intercepts which could be reasonably extracted by ISR methods. Several examples were noted where thin low-grade intercepts interpreted to be within the oxidized portion of the roll-front were not entered into the database.
- Data entry honored GT. Some errors in grade and thickness were noted but the GT values, from which contained pounds are calculated, were consistent with the drill data reviewed.
- Although lower grade halo mineralization was noted within the zones for which intercept data was entered into the database, this mineralization was not included in the database.

The author concluded that the drill hole database is adequate for the purposes of calculating Mineral Resources and fairly represents the actual drill data. Further, if any bias exists it would be of a conservative nature whereas mineralization not reasonably extractable by ISR methods was not included in the database

12.3 Opinion of Adequacy

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

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Alta Mesa Uranium Project (the Project) is an ISR facility that was in production from 2005 until being placed on standby in February 2013. As such, actual mineral recovery data is available for several wellfields. This data is summarized in Table 13-1.

Wellfield	Horizon	Pre-Mining Mineral Resource Estimate (Ibs. U ₃ O ₈)	Production (Ibs. U ₃ O ₈)	% Recovery
PAA-1	C middle	1,921,300	1,610,000	84%
PAA-2	C middle	2,030,000	1,498,200	74%
PAA-3	C middle	262,000	290,400	111%
	Lower C Upper	527,027		
PAA-4	Lower C Lower	453,960		
	TOTAL	980,987	850,000	87%
	B Ring – B Sand	41,000		
PAA-5	C Ring – B Sand	48,672		
	TOTAL	89,672	35,000	58%
	Lower C Upper	377,000		
PAA-6	Lower C Lower	331,000		
	TOTAL	708,000	338,000	NA on standby

Table 13-1 Actual Mineral Recovery from Alta Mesa

From the production data in Table 13-1, the author concludes the following with respect to mineral recovery:

- Uranium is recoverable by ISR methods at the Project.
- The weighted average recovery of wellfields PAA-1 through PAA-5 is 81%.
- Wellfield PAA-5 experienced lower than expected recovery. Whether this is related to the nature of the B sand in general or PAA-5 specifically is not known.
- Based on the performance of wellfields PAA-1 and PAA-3 it is likely that with continued effort and/or during
 wellfield restoration to recover additional uranium from wellfield PAA-2 which is in the same geologic
 horizon.
- PAA-6 was placed on standby and has remaining resources still under pattern.
- For consideration of reasonable prospects for economic extraction the author assumed recovery factor used for the Mineral Resource estimate is 70%, which is conservative and in keeping with CIM guidance.

13.1 Opinion of Author

The author of this section has concluded that the data and information utilized is accurate, reliable and adequate for the purposes of its use in this report.

14.0 MINERAL RESOURCE ESTIMATES

14.1 General Statement

The Mineral Resource estimate stated in this Technical Report updates the mineral resource estimate completed by BRS as part of a NI 43-101 form of Technical Report (2014) completed for the Alta Mesa Uranium Project (the Project) for Mestena Uranium and updated in 2016 for Energy Fuels Inc. The Mineral Resource was estimated using the GT-Contour Method, an industry accepted method and Canadian Institute of Mining (CIM) best practice for uranium deposits mined by in-situ recovery. No material changes have occurred in the subsurface data available for the Project since the prior mineral resource estimate in 2014.

14.2 Mineral Resource Estimate

Table 14-1 gives the classified Mineral Resources associated with the Project. The cut-off grade is a grade multiplied by thickness (abbreviated GT) cut-off of 0.3 GT and assumes a minimum grade of $0.02\% U_3O_8$.

	COG			Grade	Contained Metal
Classification	(G.T.)	Area	Tonnage	(% U₃O8)	(Ibs. U ₃ O ₈)
Measured	0.3	Alta Mesa	54,000	0.152	164,000
Total Measured	0.3		54,000	0.152	164,000
Indicated	0.3	Alta Mesa	1,397,000	0.106	2,959,000
	0.3	Mesteña Grande	119,000	0.120	287,000
Total Indicated	0.3		1,516,000	0.107	3,246,000
Total Measured & Indicated	0.3		1,570,000	0.109	3,410,000
Inferred	0.3	Alta Mesa	1,263,000	0.126	3,192,000
	0.3	Mesteña Grande	5,733,000	0.119	13,601,000
Total Inferred	0.3		6,996,000	0.120	16,793,000

Table 14-1 Alta Mesa and Mesteña Grande Resource Summary

Notes:

1. NI 43-101 and CIM definitions were followed for all Mineral Resource categories.

2. Mineral Resources are estimated at a 0.3 GT (0.02% U₃O₈ minimum grade)

3. Mineral Resources are estimated using a long-term Uranium price of US\$70 per pound

Total measured Mineral Resource is that portion of the in-place or in situ Mineral Resources that is estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred Mineral Resources but were considered in establishing the minimum GT cutoff with respect to reasonable prospects for future economic extraction.
 Bulk density in 0.0598 tone(#3.07.0 ft3/ton)

5. Bulk density is 0.0588 tons/ft³ (17.0 ft³/ton)

6. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

7. Numbers may not add due to rounding

14.2.1 Resource Database

Alta Mesa

The Alta Mesa drill hole database consists of some 10,744 drill holes. Of this total 5,620 or 52% of the drill holes were considered barren. All the drill data was collected using downhole geophysical tools including both gamma and PFN logging. Historic drilling by other operators generally was limited to the current Alta Mesa wellfields, and, as a matter of procedure, the exploratory drill holes have been replaced with delineation drill holes using PFN logging. Those holes meeting cut-off criteria during wellfield delineation were converted to wells. Alta Mesa procedure following wellfield installation is to then recalculate Mineral Resources with the results from the new drill data.

Table 14-2 Alta Mesa Drill Holes Summary										
Alta Mesa Data		GT >0.5	GT>0.3	GT>0.1						
	GT	1.15	0.74	0.43						
A Sand	Grade	0.200	0.153	0.117						
A Sanu	Thickness	5.74	4.81	3.65						
	Count	33	72	162						
	GT	1.22	0.87	0.54						
R Sand	Grade	0.176	0.146	0.119						
B Sand	Thickness	6.90	5.97	4.54						
	Count	160	273	527						
	GT	1.68	1.33	0.93						
MCU Sand	Grade	0.220	0.194	0.167						
MCU Sand	Thickness	7.65	6.86	5.54						
	Count	428	588	911						
	GT	1.79	1.46	1.08						
MCM Sand	Grade	0.245	0.218	0.190						
MCM Sand	Thickness	7.33	6.67	5.69						
	Count	402	527	749						
	GT	1.51	1.25	0.99						
MCL Sand	Grade	0.187	0.171	0.157						
MCL Sand	Thickness	8.11	7.30	6.32						
	Count	685	894	1,186						
	GT	1.28	1.00	0.68						
I CI I Sand	Grade	0.171	0.145	0.121						
LCU Sand	Thickness	7.50	6.86	5.63						
	Count	357	526	862						

Table 14-2 summarizes the drilling results by sand horizon for the Alta Mesa portion of the Project.

Mesteña Grande

The Mesteña Grande portion of the Project is subdivided into five areas with a total of 460 drill holes. Drill hole spacing at Mesteña Grande is generally wide spaced. Table 14-3 summarizes the drill results for the Mesteña Grande portion of the Project.

Table 14-3	Mesteña	Grande Drill	Holes	Summarv
	mootoma			e annan y

Zone	Horizon(s) or Formations	Total Drill Holes	Barren Holes	GT >0.1	0.1< GT<0.3	0.3< GT <0.5	GT > 0.5
Oakville North	OK10 and OK20	30	28	2	1	0	1
Oakville Central	OK10 and OK20	320	282	38	28	5	5
Goliad	G10 and G20	50	49	1	1	0	0
Alta vista	Alta Vista OK 20	22	19	3	3	0	0
El Sordo	Catahoula	38	33	5	2	1	2
Totals		460	411	49	35	6	8

14.2.2 Geologic Modeling

The primary geologic modeling associated with roll-front deposits in Texas is first identifying the sand in which the uranium mineralization is contained. The geophysical logs obtained following drilling contain gamma data as described in previous sections as well as electrical properties of the rock formations. A trained geologist can interpret these electrical logs as different rock types and therefore assign a formation or sand unit to a uranium intercept. The gamma signature and the cuttings logged during drilling can be used to tell what where the drill hole is within the roll front. The drill hole can be on the oxidized or reduced side of the roll front or within the mineralized "nose" of the roll front. All this information is used to define geologic continuity and the location of the mineralization.

14.2.3 Grade Capping

Grade capping was not used in estimating the Mineral Resources at the Project. The GT contour method limits the influence of a high-grade sample by containing an outlier GT interval to a single small contour.

14.2.4 Compositing

Mineralized intercepts meeting a minimum thickness of 1 ft. and grade of 0.02% U₃O₈ were composited to determine the thickness, grade and thus the GT of the drill hole within each sand. If the composite GT met the minimum criteria of 0.3 GT it would be included in the Mineral Resource estimation.

14.2.5 Density

Bulk density data for the Project was determined from a study commissioned by Total Minerals. Previously a density factor of 16.5ft³/ton was used for mineral resource estimates (Total, 1989), The author has used a density value of 17 ft³/ton for the purposes of this report, which is conservative in that it calculates approximately 3% less tonnage per unit volume.

14.2.6 Radiometric Equilibrium

Data used in this Mineral Resource relies on PFN log data for determination of uranium grade as this method is a direct measurement of uranium content, not an equivalent radiometric assay; PFN assays are considered by to be reasonably equivalent to chemical assays. PFN assay data is available for 92.8% of the drill data used in the report and thus a correction of drill hole data for DEF is not applicable.

14.2.7 GT Contouring Method

Where drilling density was sufficient to complete GT contour calculations, resource estimates were completed in accordance with industry standards, in areas where this was not possible, trend width was determined from producing wellfields PAA-6 and portions of PAA-4 or average GT values where estimated based on overall averages for all Alta Mesa drill hole data. Estimation parameters used for each resource area are provided in the discussions that follow.

When dealing with ISR Mineral Resources, the contained pounds of uranium are calculated from the GT value applied to the respective area of mineralization with the application of the appropriate bulk density. As such average thickness is not a critical parameter in the determination of the pounds contained but is needed to calculate tonnage and average grade. Based on the typical geometry of the sands, a thickness of 10 feet was assumed for exploration targets and corresponds generally with the average screened interval for wells. Mineral resource tonnages were thus calculated assuming an average thickness of 10 feet unless specific data relating to thickness was available.

14.2.8 Resource Classification

The Mineral Resources at the Project have been classified as measured, indicated and inferred for the Alta Mesa Property and indicated and inferred for the Mesteña Grande Property.

Measured mineral resources at the Alta Mesa facility and production area are those Mineral Resources calculated by the GT contour method after a well field is fully delineated. In existing wellfields such as PAA-2 and PAA-6, the geologic and mineralized continuity defined by tight drill hole spacing, less than 100 feet, is adequate to estimate the mineral resource to a high level of confidence. As such, they could be classified as a measured mineral resource in accordance with NI 43-101 standards. In some cases, outside the existing wellfields, the drill density would allow classifications of certain portions of the mineral resource as measured, these areas have been defined as indicated as they are not part of a fully delineated well field. For the purposes of this report measured mineral resources are within existing wellfields and represent only that portion of the remaining resource that can reasonably be recovered from the existing wellfields through continued operation of the wellfields. enCore considers the remaining mineral resources within the PAA-6 wellfield as having reasonable prospects for future economic extraction. At present it has not been determined whether the PAA-2 meets the criteria for reasonable prospects for future economic extraction. Thus, only the remaining mineral resource within wellfield PAA-6 are considered a current measured mineral resource.

Indicated mineral resources are based on detailed and reliable exploration, sampling, and testing information gathered through appropriate techniques that are spaced closely enough for both geological and grade continuity to be reasonably assumed. Given the nature of the mineralization in the Project area and the demonstrated continuity of mineralization along the REDOX front from the existing wellfields, indicated mineral resources, are those areas where the location of the REDOX front can be reasonably defined by drill data and where along a continuously mapped REDOX front there are drill holes that intersect the mineralized front and reasonably confirm the presence of mineralization which has reasonable prospects for economic extraction. For the Project, drill hole spacing in areas for which indicated mineral resources are defined range from less than 100 feet to as much as 800 feet along the REDOX front.

Inferred mineral resources are defined as that part of the mineral resource for which quantity and quality can be estimated based on geologic evidence, limited sampling and reasonably assumed but not verified geological and grade continuity. For the Project, the basis of geologic evidence and sampling is drill hole data which is adequate to define the presence and general location of the REDOX front but for which there may not be drill holes which intersect the mineralized front and reasonably confirm the presence on mineralization meeting the criteria for indicated mineral resources. For the Project, drill hole spacing in areas where inferred mineral resources are defined may exceed 800 feet if there is geologic evidence that the REDOX front is present, and its location can reasonably be assumed.

14.2.9 Metal Price

Metal price is discussed in Section 19. By their nature all commodity price assumptions are forward-looking. No forward-looking statement can be guaranteed, and actual future results may vary materially

14.2.10 Cut-off Parameters

The cut-off criteria used in this report is a minimum grade cut-off of $0.02\% U_3O_8$ and minimum GT of 0.30. In addition, with respect to reasonable prospects for economic extraction, areas of isolated mineralization with less than an estimated 2,000 pounds uranium will typically not support the cost of well field installation and are therefore not considered in the Mineral Resource estimate. This screening criteria is based on the cost of well installation.

The .02 U_3O_8 grade cutoff is typical as the minimum grade included in determining the thickness and average grade of a mineralized intercepts to be used in the mineral resource estimate. Grade cutoff is not the governing

parameter for resource estimation for ISR projects but rather the primary cutoff is GT. The average thickness of the mineralized intervals at Alta Mesa ranges from 4 to as much as 10 feet with a weighted average on the order 5 to 6 feet. Using 6 feet the average grade would be .05 % U₃O₈. Assuming a recovery of 70% this equates to .70 pounds U₃O₈ which at a price of \$70lb has a gross value of \$49.00/lb as compared to typical production costs of approximately \$30-35/lb. The estimated breakeven cutoff grade is higher than the cutoff grade used for screening mineralized intercepts, however, the primary cutoff criteria for inclusion of mineralization in the mineral resource estimate is the GT cutoff.

The calculated cut-off grade for the Project was based on modifying factors including metal prices, metallurgical recoveries, comparable operating costs, and other operational constraints (Table 14.4). Mining costs were based on historical operating costs for the Project. The estimated value of the mineralized material at the GT cutoff exceeds the historical production costs. It is the Author's opinion that the GT cutoff as applied to this project is reasonable and conservative.

Item	Quantity
Price in US\$/lb U ₃ O ₈	US\$70.00
Process plant recovery	70-80%
Typical Porduciton Costs	\$30-35/lb
GT Cutoff	0.3

Table 14-4: Alta Mesa Uranium Project Cut-off Grade Calculation

14.2.11 Reasonable Prospects for Future Economic Extraction

The Project produced approximately 4.6 million pounds of uranium oxide between 2005 and 2013 via in-situ recovery (ISR) mining using an alkaline lixiviant and is processed at a plant located in Alta Mesa. The cut-off criteria applied to the current Mineral Resource estimates is consistent with that applied when the Project was producing uranium.

The mining and mineral processing methods stated in this report have previously been successfully employed at the project. The project is a brown-field development located in a state, which tends to favor mining and industrial development.

For these reasons, the author considers the Alta Mesa Mineral Resources have a low probability of being affected by risk associated with mining; processing; metallurgical; infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations or agreements with local individuals or groups; and governmental factors. The author is not aware of any factors including environmental, permitting, taxation, socio-economic, marketing, political, or other factors, which would materially affect the Mineral Resource estimate, herein.

14.3 Mineral Resource Summary

Mineral resources for the Alta Mesa portion of the Project estimated for classifications meeting NI 43-101 and CIM standards and definitions as measured, indicated, and inferred Mineral Resources, at a 0.30 GT cut-off, are summarized in Table 14-5.

			Grade	Contained Metal
	Area	Tonnage	(% U₃O8)	(lbs. U₃O8)
Classification	PAA-6	54,000	0.152	164,000
Total Measured	1	54,000	0.152	164,000
	PAA-7 Upper LCU1	84,000	0.151	256,000
	PAA-7 Upper LCU2	100,000	0.151	303,000
	PAA-7 Lower LCL1	119,000	0.152	361,000
	PAA-7 Lower LCL2	122,000	0.152	372,000
Indicated	D Sand - Upper	552,000	0.060	662,000
Indicated	D Sand - Lower	204,000	0.083	336,000
	LC - Adjacent to PAA1	58,000	0.171	199,000
	B Sand	92,000	0.146	268,000
	A Sand - A1	43,000 0.15		133,000
	A Sand - A2	23,000	0.153	69,000
Total Indicated		1,397,000	0.106	2,959,000
Total Measured	l and Indicated	1,451,000	0.108	3,123,000
	PAA-7 Upper LCU2	58,000	0.151	175,000
	D Sand - Upper	74,000	0.038	57,000
	D Sand - Lower	231,000	0.080	370,000
Informed	LC - W Lower C Upper	99,000	0.171	338,000
Inferred	LC - W Lower C Lower	124,000	0.140	350,000
	B Sand	268,000	0.146	781,000
	A Sand – A1	283,000	0.153	869,000
	SAM – E Sand	126,000	0.100	252,000
Total Inferred		1,263,000	0.126	3,192,000

Table 14-5 Alta Mesa Detailed Mineral Resource Summary (at 0.30 GT Cut-off Grade)

Notes:

1. NI 43-101 and CIM definitions were followed for all Mineral Resource categories.

2. Mineral Resources are estimated at a 0.3 GT (0.02% U_3O_8 minimum grade)

3. Mineral Resources are estimated using a long-term Uranium price of US\$70 per pound

4. Total measured Mineral Resource is that portion of the in-place or in situ Mineral Resources that is estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred Mineral Resources but were considered in establishing the minimum GT cutoff with respect to reasonable prospects for future economic extraction.

5. Bulk density is 0.0588 tons/ft³ (17.0 ft³/ton)

6. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

7. Numbers may not add due to rounding

14.3.1 PAA-7 Lower C Sand

The PAA-7 Mineral Resource area is permitted as a wellfield which required expansion of the existing aquifer exemption. The area was drilled on approximately 50 foot by 200-foot centers, across and along the trend, respectively. Mineralization is at a depth of approximately 550 feet. PAA-7 is adjacent to PAA-4. Mineralization in a portion of PAA-4 was estimated using the GT Contour Method. This data was used to determine appropriate parameters for the width, thickness, and GT for Lower C Lower (LCL) and the Lower C Upper (LCU) sands of the Goliad Formation which are mineralized in the area.

Mineral resource estimation parameters PAA-7 at a 0.30 GT cut-off shown in Table 14-6 below.

	Table 14-0 FAA-7 Milleral Resource Estimation Farameters							
		Trend	Width	Area	Thickness	Grade		
Horizon	Classification	Length (ft)	(ft)	(ft²)	(ft)	(%U₃O8)	GT	
LCU1	Indicated	9,200	34.7	319,507	4.5	0.151	0.68	
LCU2	Indicated	10,900	34.7	378,547	4.5	0.151	0.68	
LCU2	Inferred	6,300	34.7	218,793	4.5	0.151	0.68	
LCL1	Indicated	17,400	29.7	516,542	3.9	0.152	0.59	
LCL	Indicated	17,900	29.7	531,385	3.9	0.152	0.59	

Table 14-6 PAA-7 Mineral Resource Estimation Parameters

14.3.2 D Sand

Mineralization in the D sand of the Goliad Formation is defined by drilling within two sub-horizons, the upper and lower sands, DU and DL, respectively. The area is drilled on approximately 50 foot by 200-foot centers, across and along the trend, respectively. Most of the mineralization defined to date is in the DU. Mineralization is at a depth of approximately 550 feet. The average width of mineralization was taken to be equivalent to PAA-7, as discussed previously. The average GT represents average values from drill holes in the D sands above the GT cut-off, 24 drill holes in the DU and 4 in the DL. An average thickness of 10 feet was used. Note that mineralization in the D Sand is projected to extend into the exclusion area. Trend lengths within the exclusion area were excluded from the resource estimate.

Mineral resource estimation parameters for the D sand at a 0.30 GT cut-off are shown in Table 14-7.

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft²)	Thickness (ft)	Grade (%U₃Oଃ)	GT
D Sand	Indicated	26,600	35	938,000	10	0.060	0.60
D Sand	Inferred	2,300	35	126,000	10	0.060	0.60
D Sand	Indicated	9,900	35	346,500	10	0.083	0.83
D Sand	Inferred	10,900	35	392,000	10	0.083	0.83

Table 14-7 D Sand Mineral Resource Estimation Parameters

14.3.3 Lower C Sand Outside of PAA-7, PAA-6 and PAA-4

The area is defined by drilling on variable centers, across and along the trend, respectively. Mineralization occurs in the lower C sand of the Goliad Formation at a depth of approximately 525 to 575 feet. The area includes a portion within the PAA-1 wellfield (completed in the Middle C sand but with drilling penetrating the Lower C sand as well). This portion of the Mineral Resource was classified as an indicated Mineral Resource but could have been classified as a measured Mineral Resource based on drill hole spacing. Average thickness and GT for the resource area was determined from the portion of the mineralization within the PAA-1 wellfield. Average width

was determined from GT contour estimates of PAA-4 and PAA-6, as discussed previously for the PAA-7 Mineral Resource area.

The Lower C Sand Outside of PAA-7, PAA-6, and PAA-4 also includes an area for which an Exploration Target has been defined and is described in Section 9.0 (Exploration).

Mineral resource estimation parameters for the Lower C Sand Outside PAA-7, PAA-6, and PAA-4 at a 0.30 GT cut-off are summarized in Table 14-8.

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft²)	Thickness (ft)	Grade (%U ₃ O ₈)	GT
LCU Sand	Indicated	6,373	35	223,062	4.44	0.171	0.758
LCU Sand	Inferred	10,822	35	378,785	4.44	0.171	0.758
LUL Sand	Indicated	12,433	35	435,170	4.86	0.140	0.683

14.3.4 B Sand

The B sand of the Goliad Formation is present in the majority of the drill holes within the Project and occurs above the C sand, which was mined in the majority of the existing wellfields. The depth of the B sand is less than 500 feet.

Wellfield PAA-5 was completed in the B sand. A GT contour model was developed for portion of the B sand to determine appropriate Mineral Resource estimation parameters for width. Thickness and GT estimation parameters were determined from the average values from some 273 intercepts for the B sand above the minimum GT cut-off. As a cautionary note the recovery from wellfield PAA-5 was considerably lower than the other wellfields within the C sand units. It is not known whether this was a function of the PAA-5 wellfield specifically or the B sand in a more general sense.

Mineral resource estimation parameters for the B Sand at a 0.30 GT cut-off are shown in Table 14-9:

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft²)	Thickness (ft)	Grade (%U₃Oଃ)	GT
B Sand	Indicated	3,549	31	262,193	5.97	0.15	0.87
B Sand	Inferred	25,011	31	763,058	5.97	0.15	0.87

Table 14-9 B Sand Mineral Resource Estimation Parameters

14.3.5 A Sand

Mineralization in the A sand of the Goliad Formation is defined by drilling within two sub-horizons, the upper and lower sands, A1 and A2, respectively. The area is drilled on approximately 50 foot by 200 foot centers or closer, across and along the trend, respectively. Most of the mineralization defined to date is in the A1 sand. The A sand is stratigraphically above the B and C sands and is encountered in the majority of the drill holes within the Project. Mineralization is at a depth of less than 500 feet. The average width of mineralization was taken to be equivalent to PAA-7, as discussed previously. The average thickness and GT parameters represent average values from drill holes in the A sands above the GT cut-off, from 72 intercepts.

Mineral resource estimation parameters for the A sand at a 0.30 GT cut-off are shown in Table 14-10.

		Trend	Width		Thickness	Grade	
Horizon	Classification	Length (ft)	(ft)	Area (ft ²)	(ft)	(%U₃O8)	GT
A1 Sand	Indicated	4,367	35	152,829	4.81	0.15	0.74
A2 Sand	Inferred	28,616	35	1,001,555	4.81	0.15	0.74
A1 Sand	Inferred	2,283	35	79,905	4.81	0.15	0.74

Table 14-10 A Sand Mineral Resource Estimation Parameters

14.3.6 South Alta Mesa

The South Alta Mesa is primarily an exploration target, but within a limited portion of the area, the interpreted REDOX trend, within the E sand of the Goliad, is reasonably defined by drilling. This area meets NI 43-101 and CIM definitions for classification as an inferred Mineral Resource.

Mineral resource estimation parameters reflecting overall averages for the Alta Mesa drill hole intercepts meeting the minimum GT cut-off criteria are at a width of 35 feet, a thickness of 10 feet, and a GT of 1.00. These parameters were applied to an estimated trend length of 6,125 feet to determine the inferred Mineral Resource for this portion of the South Alta Mesa area.

14.3.7 Mesteña Grande Portion of the Project

Mineral resources for the Mesteña Grande portion of the Project estimated for classifications, meeting NI 43-101 and CIM definitions as indicated and inferred Mineral Resources, at a 0.30 GT cut-off, as summarized in Table 14-11. Subsequent sections discuss each Mineral Resource area separately.

			Grade	Contained Metal
Classification	Area	Tonnage	(% U3O8)	(Ibs. U ₃ O ₈)
Indicated	Central OK	119,000	0.120	287,000
Total Indicated		119,000	0.120	287,000
Total Measured	and Indicated	119,000	0.120	287,000
	North OK 10	1,064,000	0.120	2,555,000
	North OK 20	233,000	0.120	558,000
	Central OK 10	366,000	0.120	880,000
Inferred	Central OK 20	2,178,000	0.120	5,228,000
Interreu	Alta Vista OK 20	255,000	0.120	613,000
	Goliad 10	675,000	0.120	1,621,000
	Goliad 20	564,000	0.120	1,354,000
	El Sordo	397,000	0.100	794,000
Total Inferred		5,733,000	0.119	13,601,000

Table 14-11 Mesteña Grande Mineral Resource Summary

All estimates are rounded. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with NI 43-101 standards. The portion of the Project with defined Measured and Indicated Mineral Resources would support a preliminary feasibility study (PFS) or Feasibility (FS) which could enable them to be categorized as mineral reserves. Inferred Mineral Resources are too speculative to have reasonable prospect for economic extraction applied to them which would enable them to be categorized as mineral reserves. Inferred Mineral Resources could be assessed in the context of a preliminary economic assessment or Technical Report which is allowed under NI 43-101 regulations.

14.3.8 Mesteña Grande – Mineral Resource Estimation Parameters

Mineral resource estimation parameters for Mesteña Grande, including defined mineralization in the Goliad, Oakville, and Catahoula formations, were based on data from the Alta Mesa portion of the Project. This approach was taken as the drilling at Mesteña Grande is wide spaced. As discussed in Section 10 and tabulated on Table 10.2, a total of 460 holes were completed in the Mesteña Grande area of which 14 were above the minimum GT cut-off. The drilling did define REDOX trends appropriate for the estimation of mineralization but was not sufficient to determine a reasonable width and GT for the mineralization. An average width of 35 feet was determined from GT contour estimates of PAA-4 and PAA-6, as discussed previously, and for the PAA-7 Mineral Resource area. An average GT value of 1.2 was derived from the average of the C horizon of the Goliad Formation at Alta Mesa which has been the primary ISR mining horizon (nearly 3,000 intercepts). A thickness of 10 feet was assumed. Trend lengths were determined for each area from drill hole data as subsequently discussed.

14.3.9 Mesteña Grande – Oakville Formation

The interpreted REDOX trends are defined by approximately 350 drill holes. The majority of the Mineral Resources are classified as inferred although there is one area in the Oakville Central North where closer spaced drilling has reasonably confirmed the presence of mineralization which has reasonable prospect for economic extraction. This mineralization is within the Oakville 10 sand.

The depth to mineralization in the Oakville Formation occurs at depths from 1,050 to 1,300 feet which is substantially deeper than mineralization in the Goliad Formation both at Mesteña Grande and at Alta Mesa. The increased depth will impact production costs. The author is aware of several similar ISR projects with similar depths to mineralization and concludes there is a reasonable prospect for economic extraction of these resources; however, production costs will likely be higher than those for Alta Mesa or mineralization in the Goliad at Mesteña Grande.

Mineral resource estimation parameters for the Mesteña Grande, Oakville Formation, at a 0.30 GT cut-off shown in Table 14-12.

		Trend	Width		Thickness	Grade	
Horizon	Classification	Length (ft)	(ft)	Area (ft ²)	(ft)	(%U₃O8)	GT
Oakville North 20 Sand	Inferred	51,700	35	1,809,500	10	0.12	1.2
Oakville North 10 Sand	Inferred	11,300	35	395,500	10	0.12	1.2
Oakville Central 10 Sand	Indicated	5,800	35	203,000	10	0.12	1.2
Oakville Central 10 Sand	Inferred	17,800	35	623,000	10	0.12	1.2
Oakville Central 20 Sand	Inferred	105,800	35	3,703,000	10	0.12	1.2
Oakville Alta Vista 20 Sand	Inferred	12,400	35	434,000	10	0.12	1.2

Table 14-12 Mesteña Grande and Oakville Formation Mineral Resource Estimation Parameters

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14.3.10 Mesteña Grande - Goliad Formation

REDOX trends were defined in the Goliad Formation in the northern portion of Mesteña Grande. The interpreted REDOX trends are defined by approximately 50 drill holes. Mineralization is at depth ranging from 400 to 500 feet. Mineral resources for the Goliad are classified as inferred Mineral Resources and were estimated for the Goliad 10 and Goliad 20 sands.

Mineral resource estimation parameters for the Mesteña Grande, Goliad Formation, at a 0.30 GT cut-off are shown in Table 14-13.

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft²)	Thickness (ft)	Grade (%U₃O8)	GT
Goliad 10 Sand	Inferred	32,800	35	1,148,000	10	0.12	1.2
Goliad 20 Sand	Inferred	27,400	35	959,000	10	0.12	1.2

Table 14-13 Mesteña Grande and Goliad Formation Mineral Resource Estimation Parameters

14.3.11 El Sordo – Catahoula Formation

Mineralization in the El Sordo area is in the Catahoula Formation at depths ranging from 450 to 600 feet. The Catahoula Formation is described as primarily composed of volcanic ash-fall tuffs. Regionally, the Catahoula Formation is an important source rock for uranium. BRS reviewed the geophysical logs for the El Sordo area, and the mineralization is within well- developed sand units and BRS's opinion is that a reasonable prospect for economic extraction via ISR mining is feasible. Mineral resources at El Sordo are classified as inferred Mineral Resources based on the following assumptions:

- An average width of 35 feet was determined from GT contour estimates of PAA-4 and PAA-6, as discussed previously, and for the PAA-7 Mineral Resource area.
- An average GT value of 1.0 was derived from the average of all Alta Mesa data for all horizons (approximately 3,300 intercepts).
- A thickness of 10 feet was assumed.
- Trend lengths are defined by drilling.

Mineral resource estimation parameters for the El Sordo area, at a 0.30 GT cut-off are shown in Table 14-14.

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft²)	Thickness (ft)	Grade (%U₃Oଃ)	GT
Catahoula C-1	Inferred	8,769	35	306,915	10	0.10	1.0
Catahoula C-2	Inferred	10,509	35	367,815	10	0.10	1.0

Table 14-14 El Sordo- Catahoula Formation Mineral Resource Parameters

14.4 Opinion of Adequacy

It is the opinion of the author that the Mineral Resource procedures and calculations are suitable for the purposes of resource estimation under NI 43-101 requirements for roll-front uranium deposits mined by in-situ recovery methods.

14.5 Mineral Resource Figures and Drill Hole Locations

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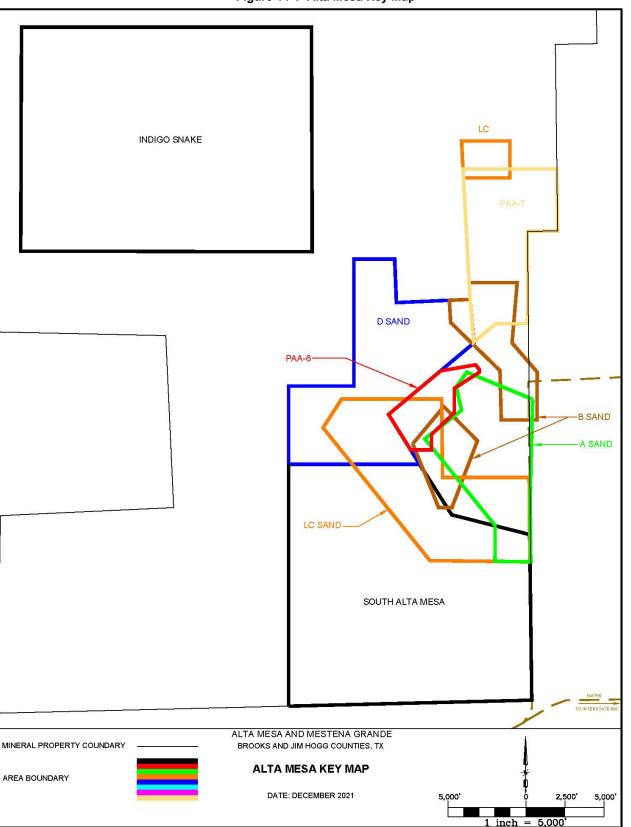
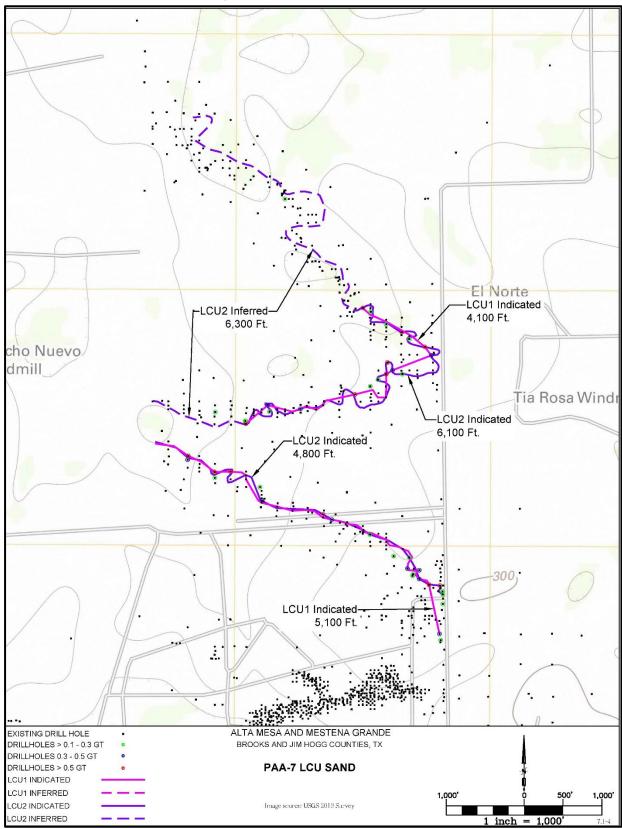


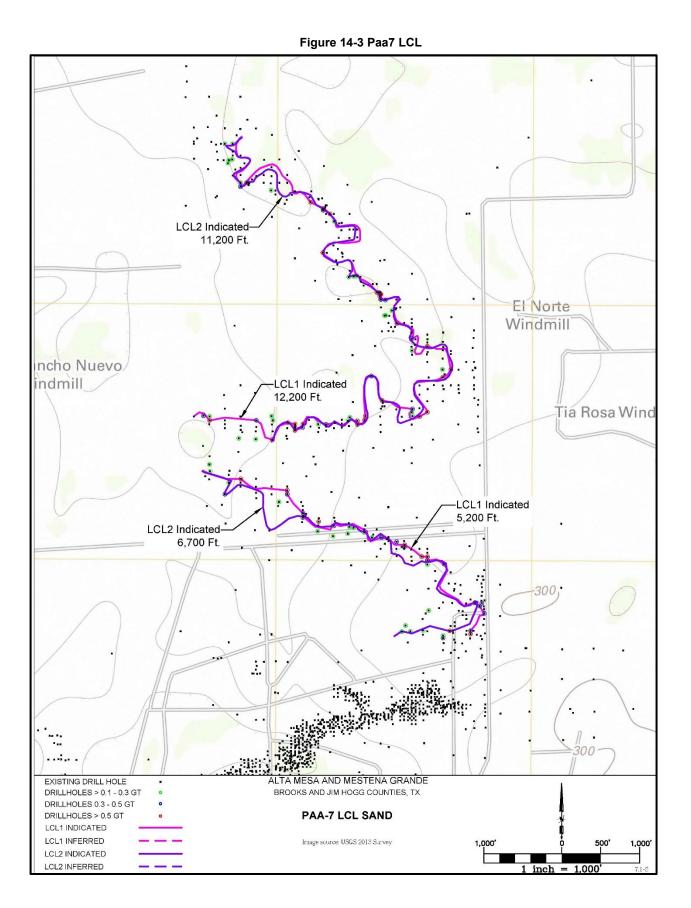
Figure 14-1 Alta Mesa Key Map

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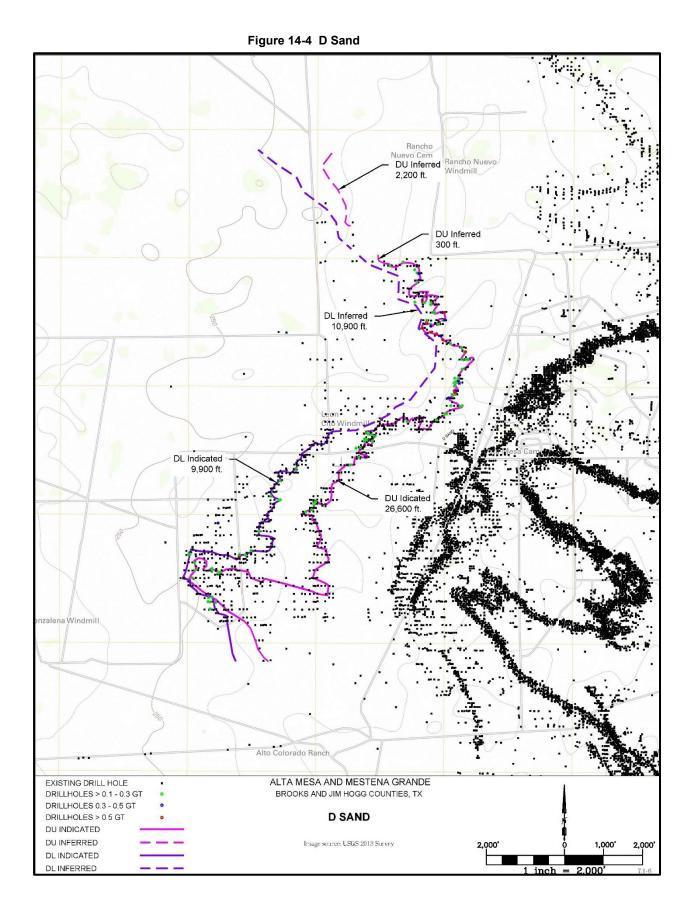
Figure 14-2 PAA7 LCU



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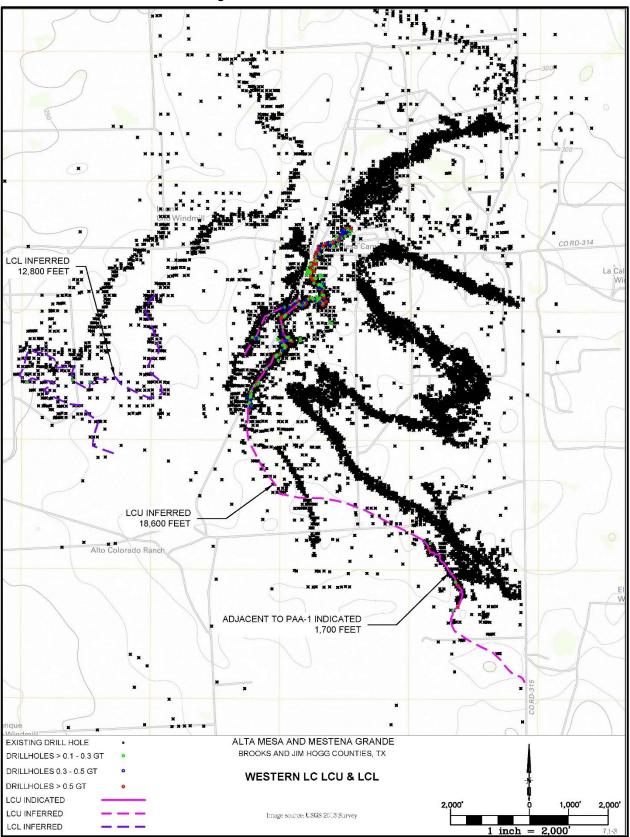


Figure 14-5 Western LC LCU and LCL

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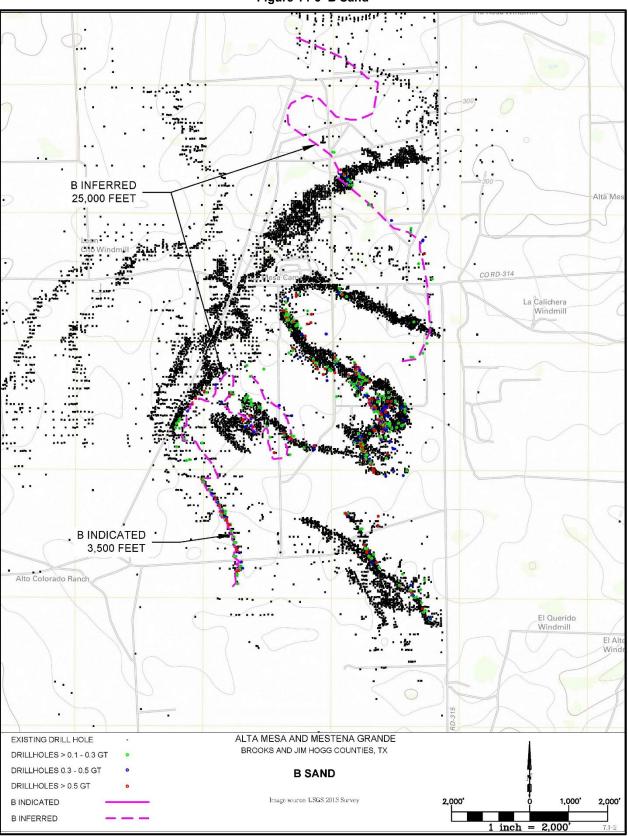
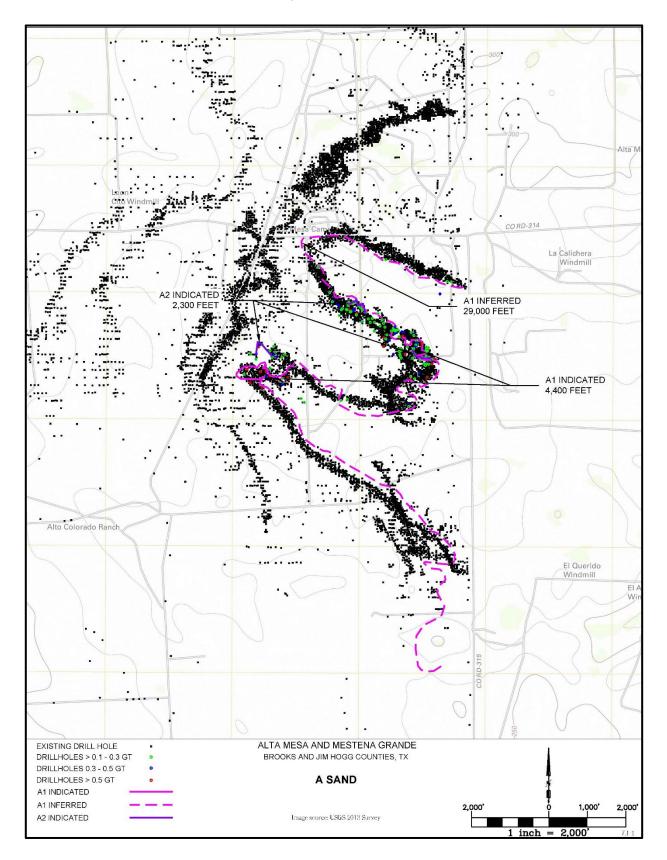


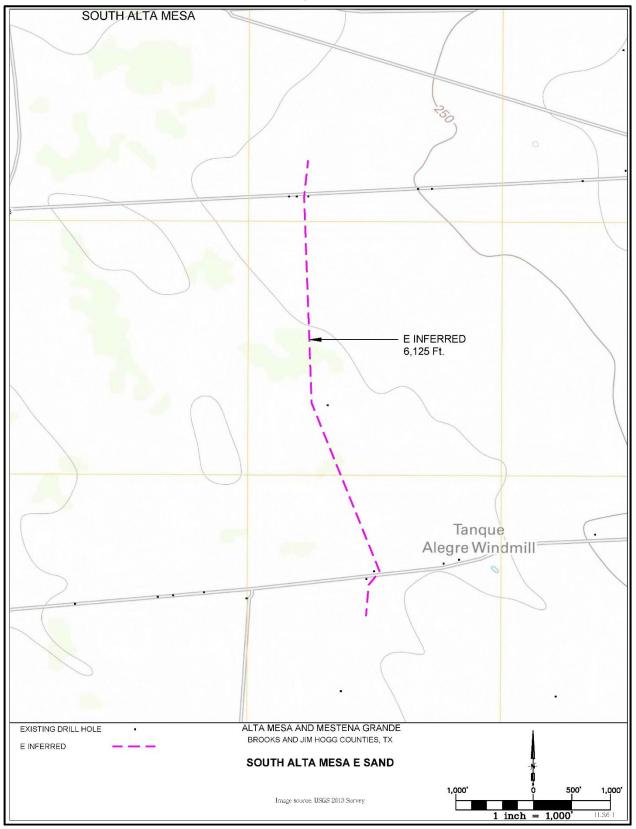
Figure 14-6 B Sand

Figure 14-7 A Sand



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Figure 14-8 Sam and E Sand



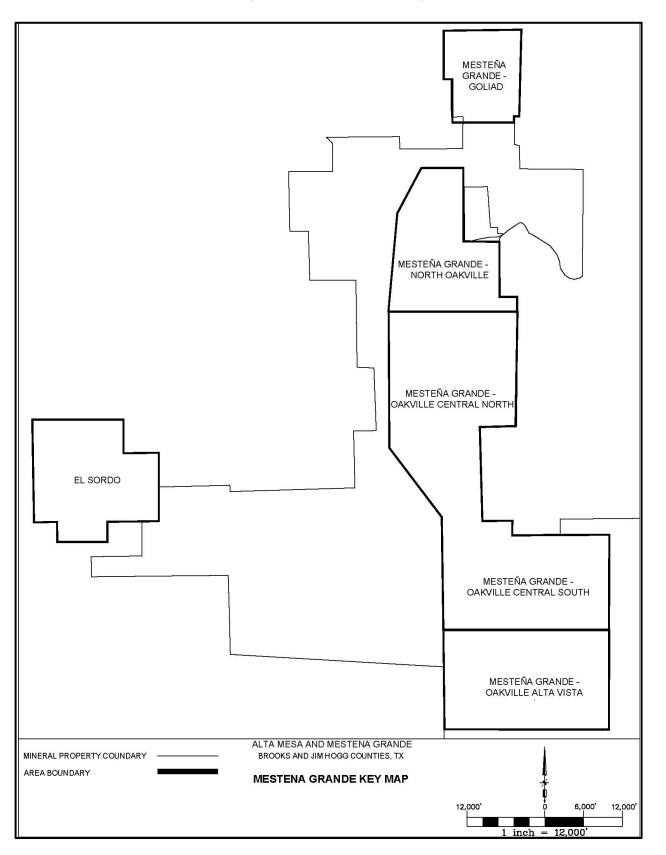
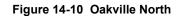
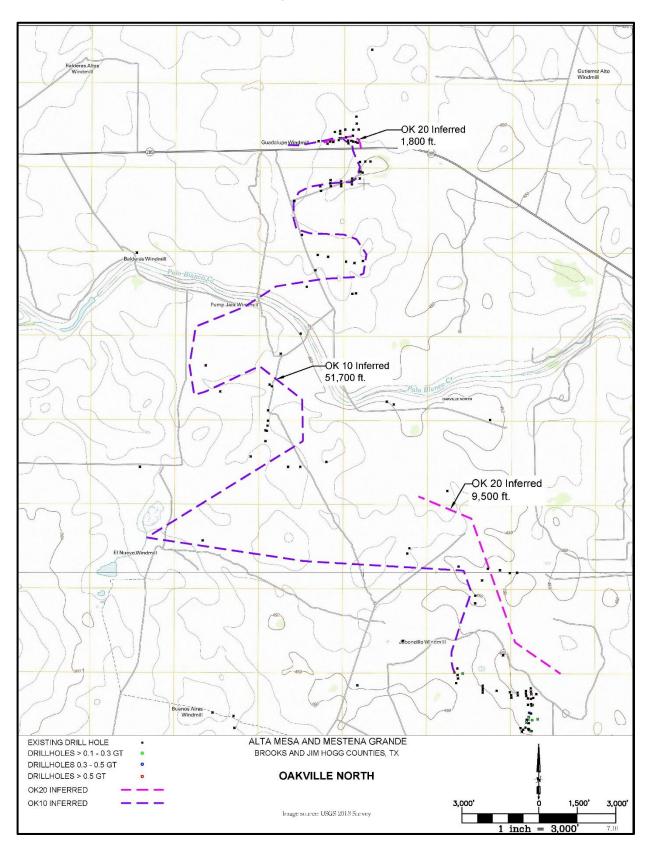


Figure 14-9 Mestena Grande Key Map





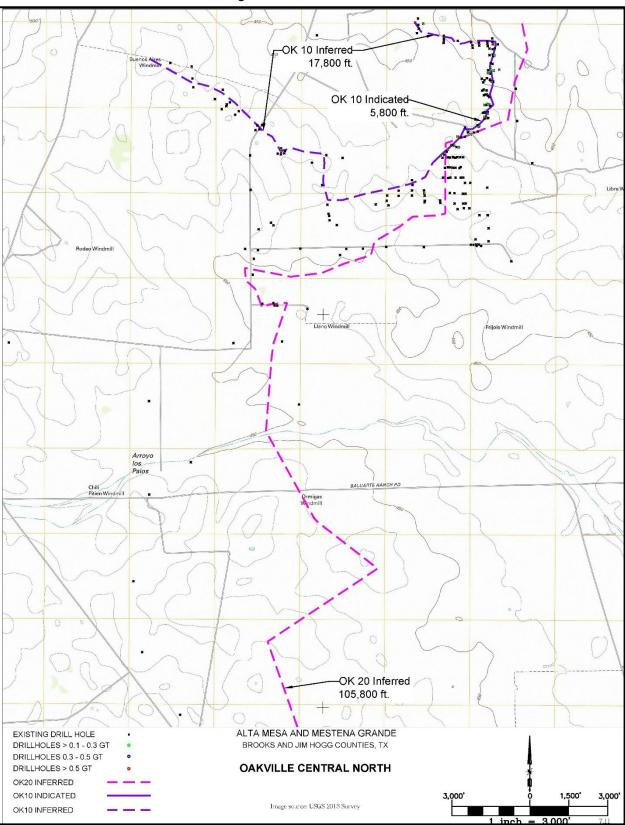


Figure 14-11 Oakville Central North

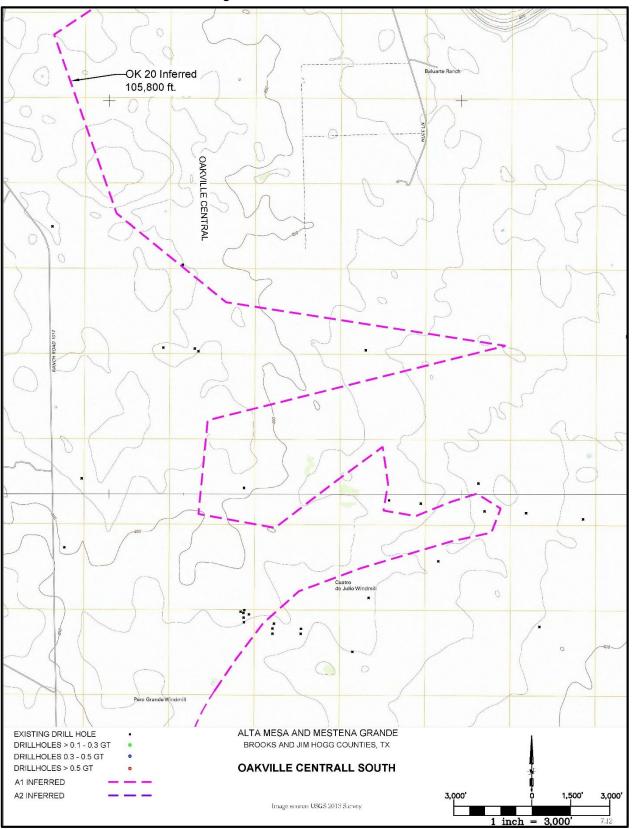


Figure 14-12 Oakville Central South

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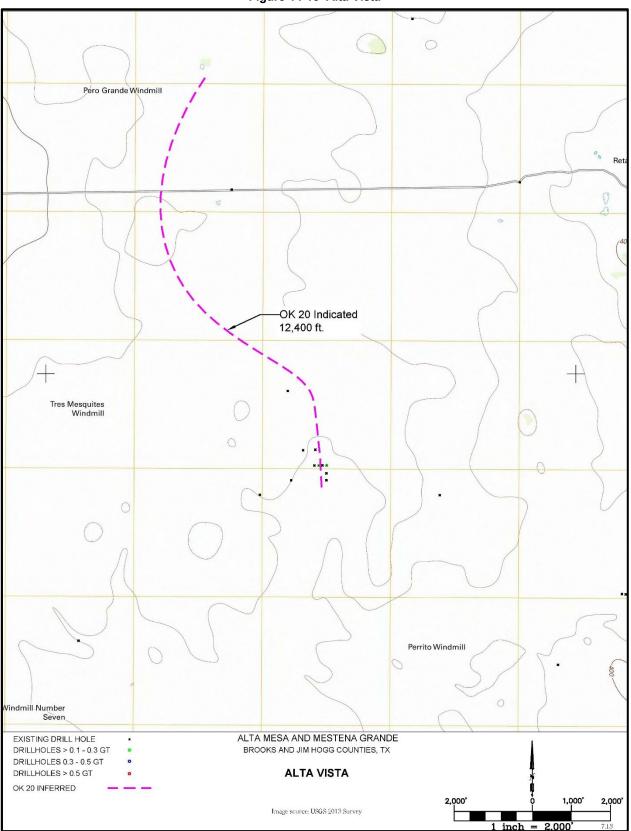
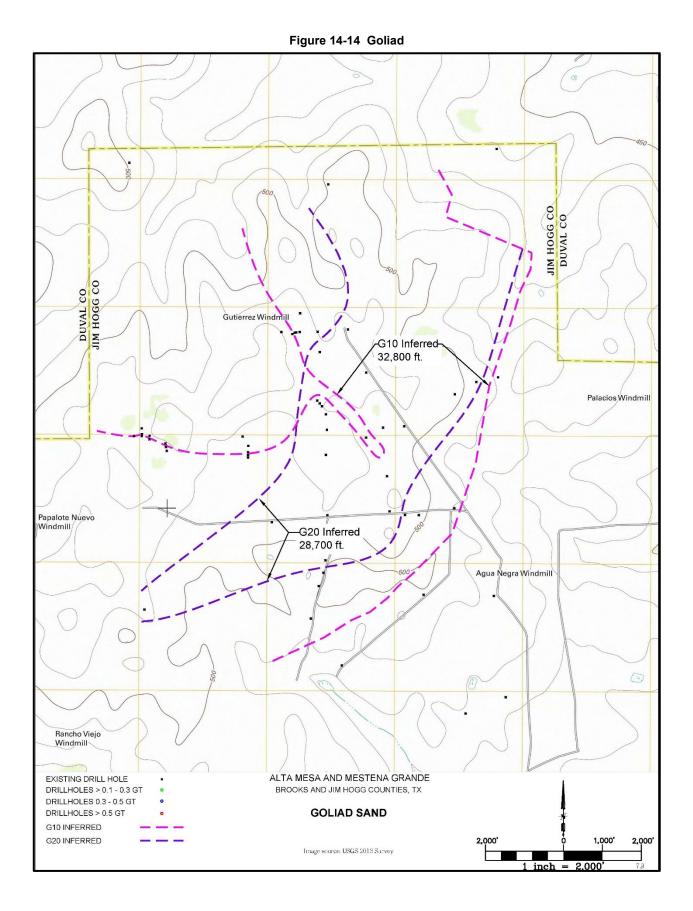


Figure 14-13 Alta Vista

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15.0 MINERAL RESERVE ESTIMATES

There are no Mineral Reserves at the Alta Mesa or Mesteña Grande properties.

16.0 MINING METHODS

This section is not applicable to this Initial Assessment.

17.0 PROCESSING AND RECOVERY METHODS

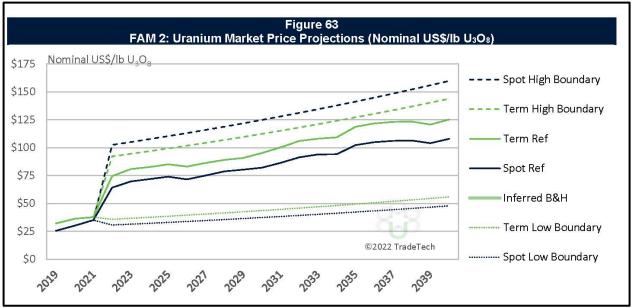
18.0 INFRASTRUCTURE

19.0 MARKET STUDIES

Uranium does not trade on the open market, and many of the private sales contracts are not publicly disclosed since buyers and sellers negotiate contracts privately. Monthly long-term industry average uranium prices based on the month-end prices are published by Ux Consulting, LLC, and Trade Tech, LLC. ENCORE has not begun any negotiations of any contracts to develop the property, including those associated with uranium sales, which is appropriate for a project at this level of development.

Figure 19-1 provides a Long Term Uranium Price Forecasts from TradeTech LLC[™] ("TradeTech[™]") 2022: Issue 3. The Forward Availability Model (FAM 2) forecasts how future uranium supply enters the market assuming restricted project development because of an unsupportive economic environment. Currently most US producers are in a mode of care and maintenance and numerous facilities globally are also slowing or shutting in production at least on a temporary basis. This condition aligns with the FAM 2 projections.

Term forecasts beginning 2025 or later and extending into the future are considered the most reasonable for purposes of this report, as they consider the effects of prices on future existing and new production. In addition, larger projects are typically supported by long-term contracts with investment-grade nuclear utilities. Therefore, term prices are most appropriate for purposes of this report.





The Term price projections for uranium oxide (USD) from TradeTech[™] 2022, for 2023, are: FAM 2 \$81/lb. Projections of uranium price through 2040 increase from these values. The author recommends, as a conservative measure, the use of a long-term uranium price of \$70.00 USD per pound uranium oxide for the consideration of reasonable prospects of economic extraction.

By their nature, all commodity price assumptions are forward-looking. No forward-looking statement can be guaranteed, and actual future results may vary materially.

From TradeTech[™] 2022

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND PLANS, NEGOTIATIONS, OR AGREEMENTS WITH LOCAL INDIVIDUALS OR GROUPS

21.0 CAPITAL AND OPERATING COSTS

22.0 ECONOMIC ANALYSIS

23.0 ADJACENT PROPERTIES

Several ISR mines lie within the South Texas Uranium Province.

23.1 Garcia Property

The mineralized trends in the Goliad Formation continue to the east onto properties not controlled by Alta Mesa LLC referred to as the Garcia property. Chevron conducted exploration drilling in the 1970's on the Garcia property, which is located immediately east of the Alta Mesa project. These exploration efforts identified the presence of several mineralized sands on the Garcia tract. Historic data and reports exist for this area, however, the author of this Technical Report has not verified this data and information.

24.0 OTHER RELEVANT DATA AND INFORMATION

24.1 Hydrogeology

There has been no hydrologic study on the project site, however pump tests are completed on each well-field as part of the permit application.

24.2 Geotechnical

There has been no geotechnical study on the mineralized zones at Alta Mesa.

24.3 Exploration Target Definition

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

24.4 Exploration Targets

For the project areas defined as Exploration Targets there is sufficient geologic evidence from limited drilling and other information to interpret that mineralization may extend from areas of resource production and/or defined Mineral Resources into the targeted areas. For Exploration Target areas, favorable conditions for the occurrence of mineralization were determined based on the presence of host sand units and evidence of REDOX interfaces within those host sand units. No estimate of Mineral Resources or Mineral Reserves in accordance with NI 43-101 guidelines has been made for Exploration Target areas. Rather, the following calculations are intended to quantify an Exploration Target for these portions of the Project, as allowed as a Restricted Disclosure under NI 43-101 regulations. The tonnages, grades, and contained pounds of uranium, as stated in this report, for exploration targets should not be construed to reflect a calculated Mineral Resource (inferred, indicated, or measured). The potential quantities and grades for exploration targets, as stated in this report, are conceptual in nature, and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in any of the exploration targets being delineated as a Mineral Resource.

Exploration target calculations are based on a minimum grade cut-off of 0.02 % U₃O₈ and minimum GT of 0.30. A bulk dry density of 17 cubic feet per ton was used.

Exploration Targets were estimated by applying a range of GT values, determined from all drill data available for the Project, to an interpreted trend length and average width of mineralization.

For the exploration target areas, the REDOX boundary or trend for each of the target areas was defined from drill data which defines the general location of a REDOX boundary. In two cases 3D seismic imaging is available which does indicate the presence of sand channels. These are the Indigo Snake and South Alta Mesa areas. For South Alta Mesa the presence of a REDOX boundary is also indicated by drilling and an exploration target has been

defined in this area. At Indigo Snake a single drillhole was completed and the results were inconclusive, so no exploration target was defined for this area.

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

Trend width was determined from PAA-6 and portions of PAA-4 where drilling density was sufficient to estimate the average trend width. Mineralization in both areas is in the C horizon of the Goliad Formation. The average trend width is 35 feet. There is a risk that the average width of mineralization may vary geographically and within other sand units and formations.

Average GT values above a GT cut-off of 0.30 were determined for each host sand unit and are summarized in Table 9-1. A GT range reflecting the standard deviation about the mean was utilized for the estimation of exploration targets. As with the trend width the available data is weighted by intercepts from the C horizon of the Goliad Formation. There is a risk that the average GT may vary in other sand units and formations.

By convention for ISR Mineral Resources the contained pounds of uranium are calculated from the GT value applied to the respective area of mineralization. As such average thickness is not a critical parameter in the determination of the pounds contained but is needed to calculate tonnage and average grade. Based on the typical geometry of the sands a thickness of 10 feet was assumed for exploration targets. This thickness generally corresponds with the average screened interval for wells. Table 9-1 summarizes the minimum GT used in each host sand in the Project.

Host Sand	Minimum GT 0.30	# Intercepts
A Sand	0.74	72
B Sand	0.87	273
MCU Sand	1.33	588
MCM Sand	1.46	527
MCL Sand	1.25	894
LCU Sand	1.00	526
LCL Sand	0.95	390
DU Sand	0.60	24
DL Sand	0.83	4
Total Intercepts		3,298
Mean GT	1.00	
Standard Deviation	0.23	
GT Range	0.77 to 1.23	

Table 24-1 GT Average and Range

From the forgoing parameters, including trend length (estimated for each area), average trend thickness (10 feet), trend width (35 feet), GT range (0.77 to 1.23), and bulk density (17 ft3/ton), an estimate of the potential quantity and grade of the exploration targets was completed and is summarized in Table 9-2. This estimation was based on a GT cut-off of 0.30.

		Low Range Estimate			High Range Estimate			
		Tons	Grade	Pounds	Tons	Grade	Pounds	
Area	Zone	(000s)	(%U₃O8)	(000s)	(000s)	(%U₃O8)	(000s)	
Alta Mesa	LCL Sand West of PAA-7	271	0.077	417	271	0.123	666	
Alla Mesa	LC Sands North of PAA-7	185	0.077	285	185	0.123	456	
	SAM - E SANDS	559	0.077	864	559	0.123	1,375	
	SAM - F SANDS	155	0.077	240	155	0.123	382	
South Alta	SAM - G SANDS	213	0.077	330	213	0.123	526	
Mesa	SAM - H SANDS	203	0.077	314	203	0.123	499	
	SAM - D UPPER SANDS	347	0.077	537	347	0.123	854	
	SAM - D LOWER SANDS	395	0.077	611	395	0.123	973	
	Alta Mesa Subtotal	456	0.077	703	456	0.123	1,122	
	South Alta Mesa Subtotal	1,872	0.077	2,896	1,872	0.123	4,610	
	Grand Total	2,328	0.077	3,599	2,328	0.123	5,732	

Table 24-2 Alta Mesa Exploration Targets

The potential tonnages, grade, and contained pounds of uranium for the exploration targets are estimates and could change as proposed exploration activities are completed. They should not be construed to reflect a calculated Mineral Resource (inferred, indicated, or measured). Furthermore, it is uncertain if additional exploration will result in any of the exploration targets being delineated as a Mineral Resource.

The areas for which Exploration Targets have been defined include:

- The LCL Sand West of PAA-7 Figure 24.1.
- The LC Sands North of PAA-7 Figure 24.1
- The South Alta Mesa Area in the D, E, F, G, and H sands Figure 24.1
- Catahoula Formation (CF) and Indigo Areas Figure 24.2

The REDOX boundary shown on Figure 24.1. for the LCL sand of the Goliad Formation west of PAA-1 is defined by wide-spaced drilling and is an extension of the area for which inferred Mineral Resources have been estimated in the same geologic horizon. The depth to mineralization is less than 600 feet. The REDOX trend length is 13,200 feet.

The REDOX boundary shown on Figure 24.1 for the LC sands of the Goliad Formation north of PAA-7 is defined by wide-spaced drilling. The depth to mineralization is less than 600 feet. The REDOX trend length is 4,500 feet for which the estimate applies. This trend length is applicable to both the LC lower and upper sands (LCL and LCU) for a total trend length of 9,000 feet.

REDOX boundaries for the South Alta Mesa area are shown on Figure 24.1.. In cross section, oxidation within the system proceeds generally from east to west. The individual drill logs show the oxidation/reduction conditions observed from lithological logging. Correlation of sands was based on the resistivity and SP logs. Within some of the drill holes, elevated gamma levels indicate proximity to mineralization and show gamma signatures typical of roll-front mineralization. Various sands of the Goliad Formation, including the D upper and lower sands, the E sand, the F sand, the G sand, and the H sand, are present.

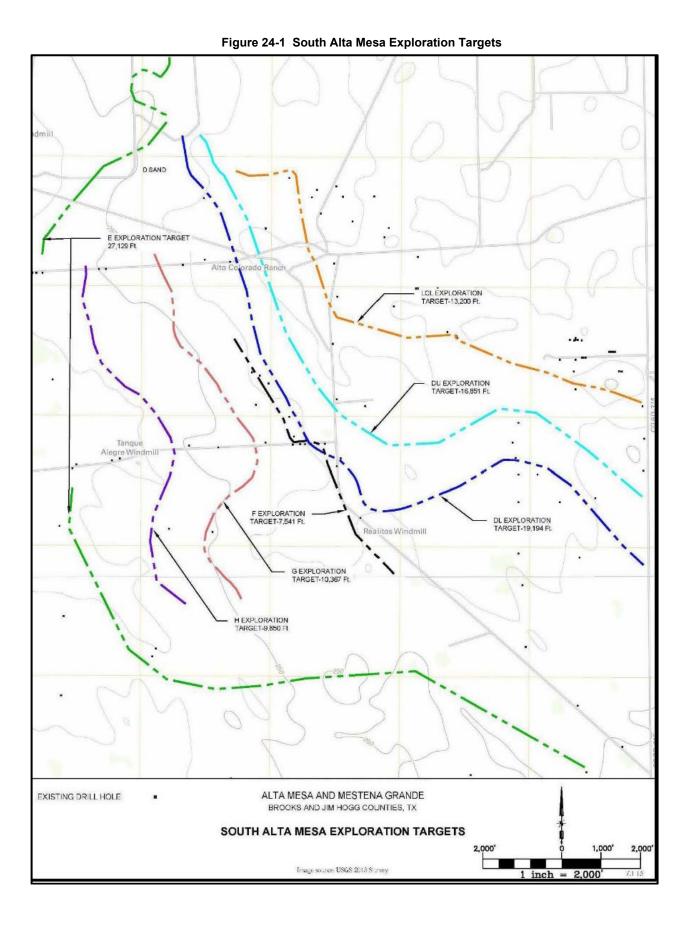
South Alta Mesa is a large area. REDOX trends are based primarily on data from a total of 78 drill holes, however, the interpretation of trend locations was influenced by the 3D seismic data. The seismic image shows the major sand concentrations as shades of gray and the margins of the sand channels in shade of pink. The interpreted

trends for the D sands tend to follow the northern margin of the channel system and the E sand is sub-parallel to the southern margin of the channel system. The F, G and H sands are more central to the channel system but tend to be sympathetic to transition areas within the main channel system as depicted by the seismic data.

Depth to mineralization, depending on the sand horizon, may vary from approximately 500 feet to slightly over 800 feet.

Most of the South Alta Mesa area is defined as an exploration target, however, within a limited portion of the area containing the E sand, drilling indicates the presence of mineralization, and the location of the trend is reasonably defined by drilling. For this area an inferred Mineral Resource has been estimated as discussed in Section 14.0.

The REDOX boundary shown on Figure 24.2 follows the sand channel indicated by the 3D seismic profile. Only two drill holes have been completed in the area. Both showed slight mineralization in the Catahoula Formation at depths in the range of 1,600 to 2,200 feet. The mineralized trend is projected based on the seismic data and the limited drill hole data.



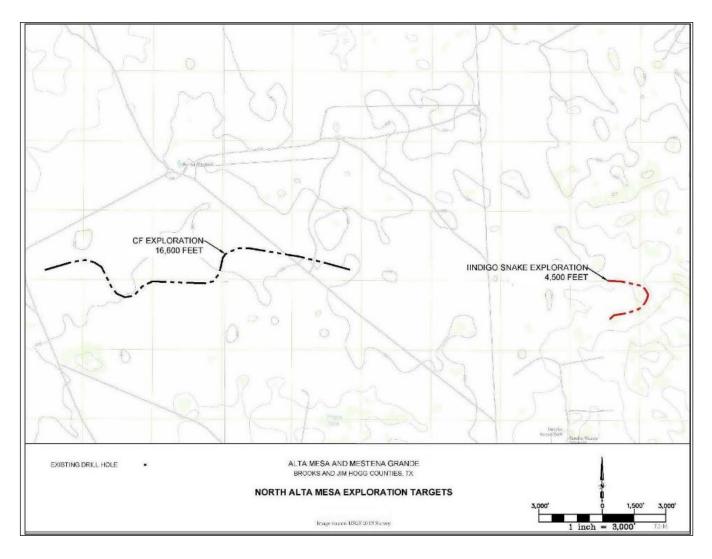


Figure 24-2. North Alta Mesa Exploration Targets

25.0 INTERPRETATION AND CONCLUSIONS

The Project is located within the South Texas Uranium Province and includes both the Alta mesa and Mesteña Grande project areas. Uranium mineralization occurs within known host formations common to the province which have been mined by conventional and ISR methods. Significant Mineral Resources remain within the Project area which may be tributary to the Alta Mesa central processing facility which is fully licensed and operated from 2005 producing approximately 4.6 million pounds of uranium oxide until production standby in February 2013.

Mineral resources have been estimated for both the Alta Mesa and Mesteña Grande areas in accordance with NI 43-101 and CIM standards and definitions as summarized in Table 25-1 and classified as measured, indicated, and inferred. Only the Alta Mesa property has had previous ISR mining. No pre-feasibility study or feasibility study has been completed in accordance with NI 43-101 requirements, thus no mineral reserves are stated in this report.

	COG			Grade	Contained Metal
Classification	(G.T.)	Area	Tonnage	(% U₃Oଃ)	(lbs. U₃Oଃ)
Measured	0.3	Alta Mesa	123,000	0.151	164,000
Total Measured	0.3	-	123,000	0.151	164,000
Indicated	0.3	Alta Mesa	1,393,000	0.106	2,959,000
	0.3	Mesteña Grande	119,000	0.120	287,000
Total Indicated	0.3	-	1,512,000	0.107	3,246,000
Total Measured & Indicated	0.3		1,635,000	0.110	3,410,000
Inferred	0.3	Alta Mesa	1,230,000	0.128	3,192,000
	0.3	Mesteña Grande	5,733,000	0.119	13,601,000
Total Inferred	0.3		6,964,000	0.121	16,793,000

Table 25-1 Alta Mesa and Mesteña Grande Resource Summary

Notes:

1. NI 43-101 and CIM definitions were followed for all Mineral Resource categories.

2. Mineral Resources are estimated at a 0.3 GT (0.02% U₃O₈ minimum grade)

3. Mineral Resources are estimated using a long-term Uranium price of US\$70 per pound

Total measured Mineral Resource is that portion of the in-place or in situ Mineral Resources that is estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred Mineral Resources but were considered in establishing the minimum GT cutoff with respect to reasonable prospects for future economic extraction.
 Bulk density is 0.0588 tons/ft³ (17.0 ft³/ton)

6. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

7. Numbers may not add due to rounding

Measured Mineral Resources are limited to fully delineated wellfields in the Alta Mesa portion of the Project. While additional Mineral Resources may remain in additional wellfields, only the remaining Mineral Resources in well field PAA-6 are considered to meet reasonable prospects for future economic extraction and are thus the only measured Mineral Resources included in the Mineral Resource summary.

Indicated and inferred Mineral Resources have been estimated for both the Alta Mesa and Mestena Grande portions of the project using minimum grade and GT cut-offs based on reasonable prospects for future economic extraction.

Mineral resources at Alta Mesa are near the existing Central Processing Facility. Future development and extraction of Mineral Resources at Mesteña Grande would require the design, permitting and construction of a satellite facility.

In addition to the estimated Mineral Resources, Exploration Targets have been defined in the South Alta Mesa area of the Alta Mesa Project. The Exploration Target for the Project estimated is summarized in Table 25-2.

Table 25-2 Project Total Exploration Target								
Low Range Estimate High Range Estimate								
	Tons	Grade	Pounds	Tons	Grade	Pounds		
Exploration Target	(000s)	(%U ₃ O ₈)	(000s)	(000s)	(%U ₃ O ₈)	(000s)		
Tot	al 2,328	0.077	3,599	2,328	0.123	5,732		

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The tonnages, grades, and contained pounds of uranium for exploration targets are estimates and could change as proposed exploration activities are completed. They should not be construed to reflect a calculated Mineral Resource (measured, indicated or inferred). The potential quantities and grades for exploration targets are conceptual in nature, as there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in any of the exploration targets being delineated as a Mineral Resource.

The author considers the data and information available for this report to be accurate and reliable for the purposes of estimating Mineral Resources for the Project.

The author feels the risks to put the Alta Mesa portion of the Project into production are low since all permits for operating including licenses to resume plant operations at the existing Alta Mesa ISR production facility. For each new wellfield a production area authorization (PAA) permit will need to be obtained through the permitting process with the TCEQ.

However, the Mesteña Grande portion of the Project, which will operate as a satellite facility to the Alta Mesa ISR facility, will require full permitting prior to production and operation of its wellfields.

The Project does have some risks similar in nature to other mining projects in general and uranium mining projects specifically, including:

- Future commodity demand and pricing; •
- Environmental and political acceptance of the project; •
- Variance in capital and operating costs; and •
- Mine and mineral processing recovery and dilution.

There is a risk that additional drilling may not locate additional Mineral Resources and that mineralization may not be found or may not be continuous along the REDOX boundary and that the actual grade times thickness (GT) along the trends will fall outside the estimated range, either higher or lower. A substantial portion of the Mineral Resource is based on wide-spaced drilling and has been classified as inferred. Inferred Mineral Resources are too speculative to have economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred Mineral Resources can be assessed in the context of a Technical Report study which is allowed under a Preliminary Economic Assessment in accordance NI 43-101 requirements. The tonnages, grades, and contained pounds of uranium, as stated in this report, for exploration targets should not be construed to reflect a calculated Mineral Resource (inferred, indicated, or measured). The potential quantities and grades for exploration targets, as stated in this report, are conceptual in nature, and there has been insufficient work to date to define an NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in any of the exploration targets being delineated as a Mineral Resource.

ALTA MESA URANIUM PROJECT JANUARY 2023

The author is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which would materially affect the Mineral Resource estimates presented in this report. To the author's knowledge there are no other significant factors that may affect access, title, or the right or ability to perform work on the property provided the conditions of all mineral leases and options, and relevant operating permits and licenses, are met. The reader is cautioned that additional drilling may or may not result in discovery of an economic Mineral Resource on the property.

26.0 RECOMMENDATIONS

A phased project approach is recommended. Phase 1 would include delineation of the PAA7 and PAA8 mineral resource areas. These areas are within the aquifer exemption area and proximate to the Alta Mesa facility. Phase 1 would include some rehabilitation and modernization of the facility and preparation of a Potential Economic Assessment (PEA). Phase 2 would include wellfield planning, installation of baseline monitor wells, hydrologic studies and related activities to advance permitting of the wellfields. Phase 2 would include a Preliminary Feasibility Study (PFS). Phase 2 would be contingent on the outcome of Phase 1 and favorable market conditions.

26.1 Phase 1 – Delineation of the PAA7 and PAA8 Mineral Resource Areas:

Phase 1a Delineation Drilling: PAA7 is reasonably well delineated and permits and baseline monitor wells are in place. Additional Forty additional exploration drill holes are recommended. PAA8 requires an estimated 330 exploration drill holes. Drilling costs for the project have been estimated on a per hole basis in two categories.

- Exploration drilling including all costs for site preparation, drilling, geophysical logging, drill hole abandonment and sealing, and site reclamation. Estimated cost per each \$4,800.00 USD.
- Cased exploration wells including all costs for site preparation, drilling, geophysical logging, casing and screening, and site reclamation. Estimated cost per each \$16,000.00 USD.

Phase 1b Facility Rehab: In preparation for restarting the processing facility, rehabilitation and modernization of the facility is recommended. This work would be necessary to fully evaluate the operational readiness of the facility and determine if any additional components would need rehabilitation or replacement.

Phase 1c PEA: Following the completion of phase 1a and 1b, it is recommended that the mineral resources within PAA7 and PAA8 will be re-evaluated, and a PEA prepared for the project.

Total costs are summarized in Table 26.1.

Description	Units	Unit Cost		Cost	
PAA7 Delineation	40	\$	4,800	\$	192,000
PAA8 Delineation	330	\$	4,800	\$	1,584,000
Facility Rehab				\$	1,000,000
PEA				\$	80,000
TOTAL COST PHASE 1				\$	2,856,000

Table 26-1 Phase 1 Estimated Costs

26.2 Phase 2 – Permitting and Economic Evaluation:

Phase 2 is contingent on the outcome of Phase 1 and favorable market conditions. Phase 2 includes,

- Completion of cased wells for hydrological assessment and determination of baseline water quality for PAA8,
- Permitting and related studies of the PAA8 wellfield, and
- Completion of a PFS.

Total costs are summarized in Table 26.2.

Description	Units	Unit Cost		Cost	
PAA8 Wells	40	\$	16,000	\$	640,000
Permitting and Studies				\$	500,000
PFS				\$	200,000
TOTAL COST PHASE 1				\$:	1,340,000

Table 26-2 Phase 1 Estimated Costs

27.0 REFERENCES

Publications Cited in this report:

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 6. Brogdon, L.D., C.A. Jones, and J.V Quick, "Uranium favourability 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.
- 10. 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.
- 12. Eargle, D. H., Stratigraphy of Jackson Group (Eocene), South-Central, Texas: American Association of Petroleum Geologists Bulletin, 43, 1959.
- 13. 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.
- 14. 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.

- 15. De Voto, R. H. "Uranium Geology and Exploration" Colorado School of Mines, 1978.
- 16. Finch, W. I., Uranium provinces of North America—their definition, distribution, and models: U.S. Geological Survey Bulletin 2141, 1996.
- 17. 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.
- 18. 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.
- 19. IAEA, "World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification" 2009 Edition, Vienna: IAEA, 2009.
- 20. 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.
- 21. McKay, A. D. et al, "Resource Estimates for In Situ Leach Uranium Projects and Reporting Under the JORC Code", Bulletin November/December 2007.
- 22. 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.
- 23. US Securities and Exchange Commission, 17 CFR Parts 229, 230, 239 and 249, Modernization of Property Disclosures for Mining Registrants.
- 24. TradeTech, Uranium Market Study.

Unpublished Reports:

- 1. Goranson, P., Mesteña Uranium LLC, Internal Memorandum Re: Review of Reserve Estimates, July 2007.
- Personal Communication Groanson, P., enCore Energy Corp., Alta Mesa Wellfield Economics, January 2023.

Web Sites:

1. Texas Monthly Magazine:

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

2. Texas State Historical Association- Handbook of Texas:

https://www.tshaonline.org/handbook/entries/mineral-rights-and-royalties

3. United States Nuclear Regulatory Commission-Nuclear Materials:

https://www.nrc.gov/materials/uranium-recovery/extraction-methods/isl-recovery-facilities.html

28.0 CERTIFICATES OF QULAIFIED PERSONS

CERTIFICATE OF QUALIFIED PERSON

DOUGLAS L. BEAHM

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

- 1. I am the Principal Engineer and President of BRS Engineering, Inc., 1130 Major Avenue, Riverton, Wyoming 82501.
- 2. I am the author of the report titled "Technical Report Summary for the Alta Mesa Uranium Project, Brooks and Jim Hogg counties, Texas, " and with an effective date of January 19, 2023.
- 3. I graduated with a Bachelor of Science degree in Geological Engineering from the Colorado School of Mines in 1974. I am a licensed Professional Engineer in Wyoming, Colorado, Utah, and Oregon; a licensed Professional Geologist in Wyoming; and Registered Member of the SME.
- 4. I have worked as an engineer and a geologist for 49 years. My work experience includes uranium exploration, mine production, and mine/mill decommissioning and reclamation. Specifically, I have worked with uranium projects hosted in similar sandstone environments throughout the Western US.
- 5. I was last present at the site on January 12, 2023, and previously from April 15 through April 17, 2014.
- 6. I am responsible for all sections of the report..
- 7. I am independent of the issuer, enCore, and all previous owners including, Energy Fuels Inc. and Mestena Uranium and have no interest in the property applying all of the tests in NI 43-101. I hold no stock, options or have any other form of financial connection to enCore. enCore is but one of many clients for whom I consult.
- 8. I have prior involvement on the project related to preparation of previous Technical Reports.
- 9. I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of my education, professional registration, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 10. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with same.
- 11. As of the date of this report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 12. I consent to the filing of this Technical Report with any stock exchange and other regulatory authority.

<u>_20 January 2023</u> Signed and Sealed Douglas L. Beahm,

Douglas L. Beahm, PE, PG Registered Member SME