

**ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES,
TEXAS, USA**

**ALTA MESA URANIUM PROJECT, ALTA MESA AND
MESTEÑA GRANDE MINERAL RESOURCES AND
EXPLORATION TARGET, TECHNICAL REPORT NATIONAL
INSTRUMENT 43-101**

PREPARED FOR:

EFR ALTA MESA LLC

A Wholly Owned Subsidiary of:

ENERGY FUELS INC.

AUTHORED BY:

Douglas L. Beahm, P.E., P.G.

Principal Engineer

BRS Engineering

Effective Date: July 19, 2016

SIGANTURE PAGE AND CERTIFICATE OF QUALIFIED PERSON

DOUGLAS L. BEAHM

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

1. I am the Principal Engineer and President of BRS, Inc., 1130 Major Avenue, Riverton, Wyoming 82501.
2. I am the author of 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 July 19, 2016.
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 over 42 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 from April 15 through April 17, 2014 after reviewing data at the Corpus Christi office of Mesteha Uranium on April 14, 2014.
6. I am responsible for all sections of the report.
7. I am independent of the issuer applying all of the tests in NI 43-101.
8. I do not have prior working experience on the project.
9. I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of my education, professional registration, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with same.
11. As of the date of this report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority.

July 19, 2016
Signed and Sealed

Douglas L. Beahm

TABLE OF CONTENTS

SECTION	TITLE	PAGE
SECTION 1: SUMMARY		7
1.1	Project Overview	8
1.2	Project Description and Ownership	8
1.3	Development Status	8
1.4	History	9
1.5	Regulatory Status	9
1.6	Geology and Mineralization	9
1.7	Exploration and Drilling Status	10
1.8	Conclusions	10
1.9	Exploration Targets	11
1.10	Recommendations	11
1.11	Summary of Risks	12
SECTION 2: INTRODUCTION		15
SECTION 3: RELIANCE ON OTHER EXPERTS		17
SECTION 4: PROPERTY DESCRIPTION AND LOCATION		18
4.1	Property Description and Location	18
4.2	Ownership and Mineral Tenure	18
4.3	Surface Rights	20
4.4	Permitting	22
4.5	Environmental Liabilities	23
4.6	State and Local Taxes	23
4.7	Encumbrances and Risks	23
SECTION 5: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY		24
5.1	Physiographic Features	24
5.2	Access	25
5.3	Climate	25
5.4	Infrastructure	25
5.5	Land Use	25
5.6	Flora and Fauna	25
5.7	Surface Rights and Local Resources	26

SECTION 6: HISTORY	27
6.1 MULLC Mineral Resource Estimate	29
SECTION 7: GEOLOGICAL SETTING AND MINERALIZATION	30
7.1 Regional Geological Setting	30
7.2 Uranium Source and Deposition	33
7.3 Structural Geology	33
7.4 Local Geology.....	35
SECTION 8: DEPOSIT TYPES	37
SECTION 9: EXPLORATION.....	38
9.1 Historical Exploration.....	38
9.2 Recent Exploration.....	38
9.3 Exploration Target Definition.....	38
9.4 Exploration Target Estimation Parameters	38
9.5 Exploration Target Estimates.....	40
9.6 Exploration Target Areas	41
9.6.1 LCL Sand West of PAA-1	41
9.6.2 LC Sands North of PAA-7	41
9.6.3 South Alta Mesa.....	41
9.6.4 Indigo Snake	42
SECTION 10: DRILLING.....	48
10.1 Drilling and Logging Procedures	48
10.2 Summary of Drilling Results	49
SECTION 11: SAMPLE PREPARATION, ANALYSES, AND SECURITY	51
SECTION 12: DATA VERIFICATION.....	52
12.1 Drill Data	52
12.2 Database Management	53
12.3 Core Assays and Disequilibrium.....	54
12.4 Density	54
12.5 Summary	54
SECTION 13: MINERAL PROCESSING AND METALLURGICAL TESTING.....	55
SECTION 14: MINERAL RESOURCE ESTIMATES.....	56
14.1 Mineral Resource Estimation.....	56
14.1.1 Definitions.....	56

14.1.2	Methodology	57
14.2	Key Assumptions and Parameters.....	57
14.2.1	Cutoff Criteria	57
14.2.2	Bulk Density	57
14.2.3	Radiometric Equilibrium.....	58
14.2.4	Width and GT of Mineralization.....	58
14.3	Mineral Resource Summary.....	59
14.4	Alta Mesa Portion of the Project.....	60
14.4.1	Current Wellfields.....	61
14.4.2	PAA-7 Lower C Sand	61
14.4.3	D Sand.....	61
14.4.4	Lower C Sand Outside of PAA-7, PAA-6, and PAA-4	62
14.4.5	B Sand.....	63
14.4.6	A Sand.....	63
14.4.7	The South Alta Mesa.....	64
14.5	Mesteña Grande Portion of the Project.....	72
14.5.1	Mesteña Grande – Mineral Resource Estimation Parameters	72
14.5.2	Mesteña Grande -Oakville Formation.....	73
14.5.3	Mesteña Grande - Goliad Formation	74
14.5.4	El Sordo – Catahoula Formation.....	74
14.6	Risks.....	82
	SECTIONS 15 through 22 – NOT APPLICABLE.....	83
	SECTION 23: ADJACENT PROPERTIES	84
	SECTION 24: OTHER RELEVANT DATA AND INFORMATION.....	85
	SECTION 25: INTERPRETATION AND CONCLUSIONS	86
25.1	Alta Mesa	86
25.2	Mesteña Grande	86
25.3	Exploration Target	87
25.4	Summary of Risks.....	87
	SECTION 26: RECOMMENDATIONS	88
26.1	Inferred Mineral Resource Drilling.....	89
26.2	Exploration Target Drilling.....	90
	SECTION 27: REFERENCES	91

Tables

Table 1.1 Terms and Abbreviations	7
Table 1.1 – Alta Mesa and Mesteña Grande Resource Summary	10
Table 1.2– Project Total Exploration Target	11
Table 4.1 – EFR Alta Mesa LLC Permit Register	22
Table 4.2 – Decommissioning Cost Summary.....	23
Table 6.1- Historical Mineral Reserve Estimate, Total Minerals 1989	27
Table 6.2 – Summary of Historical Mineral Reserve Estimates	28
Table 9.1 – GT Average and Range.....	39
Table 9.2 – Exploration Targets.....	40
Table 10.1 – Alta Mesa Drill Holes Summary.....	49
Table 10.2 – Mesteña Grande Drill Holes Summary	50
Table 13.1 – Mineral Recovery.....	55
Table 14.1 – Alta Mesa and Mesteña Grande Resource Summary.....	59
Table 14.2 Alta Mesa Mineral Resource Summary	60
Table 14.3: PAA-7 Mineral Resource Estimation Parameters.....	61
Table 14.4: D Sand Mineral Resource Estimation Parameters	62
Table 14.5: Lower C Sand Outside PAA-7, PAA-6, and PAA-4 Mineral Resource Estimation Parameters	62
Table 14.6: B Sand Mineral Resource Estimation Parameters	63
Table 14.7: A Sand Mineral Resource Estimation Parameters	63
Table 14.8 Mesteña Grande Mineral Resource Summary	72
Table 14.9: Mesteña Grande and Oakville Formation Mineral Resource Estimation Parameters.....	73
Table 14.10: Mesteña Grande and Goliad Formation Mineral Resource Estimation Parameters	74
Table 25.1 – Project Total Mineral Resources.....	86
Table 25.2– Project Total Exploration Target	87
Table 26.1 - Estimated Drilling Cost Alta Mesa Inferred Mineral Resource Areas	89
Table 26.2 - Estimated Drilling Cost Mesteña Grande Inferred Mineral Resource Areas	89
Table 26.3 - Estimated Drilling Cost Alta Mesa Inferred Mineral Resource Areas	90

Figures

Figure 1.1 – Location Map.....	14
Figure 4.1 Property Map	19
Figure 5.1 Topography of the South Texas Uranium Province	24
Figure 7.1 – Regional Geology	31
Figure 7.2 – Regional Stratigraphy.....	32
Figure 7.3 – Structural Geology.....	34
Figure 7.4 Geologic Model at Alta Mesa.....	35
Figure 7.5 - Type Log	36
Figure 8.1 – Roll-Front Mineralization.....	37
Figure 9.1 – LCL Sand West of PAA-1	43
Figure 9.2 - The LC Sands North of PAA-7	44
Figure 9.3 - South Alta Mesa Area	45
Figure 9.4 - South Alta Mesa Area Cross Section A-A'	46
Figure 9.5 - Indigo Snake Area.....	47
Figure 12.1 – Typical PFN Calibration Graph.....	52
Figure 14.1 - Alta Mesa Area Key Map.....	65
Figure 14.2 - PAA-7 Lower C Lower.....	66
Figure 14.3 - PAA-7 Lower C Upper	67
Figure 14.4 - D Sand.....	68
Figure 14.5 - LC Sand Outside of PAA-7 and PAA-4.....	69
Figure 14.6 - B Sand.....	70
Figure 14.7 - A Sand.....	71
Figure 14.8 - Mesteña Grande Index Map	75
Figure 14.9 - Mesteña Grande Goliad.....	76
Figure 14.10 - Mesteña Grande North	77
Figure 14.11 - Mesteña Grande Central North	78
Figure 14.12 - Mesteña Grande Central South	79
Figure 14.13 - Mesteña Grande Alta Vista	80
Figure 14.14 - El Sordo.....	81
Figure A-1- PAA-6 Lower C Upper	94
Figure A-2 – PAA-6 Lower C Lower.....	95
Figure A-3 – PAA-4 Lower C Upper.....	96
Figure A-4 – PAA-4 Lower C Lower	97

Appendix A – GT CONTOUR ESTIMATES, PAA-6 AND PAA-4

SECTION 1: SUMMARY

This 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, was prepared by MR. Douglas Beahm (the “Author”) of BRS Inc., of Riverton, Wyoming, on behalf of Energy Fuels Inc (“EFI”). The effective date of the mineral resource estimate is June 1, 2014. This report was prepared in accordance with National Instrument 43-101, *Standards of Disclosure for Mineral Projects* (“NI 43-101”) and the Canadian Institute Mining (CIM) *Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves* (“CIM standards”).

The Alta Mesa Uranium Project (the “Project”) 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 in-circuit inventory. The first wellfield (PAA-1) has undergone restoration and is currently being monitored for restoration stability. 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.

This report provides estimates of mineral resources within the Alta Mesa area and within the Mesteña Grande area which is unmined. No current preliminary economic assessment, pre-feasibility study or feasibility study has been completed. Thus, no mineral reserves are stated, and the additional requirements of Form 43-101F1 for advanced technical reports, Sections 15 through 22, do not apply to this report.

This report also defines 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 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.

Table 1.1 provides a brief list of terms and abbreviations used in this report:

Table 1.1 Terms and Abbreviations

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)

GENERAL TERMS AND ABBREVIATIONS					
	METRIC		US		Metric : US
	Term	Abbreviation	Term	Abbreviation	Conversion
Area	Square Meters	M ²	Square Feet	Ft ²	10.76
	hectare	Ha	Acre	Ac	2.47
Volume	Cubic Meters	m ³	Cubic Yards	Cy	1.308
Length	Meter	m	Feet	Ft	3.28
	Meter	m	Yard	Yd	1.09
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

1.1 Project Overview

The Project is located within the South Texas Uranium Province and mineralization occurs within known host formations common to the province which have been mined by both conventional and ISR methods. The property is located at 755 CR 315, Encino, Texas 78353, in Brooks County, Texas. (Refer to Figure 1.1, Location Map)

This report addresses mineral resources and exploration targets for the Alta Mesa existing wellfields within two main areas; the Alta Mesa and Mesteña Grande portions of the Project as shown on Figure 4.1.

1.2 Project Description and Ownership

The Project is located within the private land holdings of the Jones Ranch, founded in 1897. The Jones Ranch comprises approximately 380,000 acres.
(<http://www.texasmonthly.com/content/biggest-ranches>).

The ranch holdings include surface and mineral rights including oil and gas and other minerals including uranium. Active uses of the ranch lands in addition to uranium exploration and production activities include agricultural use (Cattle), oil and gas development, and private hunting.

The Project consists of Uranium Mining Leases and Options comprising some 4,598 acres and 195,501 acres, respectively, representing a total of approximately 200,100 acres of mineral rights for the extraction of uranium via ISR within the overall ranch. Refer to Section 4.2, Ownership and Mineral Tenure.

1.3 Development Status

The Alta Mesa project has produced approximately 4.6 million pounds of uranium. 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.

1.4 History

The Alta Mesa project was discovered by Chevron Resources who held the property in the vicinity of the Alta Mesa facility until 1985. Total Resources Incorporated followed Chevron and completed extensive drilling and a feasibility study for the project. Uranium Resource Inc. (URI) held the mineral lease and obtained the Radioactive Material License during the period of 1996 through 1998. Mesteña Uranium LLC was formed in 1999 and continued permitting activities in April, 2000. Permits were granted, construction was initiated in 2004 and operations began in the 4th quarter of 2005. The Alta Mesa Uranium Project (Project) 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 in-circuit inventory.

On March 7, 2016, Energy Fuels Inc. announced that it entered into a share purchase agreement with the various interests holding the Alta Mesa Project and will acquire all of the “Membership Interests” of Mesteña Uranium LLC, Leoncito Plant LLC, and Leoncito Project LLC from the sellers of Mesteña LLC, Jones Ranch Minerals Unproven Ltd., and Mesteña Unproven Ltd. The Uranium Lease and the Uranium Option on adjacent lands were amended and restated to include new 15 year terms at closing of the purchase agreement. As part of the purchase agreement EFR acquired all of the Real Property and Personal Property currently held by the three LLCs. As part of the purchase agreement, EFI paid Juneau Uranium LLC, at the direction of Mesteña, in EFI shares equivalent to \$600,000 terminating a JV agreement pertaining to a northern area of production unit PAA-7 at the execution date of the purchase. The purchase agreement was finalized on June 16, 2016.

1.5 Regulatory Status

The Alta Mesa project area is permitted for ISR mining and recovery of uranium. Table 4.2 summarizes the current permits held by EFI’s wholly-owned subsidiary EFR Alta Mesa LLC following acquisition of the Project. 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. Bonds are held by the state for well completion, ISR mining, and uranium processing to insure reclamation and restoration of the affected lands and aquifers in accordance with state regulations and permit requirements. The total current bond amount is \$11,042,058 as shown on Table 4.3.

1.6 Geology and Mineralization

The Project is located in the South Texas Uranium Province. ISR mining to date has been in the Goliad Formation. Mineral resources are held in the Goliad, Oakville, and Catahoula Formations.

Mineralization within the South Texas Uranium Province is interpreted to be dominantly roll-front type mineralization and primarily of epigenetic origin. Roll-fronts are formed along an interface between oxidizing ground water 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. Mineralization tends to be very continuous.

1.7 Exploration and Drilling Status

Drill data is available for a total of 10,744 drill holes of which approximately 3,000 are within existing wellfields. The primary assay data for the Project is downhole geophysical log data. MULLC (now EFR Alta Mesa LLC) relied entirely on prompt-fission-neutron (PFN) logging for uranium grade assay and used natural gamma logging to screen intervals for PFN logging. Of the 10,744 drill holes in the Alta Mesa database, PFN logging was not available for only 7.2% of the drill holes. For the Mesteña Grande portion of the Project, all 460 drill holes were completed by EFR Alta Mesa LLC and all gamma intercepts greater than 0.02 %eU₃O₈ were logged by PFN.

Whereas EFR Alta Mesa LLC relied on PFN log data for determination of uranium grade, this method being a direct measurement of uranium content and not an equivalent radiometric assay, an assessment of disequilibrium factor (DEF) is not applicable in this case for 7.2% of the data that was logged with just a gamma tool and not with the PFN tool.

1.8 Conclusions

The data available for this report is considered, by the Author, 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 fully 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 CIM standards and definitions and are summarized on Tables 14.2 and 14.3, respectively. Mineral resources are classified as measured, indicated and inferred as summarized on Table 1.1. Note this table is repetitive of Table 14.1 of the report but is provided here for ease of reference.

Table 1.1 – Alta Mesa and Mesteña Grande Resource Summary

ALTA MESA AND MESTEÑA GRANDE MINERAL RESOURCE SUMMARY 0.30 GT CUTOFF	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
TOTAL MEASURED MINERAL RESOURCE*	123	0.151	371
ALTA MESA INDICATED MINERAL RESOURCE	1,393	0.106	2,959
MESTEÑA GRANDE INDICATED MINERAL RESOURCE	119	0.120	287
TOTAL MEASURED AND INDICATED RESOURCE	1,635	0.111	3,616

ALTA MESA AND MESTEÑA GRANDE MINERAL RESOURCE SUMMARY 0.30 GT CUTOFF	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
ALTA MESA INFERRED MINERAL RESOURCES	1,230	0.128	3,192
MESTEÑA GRANDE INFERRED MINERAL RESOURCE	5,733	0.119	13,601
TOTAL INFERRED RESOURCE	6,964	0.121	16,794

*The Total measured mineral resources are that portion of the in-place mineral resource that are estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred mineral resources.

Note: Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. The portion of the Project with defined Measured and Indicated mineral Resources would support a preliminary economic assessment (PEA) or preliminary feasibility study (PFS) which could enable them to be categorized as mineral reserves. Inferred mineral resources are too speculative to have the economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred mineral resources could be assessed in the context of PEA which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

1.9 Exploration Targets

Exploration targets have been defined primarily in the South Alta Mesa area of the Alta Mesa Project. The Exploration Target for the Project estimated is summarized in Table 1.2.

Table 1.2– Project Total Exploration Target

	LOW RANGE ESTIMATE			HIGH RANGE ESTIMATE		
	TONS (x 1,000)	GRADE %U ₃ O ₈	POUNDS (x 1,000)	TONS (x 1,000)	GRADE %U ₃ O ₈	POUNDS (x 1,000)
EXPLORATION TARGET						
TOTAL	2,670	0.077	4,125	2,670	0.123	6,573

Note: The tonnages, grades, and contained pounds of uranium 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 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.

1.10 Recommendations

Recommendations are limited to the progressive exploration and development drilling of mineral resources and exploration targets. Recommendations are limited to the amount of work considered necessary to elevate exploration targets to inferred mineral resources and inferred mineral resources to indicated mineral resources. Indicated mineral resources will support preliminary feasibility studies, which would be appropriate if the recommended program were to result in the addition of indicated mineral resources. However, it is uncertain if additional exploration will result in discovery of an economic mineral resource on the property and/or demonstrate the continuity of mineralization within the areas of inferred mineral resources necessary for these areas to be classified as indicated mineral resources.

The cost estimates that follow assume that the entirety of each trend would need to be drilled and all of the holes along a fence would need to be drilled. The reality is that drilling would begin in the most prospective locations and, assuming successful results, work away along trend. If drilling was unsuccessful, drilling would likely be curtailed. Also, if a drill hole penetrated the planned drill target along a fence, then the additional drill holes planned along that fence would not be needed. Conversely, if the planned drill target was not penetrated with the planned fence additional drilling may be required.

In summary, it is recommended that any drill programs be well planned, and the drill results from each hole closely monitored, and the program adjusted as appropriate.

The estimated cost of fully drilling the area of inferred mineralization for the Alta Mesa and Mesteña Grande areas are summarized in Table 26.1 and 26.2, respectively. If these drilling programs were successful in defining the estimated inferred mineral resources to the level necessary for classification as indicated mineral resources, the overall cost would be approximately \$3.15 per pound of uranium oxide. Alta Mesa would be less expensive per unit due to the shallower depth than Mesteña Grande.

If this program were to be implemented the recommended priorities would be:

- Alta Mesa: LC and D sands - \$2,375,000
- Mesteña Grande: Goliad and El Sordo sands – \$5,700,000
- South Alta Mesa: The B sand – \$2,612,500
- Mesteña Grande: Oakville sands –
 - Mesteña Grande North \$12,800,000
 - All other Mesteña Grande \$27,200,000

The estimated cost of fully drilling the Exploration Targets for Alta Mesa is summarized in Table 26.3. If these drilling programs were successful in defining the inferred mineral resources in the Exploration Target areas the cost would be approximately \$1.15 per pound of uranium oxide. Alta Mesa would be less expensive per unit due to the shallower depth than South Alta Mesa or Indigo Snake.

If this program were to be implemented the recommended priorities would be:

- Alta Mesa LC Sand - \$500,000
- South Alta Mesa* - \$5,110,000
- Indigo Snake – \$1,890,000

*Beginning with the E Sand.

1.11 Summary of Risks

It is the Author's opinion that the associated risks are low as the Project has operating permits and facilities in place. The Project is tributary to the existing Alta Mesa ISR production facility; as such the facility is fully licensed to operate. For each new wellfield a production area authorization (PAA) permit will need to be obtained through the permitting process with the Texas Commission on Environmental Quality (TCEQ). The Mesteña Grande portion of the Project will operate as a satellite facility to the Alta Mesa ISR facility and will require full permitting requirements prior to production and operation of its well fields.

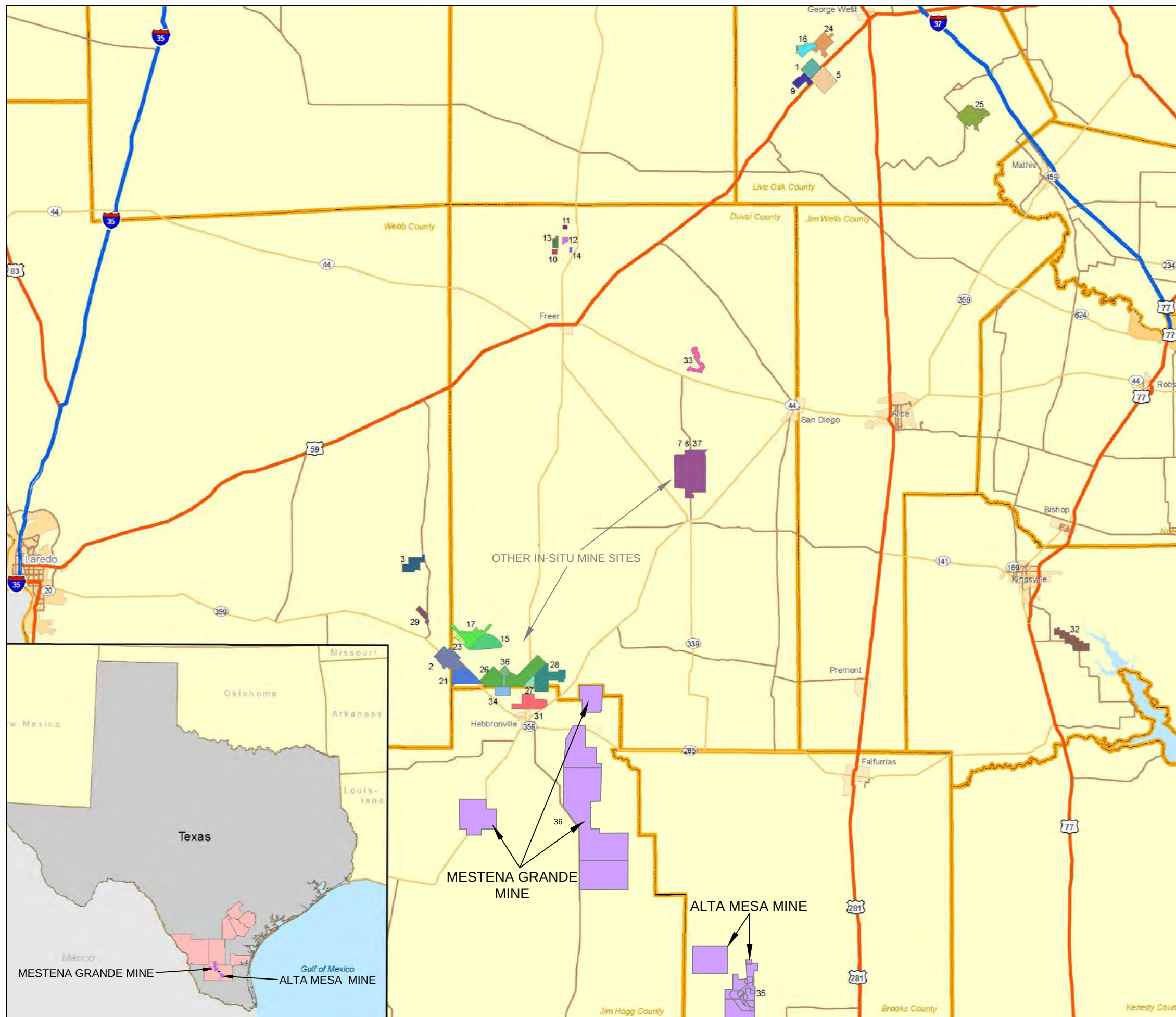
The Project does have some risks similar in nature to other mining projects in general and uranium mining projects specifically, including:

- 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 could be assessed in the context of preliminary economic assessment (PEA) which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101. 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.

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.

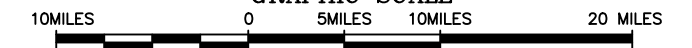


LEGEND

1. MOSER MINE
2. O'HEM MINE
3. BRUNI MINE
4. BURNS MOSER MINE
7. PALANGANA MINE
9. CLAY WEST MINE
10. PIEDRE LUMBRE 202 MINE
11. BRELUM 199 MINE
12. PIEDRE LUMBRE 200-201 MINE
13. BRELUM 106-200 MINE
14. PIEDRE LUMBRE 201-205 MINE
15. EL MESQUITE MINE
16. BOOTS-BROWN MINE
17. HOLIDAY MINE
21. LONGORIA MINE
23. BENAVIDES MINE
24. PAWLK MINE
25. MT. LUCAS MINE
26. TREVINO MINE
27. McBRYDE MINE
28. LAS PALMAS MINE
29. WEST COLE MINE
31. SILVER LAKE MINE
32. KINGSVILLE DOME MINE
33. ROSITA MINE
34. GRUY MINE
35. ALTA MESA MINE
36. MESTENA GRANDE
37. PALANGANA MINE



GRAPHIC SCALE



1 inch = 10 MILES



PREPARED FOR
ENERGY FUELS INC.



PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501



ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:

LOCATION MAP

DRAWN BY: CDS	REVISION NO.	DATE	BY	DRAWING SCALE: 1"=10 MILES
DATE: 5/15/14				
CHECKED BY: DLB				FIGURE: 1.1
LAST PLOT DATE: 6/3/14				
CAD FILE: USER\JONESRANCHURANIUM\REPORT FIGURES 2014\FIG 1.1				

1.1

CAD FILE: USRV/JONESRANCHURANIUM/REPORT FIGURES 2014/FIG 1.1

SECTION 2: INTRODUCTION

This Technical Report was prepared for EFR Alta Mesa LLC, a wholly-owned subsidiary of Energy Fuels Inc., in compliance with National Instrument 43-101, *Standards of Disclosure for Mineral Projects* and in accordance with CIM *Best Practice Guidelines for the Estimation of Mineral Resources and Mineral Reserves*. The Alta Mesa Uranium Project (Project) 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 in-circuit inventory.

This report provides estimates of mineral resources for the Alta Mesa and Mesteña Grande areas. No current preliminary economic assessment, pre-feasibility study or feasibility study has been completed. Thus, no mineral reserves are stated, and the additional requirements of Form 43-101F1 for advanced technical reports, Sections 15 through 22, do not apply to this report.

This report also defines 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 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.

The lead author of this report, Mr. Douglas Beahm, is both a Professional Geologist and a Professional Engineer, and a Registered Member of the Society of Mining, Metallurgy, and Exploration Inc. (SME). He is independent of Energy Fuels and its subsidiaries including Energy Fuels Alta Mesa LLC, using the test set out in Section 1.5 of NI 43-101. Mr. Beahm is experienced with uranium exploration, development, and mining including past employment with the Homestake Mining Company, Union Carbide Mining and Metals Division, and AGIP Mining USA. In addition, as a consultant and principal engineer of BRS, Inc., Mr. Beahm has provided geological and engineering services relative to the development of mining and reclamation plans for a variety uranium projects including south Texas. Mr. Beahm's experience spans a period of more than forty years dating back to 1974. Mr. Beahm previously worked on the Alta Mesa Project having completed a NI 43-101 technical report on the Alta Mesa Project for the previous owner MULLC in June 2014. This technical report was internal and was not filed on SEDAR as MULLC was not a Canadian issuer. Mr. Beahm also has extensive work experience with similar sandstone-hosted uranium deposits in Texas.

Mr. Beahm through his company, BRS Inc., was retained to develop a mineral resource estimate and Technical Report for the Project by Energy Fuels Inc., 100% indirect owner of the Project through its wholly-owned subsidiary, EFR Alta Mesa LLC. Mr. Beahm previously 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.
- Observed and reviewed surveying methodology.
- Prepared an independent internal report for Mesteña which has not been publicly disclosed.

During the site visit copies of all drill data pertinent to the current evaluation were provided in electronic format. Based on review of the data collection and preservation methods employed by EFR Alta Mesa LLC, the author is 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.

SECTION 3: RELIANCE ON OTHER EXPERTS

The location, extent, and terms relating to mineral tenure were provided by EFI and were relied upon as defining the mineral holdings of EFI in the development of this report.

The status of operating permits and current bond obligations was provided by EFI and was relied upon in the development of this report.

The Alta Mesa mine production was provided by EFI and was relied upon in the development of this report.

SECTION 4: PROPERTY DESCRIPTION AND LOCATION

4.1 Property Description and Location

The Alta Mesa central processing facility and mine office is located 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.

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 (<http://www.texasmonthly.com/content/biggest-ranches>). 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.

The Project consists of Uranium Mining Leases for uranium ISR mining (4,598 acres) and Mineral Options (195,501 acres) comprising some 200,100 total acres as discussed in Section 4.2, Ownership and Mineral Tenure.

For the purposes of this report the Project is defined as constituting two distinct project areas, as shown on Figure 4.1 Property Map:

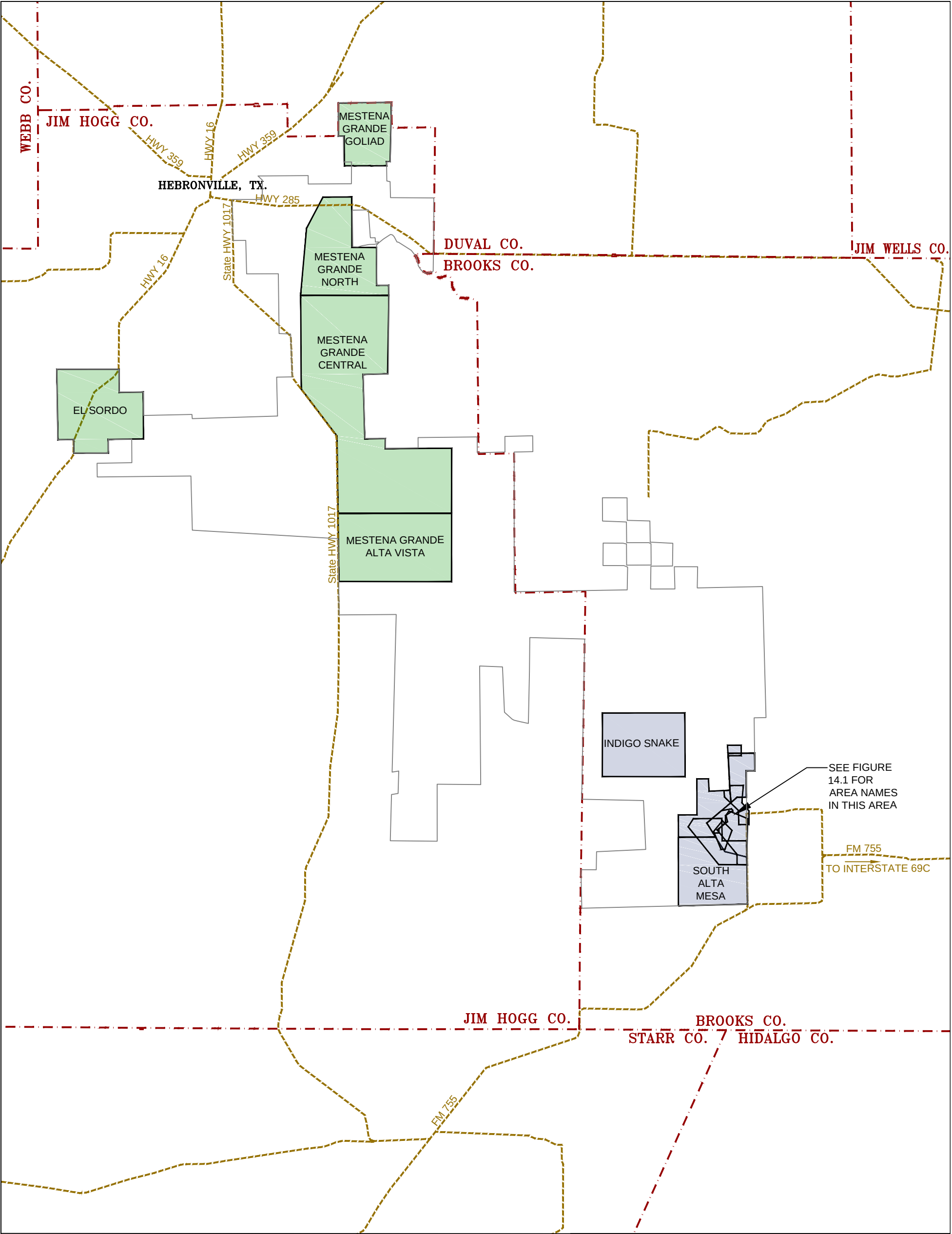
- The Alta Mesa project area, Brooks County, Texas, comprising 16,010 acres, including,
 - The Alta Mesa mine area and central processing facility
 - The South Alta Mesa
 - The Indigo Snake
- The Mesteña Grande project area, Jim Hogg County, Texas, comprising 47,088 acres, including,
 - Mesteña Grande Goliad
 - Mesteña Grande North
 - Mesteña Grande Central
 - Mesteña Grande Alta Vista
 - El Sordo

4.2 Ownership and Mineral 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 provisions 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.

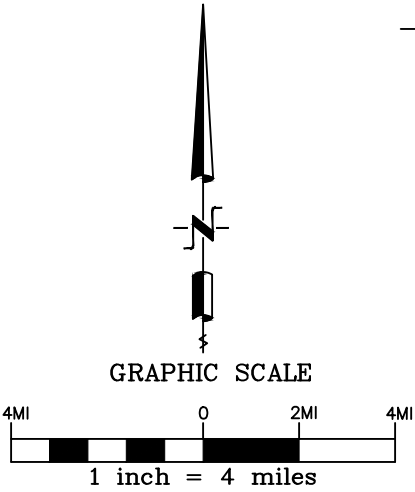
(<http://www.tshaonline.org/handbook/online/articles/gym01>)

The Project consists of a private Mining Lease (4,598 acres) and Options (195,501 acres) for uranium comprising some 200,100 total acres consisting of acreage associated with currently approved mining permits issued by the TCEQ and 9 prospect areas as described.



LEGEND

PROPERTY BOUNDARY	
COUNTY LINE	
EXISTING ROAD	
AREA BOUNDARY	
MESTEÑA GRANDE PROJECT AREA	
ALTA MESA PROJECT AREA	





PREPARED FOR
ENERGY FUELS INC.



PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501



ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: PROPERTY MAP, BROOKS AND JIM HOGG COUNTIES				
DRAWN BY: CDS	REVISION NO.	DATE	BY	DRAWING SCALE: 1"=4 MILES
DATE: 5/20/14				FIGURE:
CHECKED BY: DLB				4.1
LAST PLOT DATE: 5/23/14				
CAD FILE: USRV/JONESRANCHURANIUM/REPORT FIGURES 2014/FIG4.1 PROPERTY MAP				

Amended and Restated Uranium Solution Mining Lease

The Uranium Solution Mining Lease, originally dated June 1, 2004, covers 4,575 acres, more or less, out of the “La Mesteñas” Ysidro Garcia Survey, A-218, Brooks County, Texas and “Las Mesteñas Y Gonzalena” Rafael Garcia Salinas Survey, A-480, Brooks County, Texas (description corrected in a later amendment) has been superseded by the Amended and Restated Uranium Solution Mining Lease dated June 16, 2016, as part of the share purchase agreement between Energy Fuels Inc. and the various holders of the Mesteña project. 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 commencing on June 16, 2016 or so 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 upon payment of an undisclosed cash payment. The lease includes provisions for royalty payments on the Net proceeds (less allowable deductions) received by the Lessee. The royalty payment is 7.5% of Market Value of Product sold at a uranium price greater than \$95.00 per pound, 6.25% of Market Value of Product sold at a uranium price greater than \$65.00 and up to and including \$95.00 per pound, and 3.125% of the Market Value of Product sold at a uranium price of \$65.00 or less per pound. The lease also calls for a royalty on substances produced on adjacent lands but processed on the leased premises.

Amended and Restated Uranium Testing Permit and Lease Option Agreement

The Uranium Testing Permit and Lease Option Agreement, originally dated August 1, 2006, covers all of the 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, 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 Energy Fuels Inc. and the various holders of the Mesteña project. It now covers some 195,501.03 acres.

The term of the amended lease and option agreement is for eight (8) years commencing 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.

4.3 Surface Rights

Amended surface use agreements have been entered into with all of 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 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.

4.4 Permitting

The Alta Mesa project area is permitted for ISR mining and recovery of uranium. Table 4.1 summarizes the current permits held by EFR Alta Mesa LLC (previously known as MULLC). Similar permits would be required for the Mestefia Grande project area depending upon the nature of operations and their integration with the Alta Mesa facility.

Table 4.1 – EFR Alta Mesa LLC Permit Register

Work Area	Permit/License or Action	Frequency	Permit Expiration Date or Date Due	Permit Status
DOT HAZMAT	DOT HAZMAT Registration 052413550028VX	3 years	6/30/2017	Active
FCC	FCC - Radio License FRN0020106654	10 years	9/8/2020	Active
OSSF	Sewage System OSSF	N/A	no expiration	Active
PAA-1	PAA-1	N/A	no expiration	Active
PAA-2	PAA-2	N/A	no expiration	Active
PAA-3	PAA-3	N/A	no expiration	Active
PAA-4	PAA-4	N/A	no expiration	Active
PAA-5	PAA-5	N/A	no expiration	Active
PAA-6	PAA-6	N/A	no expiration	Active
PAA-7	PAA-7	N/A	no expiration	Active
DPS 3621	Texas PCLA Permit 3621 (lab equipment)	Annual	7/31/2017	Active
PE Firm	PE Firm Registration - F-14224	Annual	-	Inactive
PG Firm	PG Firm Registration - 50436	Annual	3/31/2017	Active
RCT 125	Uranium Exploration Permit 125	annual	7/24/2017	Active
RML R05360	Radioactive Material License - R05360	-	9/20/2009	Timely Renewal
RML L05939	L05939 - Sealed Source RML for PFN	10 years	9/30/2025	Active
TCEQ AE	TCEQ Aquifer Exemption	N/A	no expiration	Active
UR03060	UIC Class III Mine Area Permit UR03060	10 years	4/4/2023	Active
USCOE 404	USCOE 404 exemption SWG-1998-02466	5 years	3/4/2019	Active
USDA	USDA Pesticide License 0618208	5 years	3/31/2017	Active
WDW-365	UIC Class I disposal well permit WDW-365	10 years	10/20/2020	Active
WDW-366	UIC Class I disposal well permit WDW-366	10 years	10/20/2020	Active
XSOU8814	NRC Export License XSOU8814	10 years	12/31/2018	Active

4.5 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 (June, 2016) 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	\$9,112,916
TCEQ – Class III Wells	\$1,538,977
TCEQ – Class I Wells	\$390,166
	\$11,042,058

4.6 State and Local Taxes

Ad valorem tax rates per \$ 100 of taxable value applicable to tangible property for 2015 were as follows:

Brooks County	0.750044
Brooks County Rd and Bridge	0.114780
Brooks County ISD	1.446342
Brooks County FM FC	0.074702
Brush Country Groundwater	0.026020

4.7 Encumbrances and Risks

To the Author's knowledge there are no other forms of encumbrance related to the Project. It is the Author's opinion that the risks associated are low as the Project has operating permits and facilities in place. 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.

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, if the aforementioned requirements, payments, and notifications are met.

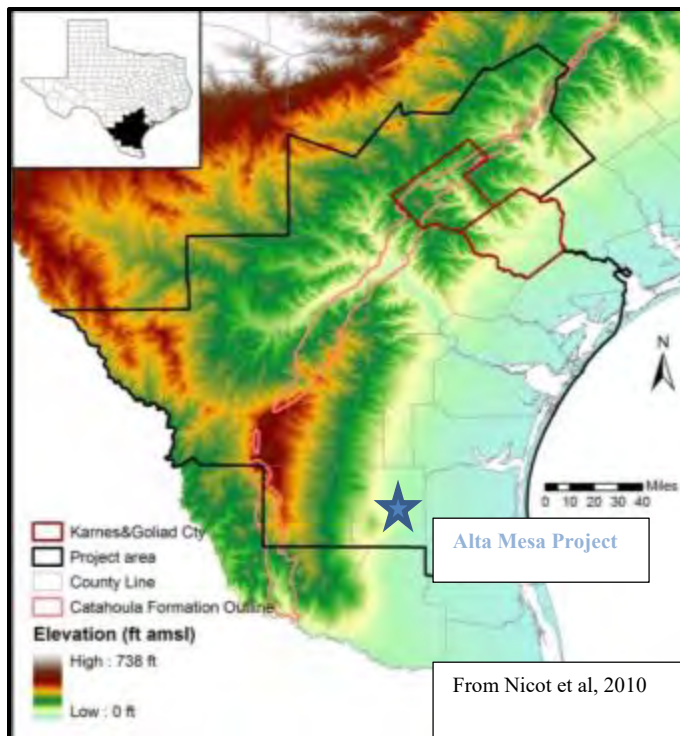
SECTION 5: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

The Project is located primarily in Brooks and Jim Hogg counties, Texas, with the central processing facility in Brooks County. Brooks County is generally rural and according to the 2010 United States Census, there were 7,223 people living in the county. The population density was 8 people per square mile. The median income for a household in the county was \$18,622, and the median income for a family was \$22,473 (<http://en.wikipedia.org>). Most of the workers for the operation are from the local area and nearby communities such as Kingsville, Texas approximately 40 miles from the site. Some staff members commute from Corpus Christi, Texas approximately 90 miles from the site.

5.1 Physiographic Features

The Project is located in the coastal plain of the Gulf of Mexico. 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 ft in the southwest. Three major rivers 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 5.1 shows the general topographic conditions for the Project and region.

Figure 5.1 Topography of the South Texas Uranium Province



5.2 Access

The Project is accessible year round. The site 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.

5.3 Climate

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

5.4 Infrastructure

Local infrastructure includes electricity service which is adequate for mine and mineral processing activities. The Alta Mesa facility also has telephone and internet service in the form of a T-1 fiber optics line. The 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 Flora and Fauna

The area is regionally classified as a coastal sand plain. Brooks County comprises 942 square miles of brushy mesquite land. The nearly 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 (<http://www.tshaonline.org/handbook/online/articles/hcb16>). 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).

5.7 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 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. The author concludes that EFR 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.

SECTION 6: HISTORY

Alta Mesa was first discovered in the mid 1970's by Chevron Resources as a result of researching oil and gas logs for natural gamma geophysical signatures. Chevron controlled the Alta Mesa portion of the project through June of 1985 when they returned the mineral lease due to Chevron exiting the uranium business. Chevron reportedly drilled a total of 360 holes inclusive of exploration drilling, coring, and well completion during a four year period from 1981 through 1984. In July, 1988 Total Minerals Incorporated ("Total") executed a lease agreement for the Alta Mesa portion of the project (Total, 1989). Total also engaged Uranium Resources Incorporated ("URI") to complete a feasibility study for the project. The Total mineral lease was terminated as a result of the French Government requiring Total to sell all of their uranium assets to Cogema.

Subsequently, the Project was evaluated by Cogema in 1994 and later by URI. URI held the mineral lease and obtained the Radioactive Material License during the period of 1996 through 1998. Mesteña Uranium LLC was formed in 1999 and continued permitting activities in April, 2000 and completed licensing in 2003. Plant construction at Alta Mesa began in 2004 with initial production in the 4th quarter of 2005. The Project produced approximately 4.6 million pounds of uranium oxide between 2005 and 2013 via 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 in-circuit inventory.

In their 1989 annual report (Total, 1989), Total Minerals Incorporated stated the following historic mineral reserve estimates (highlighted value recommended by Total):

Table 6.1- Historical Mineral Reserve Estimate, Total Minerals 1989

In-Place Reserve eU_3O_8 Pounds	Disequilibrium Factor (DEF)	*In-Place Reserve cU_3O_8 Pounds
8,245,232	1.20	9,894,578
8,245,232	1.13	9,317,112
8,245,232	1.10	9,069,755
8,245,232	1.00	8,245,232

* cU_3O_8 was defined by Total as the chemical equivalent uranium oxide.

Historical mineral reserve estimates were prepared before the implementation of NI 43-101 and do not necessarily use the categories for mineral reserve and mineral resource reporting as defined in NI 43-101. The reader should not rely on the historical reserve estimates as they are superseded by the mineral resource estimate presented in Section 14 of this report.

An internal MULLC memorandum (Goranson, 2007) summarized the historical mineral resources for the Alta Mesa portion of the project. Refer to Table 6.2.

Table 6.2 – Summary of Historical Mineral Reserve Estimates

Reserve Report	Reserve Estimate
Chevron Resources (1985)	1.1 million lbs U_3O_8 (potential 5 million)
Total Minerals (1989)	9.1 million lbs U_3O_8 (potential 12.6 million)
Cogema Mining (1994)	4.1 million lbs U_3O_8 (potential 4.9 million)

These historical resource estimates were completed prior to the implementation of National Instrument 43-101 ("NI 43-101") and are not compliant with current accepted reserve and resource classifications as set forth by the Canadian Institute of Mining and Metallurgy (CIM). Given the quality of the historic work completed on the Project, the author believes these resource estimates to be both relevant and reliable subject to the available data and economic conditions which existed at the time the estimates were prepared. However, these are of a historic nature and as such should not be relied upon. Please refer to Section 14 for current mineral resource estimates.

6.1 MULLC Mineral Resource Estimate

MULLC previously completed internal mineral resource estimates effective April, 2014 for the Project including both the Alta Mesa and Mesteña Grande project areas. The Author considers these estimates as historical.

Zone	Classification			
	Measured (Million lbs)*	Indicated (Million lbs)*	Inferred (Million lbs)*	Potential (Million lbs)*
Middle C Sand (PAA-1, PAA-2, PAA-3)	0.5			
PAA-4	0.1			
PAA-5		0.1		
PAA-6	0.4			
PAA-7		1.1		
A Sand		0.1	0.9	
B Sand (outside of PAA-5)		0.1	1.0	
LC (outside of PAA-6 and PAA-7)	0.02		1.0	0.3
D Sand		0.8	0.7	0.8
South Alta Mesa			0.2	4.8
Mesteña Grande - Oakville North			3.1	
Mesteña Grande - Oakville Central		0.7	5.5	
Mesteña Grande - Oakville Alta Vista			1.0	
Mesteña Grande - Goliad			3.1	
El Sordo			0.7	
Indigo Snake				1.2
TOTAL*	1.1	2.9	17.1	7.2

*All numbers rounded

This historical resource estimate is not compliant with the National Instrument 43-101 ("NI 43-101") and with current accepted reserve and resource classifications as set forth by the Canadian Institute of Mining and Metallurgy (CIM). Given the quality of the historic work completed on the Project, the author believes this resource estimate is both relevant and reliable. However, this estimate should be considered historical in nature and as such should not be relied upon. Please refer to Section 14 for current mineral resource estimates.

SECTION 7: GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geological Setting

The Geology of Texas is shown on Figure 7.1. The Project is located within the Texas Gulf Coast along a belt of Tertiary and Quaternary sedimentary formations. Regional stratigraphy highlighting the Tertiary and sedimentary sequence and known uranium host formations is shown on figure 7.2.

The Project is located within the South Texas Uranium Province which is known to contain more than 100 uranium deposits that were developed in the second half of the 20th century (Nicot, et al, 2010).

Regionally uranium deposits are hosted by four formations:

- Miocene/Pliocene Goliad Formation, consisting of fluvial deposits, mostly unconsolidated sands.
- Miocene Oakville Formation, consisting of fluvial deposits (sands, some clay).
- Oligocene/Miocene Catahoula Formation, consisting of fluvial deposits, mostly sands, clay, and clastic volcanic rich sediments.
- The Jackson Group consisting of fluvial deposits sands, silt, clay, and lignite.

At the Project, in order of importance, uranium is hosted by the Goliad, Oakville, and Catahoula formations.

Figure 7.1 – Regional Geology

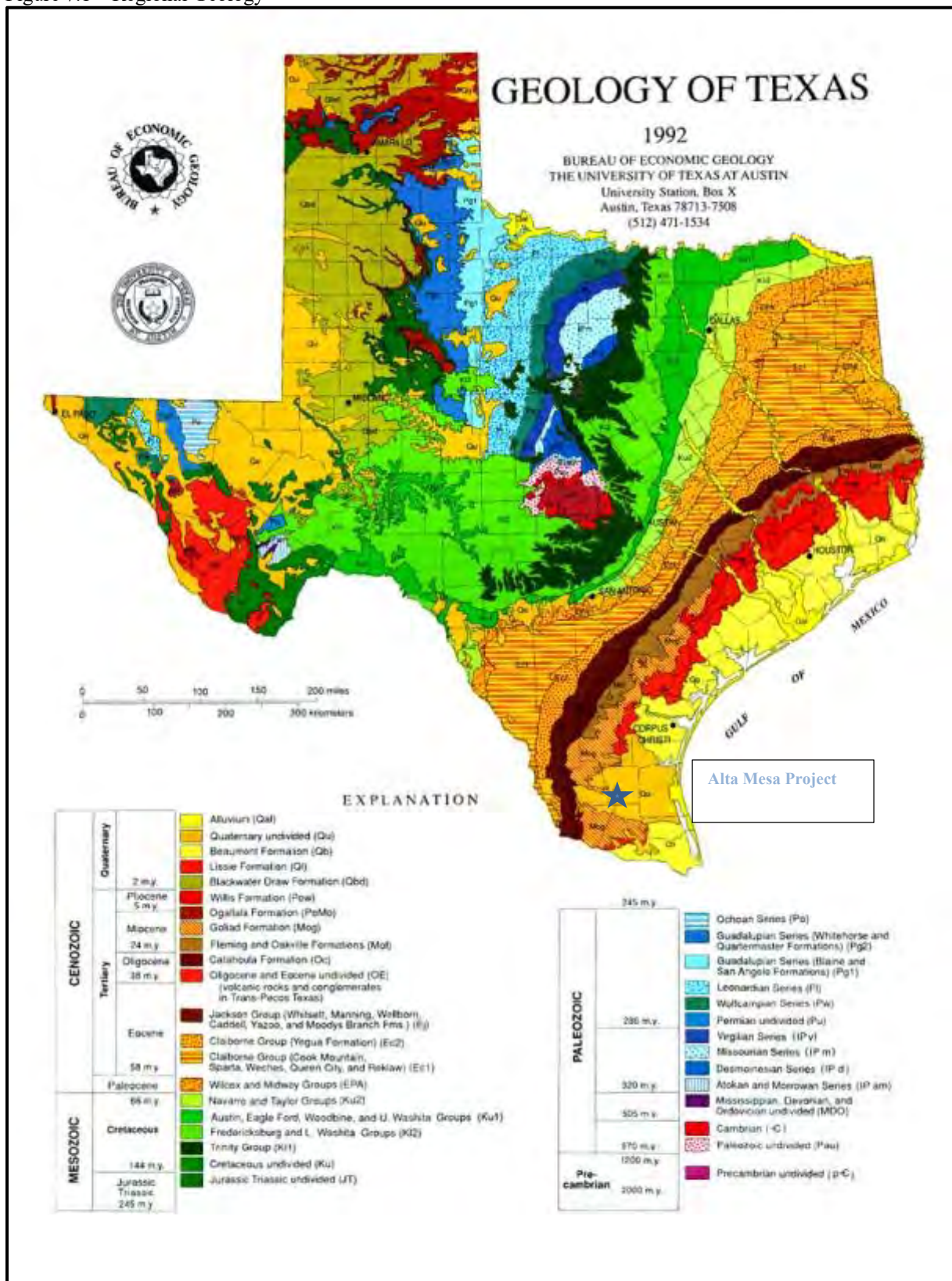


Figure 7.2 – Regional Stratigraphy

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

From (Nicot, et al, 2010)



Host formations in order of importance Goliad Sand, Oakville Sandstone, and Catahoula Formation

7.2 Uranium Source and Deposition

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 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 ground waters to leach and transport the uranium:
 - Ground waters regionally tend to be oxidizing and slightly alkaline.
- Adequate reductant within the host formation:
 - Conditions resulting from periodic H_2S gas migrating along faults and subsequent iron sulfide (pyrite) precipitation created local reducing conditions.
- Time sufficient to concentrate the uranium at the oxidation/reduction interface.
 - Uranium precipitates from solution at the oxidation/reduction boundary (REDOX) as uraninite which is dominant (UO_2 , uranium oxide) or coffinite ($USiO_4$, uranium silicate).
 - The geohydrologic regime of the region has been stable over millions of years with ground water movement controlled primarily by high-permeability channels within the predominantly sandstone formations of the Tertiary.

7.3 Structural Geology

The structural map of the Gulf Coast area shown in Figure 7.3 is dominated by an abundance of growth faults that trend with, or are slightly oblique to, stratigraphic strike, which is more or less 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 ground water flow and the introduction of additional reductant via the migration of H_2S 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).

Figure 7.3 – Structural Geology

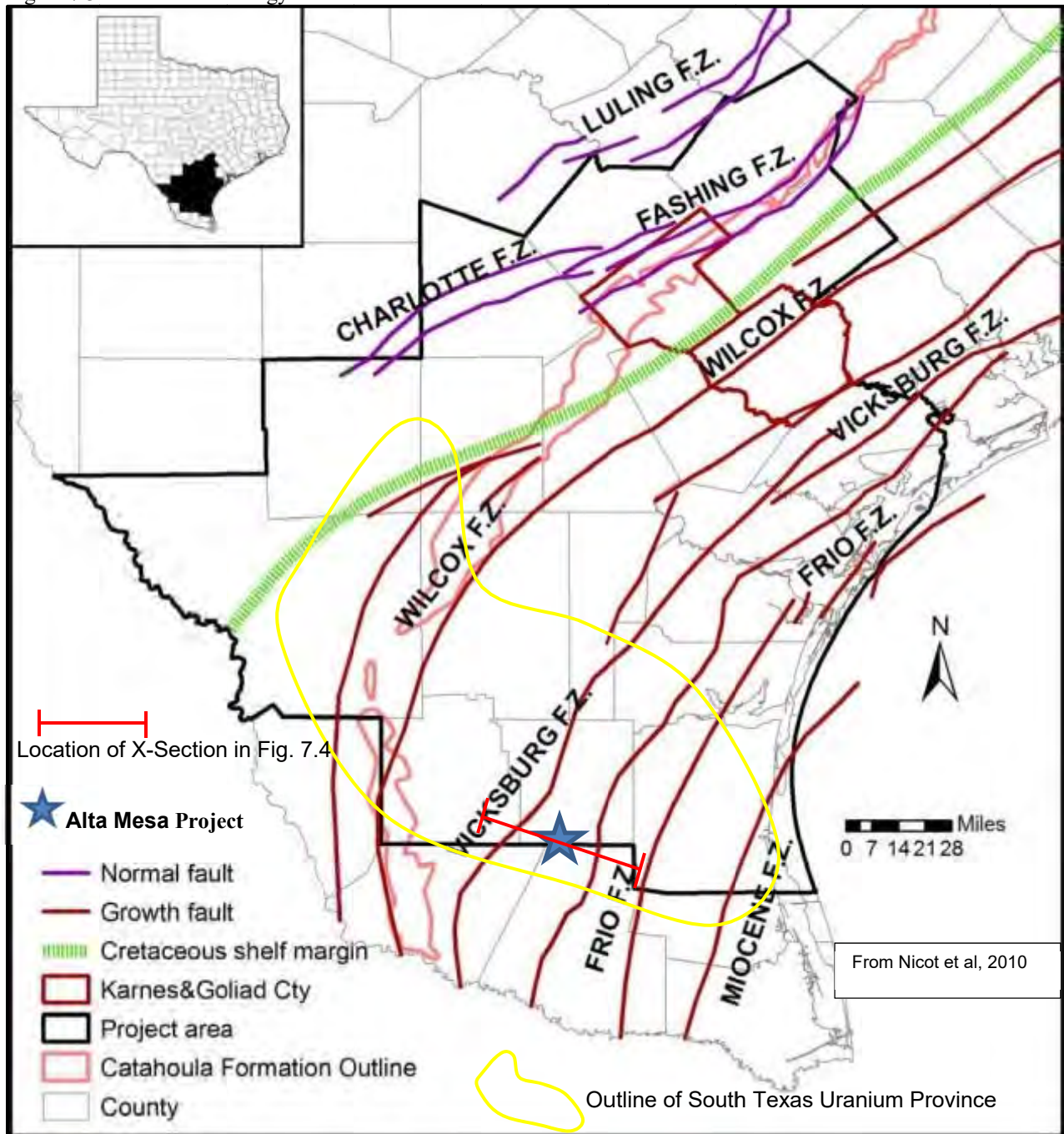
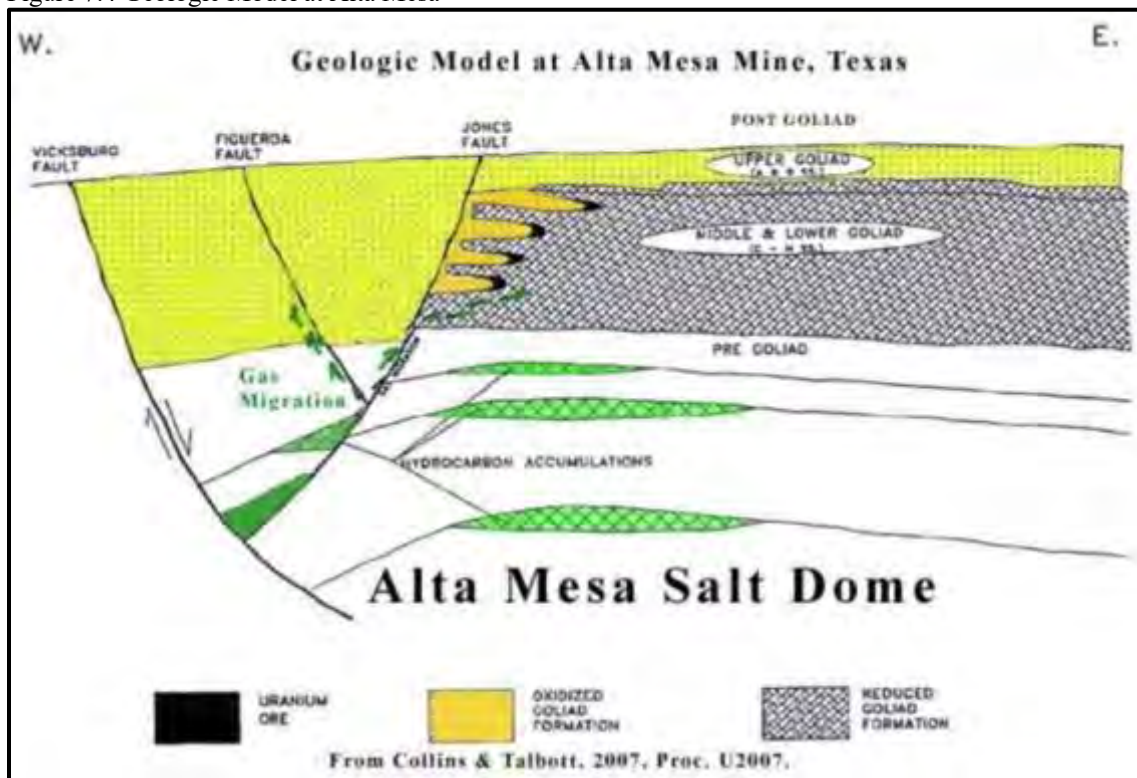


Figure 7.4 Geologic Model at Alta Mesa



7.4 Local Geology

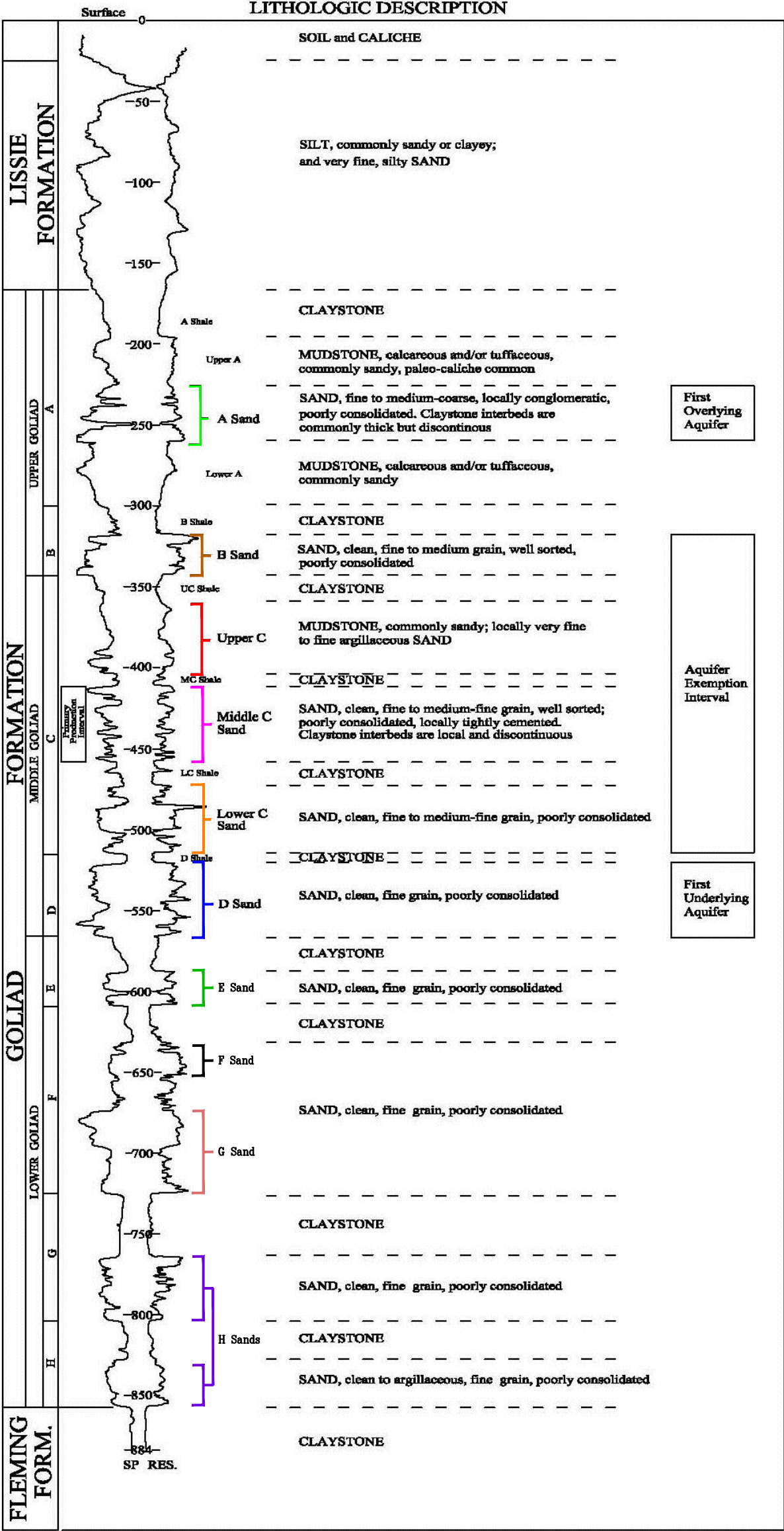
Within the Alta Mesa portion of the Project, Quaternary formations are exposed at the surface. These are conformably underlain by the Goliad Formation, the primary uranium host. Figure 7.5 is a type log for the Alta Mesa area which defines the local stratigraphic units and nomenclature used in this report.

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, mineral resources have been estimated for the A, B, C, and D sands. Section 9 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 – Regional Stratigraphy). 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.

Figure 4.1 shows the location of the various mineral leases and options and the identified and/or interpreted mineralized trends.

ALTA MESA
TYPE ELECTRIC LOG
(WWJ-35)



		PREPARED FOR ENERGY FUELS INC.	
		PREPARED BY BRS INCORPORATED 1130 Major Avenue, Riverton, WY 82501	
			
ALTA MESA URANIUM PROJECT BROOKS AND JIM HOGG COUNTIES, TEXAS, USA			
DRAWING NAME: TYPE LOG			
DRAWN BY: CDS	REVISION NO.	DATE	BY
DATE: 5/15/14			
CHECKED BY: DLB			
LAST PLOT DATE: 5/23/14			
CAD FILE: USRV/JONESRANCHURANIUM/REPORT FIGURES 2014/FIG 7.5 LOCATION MAP			DRAWING SCALE: N/A
			FIGURE: 7.5

SECTION 8: DEPOSIT TYPES

South Texas uranium deposits are sandstone-hosted roll-front uranium deposits as defined in the “World Distribution of Uranium Deposits (UDEPO) with Uranium Deposit Classification”, (IAEA, 2009).

Mineralization within the South Texas Uranium Province is interpreted to be dominantly roll-front type mineralization and primarily of epigenetic origin (Finch, 1996). As depicted on Figure 8.1, roll-fronts are formed along an interface between oxidizing ground water 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 diagenetic 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, ground water geochemistry, and time in that the ground water/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. Roll Front mineralization is common to Wyoming uranium districts including the Powder River Basin, Gas Hills, Shirley Basin, Great Divide Basin, and others, as well as districts in South Texas and portions of the Grants, New Mexico District.

Figure 8.1 – Roll-Front Mineralization

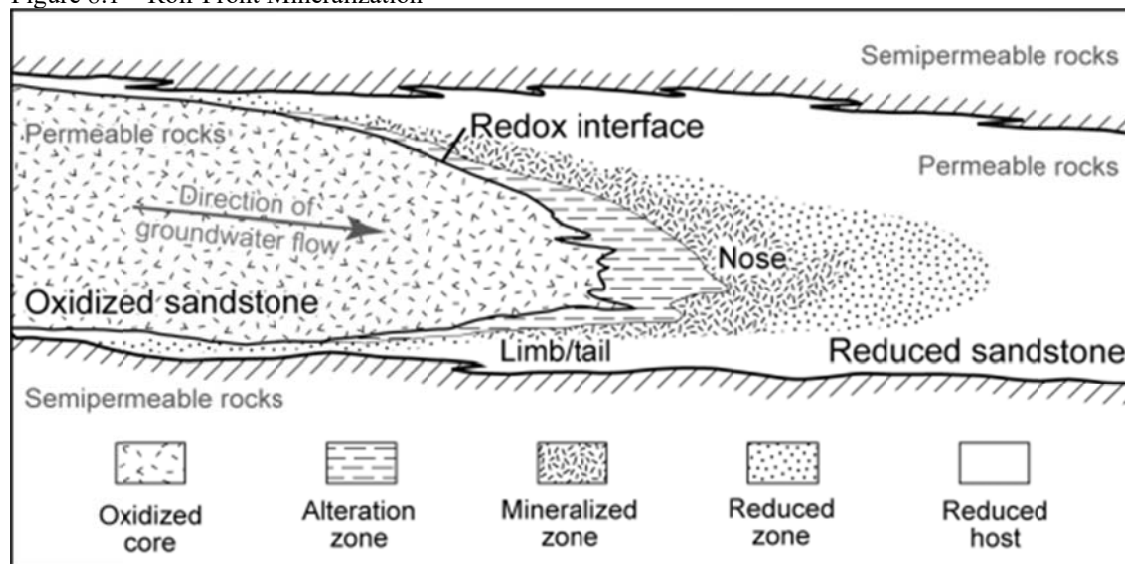


Figure 8.1 - Idealized cross-section of a sandstone-hosted roll front uranium deposit. Modified from Granger and Warren (1974) and De Voto (1978).

SECTION 9: 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.

9.2 Recent Exploration

Although drilling remains the primary exploration method at the Project, 3D seismic data developed for oil and gas exploration has recently been used to 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 area. Figures 9.3 and 9.5, respectively, show the South Alta Mesa and Indigo Snake interpreted trends with the 3D seismic images for these areas.

9.3 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 into the targeted areas. For Exploration Target areas, favorable conditions for the occurrence of mineralization was 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 these portions of the Project, as allowed under Section 2.3(2) of NI 43-101. 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.

9.4 Exploration Target Estimation Parameters

Exploration Target calculations are based on chemically equivalent uranium grades. A minimum grade cutoff of 0.02 % U_3O_8 and minimum GT of 0.30 was applied. A bulk dry density of 17 cubic feet per ton was used. Refer to Section 14 for discussion of chemically equivalent data, cutoff and bulk density.

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 drilling and/or in the case of Indigo Snake and to a lesser extent South Alta Mesa, through 3D

seismic imaging. 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 below the estimated range.

Trend width was determined from PAA-6 and portions of PAA-4, as discussed in Appendix A, where drilling density was sufficient to estimate the average trend width. Mineralization in both of these areas is in the C horizon of the Goliad Formation. The average trend width recommended by the Author 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 cutoff 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 – GT Average and Range

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		3298
Mean GT	1.00	
Standard Deviation	0.23	
GT Range	0.77 to 1.23	

9.5 Exploration Target Estimates

From the forgoing parameters, including trend length (measured 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 cutoff of 0.30.

Table 9.2 – Exploration Targets

ALTA MESA EXPLORATION TARGET	LOW RANGE ESTIMATE			HIGH RANGE ESTIMATE		
AREA	TONS	GRADE	POUNDS	TONS	GRADE	POUNDS
	(x 1,000)	%U ₃ O ₈	(x 1,000)	(x 1,000)	%U ₃ O ₈	(x 1,000)
LCL Sand West of PAA-7	271	0.077	417	271	0.123	666
LC Sands North of PAA-7	185	0.077	285	185	0.123	456
Indigo Snake Area	342	0.077	526	342	0.123	841
SUB TOTAL	798	0.077	1,229	798	0.123	1,963

SOUTH ALTA MESA EXPLORATION TARGET	LOW RANGE ESTIMATE			HIGH RANGE ESTIMATE		
AREA	TONS	GRADE	POUNDS	TONS	GRADE	POUNDS
	(x 1,000)	%U ₃ O ₈	(x 1,000)	(x 1,000)	%U ₃ O ₈	(x 1,000)
SAM - E SANDS	559	0.077	864	559	0.123	1,375
SAM - F SANDS	155	0.077	240	155	0.123	382
SAM - G SANDS	213	0.077	330	213	0.123	526
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
SUB TOTAL	1,872	0.077	2,896	1,872	0.123	4,610

	LOW RANGE ESTIMATE			HIGH RANGE ESTIMATE		
EXPLORATION TARGET	TONS	GRADE	POUNDS	TONS	GRADE	POUNDS
	(x 1,000)	%U ₃ O ₈	(x 1,000)	(x 1,000)	%U ₃ O ₈	(x 1,000)
TOTAL*	2,670	0.077	4,125	2,670	0.123	6,573

*All estimates rounded.

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

9.6 Exploration Target Areas

The areas for which Exploration Targets have been defined include:

- The LCL Sand West of PAA-7 – Figure 9.1
- The LC Sands North of PAA-7 – Figure 9.2
- The South Alta Mesa Area in the D, E, F, G, and H sands – Figures 9.3 and 9.4
- The Indigo Snake Area – Figure 9.5

9.6.1 LCL Sand West of PAA-1

The REDOX boundary shown on Figure 9.1 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.

9.6.2 LC Sands North of PAA-7

The REDOX boundary shown on Figure 9.2 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.

9.6.3 South Alta Mesa

REDOX boundaries for the South Alta Mesa area are shown on Figure 9.3. The background image for this figure is a shallow seismic survey of the area. Figure 9.4 provides a north-looking cross sectional view from west to east across the area. 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.

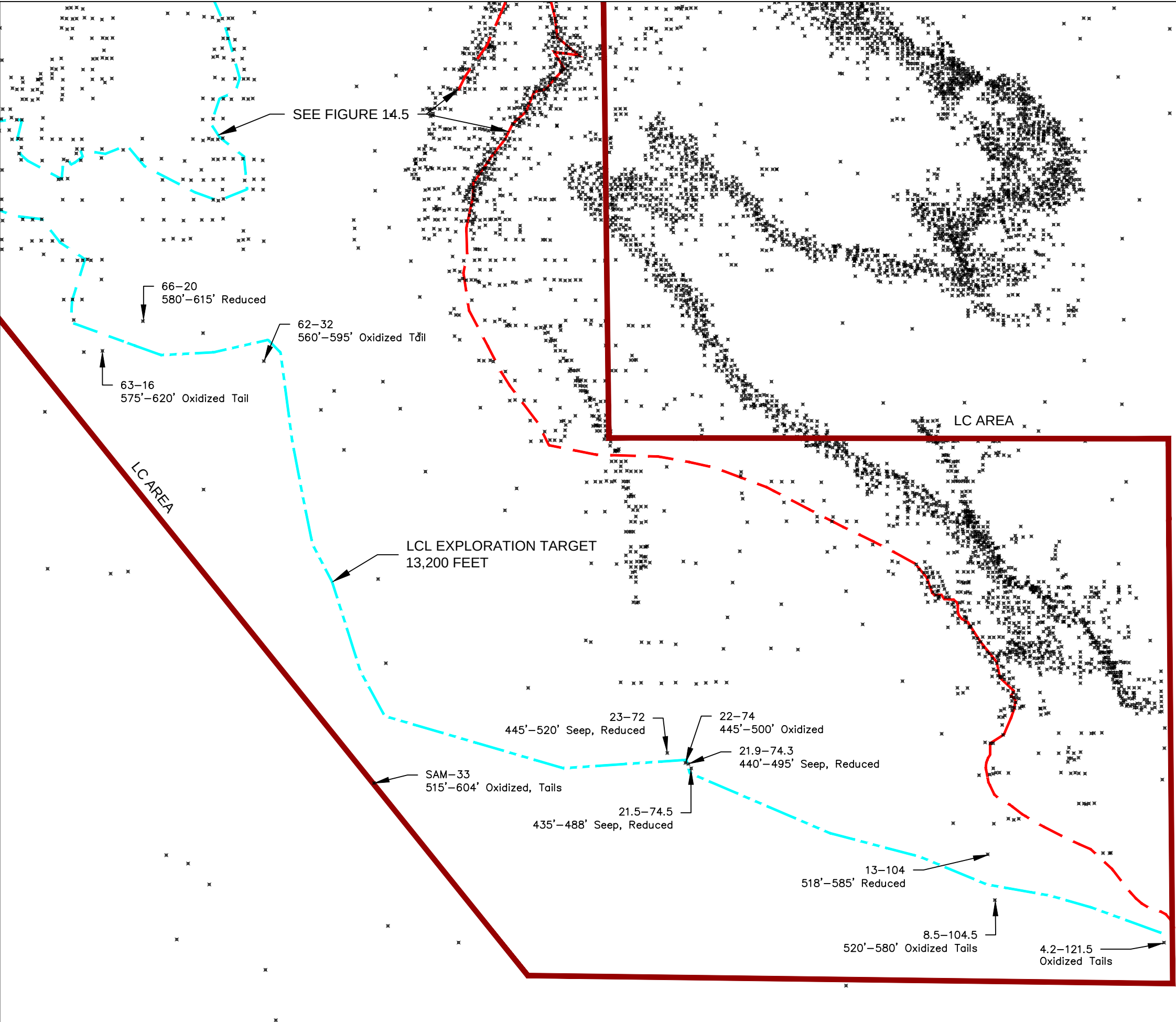
South Alta Mesa is a large area. REDOX trends are based primarily on data from a total of 78 drill holes, however, the interpretation of trend locations was influenced by the 3D seismic data. The seismic image shows the major sand concentrations as shades of gray and the margins of the sand channels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

The majority 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.

9.6.4 Indigo Snake

The REDOX boundary shown on Figure 9.5 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.



LEGEND

EXISTING DRILL HOLE

×

AREA BOUNDARY

LCU INDICATED

LCU INFERRED

LCL INFERRED

LCL EXPLORATION TARGET

GRAPHIC SCALE

1,00005001,0002,000

1 inch = 1,000ft.

CF

ENERGY FUELS

PREPARED FOR

ENERGY FUELS INC.

BRS

ENGINEERING

PREPARED BY

BRS INCORPORATED

1130 Major Avenue, Riverton, WY 82501

BRS

ENGINEERING

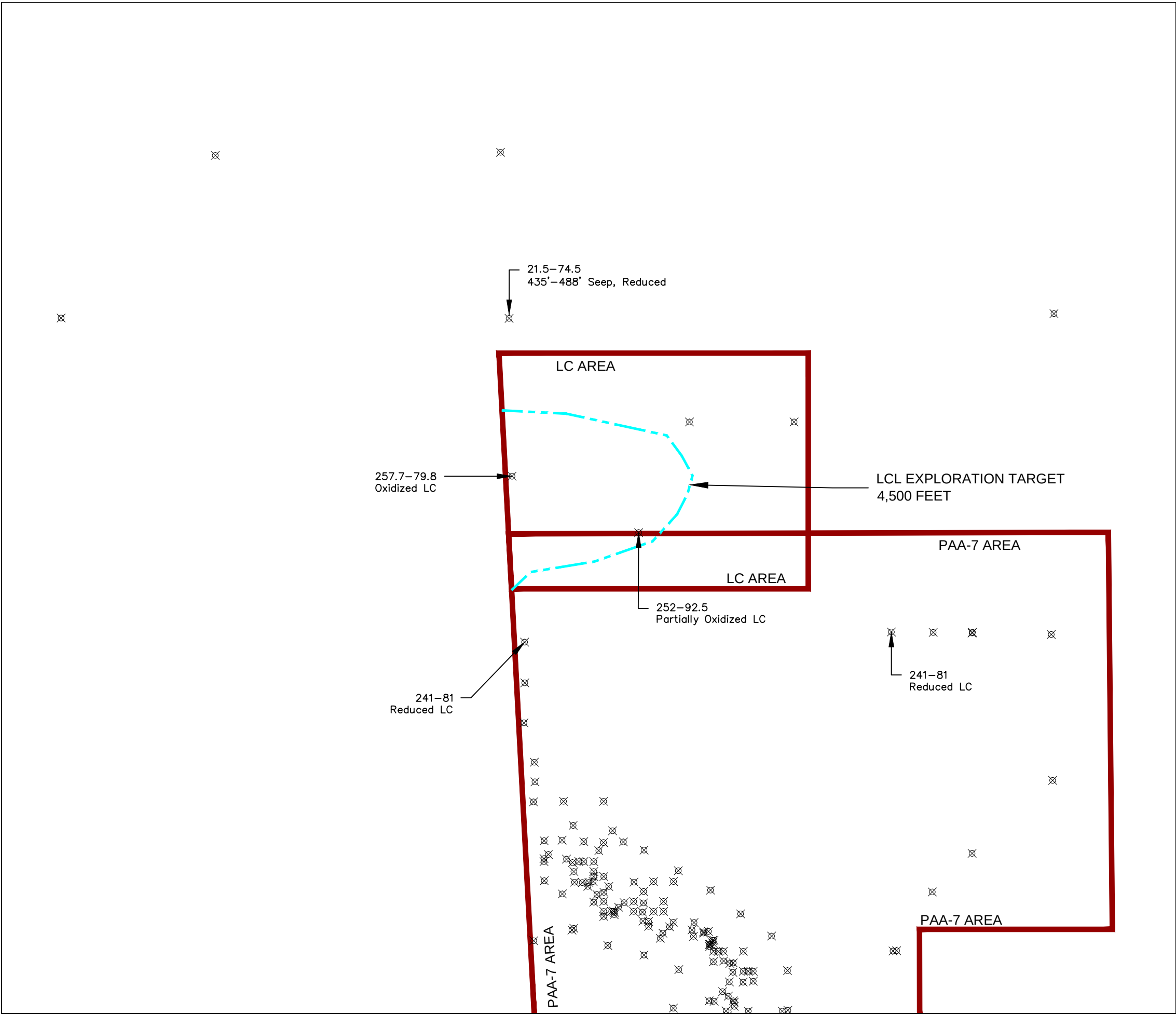
ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:

LCL EXPLORATION TARGET, BROOKS COUNTY

DRAWN BY: RHCP, CDS	REVISION NO.	DATE	BY	DRAWING SCALE:
DATE: 5/15/14				1"=1,000'
CHECKED BY: DLB				FIGURE:
LAST PLOT DATE: 6/3/14				9.1
C\AD FILE: USER\JONESRANCHURANIUM\2014 REPORT FIGURES\DWG\ALTA MESA\FIG 9.1				



LEGEND

EXISTING DRILL HOLE	X
AREA BOUNDARY	
LCL EXPLORATION TARGET	

GRAPHIC SCALE
1 inch = 1,000ft.

CF
ENERGY FUELS

PREPARED FOR
ENERGY FUELS INC.

BRS
ENGINEERING

PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

BRS
ENGINEERING

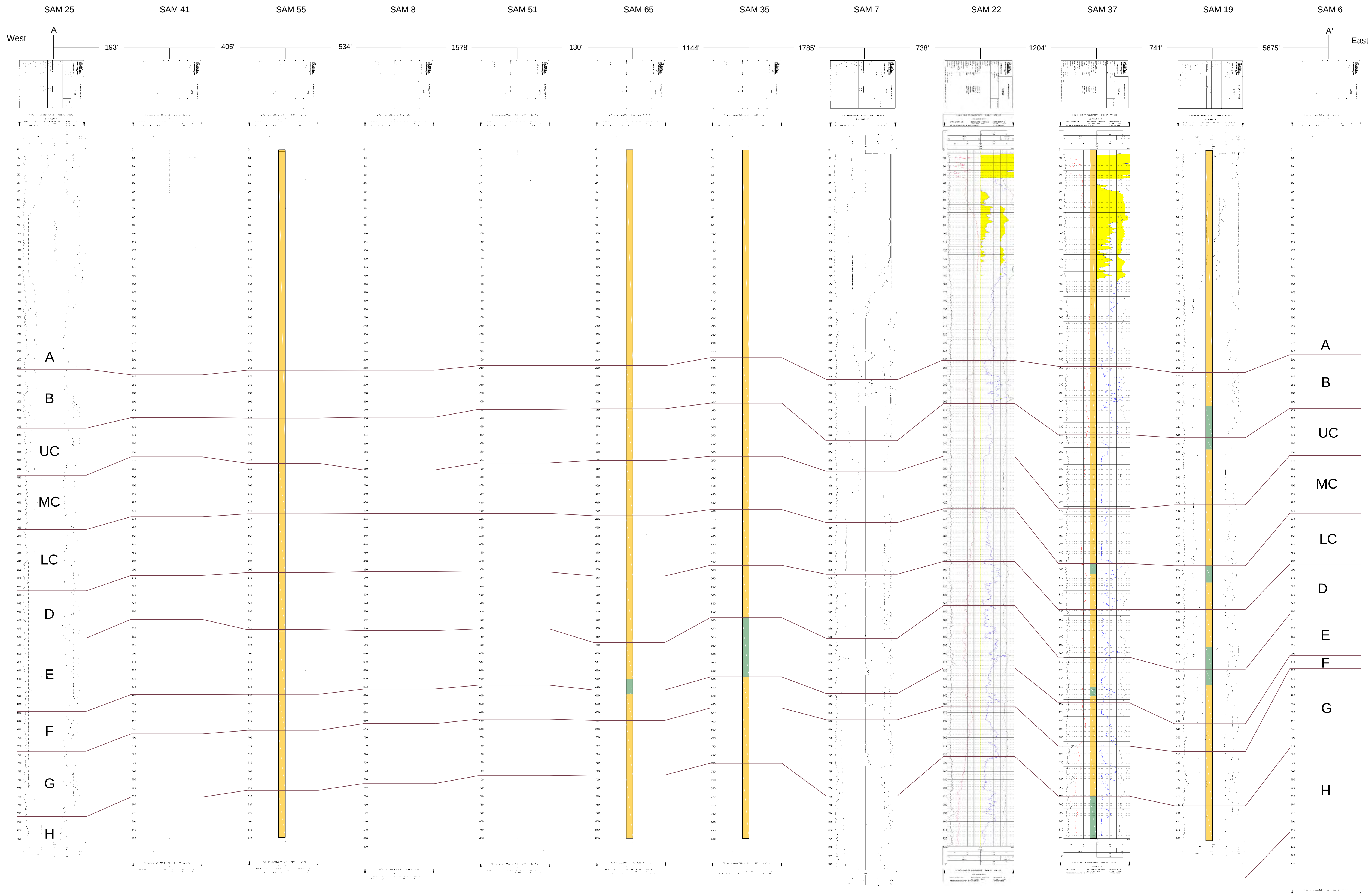
ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:
EXPLORATION TARGET- LC SANDS NORTH OF PAA-7, BROOKS COUNTY

DRAWN BY: RHCP	REVISION NO.	DATE	BY	DRAWING SCALE: 1"=1,000' FIGURE: 9.2
DATE: 5/15/14				
CHECKED BY: DLB				
LAST PLOT DATE: 6/3/14				

CAD FILE: USERV\JONESRANCHURANIUM\2014 REPORT FIGURES\DWG\ALTA MESA\FIG9.2

SOUTH ALTA MESA



LEGEND

OXIDIZED MATERIAL 

REDUCED MATERIAL 

GF **ENERGY** **PREPARED FOR**
ENERGY FUELS INC.

BRS **PREPARED BY** **BRS INCORPORATED** **BRS**
1130 Major Avenue, Riverton, WY 82501

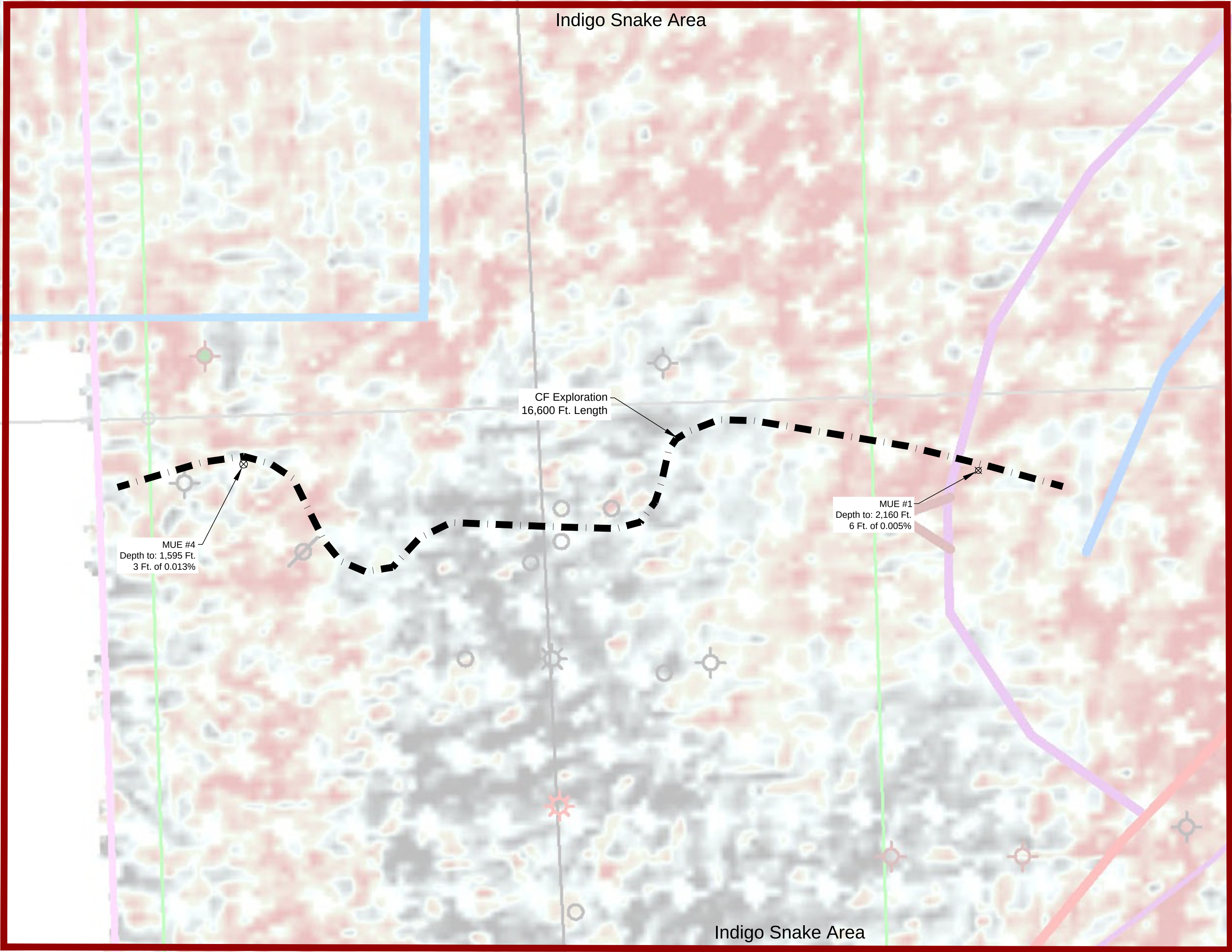
ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:
SOUTH ALTA MESA CROSS SECTION, BROOKS COUNTY

DRAWN BY:	REVISION NO.	DATE	BY	DRAWING SCALE:
JHP		5/21/14		1"=50'

CHECKED BY: OLB
LAST PLOT DATE: 6/3/14
CAD FILE: USDPV/CROSSSECTION/REPORT FIGURE 2014/FIG.4 SAM CROSS SECTION

FIGURE: 9.4



SECTION 10: 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 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. Maps showing drill hole locations are provided in Section 14.

10.1 Drilling and Logging Procedures

EFR Alta Mesa LLC maintains written standard operating procedures for drilling, lithological logging and geophysical logging, and provided copies of these to the Author. Virtually all drilling completed by EFR Alta Mesa LLC for the purposes of exploring and resource development consists of rotary drilling. EFR Alta Mesa LLC 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 Author surveyed 8 exploration drill holes and one well with the EFR Alta Mesa LLC 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 the 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, 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 final wellfield delineation it is recommended that the drill holes be re-surveyed.

EFR Alta Mesa LLC operates 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 %eU₃O₈ by user specified depth increments. EFR Alta Mesa LLC 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 EFR Alta Mesa LLC operates 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. EFR Alta Mesa LLC logs all gamma intercepts above 0.02 %eU3O8 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 is active, both the natural gamma and PFN logging trucks are calibrated routinely. The Author concludes that the drilling and logging procedures followed by EFR Alta Mesa LLC 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 using PFN logging. Those holes meeting cutoff criteria during wellfield delineation were converted to wells. EFR Alta Mesa LLC'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.

Table 10.1 – Alta Mesa Drill Holes Summary

Alta Mesa Data		GT> .5	GT> .3	GT> .1
A sand	GT	1.15	0.74	0.43
	Grade	0.200	0.153	0.117
	Thickness	5.74	4.81	3.65
	Count	33	72	162
B sand	GT	1.22	0.87	0.54
	Grade	0.176	0.146	0.119
	Thickness	6.90	5.97	4.54
	Count	160	273	527
MCU sand	GT	1.68	1.33	0.93
	Grade	0.220	0.194	0.167
	Thickness	7.65	6.86	5.54
	Count	428	588	911
MCM sand	GT	1.79	1.46	1.08
	Grade	0.245	0.218	0.190
	Thickness	7.33	6.67	5.69
	Count	402	527	749
MCL sand	GT	1.51	1.25	0.99
	Grade	0.187	0.171	0.157
	Thickness	8.11	7.30	6.32
	Count	685	894	1186
LCU sand	GT	1.28	1.00	0.68
	Grade	0.171	0.145	0.121
	Thickness	7.50	6.86	5.63
	Count	357	526	862

LCL sand	GT	1.22	0.95	0.64
	Grade	0.178	0.154	0.126
	Thickness	6.90	6.17	5.11
	Count	262	390	647
DU sand	GT	0.88	0.60	0.40
	Grade	0.099	0.089	0.078
	Thickness	8.82	6.79	5.17
	Count	11	24	44
DL	GT	1.29	0.83	0.30
	Grade	0.166	0.147	0.085
	Thickness	7.75	5.63	3.47
	Count	2	4	19
Total Intercepts		2340	3298	5107

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 at Mesteña Grande is generally wide 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.

Table 10.2 – Mesteña Grande Drill Holes Summary

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

SECTION 11: SAMPLE PREPARATION, ANALYSES, AND SECURITY

The primary assay data for the Project is downhole geophysical log data, both natural gamma equivalent logs and PFN logs. EFR Alta Mesa LLC relies entirely on PFN logging for uranium grade assay and uses the natural gamma logging to screen intervals for PFN logging. Of the 10,744 drill holes in the Alta Mesa database 9,967 were drilled by EFR Alta Mesa LLC. The remaining 777 drill holes, 7.2%, were completed by Chevron or Total Minerals Incorporated and were not logged by PFN. For the Mesteña Grande portion of the Project all 460 drill holes were completed by EFR Alta Mesa LLC and all gamma intercepts greater than 0.02 %eU₃O₈ were logged by PFN.

EFR Alta Mesa LLC has 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 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.

Calibration data for both natural gamma logs and PFN is discussed Section 12. When drilling is active both the natural gamma and PFN logging trucks are calibrated routinely. Natural gamma and PFN calibration is performed at standard facilities.

It is the Author's opinion 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.

SECTION 12: DATA VERIFICATION

12.1 Drill Data

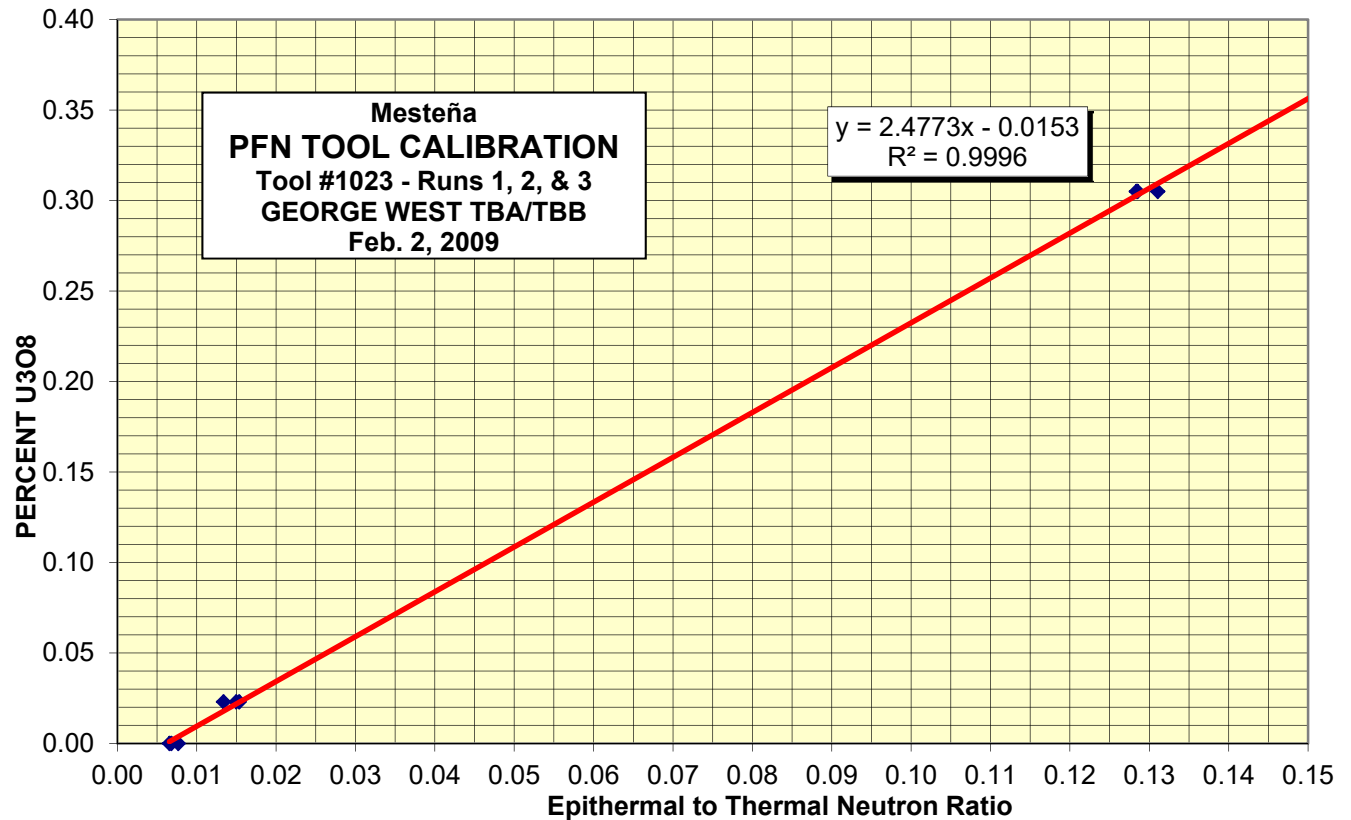
The primary assay data for the Project is downhole geophysical log data. EFR Alta Mesa LLC relied entirely on PFN logging for uranium grade assay and used the natural gamma logging to screen intervals for PFN logging. Of the 10,744 drill holes in the Alta Mesa database, PFN logging was not available for only 7.2% of the drill holes. For the Mesteña Grande portion of the Project, all 460 drill holes were completed by EFR 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 routinely. As an example in both 2009 and 2010 according to calibration data the PFN tools were calibrated on 8 separate occasions. Natural gamma and PFN calibration is performed at standard facilities. Figure 12.1 shows a typical calibration graph for a PFN tool. The EFR Alta Mesa LLC written PFN calibration procedure follows.

EFR ALTA MESA LLC PFN TOOL CALIBRATION PROCEDURE – AT GEORGE WEST, TEXAS PITS

1. Set up on the location at George West pits. The pits consist of four pits; High, Middle, Low and Barren
2. Put tool in the pit and raise the top of the tool up about 5 ft. above the pipe; this will leave 3 ft. in the pit
3. Do the routine surveys that are required before logging
4. Set depth at 100ft. (this is for the generator of the tool to turn on)
5. Turn on the survey meter to insure that there is no radioactive signals within the truck.
6. Go down to the bottom of the hole and start logging up at 2 ft.\min
7. Open Log PFN program
8. Setup > Hole # test pit (high, low, middle or barren)
9. Turn on the PFN tool and the Neutron generator (set at 75)
10. Option > Miscellaneous > Active Time Drive > Record Calibration Data > 3 ft. min. > OK
11. 25 samples (Calibration Data)
12. Clear Calibration Data Table (practice run)
13. Let the table restart down to the 25th sample > then hit print
14. Repeat this three more times
15. Once you have logged the pit four times with one tool then run the other tools following the same procedures
16. Print out the logs and put the encoder and LAS files on the server.
17. Turn off the neutron generator box
18. The results of the calibration were turned in to GeoInstruments Inc., for updates and third party Qa/Qc, as needed

Figure 12.1 – Typical PFN Calibration Graph



12.2 Database Management

During the site visit conducted from April 15 through 17, 2014, the Author 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 concludes 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 reasonable extractable by ISR methods was not included in the database.

12.3 Core Assays and 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.

By definition 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 U^{238} for the order of a million years or more, the daughter isotopes will be in equilibrium with the parent isotope (McKay, 2007). Disequilibrium occurs when one or more decay products are dispersed as a result 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 eU_3O_8 to chemical uranium grade. Radiometric equilibrium is represented by a DEF of 1, positive DEF by a factor greater than 1, and negative DEF by a factor of less than 1. Total Minerals Incorporated applied a positive DEF of 1.13 to their mineral resource estimation (Total, 1989).

Whereas EFR Alta Mesa LLC relies 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.

12.4 Density

Bulk density data is available for the Project (Babbitt, 1987) in a study commissioned by Total Mineral Incorporated supporting their bulk density. EFR Alta Mesa LLC uses a bulk density of $17 \text{ ft}^3/\text{ton}$. Total Minerals Incorporated used a density factor of $16.5 \text{ ft}^3/\text{ton}$ (Total, 1989). MULLC's use of $17 \text{ ft}^3/\text{ton}$ rather than $16.5 \text{ ft}^3/\text{ton}$ is conservative in that it calculates approximately 3% less tonnage per unit volume. The Author used the conservative value for bulk density of $17 \text{ ft}^3/\text{ton}$ in all calculations.

12.5 Summary

The author concludes that the data utilized in this report is accurate and reliable for the purposes of its use in this report.

SECTION 13: MINERAL PROCESSING AND METALLURGICAL TESTING

The Alta Mesa Project is an ISR facility currently in produced from 2005 until being placed on standby in February 2013. As such actual mineral recovery data is available for several wellfields as summarized on Table 13.1 for the completed wellfields.

Table 13.1 – Mineral Recovery

Wellfield	Horizon	Pre-Mining Mineral Reserve Estimate* (lbs U ₃ O ₈)	Production	% 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%
PAA-4	Lower C Upper	527,027		
	Lower C Lower	453,960		
	TOTAL	980,987	850,000	87%
PAA-5				
	B Ring – B Sand	41,000		
	C Ring – B Sand	48,672		
	TOTAL	89,672	35,000	58%
PAA-6	Lower C Upper	377,000		
	Lower C Lower	331,000		
	TOTAL	708,000	338,000	NA on standby

*The mineral reserve estimate is from EFR Alta Mesa LLC and has not been verified by the Author as the areas have already been mined. The Author considers this to be an historic mineral resource estimate.

This historical resource estimate is not compliant with NI 43-101 or with currently accepted reserve and resource classifications as set forth by the CIM. Given the quality of the historic work completed on the Project, the Author believes this resource estimate is both relevant and reliable. However, this estimate should be considered historic in nature and as such should not be relied upon. From the foregoing production data 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 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.

SECTION 14: MINERAL RESOURCE ESTIMATES

14.1 Mineral Resource Estimation

The Technical Report provides estimates of mineral resources for the Alta Mesa and Mesteña Grande areas. Drilling in areas outside the wellfield is generally not of sufficient density to complete a GT contour estimation of mineral resources, however, the drill hole data is sufficient to define mineral resources in accordance with CIM definitions as discussed in Section 14.1.1.

No current preliminary economic assessment of these mineral resources or feasibility study has been completed. Thus, no mineral reserves are stated and the additional requirements of Form 43-101F1, for advanced technical reports, Sections 15 through 22, do not currently apply to this report. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards.

14.1.1 Definitions

A Mineral Resource is defined as a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics, and continuity of a mineral resource are known, estimated or interpreted from specific geologic evidence and knowledge (CIM, 2014). Mineral resource estimates are classified as Measured, Indicated, or Inferred based on the level of understanding and definition of the mineral resource

Measured mineral resources are based on detailed and reliable exploration, sampling and testing information (for the Project, drill holes) gathered through appropriate techniques that are spaced closely enough to confirm both geological and grade continuity to a high level of confidence. EFR Alta Mesa LLC defines measured mineral resources internally as those mineral resources calculated by the GT contour method after a wellfield is fully delineated. The Author has reviewed the existing wellfields in general and the PAA-4 and PAA-6 wellfields specifically, and concurs that the drill hole spacing of less than 100 feet within the wellfields 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 CIM standards. The Author concludes that the EFR Alta Mesa LLC internal definition of measured mineral resources meets CIM definitions and standards. While in some cases, outside the existing wellfields, the drill density would allow classifications of certain portions of the mineral resource as measured, the Author included such areas in the estimate of indicated mineral resources. 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.

Indicated mineral resources are based on detailed and reliable exploration, sampling, and testing information (for the Project; drill holes) 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, the Author defines indicated mineral resources, in accordance with CIM definitions and standards, to be 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 prospect for economic extraction. For the Project, drill hole spacing in areas for which the

Author calculated indicated mineral resources ranges 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 measured on the basis of geologic evidence and limited sampling and reasonably assumed but not verified geological and grade continuity. For the Project, the basis of geologic evidence and sampling is 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 areas for which the Author calculated inferred mineral resources may exceed 800 feet provided that there is geologic evidence that the REDOX front is present and its location can reasonably be assumed.

14.1.2 Methodology

Mineral resource calculations are based on chemically equivalent uranium grades. A minimum grade cutoff of 0.02 % U_3O_8 and minimum GT of 0.30 was used in the calculations along with a bulk dry density of 17 cubic feet per ton, as previously discussed (Section 12.4) and below (Section 14.2.2).

Measured mineral resource were only estimated for existing wellfields and only that portion of the remaining resource in these areas that can reasonably be recovered from the existing wellfields through continued operation of the wellfields.

Indicated and Inferred mineral resources were estimated by projecting average width and GT along the identified REDOX trend defined by drill holes according to the foregoing definitions. Appropriate average width and GT applied to each specific mineral resource area was determined from drill hole data and is specifically discussed separately for each mineral resource area. Wellfield recovery factors were not applied to the indicated and inferred mineral resource estimates. Based on historical production discussed in Section 13, the Author concludes that wellfield recovery will likely exceed 80% overall.

14.2 Key Assumptions and Parameters

14.2.1 Cutoff Criteria

The cutoff criteria used by EFR Alta Mesa LLC at their ISR facility at Alta Mesa is a minimum grade cutoff of 0.02 % U_3O_8 and minimum GT of 0.30. The Author is familiar with cutoff criteria as applied for similar operations and concurs that a minimum GT cutoff of 0.30 does meet criteria for reasonable economic extraction via ISR.

14.2.2 Bulk Density

Bulk density data is available for the Project. From a study commissioned by Total Mineral Incorporated they used a density factor of 16.5ft³/ton (Total, 1989). EFR Alta Mesa LLC's uses of 17ft³/ton rather than 16.5 ft³/ton, which is conservative in that it calculates approximately 3% less tonnage per unit volume. The Author used the conservative value of 17 ft³/ton for bulk density in all calculations.

14.2.3 Radiometric Equilibrium

EFR Alta Mesa LLC 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 the Author to be reasonably equivalent to chemical assays. PFN assay are 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.

14.2.4 Width and GT of Mineralization

Where possible, width and GT parameters were determined from specific drill data from the individual resource areas. Where this was not possible, trend width was determined from wellfields PAA-6 and portions of PAA-4, as discussed in Appendix A. Where drilling density was sufficient to complete GT contour resource estimates in accordance with CIM guidance (CIM, 2013), from which the average trend width could be determined, average GT values above a GT cutoff of 0.30 were determined for each host sand unit and resource area where possible. Where this was not possible, average GT values were 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.

By convention for 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. This thickness generally corresponds 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.

14.3 Mineral Resource Summary

Mineral Resources for the Project are estimated by classifications, meeting CIM standards and definitions as measured, indicated, and inferred mineral resources, at a 0.30 GT cutoff, as summarized in Table 14.1. Figures 14.1 and 14.8, show the mineral resource areas for the Alta Mesa and Mesteña Grande areas, respectively.

Table 14.1 – Alta Mesa and Mesteña Grande Resource Summary

ALTA MESA AND MESTEÑA GRANDE MINERAL RESOURCE SUMMARY 0.30 GT CUTOFF	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
TOTAL MEASURED MINERAL RESOURCE*	123	0.151	371
ALTA MESA INDICATED MINERAL RESOURCE	1,393	0.106	2,959
MESTEÑA GRANDE INDICATED MINERAL RESOURCE	119	0.120	287
TOTAL MEASURED AND INDICATED RESOURCE	1,635	0.110	3,616

ALTA MESA AND MESTEÑA GRANDE MINERAL RESOURCE SUMMARY 0.30 GT CUTOFF	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
ALTA MESA INFERRED MINERAL RESOURCES	1,230	0.128	3,192
MESTEÑA GRANDE INFERRED MINERAL RESOURCE	5,733	0.119	13,601
TOTAL INFERRED RESOURCE	6,964	0.121	16,794

*Total measured mineral resource is that portion of the in-place mineral resource that is estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred mineral resources.

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. The portion of the Project with defined Measured and Indicated mineral Resources would support a preliminary economic assessment or preliminary feasibility study (PFS) which could enable them to be categorized as mineral reserves. Inferred mineral resources are too speculative to have the economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred mineral resources could be assessed in the context of preliminary economic assessment (PEA) which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

14.4 Alta Mesa Portion of the Project

Mineral resources for the Alta Mesa portion of the Project estimated for classifications meeting CIM standards and definitions as measured, indicated, and inferred mineral resources, at a 0.30 GT cutoff, are summarized in Table 14.2. The location of mineral resource areas is shown on Figure 14.1.

Table 14.2 Alta Mesa Mineral Resource Summary

ALTA MESA MEASURED MINERAL RESOURCE*	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
PAA-2	69	0.150	207
PAA-6	54	0.152	164
TOTAL MEASURED MINERAL RESOURCE*	123	0.151	371
ALTA MESA INDICATED MINERAL RESOURCE	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
PAA-7 Upper LCU1 Indicated	84	0.151	256
PAA-7 Upper LCU2 Indicated	100	0.151	303
PAA-7 Lower LCL1 Indicated	119	0.152	361
PAA-7 Lower LCL2 Indicated	122	0.152	372
<i>SUB TOTAL PAA-7</i>	<i>425</i>	<i>0.152</i>	<i>1,291</i>
D Sand - Upper - Indicated	548	0.060	662
D Sand - Lower - Indicated	204	0.083	336
<i>SUB TOTAL D Sand</i>	<i>751</i>	<i>0.066</i>	<i>999</i>
LC - Adjacent to PAA1 - Indicated	58	0.171	199
B Sand Indicated	92	0.146	268
A Sand - A1 - Indicated	43	0.153	133
A Sand - A2 - Indicated	23	0.153	69
<i>SUB TOTAL A Sand</i>	<i>66</i>	<i>0.153</i>	<i>202</i>
TOTAL INDICATED RESOURCE	1,393	0.106	2,959
TOTAL MEASURED AND INDICATED RESOURCE	1,515	0.110	3,330

ALTA MESA INFERRED MINERAL RESOURCES	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
PAA-7 Upper LCU2 Inferred	58	0.151	175
<i>SUB TOTAL PAA-7</i>	<i>58</i>	<i>0.151</i>	<i>175</i>
D Sand - Upper - Inferred	47	0.060	57
D Sand - Lower - Inferred	224	0.083	370
<i>SUB TOTAL D Sand</i>	<i>372</i>	<i>0.079</i>	<i>428</i>
LC - W Lower C Upper - Inferred	99	0.171	338
LC - W Lower C Lower - Inferred	124	0.140	350
<i>SUB TOTAL LC Sand</i>	<i>223</i>	<i>0.154</i>	<i>688</i>
B Sand Inferred	268	0.146	781
A Sand - A1 - Inferred	283	0.153	869
SAM - E Sand Inferred	126	0.100	252
TOTAL INFERRED RESOURCE	1,230	0.130	3,192

*Measured mineral resource that portion of the in-place mineral resource that are estimated to be recoverable within existing wellfields. Wellfield recovery factors have not been applied to indicated and inferred mineral resources.

All estimates are rounded.

Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. The portion of the Project with defined Measured and Indicated mineral Resources would support a preliminary economic assessment or preliminary feasibility study (PFS) which could enable them to be categorized as mineral reserves. Inferred mineral resources are too speculative to have the economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred mineral resources could be assessed in the context of preliminary economic assessment (PEA) which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

14.4.1 Current Wellfields

The wellfields PAA-1 through PAA-5 have been mined by ISR methods. Active restoration within PAA-1 has been completed and is currently in the stability monitoring phase. Wellfield PAA-6 has been partially mined by ISR methods. Based on the performance of wellfields PAA-1 and PAA-3, the Author considers it likely, with continued effort, additional uranium can be recovered from wellfields PAA-2 and PAA-6. Drill hole density in PAA-2 and PAA-6 is sufficient to classify the remaining portions of these wellfields, which can reasonably be extracted economically, as a measured mineral resources in accordance with CIM standards as shown on Table 14.2.

14.4.2 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 (CIM, 2013). 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 (Refer to Appendix A for GT Contour Map). Drill hole and mapped trends are shown on Figures 14.2 and 14.3.

Mineral resource estimation parameters PAA-7 at a 0.30 GT cutoff are:

Table 14.3: PAA-7 Mineral Resource Estimation Parameters

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	GT
LCU1 Indicated	Indicated	9,200	34.7	319,507	4.5	0.151	0.68
LCU2 Indicated	Indicated	10,900	34.7	378,547	4.5	0.151	0.68
LCU2 Inferred	Inferred	6,300	34.7	218,793	4.5	0.151	0.68
LCL1 Indicated	Indicated	17,400	29.7	516,542	3.9	0.152	0.59
LCL2 Indicated	Indicated	17,900	29.7	531,385	3.9	0.152	0.59

14.4.3 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. The majority 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 cutoff, 24 drill holes in the DU and 4 in the DL. An average thickness of 10 feet was used. Drill hole location and mapped trends are shown on Figure 14.4. 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 cutoff are:

Table 14.4: D Sand Mineral Resource Estimation Parameters

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	GT
D Sand Indicated	Indicated	26,600	35	938,000	10	0.060	0.60
D Sand Inferred	Inferred	2,300	35	126,000	10	0.060	0.60
D Sand Indicated	Indicated	9,900	35	346,500	10	0.083	0.83
D Sand Indicated	Inferred	10,900	35	392,000	10	0.083	0.83

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

The Lower C Sand Outside of PAA-7, PAA-6, and PAA-4 mineral resource area is shown on Figure 14.5. 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.

Mineral resource estimation parameters for the Lower C Sand Outside PAA-7, PAA-6, and PAA-4 at a 0.30 GT cutoff are:

Table 14.5: Lower C Sand Outside PAA-7, PAA-6, and PAA-4 Mineral Resource Estimation Parameters

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	GT
LCU Sand Indicated	Indicated	6,373	35	223,062	4.44	0.171	0.758
LCU Sand Inferred	Inferred	10,822	35	378,785	4.44	0.171	0.758
LUL Sand Indicated	Indicated	12,433	35	435,170	4.86	0.140	0.683

14.4.5 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. Figure 14.6 shows the drill hole locations and defined mineral resource area for the B sand.

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 cutoff. As a cautionary note the recovery from wellfield PAA-5 as discussed in Section 13 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 cutoff are:

Table 14.6: B Sand Mineral Resource Estimation Parameters

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	GT
B Sand Indicated	Indicated	3,549	31	262,193	5.97	0.15	0.87
B Sand Inferred	Inferred	25,011	31	763,058	5.97	0.15	0.87

14.4.6 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. The majority 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 cutoff, from 72 intercepts. Drill hole location and mapped trends are shown on Figure 14.7

Mineral resource estimation parameters for the A sand at a 0.30 GT cutoff are:

Table 14.7: A Sand Mineral Resource Estimation Parameters

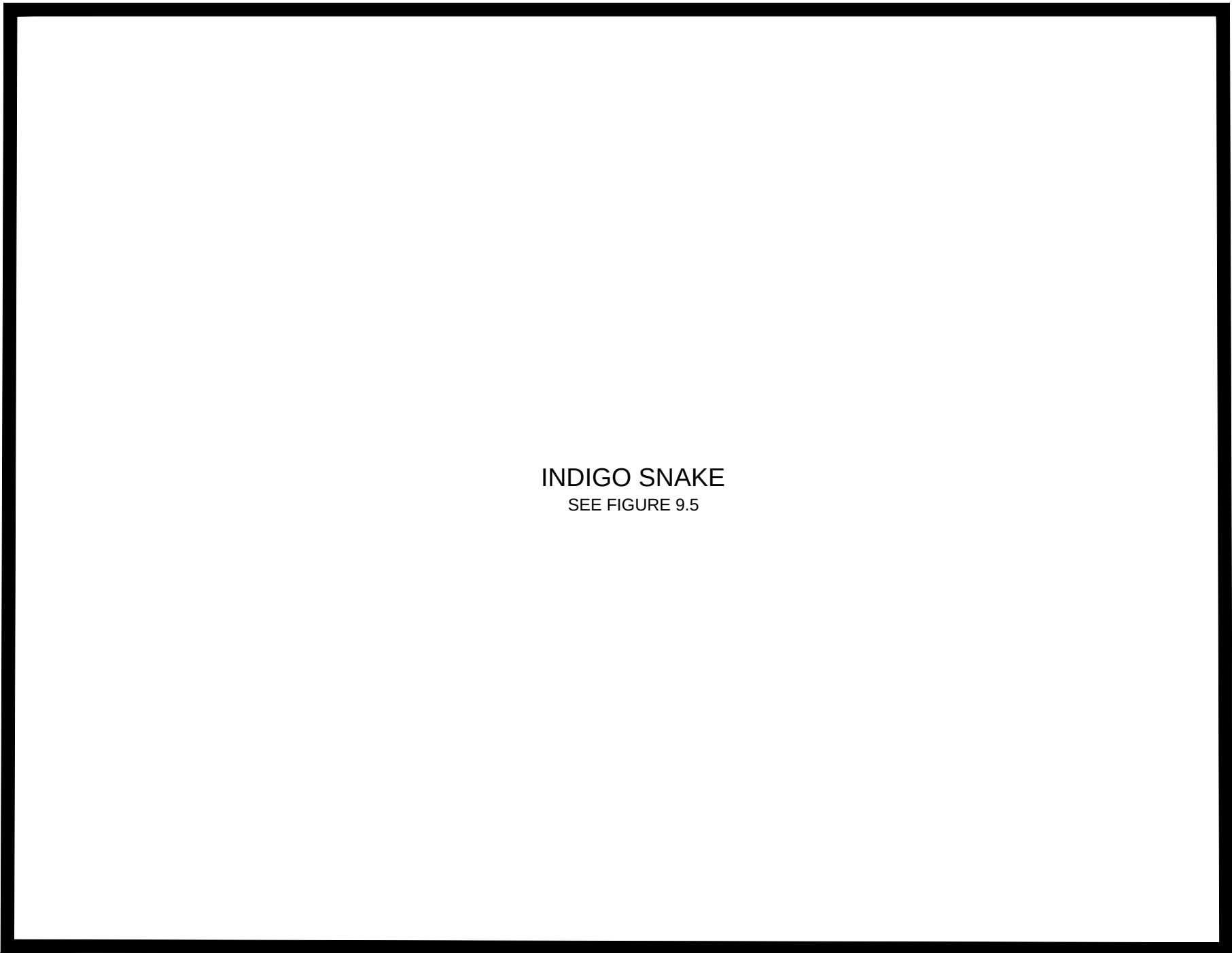
Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	GT
A1 Sand Indicated	Indicated	4,367	35	152,829	4.81	0.15	0.74
A2 Sand Inferred	Inferred	28,616	35	1,001,555	4.81	0.15	0.74
A1 Sand Inferred	Inferred	2,283	35	79,905	4.81	0.15	0.74

14.4.7 The South Alta Mesa

The South Alta Mesa is primarily an Exploration Target as described in Section 9. 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 CIM criteria for classification as an inferred mineral resource. Drill hole locations and interpreted REDOX trends are shown on Figure 9.3.

Mineral resource estimation parameters reflecting overall averages for the Alta Mesa drill hole intercepts meeting the minimum GT cutoff criteria are; 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.

JIM HOGG CO.
BROOKS CO.



INDIGO SNAKE
SEE FIGURE 9.5

LC
SEE FIGURE 9.2

PAA-7
SEE FIGURES 14.2, 14.3

D SAND
SEE FIGURE 14.4

PAA-6
SEE FIGURES A-1, A-2

B SAND
SEE FIGURE 14.6

A SAND
SEE FIGURE 14.7

LC
SEE FIGURES 14.5, 9.1

SOUTH ALTA MESA
SEE FIGURE 9.3

FM 755
TO INTERSTATE 69C

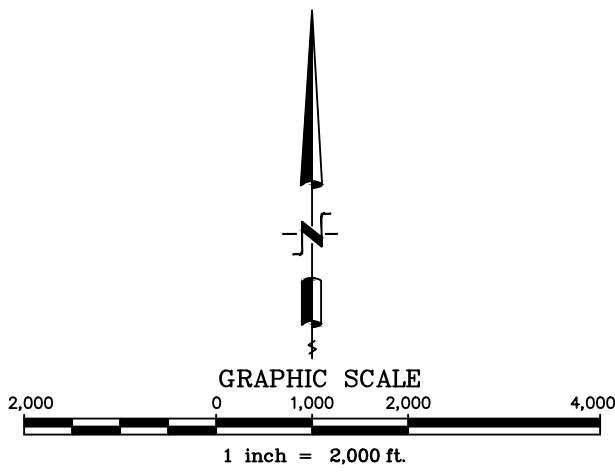
LEGEND

MINERAL PROPERTY BOUNDARY

COUNTY LINE

EXISTING ROAD

AREA BOUNDARY

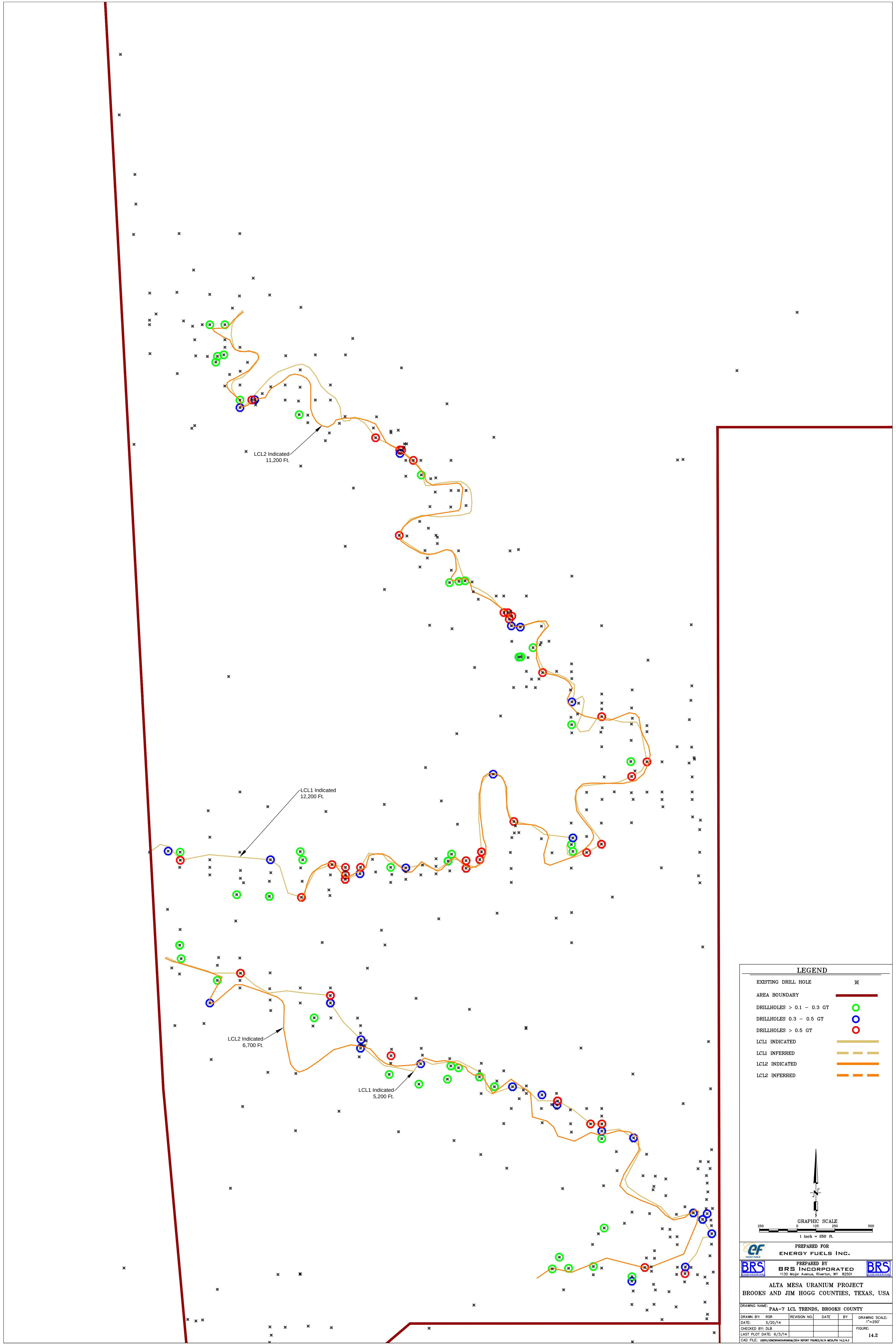


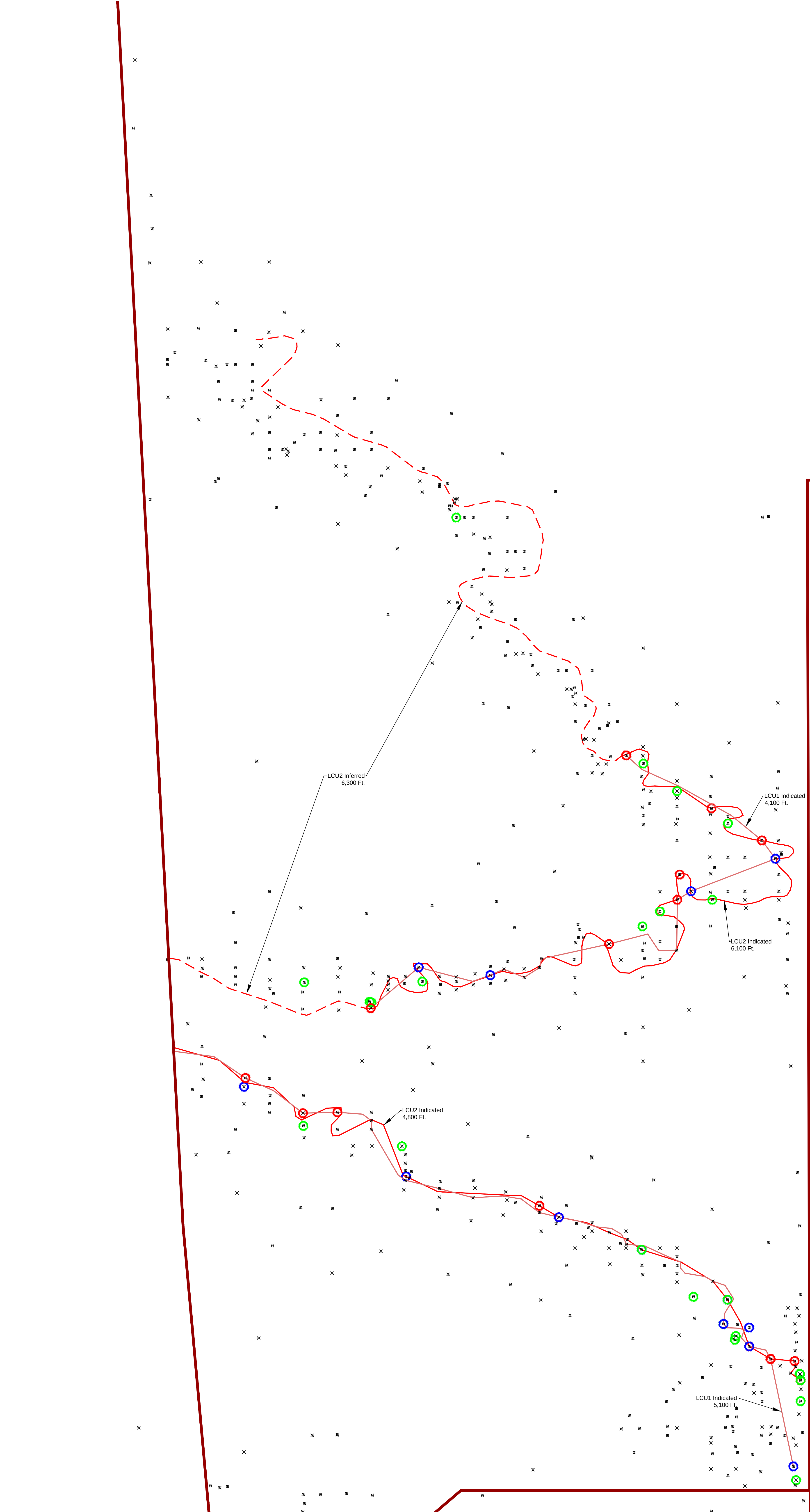
PREPARED FOR
ENERGY FUELS INC.

PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: ALTA MESA INDEX MAP, BROOKS COUNTY					FIGURE: 14.1
DRAWN BY:	CDS	REVISION NO.	DATE	BY	
DATE:	5/19/14				
CHECKED BY:	DLB				
LAST PLOT DATE:	6/3/14				
CAD FILE: U:\BRS\2014\BROOKS\BROOKS\2014 REPORT FIGURES\ALTA MESA\Fig 14.1					





EXISTING DRILL HOLE	×
AREA BOUNDARY	—
DRILLHOLES > 0.1 – 0.3 GT	○
DRILLHOLES 0.3 – 0.5 GT	○
DRILLHOLES > 0.5 GT	○
LCU1 INDICATED	—
LCU1 INFERRED	- - -
LCU2 INDICATED	—
LCU2 INFERRED	- - -

GRAPHIC SCALE
0 125 250 500
1 inch = 250 ft.

BRS
INCORPORATED

PREPARED FOR
ENERGY FUELS INC.

PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

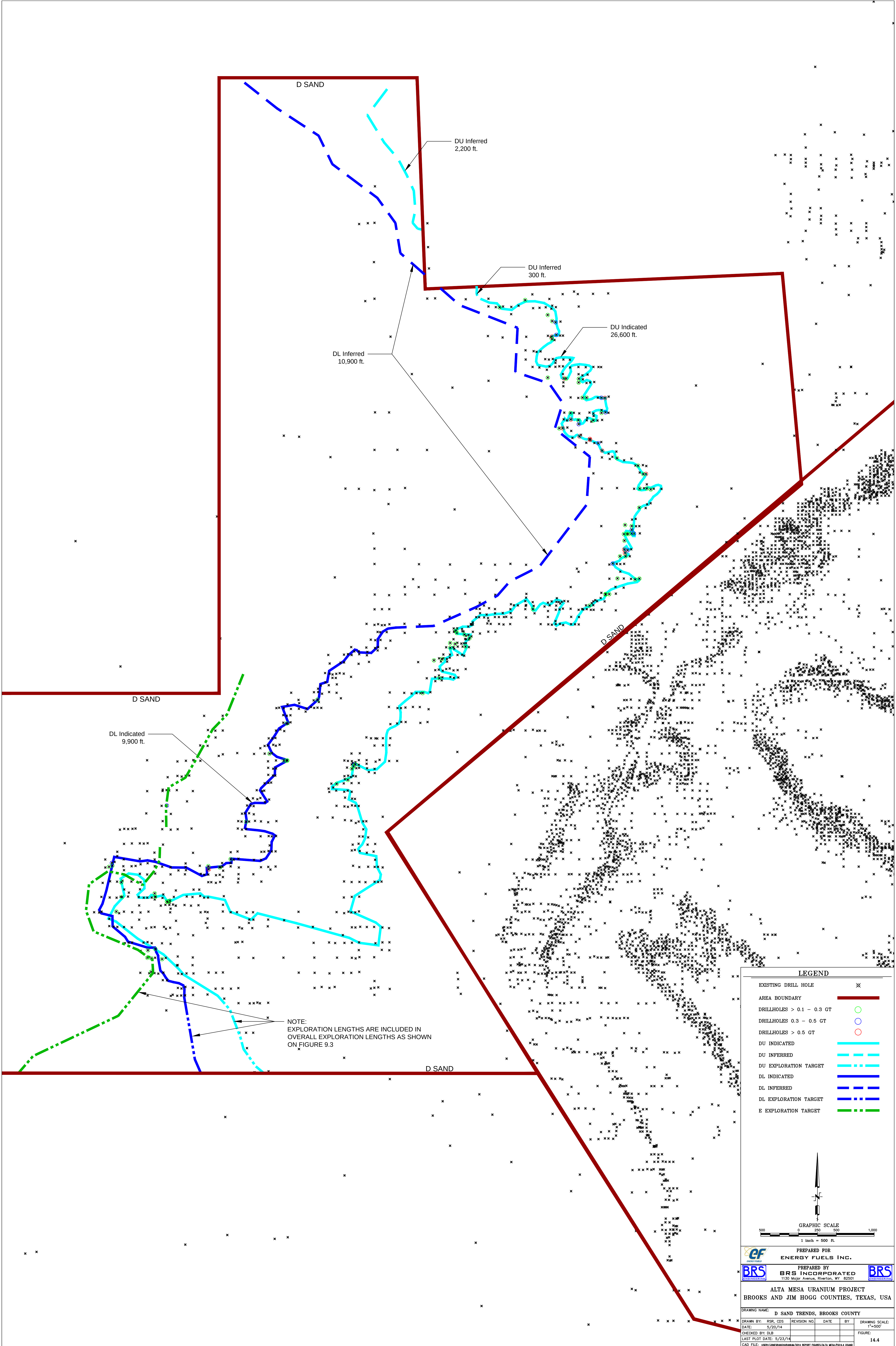
BRS
INCORPORATED

ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: **PAA-7 LCU TRENDS, BROOKS COUNTY**

DRAWN BY: RSR	REVISION NO.	DATE	BY	DRAWING SCALE: 1"=250'
DATE: 5/20/14				FIGURE:
CHECKED BY: DLB				
LAST PLOT DATE: 6/3/14				
CAD FILE: USER\GEOGRAPHIC\BROOKS\2014 REPORT FIGURES\ALTA MESA\FIG14.3.13				

14.3



LEGEND

EXISTING DRILL HOLE

×

AREA BOUNDARY

DRILLHOLES > 0.1 – 0.3 GT

DRILLHOLES 0.3 – 0.5 GT

DRILLHOLES > 0.5 GT

DU INDICATED

DU INFERRED

DU EXPLORATION TARGET

DL INDICATED

DL INFERRED

DL EXPLORATION TARGET

E EXPLORATION TARGET

GRAPHIC SCALE

0 250 500 1,000

1 inch = 500 ft.

GF

ENERGY FUELS INC.

PREPARED BY

BRS INCORPORATED

1130 Major Avenue, Riverton, WY 82201

ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:

D SAND TRENDS, BROOKS COUNTY

DRAWN BY: RSR, CDS

REVISION NO.

DATE

BY

DRAWING SCALE:

DATE: 5/20/14

1"=500'

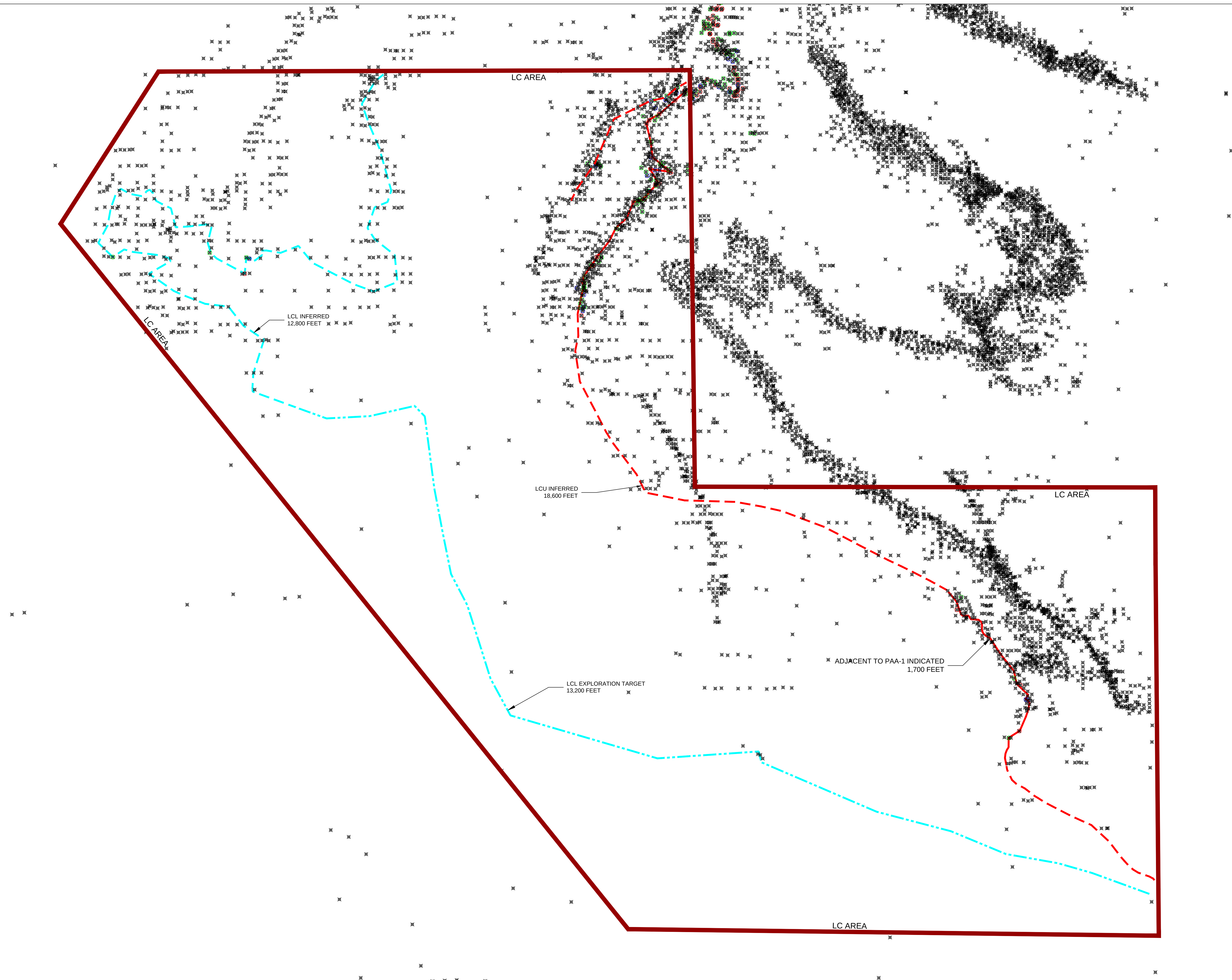
CHECKED BY: DLB

FIGURE:

LAST PLOT DATE: 5/23/14

14.4

CAD FILE: US2V/GMCR/MCH/ANNA/2014 REPORT FIGURE/ALTA MESA/FIG14.4.DWG



LEGEND

EXISTING DRILL HOLE	✕
AREA BOUNDARY	
LCU INDICATED	
LCU INFERRED	
LCL INFERRED	
LCL EXPLORATION TARGET	
DRILLHOLES > 0.1 - 0.3 GT	
DRILLHOLES 0.3 - 0.5 GT	
DRILLHOLES > 0.5 GT	

GRAPHIC SCALE
0 250 500 1,000
1 inch = 500 ft.

PREPARED FOR
ENERGY FUELS INC.

BRS
BRIDGEWATER

PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

BRS
BRIDGEWATER

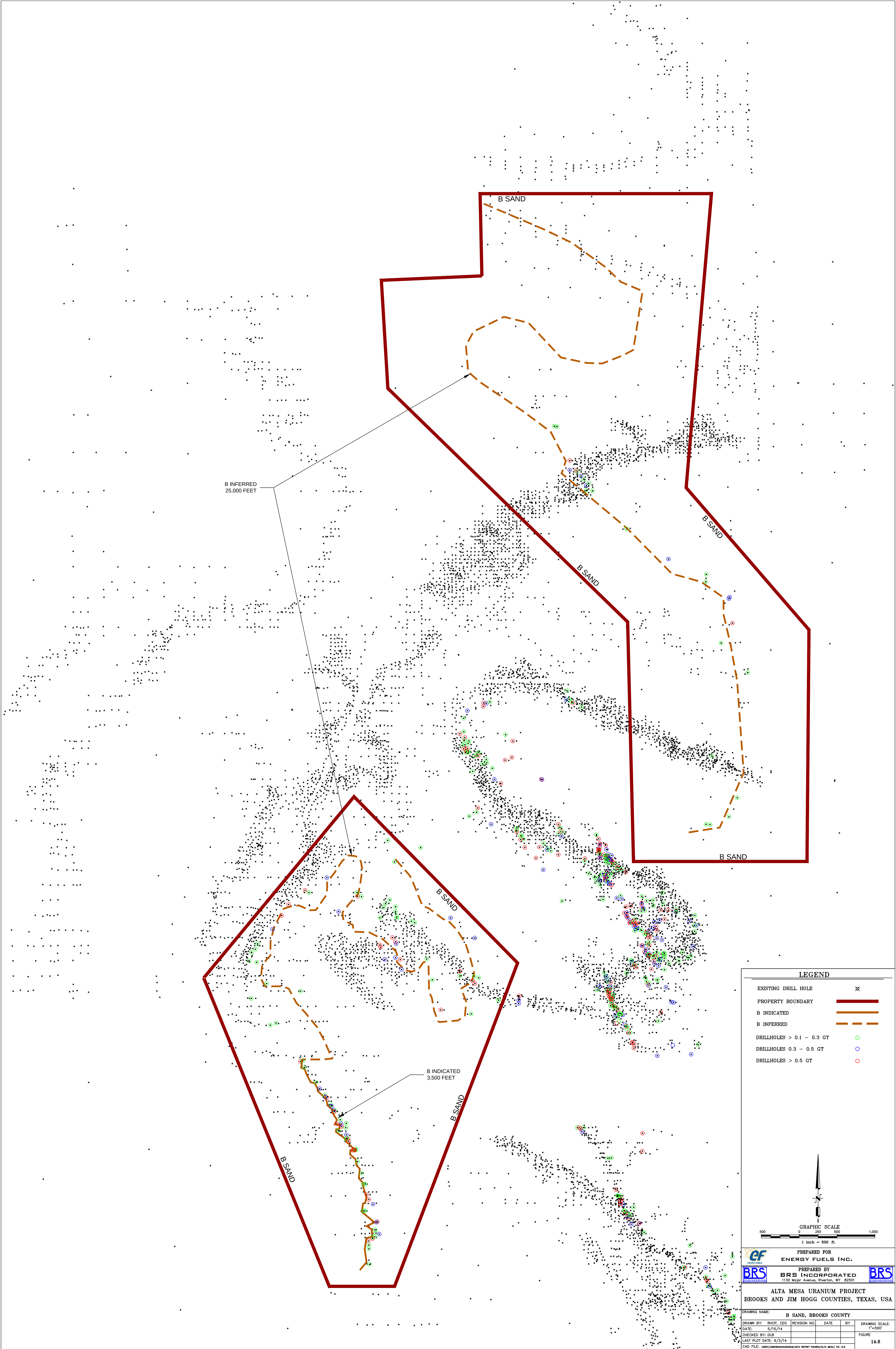
ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: WESTERN LC LCU & LCL, BROOKS COUNTY				
DRAWN BY:	RHSP, CDS	REVISION NO.	DATE	BY
DATE:	5/15/14			
CHECKED BY:	DLB			
LAST PLOT DATE:	6/3/14			
CAD FILE: USERV\ENERGHR\BRW\2014 REPORT FILES\DWG\ALTA MESA\FIG 14.5				

DRAWING SCALE:
1"=500'

FIGURE:

14.5



LEGEND

EXISTING DRILL HOLE

PROPERTY BOUNDARY

B INDICATED

B INFERRED

DRILLHOLES > 0.1 - 0.3 GT

DRILLHOLES 0.3 - 0.5 GT

DRILLHOLES > 0.5 GT

✕

○

○

○

GF

INDUSTRIAL

BRS

ENGINEERING

PREPARED FOR

ENERGY FUELS INC.

PREPARED BY

BRS INCORPORATED

1130 Major Avenue, Riverton, WY 82501

ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:

B SAND, BROOKS COUNTY

DRAWN BY:

RHCP, CDS

REVISION NO.

DATE

5/15/14

BY

DRAWING SCALE:

1"=500'

CHECKED BY:

DLB

FIGURE

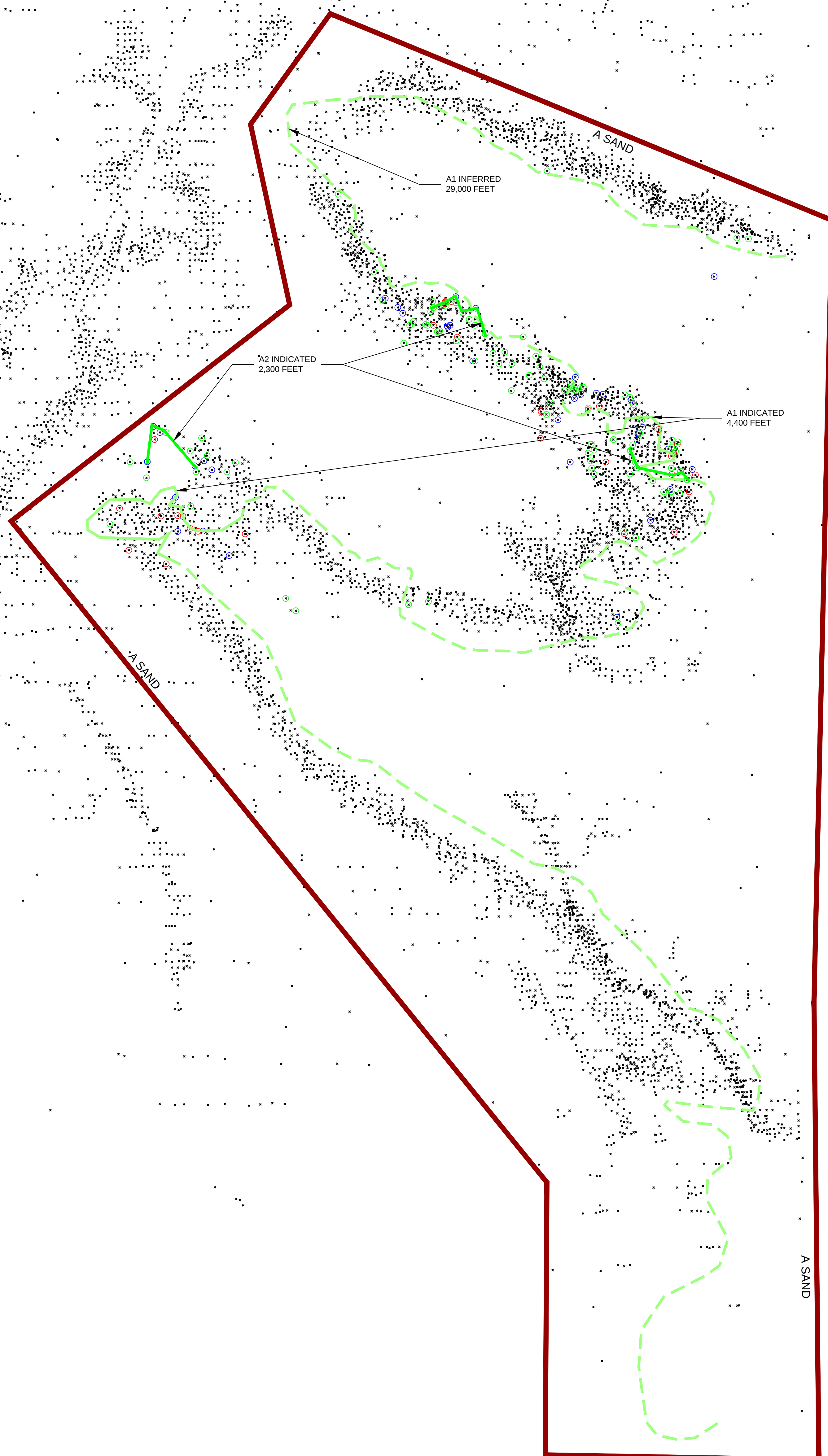
14.6

LAST PLOT DATE:

6/3/14

CAD FILE:

USDP/OPERATION/URANIUM/2014 REPORT FIGURES/ALTA MESA/ FIG 14.6



LEGEND

EXISTING DRILL HOLE	✕
AREA BOUNDARY	
A1 INDICATED	
A1 INFERRED	
A2 INDICATED	

DRILLHOLES > 0.1 – 0.3 GT	○
DRILLHOLES 0.3 – 0.5 GT	○
DRILLHOLES > 0.5 GT	○

GRAPHIC SCALE

1 inch = 500 ft.

PREPARED FOR

ENERGY FUELS INC.

PREPARED BY

BRS INCORPORATED

1130 Major Avenue, Riverton, WY 82501

ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: A1 & A2 SANDS, BROOKS COUNTY																		
DRAWN BY: RHCP, CDS DATE: 5/15/14 CHECKED BY: DLB LAST PLOT DATE: 6/2/14 CAD FILE: UGRR\CONTRAVANCE\000000\004_REPORT_FIGURES\CA\TAMSA_P10_14.T	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 20%;">REVISION NO.</th> <th style="width: 20%;">DATE</th> <th style="width: 10%;">BY</th> <th style="width: 50%;"></th> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>	REVISION NO.	DATE	BY										<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWING SCALE: 1"=500'</td> <td style="width: 50%;">FIGURE:</td> </tr> <tr> <td> </td> <td style="text-align: right;">14.7</td> </tr> </table>	DRAWING SCALE: 1"=500'	FIGURE:		14.7
REVISION NO.	DATE	BY																
DRAWING SCALE: 1"=500'	FIGURE:																	
	14.7																	

14.5 Mesteña Grande Portion of the Project

Mineral resources for the Mesteña Grande portion of the Project estimated for classifications, meeting CIM standards and definitions as indicated and inferred mineral resources, at a 0.30 GT cutoff, as summarized in Table 14.2. Subsequent sections discuss each mineral resource area separately. Refer to Figure 14.8 for the location of mineral resource areas.

Table 14.8 Mesteña Grande Mineral Resource Summary

MESTEÑA GRANDE INDICATED MINERAL RESOURCE	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
Central OK - Indicated	119	0.120	287
TOTAL INDICATED RESOURCE	119	0.120	287

MESTEÑA GRANDE INFERRED MINERAL RESOURCE	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
North OK10 - Inferred	1,064	0.12	2,555
North OK 20 - Inferred	233	0.12	558
Central OK 10 - Inferred	366	0.12	880
Central OK 20 - Inferred	2,178	0.12	5,228
Alta Vista OK 20 - Inferred	255	0.12	613
Goliad 10 - Inferred	675	0.12	1,621
Goliad 20 - Inferred	564	0.12	1,354
El Sordo - Inferred	397	0.10	794
TOTAL INFERRED RESOURCE	5,733	0.119	13,601

All estimates are rounded. Mineral resources are not mineral reserves and do not have demonstrated economic viability in accordance with CIM standards. The portion of the Project with defined Measured and Indicated mineral Resources would support a preliminary economic assessment or preliminary feasibility study (PFS) which could enable them to be categorized as mineral reserves. 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 could be assessed in the context of preliminary economic assessment (PEA) which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

14.5.1 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 cutoff. 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.

14.5.2 Mesteña Grande -Oakville Formation

REDOX trends within the Oakville Formation are shown on Figures 14.9, Oakville North, Figure 14.10, Oakville Central North, Figure 14.11, Oakville Central South, and Figure 14.12, Oakville Alta Vista. 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 (Figure 14.11) 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. Thus, the Author concludes that there is a reasonable prospect for economic extraction of these resources but cautioned that production cost 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 cutoff are:

Table 14.9: Mesteña Grande and Oakville Formation Mineral Resource Estimation Parameters

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	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

14.5.3 Mesteña Grande - Goliad Formation

REDOX trends were defined in the Goliad Formation in the northern portion of Mesteña Grande (refer to Figure 14.13). 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 cutoff are:

Table 14.10: Mesteña Grande and Goliad Formation Mineral Resource Estimation Parameters

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	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

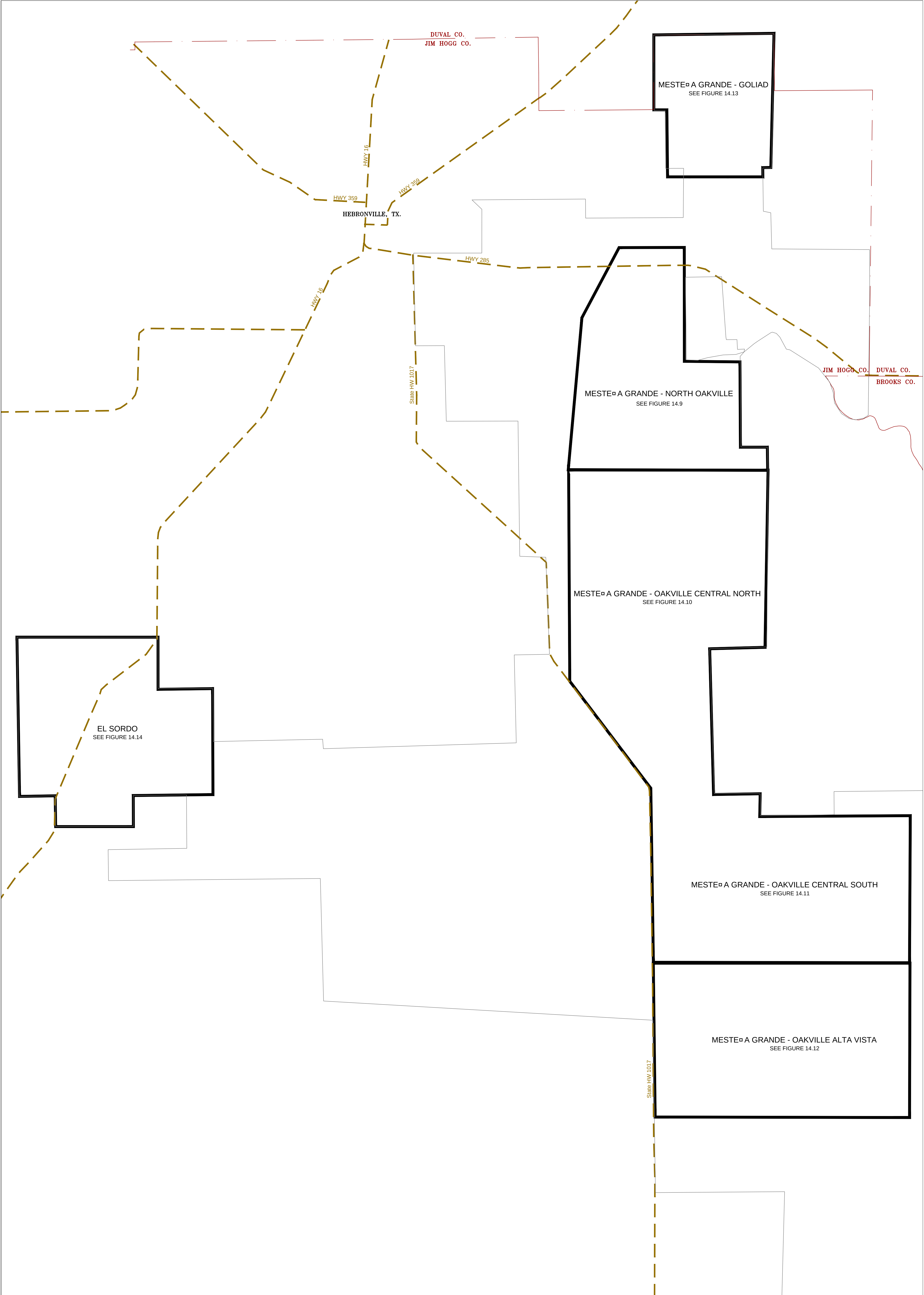
14.5.4 El Sordo – Catahoula Formation

Mineralization in the El Sordo area is located 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 considered to be an important source rock for uranium. The Author reviewed the geophysical logs for the El Sordo area, and the mineralization is within well-developed sand units and in the Author's opinion have is a reasonable prospect for economic extraction via ISR mining. 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 cutoff are:

Horizon	Classification	Trend Length (ft)	Width (ft)	Area (ft ²)	Thickness (ft)	Grade (%U ₃ O ₈)	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



GRAPHIC SCALE
0 2,000 4,000 8,000
1 inch = 4,000 ft.

LEGEND

MINERAL PROPERTY BOUNDARY	
COUNTY LINE	
EXISTING ROAD	
AREA BOUNDARY	

PREPARED FOR
ENERGY FUELS INC.

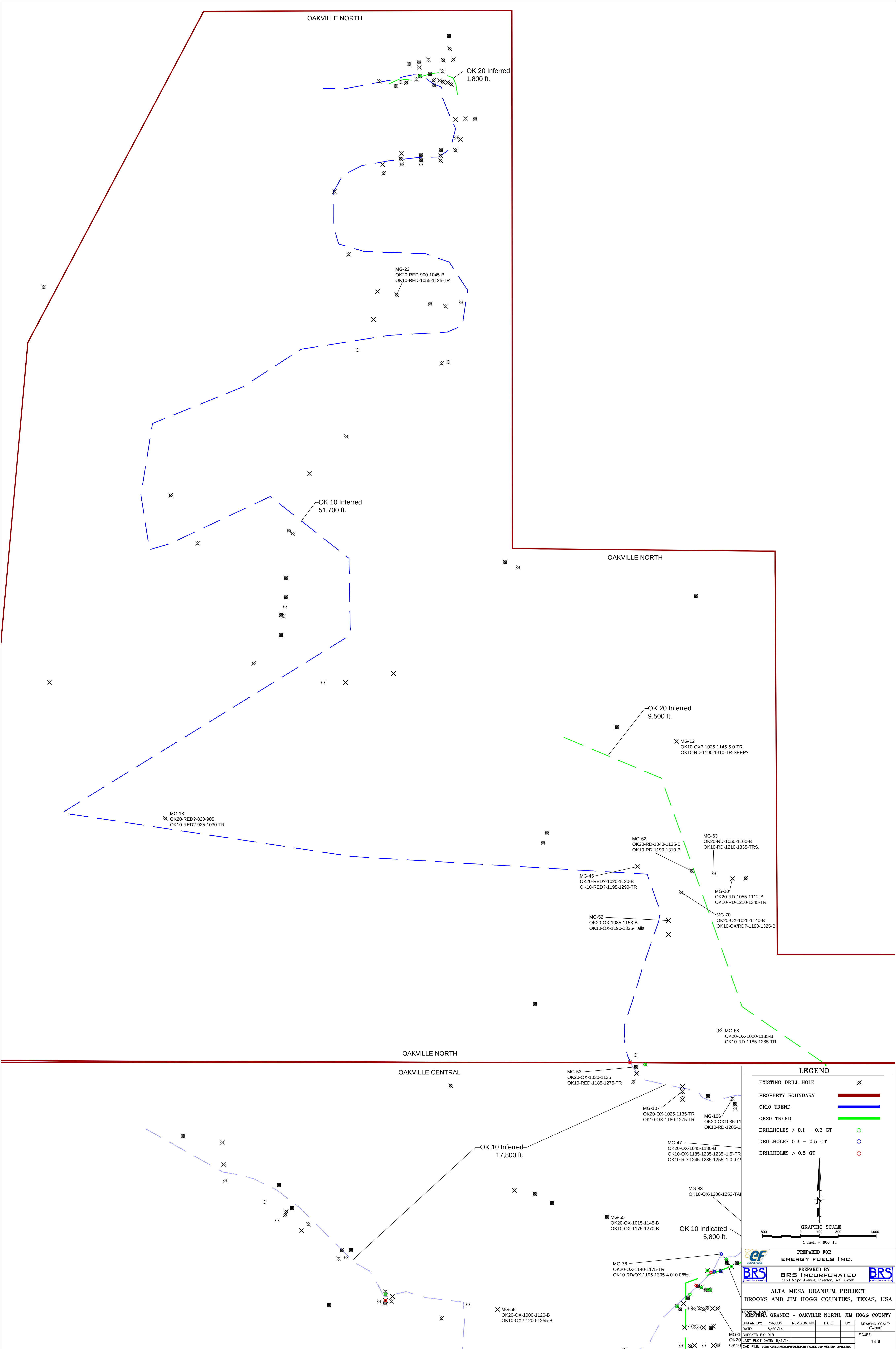
PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

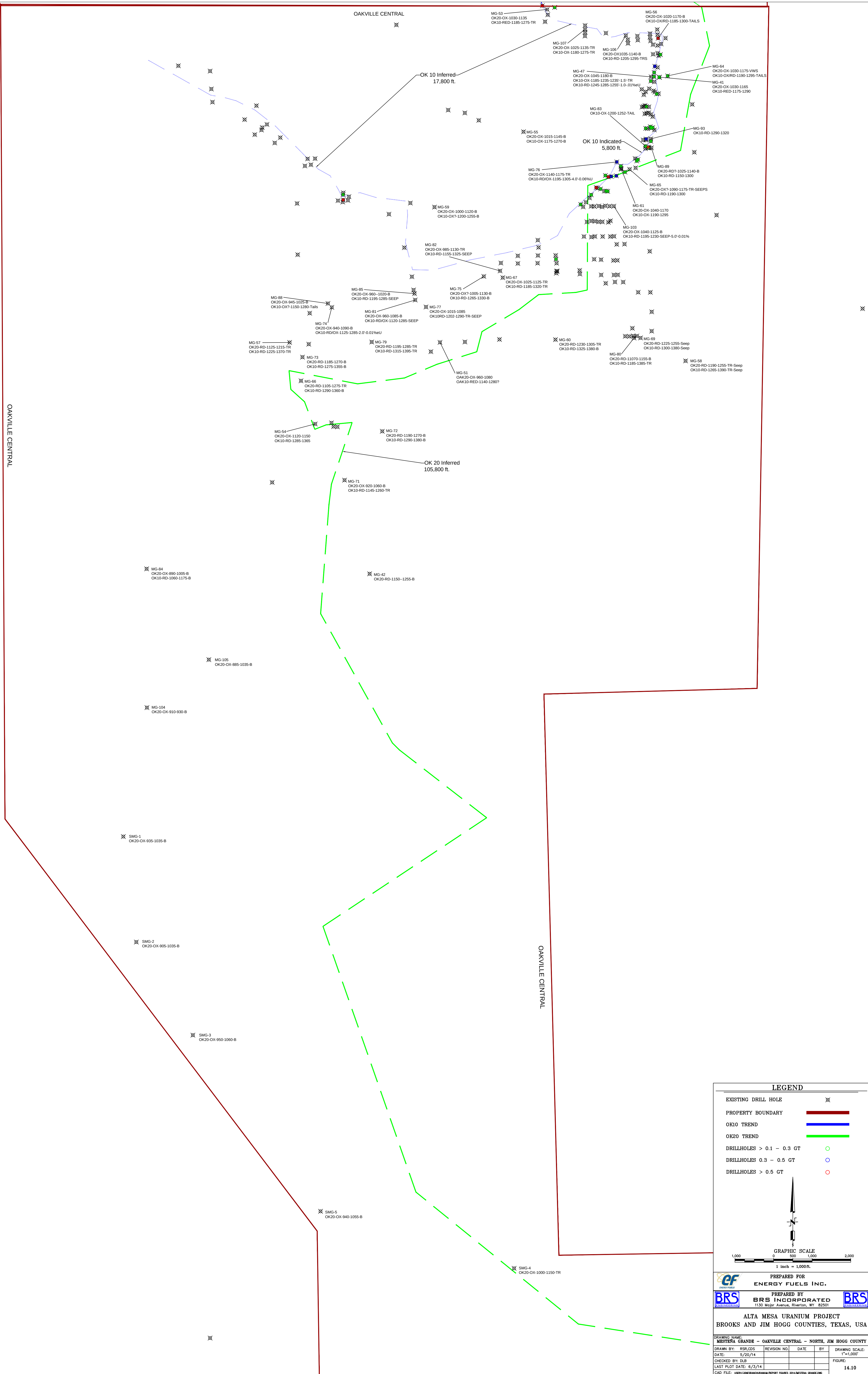
ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

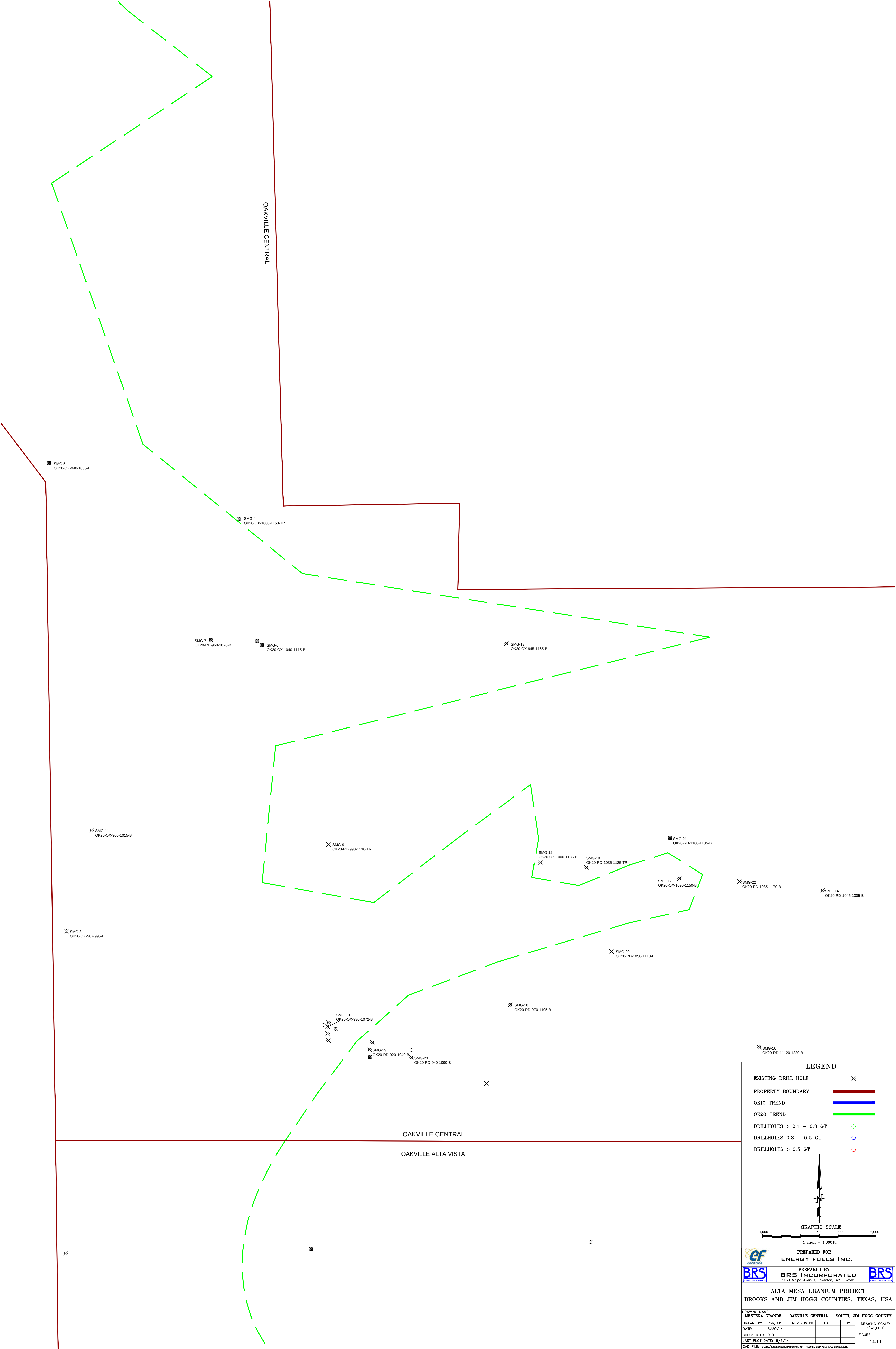
DRAWING NAME:
MESTENA GRANDE INDEX MAP, JIM HOGG COUNTY

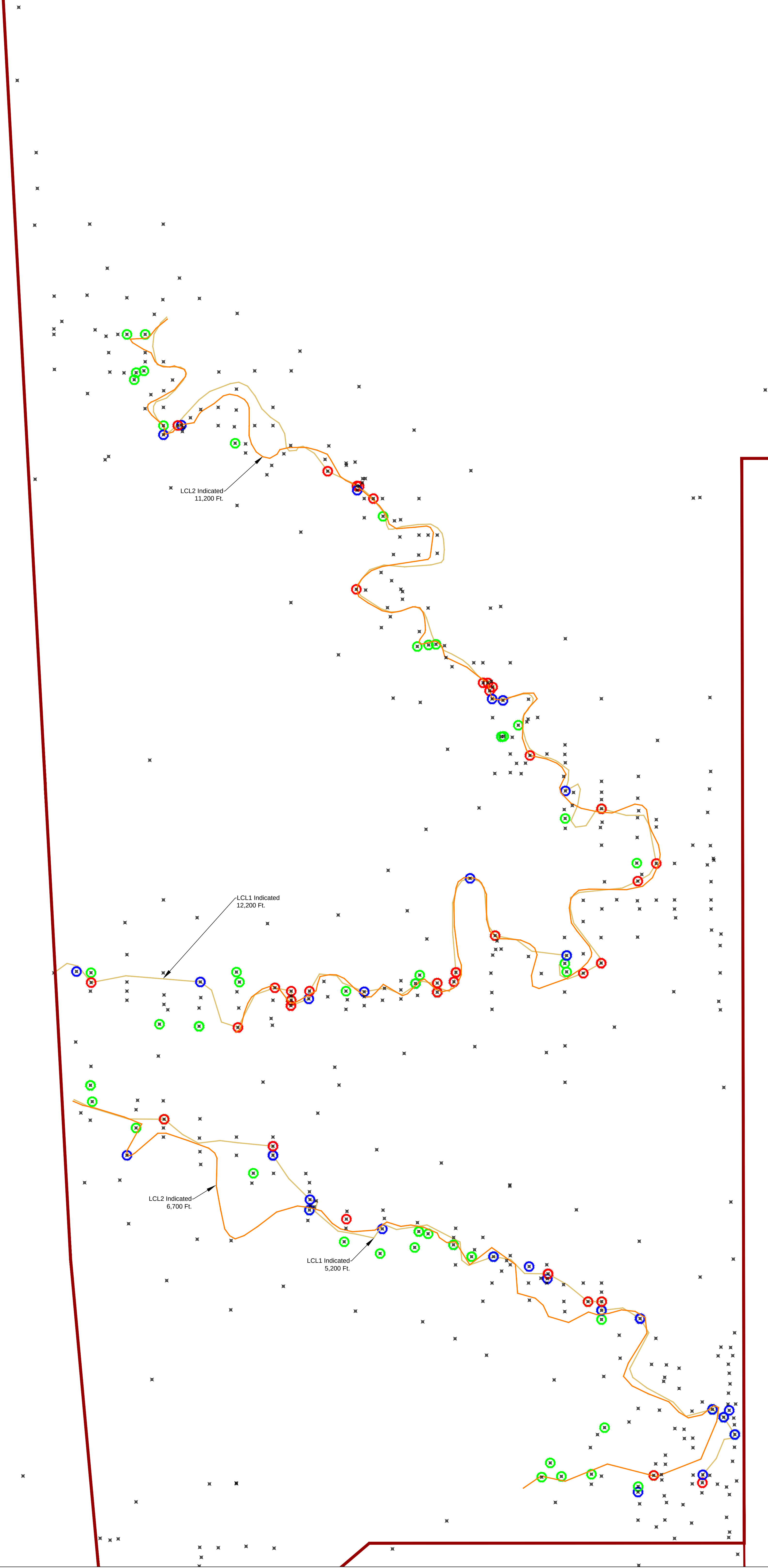
DRAWN BY: CDS	REVISION NO.	DATE	BY	DRAWING SCALE: 1"=4,000'
DATE: 5/19/14				FIGURE:
CHECKED BY: DLB				14.8
LAST PLOT DATE: 6/3/14				

CAD FILE: U:\BRS\2014\BROOKS\BRS\2014 REPORT FIGURES\MESTENA GRANDE\FIG 14.8









LEGEND

EXISTING DRILL HOLE

×

AREA BOUNDARY

DRILLHOLES > 0.1 – 0.3 GT

DRILLHOLES 0.3 – 0.5 GT

DRILLHOLES > 0.5 GT

LCL1 INDICATED

LCL1 INFERRED

LCL2 INDICATED

LCL2 INFERRED

GRAPHIC SCALE

0 125 250 500

1 inch = 250 ft.

PREPARED FOR

ENERGY FUELS INC.

PREPARED BY

BRS INCORPORATED

1130 Major Avenue, Riverton, WY 82501

ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:

PAA-7 LCL TRENDS, BROOKS COUNTY

DRAWN BY: RSR

REVISION NO.

DATE

BY

DRAWING SCALE:

DATE:

5/20/14

1"=250'

CHECKED BY: DLB

LAST PLOT DATE:

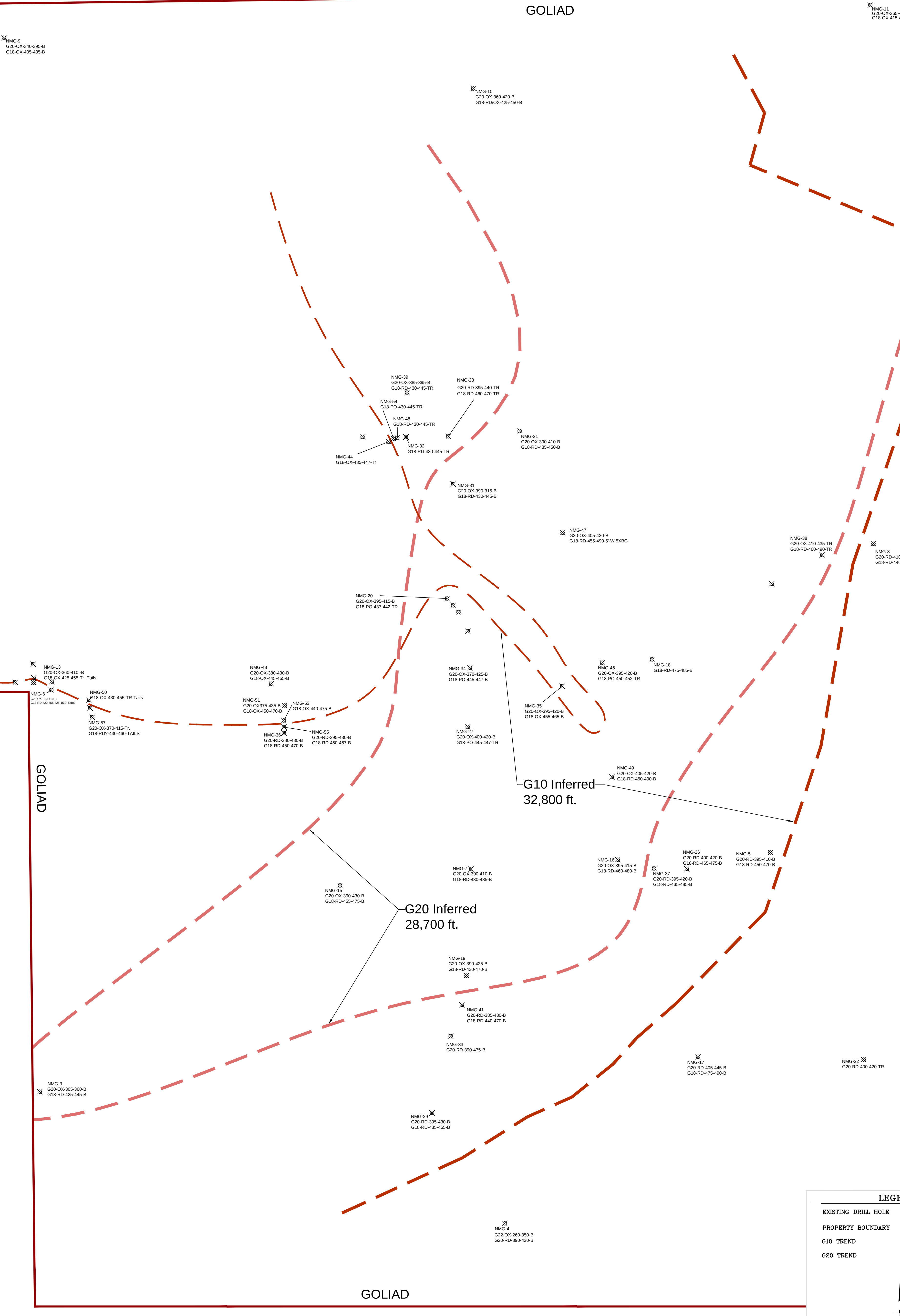
6/3/14

CAD FILE:

USER\GEOGRAPHIC\BROOKS\2014 REPORT FIGURES\ALTA MESA\FIG 14.2.1.2

FIGURE:

14.2



LEGEND

EXISTING DRILL HOLE

PROPERTY BOUNDARY

G10 TREND

G20 TREND

500

0

250

500

1,000

1 Inch = 500 ft.

GF

ENERGY FUELS

PREPARED FOR

ENERGY FUELS INC.

BRS

ENGINEERS & SURVEYORS

PREPARED BY

BRS INCORPORATED

1130 Major Avenue, Riverton, WY 82501

BRS

ENGINEERS & SURVEYORS

ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME:

MESTERA GRANDE - GOLIAD, JIM HOGG COUNTY

DRAWN BY: RSK,CDS

REVISION NO.

DATE

BY

DRAWING SCALE:

DATE:

5/20/14

1"=500'

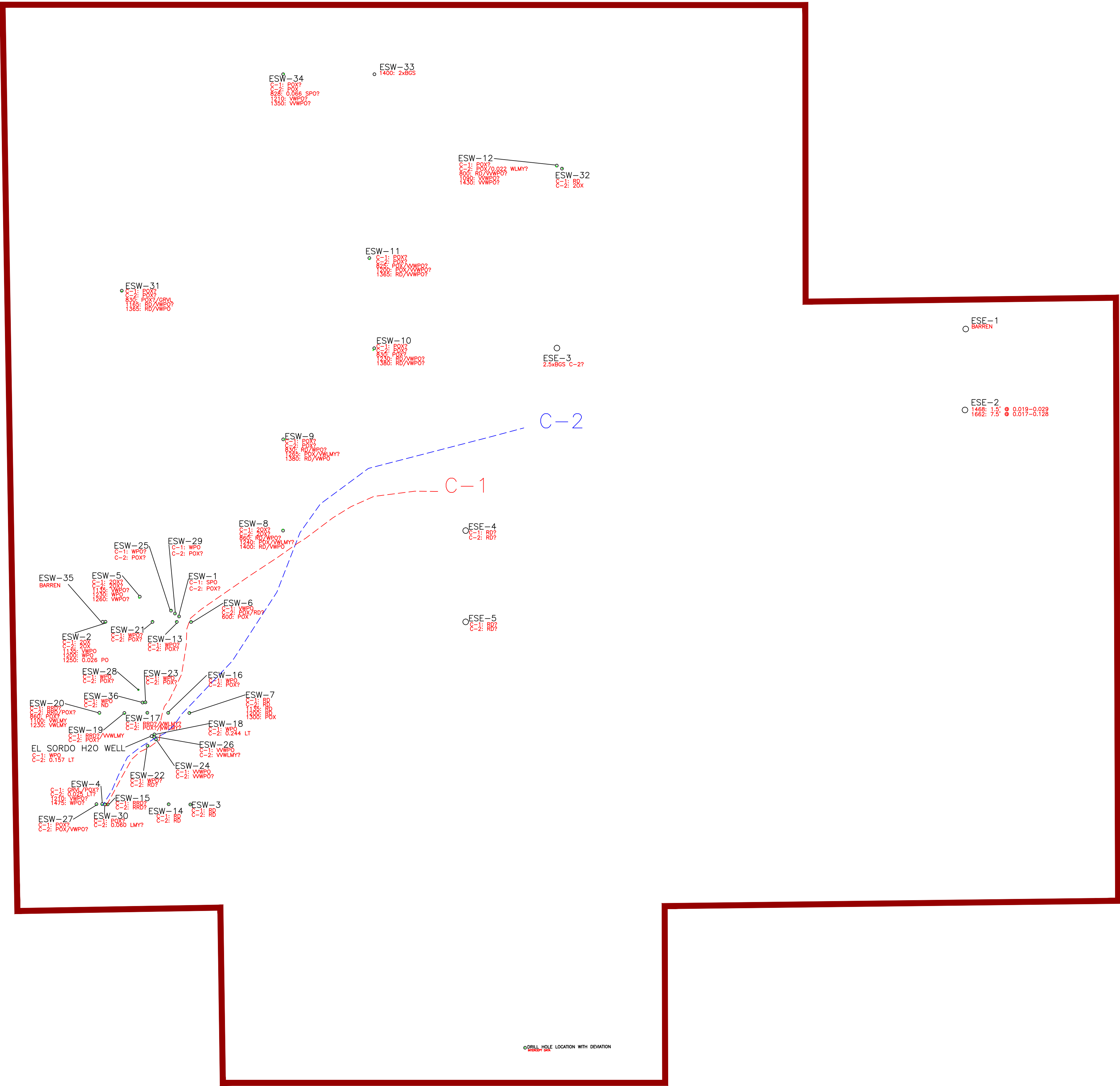
CHECKED BY: DLB

FIGURE:

LAST PLOT DATE: 6/3/14

CAD FILE: USERV\ENGINEERING\REPORT FIGURES 2014\MESTERA GRANDE.DWG

14.13



LEGEND

DRILL HOLE LOCATION WITH DEVIATION ○
INTERCEPT DATA AND OBSERVATIONS

C-1 SAND ORE TREND ---
C-2 SAND ORE TREND ---
AREA BOUNDARY

GRAPHIC SCALE
1 inch = 1,000 ft

PREPARED FOR
ENERGY FUELS INC.

PREPARED BY
BRS INCORPORATED

ALTA MESA URANIUM PROJECT
BROOKS, JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: EL SORDO, JIM HOGG COUNTY

DRAWN BY:	CHKD. CDR.	REVISION NO.	DATE	BY	DRAWING SCALE:
DATE	5/20/14				1"=1,000'
CHECKED BY: JLB					FIGURE:
LAST PLOT DATE: 6/2/14					14.14

CAD FILE: \\BRS\BRS\ALTA MESA\ALTA MESA.DWG

14.6 Risks

Technical risks related to the project are low as the mining and recovery methods are known and the mineral resources are tributary to an operating facility. While continuity of mineralization has been demonstrated in the wellfields, PAA-5 did underperform. 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, 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 could be assessed in the context of preliminary economic assessment (PEA) which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

The Author is not aware of any other specific risks or uncertainties that might materially affect the mineral resource estimate.

SECTIONS 15 through 22 – NOT APPLICABLE

SECTION 23: ADJACENT PROPERTIES

Alta Mesa is one of many ISR mines within the South Texas Uranium Province. Some of the other ISR mines are shown on Figure 1.1.

Garcia Property

The mineralized trends in the Goliad Formation continue to the east onto properties not controlled by EFR Alta Mesa LLC. 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. Historical mineral resource estimates for this area range from 6.7 million to 9 million pounds.

These historical resource estimates are not compliant with the National Instrument 43-101 ("NI 43-101") and with current accepted reserve and resource classifications as set forth by the Canadian Institute of Mining and Metallurgy (CIM). This estimate should be considered historic in nature and as such should not be relied upon.

Alta Mesa Este of URI

The Alta Mesa Este Project is controlled by Uranium Resources Inc. (URI) and is located northeast of the Project. According to URI's web site, historic drill data from the early 1980s, when the property was controlled by Chevron Resources, outlined wide-spread uranium mineralization in the Goliad Formation in the project area and on nearby lands. URI has been analyzing historical information from drilling in the 1980s and has identified a target area approximately 1.5 miles along the east-west strike of mineralization hosted in the Goliad Formation. No historic or current mineral resource estimate was stated by URI.

<http://www.uraniumresources.com/projects/texas/south-texas-projects>

SECTION 24: OTHER RELEVANT DATA AND INFORMATION

The Project is part of the existing Alta Mesa ISR production facility. As such the facility is fully licensed to operate. For each new wellfield a Production Area Authorization (PAA) permit for aquifer exemption will need to be obtained through TCEQ, whereas the Mesteña Grande portion of the Project will require full permitting requirements. However, the potential risks related to permitting for an existing facility is far less than for a greenfield operation.

During the Author's visit to the site on April 17, 2014, Mr. David Murry, a regulator from the Texas Commission on Environmental Quality, was on-site coordinating a site visit with the US EPA regarding MULLC's aquifer exemption application that was under review by the EPA at the time. The Author asked Mr. Murry if, from the perspective of environmental compliance, there were any specific risks for continued operations at the Project. His response was that he was not aware of any compliance issues and that although there are required permitting actions such as the aquifer exemption for future wellfields, he was not aware of any issues which would curtail operations.

As a cautionary notation, Texas is an Agreement State; however, aquifer exemption applications require concurrence and approval from the EPA. EPA was not present during the site visit with the state representative.

SECTION 25: INTERPRETATION AND CONCLUSIONS

The Project is located within the South Texas Uranium Province and mineralization occurs within known host formations common to the province which have been mined by both conventional and ISR methods. The Alta Mesa Uranium Project (Project) 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 in-circuit inventory.

Table 25.1 summarizes the Project Total Measured and Indicated Mineral Resources and the Project Total Inferred Mineral Resources.

Table 25.1 – Project Total Mineral Resources

ALTA MESA AND MESTEÑA GRANDE MINERAL RESOURCE SUMMARY 0.30 GT CUTOFF	TONS (x 1,000)	AVG. GRADE %U₃O₈	POUNDS (x 1,000)
TOTAL MEASURED AND INDICATED RESOURCE	1,635	0.111	3,616

TOTAL INFERRED RESOURCE	6,964	0.121	16,794
--------------------------------	-------	-------	--------

Mineral resources by classification are summarized on Table 14.1. All estimates are rounded.

25.1 Alta Mesa

Mineral resources in the Alta Mesa area are found within various sand horizons of the Goliad Formation at depths generally less than 600 feet and are within reasonable proximity to the Alta Mesa central mineral processing facility. Estimated mineral resources for Alta Mesa by area can be found on Table 14.2. The total estimated Measured and Indicated Mineral Resource for Alta Mesa is 3,335,000 pounds of uranium oxide. The total estimated Inferred Mineral Resource for Alta Mesa is 3,235,000 pounds of uranium oxide.

25.2 Mesteña Grande

Mineral resources in the Mesteña Grande area are found within portions of the Goliad, Oakville, and Catahoula Formations. Depths to mineralization in the Goliad and Catahoula Formations are generally less than 600 feet while depths to mineralization in the Oakville are in the range of 1,050 to 1,300 feet. Estimated mineral resources for the Mesteña Grande by area can be found on Table 14.3. The total estimated Indicated Mineral Resource for Mesteña Grande is 287,000 pounds of uranium oxide. The total estimated Inferred Mineral Resource for Mesteña Grande is 13,601,000 pounds of uranium oxide.

Development of the Mesteña Grande resources will require some form of satellite mineral processing facility to concentrate an intermediate product such as loaded resin for shipment to Alta Mesa for final processing.

25.3 Exploration Target

Exploration targets have been defined in three areas in proximity of the Alta Mesa processing facility including the South Alta Mesa, Lower C trend, and Indigo Snake. Exploration targets are primarily defined by drilling but may also be inferred from 3D seismic data which aid in the definition of sand channels. Exploration Target estimates by area and sand horizon are summarized on Table 9.2. The total Exploration Target range is provided in Table 25.2.

Table 25.2– Project Total Exploration Target

EXPLORATION TARGET	LOW RANGE ESTIMATE			HIGH RANGE ESTIMATE		
	TONS	GRADE	POUNDS	TONS	GRADE	POUNDS
	(x 1,000)	%U ₃ O ₈	(x 1,000)	(x 1,000)	%U ₃ O ₈	(x 1,000)
TOTAL	2,670	0.077	4,125	2,732	0.123	6,573

Tonnages, grade, and contained pounds of uranium oxide for exploration targets 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.

25.4 Summary of Risks

It is the Author's opinion that the risks associated are low as the Project has operating permits and facilities in place. The Project is tributary to the existing Alta Mesa ISR production facility. As such the facility is fully licensed to operate. For each new wellfield a PAA permit will need to be obtained from TCEQ. The Mestefia Grande portion of the Project will require complete permitting requirements as its considered a satellite operation.

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

- 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 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. 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 the economic considerations applied to them which would enable them to be categorized as mineral reserves. Inferred mineral resources could be assessed in the context of preliminary economic assessment (PEA) which is allowed as a restricted disclosure under section 2.3(3) of NI 43-101.

The Author is not aware of environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which would materially affect the mineral resource estimates. 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.

SECTION 26: RECOMMENDATIONS

Recommendations are limited to the progressive exploration and development drilling of mineral resources and exploration targets. Recommendations are limited to that amount of work considered necessary to elevate exploration targets to inferred mineral resources and inferred mineral resources to indicated mineral resources. Indicated mineral resources will support preliminary feasibility studies which would be appropriate if the recommended program were to result in the addition of indicated mineral resources. However, it is uncertain if additional exploration will result in discovery of an economic mineral resource on the property and/or demonstrate the continuity of mineralization within the areas of inferred mineral resources necessary for these areas to be classified as indicated mineral resources.

Assumptions for the purposes of estimating the costs of drilling program assume that drilling will be completed across the trend on close spacing and along the trend at a greater spacing (referred to as fence drilling) and include:

- Drilling Inferred Mineral Resources to drill hole density of Indicated Mineral Resources
 - Requires 5 holes per 200 feet of trend length
- Drilling Exploration Target to drill hole density of Inferred Mineral Resources
 - Requires 8 holes per 1,000 feet of trend
- Approximate 500-600 foot depth, \$2,500 per drill hole
 - approximately \$5 per foot all-in, includes site prep, drilling, logging, and reclamation
 - direct drilling costs up to 700 feet deep are approximately \$3.00 per foot
- Approximate 1,000-1,200 foot depth per drill hole, \$7,000 per drill hole, approximately \$7 per foot all-in

Drilling should be done in a phased-approach and be result-driven. The reality is that drilling would begin in the most prospective locations and work away assuming successful results. If drilling was unsuccessful, drilling would likely be curtailed. Also, if a drill hole penetrated the planned drill target along a fence, then the additional drill holes along that fence would not be needed. Conversely if the planned drill target was not penetrated with the planned fence additional drilling may be required. In summary, it is recommended that any drill programs be well planned and the drill results from each hole closely monitored and the program adjusted as appropriate. The cost estimates that follow assume that the entirety of each trend would need to be drilled and all of the holes along a fence would need to be drilled.

26.1 Inferred Mineral Resource Drilling

It is recommended that the exploration and development drilling program as estimated herein be conducted in phases as warranted by market conditions and the success for previous phases. The estimated cost assumes fully drilling the area of inferred mineralization for the Alta Mesa and Mesteña Grande areas are summarized in Table 26.1 and 26.2, respectively. If these drilling programs were successful in defining the estimated inferred mineral resources to the level necessary for classification as indicated mineral resources the overall cost would be approximately \$3.15 per pound of uranium. Alta Mesa would be less expensive per unit due to the shallower depth than Mesteña Grande.

If this program were to be implemented the recommended priorities would be:

- Alta Mesa LC and D sands
- Mesteña Grande Goliad and El Sordo
- South Alta Mesa and the B sand
- Mesteña Grande Oakville

Table 26.1 - Estimated Drilling Cost Alta Mesa Inferred Mineral Resource Areas

Alta Mesa	Trend Length	No. Drill Holes	Estimated Cost
A Sand Inferred	28,616	720	\$ 1,800,000
B Sand Inferred	25,011	625	\$ 3,562,500
LC Sand Inferred	23,256	580	\$ 1,450,000
D Inferred	14,800	370	\$ 925,000
South Alta Mesa Inferred	6,125	150	\$ 1,050,000
Total			\$ 6,787,500

Table 26.2 - Estimated Drilling Cost Mesteña Grande Inferred Mineral Resource Areas

Mesteña Grande	Trend Length	No. Drill Holes	Estimated Cost
MG Oakville inferred	199,000	5,000	\$ 40,000,000
MG Goliad inferred	60,200	1,500	\$ 4,500,000
El Sordo inferred	19,278	480	\$ 1,200,000
Total			\$ 45,700,000

The cost estimates above assume that the entirety of each trend would need to be drilled and all of the holes along a fence would need to be drilled. Drilling should be done in a phased-approach and be result-driven.

26.2 Exploration Target Drilling

It is recommended that the exploration and development drilling program as estimated herein be conducted in phases as warranted by market conditions and the success for previous phases. The estimated cost assumes fully drilling Exploration Target for Alta Mesa is summarized in Table 26.3. If this drilling program is successful in defining the inferred mineral resources in the Exploration Target areas the cost would be approximately \$1.15 per pound of uranium. Alta Mesa LC Sands would be less expensive per unit due to the shallower depth than South Alta Mesa or Indigo Snake. For South Alta Mesa it is recommended that the initial focus be on the E Sand for which gamma anomalies were noted in most of the existing drill holes.

If this program were to be implemented the recommended priorities would be:

- Alta Mesa LC Sand
- South Alta Mesa
- Indigo Snake

Table 26.3 - Estimated Drilling Cost Alta Mesa Inferred Mineral Resource Areas

Alta Mesa	Trend Length	No. Drill Holes	Estimated Cost
LC Sands	25,172	200	\$ 500,000
South Alta Mesa	90,932	730	\$ 5,110,000
Indigo Snake	33,200	270	\$ 1,890,000
Total			\$ 7,500,000

The cost estimates above assume that the entirety of each trend would need to be drilled and all of the holes along a fence would need to be drilled. Drilling should be done in a phased-approach and be result-driven.

SECTION 27: REFERENCES

Publications Cited:

CIM, “CIM Definition Standards On Mineral Resource and Mineral Reserves”, CIM, November, 2014.

CIM, “Estimation of Mineral Resources and Mineral Reserves”, (Uranium p. 51) adopted by CIM November 23, 2003.

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

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

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

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

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

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

Unpublished Reports:

Goranson, P., Mesteña Uranium LLC, Internal Memorandum Re: Review of Reserve Estimates, July, 2007.

Web Sites:

http://www.bcsbc.ca/uploadedFiles/NI_43-101-_What_You_Need_to_Know_-_2012-01-20.pdf

<http://www.texasmonthly.com/content/biggest-ranches>

<http://www.tshaonline.org/handbook/online/articles/gym01>

<http://en.wikipedia.org>

<http://www.uraniumresources.com/projects/texas/south-texas-projects>

APPENDIX A to the Technical Report

GT CONTOUR ESTIMATES

PAA-6 AND PAA-4

The Technical Report provides estimates of mineral resources and exploration targets for the Alta Mesa and Mesteña Grande area. Drilling in these areas is generally not of sufficient density to complete a GT contour estimation of mineral resource as is recommended for Uranium projects (“Estimation of Mineral Resources and Mineral Reserves”, adopted by CIM November 23, 2003, p 51.). As discussed in the Technical Report mineral resource estimates were based on the projection of average GT and width along projected mineralized trends representing the oxidation/reduction interface or REDOX along which the roll-front mineral deposits are formed.

As discussed in the report average GT values above the recommended GT cutoff of 0.30 were determined from the available intercept data from the overall drill data and/or summaries of the intercept data by areas and mineralized horizon or sand as appropriate for each mineral resource area. To determine a realistic average width of mineralization, GT contour estimates were completed for portions of the PAA-6 and PAA-4 wellfields adjacent to mineral resource areas to be estimated. Drill density and geologic continuity in the areas selected for GT contour mineral resource estimation were sufficient in the Author’s opinion to meet CIM criteria for measured mineral resources.

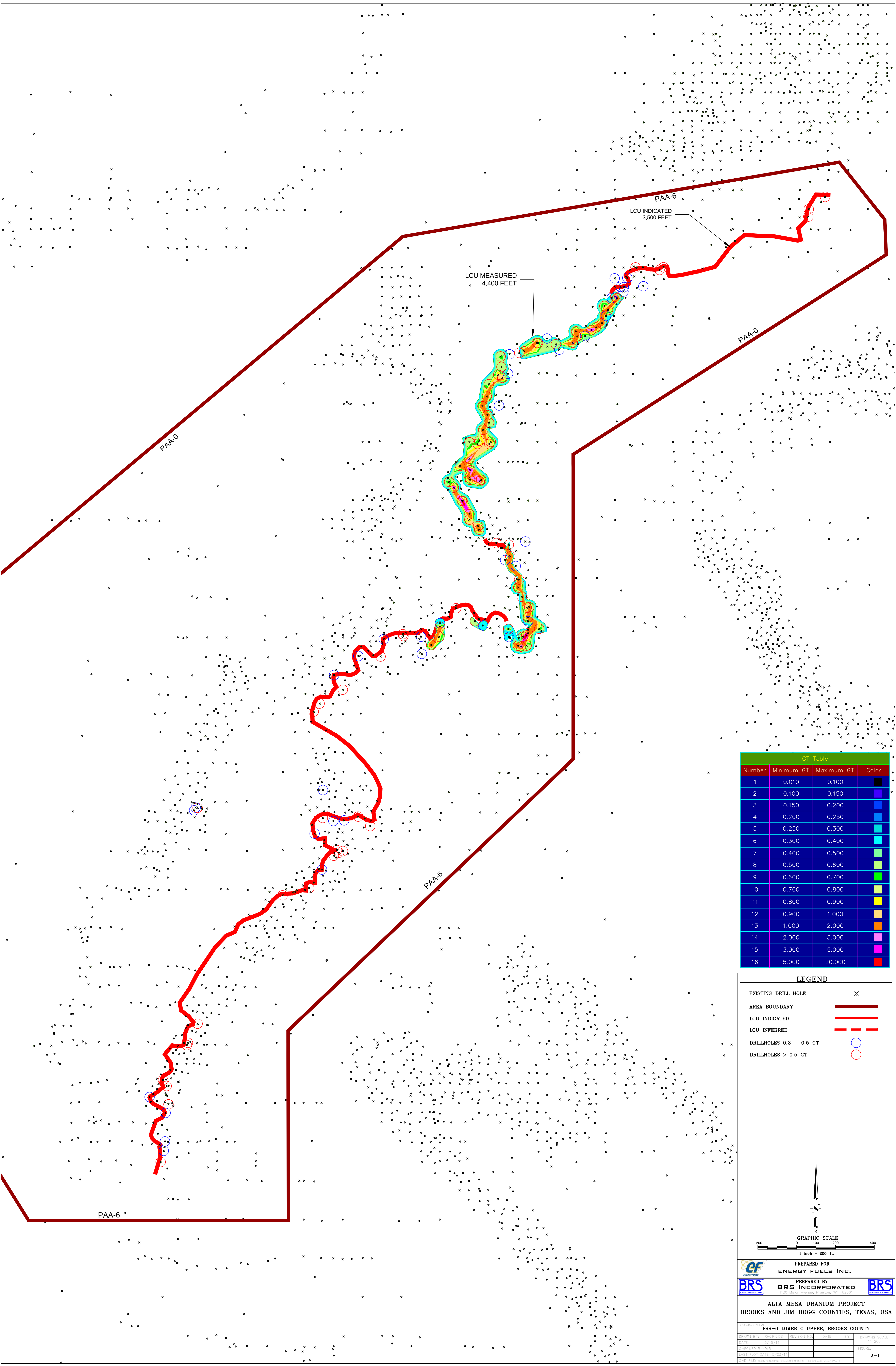
GT contours are provided on the following figures:

PAA-6 Lower C Upper (LCU)	Figure A-1
PAA-6 Lower C Lower (LCL)	Figure A-2
PAA-4 Lower C Upper (LCU)	Figure A-3
PAA-4 Lower C Lower (LCL)	Figure A-4

For PAA-6 within the area calculated by GT contour the Average width of mineralization greater than the 0.30 GT cutoff was 46.2 feet. Along the portion of the REDOX trend 80% was mineralized yielding an overall width of 37.0 feet.

For PAA-4 within the area calculated by GT contour the Average width of mineralization greater than the 0.30 GT cutoff was 53.4 feet. Along the portion of the REDOX trend 60% was mineralized, yielding an overall width of 32.2 feet.

The calculated average width from the two estimates is 34.6. The Author recommends using 35 feet for the average width where applicable for estimation of mineral resources and exploration targets.



GT Table			
Number	Minimum GT	Maximum GT	Color
1	0.010	0.100	
2	0.100	0.150	
3	0.150	0.200	
4	0.200	0.250	
5	0.250	0.300	
6	0.300	0.400	
7	0.400	0.500	
8	0.500	0.600	
9	0.600	0.700	
10	0.700	0.800	
11	0.800	0.900	
12	0.900	1.000	
13	1.000	2.000	
14	2.000	3.000	
15	3.000	5.000	
16	5.000	20.000	

LEGEND

EXISTING DRILL HOLE ✕

AREA BOUNDARY ———

LCU INDICATED ———

LCU INFERRED - - -

DRILLHOLES 0.3 – 0.5 GT ○

DRILLHOLES > 0.5 GT ○

GRAPHIC SCALE

0 100 200 400

1 inch = 200 ft

PREPARED FOR
ENERGY FUELS INC.

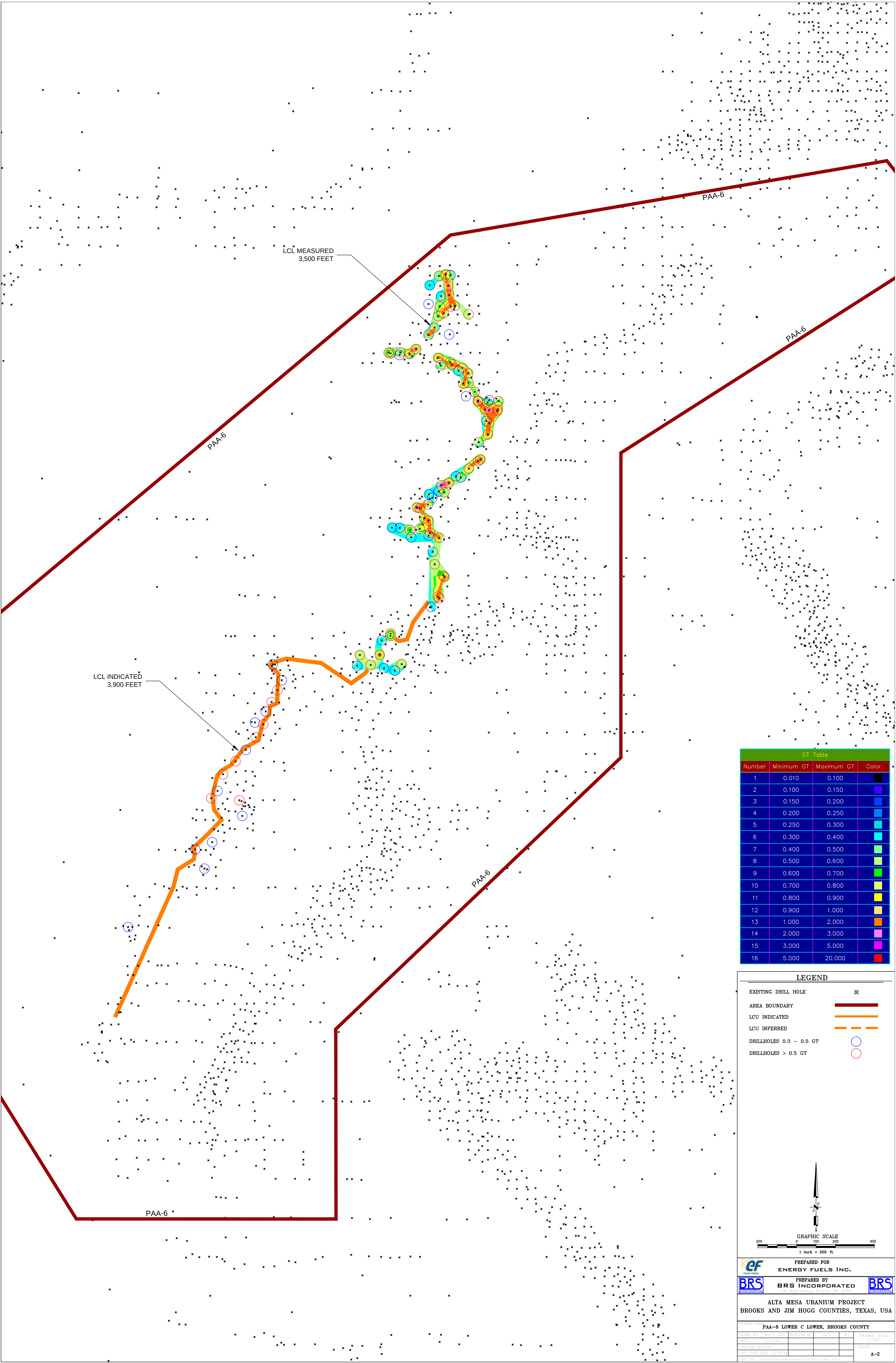
PREPARED BY
BRS INCORPORATED

ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: **FAA-6 LOWER C UPPER, BROOKS COUNTY**

DRAWN BY: RMC/PCS	REVISION NO.	DATE	BY	DRAWING SCALE:
DATE: 5/25/14				1"=200'
CHECKED BY: DB				FIGURE:
LAST PLOT DATE: 5/25/14				A-1

© 2014 BRS. All rights reserved. BRS is a registered trademark of BRS Incorporated. BRS is a registered trademark of BRS Incorporated.



GT Table			
Number	Minimum GT	Maximum GT	Color
1	0.010	0.100	
2	0.100	0.150	
3	0.150	0.200	
4	0.200	0.250	
5	0.250	0.300	
6	0.300	0.400	
7	0.400	0.500	
8	0.500	0.600	
9	0.600	0.700	
10	0.700	0.800	
11	0.800	0.900	
12	0.900	1.000	
13	1.000	2.000	
14	2.000	3.000	
15	3.000	5.000	
16	5.000	20.000	

LEGEND

EXISTING DRILL HOLE

AREA BOUNDARY

LCU INDICATED

LCU INFERRED

DRILLHOLES 0.3 – 0.5 GT

DRILLHOLES > 0.5 GT

CF

ENERGY FUELS

BRS

ENGINEERING

PREPARED FOR

ENERGY FUELS INC.

PREPARED BY

BRS INCORPORATED

ALTA MESA URANIUM PROJECT

BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME

PAA-6 LOWER C LOWER, BROOKS COUNTY

DRAWN BY: RBCP, CTS

REVISION NO.

DATE

BY

DRAWING SCALE:

DATE

5/25/14

1"=200'

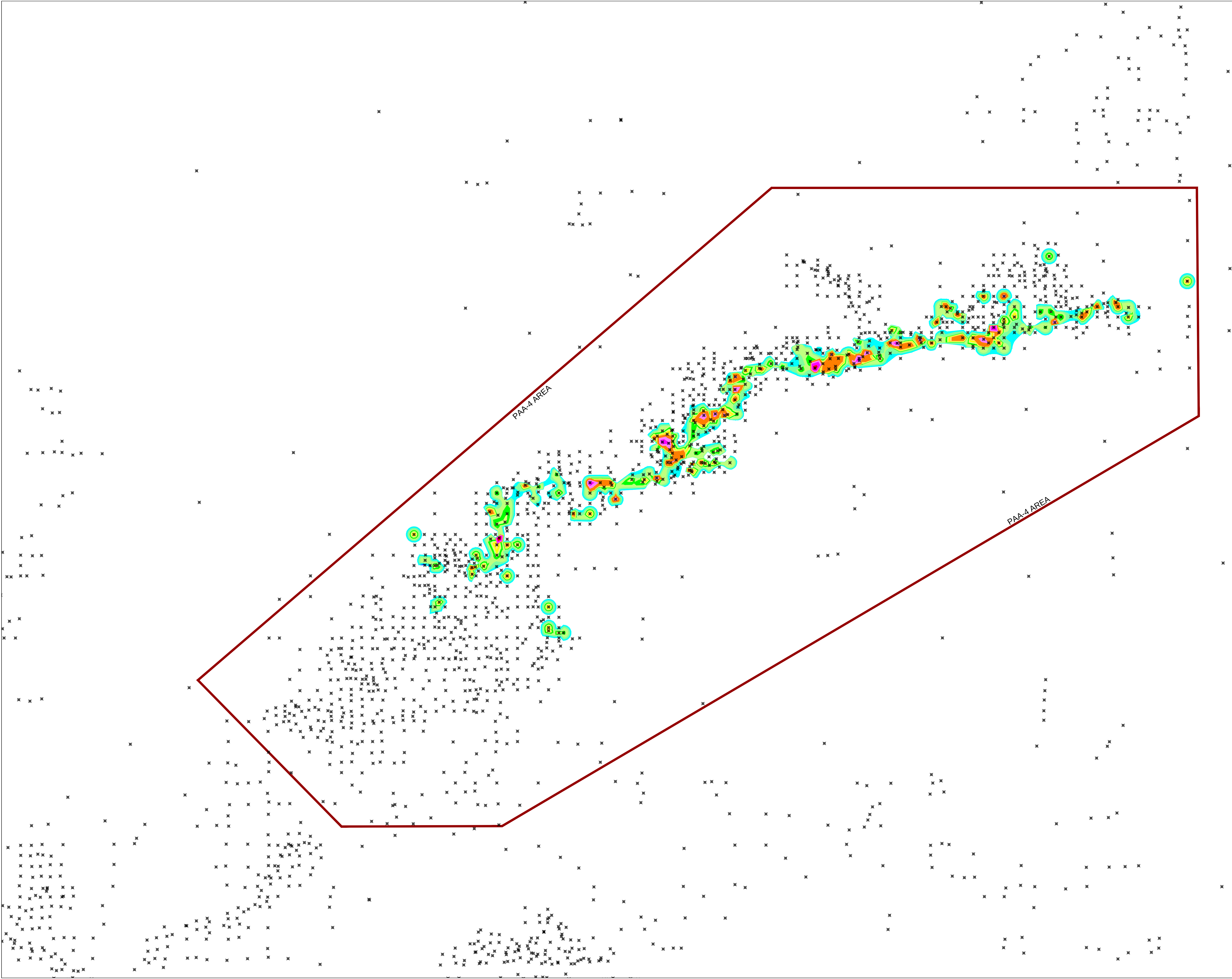
CHECKED BY: DB

FIGURE

LAST PLOT DATE: 5/23/14

A-2

CAD FILE: \\BRS\BRS\Projects\2014\Altamesa\Drawings\A-2.dwg



GT CONTOURS			
	MINIMUM GT	MAXIMUM GT	COLOR
1	0.00	0.10	
2	0.10	0.15	
3	0.15	0.20	
4	0.20	0.25	
5	0.25	0.30	
6	0.30	0.40	
7	0.40	0.50	
8	0.50	0.60	
9	0.60	0.70	
10	0.70	0.80	
11	0.80	0.90	
12	0.90	1.00	
13	1.00	2.00	
14	2.00	3.00	
15	3.00	5.00	
16	5.00	20.00	

LEGEND

EXISTING DRILL HOLE x

AREA BOUNDARY —

GRAPHIC SCALE

0 100 200 400

1 inch = 200 ft.

CF
CONSULTING

PREPARED FOR
ENERGY FUELS INC.

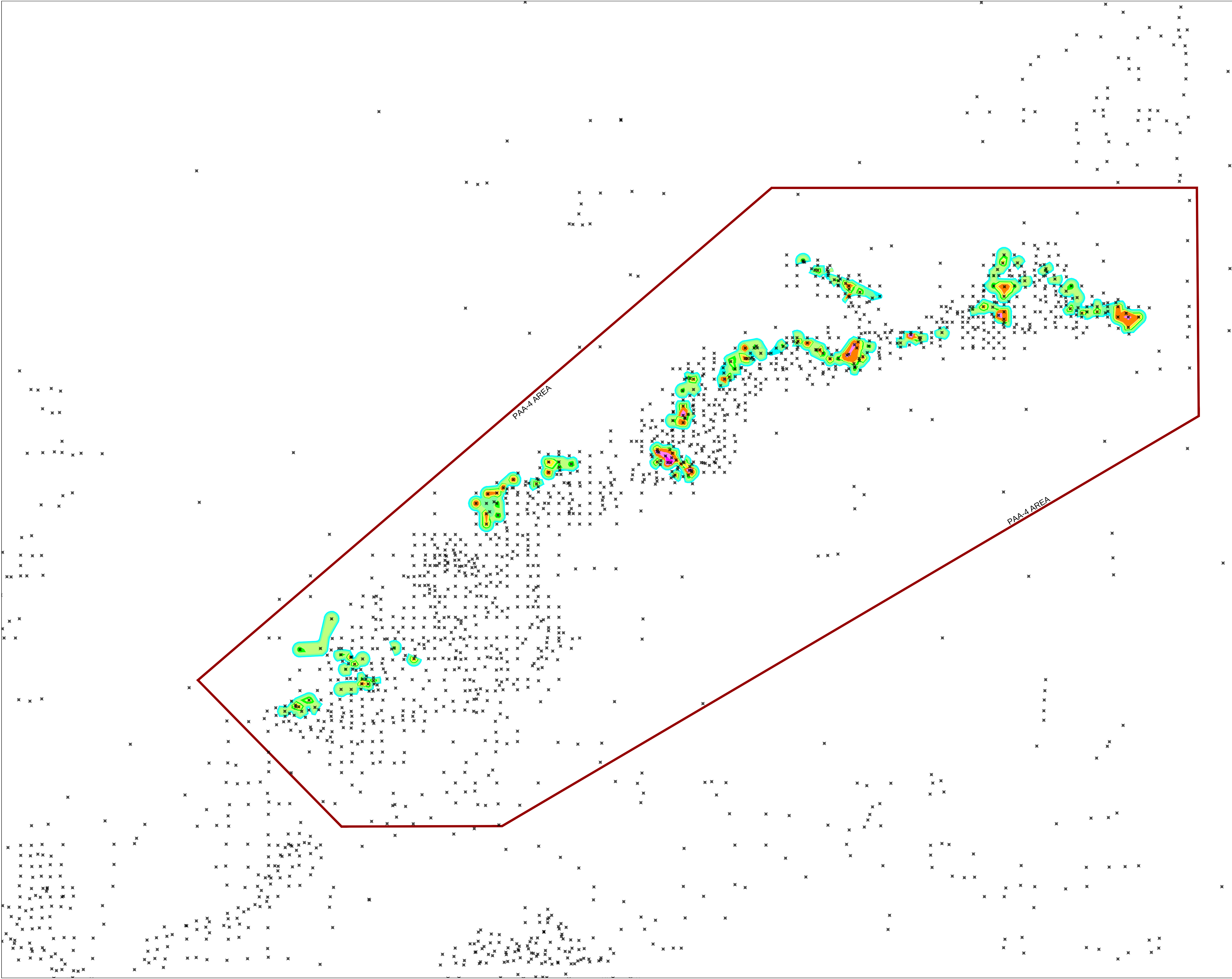
BRS
ENGINEERING

PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

BRS
ENGINEERING

ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: PAA-4 LCU GT CONTOURS			
DRAWN BY: RSR	REVISION NO.	DATE	BY
DATE: 5/20/14			
CHECKED BY: DLB			FIGURE:
LAST PLOT DATE: 6/3/14			
CAD FILE: USER\GME\ALTAURANIUM\REPORT FIGURES 2014\10 A-3.dwg			A-3



GT COUNTOURS			
	MINIMUM GT	MAXIMUM GT	COLOR
1	0.00	0.10	
2	0.10	0.15	
3	0.15	0.20	
4	0.20	0.25	
5	0.25	0.30	
6	0.30	0.40	
7	0.40	0.50	
8	0.50	0.60	
9	0.60	0.70	
10	0.70	0.80	
11	0.80	0.90	
12	0.90	1.00	
13	1.00	2.00	
14	2.00	3.00	
15	3.00	5.00	
16	5.00	20.00	

LEGEND

EXISTING DRILL HOLE x

AREA BOUNDARY —

GRAPHIC SCALE

0 100 200 400

1 inch = 200 ft.

CF
CONSULTING

PREPARED FOR
ENERGY FUELS INC.

PREPARED BY
BRS INCORPORATED
1130 Major Avenue, Riverton, WY 82501

ALTA MESA URANIUM PROJECT
BROOKS AND JIM HOGG COUNTIES, TEXAS, USA

DRAWING NAME: PAA-4 LCL GT CONTOURS, BROOKS COUNTY			
DRAWN BY: RSR	REVISION NO.	DATE	BY
DATE: 5/20/14			
CHECKED BY: DLB			
LAST PLOT DATE: 6/3/14			
CAD FILE: USER\JONES\BROOKS\URANIUM\REPORT FIGURES 2014\FIG A-3.4.DWG			FIGURE: A-4