TECHNICAL REPORT
ON
LA SAL DISTRICT PROJECT
(Including the Pandora, Beaver, and Energy Queen Projects)

San Juan County, Utah, U.S.A.

Prepared for Energy Fuels Inc.
In Compliance with Canadian National Instrument 43-101
"Standards of Disclosure for Mineral Projects"

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1.0 Summary

Energy Fuels Resources Corporation, an indirect subsidiary of Energy Fuels Inc. ("EFI"), previously had a Technical Report prepared in accordance with National Instrument 43-101, Standards for Disclosure for Mineral Properties ("NI 43-101") on the Mineral Resources of the Energy Queen project in March 2011 (**Updated Technical Report on Energy Fuels Resources Corporation's Energy Queen Project San Juan County, Utah March 15, 2011** (the "Energy Queen Technical Report") by Douglas C. Peters (Certified Professional Geologist, Peters Geosciences, Golden, Colorado). The Energy Queen property is located near the west end of the La Sal Mineral Belt, about three-to-five miles west of the town of La Sal, Utah. In June 2012, EFI acquired the U.S. Mining Division of Denison Mines Corp. ("Denison"), including Denison's subsidiary Denison Mines Holdings Corp. (now called Energy Fuels Holdings Corp.), a subsidiary of which holds the Pine Ridge, Pandora, Snowball, La Sal, and Beaver mines in the eastern part of the La Sal Mineral Belt, as well as property between the Beaver and Energy Queen mines, referred to in this report as the Redd Block.

Peters Geosciences has been retained by EFI to prepare a new independent Technical Report to support disclosure of Mineral Resource estimates for the combined property now controlled by EFI, hereafter referred to as the La Sal Project. This new Technical Report is intended to replace the Energy Queen Technical Report.

1.1 Land and Facility Status

The La Sal Project consists of four core properties, from east-to-west, Pandora/Snowball, Beaver/La Sal, Redd Block, and Energy Queen, located in San Juan County, Utah near the town of La Sal (Figure 1-1). Other properties within the La Sal Project include Pine Ridge, east of Pandora, as well as unpatented mining claims and a Utah State Mineral Lease west of the Energy Queen property. The La Sal Project property stretches for 11 miles in an east-west direction and covers all, or parts of the following Sections: Sections 31, 32, and 33, T28S, R25E; Sections 4, 5, 6, and 7, T29S, R25E; Sections 25, 26, 31, 32, 33, 34, 35, and 36, T28S, R24E; Sections 1, 2, 3, 4, 5, 6, 7, 11, and 12, T29S, R24E; Section 36, T28S, R23E; and Sections 1, 2, and 12, T29S, R23E, SLBM, San Juan County, Utah.

The property is held by EFI's indirect subsidiaries, EFR Colorado Plateau LLC and Energy Fuels Resources Corporation, collectively referred to as "EFR", under a variety of methods, including private surface use and access leases, private mineral leases, State of Utah mineral leases, a San Juan County surface use, access, and mineral lease, and 272 unpatented mining claims that are either owned by EFR (110 claims), leased by EFR (129 claims), or under an option to lease or purchase by EFR (33 claims). The total land package consists of approximately 10,800 acres.

The unpatented claims cover about 4,300 acres, the eight State of Utah mineral leases total approximately 2,800 acres, the San Juan County leased land contains just over 263 acres, and the six separate surface access and nine private parcel mineral leases apply to a total of 3,200 acres.

The all-weather Utah State Highway 46 is within the Project boundary for the western eight (8) miles. Unpaved Forest Service roads access the eastern part of the Project. All other portions of the Project are accessible via County or private dirt roads. Surface facilities sufficient to conduct mining operations exist at the Pandora, La Sal, Beaver, and Energy Queen mines, with the exception of the head frame and hoist at the Energy Queen, which needs to be refurbished. A water treatment facility will also be needed to mine the Energy Queen and Redd Block deposits. The mines are currently serviced by adequate power lines and other utilities.

1.2 History

Numerous underground mines near outcrops in the eastern part of the La Sal Trend (La Sal Creek Canyon District) extracted vanadium and uranium during the early 1900s. Deeper deposits of the central La Sal Trend (the area of the La Sal Project) were discovered in the 1960s and developed for production in the 1970s through vertical shafts and declines. La Sal Project area and La Sal Creek District production through 1980 totaled about 6,426,000 pounds U_3O_8 (average grade of 0.32% U_3O_8) and nearly 29,000,000 pounds V_2O_5 (average grade of 1.46%) (Kovschak and Nylund, 1981). Most production in the district was derived from fluvial sandstones, mainly in the upper part of the Salt Wash Member of the Morrison Formation of Jurassic age. Sandstone lenses in the overlying Brushy Basin Member of the Morrison Formation host uranium-vanadium deposits in some locales. Sometime after World War II (approximately 1948-1954), exploration work on Morrison Formation outcrops in the west end of the district resulted in the discovery of the Rattlesnake Mine (Pit) two miles west-southwest of the Energy Queen shaft (U.S. Atomic Energy Commission, 1959), on claims now owned by EFR. The Pandora mine was operated by Atlas Minerals in the 1970s and early 1980s. Umetco Minerals Corporation ("Umetco"), a subsidiary of Union Carbide Corporation, operated the Snowball, La Sal, and Beaver Mines during the same time period. The Energy Queen mine, then known as the Hecla Shaft, was started in 1979 by the Union Carbide/Hecla Joint Venture. The mine stopped production in 1983 due to inadequate uranium prices. General Electric Uranium Mining Company ("GEUMCO") operated the Pine Ridge mine in the late 1970s, producing from a sandstone lens in the Brushy Basin Member of the Morrison Formation. The Pine Ridge mine was acquired by Minerals Recovery Corporation ("MRC") in 1981 which developed a decline to the Salt Wash Member of the Morrison Formation, but halted operations before any significant production. Low uranium and vanadium prices forced all production throughout the district to cease about 1991. Ores from these mines have been successfully processed at the now dismantled Uravan Mill (Umetco), the now dismantled Moab Mill (Atlas Minerals Corporation), and the operating White Mesa Mill, now owned by EFR White Mesa LLC, a wholly-owned subsidiary of EFI.

Denison began producing from the Pandora Mine in 2006 and later from the Beaver Shaft/La Sal decline following its acquisition by International Uranium Corporation ("IUC"). Ore production by Denison and by EFR (following its acquisition of Denison's U.S. Mining Division) between 2006 and 2012 from the mines in the La Sal Project area totaled approximately 412,000 tons

(1,658,000 lbs U_3O_8 at an average grade of 0.20% U_3O_8 and 8,431,000 lbs V_2O_5 at an average grade of 1.02% V_2O_5). From 2008 through mid-2012, Denison drilled 220 exploration and fill-in (confirmation) holes in the project area. EFR drilled another 27 holes on the Energy Queen property and the State land to the northwest of the Energy Queen from 2007 through 2012. Due to declining uranium prices, production ceased in October 2012 at the Beaver/La Sal Mines and in December 2012 at the Pandora Mine. Both mines were put on a standby status and are currently maintained in conditions that would allow them to be placed back into production within a few weeks' time.

1.3 Geology and Mineralization

The significant uranium deposits in the La Sal Project occur in the late Jurassic Morrison Formation. The Morrison comprises two members in the La Sal area. The lower member, the Salt Wash, is the main uranium host. The upper part of the Morrison is the Brushy Basin Member; it is from 350 to 450 feet thick. The Salt Wash, approximately 300 feet thick, consists of about equal amounts of fluvial sandstones and mudstones deposited by meandering river systems flowing generally toward the east. The Brushy Basin was deposited mostly on a large mud flat probably with many lakes and streams. Much of the material deposited to form the Brushy Basin originated from volcanic activity to the west. The majority of the uranium production has come from the upper sandstones of the Salt Wash Member known as the Top Rim (historically referred to as the ore-bearing sandstone or "OBSS"), which ranges from about 60 feet to 100 feet thick.

Light-brown and gray sandstones and conglomerates of the 200-foot thick Cretaceous Burro Canyon Formation overlie the Brushy Basin. These crop out in the eastern part of the La Sal Project (over the Pine Ridge, Pandora, and La Sal/Snowball areas). This formation contains interbedded green and purplish mudstones with a few thin limestone beds. The Burro Canyon Formation is exposed covering the Brushy Basin at the west end of the Project, on the State sections and claims west of the Energy Queen. Locally, silicification altered the limestones to chert and some of the sandstones to orthoquartzite. Orthoquartzite cobbles and boulders litter the Brushy Basin slopes. In the central part of the La Sal Project (Beaver Mine, Redd Block, and Energy Queen), the Burro Canyon is covered by a layer of alluvium and gravels shed from the La Sal Mountains to the north. These gravels vary in thickness from a thin veneer to over 120 feet thick.

The La Sal District uranium-vanadium deposits are similar to those elsewhere in the Uravan Mineral Belt. Host rocks within the areas surrounding the La Sal Project consist of oxidized sediments of the Morrison Formation, exhibiting red, hematite-rich clastic rocks. Individual deposits are localized in areas of reduced, gray sandstone and gray or green mudstone (Thamm et al., 1981). The Morrison sediments accumulated as oxidized detritus in the fluvial environment. However, there were isolated environments where reduced conditions existed, such as oxbow lakes and carbon-rich point bars. During early burial and diagenesis, the through-flowing ground water within the large, saturated pile of Salt Wash and Brushy Basin material remained oxidized, thereby transporting uranium in solution. When the uranium-rich waters encountered the zones of trapped reduced waters, the uranium precipitated. Therefore, deposits vary greatly in thickness, grade, size, and shape. Vanadium may have been leached from iron-titanium mineral grains and subsequently deposited along with, or prior, to the uranium.

The uranium- and vanadium-bearing minerals occur as fine-grained coatings on the detrital grains, they fill pore spaces between the sand grains, and they replace some carbonaceous material and detrital quartz and feldspar grains. The primary uranium mineral is uraninite (pitchblende) (UO_2) with minor amounts of coffinite ($USiO_4OH$). Montroseite (VOOH) is the primary vanadium mineral, along with vanadium clays and hydromica.

1.4 Mineral Resources

Mineral Resource estimates have been made for the La Sal Project. The Mineral Resources are classified as defined in the NI 43-101 and in accordance with CIM Standards on Mineral Resources and Mineral Reserves. They are grouped by logical mining unit subareas and summarized in Table 1-1, below.

Table 1-1. Summary of Measured, Indicated, and Inferred Mineral Resources for the La Sal Project.

Mines	Tons	U_3O_8 Lbs	Avg Grade (U_3O_8)	V_2O_5 Lbs	Avg Grade (V_2O_5)
Energy Queen					
Measured	262,000	971,000	0.19	5,100,000	0.97
Indicated	81,000	268,000	0.17	1,409,000	0.87
Inferred	43,000	79,000	0.09	417,000	0.48
Redd Block					
Measured	336,000	1,260,000	0.19	6,615,000	0.98
Indicated	35,000	47,000	0.07	249,000	0.35
Inferred	95,000	171,000	0.09	900,000	0.47
Beaver/LaSal					
Measured	215,000	800,000	0.19	4,199,000	0.98
Indicated	9,000	33,000	0.18	173,000	0.96
Inferred	29,000	67,000	0.11	352,000	0.60
Pandora					
Measured	196,000	701,000	0.18	3,682,000	0.94
Indicated	6,700	19,000	0.14	99,000	0.73
Inferred	18,000	44,000	0.12	232,000	0.66
Grand Total (Measured+Indicated)	**1,142,000**	**4,100,000**	**0.18**	**21,525,000**	**0.94**
Grand Total (Inferred)	**185,000**	**362,000**	**0.10**	**1,902,000**	**0.51**

Footnotes:

1) Tons and grade are calculated using a dilution of one foot of waste, as further described in the text.

2) Resource estimate is based on drill hole intercept cutoff grade of 0.10% U_3O_8 and a GT of 0.20.

3) Vanadium grade is estimated at the district average ratio to uranium grade of 5.25 : 1

1.5 Conclusions

Peters Geosciences has reviewed the EFR resource estimate and supporting documentation for the La Sal Project and is of the opinion that classification of the mineralized material as Measured, Indicated, or Inferred Mineral Resources meets the definitions and guidelines of the CIM Definition Standards for Mineral Resources and Mineral Reserves. The mines in the La Sal Project, other than the Energy Queen mine, are expected to be able to return to production quickly once economic conditions allow for the mining and milling costs and mining of known resources at a profit.

1.6 Recommendations

The mines included in the Project other than the Energy Queen mine will require only short periods of startup procedures and costs to be able to resume mining when economic conditions warrant. The Author recommends that EFR proceed with 1) rehabilitation of the Energy Queen mine and 2) a drilling program in that area to fully define the mineralization trends and connections, so that mine development can be planned and executed properly. In addition, drilling should be performed 1) in the Crested Claims area in the border area of the Redd Block and Beaver mine, 2) at the Pandora mine, and 3) at the optioned claims north of the Beaver mine, upon completion of the EA with BLM and USFS, to identify resource connections and extensions that are suggested by known intercepts in these areas but have not been fully explored yet.

2.0 Introduction and Terms of Reference

Peters Geosciences was retained by EFI to prepare an updated, independent Technical Report, in conjunction with updating of background information in the report by EFR staff, compliant with NI 43-101 on the La Sal Project a uranium-vanadium project located in Utah. This report has been prepared to meet the requirements of NI 43-101 and Form 43-101F1.

Peters Geosciences understands that this report will be used in support of future public offerings by EFI.

Douglas C. Peters, a Qualified Person under NI 43-101 through membership as a CPG (AIPG #8274) and RM (SME Member #2516800), and principal in Peters Geosciences, visited the La Sal Project on March 11, 2014 during a tour of the various component properties led by Mr. Richard White, CPG (AIPG #08792) and Mr. Race Fisher, Mine Superintendent, of EFR. In addition to viewing the surface facility conditions at all of the project area mines, Mr. Peters traversed parts of the property. Only surface conditions were observed because access to the underground mines was not possible due to the Energy Queen being flooded and not fully rehabilitated yet. In addition, underground access to the underground portions of the other mines was not possible due to them being inactive and having not recent ventilation to allow safe access on short notice. Consequently, depositional characteristics of the uranium were not directly seen and no in-place samples were collected.

Relevant reports, maps, and data were reviewed and discussed with EFR staff, principally Mr. Richard White, who serves as Chief Geologist for EFI, Dr. Kaiwen Wu, Sr. Exploration Geologist for EFI, Tyler Johnson, Geological Consultant for EFR, and Mr. Race Fisher and Mr. Todd Eldredge, both of EFR. The References section of this report lists the reviewed documents of importance as cited in this report.

Measurements are in English units (i.e., short tons, feet, or acres), and grades are expressed as percent of U_3O_8 or V_2O_5.

3.0 Reliance on Other Experts

This updated report, prepared for EFR, has been reviewed by Douglas C. Peters of Peters Geosciences for changes and expansions made to the March 2011 Energy Queen Technical Report by EFR staff. Some of the figures in that report were reused and/or modified for use in this report. Text also has been added and modified by Peters Geosciences as part of the report preparation process for EFR. The information, conclusions, opinions, and estimates contained herein are based upon information available to Peters Geosciences at the time of report updating and preparation. This includes certain data, maps, and other documents in the possession of EFR and reviewed with Mr. Richard White, CPG, and other EFR staff in the La Sal Project area and in their offices in Lakewood and Egnar, Colorado. With the exception of results from 2007-2012 drilling by Denison and EFR, most data used in this report are from earlier exploration and mining efforts conducted by previous companies in the immediate La Sal District.

On March 11, 2014, Mr. White led a field review for Mr. Peters of the properties covered by this report and was instrumental in assisting with the review, discussion, and understanding of both the general and site-specific geology of the La Sal mining district and La Sal Project. Mr. Tyler Johnson supervised a total 220 drill holes exploration program for Denison from 2008 to 2012, and Dr. Kaiwen Wu supervised the drilling program of the Energy Queen mine for EFR in 2012. Therefore, they both have direct knowledge of the site conditions, mineralization, and geology.

Mr. Peters reviewed the available claims and leases covering the La Sal Project, although he is not an attorney and cannot attest to compliance of specific legal language in those documents. Nonetheless, such documents appear to be sufficient based on his prior experience with such claims and leases. Likewise, Mr. Peters did not review the permitting, maintenance, and reclamation status of the various mining facilities included in the La Sal Project beyond discussions with Mr. White and Mr. Fisher.

4.0 Property Description and Location

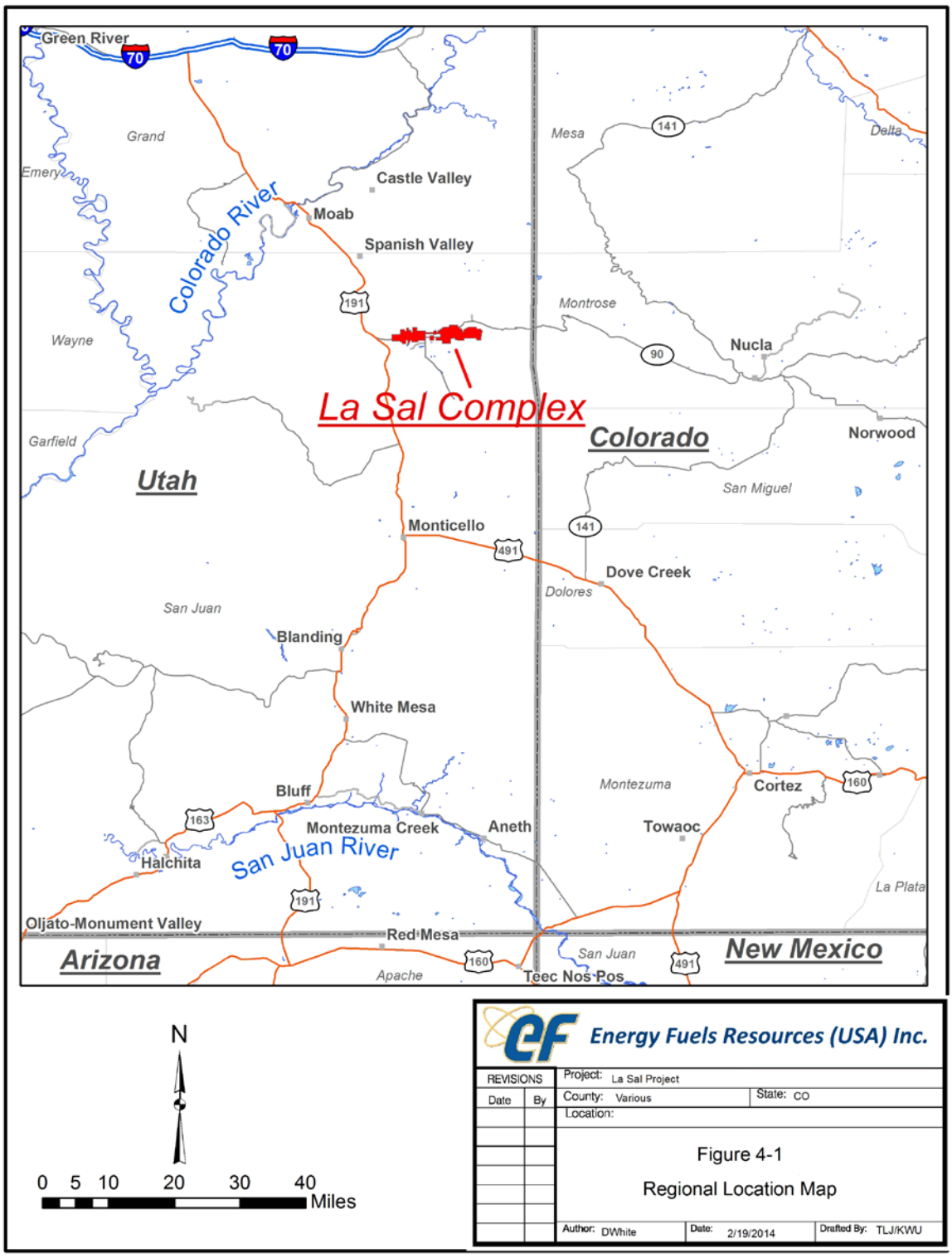
All the property in the Energy Fuels' La Sal Project is controlled by EFI's wholly-owned subsidiaries, EFR Colorado Plateau LLC and Energy Fuels Resources Corporation (collectively referred to as "EFR"). The La Sal Project is located in the northeastern part of San Juan County, Utah (Figure 4-1). The Project property forms a narrow East-West band, eleven-miles long, of contiguous parcels. The town of La Sal, Utah is near the Project center. The La Sal Project property consists of approximately 10,800 acres of mineral rights in a combination of unpatented claims owned by EFR, unpatented claims leased by EFR, State of Utah mineral leases, a San Juan County surface use, access, and mineral lease, and mining leases on private mineral rights, all located in the La Sal Mining District (Figure 4-2). The land surface overlying some mineral rights is also of varying ownership. Where the federal government controls the surface and minerals, EFR has the right to access, explore, develop and mine on unpatented mining claims located on land managed by the U.S. Bureau of Land Management ("BLM") or U.S. Forest Service ("USFS"), as long as National Environmental Protection (NEPA) regulations are met. All other property, regardless of ownership, is covered by access or surface lease agreements with land owners, including ranchers, San Juan County, and the State of Utah (Figure 4-3).

A total of 272 unpatented mining claims, located on land managed by the BLM or USFS, are controlled by EFR. Of these, 110 claims are owned by EFR, 129 claims are leased by EFR, and EFR has an option to lease or purchase 33 claims. The claims cover about 4,330 acres, the eight State of Utah mineral leases total approximately 2,860 acres, the San Juan County leased land contains just over 263 acres, and the six separate surface access and nine private parcel mineral leases apply to a total of 3,430 acres.

The area encompassed by the Project is located on two U.S. Geological Survey-7 ½ minute-Quadrangle topographic maps: 1) La Sal West, Utah and 2) La Sal East, Utah. The La Sal Project consists of four core properties, from east-to-west, Pandora/Snowball, Beaver/La Sal, Redd Block, and Energy Queen. Other properties within the La Sal Project include Pine Ridge east of Pandora and unpatented mining claims and a Utah State Mineral Lease west of Energy Queen. The property covers all, or parts of the following Sections: Sections 31, 32, and 33, T28S, R25E; Sections 4, 5, 6, and 7, T29S, R25E; Sections 25, 26, 31, 32, 33, 34, 35, and 36, T28S, R24E; Sections 1, 2, 3, 4, 5, 6, 7, 11, and 12, T29S, R24E; Section 36, T28S, R23E; and Sections 1, 2, and 12, T29S, R23E, SLBM, San Juan County, Utah.

Surrounding property to the southwest, west, most of the north, and the southeast of the Project is BLM land. Bordering on the northeast is USFS land. The south-central boundary joins both private and more BLM lands.

Some of the mining leases date back to the late 1960s and early 1970s when Union Carbide was conducting exploration drilling and mine development in the Beaver/La Sal/Redd Block area. American Metal Climax, followed by Atlas Minerals Corporation ("Atlas"), also were active at the Pandora, and Hecla was exploring the Energy Queen


Green River
70
70
Grand
Emery
Wayne
Garfield
Colorado River
Castle Valley
Moab
Spanish Valley
191
La Sal Complex
Utah
Monticello
491
San Juan
Blanding
White Mesa
Bluff
163
Montezuma Creek
Aneth
San Juan River
Halchita
191
Oljato-Monument Valley
Red Mesa
Arizona
160
Apache
Mesa
141
Delta
Montrose
90
Nucla
Colorado
Norwood
San Miguel
141
Dove Creek
Dolores
Montezuma
Cortez
160
Towaoc
La Plata
San Juan
491
New Mexico
Teec Nos Pos
N
0 5 10 20 30 40
Miles
Energy Fuels Resources (USA) Inc.
REVISIONS
Date
By
Project: La Sal Project
County: Various
State: CO
Location:
Figure 4-1
Regional Location Map
Author: DWhite
Date: 2/19/2014
Drafted By: TLJ/KWU

area. One State of Utah mineral lease dates from 1960. All of the leases have transferred to EFR, some through several successors. Several older leases were renegotiated in 2008. A brief description of EFR's succession of mineral rights of the consolidated project area can be found near the end of Section 6 in this report.

A summary of the various parcels mineral ownership follows, with brief discussions of surface access agreements.

4.1 Claims Owned by EFR

Annual holding costs on unpatented claims consist of rental fees to the BLM at $140/year/claim, due on or before September 1st each year. An affidavit of the payment to the BLM also must be filed with the appropriate County each year for a nominal fee (approximately $10 per claim). This applies to all unpatented claims whether owned or leased by EFR. Peters Geosciences has reviewed the BLM's Land and Mineral Legacy Rehost 2000 System ("LR2000") web site and received receipt-stamped and recorded BLM and San Juan County ("County") filings. These documents indicate EFR has met the federal and state requirements to retain all claims discussed in this Technical Report (owned or leased) until September 1, 2014. All unpatented mining claims (including those discussed throughout this Report) must be renewed annually in order to be maintained in good standing. Therefore, timely filing and fee payments are recommended well in advance of September 1, 2014 in order to maintain all claims for the next assessment year and to avoid filing backlogs at the BLM and County. There are no royalties associated with these claims.

4.1.1 Beaver/La Sal Area

EFR owns 21 unpatented claims covering parts of the Beaver/La Sal and Snowball mines. These are Snowball 1 and 2; Beaver 22-28; Robin 1-5; Fisher and Fisher 1-3; Chuck 1 and 2; and Cal Fraction. The claims lie in Section 35, T28S, R24E, Section 31, T28S, R25E, and Section 1, T29S, R24E. There are no royalties associated with these claims.

4.1.2 Energy Queen Area

EFR owns 56 unpatented claims covering part of the Energy Queen mine Mineral Resources and west of the Energy Queen property. In March 2009, EFR purchased 29 claims from BZU Holdings (Mesa Uranium) in section 1, T29S, R23E. These are the RM/Judas group and include RM 2, 4, 6, 8, 10, 12, and 14, RM 16-20, RM 22-25, RM 27-30, and Judas 2-8. There are no royalties associated with the RM/Judas Group claims. The Sunnyside 3-8, Rattlesnake 3, 4, 7, and 8, Buck #1, and Jude #1 and #2 were purchased by EFR from Uranium One in December 2010. They lie in Sections 1 and 12, T29S, R23E. Uranium One reserved an overriding royalty of 1% on these claims which also are burdened by a 2.5% royalty due to a previous owner of the claims. EFR purchased the Judas 10-13, HEC 23, DOD 1-3, and Daisy 1-8 claims in March 2012 from Kimmerle Mining LLC. EFR will owe a production royalty (4% net smelter return) to the seller on those claims. These claims lie in Section 31, T28S, R24E, Sections 1 and 12, T29S, R23E, and Sections 6 and 7, T29S, R24E.

4.1.3 Pine Ridge Area

In April 2011, Denison purchased 37 claims in the Pine Ridge area from six separate claim owners. Due to some overlap and other irregularities, Denison amended the Notice of Location with the BLM on 18 of the claims. EFR abandoned the other 19 claims and replaced them with 15 new claims covering essentially the same ground. All of these claims are held without encumbrances (including royalties) and lie in Section 33, T28S, R25E and Section 4, T29S, R25E.

4.2 Claims Leased by EFR

Four groups of unpatented claims are owned by various groups of individuals. EFR holds the right to the minerals under these claims through various mining leases discussed below. EFR is current on all payments and other obligations under the leases, and the claims subject to the leases listed below are all valid at the effective date of this report.

4.2.1 Pandora Claims

EFR is successor to the Mining Lease of June 16, 1967 and its several amendments between Robert H. Sayre, Jr. and American Metal Climax, Inc. and its successors (to Atlas in 1973; to Umetco in 1988) applicable to 104 Pandora unpatented claims. The claims lie in Sections 1 and 12, T29S, R24E, Section 31, T28S, R25E, and Sections 5, 6, and 7, T29S, R25E. Production from these claims is subject to a royalty to Sayre's successors of 10% of the contained value of uranium and vanadium, less certain allowable deductions. EFR has made all payments due for production that occurred through December 2012 when the Pandora mine ceased production and went into standby status. No annual advance royalties or other lease payments are due. The annual BLM fees are the responsibility of EFR.

4.2.2 Martha Claims

A mining lease between Robert H. Sayre, Jr. and Atlas dated July 11, 1973 applies to 10 Martha unpatented claims at the east end of the Pandora claims. EFR is successor to this lease. The terms of the mining lease, with respect to production royalty, are the same as the Pandora Mining Lease (above). Some production occurred on the Martha claims at the eastern end of the Pandora mine. EFR has made all royalty payments due for production that occurred through December 2012 when the Pandora mine ceased production and went into a standby status. The Martha claims lie in Section 31, T28S, R25E and Section 5, T29S, R25E. The mining lease does not include any requirement for annual advance royalties or other lease payments. The annual BLM fees are the responsibility of EFR.

4.2.3 Mike Claims

The Mike claims are the subject of a mining lease between various individuals who are all part owners of the six Mike claims and Denison, dated August 1, 2011. This Mining Lease supersedes the original 1970 lease between Umetco and the owners. The claims lie in Section 1, T29S, R24E. Production royalties are on a sliding scale for both uranium

and vanadium depending on the respective commodity's market price. The uranium royalty varies from 3% to 8%, and the vanadium royalty from 2% to 6% less allowable deductions. EFR has made all royalty payments due for production that occurred through October 2012 when the La Sal mine ceased production and went into a standby status. The annual BLM fees are the responsibility of EFR. There is no annual advance royalty or other lease cost due on these claims.

4.2.4 Crested Claims

Six Crested and two T and A claims are covered by a Mining Lease dated February 1, 2009 between the eight individual owners and Denison. These claims are located in Sections 33 and 34, T28S, R24E and Section 3, T29S, R24E. EFR pays an annual advance royalty determined by the long term uranium price in the preceding twelve months. Production royalties are on a sliding scale for both uranium and vanadium depending on the respective commodity's market price. The uranium royalty varies from 3% to 8% and the vanadium royalty from 2% to 6% less allowable deductions. The annual BLM fees are the responsibility of EFR. No other lease costs apply to these claims.

4.2.5 Claims Under Option to Lease

EFR has an option to lease 33 unpatented claims contiguous with the Beaver claims, some of the Redd Royalties leased land, and Utah School Institutional and Trust Lands Administration (SITLA) Mineral Lease ML-18301. These lie immediately north of the Beaver mine in Sections 25 and 35, T28S, R24E. The claims, including SAL 1-24 and SPI 1-9, are under option to lease with a group of individuals. The option will expire August 31, 2014 if not exercised by EFR. If exercised, EFR will be obligated to pay the annual BLM claim fee of $140 per claim and an annual advance royalty of $20,000.

4.3 State of Utah School and Institutional Trust Lands Administration (SITLA) Mineral Leases

EFR holds 2,821.3 acres under mineral lease from the State of Utah in eight separate leases. The State also owns 1,684 acres of the surface of four of the parcels, thereby granting access to EFR for exploration and mining related work. The other 1,137 acres of surface are under private ownership. The private parcels all are subject to valid access and surface use agreements with the land owners.

4.3.1 ML-18301

The Utah State mineral lease covering all of the 640 acres in Section 36, T28S, R24E was originally issued to an individual, Robert Manly, on April 25, 1960. Through a series of assignments and amendments, the lease is now held by EFR. The current term of the lease runs through December 31, 2014; it is renewable annually by making advance royalty payments. The surface of approximately 384 acres of the western part of the lease parcel is owned by Charles Hardison Redd. EFR has a surface access agreement with Redd. The eastern part of ML-18301 surface is owned by SITLA. Rights to necessary surface use are granted by the mineral lease. The eastern part of the Beaver/La Sal mine lies within this lease. The lease is held by paying in advance an annual rental of $1.00 per

acre and an annual minimum royalty based on the previous January through November's average uranium and vanadium market prices. EFR has made the rental payment of $640 and the minimum royalty payment in the amount of $11,471 for the 2014 lease year. Rentals and annual minimum royalties are credited against actual production royalties for the year in which they accrue. The production royalty on this and other Utah State Mineral Leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions. EFR has made all production royalty payments for ore mined in 2012 and prior years which was processed and sold to contracts as yellowcake and vanadium pentoxide in 2013 or prior years.

4.3.2 ML-27247

Mineral Lease ML-27247 covers 40 acres in the SW ¼ SW ¼ Section 35, T28S, R24E. The lease was originally issued on December 4, 1970 to an individual, Gregory Hoskin. Through a series of assignments and amendments, the lease is now held by EFR. The current term of the lease runs through December 31, 2014; it is renewable annually by making advance royalty payments. The surface of the western 20 acres of the lease parcel is owned by Redd Agri LLC and the eastern 20 acres is owned by La Sal Livestock. EFR has a surface access agreement with both Redd Agri and La Sal Livestock. Portions of the western part of the Beaver mine lie on this lease parcel. The lease is held by paying in advance an annual rental of $1.00 per acre and an annual minimum royalty based on the previous January through November's average uranium and vanadium market prices. EFR has made the rental payment of $40 and the minimum royalty payment in the amount of $1,094 for the 2014 lease year. Rentals and annual minimum royalties are credited against actual production royalties for the year in which they accrue. The production royalty on this and other Utah State Mineral Leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions. EFR has made all production royalty payments for ore mined in 2012 and prior years which was processed and sold into contracts as yellowcake and vanadium pentoxide in 2013 or prior years.

4.3.3 ML-27248

As with ML-27247, the Mineral Lease ML-27248 was originally issued to Gregory Hoskin in December 1970 and is now held by EFR following several assignments and amendments. It covers 80 acres in the W ½ NW ¼ Section 2, T29S, R24E. With the exception of small parcels owned by San Juan School District and La Sal Recreation District, the surface is owned by Redd Agri. EFR has a surface use agreement with Redd Agri for those portions held by Redd Agri. Portions of the western part of the Beaver mine are located on this lease. EFR's operations of the Beaver mine and any expected exploration drilling are not affected by access restrictions to the School and Recreation Districts' acreage. The current term of the lease runs through December 31, 2014; it is renewable annually. The lease is held by paying in advance an annual rental of $1.00 per acre and an annual minimum royalty based on the previous January through November's average uranium and vanadium market prices. EFR has made the rental payment of $80

and the minimum royalty payment in the amount of $1,636 for the 2014 lease year. Rentals and annual minimum royalties are credited against actual production royalties for the year in which they accrue. The production royalty on this and other State of Utah mineral leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions. EFR has made all production royalty payments for ore mined in 2012 and prior years which was processed and sold into contracts as yellowcake and vanadium pentoxide in 2013 or prior years.

4.3.4 ML-49313

In December 2010, EFR purchased ML-49313 from Uranium One with the seller retaining a 1% overriding royalty. Uranium One acquired the lease from the original assignee, William Sheriff. This lease covers about 484 acres in the S½, S½ of NW¼, and E½ of NE¼ Section 36, T28S, R23E. The southeast corner of this section is about one mile west of the Energy Queen shaft. It is connected with the Energy Queen lease property by BLM land (W½ sec 31, T28S, R24E and part of NW¼ sec 6, T29S, R24E) currently covered by unpatented mining claims (Daisy-DOD) held by EFR. ML-49313 is contiguous to the north border of the RM/Judas claims. No mining has taken place here. The surface is owned by SITLA. Rights to necessary surface use are granted by the lease. This lease is held by payment of $500 per year rental. No annual minimum royalties apply. EFR has paid to hold this lease to the end of its first term, May 1, 2014. It is renewable, and EFR intends to renew it for a second ten-year term. The production royalty on this and other State of Utah mineral leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions.

4.3.5 ML-49314

This lease was issued April 30, 2004 to William Sheriff. Mr. Sheriff assigned it to Energy Metals Corporation in 2006, which then became Uranium One in 2009. In February 2011, Denison purchased it from Uranium One. EFR now is the lessee, having acquired Denison's U.S. Mining Division in June, 2012. The lease covers 640 acres, all of Section 32, T28S, R25E. This lies north of the eastern part of the Pandora mine, but no mining has occurred. The surface is owned by Paul Redd. EFR has a surface access agreement with Redd to access a Pandora mine ventilation hole. Holding cost for ML-49314 is $1.00 per acre. The rental of $640 was paid to hold the lease to the end of its first term, May 1, 2014. It is renewable, and EFR intends to renew it for a second ten-year term. The production royalty on this and other Utah State Mineral Leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions.

4.3.6 ML-49315

The history of ownership of this lease is the same as that of ML-49314, mentioned above. ML-49315 covers almost 138 acres mostly in the NE ¼ and in parts of NW ¼ Section 5,

T29S, R24E. EFR has paid the annual rental of $1.00 per acre to hold this lease until May 1, 2014. It will expire then, but it is renewable. EFR intends to renew this lease for a second ten-year term. Portions of the Redd Block Mineral Resources are located on this lease. No mining has yet occurred. The production royalty on this and other Utah State Mineral Leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions.

4.3.7 ML-49596

The State lease, ML-49596, comprises 640 acres in section 2, T29S, R23E. It was purchased from Uranium One in December 2010 with the seller retaining a 1% overriding royalty. Uranium One acquired the lease from the original assignee, William Sheriff. The surface is owned by SITLA. Rights to necessary surface use are granted by the lease. This lease joins the west border of the RM/Judas claims, which is one mile west of the Energy Queen private-mineral lease. Holding costs are currently $1.00/acre/year and have been paid to hold the lease until January 31, 2015, which will be the end of the first ten-year term. It is renewable, and EFR intends to renew it for a second ten-year term. The production royalty on this and other Utah State Mineral Leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions. Another party produced ore from a small mine on this lease parcel in the 1980s, prior to the current lease.

4.3.8 ML-51440

In September 2008, EFR was the high bidder on a State of Utah mineral lease to the northeast, separated by one-quarter mile from the Energy Queen lease (ML-51440). The lease covers 160 acres in the N ½ S ½ Section 32, T28S, R24E. This lease borders the Redd Block Mineral Resources on the north side. Payment of $500 per year is required to hold this lease. EFR has made the payment to hold until August 31, 2014. The production royalty on this and other Utah State Mineral Leases is 8% on uranium and 4% on vanadium. It is based on the gross value received under contract for the processed products less the actual processing and refining costs. Mining costs are not allowable deductions.

4.4 Private Mineral Leases

The private land in the La Sal region is mostly agricultural land. The primary use is dry land ranching, specifically livestock grazing. Several parcels of irrigated hay fields exist as well. EFR has leased the mineral rights on numerous parcels from various private landowners. The Redd family has owned much of the subject land for many decades, both minerals and surface. Most of the mineral ownership east and north of the Energy Queen mine is vested in Redd Royalties, Ltd. A few small parcels have joint ownership of minerals with parties other than Redd. The surface estate has been split from the minerals on numerous parcels; however, most of the surface is owned by members of the Redd family, as individuals or in legal entities, namely La Sal Livestock and Redd Agri, LLC. EFR has surface use and access agreements in place which allows for any activities

appurtenant to exploration, development and mining. The Energy Queen lease at the west end of the district is not owned by Redd Ranches or its affiliates.

4.4.1 Superior Uranium - Energy Queen Mining Lease

Energy Fuels Resources Corporation entered into a 30-day option to lease the Energy Queen surface rights with Markle Ranch Holdings, LLC on November 15, 2006. A lease was signed on December 15, 2006 for a term of twenty years, which is extendable if mineral production occurs on a continuing basis. The lease gives EFR the right to use any of the 702 acres for exploration, development, or mining purposes. Rental is at the rate of $50.00 per acre for those acres disturbed by such activities, currently about 60 acres, and $10.00 per acre for the remaining undisturbed acreage. Markle also will be paid 1% of market value for any material mined on adjoining properties, if such minerals are removed by use of the mine shaft located on the Markle property.

EFR also entered into a 30-day option to lease the Energy Queen mineral rights from Superior on November 15, 2006. A Mining Lease Agreement was signed on December 13, 2006 for a term of twenty years, which is extendable if mineral production occurs on a continuing basis. The mineral lease and surface lease cover the same 702 acres located in most of Section 6 and the N ½ NE ¼ and NE ¼ NW ¼ Section 7, T29S, R24E. There are annual payments due on the lease anniversary dates of $50,000, which are advance royalties that will be credited against production royalties. Production royalty will be paid on a sliding scale for both uranium and vanadium from 4% to 8%, depending upon market prices of uranium ranging from less than $50 to greater than $95/lb and vanadium ranging from less than $8 to greater than $22/lb.

The surface and minerals of this parcel were leased previously to Hecla Mining with the surrounding properties controlled by Umetco. These two companies operated the mine, then known as the Hecla Shaft, in a joint venture. The shaft and other surface facilities for the Energy Queen mine are located in the northeast corner of Section 6.

4.4.2 Redd Royalties Block 1-A Mining Lease

The leased parcel referred to as Redd 1-A covers 160 acres in the SE ¼ Section 31, T28S, R24E, immediately north of the Energy Queen mine. This was once part of a much larger mining lease dated June 1, 1971 between Union Carbide Corporation and Redd Ranches, a partnership of 11 members of the Redd family. The other parcels were released in November 1999. Through a succession of assignments, EFR became owner of the Mining Lease with the acquisition of Denison's U.S. Mining Division in June 2012. An advance royalty of $3.00 per net mineral acre is paid annually to hold the lease. Payment is current to hold the lease until July 1, 2014. It is the intent of EFR to continue to hold this lease. No mining has occurred on this parcel yet. Production royalty will be 12.5 % of "gross value". The gross value is the combination of the Uranium Base plus the Vanadium Base. The Uranium Base is determined by a table that has specified dollar amounts based on the U_3O_8 grade of the ore produced. At the time of the original lease agreement, U_3O_8 was valued at $8.00/lb. The Uranium Base is adjusted from the table value by how the actual price received for sale of concentrates in the preceding six months bears to the $8.00/lb price. The table values in the lease range from $1.50/lb U_3O_8

contained in ore at a grade of 0.10% U_3O_8 to $4.85/lb U_3O_8 contained in ore at a grade of 1.00% U_3O_8 or greater. The Vanadium Base is determined by the V_2O_5 component of an ore purchase price offered by EFR's White Mesa Mill or other price of V_2O_5 contained in ore prevailing in the area at the time the ore is fed to initial process. Surface access is granted to this land in an agreement with La Sal Livestock.

4.4.3 Redd Royalties Block 1-B Mining Lease

The lease referred to as the Redd 1-B was entered at the same time and in the same form as the Redd 1-A lease described above, but covering different parcels of land. The Redd 1-B Mining Lease applies to 1,400 acres lying in the following sections: E ½ SE ¼, SE ¼ NE ¼ Section 34 and W ½ NW ¼ Section 35, T28S, R24E; in Section 2, T29S, R24E all but the W ½ NW ¼; the SE ¼, E ½ SW ¼ and E ¼ NE ¼ of Section 3, T29S, R24E; and the N ½ Section 11, T29S, R24E. An annual advance royalty of $6,000 is paid to hold this lease. Payment is current to hold the lease until July 1, 2014. It is the intent of EFR to continue to hold this lease. The production royalty is 12.5 % of "gross value". The gross value is the combination of the Uranium Base plus the Vanadium Base. The Uranium Base is determined by a table that is a specified dollar amount based on the U_3O_8 grade of the ore produced. At the time of the original lease agreement, U_3O_8 was valued at $8.00/lb. The Uranium Base is adjusted from the table value by how the actual price received for sale of concentrates in the preceding six months bears to the $8.00/lb price. The table values in the lease range from $1.50/lb U_3O_8 contained in ore at a grade of 0.10% U_3O_8 to $4.85/lb U_3O_8 contained in ore at a grade of 1.00% U_3O_8 or greater. The Vanadium Base is determined by the V_2O_5 component of an ore purchase price offered by EFR's White Mesa Mill or other price of V_2O_5 contained in ore prevailing in the area at the time the ore is fed to initial process. Parts of the past production of the Beaver mine occurred on this leased land. It includes some of the mining areas active up to the time mining was suspended in October 2012. All ore produced by EFR from the lease has been fed to process at the White Mesa Mill and all production royalties have been paid. EFR is granted access to the surface of this Mining Lease under agreements with both La Sal Livestock and Redd Agri.

4.4.4 Redd Royalties La Sal Unit Mining Lease

This lease was entered into on February 5, 2008 between Denison and Redd Royalties for a 20-year term to cover some of the land previously part of the Redd 1-A that had been released from the 1-A lease in 1999. The leased land lies in the following parcels: NE ¼ Section 31, T28S, R24E; S ½ NE ¼, SE ¼ Section 4, T29S, R24E, and the SE ½ Section 5, T29S, R24E. It totals about 683 acres. The annual advance royalty to hold this lease is dependent on the previous 12 month weighted average UxConsulting Long Term U_3O_8 Price ("Ux LT price"). At the recent average Ux LT price of greater than $50/lb, the current annual payment is $13,500. Payment has been made to keep the lease current until February 5, 2015. No mining has occurred on the subject land. When it does occur, a "market value" production royalty will be due on a sliding scale ranging from a uranium royalty of 4% when Ux LT is less than $50/lb to 10% when Ux LT is greater than $150/lb. The vanadium "market value" royalty varies from 2% at a Ryan's Notes published value for V_2O_5 of less than $3.00/lb up to 6% if the Ryan's Notes published value for V_2O_5 is more than $20.00/lb. The "market value" is determined to be the

published prices for the two products in the month the ore is fed to process multiplied by the contained pounds less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes. Payments for surface access agreements are made to Lowry Redd and Charles Redd for specific surface parcel ownership.

4.4.5 Redd Royalties Pine Lodge Unit Mining Lease

On January 31, 1968, Union Carbide entered a mining lease with Redd Ranches, a partnership of 11 members of the Redd family, for the rights to more than 3,680 acres north and east of La Sal, Utah. Partial drops occurred along with assignments resulting in the current lease held by EFR applicable only to 60 acres described as SE ¼ SW ¼, E ½ SW ¼ SW ¼, Section 31, T28S, R25E. Holding costs amount to an annual $12.00 per net mineral acre, which has been paid until February 2, 2015. A production royalty is due at the rate of 15% of "gross value". The gross value is the combination of the Uranium Base plus the Vanadium Base. The Uranium Base is determined by a table that has a specified dollar amounts based on the U_3O_8 grade of the ore produced. At the time of the original lease agreement, U_3O_8 was valued at $8.00/lb. The Uranium Base is adjusted from the table value by how the actual price received for sale of concentrates in the preceding six months bears to the $8.00/lb price. The table values in the lease range from $1.50/lb U_3O_8 contained in ore at a grade of 0.10% U_3O_8 to $4.85/lb U_3O_8 contained in ore at a grade of 1.00% U_3O_8 or greater. The Vanadium Base is determined by the V_2O_5 component of an ore purchase price offered by EFR's White Mesa Mill or other price of V_2O_5 contained in ore prevailing in the area at the time the ore is fed to initial process. Mining in portions of the Snowball mine took place on the subject land up to the cessation of mining in the Pandora/Snowball mines in December 2012. EFR has made all production royalty payments resulting from mining and milling of that ore in early 2013.

4.4.6 Redd Royalties West Pine Lodge Unit Mining Lease

Denison entered into a mining lease with Redd Royalties on February 5, 2008 to cover an area previously in the Pine Lodge Unit (above) that had been dropped from the older lease. The current lease held by EFR applies to 100.4 acres described as W ½ NE ¼ SW ¼; NW ¼ SW ¼ and Lots 2 and 3, Section 31, T28S, R25E. The annual advance royalty to hold this lease is dependent on the previous 12 month weighted average Ux LT price. Annual advance royalties have been paid to hold this lease current until February 5, 2015 in the amount of $2,000. No mining has yet occurred on the subject land. When ore production commences, a "market value" production royalty will be due on a sliding scale ranging from a uranium royalty of 4% when Ux LT price is less than $50/lb to 10% when Ux LT price is greater than $150/lb. The vanadium "market value" royalty varies from 2% at a Ryan's Notes published value for V_2O_5 of less than $3.00/lb up to 6% if the Ryan's Notes published value for V_2O_5 is more than $20.00/lb. The "market value" is determined to be the published prices for the two products in the month the ore is fed to process multiplied by the contained pounds less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes.

4.4.7 Redd Royalties portion of Redd-Mullins Mining Lease

Union Carbide entered into a lease with Katheryn Anne Redd Mullins and ten other members of the Redd family on April 16, 1973. It covered 50% of the mineral ownership of 280 acres located in S ½ SW ¼ and S ½ SE ¼ Section 33, T28S, R24E and SE ¼ SW ¼ and W ½ SE ¼ Section 34, T28S, R24E. (See Crawford-Keller and Barton Norton Estates, below, for description of the other 50% mineral ownership of these parcels.) The lease has undergone various assignments and amendments. An annual advance royalty equal to $30.00 per net mineral acre ($4,200) has been paid to hold this lease current until April 16, 2014. It is the intent of EFR to continue to hold this lease beyond that date. The production royalty on the 50% mineral ownership on this leased land is like that due on the other older leases, such as Redd 1-A. Production royalty is 12.5% of "gross value". The gross value is the combination of the Uranium Base plus the Vanadium Base. The Uranium Base is determined by a table that is a specified dollar amount based on the U_3O_8 grade of the ore produced. At the time of the original lease agreement, U_3O_8 was valued at $8.00/lb. The Uranium Base is adjusted from the table value by how the actual price received for sale of concentrates in the preceding six months bears to the $8.00/lb price. The table values in the lease range from $1.50/lb U_3O_8 contained in ore at a grade of 0.10% U_3O_8 to $4.85/lb U_3O_8 contained in ore at a grade of 1.00% U_3O_8 or greater. The Vanadium Base is determined by the V_2O_5 component of an ore purchase price offered by EFR's White Mesa Mill or other price of V_2O_5 contained in ore prevailing in the area at the time the ore is fed to initial process. Production from the western end of the Beaver mine has occurred on the Section 34 portion of this lease. Royalties have been paid in full by EFR for all production here, including the areas being mined when production ceased in October 2012. Surface access is secured through agreements with both La Sal Livestock and Redd Agri for various portions of the leased land.

4.4.8 Crawford-Keller portion of Redd Mullins Land

A 20-year mining lease was entered into between Denison and the Erma Crawford Family Trust on April 1, 2008. It applies to the Crawford's 25% mineral ownership of 240 acres of land situated in S ½ SW ¼ and SW ¼ SE ¼, Section 33, T28S, R24E and SE ¼ SW ¼ and W ½ SE ¼, Section 34, T28S, R24E. The annual advance royalty to hold this lease is currently paid in the amount of $625/year through April 1, 2015. This amount is based on a sliding scale determined by the 12-month weighted average Ux LT price. Production royalty here is variable, based on a "market value" ranging from a uranium royalty of 3% when Ux LT price is less than $50/lb to 8% when Ux LT price is greater than $150/lb. The vanadium "market value" royalty varies from 2% at a Ryan's Notes published value for V_2O_5 of less than $3.00/lb up to 6% if the Ryan's Notes published value for V_2O_5 is more than $20.00/lb. The "market value" is determined to be the published prices for the two products in the month the ore is fed to process multiplied by the contained pounds less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes. Payments are now made equally to two heirs, John and Fred Crawford.

Two additional, identical mining leases were made effective May 1, 2008 and May 12, 2008 between Denison and Robert and Pamela Fergusson, and between Denison and Carole and Fay Giles, respectively, to lease equally the remaining 25% of mineral rights in the same land parcels. These two leases combined are referred to as the Keller Estate portion of the Redd-Mullins Mining Lease. The annual advance royalty, determined same as the Crawford portion, is paid in four equal parts to the heirs of the Keller Estate. The Keller Estate lease carries the same production royalty as the Crawford part.

Production from the western end of the Beaver mine has occurred on the Section 34 portion of this lease. Royalties have been paid in full by EFR for all production here, including the areas being mined when production ceased in October 2012. Surface access is secured through agreements with both La Sal Livestock and Redd Agri for various portion of the leased land.

4.4.9 Barton Norton Estate portion of Redd-Mullins Land

Denison entered into a mining lease with Joel Norton, representative of the Thora Barton Norton Estate on April 25, 2008. The lease covers a 50% mineral ownership on 40 acres located in the SE ¼ SE ¼ Section 33, T28S, R24E. The other 50% mineral right resides with Redd Royalties, described above in the Redd-Mullins Mining Lease (Section 4.4.7). The annual advance royalty payment to hold the Barton Norton mineral lease is based on the weighted average Ux LT price in the previous 12 months, currently $4,000. The advance royalty is paid through April 25, 2014. It is the intent of EFR to continue to hold this lease beyond that date. Production royalty here is variable, based on a "market value" ranging from a uranium royalty of 3% when Ux LT price is less than $50/lb to 8% when Ux LT price is greater than $150/lb. The vanadium "market value" royalty varies from 2% at a Ryan's Notes published value for V_2O_5 of less than $3.00/lb up to 6% if the Ryan's Notes published value for V_2O_5 is more than $20.00/lb. The "market value" is determined to be the published prices for the two products in the month the ore is fed to process multiplied by the contained pounds less allowable deductions. The allowable deductions include sales brokerage fees, costs of transporting processed concentrates to point of sale, and applicable production and sales taxes. A portion of the Redd Block Mineral Resources is located on this parcel. No mining has been done here yet. Surface access here is covered by the La Sal Livestock agreement.

4.4.10 San Juan County Mineral Lease

A Metalliferous Mineral Lease between San Juan County, Utah and Hecla Mining Company was signed April 17, 1967. This gave Hecla the right to explore and mine 262.69 acres located in the S ½ S ½ Section 32, T28S, R24E and most of the NW ¼ Section 5, T29S, R24E. Two small private parcels in the NW ¼ Section 5 are excluded. A very small parcel, 0.18 acre in Section 10, T29S, R24E, is included in the lease. Hecla assigned 50% interest in the lease to Union Carbide in December 1976 as part of the Hecla-Union Carbide joint venture. The Hecla-Union Carbide JV operated the Hecla Shaft (now the Energy Queen shaft) immediately to the west of Section 5 on the Superior Uranium Lease. The lease is held by an annual payment of $1.00 per acre. EFR has paid the lease to maintain it through December 31, 2014. It is the intent of EFR to continue to hold this lease beyond that date. An amendment to the lease in January 1968 changed the

production royalty to match that used by the State of Utah on its metalliferous leases. When the Energy Queen mine (Hecla Shaft) ceased operation in 1983, a development drift had advanced into the County land by a few tens of feet. Very little, if any, ore was produced at that time. The drift was developing toward mineral resources that are part of the Redd Block Mineral Resources described later in this report. The mineral lease allows for surface use as necessary for exploration and mining.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Access

The La Sal Project property is easily accessed from the all-weather Utah State Highway 46. Utah 46 enters the project land near the west-central edge of ML-49596 (Section 2, T29S, R23E) about 2 miles east of the intersection of Utah 46 with U.S. Highway 191 at La Sal Junction. Utah 46 stays within or very near the Project land for the next 10 miles to the east. The headframe of the Energy Queen shaft is visible for a considerable distance from any direction. The headframe is located 500 feet south of Highway 46 and is accessed by a gravel road. The Beaver mine headframe is also visible from the highway, located a quarter mile north of the La Sal Post Office, store, and school, accessible by a good gravel road. The La Sal mine decline portal and surface facilities are also about ¼ mile off the highway on County Road Wilcox N about ¾ miles east of the La Sal Post Office. A gravel road continues eastward, past the La Sal mine facilities for 1.2 miles to reach the portal of the Pandora mine. The Snowball mine portal is about one-half mile north of the Pandora Mine surface facilities. The Snowball is only used for ventilation, so the road is not well maintained. The Pine Ridge mine area is accessed via Forest Service roads which intersect with Utah Highway 46 3.3 miles northeast of the La Sal Post Office. Because the Pine Ridge mine portal was backfilled after its last production ceased about 1990, the last half mile of access road has been reclaimed. Access could easily be re-established if the uranium price were to increase enough to restart work in that portion of the Project.

All State and U.S. highways in this area are paved roads with weight limits for 18-wheel trucks of 80,000 pounds and are maintained year round. Utah allows for trucks to pull an auxiliary trailer which results in some trucks hauling more than 75,000 net pounds per trip.

5.2 Climate

The area is semi-arid. Temperatures range between an average low of 41^{o}F to an average high of 72^{o}F. Less than 10 inches of precipitation falls per year. Winters are not particularly severe, although there are numerous snow storms, the temperature drops below 0^{o}F at times, and snow can accumulate to over a foot in the lower areas and more than two feet at times on Pine Ridge. All elevations within 4 miles of the center and west end of the property support moderate growths of sage and rabbitbrush along with other brush, forbs, cacti, yucca, and grasses. Higher elevations contain juniper and piñon pine in the rocky soils, along with scrub oak, aspen, and ponderosa pine on Pine Ridge to the east. Year-round mining is expected to occur, and was the norm in the past.

5.3 Local Resources

La Sal, Utah is a very small town, currently home to about 200 people. It has been a hub to area ranchers, uranium and copper miners, and oil drillers for many years, as well as a supply stop for recreationists. A small grocery store and post office are located on the

highway. The bulk of the residential sites are within the first mile south of the highway and two miles west of the store. The State of Utah and San Juan County both have road maintenance shops here. There are two churches, a fire station, and several small businesses in the community. Larger population centers of Moab and Monticello, Utah are 22 miles north and 34 miles south, respectively, from La Sal Junction on Highway 191. Before the cessation of mining at the Beaver and Pandora mines in late 2012, many of the workers also came from the Nucla-Naturita and the Dove Creek areas of Colorado, each about 55 miles away to the east and south, respectively. Larger cities with additional personnel and industrial supply houses include Cortez, Colorado about 100 miles to the south and Grand Junction, Colorado about 140 miles to the north.

5.4 Infrastructure

Electric transmission and distribution lines exist throughout the project area, of sufficient size to supply the load the mines demanded in the past. Several substations exist. The electricity supply is also adequate for additional demand should more ventilation fans, compressors, and even another production shaft with hoisting equipment be added when production resumes and expands. Natural gas is also available for any future production needs. The infrastructure specific to individual mines in the Project will be discussed in Section 18.

5.5 Physiography

The region of the La Sal District Project central area is characterized by a broad shallow valley of hay fields and pasturelands at an elevation between 6,400 and 7,000 feet. Hills occur at the west end and even higher elevations of about 7,800 feet are reached at Pine Ridge on the east end (Figure 1-1). The north side of the La Sal area slopes south and southwest, radially away from the La Sal Mountains, which attain an elevation of 11,817 feet at South Mountain, six miles to the north (even higher elevations are found farther north at Mt. Peale, 12,721 feet). The slope consists of bouldery gravels shed from the mountains, variably covered by wind-blown sandy loam. Underlying sedimentary rocks dip to the southwest, ranging from steep dips near the mountains to shallow dips near Highway 46. The shaft at the Energy Queen mine is near to and on the south side of the axis of a northwest-trending syncline, so the underlying rocks are dipping slightly to the northeast with northeasterly dip increasing progressively southward within the Energy Queen lease. In the area of the Beaver mine, the rocks dip about 2.5° to the southwest. The near-surface gravels are thinner and finer-grained in the Energy Queen lease area; however, near the Beaver mine, the gravels attain a thickness locally of over 120 feet.

To the west and northwest on the Energy Queen area claims and State leases, the sedimentary rocks are exposed in hills cut by small canyons due to moderate uplifting and faulting with a few hundred feet displacement related to the northwest extension of the Lisbon Valley salt-cored anticline. The relief is greater than on the Energy Queen lease-to-Beaver mine central portion of the Project. The top of the hill near the Rattlesnake mine (Pit) is at an elevation of 6,825 feet while the elevation at the western project boundary is 6,060 feet. The surface of the western part of the La Sal Project area is drained by small tributaries to West Coyote Creek, which flows westerly to Hatch Creek, thence northwesterly to Kane Spring Creek and, ultimately, to the Colorado River.

At the east end of the Project area where the Pandora and Pine Ridge mines are located, elevations reach 7,800 feet on the southeast-trending Pine Ridge. The south flank of the Ridge slopes gently to the southwest, capped by the resistant sandstones and conglomerates of the Burro Canyon Formation. South-flowing tributaries to East Coyote Wash are eroding steep-walled canyons into the Ridge, exposing the underlying Brushy Basin Member of the Morrison Formation mudstone. East Coyote Wash flows southeasterly for about 10 miles, and then turns to the east for another seven miles before joining the Dolores River in a deeply incised meandering canyon a few miles into Colorado. The Dolores is a tributary of the Colorado River, the confluence being about 60 miles to the north.

6.0 History

There are early reports (1870s) of the local Indians' use of carnotite for its yellow pigment from the area of the Yellow Bird mine near the east end of the La Sal Trend, on Wray Mesa (aka Ray Mesa), about 6 miles east of the La Sal Project property. Outcropping uranium deposits in the Morrison Formation in the east end of the La Sal Trend and other parts of the Uravan Mineral Belt farther east were mined in the early 20th century for radium (ca. 1899-1913). Vanadium was produced from the same areas of the La Sal Trend from 1913 through 1921. The area was mostly idle until about 1936 when several mills were built in the region to process the vanadium ores. Uranium became the emphasis of the district when the U.S. Army's Manhattan Project came to the area in 1943. The Atomic Energy Commission ("AEC") purchased concentrates from the several area mills from 1947 through 1970. Beginning in 1952, the U.S. Geological Survey ("USGS"), on behalf of the Raw Materials Division of the AEC, conducted a drilling program in the west end of the La Sal Creek canyon area. That program was successful in identifying new and extending known deposits (Vanadium Queen, Gray Daun, Firefly-Pigmy, and others). Private mining increased in 1953 with drilling outlining a favorable belt about 3,000 feet wide by 5 miles long (to Lion Creek). By 1955, other deposits had been found farther north of La Sal Creek canyon (Hop Creek) suggesting other belts might occur on the east flank of the La Sal Mountains and to the southeast (Carter and Gualtieri, 1965, and Chenoweth, 1981).

Uranium-vanadium deposits were discovered in the Morrison Formation 10 miles north of the Energy Queen property in 1909 on Brumley Ridge, along the west slope of the La Sal Mountains. The mining history on the west side of the mountains (known as the Moab District) is similar to the La Sal Creek District. During the 1920s and 1930s, other discoveries were made south of Brumley Ridge in Pack Creek, on Amasa Back, Black Ridge, upper Kane Springs Canyon, and Brown's Hole, which is 3 miles northwest of the Energy Queen property. The Yellow Circle group of mines in upper Kane Springs Canyon was discovered in 1915. This group has yielded more than half of the Moab District's production. Total production of the district prior to 1978 was in excess of 500,000 pounds U_3O_8 and 2.5 million pounds V_2O_5 at grades that averaged 0.28% U_3O_8 and 1.4% V_2O_5. These production numbers were summarized from Minobras Mining Services Company (1978) and Chenoweth (1983).

Sometime after World War II (1948-1954), exploration work on Morrison Formation outcrops resulted in the discovery of the Rattlesnake mine (Pit) two miles southwest of the Energy Queen shaft (U.S. Atomic Energy Commission, 1959), on claims now mostly owned by EFR.

Uranium-vanadium mineralization was found in outcrops of the Chinle Formation near the south end of Lisbon Valley in 1913. Small production for vanadium occurred sporadically into the 1920s and again in the early 1940s with production for uranium recovery from 1948-1952. Deeper drilling away from the outcrops in 1952 discovered deposits in the Big Indian District five to eight miles southeast of the Energy Queen, including the famous Mi Vida mine. Those deposits are in the Chinle and Cutler

Formations. In the late 1960s, deep drilling (2,600+ feet) on the northeast, down-dropped side of the Lisbon Valley fault found the Chinle uranium deposit mined by Rio Algom Mining LLC ("Rio Algom") in its Lisbon mine. See section 7.1 for a summary of the geology of the area.

Throughout the 1960s and into the 1970s, drilling progressed westward from the head of La Sal Creek canyon discovering Morrison uranium deposits under several hundred feet of cover (Pandora, La Sal, and Snowball mines). Drilling continued westward and intensified in the later 1970s, discovering large uranium-vanadium deposits which were developed by vertical shafts (Beaver Shaft and Hecla Shaft). The Redd Block deposit was located and mostly defined. Mining has taken place since the 1970s with periods of increased and decreased activity resulting from differing economic conditions. The area boomed until 1985 when the uranium price decline made most mining here unprofitable. Production by Umetco continued at the Beaver Shaft and La Sal decline until January 1991. Umetco acquired the Pandora from Atlas in 1988. Umetco also stopped production from the Pandora in January 1991. Umetco successfully milled the ore from the La Sal District and other Uravan Mineral Belt mines at the Uravan Mill until it closed in 1984. Pandora ore was processed at the Atlas Moab Mill before Umetco's acquisition. All ore after that was processed at the White Mesa Mill in Blanding (commissioned in 1980, and now owned by EFI). Shaft sinking of the Hecla Shaft (Energy Queen) occurred from mid-1979 through mid-1980. Development drifting and minor production were in progress through 1982, and production stopped by early 1983. Pumping continued through 1993 with the mine in a standby mode. It has been flooded to within 150 feet of the surface since that time. A small mine produced in the eastern part of Section 2 (ML-49596) during the early 1980s. The amount of production from this mine is unknown. The mine was accessed by a rubber-tire decline. It has been reclaimed, but could easily be reopened. GEUMCO operated the Pine Ridge mine in the late 1970s, producing from a sandstone lens in the Brushy Basin Member of the Morrison Formation. Pine Ridge was acquired by Minerals Recovery Corporation (MRC) in 1981 which developed a decline to the deeper Salt Wash Member of the Morrison Formation, but halted operations before any significant production. The Pine Ridge mine operated briefly in the late 1980s when the price of vanadium rose sharply. Total production from the Pine Ridge mine is not known. Up until 1981, the La Sal and La Sal Creek Districts produced 989,000 tons of ore containing 6.4 million pounds U_3O_8 and 29 million pounds V_2O_5 (Kovschak and Nylund, 1981).

In response to improving uranium prices, Denison resumed production at the Pandora mine late in 2006. The production by Denison and EFR (following acquisition of Denison's U.S. Mining Division), between 2006 and 2012 from the mines in the La Sal Project area was 412,000 tons of ore (1,658,000 lbs U_3O_8 at an average grade of 0.20% U_3O_8 and 8,431,000 lbs V_2O_5 at an average grade of 1.02% V_2O_5). Rehabilitation work began at the Beaver/La Sal mine in December 2008 and production resumed three months later. During this time of operation by Denison and EFR, the Beaver/La Sal produced about 163,500 tons of ore. Due to declining uranium prices, the production ceased in October 2012 at the Beaver/La Sal and in December 2012 at the Pandora. Both mines were put on a standby status and are currently maintained in conditions that would

allow them to be placed back into production within a few weeks' time. The remaining resources at these mines are discussed in Section 14 of this report.

Drilling by Umetco and Atlas diminished in the late 1980s. As Denison expanded operations after 2006, exploration and definition drilling increased. From 2008 through mid-2012, Denison drilled 220 exploration and fill-in (confirmation) holes in the project area. EFR drilled another 27 holes on the Energy Queen property and the State land to the northwest of the Energy Queen from 2007 through 2012.

Since the 1940s, the vanadium price was rarely sufficiently high to make mining practical for the vanadium content alone, even though it is about 4-6 times the uranium content in the La Sal area deposits. However, the value of the vanadium as a byproduct has always been important to uranium mining within the La Sal Trend as well as in the overall Uravan Mineral Belt.

In order to better understand how EFR became the owner/leaser of the mineral rights consolidated in the La Sal District, a brief discussion of the property ownership history follows. In Section 4 above, the history of individual leases and purchases are described. The history narrative that follows describes the ascension of the operating companies until the present control by EFR.

As previously mentioned, in the late 1960s, three mining companies controlled most of the property now in the EFR La Sal Project. The history of the Pine Ridge portion of the project is described above.

1) Union Carbide Corp. had leases and claims in the central district covering the La Sal, Snowball, Beaver, and most of the Redd Block; Union Carbide reorganized and became Umetco in the early 1980s;
2) American Metal Climax held the lease on the Pandora mine area at the east end of the district; the lease was assigned to Atlas in 1973, and Atlas assigned it to Umetco in 1988, retaining an overriding royalty; and
3) Hecla Mining held the Energy Queen and San Juan County leases in the west end; Hecla and Union Carbide formed a joint venture in 1976.

Umetco and Energy Fuels Nuclear ("EFN") (no relation to EFI) entered into an agreement in 1984 whereby Umetco owned 70% capacity in, and was the operator of, the White Mesa Mill. That operating agreement was restructured in 1988 wherein EFN became 20% owner of the Umetco uranium-vanadium properties in Colorado and Utah, including the La Sal properties. In 1994, Umetco gave back its interest in the White Mesa Mill to EFN and assigned all interest in the La Sal properties, among others, to EFN, thereby giving EFN control of all the previous Umetco, Hecla, and Atlas properties in the La Sal Project area. Many of the Umetco personnel continued working for EFN. Original data of the previous operators also transferred to EFN ownership. EFN bought-out the Atlas royalty on the Pandora mine in the mid-1990s. The Hecla 50% interest also was acquired by EFN.

International Uranium Corp. (“IUC”) bought all assets of EFN in 1997. IUC did not retain the Superior Uranium lease (Energy Queen lease). Again, many personnel and all data on the La Sal Project transferred to IUC. In 2006, IUC acquired Denison and changed its name to Denison Mines Corporation (“Denison”). Energy Fuels Resources Corporation, a subsidiary of Energy Fuels Inc. (“EFI”) entered into a new lease on the Energy Queen property in late 2006. EFI acquired Denison’s U.S. Mining Divison in June 2012, thereby becoming owner and operator (through various subsidiaries) of the entire La Sal Project and the White Mesa Mill. Several persons now on the EFR staff have been associated with all or portions of the La Sal Project, including Pine Ridge, since the 1980s. All historic data on the Project area, with the exception of original drill logs of the Pine Ridge mine area, is the property of EFR.

7.0 Geologic Setting and Mineralization

7.1 Regional Geology

The Colorado Plateau covers nearly 130,000 square miles in the Four Corners region (Figure 7-1). The La Sal Project and other properties currently held by EFR lie in the Canyon Lands Section in the central and east-central part of the Plateau in Utah and Colorado. The Plateau's basement rocks are mostly Proterozoic metamorphics and igneous intrusions. The area was relatively stable throughout much of the Paleozoic and Mesozoic Eras with minor uplifts, subsidences, and tiltings resulting in fairly flat-lying sedimentary rocks ranging from evaporites, limestones, and marine clastic sediments, through eolian sandstones, to detritus of fluvial systems. The Uncompahgre Uplift, forty miles northeast of the La Sal District, was active during the late Paleozoic so that Pennsylvanian through early Jurassic sedimentary rocks, which wedge out against the pre-Cambrian crystalline rocks, thicken in the Paradox Basin to the southwest. Late Mesozoic time again saw the area inundated by the warm, shallow Cretaceous Seaway, and thick marine shales with sequences of limestone, siltstone, and sandstone were deposited. The Laramide Orogeny during the Late Mesozoic caused uplift of the Colorado Plateau region as a relatively intact stratigraphic sequence, with minor folding and faulting.

The thick late Paleozoic-Mesozoic stratigraphic sequence is interrupted locally by salt-cored anticlines (e.g., Lisbon Valley) in the Paradox Basin area, basement fault-related monoclines, and Tertiary laccolithic intrusions (e.g., La Sal Mountains). The salt anticlines are elongated in a northwest-southeast direction, as is the Uncompahgre Uplift. Subsurface flow of the salt was erratically active from Permian through late Jurassic, thereby affecting deposition of the Triassic and early Jurassic sediments, including the flow of the streams that deposited the Morrison Formation. Sedimentary rocks exposed in the canyons and hogbacks around the La Sal Mountains range from Pennsylvanian through Recent and are over 8,500 feet thick (Carter and Gualtieri, 1965).

About four to fifteen miles north of the La Sal Project area are the La Sal Mountains. These consist of Tertiary laccoliths that intruded about 25 million years ago into several different horizons of Paleozoic and Mesozoic sedimentary rocks. There are three main stocks making North, Middle, and South Mountains, aligned due north-south. Diorite porphyry is the dominant rock type, with minor monzonite porphyry and syenite intruded later. The individual intrusive bodies of North and South Mountains are controlled by the salt anticlines and elongate in a northwest direction. The La Sal Mountains were uplifted in the late Tertiary, concurrently with the collapse of the salt anticlines. Deep canyon cutting occurred, continuing through the Pleistocene. The headward canyon-cutting of West and East Coyote Creeks has not yet reached the La Sal area, leaving the present broad valley. Figure 7-2 is a stratigraphic column of the rock units exposed in the La Sal, Utah area.

Major uranium deposits of the east-central Colorado Plateau occur principally in two of the fluvial sequences. The older one is located at or near the base of the upper Triassic Chinle Formation. Areas of uranium deposits occur where the basal Chinle consists of channels filled with sandstone and conglomerate that scoured into the underlying sediments. This channel system is known as the Shinarump Member in southern Utah. Farther north in eastern Utah, the basal member of the Chinle is a younger channel system known as the Moss Back. This is the host of the bulk of the ore mined from the nearby Big Indian District (Lisbon Valley). The Chinle deposition followed a period of tilting and erosion; therefore, the basal contact is an angular unconformity. Where the Chinle channels are in contact with sandstones of the Permian Cutler Formation, good uranium deposits locally occur in the Cutler, as well. The basal Chinle beds at the La Sal Project are greater than 2,700 feet deep. Potential for Chinle uranium deposits was explored by Umetco in 1977. A hole drilled in the Mike claims area found minor uranium mineralization (3.0 ft- 0.10% U_3O_8) in the Moss Back at greater than 2,800 feet deep. In the western part of Section 2, T29S, R23E, west of the Lisbon Valley Fault, the basal Chinle would be approximately 1,600 feet deep, but, to EFR's knowledge, has not been tested.

The other significant Colorado Plateau uranium deposits occur in the late Jurassic Morrison Formation. The Morrison comprises two members in the La Sal area. The lower member, the Salt Wash, is the main uranium host. The upper part of the Morrison is the Brushy Basin Member. The Salt Wash consists of about equal amounts of fluvial sandstones and mudstones deposited by braided and meandering river systems. The Brushy Basin was deposited mostly on a large mud flat probably with many lakes and streams. Much of the material deposited to form the Brushy Basin originated from volcanic activity to the west. The majority of the uranium production has come from the upper sandstones of the Salt Wash Member, known as the Top Rim (historically referred to as the ore-bearing sandstone or "OBSS").

Uranium occurrences have been found throughout most of the Colorado Plateau; however, there are numerous belts and districts, such as La Sal, where the deposits are larger and more closely spaced. In addition to the uranium, many of the deposits contain considerable amounts of vanadium. In some districts the vanadium content is ten times or more than the uranium content. In general, the Cutler and Shinarump deposits contain very little vanadium, whereas the Salt Wash deposits usually contain large amounts of vanadium. The V_2O_5:U_3O_8 ratio averages about 4:1, and can range up to 15:1 in parts of the Uravan Mineral Belt. The economics of the Salt Wash deposits are enhanced by the vanadium content, even when vanadium prices are lower than at present. The west end of the La Sal Trend, west of where the Energy Queen is located, generally has a lower vanadium content than the east end at the Pandora mine. The average vanadium content for the district is a 5.25:1 ratio, which is the value used for resource projections in this document when direct vanadium assays are absent. *This ratio cannot be guaranteed and must be used only as a historical estimator for vanadium mineralization potential.*

7.2 Local Geology Detail

7.2.1 Stratigraphy

The central part of the La Sal Project, from the Beaver mine to west of the Energy Queen mine, lies in the Browns Hole-Coyote Wash syncline. It is underlain by Quaternary gravel deposits and mixed eolian and alluvium deposits. This alluvial fill consists of moderately rounded pebbles, cobbles, and some boulder-sized rocks with interstitial silts and sands deriving from the La Sal Mountains. Thickness ranges from 0 to 120 feet, controlled primarily by paleoweathering surfaces of the underlying units, usually the Mancos Shale. In the western part of the Project, erosion has exposed older geologic units of the Cretaceous Mancos Shale, Dakota Sandstone and Burro Canyon Formation. (The lithology of these and the underlying stratigraphy is discussed below.) These units crop out as small isolated windows through the wind-blown sandy soil and Quaternary gravels and as a band along the west edge of the Energy Queen lease where West Coyote Wash has cut somewhat deeper. State lease ML-49313 (Section 36) has experienced more erosion exposing the upper part of the Morrison Formation. Farther southwest in sections 1, 2, and 12, T29S, R23E, older sedimentary rocks are also exposed as a result of displacement related to the Lisbon Valley Fault and subsequent erosion. Jurassic rocks exposed here include the Entrada Sandstone, Summerville Formation, and both members of the Morrison Formation. At the east end of the Project area, the Pandora-Pine Ridge portion is structurally higher than the Coyote Wash syncline. Here, the Dakota and Burro Canyon rocks cap the southwest sloping ridge. South-flowing tributaries to East Coyote Wash are eroding steep-walled canyons into the Ridge, exposing the underlying Brushy Basin Member of the Morrison Formation mudstone.

Rocks of interest in the subsurface at the La Sal Project range from the Permian Cutler Formation to the Cretaceous Mancos Shale (stratigraphic column is shown in Figure 7-2). The units are described below. A portion of the published Utah Geological Survey geologic map of this area is seen as Figure 7-3. Figure 7-4 shows a generalized cross section of the area adapted from Weir et al. (1960).

The Mancos Shale is a black to brown to gray, thinly laminated marine shale with thin siltstone beds. Limestone as nodules and thin lenses contains marine fossils, predominantly bivalves. Thickness in the area is between 20 and 60 feet with an unconformable contact with the overlying alluvial cover and a gradational and intertonguing contact with the underlying Dakota Sandstone.

The Dakota Sandstone consists of interbedded yellowish-brown sandstone and conglomerate with beds of gray carbonaceous shale containing discontinuous thin coal seams. It can be 150-200 feet thick where all units are present. On the Energy Queen lease, the Mancos and most of the Dakota were eroded prior to deposition of the Quaternary gravels. A very small exposure of the Mancos occurs in a window through the gravels in the northeast corner of Section 36, T28S, R23E. The Mancos was eroded from the south flank of Pine Ridge before any gravels were deposited. It is possible that the gravel fan from the La Sal Mountains may never have been deposited as far southeast as the Pandora and Pine Ridge claims.

Light-brown and gray sandstones and conglomerates compose most of the Burro Canyon Formation. It contains interbedded green and purplish mudstones with a few thin

limestone beds. Locally silicification altered the limestones to chert and some of the sandstones to orthoquartzite. Orthoquartzite cobbles and boulders litter the slopes in Section 2, T29S, R23E. Massive lenticular sandstone beds form cliffs and ledges when exposed in outcrop in the Pine Ridge canyons. Local thickness is between 80 and 120 feet in the east part of the district. The unit is about 180-220 feet thick in the Energy Queen area and is an aquifer in the region east of the Lisbon Valley fault to the west end of the Beaver mine. The lower contact with the Morrison Formation is unconformable and represents a hiatus of about 30 million years.

Much of the Brushy Basin Member of the Morrison Formation (90%) is reddish-brown and gray-green mudstone, claystone, and siltstone composed of clays derived from detrital glassy volcanic debris originating from volcanic activity to the southwest (Cadigan, 1967). This material settled on a large floodplain, and fine-grained clastic material is interbedded with a few channel sandstones and conglomerates. A conglomerate found near the base of the Brushy Basin commonly contains red and green chert pebbles and is called the Christmas Tree Conglomerate. The Brushy Basin also contains a few thin fresh-water limestone beds, some of which have been silicified. Devitrification of the volcanic ash may have been a major source of the uranium that leached downward into the Salt Wash Member sandstones and weakly mineralized some of the Brushy Basin sandstone lenses. The Brushy Basin is 350-450 feet thick in the La Sal area. The sandstones can be aquifers. The Brushy Basin crops out in most of sections 1, 2, and 12, T29S, R23E. However, in section 1 and 12, much of it is covered by landslide debris. Good exposures can be seen in the walls of the Rattlesnake open pit and the canyons cut into Pine Ridge.

The Salt Wash Member of the Morrison Formation consists of interbedded fluvial sandstones (about 60%) and floodplain-type mudstone units (40%). The Salt Wash sandstones are usually finer-grained than Brushy Basin sands. They are varieties of orthoquartzite, arkose, and tuffs. Major detrital components are quartz, feldspars, and rock fragments. Minor components include clays, micas, zircon, tourmaline, garnet, and titanium and iron minerals. The cement is authigenic silicates, calcite, gypsum, iron oxides, and clays. The sandstone units crop out as cliffs or rims, whereas the mudstones form slopes in nearby La Sal Creek Canyon and the Browns Hole-Black Ridge area. These intervening mudstones contain considerable volcanic ash, similar to the Brushy Basin mudstones. Generally in the upper part of the Salt Wash, the numerous channel sandstones have coalesced into a relatively thick unit referred to as the Top Rim. Similarly, there is a thick sequence of channel sandstones at the base of the member called the Bottom Rim. Usually there are several thinner sequences or lenticular channel sandstones in the central part of the member which are termed Middle Rim sands. The largest deposits in the Uravan Mineral Belt, the Moab District, and the La Sal Trend are in the Top Rim, commonly referred to as the OBSS. The Salt Wash is over 300 feet thick in the area of the La Sal Project. It is exposed on the Rattlesnake claims and in the lower slopes of Section 2, T29S, R23E. Good exposures of the upper sandstones (OBSS) can be seen in the floor and lowest walls of the Rattlesnake open pit.

The streams that deposited the Salt Wash sandstones flowed mostly in large meander belts across an aggrading, partly eroded plain with varying subsidence rates. The source area for most of the Morrison Formation was a highland about 400 miles to the southwest. The rocks eroding in the source area included volcanic, intrusive igneous, metamorphic, and minor sedimentary strata. Salt Wash streams flowed generally northeastward; however, some of the channel systems were obviously locally diverted by contemporaneous uplifting of the salt-cored anticlines. Kovschak and Nylund (1981) report the lower part of the Salt Wash is missing in the west end of the La Sal trend as observed in Union Carbide drill holes. They attribute this to the northwestern nose of the Lisbon Valley anticline being slightly positive topographically during early Salt Wash deposition.

The Salt Wash sandstones exhibit several facies and sedimentary features. The sandstone facies are produced from vertically stacked, aggrading stream channels. These features can be seen in some outcrops, sometimes in drill core, and in underground mines. However, these features are often too thin to be identified in borehole logs, such as neutron or resistivity logs. Large cross-bedding is common indicating stream thalwegs. Channel sandstone deposits generally fine upward. Flat, thin bedding of low energy areas can be seen along with apparent levies and crevasse splays. Channel overbank deposits within the Salt Wash Member form discontinuous, upward coarsening clay lenses. Channel scouring is also common as are the associated point bar deposits of the meandering streams. The point bars are characterized by mudstone galls which are rip-up clasts from the scouring on the outside of previous meanders. The sand grains become finer upward. There are often abundant logs and other carbonaceous plant material in the point bars, which make them a prime location for uranium deposition. Isolated oxbow lake deposits are also common.

The major Top Rim sandstones of the La Sal Trend have been interpreted as two channels joining in the vicinity of the Energy Queen, then flowing as one large channel due east. The Mike and part of the Pandora deposits are thought to be in a large meander to the south (Kovschak and Nylund, 1981). It is possible that the entire La Sal channel is a meander belt rather than a straight-flowing channel. The channel or meander belt is about one mile wide in the center part (near the town of La Sal). In this central area, the upper sandstone attains a thickness of about 120 feet with very few thin mudstone beds. At both ends of the La Sal Trend, the Top Rim interval consists of multiple, thinner sandstone beds (35-50 feet thick) separated by thicker mudstones (up to 10 feet thick). Sandstone grain size is fine to medium, which is somewhat coarser than farther east in the Uravan Mineral Belt. EFR's 2007-2012 drilling proved strong east-west trending mineralized areas in the Salt Wash member of the Morrison Formation. Denison's drilling in the Beaver-to-Pandora areas identified individual large meanders with uranium mineralization. These drilling program results will be discussed in detail in Section 10.

Fossils in the Morrison include petrified wood and carbonized plant material, dinosaur bone, tracks, and embryos, and sparse microfossils in the thin fresh-water limestone beds.

The Morrison overlies the Jurassic and Triassic San Rafael and Glen Canyon Groups. These consist of several hundred feet of red beds. The uppermost is the reddish-brown, thinly bedded mudstone and shale of the Summerville Formation, containing a few thin, slabby sandstone beds. It varies in thickness from about 25 to 80 feet thick. Very small exposures of the Summerville exist only along the Lisbon Valley fault in sections 2 and 12, T29S, R23E. Underlying the Summerville is the eolian Entrada Sandstone, some 250 feet to over 300 feet thick. It is an orange-brown, fine- to medium- grained, bleached, sandstone consisting of subrounded and moderately sorted grains. Large cross bed sets are common throughout. In outcrop it often weathers to smooth, massive exposures. Within the project boundary, the Entrada only crops out on the footwall of the Lisbon Valley fault in the southwest corner of Section 2. It is the oldest stratigraphic unit exposed on the project property. Under the Entrada is a thin shale unit, about 35 feet thick, named the Carmel. The upper unit of the Glen Canyon Group is the Navajo Sandstone. It is a light-brown, massive, cross-bedded eolian sandstone. Its thickness in the region is variable (100-450 ft), pinching out against most salt anticlines. It is 425 feet thick in a drill hole in Section 5, T29S, R24E. The Navajo is above the Kayenta Formation. The Kayenta is up to 230 feet thick and composed of lenticular sandstones interbedded with minor siltstones, shales, and conglomerates. The basal unit of the Glen Canyon Group is the Wingate Sandstone. It also is a massive eolian sandstone over 250 feet thick.

The Chinle Formation of Late Triassic age consists of bright red and red-brown mudstone and siltstone containing lenticular sandstones in the middle part, as well as thin beds of limestone-pebble conglomerate. Important uranium deposits occur in the basal, calcareous, gray conglomerate (Moss Back Member) which has been mined four miles south of the La Sal Project property. Minor amounts of vanadium occur with the uranium (0.47% V_2O_5). The thickness of the Chinle varies greatly in the area, partly due to salt movement, ranging from 200-600 feet. It was found to be 445 feet thick in the Chinle test hole drilled in Section 5, T29S, R24E. Nearly 78 million pounds of U_3O_8 (averaging 0.30% U_3O_8) have been produced from the Moss Back (Chenoweth, 1990), mostly on the southwest limb of the Lisbon Valley anticline (southwest side of Big Indian Valley), which is the upthrown side of the Lisbon Valley Fault. One large mine, the Rio Algom Lisbon mine, produced from approximately 2,700 feet deep on the down dropped side of the Lisbon Valley Fault (Huber, 1981). The Moss Back is approximately 2,650 feet deep at the Energy Queen lease, 2,800-2,900 feet deep elsewhere on the Project property to the east, and about 1,600 feet deep west of the fault in the southwest corner of Section 2, T29S, R23E. A historic hole at the Mike claims in Section 1, T29S, R24E reportedly encountered 3.0 feet of 0.10% U_3O_8 in the Moss Back at about 2,800 feet deep.

Unconformably underlying the Chinle is the Triassic Moenkopi Formation. It is an evenly bedded, chocolate-brown shale and mudstone unit containing thin bedded ripple-marked sandstones, sporadic limestone lenses, and gypsum layers. The salt anticlines were active following Moenkopi deposition, so it was mostly removed by erosion in the Big Indian District (Huber, 1981).

The Permian Cutler Formation was deposited as a thick clastic wedge derived almost entirely from the Precambrian rocks of the ancestral Uncompahgre Uplift. It contains a variety of rock types from mudstones to conglomerates. Where sandstones lie subjacent to the Moss Back, uranium deposits locally occur. The Cutler overlies the limestones, clastics, and evaporites of the Pennsylvanian Hermosa Formation.

7.2.2 Structural Geology

The local geologic structure at the La Sal Project is dominated by 1) La Sal Mountains intrusion, 2) Pine Ridge Anticline, 3) Browns Hole-Coyote Wash Syncline, and 4) Lisbon Valley Anticline. The majority of the uranium deposits lie on the eastern flank of the Browns Hole-Coyote Wash Syncline and western flank of the Pine Ridge Anticline. The syncline is the result of the Pine Ridge Anticline, a salt diapir structure formed by underlying Pennsylvanian evaporates on the northeast, and the Lisbon Valley Anticline, also salt-flow related, to the southwest. Dips of the host rocks toward the syncline axis are usually shallow, less than five degrees. The La Sal Mountain intrusion was localized by the same salt-cored structure as Pine Ridge Anticline. The intrusion of the La Sal Mountains locally bowed the Salt Wash to as much as 40° dip around the base of the mountains. The Lisbon Valley Fault truncates the deposit to the southwest with about 400-800 feet of displacement. At the west edge of the Project property, the Salt Wash is eroded and is not present any farther west.

Structurally, the west part of the La Sal Project area lies in northwest-trending Browns Hole Syncline formed between the north end of the Lisbon Valley Anticline and the South Mountain intrusion. The Energy Queen shaft is located on the syncline axis, which has a slight northwest plunge. The beds containing the known deposits at Energy Queen dip gently to the northeast, about one to three degrees, throughout most of the Energy Queen lease and the claims and State Lease ML-49313 to the north and northwest. The west end of the Beaver mine and the Redd Block Mineral Resources are on the other side of the Browns Hole Syncline axis and dip at about 3½ degrees to the southwest. As the synclinal structure axis continues to the southeast it flattens then begins plunging to the southeast and becomes the Coyote Wash Syncline. The host horizon at the Pandora mine dips southwesterly into the Coyote Wash Syncline at about three degrees. The Pine Ridge Anticline parallels the Coyote Wash Syncline about five miles to the northeast. A collapse feature associated with salt removal at depth (the Pine Ridge graben) occurs along the anticline axis two miles north of the Pandora and Pine Ridge mines.

The faults associated with the Pine Ridge graben are far enough north that they have not affected the mining at Pandora mine. No faulting occurs in the area of the Beaver mine, either, nor at the Redd Block. The proposed mining area of the Energy Queen lease is little affected by the Lisbon Valley faulting. Minor faults that are splits of the Lisbon Valley Fault are mapped crossing the claims in sections 1 and 12 and ML-49596 in section 2, T29S, R23E. These are normal faults striking north-northwest to west-northwest, of small displacement (50-400 ft), down-dropped to the northeast. The main fork of the Lisbon Valley Fault continues northerly in the east part of the claims with about 400 feet of displacement, which is decreasing to the north. Two mapable splits of the fault extend west-northwest across the Rattlesnake claims. The southern one of these

splits curves to a N45^{o}W strike at the west edge of the Rattlesnake claims. It continues across the southwest part of Section 2, having a displacement of about 300 feet. See the geologic map (Figure7-3) for spatial relationship details. Farther north, the Brumley Ridge-Cane Canyon area is highly faulted, but uranium mineralization is not structurally related (Doelling, 1969).

8.0 Deposit Type

8.1 Deposit Type

The La Sal Project uranium-vanadium deposits in the Jurassic Salt Wash Member of the Morrison Formation are sandstone-type deposits that fit into the U.S. Department of Energy's ("DOE") classification as defined by Austin and D'Andrea (Mickle and Mathews, 1978) Class 240-sandstone; Subclass 244-nonchannel-controlled peneconcordant. Any future deep drilling to explore for deposits in the Triassic basal Chinle Formation (Moss Back Member) would fit the DOE classification as Class 240-sandstone; Subclass 243- channel controlled peneconcordant. These classes are very similar to those of Dahlkamp (1993) Type 4-sandstone; Subtype 4.1-tabular/peneconcordant; Class 4.1.2 (a) Vanadium-Uranium (Salt Wash type) and Class 4.1.3-basal-channel (Chinle type).

The La Sal district uranium-vanadium deposits are a similar type to those elsewhere in the Uravan Mineral Belt. The Uravan Mineral Belt was defined by Fisher and Hilpert (1952) as a curved, elongated area in southwestern Colorado where the uranium-vanadium deposits in the Salt Wash Member of the Morrison Formation generally have closer spacing, larger size, and higher grade than those in adjacent areas and the region as a whole. The location and shape of mineralized deposits are largely controlled by the permeability of the host sandstone. Most mineralization is in trends where Top Rim sandstones are thick, usually 40 feet or greater.

The La Sal Trend is a large channel of Top Rim sandstone which trends due east, possibly as a major trunk channel to distributaries that fanned-out to the east to make a portion of the Uravan Mineral Belt. The Energy Queen deposit appears to be at the location of the junction of a tributary channel that joins the main channel from the southwest. The Rattlesnake mine (U.S. Atomic Energy Commission, 1959) is located upstream in this tributary channel. The deposit in Section 36 (ML-49313) and the small mine on ML-45965 are in the western extension of the main channel. The channel remains relatively straight and the uranium deposits get larger as it continues eastward through the Redd Block and Beaver mine deposits. East of the Beaver, the channel appears to widen and contain large meanders as it continues through the Mike portion of the La Sal mine, the Snowball, and Pandora mines as shown on the resource maps in Section 14 of this report. A complete discussion and details of the drilling results and conclusions are presented in Section 10 in this report.

Most of the La Sal and Uravan Mineral Belt areas consist of oxidized sediments of the Morrison Formation, exhibiting red, hematite-rich rocks. Individual deposits are localized in areas of reduced, gray sandstone and gray or green mudstone (Thamm et al., 1981). The Morrison sediments accumulated as oxidized detritus in a fluvial environment. However, there were isolated environments where reduced conditions existed, such as oxbow lakes and carbon-rich point bars. During early burial and diagenesis, the through-flowing ground water within the large, saturated pile of Salt Wash and Brushy Basin material remained oxidized, thereby transporting uranium in

solution. When the uranium-rich waters encountered the zones of trapped reduced waters, the uranium precipitated. Vanadium may have been leached from the iron-titanium mineral grains and subsequently deposited along with or prior to the uranium.

The habits of the deposits in the La Sal Trend have been reported to be typical of the Uravan Mineral Belt deposits. Where the sandstone has thin, flat beds, the mineralization is usually tabular. In the more massive sections, it "rolls" across the bedding, reflecting the mixing interface of the two waters. This accounts for the fact that there are several horizons within the Top Rim that are mineralized. Very thin clay layers on cross beds appear to have retarded ground water flow, which enhanced uranium precipitation. The beds immediately above mineralized horizons sometimes contain abundant carbonized plant material and green or gray clay galls. The mudstone beds adjacent to mineralized sandstones are reduced, but can grade to oxidized within a few feet. Lithology logs by Union Carbide of core from the historic drilling in the district record these same characteristics. Interpretations of electric bore hole logs and logging of cuttings in rotary drill holes by Denison and EFR geologists do as well. There are no significant differences between mineral depositional habits in the Top Rim and those in lower Salt Wash sands. EFR drilling (2007-2008) indicated mineralization occurring at the tops of carbon "trash" zones in drill holes EQ-07-1, EQ-07-16, and EQ-08-18.

The thickness, the gray color, and pyrite and carbon contents of sandstones, along with gray or green mudstone, were recognized by early workers as significant and still serve as exploration guides. The entire main La Sal Channel exhibits these favorable features. However, the bulk of the uranium deposits identified to date are aligned along the south of the Channel. This is the down-dip edge of the channel where the thick reduced sandstone grades and interfingers into pink and red oxidized sandstone and overbank mudstones (Kovschak and Nylund, 1981).

8.2 Mineralization

The uranium- and vanadium-bearing minerals occur as fine grained coatings on the detrital grains, they fill pore spaces between the sand grains, and they replace some carbonaceous material and detrital quartz and feldspar grains.

The primary uranium mineral is uraninite (pitchblende) (UO_2) with minor amounts of coffinite ($USiO_4OH$). Montroseite (VOOH) is the primary vanadium mineral, along with vanadium clays and hydromica. Traces of metallic sulfides occur. In outcrops and shallow oxidized areas of older mines in the surrounding areas, the minerals now exposed are the calcium and potassium uranyl vanadates, tyuyamunite, and carnotite.
The remnant deposits in the ribs and pillars of the Beaver and Pandora/Snowball mines show a variety of oxidized minerals common in the Mineral Belt. These brightly-colored minerals result from the moist-air oxidation of the primary minerals. Minerals from several oxidation stages will be seen, including corvusite, rauvite, and pascoite. Undoubtedly, the excess vanadium forms other vanadium oxides depending on the availability of other cations and the pH of the oxidizing environment (Weeks et al., 1959). The Energy Queen has been standing full of water since 1993, so no direct observations have been made of that mine's openings. Similarly, the mine on ML-49596

has been reclaimed and is not accessible at this time. Remnants of Salt Wash uranium-vanadium mineralization are exposed in the Rattlesnake pit floor. These show the habits described above and have mostly weathered to carnotite-type mineralization.

Some stoping areas in the Beaver/La Sal and Pandora/Snowball mines are well over 1,000 feet long and several hundred feet wide. The Mineral Resources of the Redd Block and Energy Queen mine identified through drilling are of similar size. Individual mineralized beds vary in thickness from several inches to over 6 feet. Throughout much of the La Sal District there are three horizons in the Top Rim that host the mineralization. They are 25-40 feet apart. Cross sections in Section 14 of this report show the Mineral Resource horizons throughout three portions of the district based on the historic and recent drill information.

Kovschak and Nylund (1981) report no apparent disequilibrium problems in the other mining episodes of the La Sal area. Mining and milling by Denison and EFR shows that well-calibrated gamma probes used by the mining personnel equate well to the mill head grades indicating no significant disequilibrium exists. This is generally true of the Salt Wash uranium deposits because of the age of the mineralization and the hydrologic history of the host rocks. Therefore, EFR has no reason to anticipate any disequilibrium conditions within the unmined portions of the deposits on the project property.

9.0 Exploration

Outcrops within a few miles were explored by prospectors in the early 20th century for their radium and vanadium content. Prospecting was mostly done by exploring outcrops of the Morrison Formation in the canyon walls of the east end of the La Sal Trend and other parts of the Uravan Mineral Belt farther east and the Chinle outcrops to the south. Beginning about 1936, when several mills were built in the region to process the vanadium ores, prospecting intensified in the areas of the outcrops. Shallow drilling on the benches above the outcrops was beginning. Uranium exploration in the region began in the mid-1940s resulting in the discovery of the Rattlesnake deposit about 1948. Improvements in equipment led to increased amounts and depths of drilling. The USGS conducted extensive uranium exploration and geologic evaluation in the entire region from the late 1940s, resulting in numerous publications. The Rattlesnake deposit is the only outcropping uranium deposit on the EFR La Sal Project property. All other exploration on the Project has been by drilling, described in Section 10 of this Report.

During the operation of the underground mines, longhole drill programs are essential to explore for mineralized material not found by the surface holes. This is especially helpful if the surface hole spacing is larger than about 100 feet.

10.0 Drilling

The area at and around the several mines on the EFR La Sal Project property was extensively drilled from the late 1960s through early 1980s. The targets were the upper sandstones of the Salt Wash Member of the Morrison Formation. The drilling down dip from the Rattlesnake mine discovered mineralization locally in Section 1, T29S, R23E (mostly mined-out since then; EFR has not reviewed any information on the historic drilling in Section 1). Throughout the 1960s and into the 1970s, drilling progressed westward from the head of La Sal Creek canyon discovering Morrison uranium deposits under several hundred feet of cover (Pandora, La Sal, and Snowball mines). Drilling continued westward and intensified in the later 1970s, discovering large uranium-vanadium deposits which were developed by vertical shafts (Beaver Shaft and Hecla Shaft). The Redd Block deposit was discovered and mostly defined in the late 1970s. Union Carbide's preferred method of exploration in the late 1970s and early 1980s was to rotary "plug" drill through the upper part of the hole, then core through the Top Rim uranium-bearing sandstone horizon. This allowed the company to do assays for both uranium and vanadium. Holes then usually were logged with a natural gamma probe for radiometric uranium grades. Most of the past exploration on the Beaver/La Sal, Redd Block, and Energy Queen properties performed by Union Carbide in the period 1972-1984 was by this method. A few holes were deep enough to explore the basal Chinle horizon. Much of the exploration and development drilling at the Pandora mine was done in the 1970s by Atlas. GEUMCO and its successor, MRC, drilled extensively on the Pine Ridge property from the mid-1970s through 1985. EFR owns the data on some 2,200 drill holes within the boundary of the property held as the La Sal Project.

In 2008, following the dormant period after Umetco stopped mining at the Beaver and Pandora mines in 1991, Denison began a drill project at the Pandora mine in an attempt to extend ore being followed in the underground mining operation. The historic drilling provided the best guide to drill offset holes.

From 2008 to 2012, Denison drilled a total of 220 rotary and core holes over the Pandora, Beaver/La Sal mines and the Redd Block areas. These holes were drilled to verify historical drilling data and to test the favorable ground adjacent to the mines. Holes were drilled on approximately 100 foot centers where the terrain allowed. Drill site preparation, drilling operations, and site reclamation were contracted to Reliance Resource LLC. Before the drilling program started, historic drill hole data were digitized from hard copy geologic field logs by hand. Typical data available for drill holes included a combination of lithology descriptions, composited grade intercepts, various geophysical curves, and down hole deviation. Favorability of Salt Wash sand to be mineralized were mainly interpreted based on the content of carbon, thickness of sandstone, and alteration of interbedded mudstone., Drill hole locations were chosen based on the most favorable areas, and the distance to the actual mine workings. Drill hole cuttings were collected in 5 foot intervals through the holes and logged by Denison staff geologists. Cuttings were logged with particular attention to sandstone color, carbon content, and interbedded mudstone characteristics. All drill holes were probed with natural gamma, resistivity, deviation and induction when the hole was dry abs

spontaneous potential when the holes contains water. The probing was conducted by Denison staff using Mount Sopris downhole logging equipment. Gamma counts per seconds were converted to geologic equivalent uranium grade intervals using Denison's in house Gamlog program, accounting for K-factor, dead time, water factors, and pipe factors. All gamma probes used were calibrated often at the U.S. Department of Energy calibration pits in Grand Junction.

Denison's exploration drilling at the La Sal Complex in 2008 and 2009 focused on the East Pandora mining area, southwest and northeast of the existing workings. One hole was drilled to offset a historical mineralized hole and the hole was cored through the upper level sandstone to assay both uranium and vanadium. During the two year exploration campaign significant mineralization was intercepted in and around the Pandora mine.

During 2010, Denison completed 60 rotary holes in close proximity to mine workings around the Beaver mine and 11 holes at East Pandora. All surface drilling was restricted to areas of private surface ownership. Most of the holes were drilled in relatively close proximity to current mine workings with the purpose being to identify targets that could be quickly accessed, or to infill areas close to the mine with very spare historical drilling.

In 2011 a total of 68 holes were completed including nine monitor wells. Four holes were cored in the West Beaver area to assay for both uranium and vanadium.

In 2012, a total of 40 rotary holes were drilled in the Redd Block area. No core was taken for assay analysis. These holes were drilled along the east-west trend of mineralization in the La Sal Project and offset historic mineralization drill holes.

Year	Surface Drill Holes	Core Holes	Footage
Historic	1,993	undetermined	1,247,056
2008	30	1	15,385
2009	11	0	4,740
2010	71	0	51,530
2011	68	4	50,889
2012	40	0	34430
TOTAL	2213	5	1,404,030

Before purchasing Denison's U.S. Mining Division, EFR drilled 27 holes on the Energy Queen property and the State land to the northwest of the Energy Queen from 2007 through 2012. EFR drilling was done on 100-ft or greater centers. The purpose of the exploration drilling for EFR was to verify some of the older drilling, to obtain more stratigraphic information for mine planning of the Energy Queen mine, and to add more resources to the mine inventory. Drilling, logging and final reclamation were conducted similar to Denison's exploration program. EFR drilling discovered uranium grades

comparable to historical drill holes. This proves the accuracy of the old drilling data. EFR's drilling proved strong east-west and north-south trending mineralized areas in the Salt Wash Member of the Morrison Formation in the vicinity of the Energy Queen mine.

The lithology of EFR's and Denison's drilling programs correlated well with the historic Union Carbide drilling. The grades, position, and alteration in the confirmation and new exploration holes also correlate well with the historic holes. EFR's geologic staff and consultant evaluated and made cross-sections from the old Union Carbide data.

A few of the historic holes on the Superior, Mike, and San Juan leases were drilled deep enough to test the uranium potential of the Moss Back Member of the Chinle Formation. EFR has only sparse information on those holes. Drill depths through the base of the Chinle are 2,600-2,900 feet within the La Sal Project. Depths to the Chinle horizon are less in the western part of the project. It is unknown how many of the historic holes in that area may have targeted the Moss Back.

11.0 Sample Preparation, Analyses, Security

EFR has not conducted widespread and definitive sampling related to exploration on the La Sal Project. The equivalent uranium content (eU_3O_8) can easily be estimated radiometrically with properly calibrated Geiger Counters and scintillation instruments. During underground mining, samples are often collected where the appearance of the rock suggests it is ore-grade, but the radioactivity is low. This usually represents low uranium content but higher vanadium content. The samples are assayed for both uranium and vanadium. Standard industry laboratory practices are used for chemical assaying of uranium and vanadium.

Core from drill holes is logged for its lithology, scanned with a Geiger counter, and any zone of mineralization is split along the axis of the core. One half is sent for assaying and the other half is retained with the other core. These tasks were mostly performed by personnel of Union Carbide who were experienced in uranium exploration, sampling, and analytical methods, and the summary data appear to be in conformity with technological standards at the time. EFR (and Denison previously) follow similar practices on recent core and will continue such practices on future core samples.

Conventional rotary drilling produces sand-sized particles which cannot be assigned an exact footage interval by the time they reach the surface. Mixing with cuttings from higher in the drill hole can occur; therefore, they do not yield samples adequate for grade estimation. Instead, downhole electric and radiometric logging is relied on for rotary holes. However, assaying of cuttings from ore zones can give an approximate V_2O_5:U_3O_8 ratio.

12.0 Data Verification

Because EFR has not performed bulk sampling for exploration or resource estimation, the results of historical preparation techniques and analyses have been relied upon as being reasonably accurate. As mentioned in Section 6, some personnel currently on EFR's staff have personally been involved in work at the La Sal Project since the early 1980s.

The assay results of core are compared to gamma logs of the holes. It is not expected to be a perfect match because they are not comparing the actual same sample. Some degree of uncertainty occurs because the gamma logs and the chemical assays are obtained from different samples: core is rock removed from the drill hole and gamma readings are from the material surrounding the hole. However, when the thickness X grade (GT) of core samples is similar to the log GT, the results are considered verified.

No verification of the historical data has been conducted in that no core is available from the earlier exploration or production work. Historic holes cannot be re-entered for gamma logging. It is believed that the lithology, core assays, and diamond drill logging information of the previous operators is a reasonable representation of actual in situ conditions because standard industry practices were followed by all operators.

13.0 Mineral Processing and Metallurgical Testing

The La Sal Trend has a long history of uranium and vanadium production. Deposits from this district have been successfully milled at several historic mills in the region including Union Carbide's (Umetco) mill at Uravan, Colorado, the Climax Uranium mill in Grand Junction, Colorado, the Atlas mill at Moab, Utah, and the White Mesa Mill in Blanding, Utah (now owned by EFI). Future production will be processed at the White Mesa Mill. The White Mesa Mill is a fully licensed uranium and vanadium mill located in southeastern Utah, near the Colorado Plateau District, the Henry Mountains Complex, the Arizona Strip and the White Canyon uranium districts. The Mill is approximately six miles south of the city of Blanding, Utah. Access is by U.S. highway 191.

Construction of the White Mesa Mill began in 1979, and conventionally-mined uranium/vanadium ore was first processed in May 1980. The Mill uses sulfuric acid leaching and a solvent extraction recovery process to extract and recover uranium and vanadium. The Mill has been operated on a campaign basis (i.e., intermittent processing of ore and alternate feed) since its initial start-up due to variable uranium market conditions.

In addition to the conventional ore circuit, the White Mesa Mill has a separate vanadium co-product recovery circuit. The Mill also has a third circuit for the processing of certain types of alternate feed materials, which was built in 2009. This circuit enables the Mill to process both conventional ore and alternate feed materials simultaneously.

The Mill is licensed to process an average of 2,000 tons of ore per day and to produce up to 8.0 million pounds of U_3O_8 per year. In full operation, the Mill employs approximately 150 people.

Between November 2012 and April 2013, the Mill processed uranium/vanadium ores from stockpiles of the several previous months' mining at Beaver /La Sal and Pandora/Snowball mines.

14.0 Mineral Resource and Mineral Reserve Estimates

Mineral Resource estimates have been calculated by a modified polygonal method (polygons used as shown in Figures 14-1, 14-2, and 14-3). The older drilling was often on 200-foot centers in portions of the district. The 2007-2008 drilling program on the Energy Queen lease partially consisted of fill-in holes on 100-foot spacing, as did the Denison drilling. Therefore, many polygons for Measured Mineral Resources are circles with a 100-foot diameter, thus 7,854 square feet of area, reflecting just a 50-foot influence distance centered on the hole. At locations where drifting or stoping has removed portions of polygons, there have been reductions to the resources assigned those polygons. The same method of polygons is used for resources on the entire district. Where drilling is closer than 100-foot spacing and the circles intersect, they are truncated to polygons by the perpendicular bisector method.

For the in situ resource estimate, the thickness and grade assigned to each polygon equals that of the intercepts recorded in the center hole of the polygon. A tonnage factor of 14 cubic feet per ton is used for Salt Wash deposits.

Mining assumptions were used in determining a cutoff grade for the resource estimates. Mining dilution is 1 foot of waste for mineralized thicknesses less than 6.0 feet or an appropriate fraction of a foot (if the intercept is greater than 6 feet) up to 7.0 feet. A resuing or split-shooting mining approach will be followed to minimize dilution when extracting thin zones. In the split-shooting method, the mineralization is usually thin (a few feet in thickness). The eventual stope height will be 7 feet or greater, but at the time of mining, the waste above or below the mineralized horizon is blasted. This waste layer may be one or more feet thick. After the waste is blasted and removed, the mineral zone is blasted and removed, thus reducing the amount of dilution to the mineralized rock. At times, the mineralized zone is blasted before the waste. For the remaining Mineral Resources in the Project areas, 7.0 feet is the assumed minimum stope height. Mineralized intercepts greater than 7.0 feet are not diluted for resource calculations. It is conservative to use waste at zero grade for the dilution because there is often lower-grade material adjacent to the target mineralized zones.

Vanadium assays are available for some of the drill holes. Where no data exist on vanadium content, the intercept is assigned a value based on the recent production head grades of the mill feed from the Pandora and Beaver mines. These range from 3.35 to 6.5 for various ore lots fed to process between November 2012 and April 2013. Historical Umetco Minerals resource estimate for the Energy Queen property suggests the west end of the district has a lower ratio that averages V_2O_5:U_3O_8 of 4.25:1 based on historic assays of core. The average for the district Mineral Resource estimates presented below is 5.25:1 V_2O_5:U_3O_8. *This ratio cannot be guaranteed and must be used only as a historical estimator for vanadium mineralization potential.*

The Mineral Resource estimate for the La Sal Project is reported by mine areas. Since the Project covers a length of eleven miles and includes several mines from east to west, the project was divided into four blocks: Pandora, Beaver/ La Sal, Redd Block and

Energy Queen (Figures 14-1, 14-2, and 14-3). The Mineral Resource estimate for the Energy Queen was presented in the Energy Queen Technical Report (Peters, 2011) and will be revised with new drill holes in this report. Other changes to the Energy Queen Mineral Resource from the previous report are not readily apparent, but result from applying a smaller area of influence to the drill hole intercepts, using a higher cutoff criteria, and including the SE ¼ Section 31, T28S, R24E

Mineral Resource estimation for the La Sal project is based on the gamma logs from 1,993 historic rotary drill and core holes, 247 holes drilled by EFR and Denison from 2007 to 2012, and approximately 500 underground long holes. Mineral Resource estimates have been calculated using a modified polygonal method. A minimum composite intercept GT value (grade X thickness) of 0.10% ft eU_3O_8 was used as a cutoff. The mineralization in the La Sal project is interpreted as being hosted in the Top Rim sandstone of the Salt Wash Member of the Morison Formation. Total thickness of the host sandstone is between 60 and 100 feet. All available geologic data (resistivity, conductivity, grade, deviation, lithology and stratigraphy) are loaded into Rockworks software to generate cross sections and to correlate ore horizons between adjacent drill holes. Cross sections through mineralized zones within the target sandstone horizon are created with composited grade intercepts and available lithology data. The sandstone interval in each drill hole is then divided into three zones within the Top Rim, U1, U2, and U3 from bottom to the top (Figures 14-4,14-5, and14-6). The interpretation of mineralized composition is used as the basis for mineral resources estimation.

In this report, a Measured Mineral Resource is estimated by an area of influence (circle of 50 feet radius) which is assigned to each drill-hole intercept (Figures 14-4,14-5, and14-6). Intercepts in surface rotary and core holes, and underground long holes, were assigned as Measured Resource. Where portions of polygons are closer than 100 feet, the polygons are altered to half the distance between holes. The contained metal associated with that drill hole is calculated from the thickness, grade, and area of influence of the drill-hole intercept.

An Indicated Mineral Resource block is drawn between two drill holes or among several drill holes which have to meet two criteria: first, mineralization between and among drill holes has to correlate well within the same zones (U1, U2, or U3), within which the mineralization is believed to be continuous between drill holes (Figures 14-4,14-5, and14-6). Secondly, the distance between two drill holes cannot be over 200 feet apart. Otherwise an Inferred Mineral Resource will be assigned. No Indicated or Inferred Resources will be calculated between two holes when mineralization intercepts in these two holes are on different horizons which do not support the mineralization continuity. The grade and thickness assigned to a polygon of either Indicated or Inferred Resource blocks is the smallest grade and thickness of the particular drill holes' intercepts that define each block. Therefore, the Indicated and Inferred Mineral Resources reported here are conservative.

Table 14-1 lists the mineral resources of the four blocks with one foot mining dilution.

A density factor of 14cuft/ton is used in this report. One foot mining dilution is used when the intercept is less than seven feet thick, otherwise no dilution is assigned. 7.0 feet is the assumed minimum stope height. Mineralized intercepts greater than 7.0 feet are not diluted for resource calculations. It is conservative to use waste at zero grade for the dilution, because there is often lower-grade material adjacent to the target mineralized zones. The average V_2O_5:U_3O_8 ratio from both Pandora and Beaver/ La Sal mines is 5.25:1 from the recent White Mesa Mill head grades, and this ratio is used for the Vanadium Mineral Resources estimate.

Historically, good agreement between polygonal estimation and as-mined reserves has been found when drill-hole areas of influence are limited to drill-hole spacings of 100 ft. A review of more recent estimations, particularly NI 43-101 Technical Report compliant resources in the uranium industry supports the use of this 100 ft drill-hole separation limitation.

Table 14-1

Mines	Tons	U_3O_8 Lbs	Avg Grade (U_3O_8)	V_2O_5 Lbs	Avg Grade (V_2O_5)
Energy Queen					
Measured	262,000	971,000	0.19	5,100,000	0.97
Indicated	81,000	268,000	0.17	1,409,000	0.87
Inferred	43,000	79,000	0.09	417,000	0.48
Redd Block					
Measured	336,000	1,260,000	0.19	6,615,000	0.98
Indicated	35,000	47,000	0.07	249,000	0.35
Inferred	95,000	171,000	0.09	900,000	0.47
Beaver/LaSal					
Measured	215,000	800,000	0.19	4,199,000	0.98
Indicated	9,000	33,000	0.18	173,000	0.96
Inferred	29,000	67,000	0.11	352,000	0.60
Pandora					
Measured	196,000	701,000	0.18	3,682,000	0.94
Indicated	6,700	19,000	0.14	99,000	0.73
Inferred	18,000	44,000	0.12	232,000	0.66
Grand Total (Measured+Indicated)	**1,142,000**	**4,100,000**	**0.18**	**21,525,000**	**0.94**
Grand Total (Inferred)	**185,000**	**362,000**	**0.10**	**1,902,000**	**0.51**

Footnotes:

1) Tons and grade are calculated using a dilution of one foot of waste, as further described in the text.

2) Resource estimate is based on drill hole intercept cutoff grade of 0.10% U_3O_8 and a GT of 0.20.

3) Vanadium grade is estimated at the district average ratio to uranium grade of 5.25 : 1

Previous workers in this area (mainly Union Carbide) and EFR geologists have studied the main channel trends. Sandstone thickness, gray color, and pyrite and carbon contents of sandstones, along with gray or green inter-bedded mudstone, indicate areas of sandstones that are favorable for containing uranium-vanadium mineralization. These conditions allow geological definition of favorable areas and exploration targets.

On the State of Utah mineral lease in section 2, T29S, R23E (ML-49313) there is a small, reclaimed mine. This is too far from the Energy Queen property to mine from any existing or planned workings. However, it is believed this mine closed in the mid-1980s because of depressed uranium prices, not because its resources were exhausted. EFR has acquired a map of this parcel showing the mine workings and some of the drilling. No resource calculation can be made for this property.

As mentioned above, the Pine Ridge portion for the Project area was drilled and mined in the 1970s and 1980s. EFR possesses historic maps and some drill hole information but has not yet performed the work necessary to classify any Mineral Resources there in compliance with CIM Standards.

Several exploration target areas have been identified from scattered drill holes, areas of denser drilling for which the historic data have not yet been thoroughly evaluated, nor confirmed by EFR drilling, and by geological projection on the entire Project length.

Some areas within the leased property remain unexplored at this time. The La Sal Mineral Trend follows the direction of the sandstone channel along its southern edge.

At the Energy Queen property, a few scattered surface holes within the lease boundary encountered favorable sandstone and require offset drilling, because these mineralized zones are open in the direction of the tributary channel trend. Much of the surface drilling only penetrated the Top Rim sandstone so that there may be presently unknown lenticular Middle Rim sandstones which could be mineralized.

The potential pounds and grade are conceptual in nature, there has been insufficient exploration to define an accessible and compliant mineral resource in these adjacent properties, and it is uncertain if further exploration will result in these targets being delineated as mineral resources.

15.0 Mineral Reserve Estimates

EFR is in the process of preparing a detailed evaluation of the mining process and economics needed to mine and produce the resources in the areas of the La Sal Project. Because this is not yet complete, the current report will not assign any of the known Mineral Resources to a Mineral Reserve category. However, because this work is well underway, this report will briefly address many of the following report sections that are usually only applicable to Advanced Property Technical Reports.

16.0 Mining Methods

The mining of all resources in the La Sal Project have been by conventional underground methods for over 40 years and, once mining resumes, will continue by such methods. These methods have been used very successfully in the region for over 100 years. The nature of the Salt Wash uranium-vanadium deposits require a random room and pillar mining configuration. The deposits have irregular shapes and occur within several close-spaced, flat or slight-dipping horizons. The mineralization often rolls between horizons. The use of rubber-tired equipment allows the miners to follow the ore easily in the slight dips and to ramp up or down to the other horizons. The deposits are accessed from the surface through long declines at gradients of 8-15%, depending on depth and locations suitable for portal sites, such as the La Sal and Pandora/Snowball mines. Deposits may also be accessed through vertical shafts such as at the Beaver and Energy Queen mines. Depending on ground conditions, the shafts will be lined with concrete or with steel and timber-lagging methods. Most recently, the Beaver Shaft was used for hoisting ore, ventilation, and a secondary escape. It is connected underground to the La Sal mine which provided man and equipment access to the Beaver mine areas. The Salt Wash sandstones are usually quite competent rock and require only moderate ground support. The overlying Brushy Basin mudstones are less competent, so the declines are often supported by square set timber or steel arch and timber lagging, as is the case at the La Sal and Pandora mines. The Salt Wash uranium-vanadium deposits are usually thinner than the mining height needed for personnel and equipment access. Therefore, the ore is mined by a split-shooting method.

The split-shooting mining method involves assessing each face as the stopes advance by the mine geologist, engineer, mine foreman, or experienced lead-miner. Because the grades and thickness of the typical Salt Wash uranium-vanadium deposits are highly variable, they are usually unpredictable from one round to the next. (A round is a complete mining cycle of drill-blast-muck-ground support, if needed to be ready to drill again; a normal round advances a face about 6 feet.)

Typically, the thickness of the mineralized material is less than the height needed to advance the stope. As the stope face is being drilled, the blast holes are probed with a Geiger counter probe in order to estimate the U_3O_8 grade. The uranium-vanadium mineralization is usually dark gray to black. The mineralization sometimes rolls, pinches or swells, or follows cross-beds within the sandstone. Therefore, the miner will also use drill cutting color as a criterion to help guide blast hole direction and spacing. This irregular habit of the deposit can result in holes collared in mineralized material ending in waste, or, conversely, holes collared in waste will penetrate mineralized material much of their length.

Based on the results of the assessment of the blast holes drilled in the face, the round will be loaded and shot in two or more stages. Depending on the location and thickness of the mineralized material in the face (there may be multiple mineralized layers); the miner will attempt to blast either only mineralized material or only waste rock. The miner will muck it out as clean as possible, then shoot the remaining rock and muck it cleanly. In

resource estimates, one foot of waste is added to the mineralized material for dilution because of this method. The amount of waste rock shot before or after the mineralized material results in typical stope heights of eight-to-nine feet. The minimum height needed to advance the stope is about seven feet, so any mineralized drill-intercept greater than seven feet does not receive dilution in resource estimate calculations.

As with the split-shooting method of mining, resuing mining involves very selective separation of the waste rock from the ore. Ore grade material is determined by probing drill holes in the face of the stope. In resuing, waste is blasted or otherwise removed from one side of the ore zone. The ore in that zone is then extracted, thereby leaving any waste on the other side of the ore zone in place. If additional stope space is needed or a second ore zone occurs behind the remaining waste, that waste is removed without dilution to the ore zones. The lower limit of waste volume that can be extracted without disturbing ore is a function of the precision with which waste areas of the drill pattern can be selectively blasted without unduly increasing mining costs.

Mining assumptions were used in determining a cutoff grade for the resource estimates. Mining dilution is 1 foot of waste for mineralized thicknesses less than 6.0 feet or an appropriate fraction of a foot (if the intercept is greater than 6 feet) up to 7.0 feet. Mineralized intercepts greater than 7.0 feet are not diluted for resource calculations. A resuing or split-shooting mining approach will be followed to minimize dilution when extracting thin zones. The eventual stope height will be seven feet or greater, but at the time of mining the waste above or below the mineralized horizon is blasted. This waste layer may be one or more feet thick. After the waste is blasted and removed, the mineral zone is blasted and removed, thus reducing the amount of dilution to the mineralized rock. At times, the mineralized zone is blasted before the waste. For the La Sal Project Mineral Resources, 7.0 feet is the assumed minimum stope height. It is conservative to use waste at zero grade for the dilution, because there is often lower-grade material adjacent to the target mineralized zones. Vanadium assays are available for some of the drill holes. Where no data exist on vanadium content, the intercept is assigned a value based on the district average estimate for the property which averages a V_2O_5:U_3O_8 ratio of 5.25:1 based on historic assays of core. *This ratio cannot be guaranteed and must be used only as a historical estimator for vanadium mineralization potential.*

The cutoff of a mineralized intercept in individual holes is 0.10% U_3O_8, with a select few holes as low as 0.05% U_3O_8 based on the assumptions listed below, used in the Mineral Resource estimates for the La Sal Project in order to achieve the average grade of the total resource of 0.18% U_3O_8, as discussed in Section 22 of this report. This cutoff is somewhat subjective and was chosen based on experience of EFR staff and on the basis of the lowest grade intercepts that are likely to be mined based on a tentative mine plan and location of such intercepts in or adjacent to development entries that will be mined regardless of the grade of involved mineralized sandstone. Assumptions involved in use of this cutoff are as follows:

1) Development entries will be made to access Indicated and Measured Mineral Resources of sufficient size to warrant room-and-pillar mining of the resources.

Such entries will follow the historic random pattern of mining areas that is driven by the localized nature of areas of mineralization.

2) Entries can and will intercept some lower grade material that would not necessarily be economically mineable as standalone resources.
3) Measured vanadium grades, in combination with uranium grade, can be high enough to warrant mining a resource area even if the uranium contents in the holes in that area would not be sufficient to make the mineralization mineable through uranium content alone.
4) The thickness of the drill intercept in mineralized material makes some areas attractive because of available volume of mineralization even when relatively low grade for uranium.
5) Any mineralized material below the cutoff grade that is mined during development or room-and-pillar extraction will be considered waste regardless of contained uranium and vanadium values.
6) Indicated or Measured Mineral Resources may still prove to be uneconomic to mine upon performance of a full feasibility analysis or due to economic or mining conditions at the time mining proceeds towards such resource areas. The inverse also could be true. A substantial increase in the price of uranium or vanadium could result in a lower cutoff being in effect during mining.
7) Minimum mining thickness is 2-3 feet using the split-shooting or resuing mining methods.

17.0 Recovery Method

The La Sal Trend has a long history of uranium and vanadium production. Deposits from this district have been successfully milled at several historic mills in the region including Union Carbide's (Umetco) mill at Uravan, Colorado, the Climax Uranium mill in Grand Junction, Colorado, the Atlas mill at Moab, Utah and the White Mesa Mill in Blanding, Utah (now owned by EFI). The White Mesa Mill uses sulfuric acid leaching and a solvent extraction recovery process to extract and recover uranium and vanadium. The Mill has been operated on a campaign basis since its initial start-up due to variable uranium market conditions.

Between November 2012 and April 2013, the Mill processed uranium/vanadium ores from stockpiles of the several previous months' mining at Beaver /La Sal and Pandora/Snowball mines attaining greater than 96% uranium recovery and greater than 70% vanadium recovery. Future production will be processed at White Mesa Mill.

18.0 Project Infrastructure

18.1.1 Energy Queen Mine

Permanent structures existing at the Energy Queen site include the headframe and a metal building containing an office, shop, showers, warehouse, and the hoist. The compressor is located in a separate building. One cased vertical ventilation hole was established into the mine working level. A small water treatment building and settling ponds are located nearby on the San Juan County land in Section 5. During earlier operations, water was treated with barium chloride to remove radium. EFR received approval for a new surface water discharge permit from the Utah Water Quality Division ("WQD") on March 14, 2008. Water encountered during mining will be in excess of the amount needed for re-use during the mining activity. Presently, inflow (once the mine is dewatered) is expected to be approximately 65 gallons per minute, based on Umetco pumping records from 1990. The mine water will be treated using barium chloride (or a similar process) to remove radium, and treated water then will be discharged to an existing dry wash. Construction plans for a new treatment plant were submitted to WQD in second quarter 2008, but have been on-hold due to the depressed uranium price. Phone and power lines are installed and presently being used.

The Energy Queen shaft conveyance system will be capable of producing at least 200 tons of ore and waste rock per day once mine refurbishment is complete. Refurbishment activities are complete on surface facilities with the exception of the main dry room, hoist, and headframe. Rehabilitation of the shaft and initial production of mineralized material from the Energy Queen mine could begin in about 9 months after the water treatment plant is constructed once a decision to dewater the mine is made. Evaluations of the hoisting equipment are underway. The mine is located 62 miles from the White Mesa Mill at Blanding, Utah. It is about 38 miles to the Piñon Ridge Mill planned in the Paradox Valley near Bedrock, Colorado.

18.1.2 La Sal Mine

The Beaver and La Sal mines are accessed through the La Sal decline with rubber-tired equipment. Men and supplies enter through this portal. The principal shop, offices, and warehouse facilities used by all mines in the district are housed at the surface facilities of the La Sal Decline. There are large fenced yards as well as buildings for equipment and supply storage. It is used as a central receiving site for bulk and large orders which are then distributed to the other EFR mines in the district and other parts of the region. The shop areas include facilities specific to electrical equipment, drills, mobile diesel equipment, and welding. Engineering, geology, safety, environmental, and mine supervisory and clerk offices are located here. There are also staff and mine crew's dry rooms. Ample ore stockpile space is available for easy truck load-out for transporting ore to the White Mesa Mill. Electrical lines and substations exist and are adequately sized for any future production potential of the Mineral Resources. The La Sal mine is dry, so no water treatment facilities are needed.

18.1.3 Beaver Shaft

The surface infrastructure at the Beaver Shaft location consists of the hoist house, hoist, and headframe. The shaft is 690 feet deep to the underground haulage level at the loading pockets top grizzlies and 750 feet total depth. There are three pockets, two of 70 ton capacity and one of 90 ton capacity. This arrangement allows for separation of ore and waste. The skips dump into an ore bin from which the ore is trucked a short distance to a stockpile and subsequently loaded in to the trucks for haulage to the White Mesa Mill. The shaft conveyance system is certified for man trips, although the routine access for personnel is through the La Sal decline. Another building houses compressors that were supplying compressed air for the underground workings in the Beaverm. Power lines and substations are in place. The Beaver mine is a dry mine; therefore, no water treatment facilities exist.

18.1.4 Pandora Mine

Access into the Pandora mine is through a decline with rubber-tired equipment. Surface facilities here are less than at the other mines. It consists of a small office and shop buildings. A third building with a dirt floor is used for storage of materials and equipment. Power lines exist to the mine with enough capacity for the required load of potential future mining. The Pandora mine is a dry mine; therefore no water treatment facilities exist.

18.1.5 Redd Block

In 1980, Umetco was planning to sink another shaft to access the Redd Block Mineral Resource. The project did not progress too far. The infrastructure at the Redd Block associated with a possible new shaft consists of a cleared and leveled site large enough for future construction of all surface facilities that would be required. The power line and transformers are installed, and the concrete base for a compressor building has been poured. As mining progresses, a water table in the Salt Wash sandstone host horizon will be between the current Beaver western mine advance and the east end of the Redd Block Mineral Resources. Seven monitor wells were installed by Denison around this proposed shaft site.

19.0 Market Studies and Contracts

19.1 Uranium Market and Price

Uranium does not trade on the open market and many of the private sales contracts are not publically disclosed. Monthly long term industry average uranium prices based on the month-end prices are published by Ux Consulting, LLC, and Trade Tech.

As shown on Figure 19.1, the current spot price is less than the long term contract price. However, during periods when the spot price rises, such as the peaks in 2007 and 2011, the spot price equals or exceeds the long term price. Spot prices apply only to marginal trading and usually represent less than 20% of supply (World Nuclear Association, 2013).

Figure 19-1. Uranium Price History

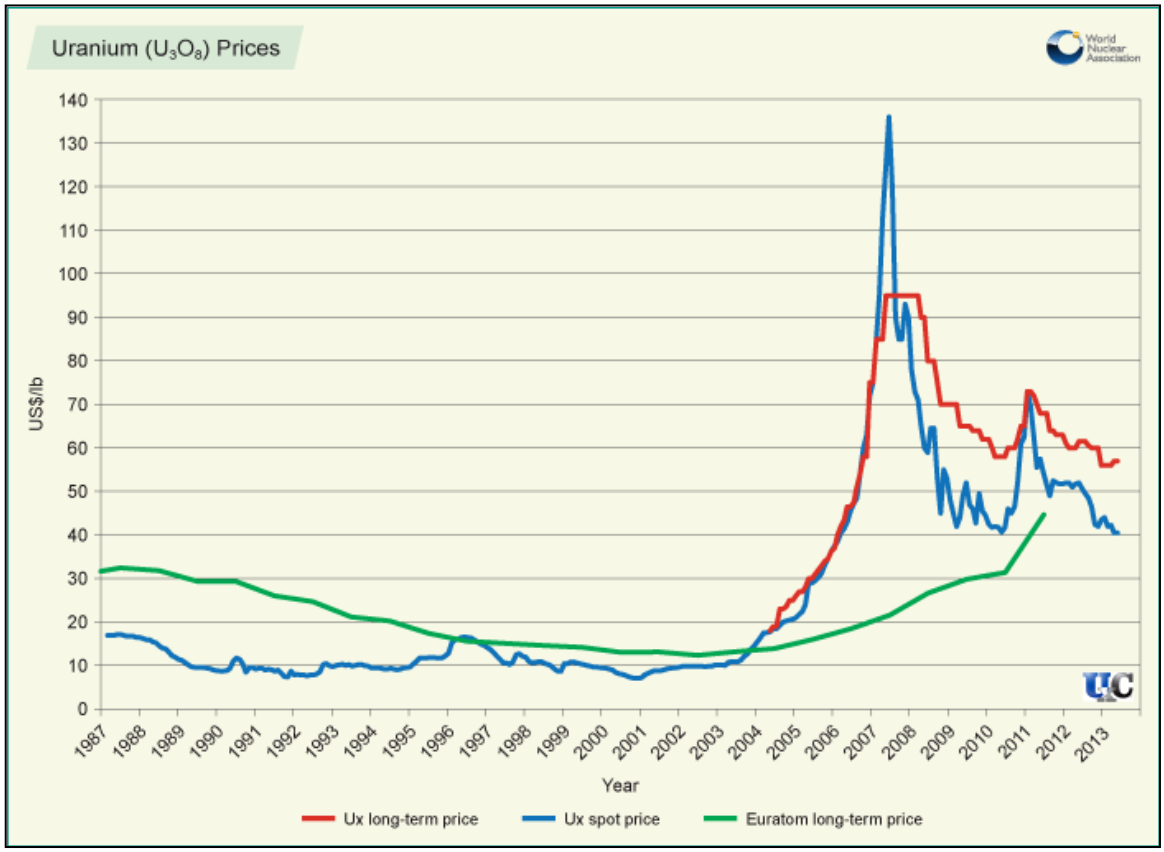


Table 19-1. Long Term Uranium Price

Table 19-1: Long Term Uranium Price*					
	2009	2010	2011	2012	2013
Jan	$ 69.00	$ 60.00	$ 70.00	$ 61.00	$ 57.00
Feb	$ 69.00	$ 60.00	$ 70.00	$ 60.00	$ 57.00
Mar	$ 69.00	$ 60.00	$ 68.00	$ 60.00	$ 57.00
Apr	$ 69.00	$ 60.00	$ 68.00	$ 61.00	$ 57.00
May	$ 65.00	$ 60.00	$ 68.00	$ 61.00	$ 57.00
Jun	$ 65.00	$ 60.00	$ 68.00	$ 61.00	$ 57.00
Jul	$ 65.00	$ 60.00	$ 68.00	$ 61.00	$ 54.00
Aug	$ 65.00	$ 60.00	$ 65.00	$ 60.00	$ 53.00
Sep	$ 65.00	$ 62.00	$ 63.00	$ 61.00	$ 51.00
Oct	$ 65.00	$ 62.00	$ 63.00	$ 59.00	$ 50.00
Nov	$ 60.00	$ 65.00	$ 62.00	$ 59.00	$ 50.00
Dec	$ 60.00	$ 67.00	$ 61.00	$ 57.00	$ 50.00
Average	$ 65.50	$ 61.33	$ 66.17	$ 60.08	$ 54.17

*Average long-term price 2009 through 2013 - $61.45 per pound
As quoted by Trade Tech, 2013

Table 19-2. Short Term Uranium Price

Table 19-2: Spot Uranium Price*					
	2009	2010	2011	2012	2013
Jan	$ 47.00	$ 42.25	$ 72.25	$ 52.25	$ 43.75
Feb	$ 44.00	$ 40.50	$ 69.50	$ 52.00	$ 42.00
Mar	$ 42.00	$ 41.75	$ 58.50	$ 51.10	$ 42.25
Apr	$ 45.00	$ 41.75	$ 55.00	$ 51.50	$ 40.50
May	$ 49.00	$ 40.75	$ 56.50	$ 51.25	$ 40.40
Jun	$ 51.00	$ 41.75	$ 51.50	$ 50.75	$ 39.55
Jul	$ 47.00	$ 45.25	$ 52.00	$ 49.50	$ 35.00
Aug	$ 46.00	$ 45.50	$ 49.25	$ 48.00	$ 34.00
Sep	$ 43.00	$ 46.75	$ 52.00	$ 46.50	$ 35.00
Oct	$ 46.50	$ 52.00	$ 51.75	$ 41.00	$ 34.25
Nov	$ 45.25	$ 60.25	$ 51.50	$ 42.50	$ 35.90
Dec	$ 44.50	$ 62.00	$ 52.00	$ 43.25	$ 34.50
Average	$ 45.85	$ 46.71	$ 55.98	$ 48.30	$ 35.22

*Average spot price 2009 through 2013 - $46.41 per pound
As quoted by Trade Tech, 2013

Thus, in a 5-year look-back from 2009 to the present, average uranium prices have been $46.41 per pound for spot delivery to $61.45 per pound for long-term delivery. More recently, in February 2014, the spot price was $35.40 and the long-term price was $50.00. Near- to mid-term uncertainty has created recent weakness in uranium markets. The shutdown of reactors in Japan, building inventories, and a general lack of demand has been largely to blame for this near-term price weakness. However, longer-term market fundamentals in the uranium sector remain strong. Nations around the World, led by China, are building new nuclear reactors. Yet, current weakness in uranium prices is leading to new uranium projects being deferred or canceled. The World Nuclear Association reports that there are now 70 nuclear reactors under construction around the World. In addition, Japan has signaled that it will restart many of their reactors in the coming years, with several potentially restarting in 2014. As a result, though predicting spot- and long-term prices is speculative, many analysts expect rising spot- and long-term prices in the coming years (Ux Consulting, 2013).

Ux Consulting Company, a leading source of consulting, data services and publications on the global nuclear fuel cycle markets, has published expected mid-range spot prices that average $70/lb during the potential life of mining at the La Sal Project deposits. The Ux mid-point prices range from $55/lb in 2017 to $77/lb in 2025 (Ux Consulting, 2013).

As a result, the author recommends utilizing a uranium price of $65/lb as a base case in establishing a cut-off for Mineral Resource estimation to satisfy the CIM Standards that it has “reasonable prospects for economic extraction”.

19.2 Vanadium Market and Price

The primary market for vanadium is the steel manufacturers. Well over 90% of worldwide vanadium production is used as an alloying agent for strengthening and toughening steels. There is a newly developing market for vanadium as an electrolyte for high capacity batteries that are envisioned to find use in the renewable energy business. These batteries conceptually could solve the problem of storing renewable energy when it is generated, and putting that energy out on the grid when it is needed.

Vanadium is a broker market with several intermediaries buying product from the primary producers and typically converting that vanadium to ferrovanadium for direct charge into the steelmaking furnaces. Prices for vanadium are historically quite volatile, but have been holding in the $5.50-to-$7.00 per pound range for the last 3 to 4 years. As a result, the author recommends utilizing a vanadium price of $6.50/lb as a base case in establishing a cut-off for Mineral Resource estimation to satisfy the CIM Standards that it has “reasonable prospects for economic extraction”. The total annual V_2O_5 market is about 150 million lbs. The vanadium to be produced by the La Sal Project mines owned by EFR will represent about 2% of the total vanadium demand and should have little or no effect on price.

20.0 Environmental Studies, Permitting and Social or Community Impact

The company's La Sal, Utah mines are located on a mixture of private, state, and federal lands. Mines on private and state lands require an approved Notice of Intent ("NOI") with the Utah Division of Oil, Gas and Mining ("DOGM"). If the mine generates water, a ground water discharge permit is required for the treatment plant and ponds and a surface water discharge permit is required for discharge of treated water. Both permits are issued through the DWQ. Air permits for air emissions including radon are issued by the Utah Division of Air Quality ("DAQ"); however, smaller mines are typically exempt. Water well permits, water rights, and stream alteration permits are issued through the Division of Water Resources ("DWR"). On federal land, all the state permits listed above are required; however, a Plan of Operations ("POO") and a review under NEPA are also required by the federal land managing agency. The company's mines are all existing mines in historic mining areas and approvals by the BLM and U.S. Forest Service ("USFS") have been obtained under Environmental Assessments ("EAs") and Findings of No Significant Impact ("FONSI"). The counties in southeastern Utah are rural and sparsely populated; and, their county permitting requirements are typically limited to building and utility permits. Agreements for maintaining portions of the county roads used for ore haulage are also fairly common.

The permitting status for each of the company's La Sal mines is summarized below.

20.1 Energy Queen Permits

The Energy Queen mine (formerly the Hecla Shaft) is located on private land and about 3 miles west of the Beaver Shaft and the town of La Sal. The mine was developed by Union Carbide in the late 1970s and early 1980s. The mine stopped production in 1982, but continued dewatering and water treatment through the end of 1992. At that time, the pumps were shut down and the mine was allowed to flood. The mine permit was transferred to EFN (1994), then IUC (1997), and then Denison (2007). Energy Fuels Resources Corporation ("EFRC") acquired the mine lease in late 2006, and the permit was transferred from Denison to EFRC in 2008. The mine, which is on standby, will require installation of a new water treatment system and significant capital improvements to the surface facilities, hoist, and shaft prior to being put back into production. EFRC has acquired all the additional permits needed to operate including the surface and ground water discharge permits, a minor source air emission exemption, a National Emission Standards for Hazardous Air Pollutants ("NESHAP") approval for radon emissions, and an amendment to the Large Mine NOI. This amendment included plans for a new water treatment plant and holding ponds, a large ore pad, and additional ground water monitoring wells. EFRC began work on a second amendment to the Large Mine NOI in 2012, which was to include additional vent shafts, expanding the waste dump, and expanding the land package. However, this effort was temporarily suspended in the fall of 2012 with the acquisition of Denison's U.S. Mining Division, along with the acquisition of the Redd Block permit and associated resources immediately east of the Energy Queen. EFRC will need to prepare an integrated mine plan for the area before permitting can resume.

Existing major permits at the mine include:

- Large Mine NOI M/037/043 as amended (DOGM)
- Approval for Construction under 40 CFR Part 61 Subparts A & B (DAQ)
- Small Source Exemption – De Minimis Emissions (DAQ)
- UPDES Permit UT0025712 for surface water discharge (DWQ)
- Ground Water Quality Discharge Permit UGW37007 (DWQ)

20.2 La Sal Mines Complex (Pandora, La Sal, Snowball, and Beaver Shaft)

The La Sal Mines Complex consists of four underground uranium/vanadium mines located near La Sal, Utah that are connected underground. The Pandora is located on unpatented mining claims on BLM and USFS land. The surface facilities, consisting of a decline, mine buildings, ore pad, and a large waste dump, are located on BLM land whereas the vent shafts are located on both BLM and USFS land. The mine was developed and first operated by Atlas in the early 1970s. The mine shut down in the mid-1980s and the mine and permits were acquired by Umetco. Umetco operated the mine in 1989 and 1990, but placed it on standby in the fall of 1990. EFN acquired the mine and permits in 1994 and, these in turn were transferred to IUC (1997), Denison (2007), and EFI (2012). The mine is currently permitted under the original 1977 NOI with DOGM and the 1981 EA with the BLM plus amendments. The vent shafts on the USFS lands were permitted by Umetco in 1989. The total approved surface disturbance is 13.3 acres.

The La Sal mine, Snowball mine, and Beaver Shaft are located on a mixture of BLM and private land. They were developed and first operated by Union Carbide in the 1970s. The La Sal and Snowball mines access the ore body via declines and were developed in the early 1970s. The Beaver Shaft was added in 1979. Most of the surface facilities for these three mines are located at the La Sal decline area including a large warehouse, shop, office trailers, ore pad and waste dump. The Beaver Shaft facilities include the headframe/hoist, an ore pad, and waste dump. The Snowball facilities are limited to the decline and a waste dump. The three mines were permitted with DOGM and the BLM in the mid-1970s and early 1980s, when their respective state and federal regulations came into being. The mine is currently permitted under these plans plus approved amendments for a total surface disturbance of 43.2 acres.

Denison restarted the Pandora mine in 2007 and the La Sal and Beaver Shaft in 2008. The mines were operated by EFR until the fall of 2012 when the La Sal and Beaver mines were placed on standby in October and the Pandora in December 2012. Additional Mineral Resources exist at these mines, described in Section 14 of this report. The La Sal and Beaver underground workings are expanding in a westward direction towards Redd

Block and the Energy Queen. The La Sal Complex is currently a dry mine; however, EFR anticipates encountering ground water as the mine expands farther to the west.

In 2009, it became increasingly more difficult to obtain BLM and USFS permits for exploration and new vent shafts under the old permits. The company agreed to file updated plans that included future mine expansion and exploration with these agencies and DOGM. The POO was submitted in December 2009 and after a number of revisions was found to be complete in December 2010. Project scoping followed in January 2011 and the draft EA to approve the proposed mine expansion was released for public comment in July 2012. A large number of public comments were received. The third-party contractor and the agencies are currently finishing up responses to comments and revisions to the EA. A final EA likely will be issued in mid-2014.

The revised Large Mine NOI to update and expand the permitted facility was submitted to DOGM in January 2010 and is in the final stages of permitting. DOGM has requested that we provide them with updated reclamation bond estimates for the surface facilities. These estimates are scheduled to be prepared and submitted in April 2014.

When mine operations restarted in 2007, the Pandora mine operated under a minor source exemption for air emissions. With the restarting of the La Sal mine, DAQ requested that Denison permit all the mines in the La Sal Mines Complex under one permit. This permit application was submitted in November 2008 and approved in November 2009. A permit revision was submitted in October 2010 for adding generators and increasing mine production. This permit was approved in March 2012.

The location of the mines near the town of La Sal has made it challenging to meet the radon NESHAP requirement that the maximum modeled incremental dose of the nearest receptors (i.e., nearby residents) from mine ventilation be no more than 10 millirems/year (mrem/yr). Additional emission controls were installed in the mines to reduce radon levels. EFR also believes that both the radon sampling method utilized at the mines and the radon model specified in the regulations are overly conservative. Additional field sampling and use of more modern air quality models support this conclusion. This information will be submitted to the State of Utah and the U.S. Environmental Protection Agency (“EPA”) in second quarter 2014 with a request to modify its sampling and modeling program.

Existing major permits at the La Sal Mines Complex include:

- 1981 Pandora Plan of Operations and EA/FONSI (UTU-060-GR-1-25)
- 1977 Pandora Large Mine Notice of Intention (M/037/012)
- 1981 La Sal Plan of Operations and EA/FONSI (UTU-0689812)
- 1977 La Sal, Snowball, Beaver Large Mine Notice of Intention (M/037/026)
- 2009 Approval Order, Underground Uranium Mine w/NESHAP Part 61 (DAQE-AN0141510002-09)

- 2012 Approval Order, Increase Production and Generator Usage (DAQE-AN141510003-12)

20.3 Pine Ridge

The Pine Ridge mine is located on unpatented mining claims on USFS land west of the La Sal Mines Complex. It is a small underground mine with a decline and ventilation shaft that was operated in the mid-1980s and later reclaimed. An individual, owner of the claims at the time, obtained a 1-acre Small Mine NOI from DOGM and POO approval from the USFS in 2008 to reopen the portal and inspect the underground workings. This work was never completed; however, Denison acquired the claims and permits in the fall of 2011 and EFR reclaimed the site in the fall of 2013. The area is considered an exploration target at this time and additional permitting efforts will not resume until the uranium market price becomes more favorable.

Existing permits at the mine include:

- Plan of Operations POO-2008-009422 – BLM
- Small Mine NOI S-037-0120 – DOGM

20.4 Redd Block

The Redd Block is located on private land approximately 1.25 miles east of the Energy Queen and 1.75 miles west of the Beaver Shaft. The mine is permitted and bonded with DOGM for 8 acres of disturbance under a permit that was issued in the early 1980s to Union Carbide. The approved plan called for constructing a production shaft and associated surface facilities. Union Carbide started to construct the surface facilities, but this work was terminated quickly and there is only limited on-site disturbance at this time. This permit has since been transferred to EFN, then IUC, then Denison, and now EFR. In the fall of 2011, Denison amended the permit to allow for the installation of a series of monitoring wells in the alluvium, Dakota Formation, and the Salt Wash Member of the Morrison Formation to provide information for a future production shaft. A draft groundwater discharge permit was prepared and eight groundwater sampling events have been conducted on site, which would allow for permitting of a water treatment plant and holding ponds. However, with the merger of Denison and Energy Fuels, the Energy Queen's production shaft is now available and it may not be necessary to put in a production shaft at Redd Block. Integrated engineering plans will need to be developed for the area before additional permitting is pursued for Redd Block. The mine permit with DOGM (see below) and the monitoring well permits with DWR are the only permits currently in place.

- Large Mine NOI M-037-046 (DOGM)

21.0 Capital and Operating Costs

The Pandora and Beaver mines are being maintained in a state that will allow for resumption of production with nominal capital expenditures. Even though the Pandora and Beaver mines were operating as recently as late 2012, capital costs to reopen the mines and future operating costs have not been assembled or reviewed by Peters Geosciences. EFR has advanced rehabilitation of the surface facilities of the Energy Queen mine toward mining, with the exception of the hoist, headframe, and shaft rehabilitation. This completes much of the recommendations presented in the March 2011 Energy Queen Technical Report (Peters, 2011). The specific plans (equipment, ventilation, man-power, production rates, development scheduling, etc.) have not been developed yet for the Energy Queen. The acquisition of the Redd Block east of Energy Queen will require an economic evaluation for mining the combined Mineral Resources of the Energy Queen related properties. Therefore, the capital and operating costs for the Energy Queen and Redd Block cannot be discussed in this report in any meaningful fashion.

As described in Section 20 of this report, most mine permits have been received. Permitting cost estimates for the future will not contribute significantly to capital costs of the project when production resumes at the Beaver and Pandora mines, nor at the Energy Queen mine.

22.0 Economic Analysis

EFR is in the early stage of economic evaluation of the entire La Sal District Project since acquiring ownership of large parts of the area. Once the mining plan is finalized and cost estimates are more firm, the economics of the project will be analyzed. A projection of market prices for uranium and vanadium will be assessed and an economic model developed. This work will lead to determination of Internal Rate of Return and Net Present Value of the project (each mine will be modeled separately). Sensitivity analyses will follow.

Operating costs from the 2012 mining in the Beaver and Pandora have not been reviewed by Peters Geosciences, nor have the operating costs of the White Mesa Mill. However, generalized mining, hauling, milling, royalty and taxes, and overhead operating costs were estimated for the purpose of determining the run-of-mine average ore grade cut-off for Mineral Resource estimation to satisfy the CIM Standards that it has "reasonable prospects for economic extraction". Those estimates are shown in the following table.

La Sal Run-of-Mine Cut-Off

	Revenue				Costs/ton
price	$65.00	$6.50		Mine *	$125.00
	U_3O_8	V_2O_5		haul	$11.25
grade	0.18%	0.945%		royalty+tax	$7.00
lb/ton	3.6	18.9		mill	$175.00
recovery	0.97	0.75		G&A	$5.00
recoverable value$/ton	$226.98	$92.14	**$319.12**		**$323.25**

*Mine cost per ton of ore includes the cost of all waste removed in the split-shooting and resuing methods of mining

23.0 Adjacent Properties

As described in Sections 7 and 14 of this report, known uranium-vanadium mineralization in the La Sal District is almost entirely confined to the La Sal Channel. The property maps in Section 4 indicate that EFR controls almost all of the known mineralized land. There are a few exceptions where the Salt Wash may be favorable, but has not been thoroughly evaluated by EFR.

Kimmerle Mining owns 10 unpatented mining claims on BLM land adjacent to the north side of the Redd Block in Section 33 and near the west end of the Beaver mine in Section 34, T28S, R24E. These sections have been sparsely explored. No historic resources are known to occur here.

Kimmerle also owns numerous unpatented claims east of the Pine Ridge mine, at the east end of the EFR La Sal Project in Sections 33 and 34, T28S, R25E and Sections 3 and 4, T29S, R25E. Historic drilling has identified mineralized areas continuing eastward on Pine Ridge into the Wray Mesa area in Colorado on the south side of the La Sal Creek Canyon District. As previously mentioned, EFR is not treating the historic drill-identified mineralization at the Pine Ridge mine as a Mineral Resource because it has not been sufficiently evaluated nor has EFR conducted any verification drilling. Therefore, it is not known if the EFR mineralized area continues into the immediately adjoining non-EFR claims. Kimmerle has filed two claims in Section 5, T29S, R25E which overlap, and are therefore in conflict with some of the EFR-leased claims of the Pandora group. The contested claims lie between the mine workings of the Pandora mine and the Pine Ridge mine. None of the Mineral Resources reported in this Report occur on the contested claims.

An individual owns two unpatented claims north of the EFR Pandora claims in Sections 30 and 31, T28S, R25E. The claims are almost one mile north of the Pandora mine and any of the estimated Mineral Resources at Pandora.

The land south of the central part of the EFR Project property is mostly private. This land is not leased to any exploration or mining company as it is believed to be out of the mineralized trend. Four claims near the Rattlesnake Pit are owned by an individual. EFR has not reviewed any historic data specific to this area.

24.0 Other Relevant Data and Information

EFR presently has multiple phases of work planned for the Energy Queen mine and facilities. An initial phase of rehabilitation work on the Energy Queen mine surface facilities has been completed. Rehabilitation of the headframe, shaft, and hoist will be concurrent with dewatering, and will be followed by drift rehabilitation.

Some of the work needed includes: (all cost estimates are in US dollars.)

Surface Plant

The shaft collar, headframe, conveyances, and bins will need cleaning, some repair and modifications, and a thorough structural evaluation. The hoist system will need to be evaluated more thoroughly and repaired or replaced, as needed. The ropes will be replaced. This is expected to be completed in six months from the decision to start. Cost of all components of the conveyance system, including power upgrade is approximately $2.5 million.

Cost for the planned water treatment plant, pond and other infrastructure, and pumping equipment and operating costs to dewater the mine is estimated to be just over $1 million.

Expenditures related to improvement and maintenance of the waste rock dump and stockpile areas are planned at less than $50,000.

Once the mine is dewatered, the shaft will be repaired, as needed. The underground shaft stations, loading pockets, and sumps will be rehabilitated. These tasks are estimated to cost $935,500. The next rehabilitation work underground will be to restore access to the existing ventilation shaft and install a fan and emergency escape hoist. It is estimated this phase will cost about $700,000 and will include communications and other systems needed for operation and safety, along with safety materials. Rehabilitation of the existing drifts to the faces may cost as much as $850,000.

The power distribution lines are still in place and the substation has been reconstructed for current power requirements. Wiring and conduits to and inside buildings have been upgraded. Other electrical upgrades will be done in phases to the hoist and other services as they are readied. The bulk of the cost of electrical gear is for the hoist, included above.

The most important factor in rehabilitation and development timing will be the construction of necessary water treatment facilities. Monitor wells have been installed and the underground water sampling and analyses are complete. The water discharge permit has been issued by the State of Utah and the construction permit application is ready to submit. Final design of the ponds and treatment facility are essentially complete. Facility costs are discussed above. Shaft rehabilitation will be conducted concurrent with dewatering.

Contractor and/or internal labor costs are included in each category listed above.

Supervision costs for the entire rehabilitation project, including project foreman, consultant oversight, and staff salaries, are estimated at $276,500.

The total capital and labor cost for the entire rehabilitation project are estimated to be approximately $6,300,000 prior to commencement of new development and production.

25.0 Interpretations and Conclusions

Peters Geosciences has reviewed the EFR resource estimate and supporting documentation and is of the opinion that classification of the mineralized material as Measured, Indicated, or Inferred Mineral Resources as discussed in Section 14 meets the definitions and guidelines of the CIM Definition Standards For Mineral Resources and Mineral Reserves (adopted by the CIM Council on November 27, 2010) as required by NI 43-101. Dilution has assumed waste material to have a grade of zero, no dilution for intercepts greater than 7.0 feet, and dilution of 1 foot of waste for all intercepts less than 6.0 feet (with appropriate decreasing fraction of 1 ft for intercepts between 6.0 and 7.0 feet).

In addition, the mines in the Project, other than the Energy Queen mine, are expected to be able to return to production quickly once economic conditions allow for related mining and milling costs and mining of known resources at a profit.

26.0 Recommendations

Other than the Energy Queen mine, the mines included in the La Sal Project will require only short periods of startup procedures and costs to be able to resume mining when economic conditions allow for that to occur. The following drilling is recommended for various parts of the Project to advance definition of resources that will improve mine planning for when production can resume.

1. Drilling:
   A. Conduct additional surface drilling on the Energy Queen lease and other properties in that Project Area in order to identify possible areas of mineralization and also serve as a guide to mining. (Estimated cost = $187,200 for 15,600 ft of additional drilling in 23 holes to test the Salt Wash Member.) Such drilling should include at least 5 holes that twin locatable Union Carbide drill holes for which radiometric logs and or drill core cannot be obtained. Such confirmation holes should be spread as evenly as possible around the Energy Queen property, outside of the 2007-2012 EFR drilling program area, so that additional confidence can be obtained regarding the accuracy of Union Carbide drill data that cannot be verified through core or radiometric logs. (Estimated minimum cost = $208,000 for 13,000 ft of additional drilling in 5 holes down to the Moss Back Member.)

   B. Additional surface drilling of 20 holes in the Crested Claims area upon completion of the EA with BLM and USFS to identify resource connections and extensions. (Estimated cost = $187,200 for 15,600 ft at $12/ft all-in including site preparation, drill, logging, and reclamation of additional drilling.)

   C. Additional surface drilling of 15 holes in the Pandora mine area upon completion of the EA with BLM and USFS to identify resource connections and extensions. (Estimated cost = $126,000 for 10,500 ft of additional drilling.)

   D. Exploration drilling of eight holes on the optioned claims north of the Beaver mine to determine if the mineralization trends in the northeastern part of Beaver extend north of the known intercepts in that area. (Estimated cost = $72,000 for 6,000 ft of additional drilling.)

   E. As many drill holes as possible, preferably all of the holes to be drilled in the future, should drill through the Middle and Bottom Rim sandstones in order to be certain that all potential Salt Wash resources are tested within the property boundary. If funding permits, it also is suggested that all drill holes test for potential resources in the deeper Moss Back Member in light of a quality intercept having been encountered in one such penetration thus far. (Estimated drilling costs for holes to drill to the Moss Back is approx. $16/ft all in.)

The Author recommends that EFR proceeds with the following steps to continue rehabilitation of the Energy Queen mine and subsequently begin development and plan

production when funds are available to do so.

2. Mine Rehabilitation (note that estimated costs are stated in Section 24 of this report and will not be restated here):
   A. Continue rehabilitation of the Energy Queen surface facilities, with emphasis upon the hoist and headframe so that shaft rehabilitation can be performed as much in tandem as possible with other rehabilitation of surface facilities.
   B. Dewater the shaft, and rehabilitate as required, with the goal of access to existing workings as soon as possible to confirm their safe and trafficable conditions or rehabilitate them for renewed mining.
   C. Obtain representative bulk samples of ore from existing workings, as soon as they are rehabilitated, in order to perform confirmatory metallurgical testing and processing of the ore. Such sampling could be done at the same time as startup of production from the mine.

A preliminary economic assessment (PEA) is planned to be performed internally by EFR later in 2014. As a follow-on to that PEA, a full feasibility (economic and mining) analysis should be prepared to convert measured and indicated mineral resources into probable and/or proven mineral reserves. (Estimated cost for the PEA = $50,000.)

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28.0 Certificate and Signature Page

I, Douglas C. Peters, do hereby certify:

1. That I graduated from the University of Pittsburgh with a Bachelor of Science degree in Earth & Planetary Sciences in 1977. That I graduated from the Colorado School of Mines with a Master of Science degree in Geology in 1981 and with a Master of Science degree in Mining Engineering in 1983.

2. That I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI-43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. I am recognized by the American Institute for Professional Geologists as a Certified Professional Geologist (CPG #8274) and the Society for Mining, Metallurgy, and Exploration, Inc. as a Registered Member (#2516800).

3. That I have practiced my profession for over 30 years, the last 18 of which have been as an independent consulting geologist.

4. That I am responsible for this technical report titled: "Technical Report On Energy Fuels Inc's. La Sal District Project (Including the Pandora, Beaver, and Energy Queen Projects)", dated March , 2014, and that Project was visited by me on March 11, 2014.

5. That I have had prior experience with the Energy Queen property that is included in the subject of this Technical Report and have had previous experience with other uranium properties in Colorado, New Mexico, Washington, and Wyoming.

6. That this report dated March, 2014 is based on published and unpublished maps and reports, and discussions with representatives of Energy Fuels Resources Corporation.

7. That I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission of which would make the Technical Report misleading or would affect the stated conclusions.

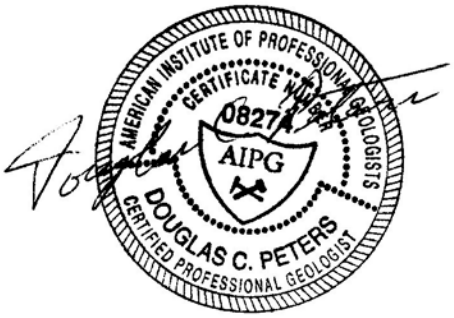
8. That I am independent of Energy Fuels Resources Corporation and its parent, Energy Fuels Inc., applying the test in section 1.5 of NI 43-101.

9. That I am the owner of Peters Geosciences, whose business address is 825 Raptor Point Road, Golden, Colorado 80403.

10. That I have read NI 43-101 and NI 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

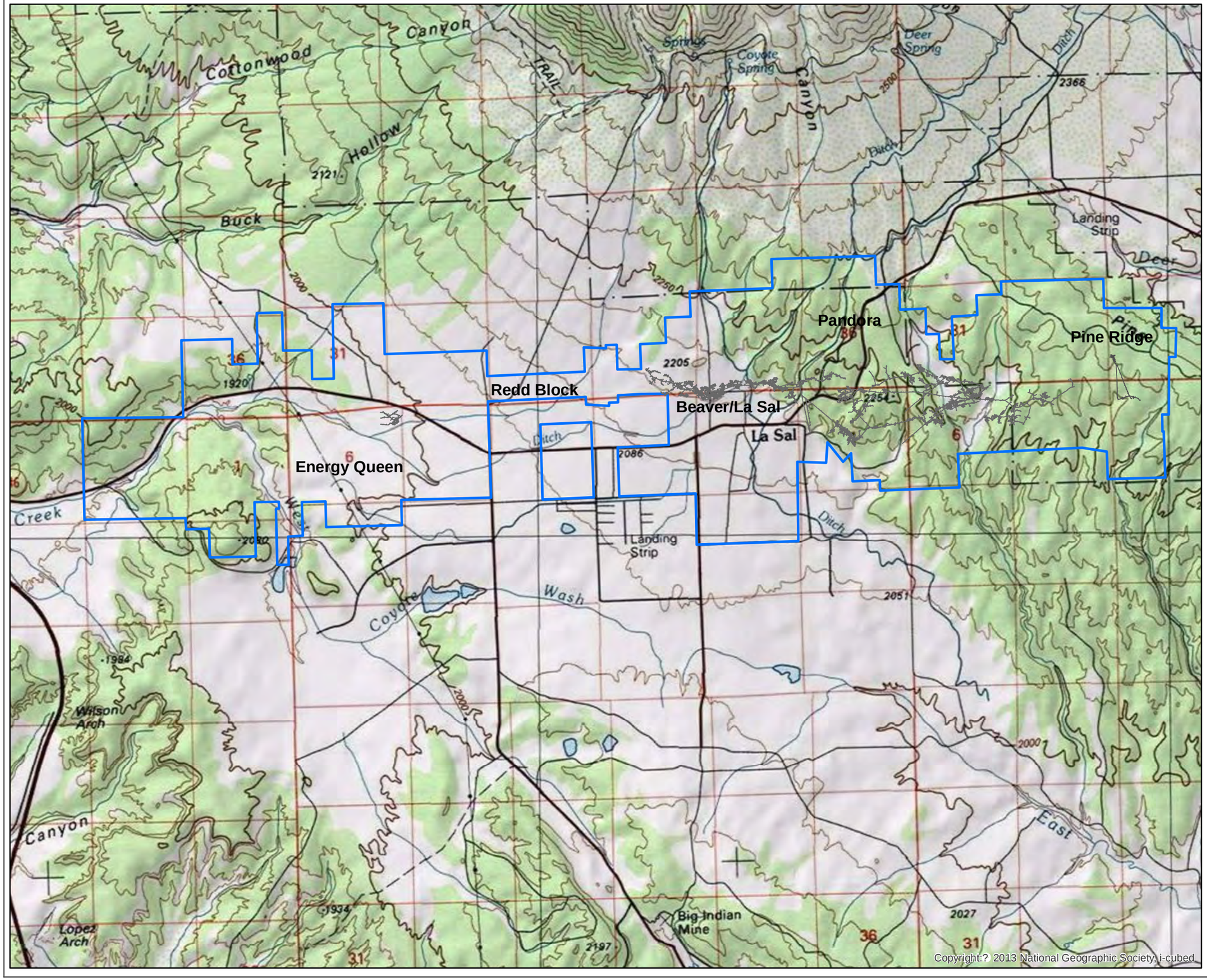
11. That I consent to the filing of this Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or on its website accessible by the public.

Signed and dated this 25th day of March, 2014.



Douglas C. Peters, CPG

APPENDIX



Property outline

Mine workings

0 3,000 6,000 12,000 Feet

1:60,000

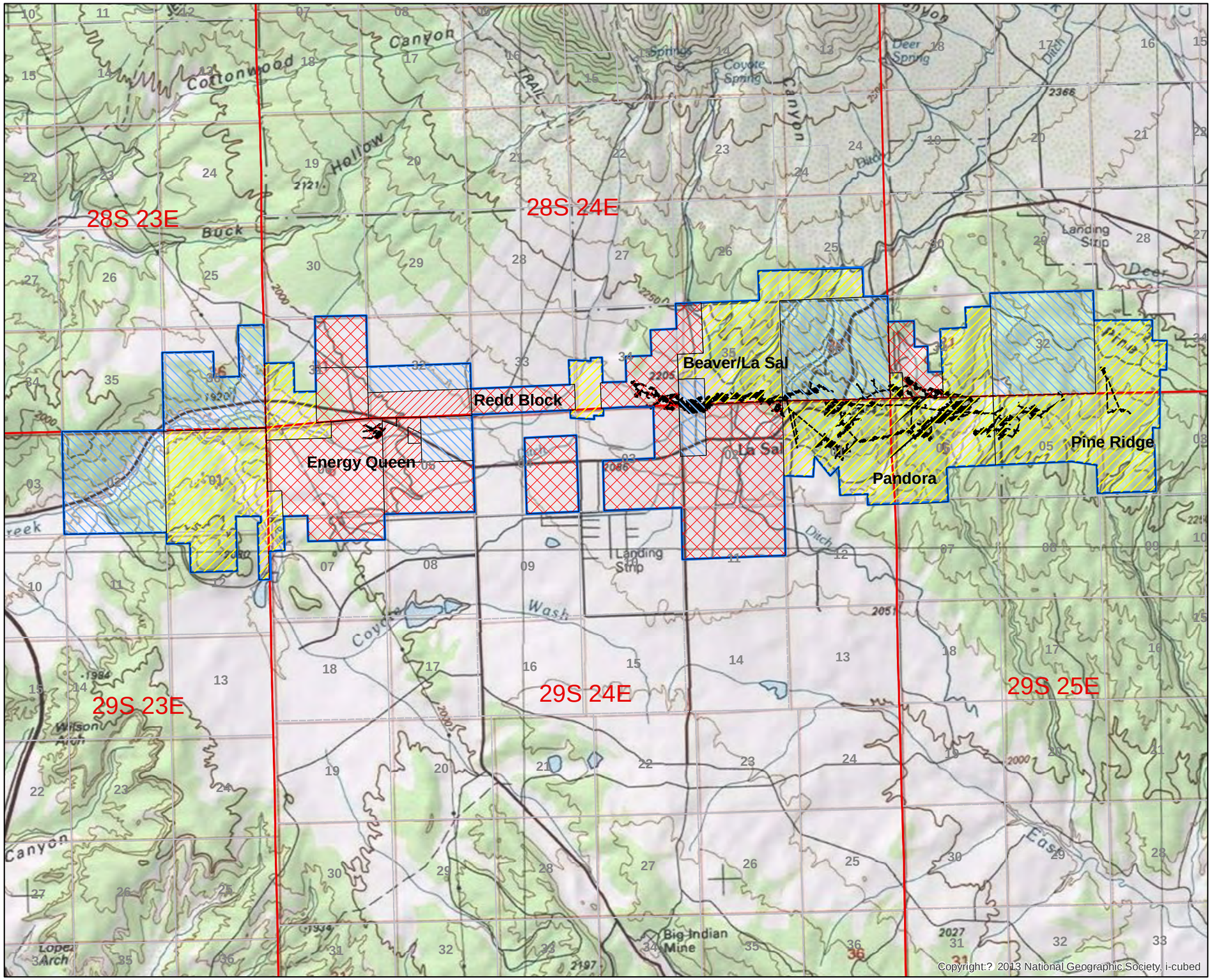
Energy Fuels Resources (USA) Inc.

REVISIONS	
Date	By

Project: La Sal Project
County: San Juan State: CO
Location:

Figure 1-1
TOPO Map

Author: DWhite Date: 2/19/2014 Drafted By: TLJ/KWU



Mineral Ownership

- County
- Federal
- Private
- State Trust Lands

- Property outline
- Claims
- Mine workings

0 3,000 6,000 12,000 Feet

1:60,000

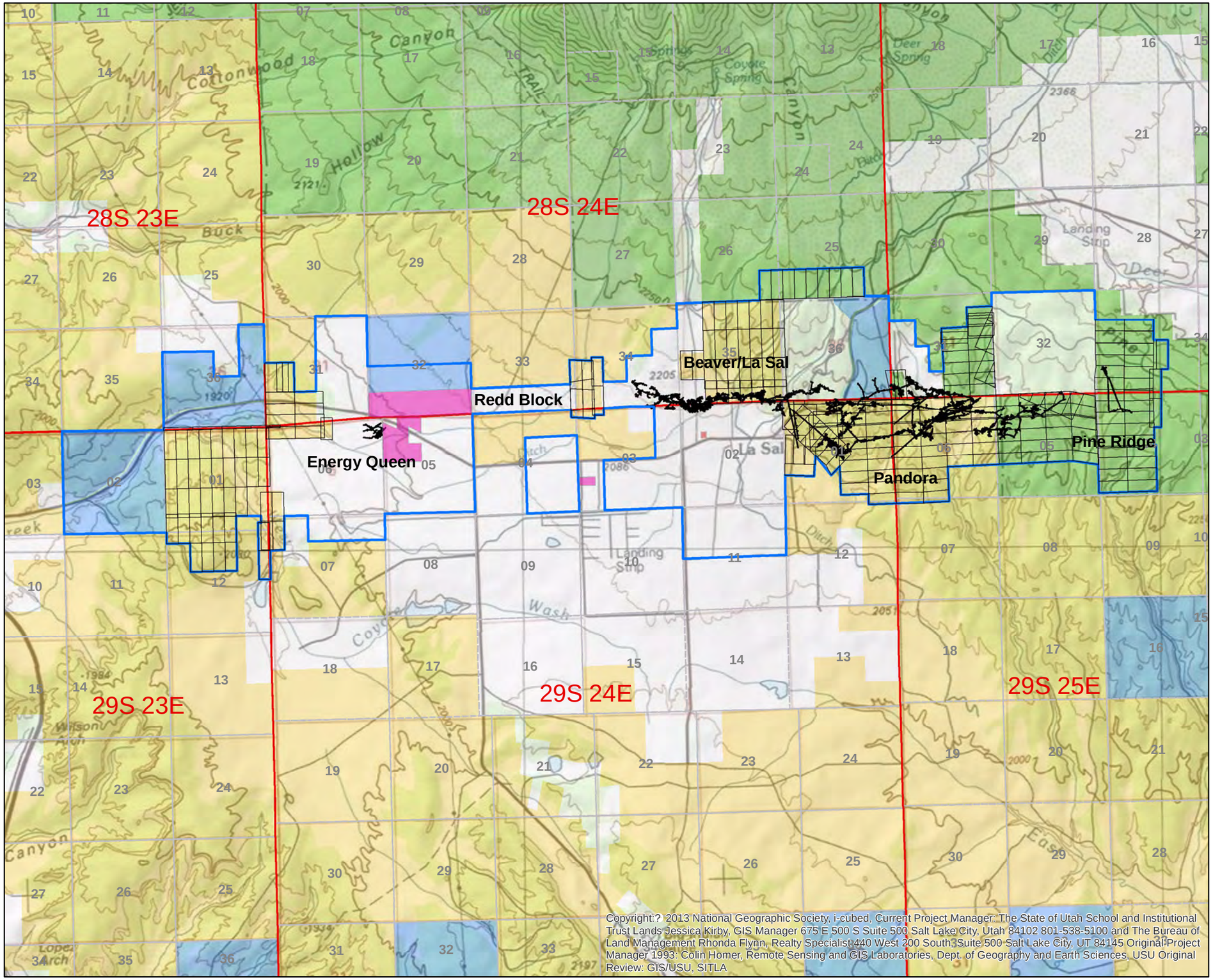
Energy Fuels Resources (USA) Inc.

REVISIONS	
Date	By

Project: La Sal Project
County: San Juan State: CO
Location:

Figure 4-2
Mineral Ownership

Author: DWhite Date: 2/19/2014 Drafted By: TLJ



Surface Ownership

- BLM
- County
- Private
- San Juan School District
- State
- USFS

- Property outline
- Claims
- Mine workings

0 3,000 6,000 12,000 Feet

1:60,000

Energy Fuels Resources (USA) Inc.

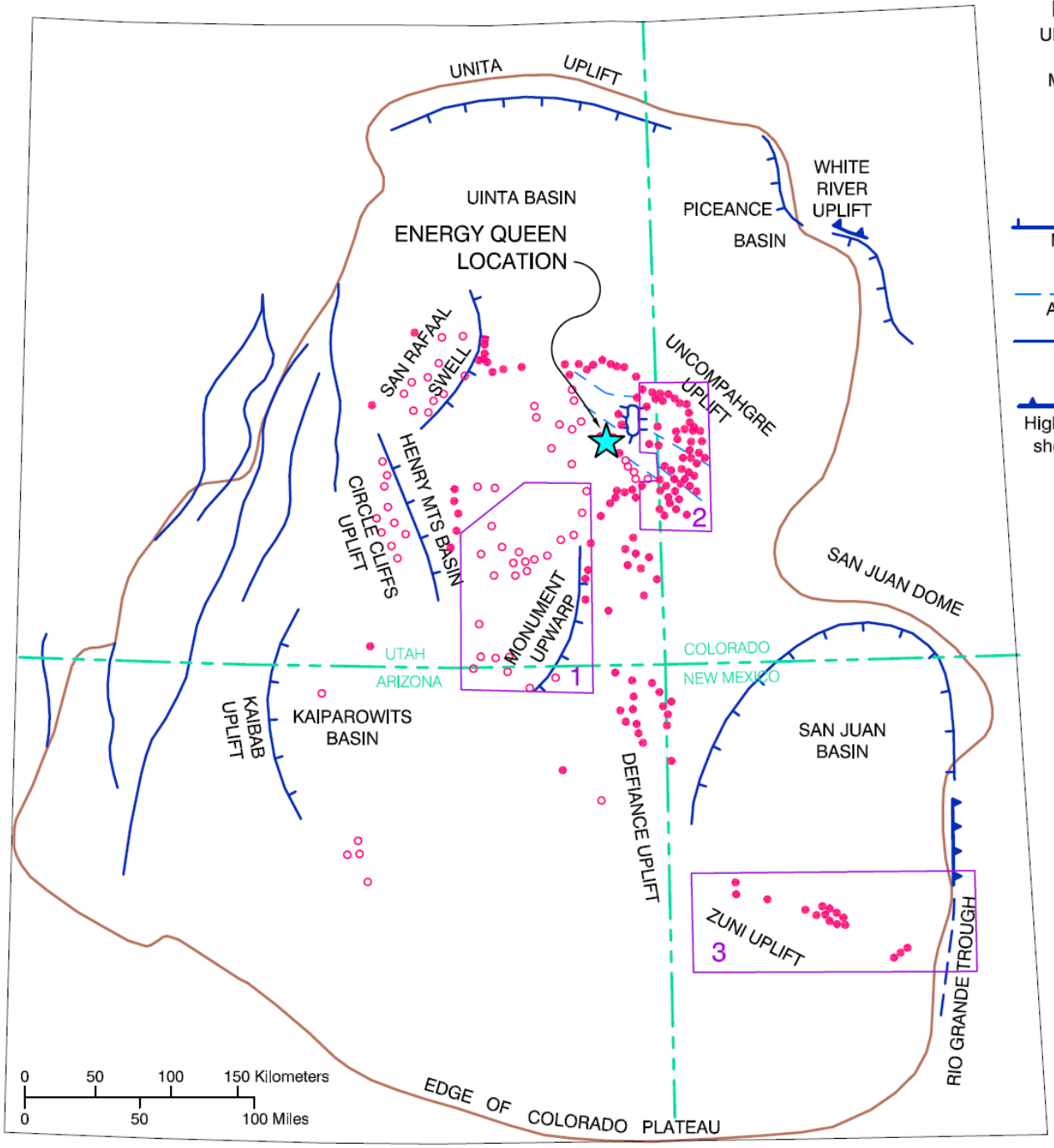
REVISIONS	
Date	By

Project: La Sal Project
County: San Juan State: CO
Location:

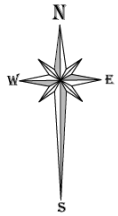
Figure 4-3

Surface Ownership

Author: DWhite Date: 2/19/2014 Drafted By: TLJ



Principal Uranium Deposits and Major Structural Features in the Colorado Plateau Province.
Blocks outline the approximate area of the following districts:
(1) Monument Valley - White Canyon, (2) Uravan, (3) Grants.
(after Nash et al., 1981; as modified from Fischer, 1968).



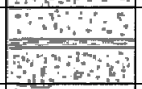
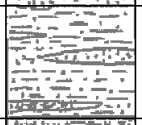
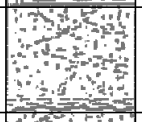
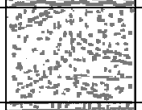
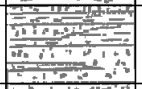
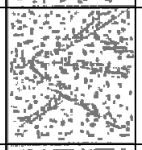
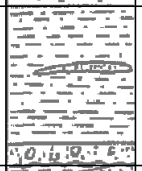
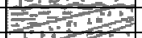
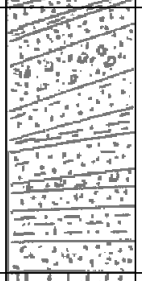
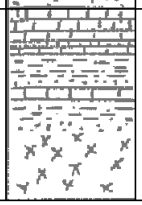
Energy Fuels Resources (USA) Inc.

REVISIONS		Project: La Sal Project	
Date	By	County: San Juan	State: CO
		Location:	

Figure 7-1

Principal Uranium Deposits & Major Structures of The Colorado Plateau

Author: DWhite	Date: 2/19/2014	Drafted By: TLJ/KWU

AGE	FORMATION	MEMBER	LITHOLOGY	THICKNESS Feet	DESCRIPTION
	Gravel			0-50	Fan gravels of predominately igneous cobbles; loess
Cretaceous	Mancos			0-50	Dark gray fissle marine shale; mostly removed by erosion.
	Dakota Sandstone			150-200	Yellow-brown sandstone and conglomerate interbedded with carnonaceous shale and impure coal.
	Burro Canyon Formation			130-180	Light gray, yellow to red sandstone and conglomerate interbedded with green and purple shale.
Jurassic	Morrison Formation	Brushy Basin		350-450	Fluvial and lacustrine variegated bentonitic mudstone with lenticular sandstone and conglomerate beds; local thin limestone beds
		Salt Wash		280-350	Fluvial light gray, tan, and red sandstones interbedded with red and minor gray mudstones.
	Summerville Fm.			30-80	Red and red-brown, thin bedded, sandy shale and mudstone.
	Entrada Sandstone			150-360	Eolian tan, orange crossbedded dandstone; red silty beds at base could actually be Carmel Formation.
	Navajo Sandstone			100-400	Eolian buff-tan crossbeded fine-grained sandstone; thins over salt-cored anticlines.
	Kayanta Formation			180-210	Irregularly bedded fluvial red-brown and lavender sandstones, siltstones, and shales.
Triassic	Wingate Sandstone			250-400	Reddish-brown fine-grained, thick bedded, massive, and crossbeded eolian sandstone; cliff-forming when outcropping.
	Chinle Formation			200-600	Upper part reddish siltstone with interbedded lenses of red sandstone, shale and limestone-pebble conglomerate. Lower part-grayish shale with lenticular basal conglomerate.
	Moenkopi Fm.			0-400	Chocolate-brown thin bedded shale with sandstone; locally missing due to angular unconformity at base of Chinle
Permian	Cutler Formation			1200-2000	Maroon and red conglomerate, and arkosic sandstone with interbedded red, brown, and purplish siltstone.
Pennsylvanian	HERMOSA FORMATION			2000+	Gray fossiliferous marine limestone interbedded with sandstone and mudstone. Thick evaporite sequence in middle part.

Note: This stratigraphic section is adapted from Weir et al.(1960)

Energy Fuels Resources (USA) Inc.

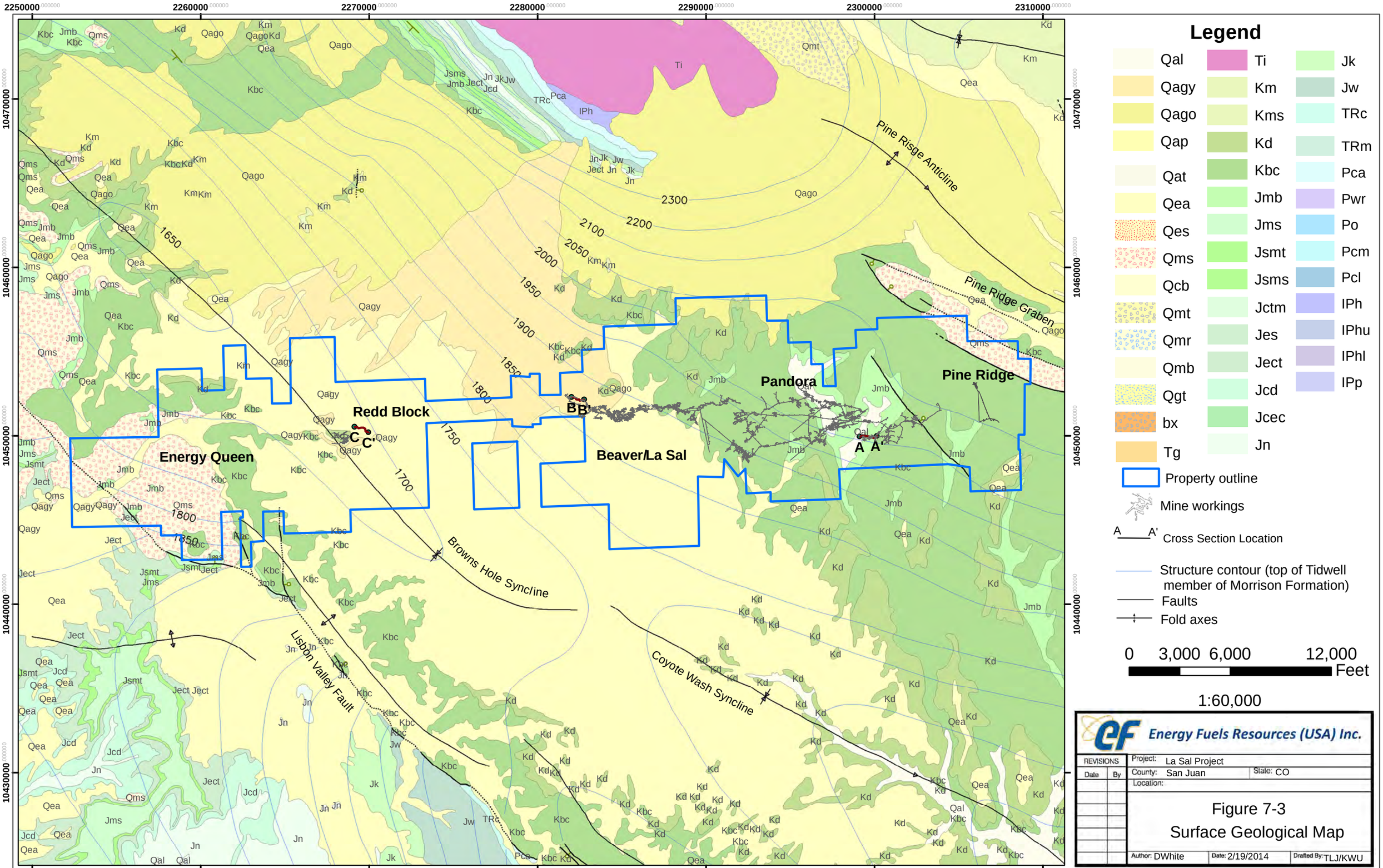
REVISIONS	
Date	By

Project: La Sal Project
County: San Juan State: CO
Location:

Figure 7-2

Generalized Stratigraphic Section
La Sal, Utah Area

Author: DWhite Date: 2/19/2014 Drafted By: TLJ/KWU



Legend

- Qal
- Qagy
- Qago
- Qap
- Qat
- Qea
- Qes
- Qms
- Qcb
- Qmt
- Qmr
- Qmb
- Qgt
- bx
- Tg
- Ti
- Km
- Kms
- Kd
- Kbc
- Jmb
- Jms
- Jsmt
- Jctm
- Jes
- Ject
- Jcd
- Jcec
- Jn
- Jk
- Jw
- TRc
- TRm
- Pca
- Pwr
- Po
- Pcm
- Pcl
- IPh
- IPhu
- IPhl
- IPp

Property outline

Mine workings

A A' Cross Section Location

Structure contour (top of Tidwell member of Morrison Formation)

Faults

Fold axes

0 3,000 6,000 12,000 Feet

1:60,000

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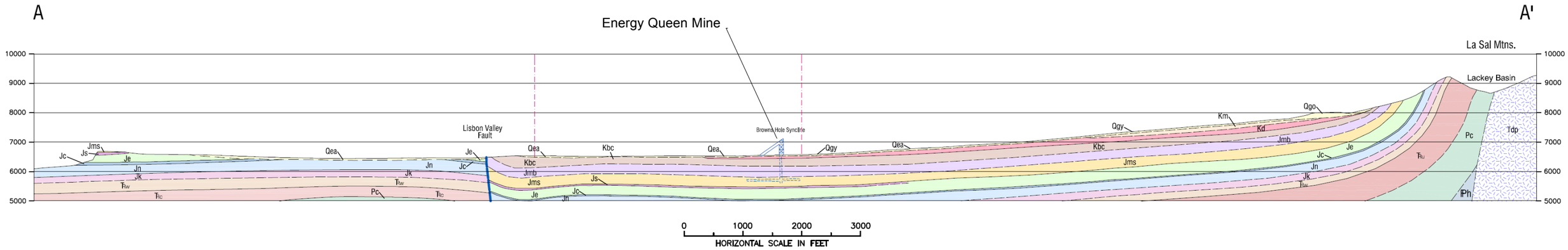
Date	By	County: San Juan	State: CO
		Location:	

Figure 7-3
Surface Geological Map

Author: DWhite | Date: 2/19/2014 | Drafted By: TLJ/KWU

The geological map is modified from" Geologic map of the La Sal 30'* 60' Quadrangle, San Juan, Wayne, and Garfield counties, Utah, and Montrose and San miguel counties, Colorado" (Hellmut H. Doelling, 2004)



Q	Quaternary gravels and loess	Js	Summerville Formation	Trw	Wingate Sandstone
Tdp	Tertiary Diorite Porphyry Laccolith	Je	Entrada Sandstone	Trc	Chinle Formation
Km	Mancos Shale	Jc	Carmel Formation	Tru	Undivided Triassic (Includes Chinle & Moenkopi Formations)
Kd	Dakota Sandstone	Jn	Navajo Sandstone	Pc	Cutler Formation
Kbc	Burro Canyon Formation	Jk	Kayenta Formation	IPh	Hermosa Formation
Jmb	Brushy Basin Member of Morrison Formation				
Jms	Salt Wash Member of Morrison Formation				

Note: This cross section is adapted from Weir et al.(1960)

Energy Fuels Resources (USA) Inc.

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Date	By	County: San Juan	State: CO	
		Location:		

Figure 7-4
Cross Section

Author: DWhite	Date: 2/19/2014	Drafted By: TLJ/KWU

Beaver/ LaSal

Pandora

28S 24E

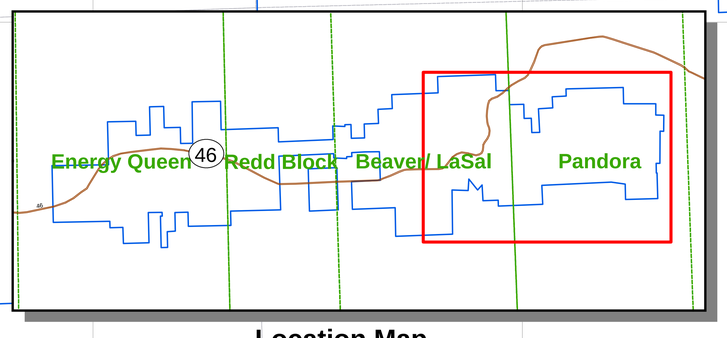
29S 24E

29S 25E

46

A'

Pandora	Tons	U3O8 Lbs	Avg Grade (U3O8)	V2O5 Lbs	Avg Grade(V2O5)
Measured	196,000	701,000	0.18	3,682,000	0.94
Indicated	6,700	19,000	0.14	99,000	0.73
Inferred	18,000	44,000	0.12	232,000	0.66



Location Map

Mineral Resources

- Measured
- Indicated
- Inferred

Drill Hole Legend

- <0.10 GT
- >0.10 GT and >0.05%eU_3O_8
- >0.20 GT and >0.10%eU_3O_8

Legend

- Property Outline
- Workings
- HWY 46
- Mines

N

0 550 1,100 2,200 3,300 4,400 Feet

1:6,000

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REVISIONS		Project: La Sal Project	
Date	By	County: San Juan	State: CO
		Location:	

Figure 14-1
Resource Map (1of 3)

Author: DWhite | Date: 2/19/2014 | Drafted By: TLJKWU

Redd Block

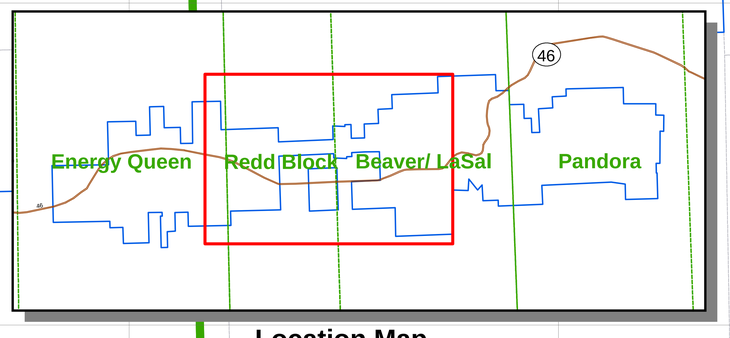
Beaver/ LaSal

28S 24E

29S 24E

Redd Block	Tons	U3O8 Lbs	Avg Grade (U3O8)	V2O5 Lbs	Avg Grade(V2O5)
Measured	336,000	1,260,000	0.19	6,615,000	0.98
Indicated	35,000	47,000	0.07	249,000	0.35
Inferred	95,000	171,000	0.09	900,000	0.47

Beaver/LaSal	Tons	U3O8 Lbs	Avg Grade (U3O8)	V2O5 Lbs	Avg Grade(V2O5)
Measured	215,000	800,000	0.19	4,199,000	0.98
Indicated	9,000	33,000	0.18	173,000	0.96
Inferred	29,000	67,000	0.11	352,000	0.6



Location Map

Mineral Resources

- Measured
- Indicated
- Inferred

Drill Hole Legend

- <0.10 GT
- >0.10 GT and >0.05%eU_3O_8
- >0.20 GT and >0.10%eU_3O_8

Legend

- Property Outline
- Workings
- HWY 46
- Mines

N

0 550 1,100 2,200 3,300 4,400 Feet

1:6,000

Energy Fuels Resources (USA) Inc.

REVISIONS		Project: La Sal Project	
Date	By	County: San Juan	State: CO
		Location:	

Figure 14-2
Resource Map (2 of 3)

Author: DWhite | Date: 2/19/2014 | Drafted By: TLJKWU

Energy Queen

28S 23E

28S 24E

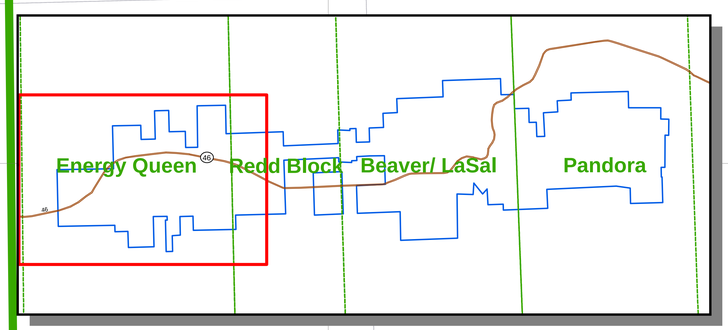
29S 23E

29S 24E

46

Rattlesnake Pit

Energy Queen	Tons	U_3O_8 Lbs	Avg Grade (U_3O_8)	V_2O_5 Lbs	Avg Grade(V_2O_5)
Measured	262,000	971,000	0.19	5,100,000	0.97
Indicated	81,000	268,000	0.17	1,409,000	0.87
Inferred	43,000	79,000	0.09	417,000	0.48



Location Map

Mineral Resources

- Measured
- Indicated
- Inferred

Drill Hole Legend

- <0.10 GT
- >0.10 GT and >0.05%eU_3O_8
- >0.20 GT and >0.10%eU_3O_8

Legend

- Property Outline
- Workings
- HWY 46
- Mines

N

0 550 1,100 2,200 3,300 4,400 Feet

1:6,000

Energy Fuels Resources (USA) Inc.

REVISIONS		Project: La Sal Project	
Date	By	County: San Juan	State: CO
		Location:	

Figure 14-3
Resource Map (3 of 3)

Author: DWhite | Date: 2/19/2014 | Drafted By: TLJ/KWU

A

A'

PN-1109 Gamma

PN-0809 Gamma

PN-0709 Gamma

D22-08 Gamma

D27-08 Gamma

D25-08 Gamma

D26-08 Gamma

Elevation (ft)

7,300
7,200
7,100
7,000
6,900
6,800

Burro Canyon Fromation

Brushy Basin Member of the Morrison Formation

Salt Wash Member of the Morrison Formation

Distance (ft)

0
200
400
600
800
1,000

Intercepts greater than a composite intercept GT value(grade* thickness) of 0.10% ft eU_3O_8

Lithology

Mudstones

Sandstones

Siltstones

U3

U2

U1

Highest sandstone unit of the Salt Wash Member of the Morrison Formation subdivided into three layers

Energy Fuels Resources (USA) Inc.

REVISIONS	
Date	By

Project: La Sal Project

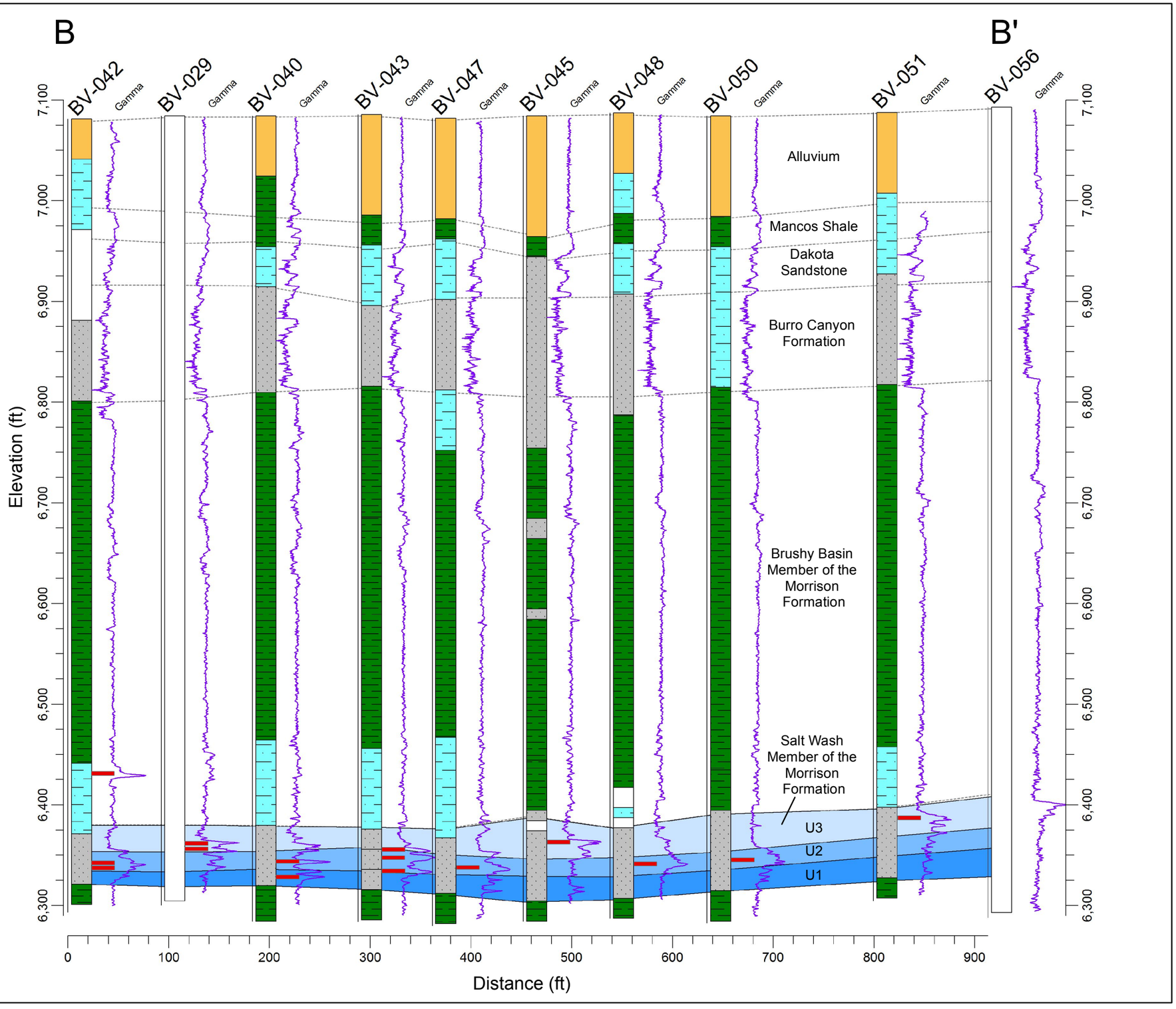
County: San Juan | State: CO

Location:

Figure 14-4

Cross Section A-A'

Author: Dwhite | Date: 2/19/2014 | Drafted By: TLJ/KWU



Intercepts greater than a composite intercept GT value(grade* thickness) of 0.10% ft eU_3O_8

Lithology

- Alluvium
- Mudstones
- Sandstones
- Siltstones

- U3
- U2
- U1

} Highest sandstone unit of the Salt Wash Member of the Morrison Formation subdivided into three layers

Energy Fuels Resources (USA) Inc.

REVISIONS	
Date	By

Project: La Sal Project

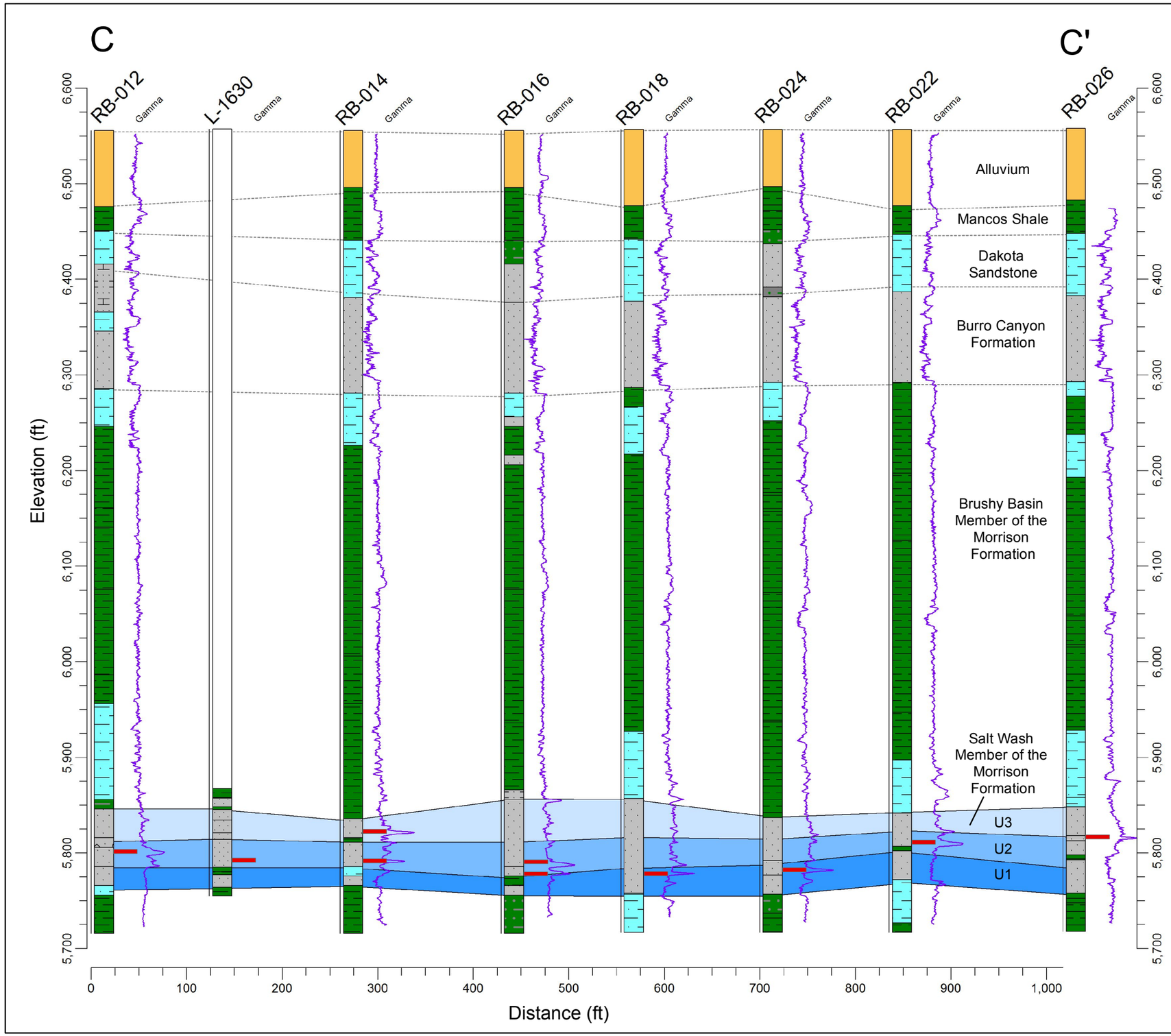
County: San Juan | State: CO

Location:

Figure 14-5

Cross Section B-B'

Author: DWhite | Date: 2/19/2014 | Drafted By: TLJ/KWU



Intercepts greater than a composite intercept GT value(grade* thickness) of 0.10% ft eU_3O_8

Lithology

- Alluvium
- Mudstones
- Sandstones
- Siltstones

- U3
- U2
- U1

} Highest sandstone unit of the Salt Wash Member of the Morrison Formation subdivided into three layers

Energy Fuels Resources (USA) Inc.

REVISIONS		Project: La Sal Project		
Date	By	County: San Juan	State: CO	
		Location:		
		Figure 14-6		
		Cross Section C-C'		
		Author: Dwhite	Date: 2/19/2014	Drafted By: TLJ/KWU