UPDATED TECHNICAL REPORT ON SAGE PLAIN PROJECT

(Including the Calliham Mine)

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"

Prepared by

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<u>Table of Contents</u>

Contents

1.0	Summary	4
1.1	•	
1.2	<u> </u>	
1.3		
1.4		
1.5	e	
1.6	•	
1.7		
1.8		
1.9	1 0	
1.1	•	
1.1	1 Mining Operations	9
1.1	2 Exploration and Development Recommendations	9
2.0	Introduction	
3.0	Reliance on Other Experts	13
4.0	Property Description and Location	14
5.0	Accessibility, Climate, Local Resources, Infrastructure, and Physiography	
6.0	History	19
7.0	Geological Setting and Mineralization	22
7.1	Regional Geology	22
7.2	Local Geologic Detail	24
7.3	Mineralization	29
8.0	Deposit Types	31
9.0	Exploration	33
10.0	Drilling	
11.0	Sample Preparation, Analyses, Security	36
12.0	Data Verification	
13.0	Mineral Processing and Metallurgical Testing	39
14.0	Mineral Resource Estimates	
14.	r · · · · · · · · · · · · · · · · · · ·	
15.0	Mineral Reserves Estimates	
16.0	Mining Method	
17.0	Recovery Methods	
18.0	Project Infrastructure	
19.0	Market Studies and Contracts	
19.		
19.		
20.0	Environmental Studies, Permitting and Social or Community Impact	
21.0	Capital and Operating Costs	
22.0	Economic Analysis	
23.0	Adjacent Properties	63

25.0 26.0 27.0	Other Relevant Data and Information Interpretations and Conclusions Recommendations References Certificate of Qualifications and Signature					
List o	of Ta	bles and Illustrations:				
Table	1.1	Summary of Measured, Indicated, and Inferr Mineral Resources for the Sage Plain Project				
Table 14.1		Sage Plain Leases Measured, Indicated, and Inferred Mineral Resources	40			
Figure	e 4-1	Index Map	Appendix			
Figure 4-2		Topographic Map	Appendix			
Figure 4-3		Historical Mine Map	Appendix			
Figure	e 4-4	Surface Ownership Map	Appendix			
Figure	e 4-5	Mineral Ownership Map	Appendix			
Figure 7-1		Principal Uranium Deposits & Major Structures of the Colorado Plateau	Appendix			
Figure 7-2		Generalized Stratigraphic Section	Appendix			
Figure	e 7-3	Index Map: Salt Wash Uranium-Vanadium Deposits in and Around the Uravan Mineral I	Belt			
Figure	e 7-4	Geologic Map	Appendix			
Figure	e 7-5	Cross Section A	Appendix			
Figure	e 7-6	Major Salt Wash Stream Channels	Appendix			
Figure 8-1		Measured, Indicated, and Inferred Resources of the Sage Plain Property Map	Appendix			

Figure 8-2 Stratigraphic Cross Section, Calliham Mine A-A' Appendix

Figure 8-3 Stratigraphic Cross Section, A-A' and B-B' Appendix

Updated Technical Report on Energy Fuel Inc's Sage Plain Project San Juan County, Utah

1.0 Summary

Project Description and Location

The Energy Fuels Inc ("EFI") Sage Plain Project is located near the southwest end of the Uravan Mineral Belt. It consists of three private mineral leases, three Utah State mineral leases, and one directly owned private parcel in east-central San Juan County, Utah. The combined 3,040 acres of the property is comprised of approximately 1,680 acres of leased fee land in sections 21, 27, 28 and 29, T32S, R26E, SLPM, about 1,280 acres of Utah State School and Institutional Trust Lands Administration (SITLA) land in sections 16 and 32, T32S, R26E, and 80 acres of land owned by Energy Fuels in section 33, T32S, R26E.

Two private leases and the Utah State leases were held by Colorado Plateau Partners LLC ("CPP"). CPP was a 50:50 joint venture between EFI's former subsidiary Energy Fuels Resources Corporation ("EFRC") and Lynx-Royal JV ("Lynx-Royal"). EFRC boughtout the 50% owned by Lynx-Royal in October 2012 and EFRC assigned its consequent 100% interest in CPP to EER Colorado Plateau LLC ("EFRCP"), an affiliated Colorado subsidiary of EFI in September 2014. The other private lease is held solely by EFRCP, having been assigned from EFRC in September 2014. EFRCP has the right to use any of the surface necessary for exploration and mining activities by virtue of the leases or ownership.

The various parcels of the project were acquired in stages. EFRCP was successful bidder on two SITLA mineral leases in 2007. A third lease was awarded to EFRCP in March 2011. These were subsequently assigned to CPP. The SITLA leases have initial terms of 10 years at a rental price of \$1.00 per acre. They have provisions allowing for renewals for a second 10-year term with increased rental and advanced royalties. Production royalty rates on SITLA leases are 8% on uranium and 4% on vanadium.

EFRCP purchased the lease on the private Calliham parcel in February 2011 from NUVEMCO. The lease was effective as of March 8, 2007 and can be held indefinitely by an annual advanced royalty payment of \$10,000. It carries a production royalty of 5% on uranium and 8% on vanadium. The Crain lease was purchased in July 2011 from Uranium Energy Corporation. It was effective on April 19, 2005 and was renewed by a one-time payment for a second 5-year term in April 2010. A renewal of this lease to keep it active beyond April 2015 is in progress. A production royalty of 6.25% on uranium and 5% on vanadium is reserved to Crain. The Skidmore lease covering land owned by J.H. Ranch, Inc., was acquired in October 2011 from a private group when it exercised an option to lease with J.H. Ranch. The lease has a primary term of 20 years. EFRCP has amended the lease, deferring advanced royalty payments until after October 2016 by continuing to make annual lease payments (the final lease payment of \$62,500 will be due in November 2015). Production royalty here will be at a rate of 12.5% of the value of "crude ore". EFRCP bought 80 acres of fee land (surface only) on which the reclaimed Calliham mine portal is located from Umetco in May 2012.

There are no environmental liabilities on any of the properties because reclamation associated with past exploration and production is complete. The portal site of the Calliham mine is on the private parcel owned by EFRCP. It was totally reclaimed and the permit terminated in 2000. A mine permit through the State of Utah and associated air and water permits will be required before EFRCP can reopen the Calliham mine, located on private land. EFRCP has performed much of the required baseline data gathering work and permit applications are nearly ready to file.

1.2 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The property lies some 15-17 air miles northeast of Monticello, Utah. The Sage Plain Project property can be accessed from the north, south, and east on paved, all-weather county roads connecting to State and U.S. highways. The nearest towns with stores, restaurants, lodging, and small industrial supply retailers are Monticello, Utah, 26 road miles to the west, and Dove Creek, Colorado, 20 road miles to the southeast. Larger population centers with more supplies and services are available farther away at Moab, Utah (61 road miles to the north) and Cortez, Colorado (54 road miles to the southeast).

The region of the Sage Plain Project is characterized by a sparsely-vegetated, relatively flat plain. It lies in an elevation range for 6,950 to 7,200 feet, is semi-arid, and accessible year-round. The region has a long history of mining, ranching, farming, and oil and gas production. Therefore, even though the regional towns are small, they have adequate services and supplies to support a project the size of the proposed Calliham mine. The regional grid of electrical transmission and distribution lines simultaneously supported the mine in the EFRCP project area plus the large Deremo mine operated by Umetco Minerals, 2 miles to the southeast, and the Silver Bell and Wilson mines, 1½ miles to the north. The grid remains adequate for any future mine operations by EFRCP.

1.3 History

The land and mineral rights ownership history was covered under section 1.1 above. Exploration drilling by various companies in the 1960s and 1970s discovered uranium-vanadium deposits in the Sage Plain area. The historic underground Calliham mine accessed the three private leases, but has been idle for about 20 years. It and the nearby Sage mine (one mile to the southeast) were operated in the 1970s to early 1980s by Atlas Minerals. The Calliham mine was acquired by Umetco Minerals in 1988 and operated briefly in 1990-1991. Umetco also operated the Silver Bell and Wilson mines, 1½ miles to the north. All mines ceased production due to depressed uranium and vanadium

prices, not because they were depleted. The Calliham is totally reclaimed. Historic production from the Calliham by Atlas and Umetco, combined, was approximately 222,000 tons at average grades of 0.15% U_3O_8 and 0.92% V_2O_5 .

1.4 Geological Setting

The Sage Plain District (also referred to as the Egnar District or Summit Point District) is a portion of the greater Slick Rock District. It is the southwest continuation into Utah of the prolific Uravan Mineral Belt. Here, the host sandstones of the upper part of the Salt Wash Member of the Jurassic-aged Morrison Formation are not exposed. They are covered by Cretaceous-aged sediments or the upper Morrison Formation's Brushy Basin Member. Due to the deeper burial of the mineralized Salt Wash Member in the Sage Plain area, discovery of economic deposits here lagged many years behind the production from the same host rocks elsewhere in the Slick Rock District a few miles to the northeast in Colorado. At Slick Rock, mining and milling of radium-uranium-vanadium ores from the Salt Wash has occurred since 1901. This part of the Uravan Mineral Belt has a significantly higher ratio of V_2O_5 : U_3O_8 in the ore than the deposits farther north.

1.5 Exploration

The uranium-vanadium deposits at and near the project are buried 500 to 750 feet deep. All exploration work, therefore, has been done by drilling from the surface. Outcrop exposures of mineralized Salt Wash sandstones 2-3 miles east of the Calliham mine helped guide the initial drilling. Drilling is discussed in more detail below in section 1.7.

1.6 Mineralization

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 throughflowing 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 detrital iron-titanium mineral grains and subsequently deposited along with or prior to the uranium. 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 primary uranium mineral is uraninite (pitchblende) (UO₂) with minor amounts of coffinite (USiO₄OH). Montroseite (VOOH) is the primary vanadium mineral, along with vanadium clays and hydromica.

1.7 Drilling

Historic exploration drilling from the surface was conducted by previous operators (including Hecla, Atlas, Truchas, Pioneer Uravan, and Umetco). These companies are known to have used techniques of common practice for uranium exploration appropriate for the region. EFRCP owns most of the original historic drill logs and maps. In addition, EFRCP staff know many of the workers of the previous operators in the Sage Plain area, as well as the reputations of the operators themselves. This direct familiarity lends

confidence to EFRCP regarding the results of the operators and information provided by such previous workers. Longhole drilling was done within the underground mine during its operation. Verification and fill-in exploration drilling by EFRCP confirmed and added to the geologic interpretation and mineral resources at the project area. There have been approximately 313 holes drilled on the Calliham lease, 300 on the Crain lease, and 487 on the Skidmore lease by the prior owners. Ten holes were drilled by CPP across the three Calliham area leased properties in December, 2011 totaling 6,465 feet. Cuttings were logged with particular attention to sandstone color, carbon content, and interbedded mudstone characteristics. The holes were probed using a properly calibrated natural gamma tool along with resistivity and spontaneous potential logs when the holes contained water. An induction tool was used in the 2011 holes that were dry. All CPP holes were also logged with a deviation tool.

1.8 Sampling and Analysis

Umetco's preferred method of exploration at the nearby Deremo mine and other properties they worked in the Sage Plain area in the 1970s and early 1980s was to rotary "plug" drill through the upper part of the hole, then core through the uranium-bearing sandstone horizon. This allowed them to do assays for both uranium and vanadium. Holes then usually were logged with a natural gamma probe for radiometric uranium grades. EFRCP has most of the original assay data from the Umetco drilling on the leases. EFRCP also has most of the original gamma logs, which include the calibration factors for the probing equipment used, from the Hecla, Atlas, Truchas, and Pioneer Uravan drilling.

Material mined from the Calliham mine was successfully milled at the Atlas mill in Moab, Utah in the 1980s. The ore mined by Umetco in 1990-91 was milled at the White Mesa Mill in Blanding, Utah, presently owned by EFI. EFRCP is not aware of any radiological disequilibrium or unfavorable metallurgical issues occurring during the mining and milling of the Calliham ore.

1.9 Security of Samples

Core sampling methods used by previous operators is believed to have followed proper protocol commonly used by uranium-vanadium producers in the region in the 1970s and 1980s. Natural gamma logging equipment used by CPP in its 2011 verification drilling, the Colorado Plateau Logging, LLC tools, were calibrated at the U.S. Department of Energy (DOE) test pits in Grand Junction, Colorado on August 24, 2011.

1.10 Mineral Resources

Review of the historic and verification drilling data show it supports remaining Measured and Indicated Mineral Resources at the Sage Plain Project of approximately 1,611,000 lbs U_3O_8 and 13,261,000 lbs V_2O_5 . This is contained in roughly 475,100 tons of material at an in-place diluted grade of 0.17% U_3O_8 and 1.40% V_2O_5 Additionally, Inferred Mineral Resources are estimated at 11,800 tons with an in-place diluted grade of 0.16% U_3O_8 and 1.20% V_2O_5 (36,700 lbs U_3O_8 and 283,600 lbs V_2O_5). This resource estimate for the Sage Plain Project is divided into the particular leases for reporting in this Technical

Report. The resources of the Calliham, Crain, and Skidmore leases are accessible through the Calliham mine. The reported Mineral Resources are all hosted in the upper sandstone interval of the Salt Wash Member of the Morrison Formation. Uranium grades derive from equivalent U_3O_8 estimated from gamma logs as well as data from historic core assays.

Resources were estimated using a polygon method. The area of influence for any one drill hole was set at a maximum of 7,854 sq. ft. (radius of 50 feet) for Measured Resources. Indicated Resources are the areas between the Measured Resource polygons of adjacent holes that are greater than 100 feet apart, but no more than 200 feet, and the mineralized intercepts in those holes correlate well. Inferred Resources are where mineralized holes are from 200 to 400 feet apart. EFRCP uses a tonnage factor of 14 cu ft/ton for mineralized Salt Wash sandstone. A cutoff grade of $0.10\%~U_3O_8$ was used (with a few exceptions, explained in Chapter 14).

The Mineral Resource totals for the entire project area are summarized in Table 1.1.

Table 1.1 – Summary of Measured, Indicated, and Inferred Mineral Resources for the Sage Plain Project; rounded.

			Avg Grade		Avg Grade
Leases	Tons of Ore	U ₃ O ₈ Lbs	(U ₃ O ₈)	V ₂ O ₅ Lbs	(V_2O_5)
Calliham			0.16		1.32
Measured	179,300	595,600	0.17	4,915,000	1.37
Indicated	10,900	22,700	0.10	172,900	0.80
Inferred	8,700	22,000	0.13	165,900	0.95
Crain			0.14		1.15
Measured	60,900	176,800	0.15	1,434,700	1.18
Indicated	2,100	3,700	0.09	26,100	0.63
Inferred	1,300	3,000	0.11	22,400	0.85
Skidmore			0.18		1.52
Measured	203,800	768,000	0.19	6,364,200	1.56
Indicated	18,100	44,200	0.12	348,100	0.96
Inferred	1,800	11,700	0.33	95,300	2.67
Grand					
Total(Mea+Ind)	475,100	1,611,000	0.17	13,261,000	1.40
Grand Total(Inf))	11,800	36,700	0.16	283,600	1.20

Notes:

- Grades and tonnages shown as diluted amounts.
 Dilution is discussed in Chapter 14.
- Vanadium grades are based on assays where known, otherwise estimated at the average V_2O_5 : U_3O_8 ratios for the individual properties used by previous operators based on core assay data and past production.

The Mineral Resources are located on private land in a region of past mining success where nearby communities have long supported mining enterprises. The State of Utah regulations are clearly stated and compliance will be readily achievable. The main challenge to moving the project forward is having a favorable market price for uranium and/or vanadium.

1.11 Mining Operations

The mining of resources in the Sage Plain Project will be by conventional underground 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 slightly dipping horizons. It 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 deposit will be accessed from the surface through a decline about 3,500 feet long at a gradient between 8 and 15%. If possible, the Calliham decline will be rehabilitated; if unusable, a new parallel decline would be driven. 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. The Salt Wash 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 mined material will be processed at the conventional White Mesa Mill, 54 miles away. Ore from the Calliham mine was successfully processed there in 1991. Salt Wash ores from other districts in the Uravan Mineral Belt were processed at the White Mesa Mill as recently as mid-2013.

1.12 Exploration and Development Recommendations

EFRCP should continue efforts to acquire the necessary permits to allow mining to commence quickly when the uranium and/or vanadium prices increase to the point the project would become economic. A formal preliminary economic assessment should be performed to determine what those prices need to be.

Although some of the "exploration" of the Calliham mine areas will be performed underground as development proceeds, it is recommended that additional surface drilling be done for the areas to the north of the majority of the Calliham workings, particularly on the Skidmore lease.

Prior to starting major permitting for the site, it is recommended that an exploration permit be obtained from DOGM to reopen the Calliham Decline and the Calliham No. 1 Vent Shaft to determine whether the decline is in good enough shape to allow for rehabilitation. Assuming that the decline is in reasonable shape, a summary of the three major state permits needed to reopen the mine follows. All three state permits likely would trigger a public comment period and associated public meetings. This area has

seen extensive uranium mining over the years and benefited from the associated economic advantages. Minor permits for water rights, storm water, county special use, etc. also may be required. The San Juan County Administrator stated the only permits they need to issue are building permits to reopen the Calliham Mine. These permits typically take 7 to 10 days to approve.

2.0 Introduction

Peters Geosciences was retained by CPP to prepare an independent Technical Report compliant with National Instrument 43-101 (NI 43-101) on the Sage Plain uranium-vanadium project in December 2011. The report was titled "Technical Report on Colorado Plateau Partners LLC (Energy Fuel Resources Corporation/Lynx-Royal JV) Sage Plain Project, San Juan County, Utah and San Miguel County, Colorado," dated December 16, 2011 (the "2011 TR"). That report was prepared to meet the requirements of NI 43-101 and Form 43-101F1. This updated report draws from the previous report, but replaces it. EFRCP now owns 100% of previously reported Mineral Resources on the Calliham and Crain leases through purchase of the Lynx/Royal interest. Furthermore, EFRCP sold the claims where the Sage mine is located to Piñon Ridge Mining LLC ("PRM") in August 2014. A reverse takeover transaction occurred in November 2014 wherein Homeland Uranium Inc. acquired all PRM shares followed by a consolidation of both companies' shares and a resultant name change to Western Uranium Corporation ("WUC") with the former PRM management remaining in control. Therefore, the reduced land position and the revised Mineral Resource owned by EFRCP are the topics of change since the 2011 TR for this updated report.

Peters Geosciences understands that this report will be used in support of future public offerings by Energy Fuels Inc. (parent company of EFRCP).

Douglas C. Peters, CPG (AIPG #8274) and RM (SME Member #2516800), and principal in Peters Geosciences, visited the Sage Plain property on December 6, 2011 during a tour of the property led by Dr. Kaiwen Wu and Mr. Jess Fulbright of EFR. In addition to viewing the surface conditions at the old Calliham mine portal area, accessible (due to then recent snow cover) drill-hole locations and related cuttings were visited as well. Mr. Peters traversed parts of the property and surrounding areas on accessible roadways. Only surface conditions and recent drill sites were observed because access to the underground mines was not possible due to the Calliham mine portal having been reclaimed. Consequently, depositional characteristics of the uranium were not directly seen and no in-place samples were collected. Likewise, historic drill sites were not visited due to snow cover that made finding them impossible within the time frame of the field visit. Field project work since 2011 has been permit related, such as four sentry wells on the Calliham lease where the proposed water treatment plant will be located. Based on this minimal amount of field work on the project by EFRCP and no additional exploration drill holes or mine-related surface disturbances having occurred, no additional site visit has been performed.

Relevant reports, maps, and data were reviewed and discussed with EFI staff, principally Mr. Richard White, who is serving as Chief Geologist for the company's Colorado and Utah operations and Dr. Kaiwen Wu, Staff Geologist. 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 report for EFI has been reviewed by Douglas C. Peters of Peters Geosciences for completeness and technical correctness for sections prepared by EFI and EFRCP staff. Text also has been added and modified by Peters Geosciences as part of the report preparation process for EFI. The information, conclusions, opinions, and estimates contained herein are based upon information available to Peters Geosciences at the time of report preparation. This includes certain data, maps, and other documents in the possession of EFI and EFRCP and reviewed with Mr. Richard White, CPG, Dr. Kaiwen Wu, Mr. Bruce Norquist, P.E. and other CPP and EFRCP staff in 2011 at the Sage Plain property and in the EFI offices in Lakewood and Naturita, Colorado and with Mr. Ryan Weidert of Royal USA Inc. who supervised the 2011 CPP exploration drilling program. With the exception of results from 2011 drilling by CPP, most data used in this report are from earlier exploration and mining efforts conducted by previous companies in the immediate Sage Plain District. Further review of newly available maps and data was held with Mr. White and Dr. Wu prior to completion of this report.

Dr. Wu and Mr. Jess Fulbright accompanied Mr. Peters for the field review on December 6, 2011 of the properties covered by this report. Dr. Wu, Mr. White, and Mr. Weidert were instrumental in assisting with the review, discussion, and understanding of both the general and site-specific geology of the Sage Plain mining district at that time. It is Mr. Peters' opinion that there have not been any substantial changes in field conditions or activities since this visit in 2011 and that a follow-up site visit is not required at this time.

Mr. Peters did not investigate the legal title of claims and leases covering the Sage Plain and related properties. Likewise, Mr. Peters did not review the permitting and reclamation status of the Sage Plain property beyond basic discussions with Mr. White and Dr. Wu.

4.0 Property Description and Location

The EFRCP Sage Plain Project is located near the southwest end of the Uravan Mineral Belt. The property lays some seven-to-nine miles west and northwest of the town of Egnar, Colorado. This is also 15-17 miles northeast of Monticello, Utah. It consists of three private mineral leases, three Utah State School and Institutional Trust Lands Administration (SITLA) mineral leases, and one parcel of fee land owned by EFRCP, all in San Juan County, Utah. The combined 3,040 acres of the project properties is comprised of approximately 1,680 acres of fee land leased (mineral and surface access) in sections 21, 27, 28 and 29, T32S, R26E, SLPM, about 1,280 acres of SITLA land in sections 16 and 32, T32S, R26E, and 80 acres of fee surface owned by EFRCP in NE ¼ NW ¼ and NW ¼ NE ¼ section 33, T32N, R26E. See Figure 4-1 for the project location map, Figure 4-2 for a topographic map with historic mine workings shown, and Figure 4-3 for an aerial view of the project area with historic mine workings shown.

All of the property, except one private lease, was held by CPP. CPP was a 50:50 joint venture between EFRC and Lynx-Royal. EFRC bought out the 50% owned by Lynx-Royal in October 2012 and EFRC assigned its subsequent 100% interest in CPP to EFRCP in September 2014. The other private lease is held solely by EFRCP. Under the operating agreement of CPP, Lynx-Royal was the manager during exploration phase work whereas EFRCP was the manager for projects that progress to a development or production stage. Therefore, Lynx-Royal managed the 2011 drilling program. The project management transitioned to EFRCP for mine design, production planning, and data collection and preparation of the numerous permit applications being readied for submittal to various county, state, and federal agencies. The surface ownership of the properties discussed below is shown in Figure 4-4 and the mineral ownership is depicted in Figure 4-5.

The various parcels of the project were acquired in stages. EFRCP was the successful bidder on two SITLA mineral leases (ML-51145 and ML-51146) in December 2007. A third lease (ML-51963) was awarded to EFRCP in March 2011. These were subsequently assigned to CPP. CPP purchased the 94 claims and another SITLA lease (ML-49301) from Uranium One Exploration USA Inc. in November 2010. EFRC purchased the lease on the private Calliham parcel in February 2011 from Nuvemco and the Crain lease in July 2011 from Uranium Energy Corporation ("UEC"). Both of these leases were assigned to CPP. Another acquisition was the Skidmore lease covering land owned by J.H. Ranch, Inc. It was acquired in October 2011 from a private group, Nuclear Energy Corporation ("NUECO"). NUECO had an option with J.H. Ranch to lease this and several other parcels. The final acquisition in the project area was the purchase of 80 acres of fee land (surface only) where the reclaimed portal facilities of the Calliham mine were located. EFRCP bought that parcel form Umetco, the last company to operate the Calliham mine. A brief description of each parcel follows:

- Calliham Lease- Nuvemco LLC entered into a Mining Lease with members of the Calliham family on March 8, 2007. EFRC purchased the lease outright from Nuvemco in February 2011. It was assigned to CPP and subsequently re-assigned to EFRCP. The term of the lease is perpetual, as long as the lessee is in compliance with the terms of the lease. The lease requires an annual advanced royalty of \$10,000 be paid to the lessor. The lease is paid for until March 8, 2016. It is the intent of EFRCP to continue to hold this lease by making the next lease payment prior to March 8, 2016. The lessor reserves a production royalty at the rate of 5% of the value of the uranium and 8% of the value of the vanadium based on the price received for the sale of ore. The lease covers the mineral rights on approximately 320 acres in the NW ¼ NW ¼ section 33 and SW ¼, S ½ NW ¼, and SW ¼ NE ¼, section 28, T32S, R26E, SLPM. Surface access and use necessary for exploration and mining are granted by the lease.
- Crain Lease- UEC entered into a Uranium and Mineral Lease with Nadine Crain on April 19, 2005 for all of section 27, T32S, R26E, SLPM, being 640 acres in area. UEC paid \$25,000 for the primary term, which was for five years. The lease was renewed at the expiration of the primary term for a second five year term by UEC paying one-time \$50/acre. It is in effect until April 19, 2015. It is the intent of EFRCP to renew the lease for at least another 5-year term. The lessor (Crain) reserves a production royalty of 6 ¼% of the net proceeds received for uranium in ores and 5% for vanadium in raw, crude form before any processing or beneficiation. EFRC purchased the lease from UEC on July 27, 2011, and it was assigned to CPP with subsequent re-assignment to EFRCP. EFRCP will pay UEC a royalty of 4% on the gross proceeds for uranium and vanadium produced from the property after the first 225,000 lbs of U₃O₈ is produced. Surface access and use necessary for exploration and mining are granted by the lease.
- Skidmore Lease- NUECO secured an option to lease several mineral lands in the district from J.H. Ranch, Inc. ("JHRI") in March 2011. On the 10th of October 2011, NUECO entered into a mining lease with JHRI covering surface and mineral rights in the E ½ section 29, SE ¼ SW ¼ and SW ¼ SE ¼ section 21, NE ¼ NW ¼, N ½ NE ¼, SE ¼ NE ¼, and N ½ SE ¼ section 28, T32S, R26E, SLPM. The lease also covers surface rights in the SW ¼ SW ¼ section 21 and NW ¼ NW ¼ section 28, T32S, R26E where the minerals are owned by the federal government. EFRC entered into an agreement with NUECO to purchase the lease on this portion of the JHRI property (referred to as Skidmore) adjacent to the Calliham property on October 7, 2011 and the lease was assigned to EFRCP on October 13, 2011. The primary term of the lease is for 20 years and is renewable. The lease requires EFRCP to make payments allocated as 75% advanced royalties and 25% rental that increase over time through the fourth

anniversary date. EFRCP made payments in October 2011 and 2012 in accordance with the lease. Due to the deep decline in the uranium price, EFRCP and JHRI amended the lease for a reduced 2013 advanced royalty payment, the balance being delayed until the fifth anniversary. Similarly, a second amendment delays the third and fourth anniversary advanced royalty payments until the sixth and seventh anniversaries. Payments subsequently will fall to a rental of \$10/acre/year. A production royalty will be due JHRI at 12.5% of the fair market value of crude ore. JHRI is also entitled to a small wheeling fee (toll) for any ore produced from any of the other leases that crosses the Skidmore property in the underground mine haulage drifts.

• SITLA Leases ML-51145, 51146, and 51963- EFRC acquired these three mineral leases from the State of Utah through normal offerings via sealed bids, the first two in November 2007 and the third in February 2011. The leases subsequently were assigned to EFRCP. They cover the SE ¼ section 16, all of section 32, and the N ½ and SW ¼ of section 16, respectively, in T32S, R26E, SLPM. Little data from past exploration has been located. These parcels were acquired because of their location near the Calliham mine and the farther north Silver Bell and Wilson mines. The lack of data precludes estimating any mineral resources for these parcels, but they are good exploration targets with high potential of discovering mineral resources with drilling. The annual cost to hold these combined leases is presently \$1,640. SITLA leases have a primary term of ten years and carry a production royalty on the gross value of ore, f.o.b. at the mine at a basis of 8% on the uranium content and 4% on the vanadium.

There are two historic uranium-vanadium mines within or near the project area, the Calliham mine which accesses the three private leases and the Sage mine which produced from unpatented claims 1 ¼ miles to the southeast. EFRCP sold the claims for the Sage mine to WUC in August 2014. The Calliham mine has been totally reclaimed. Because the portal closure consisted of back-filling for a short distance, it is expected to be easily reopened and rehabilitated. The portal and reclaimed waste rock pile are located on private land now owned by EFRCP, purchased from Umetco in May 2012. The Calliham mine is partially flooded, but can be dewatered once permits are obtained. Historic data indicate the mine did not encounter enough water to be problematic when operating. See sections 6, 16, 18, and 20 of this report for more detail on the history of the Calliham mine, the future plans for rehabilitation, development, and production, and the current permitting process.

5.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The Sage Plain Project property can be accessed from the north, south, and east on paved, all-weather county roads. The nearest towns with stores, restaurants, lodging, and small industrial supply retailers are Monticello, Utah, 26 road miles to the west, and Dove Creek, Colorado, 20 road miles to the southeast. Larger population centers with more supplies and services are available farther away at Moab, Utah (61 road miles to the north) and Cortez, Colorado (54 road miles to the southeast). EFRCP's parent, EFI, owns the uranium-vanadium processing facility (White Mesa Mill) through an affiliate subsidiary, EFR White Mesa LLC, located 5 miles south of Blanding, Utah. The Calliham mine portal location is 54 paved road miles from the White Mesa Mill. These towns and roads are shown in Figures 4-1 and 4-2.

U.S. Highway 491 connects Monticello, Utah to Dove Creek and Cortez, Colorado. There are two routes north from this highway to the project. At one mile west of the Colorado/Utah state line (16 miles east of Monticello or 10 miles west of Dove Creek), San Juan County Road 370 goes north for 10 miles to the Calliham Mine portal site drive way. The mine portal is one-half mile east of Road 370, on a private road. An alternate route is to turn north on Colorado Highway 141(2 miles west of Dove Creek) for 9.5 miles to Egnar, Colorado, then turn west on San Miguel County Road H1. Road H1 crosses into Utah at 5.5 miles west of Egnar where it becomes San Juan County Road 356 for 1.2 miles before intersecting San Juan County Road 370. Road 370 would be taken north for 4 miles to the Calliham Mine portal site driveway. Road H1 from Egnar would also be used if one was traveling to the project on Highway 141 from farther north in Colorado, such as Naturita, Colorado (a total of 62 miles away). EFRCP also will access the project from its shops and other facilities at the Energy Queen, Beaver, and Pandora mines near La Sal, Utah to the north by turning south on the Lisbon/Ucolo Road from Utah Highway 46 one mile east of the Energy Queen mine. The Lisbon/Ucolo Road becomes San Juan County Road 370, arriving at the Calliham mine portal site driveway 32 miles from Utah Highway 46. Moab, Utah is 26 miles north of the Energy Queen mine.

These highways and county roads are all well maintained year-round. State Highway shops are located in both Monticello and Dove Creek and there are county road shops in Monticello, La Sal, and Egnar.

The region has a long history of mining, ranching, farming, and oil and gas production. Therefore, even though the regional towns are small, they have adequate services and supplies to support a project the size of the proposed Calliham mine. EFRCP will be able to hire much of its mine labor from within the region. The regional grid of electrical transmission and distribution lines simultaneously supported the mines at the EFRCP

project area plus the large Deremo mine operated by Umetco Minerals, 2 miles to the southeast, and the Silver Bell and Wilson mines, 1 ½ miles to the north.

The area is semi-arid. Meteorological data from the Northdale, Colorado station, 10 miles south of the Sage Plain Project, show a recent 30-year normal mean temperature of 46 degrees F (range 31-61 degrees F). The mean annual precipitation for the same 30 years has been 12.26 inches. The closest station for wind data is in Big Indian Valley about 21 miles to the northwest. It shows the dominant directions for wind in the last 10 years are from the east (10.8% of the time) and from the south (8.1%). The average wind speed is 6.9 miles per hour. All elevations within 4 miles of the Sage Plain Project property support moderate growths of sage and rabbitbrush along with other brush, forbs, cactus, yucca, and grasses. There are localized stands of juniper and piñon pine in the rocky soils and many patches of scrub oak where it has never been cleared. Some areas have no soil or vegetation at all, both in flat areas and in the walls of Summit and Bishop Canyons. Much of the private land has been cleared and is used for livestock grazing. Some land has been cultivated for dry land crops, mainly beans, wheat, or sunflowers. However, most of the cropland now lays fallow or has become overgrown and is used for grazing.

The region of the Sage Plain Project is characterized by a relatively flat plain that is drained by three major regional rivers. Most of the private land is gently sloping, cut by small ephemeral streams that are tributary to Summit Canyon. Summit Canyon flows northeastwardly to join the Dolores River at Slick Rock, Colorado. The land south of Summit Canyon drains to Coal Bed Canyon, a tributary to larger canyons that flow to the San Juan River in southeastern Utah. The western part of the Skidmore lease is in the East Canyon drainage that flows through larger tributaries to the Colorado River to the north and west.

The flatter part of the project area is at elevations ranging from 6,950 feet near the Calliham mine portal to about 7,200 feet on the Crain lease and the SITLA leases in section 16 some three miles to the north. The terrain along Summit and Bishop Canyons consists of much steeper relief with elevations ranging from about 6,500 feet in Bishop Canyon to 7,380 feet on Bishop Point a half mile to the east (see Figure 4-2).

6.0 History

Uranium-vanadium deposits were discovered in the Morrison Formation 32 miles north of the Sage Plain Project property in Roc Creek canyon, Montrose County, Colorado in 1881; the first economic shipment of ore from there was in 1898 (Chenoweth, 1981). This started prospecting and claim staking in the region which resulted in discovery of carnotite deposits in the Salt Wash Member of the Morrison Formation (discussed in Section 7 of this report) along the Dolores River canyon and Summit Canyon near Slick Rock, Colorado around 1900, some 10 miles north of the Sage Plain. In1901, a processing plant was constructed at Slick Rock to extract uranium-vanadium concentrates from the ore and later to extract radium (Shawe, 2011 and Minobras, 1978). Many mines were opened on and near the outcropping deposits. The Slick Rock Mill was replaced in 1905. It and other mills in the region processed ores until about 1923 for both vanadium and principally radium. Ore grades in the Slick Rock area during this time probably averaged 2% U₃O₈ and 3-4% V₂O₅. During the same time period, a similar history developed in the Dry Valley District (including East Canyon) 6-14 miles northwest of the Sage Plain Project. Uranium-vanadium deposits were first discovered there in 1904 in section 8, T31S, R25E. Prospecting also discovered deposits in the Salt Wash where it is exposed in the Montezuma Canyon area (about 20 miles to the south), but they were not developed significantly until much later because of their remoteness.

There was little activity in the region until the demand for vanadium increased in the mid-1930s. Shattuck Chemical Company built a new mill at Slick Rock in 1931 and International Vanadium Corporation built one in Dry Valley. Ore here is estimated to have averaged about 0.15% U₃O₈ and 1.34% V₂O₅, with a higher average around 0.24% U₃O₈ to the south in East Canyon. North Continent Mines Company bought the Slick Rock mill and enlarged it in 1934 and operated it until 1943. In the early 1940s, the federal government formed the Metals Reserve Company to facilitate vanadium production. This entity created a buying program, and as a result, many new mines opened in the Salt Wash, and more mills were built, including one at Monticello, Utah. Total vanadium production of the Slick Rock and Dry Valley districts prior to 1946 was in excess of 122,000 tons of ore at an average grade of 2.28% V₂O₅ containing over 5.5 million pounds V₂O₅ (Chenoweth, 1981). Almost all of the uranium in the ore went to the tails at the mills until after 1943 when uranium became the focus. The mill at Monticello was altered to allow uranium recovery by the Atomic Energy Commission (AEC) in the late 1940s as were others in the region, spurring the start of the uranium boom. More deposits were found in the Salt Wash (as drilling equipment improved) and mines remained open into the 1950s and early 1960s in the Slick Rock and Dry Valley/East Canyon districts near the Sage Plain Project. Union Carbide built an up-grading mill at Slick Rock in 1956 and operated it until 1970. Between 1948 and 1977, the Slick Rock District produced over 4.1 million tons of ore at grades that averaged 0.25% U₃O₈ and 1.8% V_2O_5 . These production numbers were summarized from figures reported by Minobras Mining Services Company (1978) and Chenoweth (1981).

Uranium-vanadium mineralization was found in outcrops of the Chinle Formation near the south end of Lisbon Valley in 1913, about 13 miles north of the Sage Plain Project, east of Dry Valley. 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 18-23 miles northwest of the Sage Plain Project, 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 deposit mined by 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 on the mesas away from the canyon rims increased in the region, discovering Morrison uranium-vanadium deposits under several hundred feet of cover in the Sage Plain and other areas in the region. Exploration during this time period discovered the large uranium-vanadium deposits of the Deremo mine, 2 ½ miles southeast of EFRCP's Calliham mine, and the Wilson and Silver Bell mines, ½-to-1 mile north of the Calliham mine (adjacent to the Skidmore lease), which were developed by vertical shafts. The Calliham and Sage mines were begun as declines for use by rubber-tired equipment. The area boomed until 1985 when the uranium price decline triggered by the 1979 Three Mile Island nuclear plant incident made most mining in the region unprofitable.

Since the 1940s, the vanadium price was rarely sufficiently high to make mining practical for the vanadium content alone, even though it is about 8 times more abundant than the uranium content in the Sage Plain area deposits. However, the value of the vanadium as a byproduct has always been important to uranium mining within the district as well as in the overall Urayan Mineral Belt.

The Calliham and Sage mines were in production in the 1970s to early 1980s by Atlas Minerals. The Calliham mine property was explored in the early 1970s by Hecla Mining Company. The Crain lease to the east was explored by Truchas and later in the 1970s by Pioneer Uravan. The Calliham mine workings stop about 75 feet short of crossing into the Crain lease. The Calliham lease was acquired by Atlas Minerals and went into production in March 1976. Atlas departed the uranium business in the region in the mid-1980s. The Calliham mine and associated leases were acquired by Umetco Minerals in 1988 and operated briefly in 1990-1991 during a spike in vanadium prices. Umetco was also operating the Silver Bell and Wilson mines. During Umetco's tenure, the Calliham mine produced 13,300 tons of ore averaging 0.21% U₃O₈ (~56,000 lbs U₃O₈) and 1.29% V2O5 (~343,000 lbs V₂O₅). This ore was milled at the White Mesa Mill in Blanding, Utah, 54 road miles away.

The White Mesa Mill is owned by EFR White Mesa LLC, an affiliate of EFRCP, having been acquired when EFI merged with Denison Mines USA in June 2012. It has processed ore from several EFI mines and processes alternate feed material for its uranium content. The mill usually has an ore buying program available for other producers in the area.

Over the life of the Calliham mine, much of its ore was milled at the Atlas mill in Moab, Utah.

Atlas reported a combined production from the Sage and Calliham mines of 41,541 tons of ore and 48,142 tons of waste during the last year of operation in 1981, with the majority of this production probably coming from the larger Calliham mine. The Calliham mine closure report by Atlas (Edgington, 1982) says production ceased January 4, 1982. It states the production for the 5-year period by Atlas to be 208,871 tons of ore at average grades of 0.145% U₃O₈ (604,750 lbs) and 0.90% V₂O₅ (3,773,000 lbs). Butt Mining reportedly mined 3,000 tons of ore from the Sage mine in 1990 when vanadium prices were relatively high, but the mine has otherwise remained inactive up to the current time. The Sage mine's historic production, prior to Butt's operation, is not known. Both mines ceased production due to depressed prices, not because they were depleted.

The largest mine in the Sage Plain District (and one of the largest anywhere in the Salt Wash sandstones) is the Deremo mine, about $2\frac{1}{2}$ miles southeast of the Calliham mine. It produced 1,983,000 tons of ore at grades of 0.17% U_3O_8 (~7,000,000 lbs U_3O_8) and 1.59% V_2O_5 (~63,000,000 lbs V_2O_5). Two other large mines, the Silver Bell and Wilson mines, (now reclaimed) are a half mile north of the Skidmore portion of the Calliham mine.

7.0 Geological 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 Sage Plain Project and other properties currently held by EFRCP 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 metamorphic and intrusive igneous rocks. Figure 7-2 shows the stratigraphic column for units of Pennsylvanian age through Cretaceous age. The area was relatively stable throughout the early part of the Paleozoic, being a shelf on which miogeosynclinal sediments were deposited. The northwest-trending Paradox Basin formed in Pennsylvanian time, bounded by the Uncompangre Uplift 45 miles to the northeast. The Paradox Basin received deposition of marine sediments, including thick evaporites (Hermosa Formation). The Paradox Basin was filled by middle Permian time; however the Uncompanding continued to be a highland shedding abundant coarse clastic, arkosic debris (Cutler Formation) as the basin slowly subsided. The region continued to receive fluvial and lacustrine sediments (Moenkopi and Chinle Formations) during the early Mesozoic Era with minor erosional periods locally. The region dried considerably in late Triassic and early Jurassic and large dune fields formed at different times resulting in deposition of predominantly sandstone of eolian and fluvial origin (Wingate, Kayenta, Navajo, and Entrada formations). The buried Pennsylvanian evaporites, influenced by basement faulting and sediment loading, flowed into a series of northwest-trending diapiric anticlines. Flowage 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 Salt Wash Member of the Morrison Formation, host of the uranium-vanadium deposits in the Sage Plain Project area. The source of the sediments changed during the Paleozoic and Mesozoic from the earlier eastern source to a western dominated source. Volcanic ash from a couple of volcanic episodes to the west settled over the area, as well (upper part of the Chinle and the Brushy Basin Member of the Morrison Formation). Early Cretaceous deposition transitioned from terrestrial to marginal marine (Burro Canyon and Dakota formations). In Late Cretaceous time a large seaway occupied the region where thick marine black shales were deposited (Mancos Shale). Near the end of the Cretaceous, alternating regressions and transgressions of the sea led to thick littoral sandstones interbedded with marine shales (Mesa Verde group), later covered by fluvial and lacustrine sediments in the early Tertiary.

The regional structure is dominated by the numerous salt anticlines to the north. These are separated by synclines trending northwest, as are the anticlines. Locally there are faults of significant displacement bounding the anticlines. To the south, the Sage Plain slopes at a shallow dip southwesterly toward the Blanding Basin with the western edge being interrupted by the domal structure of the Abajo Mountains.

Some twenty miles west of the Project area are the Abajo Mountains. These consist of Tertiary laccoliths intruded about 25 million years ago into several different horizons of Paleozoic and Mesozoic sedimentary rocks. Other similar mid-to-late Tertiary intrusions are located 30 miles to the north (La Sal Mountains), 45 miles to the east (Lone Cone), and 45 miles to the south (Ute Mountain). Diorite porphyry is the dominant rock type, with minor monzonite porphyry and syenite intruded later.

The Cretaceous marine Mancos Shale and younger rocks have been removed from the Project area by mid-late Tertiary and later erosion. The laccolithic mountains were uplifted in the late Tertiary, concurrently with the collapse and erosion of the salt anticlines. Deep canyon cutting occurred nearby, continuing through the Pleistocene. Sedimentary rocks exposed in the 2,000 feet deep Dolores River Canyon, 11 miles to the east, range from the Permian Cutler to the Cretaceous Dakota.

Figure 7-2 is a stratigraphic column of the rock units exposed in the Slick Rock, Colorado area and underlying the Sage Plain, Utah area. In the Project area, the top of the Precambrian basement is probably about 10,650 feet deep. The Paleozoic erathem accounts for about 8,100 feet of this and the Triassic and lower Jurassic systems below the Morrison Formation are about 1,600 feet thick. The Morrison Formation and overlying early Cretaceous rocks are about 950 feet thick.

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, 13-23 miles to the north). 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 (i.e., the Moenkopi has been removed), good uranium deposits locally occur in the Cutler as well.

The other significant Colorado Plateau uranium deposits occur in the late Jurassic Morrison Formation. The Morrison comprises three members in the Sage Plain area. The lowest member, the Tidwell (8-15 feet thick), is a red mudstone with a thin sandstone bed and was formerly mapped as the upper part of the Summerville Formation. The Salt Wash (~350 feet thick) is the main uranium host. The upper part of the Morrison is the Brushy Basin Member (350-500 feet thick). The Salt Wash consists of about equal amounts of fluvial sandstones and mudstones deposited by 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 where the deposits are larger and more closely spaced (Figure 7-3). 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 ores contain very little vanadium, whereas the Salt Wash deposits usually contain large amounts of vanadium. The V₂O₅:U₃O₈ 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 obviously enhanced by the vanadium content, especially when vanadium prices are higher than at present. The south end of the Uravan Mineral Belt, where the Sage Plain Project is located, contains mines where the V_2O_5 : U_3O_8 is often greater than 7:1. The average V₂O₅:U₃O₈ for ore from the life-of-mine of the nearby Umetco Deremo mine is 9.2:1 (personal communication, Tony Bates, former Umetco mining engineer). In the Dry Valley District to the north, the ratio of ore produced 1956-1965 was 7.5:1; in contrast, the vanadium values decrease in the Montezuma Canyon area to the south to a low ratio of 1.3:1 (Doelling, 1969). The values used for resource projections in this document when direct vanadium assays are absent are based on other historic Umetco resource reports, more thoroughly described in section 14. This ratio cannot be guaranteed and must be used only as a historical estimator for vanadium mineralization potential.

7.2 Local Geologic Detail

The only geologic unit exposed over most of the property of the Sage Plain Project is the Cretaceous Dakota Formation. (The lithology of this and the underlying stratigraphy is discussed below.) The Dakota crops out as small isolated windows through the windblown sandy soil and as narrow bands along shallow gulches. In the head of Summit Canyon, the Cretaceous rocks are better exposed, including the Burro Canyon Formation in its entirety along with the Jurassic Brushy Basin Member of the Morrison Formation. More erosion in Summit Canyon to the east and in Bishop Canyon has exposed the lower, Salt Wash Member of the Morrison Formation. In the bottom of Bishop Canyon in section 30, T43N, R19W, older sedimentary rocks are also exposed including the Summerville Formation and Entrada Sandstone. A red shaley unit, the Carmel Formation, underlies the Entrada, but is not always mapped separately. Summit Canyon cuts deep enough to expose the Navajo and all Triassic rocks (Kayenta, Wingate) through much of the Chinle, but not the Moss Back Member horizon, in less than two miles downstream to the north (Shawe et al., 1968). To the northwest of the Calliham mine about 6 miles, East Canyon has cut deep enough to expose the Brushy Basin Member. As East Canyon continues getting deeper for the next 5-6 miles to the northwest, it exposes the Salt Wash, with many small historic uranium-vanadium mines located in this area, and the underlying units down through the Entrada.

Rocks of interest in the subsurface at the Sage Plain Project range from the Permian Cutler Formation to the Dakota (Figure 7-2). The units are described in more detail below. Figure 7-4 is derived from portions of the published USGS geologic maps of this

area (Cater, 1955 and Hackman, 1952) and results of 2011 CPP drilling and field work. Figure 7-5 shows a generalized cross section of the area adapted from Shawe (1968).

The Dakota Sandstone consists of interbedded reddish- and yellowish-brown sandstone and conglomerate with beds of gray-to-black carbonaceous shale containing discontinuous thin coal seams. Brown-to-light brown/grey mudstone/siltstone intervals are predominantly thin and are most common as splits between larger sandstone beds. It can be up to 150 feet thick where all units are present. It was overlain by the thick marine Mancos Shale. On the Sage Plain, the Mancos and most of the Dakota were eroded prior to deposition of the Quaternary soils. CPP's geologists logged the remnant Dakota in holes drilled in 2011 in the northern part of the project area to be 0-45 feet with 5-10 feet of coal on the Skidmore lease. Drilling completed in 2011 south of the Calliham mine on the Sage mine property found the Dakota cap to be thin, 0-10 feet, with intermittent exposure having similar features as the underlying Burro Canyon Formation, making it hard to distinguish.

The Burro Canyon Formation is composed mostly of light-brown and grey-to-off-white sandstones with interbedded cherty conglomerates, usually forming thick beds across the project area. Interbedded green and purplish and brown-to-grey mudstones and occasional thin limestone beds separate the sandstone units. The individual sandstone/conglomerate beds vary from 5-60 feet, and the shale/mudstone layers are from 5-30 feet thick. The entire unit where overlain by Dakota is about 140-170 feet thick at the Calliham mine properties and about 190-225 feet thick in the Sage mine area. It locally holds perched water at the base of sandstone beds, particularly the lowest one. The Burro Canyon forms cliffs along the rim of Summit and Bishop Canyons. Erosion in these canyons exposes the complete section of the Burro Canyon.

Beneath the Burro Canyon lies the Brushy Basin Member of the Morrison Formation. The Brushy Basin (about 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. These coarser clastic beds are usually lenticular. 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 420-460 feet thick across the Calliham properties and 350-405 feet thick near the Sage mine. The difference in thicknesses is linked to the thickness of the Burro Canyon, where the Brushy Basin is thinner, the Burro Canyon is thicker. The sandstones can be aquifers. The Brushy Basin crops out on the claims in the upper slopes of Summit Canyon and Bishop Canyon, as far west as the NE ¼ of section 33, T32S, R26E. However, much of it is covered by large boulders of the overlying Burro Canyon and landslide debris. Good exposures can be seen locally in the walls of the Summit Canyon farther northeast.

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 sandstones. They are varieties of orthoguartzite, 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 Salt Wash sandstones usually crop out as cliffs or rims, whereas the mudstones form steep slopes in Summit and Bishop Canyons. 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. The upper sandstone unit is much more resistant to erosion than the overlying Brushy Basin and often forms a bench in the canyon walls. 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 and elsewhere in region are in the Top Rim, commonly referred to as the OBSS. The Salt Wash is up to 350 feet thick in the area of the Sage Plain Project. The upper part is exposed near the Sage mine portal in the NE ¼ section 34, T32S, R26E. It is exposed in its entirety only in Bishop Canyon in section 29, T43N, R19W. Beginning just south of here, good exposures of the upper sandstones (OBSS) and the rest of the Salt Wash, along with numerous historic mines, can be seen for several miles to the northeast, in the walls of Summit Canyon.

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 (Figure 7-6); however, some of the channel systems were obviously locally diverted by contemporaneous uplifting of the salt-cored anticlines. The Dolores Anticline five miles to the north does not have as much structural relief as most salt anticlines and appears to not have altered the direction of the Salt Wash to the extent of most anticlines. The direction of the main channel system (meander belt) at the Project area appears to be northeast. However, the influence of the Dolores Anticline might still be significant in that it possibly slowed stream flow, enhanced meandering, causing an increased occurrence of point bars and oxbow lakes, and the resultant abundant deposition of plant material. During burial, these carbon rich zones probably contained trapped, reduced waters which helped facilitate uranium precipitation.

The Salt Wash sandstones exhibit several facies and sedimentary features. These features can be seen in some outcrops, sometimes in drill core, and in underground mines. However, these features are usually too thin to be identified in borehole logs, such as neutron, induction, or resistivity logs. Large cross-bedding is common indicating stream thalwegs. Flat, thin bedding of low energy areas can be seen along with apparent levies and crevasse splays. 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 this facies or close proximity a prime location for uranium deposition.

The drilling in 2011 by CPP at the Sage Plain Project shows the Top Rim interval consists of sandstone beds, varying widely from multiple 10-30 feet thick beds to single massive beds 30-70 feet thick. Multiple sandstone beds within the Top Rim are separated by thicker mudstones up to 15 feet thick, and the massive beds typically end with thick mudstones, usually signifying the bottom of the Top Rim. Sandstone grain size on average is fine to medium, which is somewhat coarser than in the Uravan Mineral Belt farther north. The thinner multiple sandstone beds of the Top Rim within the project area tend to be very-fine to fine grained. CPP's 2011 drilling proved strong east-west and northeast-southwest trending mineralized areas in the Salt Wash member of the Morrison Formation. This drilling program will be discussed in detail in Section 11.

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 is about 90 feet thick. Small exposures of the Summerville exist only along the lower slopes of Bishop Canyon. Underlying the Summerville is the eolian Entrada Sandstone, some 90-150 feet thick. The Entrada does not crop out within the property boundary, but does downstream in Bishop Canyon. It overlies the red shale beds of the thin Carmel Formation. The upper unit of the Glen Canyon Group is the Navajo Sandstone. It is light-brown, massive, cross-bedded eolian sandstone. Its thickness in the region is variable (175-200 ft), pinching out against most salt anticlines. The Navajo is above the Kayenta Formation. The Kayenta is up to 175 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 massive eolian sandstone over 270 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. The thickness of the Chinle varies greatly in the area, partly due to salt movement, and is about 600-650 feet at the Project. Important uranium deposits occur in the basal, calcareous, gray conglomerate (Moss Back Member) which has been mined 13-23 miles north of the Sage Plain Project property. Minor amounts of vanadium occur with the uranium in southern Lisbon Valley (0.47% V₂O₅). Nearly 78 million pounds of U₃O₈ (averaging 0.30% U₃O₈) 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 basal Chinle beds at the Sage Plain Project area are greater than 2,300 feet deep. Potential for Chinle uranium deposits has not been explored at the Project area. The authors of the Cortez Quadrangle NURE report (Campbell et al., 1982) did not consider this area favorable for Chinle uranium deposits based on scattered oil well data. Other companies have done minor exploration for Chinle deposits a few miles to the north. Uranium mineralization has been found there, but not in economic quantities.

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. Most salt anticlines were active following Moenkopi deposition, so it was mostly removed by erosion in the Big Indian District (Huber, 1981) to the north. Scattered oil well data near the Sage Plain Project indicate about 120 feet of Moenkopi lays beneath the Chinle (Shawe, 1968).

The Permian Cutler Formation was deposited as a thick clastic wedge derived almost entirely from the Precambrian rocks of the ancestral Uncompangre Uplift. It contains a variety of rock types from mudstones to conglomerates lain down in different depositional environments. Where sandstones lie subjacent to the Moss Back in the Lisbon Valley-Big Indian District, uranium deposits locally occur. One theory is the uranium migrated down dip into the Cutler sandstones from the Moss Back. Another theory is the uranium migrated up dip and precipitation was facilitated by reducing conditions produced by hydrogen sulfide leakage from deeper sediments. In the Cortez Quadrangle NURE report (Campbell et al., 1982), the authors indicate the Sage Plain Project area contains facies of the Cutler they think are favorable for uranium deposits. However, the possible lack of overlying favorable Chinle and the 100+ feet of Moenkopi present would preclude formation of uranium deposits if the first theory of downward migration is correct. At the present, though, the Cutler remains an untested potential host in the project area. Drilling to examine this stratigraphic horizon would be in excess of 2,500 feet deep. The Cutler overlies the limestones, clastics, and evaporites of the Pennsylvanian Hermosa Formation or the thin transitional Rico Formation, if present.

Structurally, the immediate area of the Sage Plain Project is very simple. The sedimentary sequence dips at a slight amount, usually less than 2 degrees to the southwest toward the Blanding Basin. The dip is the result of the northwest-trending salt-cored Dolores Anticline, the axis of which is about 5 miles northeast of the Project area. The other limb of the anticline dips much steeper, about 9 degrees to the northeast for 7 miles to the axis of the sub-parallel Disappointment Valley Syncline (See Figure 7-5). Nowhere along the axis of the Dolores Anticline does the salt breach the surface as it does in numerous other salt anticlines in the Paradox Basin; therefore, it has not collapsed to the extent of the others. The Dolores zone of faults occurs on the northeast limb, mostly as small displacement, en echelon grabens, 8 miles northeast of the property. Another zone of faults defines the Glade graben about 16 miles to the southeast near and crossing the anticlinal axis, possibly related to some dissolution of salt. This zone has been projected westerly in the subsurface a few miles south of the Project area (Shawe,

1970). The axis of the Dolores Anticline plunges to the northwest. It re-emerges in that direction as the axis of the Lisbon Valley Anticline, a much more complex structure.

7.3 Mineralization

Mineralization trends of the Sage Plain area are shown in Figure 7-6. The uranium- and vanadium-bearing minerals in the Salt Wash Member of the Morrison Formation 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) (UO₂) with minor amounts of coffinite (USiO₄OH). 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 old mines show a variety of oxidized minerals common in the Uravan 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 Sage and Calliham mines have been standing full of water for at least ten years, so no direct observations have been made of the mine workings. Fragments of ore can be found in the un-reclaimed waste rock pile at the Sage mine. Samples of this material show some of the vanadates mentioned above.

Some stoping areas in the Sage and Calliham mines as well as the nearby Deremo mine to the east and the Silver Bell and Wilson mines to the north are well over 1,400 feet long and several hundred feet wide. The Indicated Mineral Resources of the Sage Plain Project properties identified through drilling are of similar size. Individual mineralized beds vary in thickness from several inches to over 10 feet.

Top Rim sandstone is quite variable because of its depositional nature, but can usually be distinguished by it typically being the first thick sandstone encountered after the Brushy Basin. Across the project area, the individual beds only locally correlate from hole to hole; however, the elevation of the horizon as a whole at which the first thick sandstone bed is intercepted is fairly consistent. The Top Rim consists of sandstone beds, varying widely from multiple 10-30 foot beds to single massive beds 30-70 feet thick. Multiple sandstone beds within the Top Rim are separated by thicker mudstones up to 15 feet thick and the massive beds typically end with thick mudstones, usually signifying the bottom of the Top Rim. Sandstone grain size on average is fine to medium, which is somewhat coarser than in the Uravan Mineral Belt. The thinner multiple sandstone beds of the Top Rim within the project area tend to be very-fine to fine grained.

One exception to the fairly consistent elevation of the Top Rim sandstone is in holes SP-11-001 and SP-11-002, where the mineralized horizon is within a sandstone bed about 50

feet higher than expected. This interval is still considered to be in the Top Rim. The interpretation of this anomaly is that locally the upper channel sandstone of the Top Rim is thicker than similar thin sandstones at this stratigraphic horizon and there is an abnormally thick mudstone unit separating the topmost sandstone and the underlying sandstone beds. In hole SP-11-003, a quarter mile away, the mineralized part of the Top Rim elevation is consistent with the Sage mine workings and other resources in the project area and the uppermost sandstone is again thinner.

Kovschak and Nylund (1981) report no apparent disequilibrium problems in the mines of the La Sal area. Disequilibrium has not been reported as a significant problem in the Slick Rock District either. Therefore, EFRCP has no reason to anticipate any disequilibrium conditions within the Sage Plain Project property. Nonetheless, EFRCP is relying partly on historic and recent drilling results from downhole gamma logging (i.e., eU₃O₈) and greater confidence will come when any issues with disequilibrium are better established through sampling in the mine or with core drilling.

8.0 Deposit Types

The Sage Plain 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 Permian Cutler Formation would also target this class of deposit. Such deep drilling would penetrate the slightly shallower Triassic basal Chinle Formation (Moss Back Member). Deposit targets in the Chinle 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 Sage Plain and nearby Slick Rock and Dry Valley/East Canyon districts uranium-vanadium deposits are a similar type to those elsewhere in the Uravan Mineral Belt. The Uravan Mineral Belt was defined by Fischer 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 (Figure 7-3). 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 Sage Plain District appears to be a large channel of Top Rim sandstone which trends northeast-southwest, as one of the major trunk channels that is fanning into distributaries in the southern portion of the Uravan Mineral Belt. The Calliham/Crain/Skidmore (Calliham mine) and Sage mine deposits, as well as nearby Deremo and Wilson/Silverbell mines appear to be controlled by meandering within this main channel. Figure 7-6 is a generalized map of the Slick Rock channel system after Ethridge et al. (1980). Figure 8-1 shows the property boundary with the subject leases and previous operator's drilling along with the CPP drilling and resource blocks. Offset drilling for verification and fill-in exploration by CPP in the fall of 2011 shows persistent mineralization at the horizon of the historic mine workings and other horizons that can easily be accessed from those underground workings. Figures 8-2 and 8-3 are crosssections showing these relationships. Note that the line of cross-section B-B' on Figure 8-3 is identified in the center of Figure 8-1 and is longer than the line shown on the upper half of Figure 8-2. The full line of cross-section A-A' is shown on both Figures 8-1 and 8-2. A complete discussion and details of the drilling results and conclusions are presented in Section 10 in this report.

Most of the Uravan Mineral Belt districts 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 the fluvial environment. However, there were isolated environments where reduced conditions existed, such as oxbow lakes and carbon-rich point bars, referred to as carbon facies rocks by Shawe (1976). 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 detrital iron-titanium mineral grains and subsequently deposited along with or prior to the uranium.

The habits of the deposits in the Sage Plain area 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 CPP geologists for the 2011 drilling on the Project property record these same characteristics. There are no significant differences between mineral depositional habits in the Top Rim and those in lower Salt Wash sands. CPP drilling indicated mineralization occurs along with carbon "trash" zones in several drill holes, especially in hole CH-11-005.

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. Much of the Top Rim sandstone in the Sage Plain Project area exhibits these favorable features; therefore, portions of the property with only widely-spaced drill holes hold potential. However, without the historic drill data, it cannot be determined where sedimentary facies are located (e.g., channel sandstones thin and pinch-out, or sandstone grades and interfingers into pink and red oxidized sandstone and overbank mudstones). Furthermore, locations of interface zones of the oxidized and reduced environments are hard to predict. Until more historic data are obtained and/or more drilling occurs on the property away from the historic mines, these outlying areas remain exploration targets.

9.0 Exploration

Outcrops within a few miles of the Sage Plain Project were explored by prospectors in the early 20th century for their radium and vanadium content. Uranium exploration in the region began in the mid-1940s (see Section 6 of this report for a more detailed history). Exploration by drilling progressed to the mesa tops as drilling equipment improved in the 1950s and 1960s. The deposits in the Sage Plain area were found and developed by other operators in the late 1960s and early 1970s. The area around the EFRCP Calliham mine was extensively drilled in the 1970s and early 1980s.

During the operation of the underground mines, extensive stoping occurred. As the ore died-out in portions of the mines, longhole drilling inside the mines was done for exploration of the continuation of the ore, often with good success. Much of the Mineral Resource reported in this report for the Calliham mine was identified this way.

CPP's geologic staff evaluated the historic data. Based on this, a seventeen-hole rotary drill program (~11,300+ feet) was then designed and permitted by CPP in the fall of 2011. Seven holes were drilled at the Sage mine property (which EFRCP sold to WUC in August 2014) to confirm historic map data and explore for a possible east-west channel connecting the mine to a mineralized body to the west. Two holes testing the historically defined mineralized body confirmed the historic map data and one exploration hole intersected high-grade mineralization between the mine workings and the western mineralized body. Ten holes were drilled across the Calliham mine properties (five on the Calliham Lease, three on the Skidmore Lease, and two on the Crain Lease) to confirm historic map data and expand known mineralization. Eight of the ten holes had significant mineralization, indicating the historic map data to be correct. One hole specifically targeted the Calliham mine workings and another to test for the shallowest aquifer. The hole targeting the mine workings intersected the mine, as expected, adding more proof that the historic map data for the Calliham mine are accurate.

10.0 Drilling

As mentioned above, most of the drilling on the Calliham and Sage mine properties was performed by the previous operators, namely Hecla, Atlas, Pioneer, and Truchas. There have been approximately 313 holes drilled on the Calliham lease, 300 on the Crain lease, 487 on the Skidmore lease, and 199 on the claims near the Sage mine. A considerable, but unknown amount of drilling occurred historically along the benches of Summit and Bishop Canyons. It is likely a few holes were drilled over the years on the SITLA land of the Sage Plain project in sections 16 and 32, T32S, R26E. EFRCP has not yet acquired data on those two sections. Several hundred more holes were drilled north and east on land not controlled by EFRCP. Union Carbide's preferred method of exploration at the nearby Deremo mine in the 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.

EFRCP has in its possession several maps showing the location of holes on and surrounding the Project properties. With the acquisition of Denison Mines USA in 2012, EFRCP became owner of a significant amount of historic data not available when the 2011 TR was written. A summary of the review of this data is in Section 14, Mineral Resources, of this updated report. The Atlas, Pioneer, and Umetco drill hole electric logs, drill maps and mine maps with longhole data are deemed to be accurate. EFRCP does not possess, nor have the company's geologists seen, any original core obtained from the past drilling episodes.

CPP conducted two drilling projects, one on the Sage mine claims (since sold) and one across the three Calliham mine leases to verify some of the historic map data (drill hole intercepts), and to obtain more stratigraphic information for mine planning. Seven holes were drilled by CPP on the Sage mine claims in October, 2011 totaling 4,873 feet. The drilling was successful in meeting the objectives of confirming the accuracy of the historic data and verifying a historically defined mineralized body. One hole exploring a possible mineralized trend connecting the mine to the western mineralized body intercepted 2.0 feet of 0.407% eU₃O₈. Another hole intercepted mineralization greater than 1.0 foot of 0.16% eU₃O₈. The remaining four holes were weakly mineralized (0.028% eU₃O₈ or less) or barren.

Ten holes were drilled by CPP across the three Calliham area leased properties in December, 2011 totaling 6,465 feet. This drilling was also successful in meeting the objectives of confirming the accuracy of the historic data and expanding known mineralized areas. Four holes intercepted mineralization greater than 1.0 foot of 0.20% eU₃O₈, and four other holes intercepted mineralization greater than 1.0 foot of 0.10% eU₃O₈. One hole was intentionally drilled into the mine workings so a water sample could be collected to aid in water treatment planning. This hole also intercepted mineralization greater than 1.0 ft of 0.10% eU₃O₈ about 5 feet above the mine back

elevation By hitting the mine workings, the accuracy of the historical mine maps was confirmed yet again.

Cuttings were logged with particular attention to sandstone color, carbon content, and interbedded mudstone characteristics. The holes were probed using a natural gamma tool along with resistivity and spontaneous potential logs when the holes contained water. An induction tool was used in holes that were dry. All holes were also logged with a deviation tool. Even though the digitally recorded data displays estimated U_3O_8 content, the gamma logs were interpreted and mineralization calculated using the proven AEC method (area under the curve times the k factor equals the grade multiplied by the thickness (Scott et al., 1960)). It is believed that previous operators also used this method, or a close variant of it. The Colorado Plateau Logging, LLC tools were calibrated at the U.S. Department of Energy (DOE) test pits in Grand Junction, Colorado on August 24, 2011.

11.0 Sample Preparation, Analyses, Security

EFRCP has not conducted widespread and definitive sampling on the Sage Plain project. Previous underground mining activity, which resulted in development drifting and production at the Calliham mine, will not be available for sampling until the mine is dewatered and the decline and drifts are rehabilitated. The estimation of resources in this report has relied upon documentation from earlier operators and the CPP 2011 drilling program. CPP employed a conventional combination of rotary drilling, geologic logging, and downhole electric and radiometric logging in its field program.

Because EFRCP has not performed bulk sampling to date in the mine workings, the results of historical preparation techniques and analyses for these properties have been relied upon as being reasonably accurate. These tasks were performed by personnel of Atlas and Umetco who were experienced in uranium exploration and mining, sampling, and analytical methods, and the summary data appear to be in conformity with technological standards at the time.

CPP collected samples from seven holes during its 2011 drilling, amounting to thirty one 5-foot intervals of the rotary drill cuttings. The analytical work was performed by ALS Minerals, Reno, Nevada. Although grades obtained from rotary drill cuttings assays are not reliable due to mixing in the annulus, a reliable V_2O_5 : U_3O_8 ratio usually can be obtained. Duplicates and standards also were submitted to be assayed with the sampled cuttings.

It is the author's opinion that the sample preparation, analytical procedures, and sample security for CPP drilling in 2011 were adequate to assure reliable results for analyses received. Historical information on analyses and downhole probing also appear to be reliable within the normally accepted conditions for historical uranium data based on the companies involved, extent of available data, comparison with 2011 CPP drill hole results, and familiarity of EFRCP staff with past operators and their personnel.

12.0 Data Verification

Other than offsetting some of the historic drill holes and use of gamma logs where available, no verification of the historical data has been conducted. No core is available at the present time from the earlier exploration or production work. EFRCP does currently possess downhole gamma logs from the previous operators of the Crain lease. This information was used to target two verification holes drilled on that lease in 2011 by CPP. Holes CR-11-001 and 002 found the sandstones and mineralized intervals of historic holes CL-79-17, CL-79-2, CL-79-16, and CL-79-25 to be accurately logged, calculated, and recorded on the historic map by Pioneer Uravan.

Similarly, CPP used the historic map data to target three holes each on the Calliham and Skidmore leases. One hole (CH-11-002) was also deliberately drilled to intersect the mine workings in the western part of the Calliham Mine. The mine roof was penetrated within a couple feet of the expected depth which gives credence to the accuracy of the historic map. On the Calliham lease, hole CH-11-004 intercepted 1.0 foot of 0.135% eU_3O_8 at the same depth that corresponds to the historic grade of 1.0 foot of 0.16% eU_3O_8 in hole SP-1043-78. Also on the Calliham property, hole CH-11-005 intercepted 1.0 foot of 0.744% eU₃O₈ at the same depth that corresponds to the historic grade of 1.5 feet of $0.81\% \text{ eU}_3\text{O}_8$ in hole SP-148 and 1.0 foot of 1.0% eU₃O₈ in hole C-32-72. On the Skidmore property, hole SM-11-001 intercepted 2.0 feet of 0.164% eU₃O₈ at the same depth that corresponds to the historic grade of 1.5 feet of 0.67% eU₃O₈ in hole SP-1495-81 and 1.3 feet of 0.29% eU₃O₈ in hole SP-732-91. Two other horizons in hole SM-11-001 correspond to the nearest adjacent holes as well. Also on the Skidmore lease, hole SM-11-002 intercepted 2 feet of 0.397% eU₃O₈ at the same depth that corresponds to the historic grade of 6 feet of 0.4% eU₃O₈ in hole SP-1003-78 and 5 feet of 0.39% eU₃O₈ in hole SP-1187-80.

Based on these results, it is believed that CPP did enough drilling to provide reasonable confidence in the historical drilling data prior to re-opening the mines and directly accessing the mineralization in the mine workings. In addition, EFRCP staff know many of the workers of the previous operators in the Sage Plain area, as well as the reputations of the operators themselves. This direct familiarity lends confidence to EFRCP regarding the results of the operators and information provided by such previous workers. With the acquisition of Denison Mines USA in 2012, EFRCP became owner of a significant amount of historic data not available when the 2011 TR was written. EFRCP geologists have completed a thorough review of that data. Some omissions and errors in the previously used maps were discovered and corrections have been used to update the Mineral Resource estimates in this report. A summary of the review of this data is in Section 14, Mineral Resources, of this updated report.

CPP collected samples from seven holes during its 2011 drilling, amounting to thirty one 5-foot intervals of the rotary drill cuttings. These samples lack the absolute nature of core, being only chips which are diluted by cuttings from other rock in the bore hole. The

samples, when analyzed, do provide information on the U₃O₈ and V₂O₅ content to estimate a ratio for the property economic evaluation. Four of the sample results from the Sage mine western area found the vanadium to uranium (V₂O₅:U₃O₈) ratios ranged from 8.25:1 to 12.72:1 with the average at 9.80:1. This is somewhat higher than the historic resource values used by the previous operators. That historic core data averages 8.6:1, which is the value used for the resource estimates in this report in order to remain conservative.

It is the author's opinion that the uranium and vanadium data from CPP drilling in 2011 and from historical information on analyses and downhole probing are adequate for the purposes of this technical report and for basic resource estimation using these data.

13.0 Mineral Processing and Metallurgical Testing

The Slick Rock and Dry Valley Districts have 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 Vanadium Corporation of America (VCA) mill at Monticello, Utah, the Atlas mill at Moab, Utah, and EFI's White Mesa Mill in Blanding, Utah. The historic milling of district ores suggests at this point that the Sage Plain Project deposits will present no unforeseen problems with either metallurgical testing or processing.

Testing of Calliham mine mineralized material should be performed after the mine is dewatered and rehabilitated to the point that representative bulk samples can be obtained from in-place rock.

14.0 Mineral Resource Estimates

Mineral resource estimates have been calculated by a modified polygonal method (polygons used are shown overall in Figure 8-1. Tables 14.1 shows the Measured, Indicated, and Inferred Mineral Resources for all properties controlled by EFRCP. For the well-mineralized parts of the Calliham and Skidmore leases, the drill hole spacing is usually 75-200 feet. On the Crain lease the drilling is usually 100-200 feet spacing in the mineralized areas. Elsewhere on all properties drilling was done on wide-spacing initially (500-1,000 feet). Where favorable criteria were found, the operators tightened the pattern or did offsets at 100-200 feet resulting in several clusters of closer-spaced holes scattered around the entire property. The 2011 drilling program on the Sage Plain Project properties partially consisted of offset holes on spacings of 30-60 feet from historic holes. There were a few exploration holes in areas where historic drill holes are several hundred feet apart.

Where hole spacing is closer than 100 feet, a perpendicular bisector method was used to create the polygons. Where hole spacing is greater than 100 feet, the holes used for mineral resource estimations are shown on the maps as circles of 50 feet radius (7,850 square feet). However, to remain conservative, a 50-foot influence distance centered on the hole has been used. Therefore, all polygons that exceed an area equal to a 50-foot radius circle have been reduced to that area for tonnage calculations in the Mineral Resource blocks. Even though mineralization in these deposits can be highly variable over short distances in the deposit, past mining experience has shown that there is enough continuity over stoping distances or even a few contiguous resource polygons that production matches resource estimates quite well.

Table 14.1 Measured, Indicated, and Inferred Mineral Resources for the Sage Plain project.

L J			I		
			Avg Grade		Avg Grade
Leases	Tons of Ore	U₃O ₈ Lbs	(U₃O ₈)	V ₂ O ₅ Lbs	(V_2O_5)
Calliham			0.16		1.32
Measured	179,300	595,600	0.17	4,915,000	1.37
Indicated	10,900	22,700	0.10	172,900	0.80
Inferred	8,700	22,000	0.13	165,900	0.95
Crain			0.14		1.15
Measured	60,900	176,800	0.15	1,434,700	1.18
Indicated	2,100	3,700	0.09	26,100	0.63
Inferred	1,300	3,000	0.11	22,400	0.85
Skidmore			0.18		1.52
Measured	203,800	768,000	0.19	6,364,200	1.56
Indicated	18,100	44,200	0.12	348,100	0.96
Inferred	1,800	11,700	0.33	95,300	2.67

Grand Total(Mea+Ind)	475,100	1,611,000	0.17	13,261,000	1.40
Grand Total(Inf))	11,800	36,700	0.16	283,600	1.20

At locations where drifting or stoping has removed portions of polygons, there have been appropriate reductions to the resources assigned those polygons. Next to mine workings, polygons based on holes drilled from the surface often overlap with polygons drawn on the underground longholes. Where this occurs, the surface hole polygon was trimmed and the longhole data used for the smaller polygon(s) adjacent to the mine. The distance of influence used for longhole intercepts never exceeds 40 feet from the hole.

In some areas, there are two or more mineralized horizons separated by more than two feet of waste. Where this occurs, there are two or more polygons drawn for the same hole. These may be of the same shape or different overlapping shapes, depending on the mineralization in the nearest neighboring holes used to define the polygons at each horizon.

The polygons that are adjacent to mine workings or are within a few hundred feet of the workings (so that they can be developed when the mines are reopened) and are clustered with other polygons are considered Measured Mineral Resources. 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.

Indicated Mineral Resource blocks are drawn where mineralization correlates well and similar geological conditions are believed to be continuous between drill holes that are over 100 feet apart. The Indicated Mineral Resource blocks are individual holes or groups of holes that are separated from mine workings by a few hundred feet more than the Measured Mineral Resource blocks. The grade and thickness for the indicated blocks are weighted averages of the particular drill holes' intercepts that define each block. The areas of Indicated Mineral Resources blocks are shown on Figure 8-1.

Inferred Mineral Resource blocks are partially drilling-confirmed, geologically favorable areas where other deposits could occur in the defined channels. Mineral trends often follow the directions of the sandstone channels. The Sage Plain Project has one area where the mineralization found in wide-spaced holes suggests Inferred Mineral Resources may exist. The Inferred Mineral Resources are detailed in Table 14.1 and the areas are shown on Figure 8-1.

Sandstone thickness, the gray color, and pyrite and carbon contents of sandstones, along with gray or green interbedded or underlying mudstone, indicate areas of sandstones that are favorable for containing uranium-vanadium mineralization. These conditions allow geological definition of Inferred Mineral Resources, in conjunction with some drilling data, and Exploration Targets where no drilling data are available or are too far away to be considered relevant to defining Inferred Resources.

This report used the same database as the 2011 technical report (Peters, 2011). Some modifications were made and some errors of omission were corrected based on the Atlas closing maps and reports from 1982. In the 2011 TR, resource estimates for the Sage Plain project were calculated by using a grade cutoff $0.07\%~U_3O_8$. In this report, 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". The individual polygon cut-off of $0.10\%~U_3O_8$ (with a few exceptions) gives an average out-the-portal diluted grade greater than the breakeven cutoff estimate shown in the following table:

			Calliham Mine cutoff grade analyzer						
	ι	J price	U grade			V price	V grade=U*	8.6	
	\$	63.00	0.160			\$ 6.75	1.377		
				lbs/ton U		lbs/ton V			
	per	ton cost		3.041		20.650	combine	d recovera	ble value
mine	\$	125.00	value	\$ 191.61		\$ 139.39		\$ 331.00	
mill	\$	175.00							
haul	\$	11.00							
royalty,permit,G&A	\$	20.00							
	\$	331.00					income	\$ -	
Breakeven out-the-p	Breakeven out-the-portal average grade of U 0.160 % U3O8								

The minimum mining thickness for this type of sandstone uranium deposit is considered to be 3 feet. Because there is often lower-grade material adjacent to the target mineralized zones, for ore intercept of less than 3 feet, a grade 0.05% of "waste" was added in the grade and thickness recalculation to adjust the mining thickness to minimum 3 feet. For ore intercepts of more than 3 feet, no dilution was added. Under a strict ore grade control protocol, a prudent miner can drill and blast any ore greater than 3 feet without dilution based on the past mining experience in the Uravan Mineral Belt. A resuing or split-shooting mining approach will be followed to minimize dilution when extracting thin zones. The eventual stope height will be 7 feet or greater to allow the mine to advance. At the time of mining, the waste above or below the mineralized horizon, or waste separating two mineralized streaks, is blasted separately. This waste layer usually must be more than 2 feet thick to be considered worth shooting separately. Depending on the waste-ore configuration in the face, the mineralized zone may be blasted before the waste or vice-versa. For the Calliham mine, 7.0 feet is the assumed minimum stope height.

This report uses a minimum mining thickness of 3 feet and a cutoff grade of 0.10% U₃O₈ after dilution for the resource estimate, resulting in the average out-the-portal grade being greater than the breakeven out-the-portal grade. A few holes of high thickness but low grade (>0.07%) adjacent to some high grade drill holes were also included in the resource estimate. These low grade resources are considered to be recoverable during actual mining. Many low grade drill holes of less than 0.10% U₃O₈ after dilution, which were adopted in the resource estimate in the 2011 TR, are no longer included in the Mineral

Resource estimates in this report.

Vanadium assays are available for some of the drill holes. In preparing this technical report, more than 200 vanadium assay data were collected from historic maps and reports. An average V_2O_5 : U_3O_8 ratio of 8.60:1 is calculated for the Sage Plain property. This ratio is used for resource estimation of vanadium where no assay data are available. This ratio cannot be guaranteed and must be used only as a historical estimator for vanadium mineralization potential.

A cutoff of $0.10\%~U_3O_8$, after dilution has been applied, and is used in all resource estimates for the Sage Plain Project properties that are based on historic or current drilling results. This cutoff is somewhat subjective and was chosen based on experience of EFI 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 mining to their locations and 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. A good example can be seen on Figure 8-1.
- 2) Entries can and will intercept some lower grade material that would not necessarily be economically mineable as standalone resources.
- 3) Vanadium grade, in combination with uranium grade, can be high enough to warrant mining a resource area even if the uranium contents in all 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) 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.
- 6) Minimum mining thickness is 3 feet using the split-shooting or resuing mining methods.

Existing paper maps prepared by the previous operators were electronically scanned to create digital data that could be evaluated. This was used to design the CPP drill program for 2011. Field work by CPP staff found several of the old drill holes were tagged and labeled. These locations were recorded with hand-held GPS devices and used to rectify the scanned historic maps to real coordinates. Many other historic hole locations are visible, even though the tags are now missing, on the Crain and Skidmore leases. Therefore, EFRCP believes the accuracy of the historic maps is adequate for the polygon

method of Mineral Resource estimation described above. It would be difficult to accurately re-survey most of the old holes on the Calliham lease because most are on cultivated or pasture land and were reclaimed more than 20 years ago.

Since the 2011 TR (Peters, 2011) was written, EFI acquired Denison Mines USA. Denison possessed almost all of the original logs from the historic drill holes and numerous maps and mine reports. A careful evaluation of the historic data resulted in some corrections to grade and/or thickness in a few holes. Original underground longhole probe data were reviewed which confirmed the assumptions used in the 2011 TR.

The mineral resource estimates that follow are based on CPP's 2011 drilling, historic drill records, and maps of the companies mentioned above as well as general knowledge of the area. EFRCP geologists are acquainted with many of the project geologists, mining engineers, and miners that worked these properties during the past and with the reputations of those companies doing the work. Based on the different cutoff, different dilution method, and modifications resulting from the review of more historic data, the resources for the current property have been revised beyond a simple subtraction for the Sage Mine related property that was sold. The following resource estimates are believed to be reasonable for the Sage Plain Project properties. The combined Measured and Indicated Mineral Resources for the Sage Plain Project above a diluted cutoff of 0.10% U₃O₈ are 475,100 tons (diluted) at 0.17% U₃O₈ and 1.40% V₂O₅ containing 1,611,000 lbs U₃O₈ and 13,261,000 lbs V₂O₅. The Mineral Resources of each part of the Sage Plain property are detailed in table14-1.

All estimates of Inferred Mineral Resources must be considered speculative and require confirmation by drilling or mining. There is no guarantee that Inferred Mineral Resources will ever be realized as or advanced to Indicated or Measured Resources or Proven or Probable Reserves.

14.1 Exploration Targets

Some areas within the Sage Plain Project property remain unexplored at this time. The mineralized trends follow the direction of the sandstone channel meander belts from southwest to northeast. There are sub-trends that align northwest-southeast, as can be seen in the Deremo Mine. A few scattered surface holes within the project boundary encountered favorable sandstone and require offset drilling. Much of the surface drilling only penetrated the Top Rim sandstone of the Salt Wash, so there may be unknown lenticular Middle Rim sandstones which could be mineralized. The deeper Moss Back Member of the Chinle Formation and even deeper Cutler Formation sandstones have not been tested to EFRCP's knowledge anywhere on the Project property. Some specific Exploration Targets are described below.

• <u>Skidmore lease</u> There are identified areas where undiscovered mineralized channels might exist. One large exploration target area has been identified from scattered drill holes and by geological projection of the Calliham Mine to the west into the E ½ section 29, T32S, R26E, in the Skidmore lease. EFRCP will attempt

- to find any historic drill information that might be available on this parcel. EFRCP anticipates that this mineralized channel does continue west-southwest and will be drilled in the future to confirm its existence.
- <u>ML-51145</u> (Section 32, T32S, R26E) An area for another exploration target is a geologically projected channel trend west into SITLA ML-51145 from the Sage Mine channel, This target will be drilled in the future by EFRCP to determine if definable resources are present.
- ML-51146 and 51963 (Section 16, T32S, R26E) This area, by its proximity to known resources, presents a reasonable exploration target. EFRCP will make plans to drill this lease in the future to determine if it is within the favorable belt of channels.

In addition to these geological and proximity exploration targets, there are several drill intercepts in the Calliham, Crain, and Skidmore lease areas that are of sufficient grade and thickness to qualify as Measured Mineral Resources, but are isolated from the current and planned mining area. Therefore, these locations are not shown as Measured on Figure 8-1 and are not included in the Measured Resources listed in Table 14.1. However, these locations serve as excellent guides for further exploration in order to determine if these known resources can be expanded through offset drilling of the existing drill holes or by drilling and identification of resources in between those locations and the planned mining such that these areas become potentially economically mineable and mining then can proceed in the direction of these outlying locations.

All Exploration Targets must be considered speculative and require confirmation by drilling or mining. There is no guarantee that Exploration Targets will ever be realized as any category of Mineral Resources or advanced to Indicated or Measured Resources or any category of reserves.

15.0 Mineral Reserves Estimates

EFRCP 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 Calliham mine. 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 items that are usually only applicable to Advanced Property Technical Reports.

16.0 Mining Method

The mining of all resources in the Sage Plain Project will be by conventional underground 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 slightly 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. 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 arches and timber lagging. The Salt Wash 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 can 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. They will muck it out as cleanly as possible, then shoot the remaining rock and muck it cleanly. In resource estimates, waste is added to the mineralized material for dilution because of this method for any mineralized zone less than 3 feet thick. The amount of waste rock shot before or after the mineralized material results in typical stope heights of 7 feet, which is the minimum height needed to advance the stope.

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.

17.0 Recovery Methods

Historically, the uranium-vanadium ores from the Sage Plain District and others districts of the Uravan Mineral Belt have been successfully processed in conventional mills in the region. One mill is currently operational in the region, EFI's White Mesa Mill at Blanding, Utah, 54 miles away. The milling operation involves grinding the ore into a fine slurry and then leaching it with sulfuric acid to separate the metals from the remaining rock. Uranium and vanadium are then recovered from solution in separate solvent extraction processes. The uranium is precipitated as a U_3O_8 concentrate, "yellow cake", which is dried and sealed in 55-gallon steel drums for transport off-site. The vanadium concentrate is precipitated then fused into a V_2O_5 product called "black flake" which is also transported in 55-gallon steel drums.

18.0 Project Infrastructure

The Calliham mine was a profitable producer in the 1970s and early 1980s, considering the price of uranium verses the cost to mine at that time. The mine and others in the district were serviced by sufficient electricity supply (most of this is still in-place or can be easily re-installed), and an adequate road system for ore shipment. The Calliham mine has been completely reclaimed, so its surface facilities will be reconstructed. The portal will be re-established with steel sets and timber lagging. The decline will be rehabilitated and vent holes re-opened, if possible, or new vent holes will be constructed with a raise-bore machine. The main new infrastructure at the mine will be a water treatment facility and other surface facilities at the portal such as office, shop, dry, and ore and waste stockpiles.

EFRCP completed an exploration drilling program in 2011 which was used to gather preliminary information on groundwater in and near the mines. A draft design of the water treatment system was prepared in August 2012. Sentry wells were drilled at the proposed water treatment system location and eight sampling events were conducted; the wells were dry during each event. Based on information gathered about the potential inflows to the mine, the water treatment facilities may be used temporarily to dewater the mines; if water inflow is small, they may not be needed if there is no water to discharge during operations.

EFRCP has anticipated needs for several buildings at the Calliham mine. The production rate for the mine is estimated to be 200 to 250 tons per day.

The Calliham Mine will require:

- Office Trailer (50'x10')
- Dry Facilities (locker rooms and showers)- 2 @ (60'x10') each; for Men / Women, Staff, etc.
- Shop (70'x 40'), note: Capable of handling 3 pieces of equipment, ancillary machinery, room for fabrications.
- Warehouse (50'x 30').
- Compressor Building (30'x 20').
- Electrical Building (10'x10'); there will also be the need for electrical supplies storage, room for small repairs here (large repairs in the shop); substation(s).
- Scale and Guard Shack (20'x 60' area).
- Oil Storage Shed (20'x 8').
- Powder and Cap Magazines (10'x10' and 8'x 8', respectively).
- Fuel Storage (2,500 gallon capacity) with spill prevention vaults- 2@ 20'x 15'.

EFRCP presently has multiple phases of work planned. An initial phase of rehabilitation work on the Calliham mine will consist of digging out the backfilled portal, installing new ground support for the first few tens of feet (possibly longer due to the shallow cover in the portal area), and constructing security gates. The mine will then be evaluated for

the amount of rehabilitation needed in the decline. Required sentry wells have been installed. For the second phase, once rehabilitation work is scheduled, the mine will be dewatered. This will require the installation of the water treatment facility. Electrical service will be reinstated and buildings will be constructed during this second phase.

Expenditures related to reconstruction of the waste rock dump and stockpile areas at the Calliham mine will cost about \$50,000 and could begin as soon as the permit is issued from DOGM.

Once the mine is dewatered, the sumps will be rehabilitated. The next rehabilitation work underground will be to restore access to two of the existing ventilation shafts, line the shafts, and install fans and emergency escape hoists. It is estimated this phase will cost about \$2,660,000 at the Calliham. The work will include communications and other systems needed for operation and safety, along with safety materials. Rehabilitation of the existing drifts to access most of the remaining Mineral Resources in the Calliham Mine may cost as much as \$1,580,000.

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 \$160,000.

The total capital and labor cost for the entire rehabilitation project are estimated to be approximately \$5,800,000 at the Calliham prior to commencement of new development and anticipated new production from any of the Measured Mineral Resources.

19.0 Market Studies and Contracts

Markets

Uranium

The uranium market is followed closely by two consulting firms: UxC and TradeTech. Each of these reports spot and long term prices for U_3O_8 on a weekly basis. Additionally, many securities and investment banking firms provide ongoing analysis and outlook for uranium supply, demand, and prices in the future.

Based upon the ongoing review of these several sources of information by EFI staff, the world continues to be over-supplied with uranium, mainly from large quantities of secondary supplies (including enricher "underfeeding"), insufficient production cut-backs in primary production (so far), premature reactor shutdowns in the U.S., delays in new reactor construction (namely in China), and decreased demand due to Japanese reactors remaining offline. Based on current perceptions, the market is likely to remain oversupplied for the next several years, unless significant – and currently unexpected – events occur to either increase demand or curtail supply. After this period of oversupply, demand can only be covered by a significant increase in primary production. The need for higher prices to generate this additional production leads to an expectation for higher prices for U_3O_8 , surpassing the current recently quoted prices of \$38.25 for the spot market, and \$49.50 for the long term contract market.

Because of the very high value of the commodity, the uranium market is a totally global market without any freight cost barriers to product movement. Uranium produced anywhere in the world can readily find its way to a market for nuclear fuel.

Vanadium

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 mid-point average has been holding around \$5.50 per pound for the last two years. The total annual V_2O_5 market is about 150 million lbs.

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.

The current spot price is less than the long term contract price (Tables 19.1 and 19.2). However, during periods when the spot price rises, such as the peaks in 2007 and 2011 (Figure 19-1), 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 (UxC, 2014).



Figure 19-1. Uranium Price History (from UxC)

Table 19-1. Long Term Uranium Price

Table 19-1: Long Term Uranium Price*						
	2010	2011	2012	2013	2014	
Jan	\$ 60.00	\$ 70.00	\$ 61.00	\$ 57.00	\$ 50.00	
Feb	\$ 60.00	\$ 70.00	\$ 60.00	\$ 57.00	\$ 50.00	
Mar	\$ 60.00	\$ 68.00	\$ 60.00	\$ 57.00	\$ 47.00	
Apr	\$ 60.00	\$ 68.00	\$ 61.00	\$ 57.00	\$ 45.00	
May	\$ 60.00	\$ 68.00	\$ 61.00	\$ 57.00	\$ 45.00	
Jun	\$ 60.00	\$ 68.00	\$ 61.00	\$ 57.00	\$ 45.00	
Jul	\$ 60.00	\$ 68.00	\$ 61.00	\$ 54.00	\$ 44.00	
Aug	\$ 60.00	\$ 65.00	\$ 60.00	\$ 53.00	\$ 44.00	
Sep	\$ 62.00	\$ 63.00	\$ 61.00	\$ 51.00	\$ 45.00	
Oct	\$ 62.00	\$ 63.00	\$ 59.00	\$ 50.00	\$ 45.00	
Nov	\$ 65.00	\$ 62.00	\$ 59.00	\$ 50.00	\$ 49.00	
Dec	\$ 67.00	\$ 61.00	\$ 57.00	\$ 50.00	\$ 49.00	
Average	\$ 61.33	\$ 66.17	\$ 60.08	\$ 54.17	\$ 46.50	

^{*}Average long-term price 2010 through 2014 - \$57.65 per pound As quoted by Ux Consultants, 2014

Table 19-2. Short Term Uranium Price

Table 19-2: Spot Uranium Price*						
	2010	2011	2012	2013	2014	
Jan	\$ 42.25	\$ 72.25	\$ 52.25	\$ 43.75	\$ 35.50	
Feb	\$ 40.50	\$ 69.50	\$ 52.00	\$ 42.00	\$ 35.50	
Mar	\$ 41.75	\$ 58.50	\$ 51.10	\$ 42.25	\$ 34.00	
Apr	\$ 41.75	\$ 55.00	\$ 51.50	\$ 40.50	\$ 30.75	
May	\$ 40.75	\$ 56.50	\$ 51.25	\$ 40.40	\$ 28.25	
Jun	\$ 41.75	\$ 51.50	\$ 50.75	\$ 39.55	\$ 28.25	
Jul	\$ 45.25	\$ 52.00	\$ 49.50	\$ 35.00	\$ 28.50	
Aug	\$ 45.50	\$ 49.25	\$ 48.00	\$ 34.00	\$ 32.00	
Sep	\$ 46.75	\$ 52.00	\$ 46.50	\$ 35.00	\$ 35.50	
Oct	\$ 52.00	\$ 51.75	\$ 41.00	\$ 34.25	\$ 36.50	
Nov	\$ 60.25	\$ 51.50	\$ 42.50	\$ 35.90	\$ 39.00	
Dec	\$ 62.00	\$ 52.00	\$ 43.25	\$ 34.50	\$ 35.50	
Average	\$ 46.71	\$ 55.98	\$ 48.30	\$ 35.22	\$ 33.27	

^{*}Average spot price 2010 through 2014 - \$43.90 per pound As quoted by Ux Consultants, 2014

Thus, in a 5-year look-back from 2010 to the present, average uranium prices have been \$43.90 per pound for spot delivery to \$57.65 per pound for long-term delivery. More recently, in February 2015, the spot price was \$39.25 and the long-term price was \$49.00. Near- to mid-term uncertainty has created recent weakness in uranium markets. The shutdown of reactors in Japan, building inventories, material oversupply, and a general lack of demand has been largely to blame for this near to mid-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 potentially as many as four restarting in 2015 As a result, though predicting spot- and long-term prices is speculative, many analysts expect slowly rising spot- and long-term prices in the coming years (Ux Consulting, Q4 2014).

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 ranging from \$47/lb in 2017 to \$71/lb in 2025 per the Annual Midpoint of the High Price Scenario (Ux Consulting, Q4 2014). This averages \$63.22/lb during the potential life of mining at the Sage Plain Project deposits.

As a result, the author recommends utilizing a uranium price of \$63/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

Prices for vanadium are historically quite volatile, but have been holding in the \$5.00-to-\$7.00 per pound range for most of the last 3 to 4 years; although dropping in the most recent months. While prices have been at the low end of this range recently, a correction towards the high range is being forecast by vanadium industry analysts. As a result, the author recommends utilizing a vanadium price of \$6.75/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 Sage Plain Project mine owned by EFRCP will represent about 2% of the total vanadium demand and should have little or no effect on the market price.

20.0 Environmental Studies, Permitting and Social or Community Impact

Permitting History

The Sage and Calliham Mines were developed in the 1970s and a permit application for them was submitted by Atlas Minerals to the Utah Division of Oil, Gas and Mining (DOGM) in June 1977 when the Utah Mined Land Reclamation Program was fully implemented. The Sage and Calliham mines are two separate mines with the entrances to their respective declines being about 1.5 miles apart. The two mines were ultimately permitted under Permit M/037/023 in January 1984. The Calliham permit included two water evaporation ponds covering about 8.8 acres that were added in 1981 in response to new federal and state water quality regulations. The two mines were placed on standby by Atlas in January 1982 in response to depressed uranium prices. Atlas reported a combined production from the two mines of 41,541 tons of ore and 48,142 tons of waste during the last year of operation in 1981, with the majority of this production probably coming from the larger Calliham Mine.

In the fall of 1988, Atlas transferred the Sage Mine to Butt Mining Company (operated by Jim C. Butt) under a new Small Mine Permit (S/037/058) and the Calliham Mine to Umetco Minerals under the existing Large Mine Permit (M/037/023). Umetco mined the Calliham briefly in 1990-1991. They completed reclamation of the mine to the satisfaction of DOGM in 2000 and the bond for M/037/023 was released.

Current Mine Status

The Calliham Mine has been completely reclaimed, the reclamation bond released, and all permits terminated. The approximately 20 to 30 acres of reclaimed area at the main portal is bisected by the upper reach of Wildhorse Canyon. During reclamation, Umetco Minerals removed the low-grade ore stockpiles and pads from the southwest side of the drainage and incorporated these materials into the waste dump northeast of the drainage. The waste dump then was regraded and covered with topsoil borrowed from the southwest end of the site. The southwest portion of the site also was used as a topsoil borrow area for reclamation of other nearby Umetco Minerals' mines. The southwest portion of the site, which originally included the ore stockpile pads and the aforementioned evaporation ponds was completely recontoured and seeded after borrow operations were completed.

The Calliham Mine had a total of five ventilation shafts. The 4-foot diameter Calliham No. 1 shaft was cased and was reclaimed by cutting off the casing 6 feet below grade and placing a ½-inch steel plate over the casing plus some concrete and backfilling with soil. The remaining four vent shafts were uncased and reportedly backfilled with waste rock to 10 feet below grade. A 5-foot concrete plug and 5 feet of soil backfill completed the reclamation of these shafts. At the land owners' requests, concrete pads and power lines were left unreclaimed at some of the vent shafts.

Mine Permitting Requirements

Prior to starting major permitting for the site, it is recommended that an exploration permit be obtained from DOGM to reopen the Calliham Decline and the Calliham No. 1 Vent Shaft to determine whether the decline is in good enough shape to allow for rehabilitation. Assuming that the decline is in reasonable shape, a summary of the three major state permits needed to reopen the mine follows. All three state permits likely would trigger a public comment period and associated public meetings. This area has seen extensive uranium mining over the years and benefited from the associated economic advantages. Minor permits for water rights, storm water, county special use, etc. also may be required. The San Juan County Administrator stated the only permits they need to issue are building permits to reopen the Calliham Mine. These permits typically take 7 to 10 days to approve.

<u>DOGM Large Mine Permit:</u> This permit would include operation and reclamation plans, as well as comprehensive descriptions of environmental and health and safety issues. A preliminary draft of the Large Mine Notice of Intent (NOI) was prepared in 2012 but not finalized or submitted.

Contract surveyors established control points and aerial photos were taken and 2 foot contour interval contour maps prepared. A preliminary facility layout map was developed for the mine portal area.

Atlas reported water inflow of 10 gpm in 1981 with elevated concentrations of uranium, radium, and arsenic. The operating plan would include mine dewatering and holding ponds and a water treatment plant.

A large number of ventilation shafts would be needed to operate this mine. Some of the older shafts could be reopened, especially the Calliham No. 1 Shaft, which was not backfilled. New, large diameter vent shafts would also be needed along with associated surface facilities (i.e., emergency escapeways, power drops, air compressor stations, and water supply stations).

Topsoil sampling was completed on site and a preliminary soil map was prepared. Soil samples were sent to Colorado State University's soil lab for analysis and recommendations for soil amendments. During communication with DOGM representatives, they requested that a radiation survey be conducted which has not yet been done.

The DOGM large mine permit, once approved, likely would require bonding in the amount of \$150,000 to \$250,000.

<u>Utah Division of Water Quality (DWQ) Mine Water Discharge Permit:</u> The Calliham Mine would need to be dewatered during rehabilitation and then kept dewatered during mine operations. The DWQ requires that groundwater (zero) discharge permits be obtained for all ponds and surface water discharge permits be obtained for treating and discharging water from the site. Use of evaporation ponds versus water treatment was evaluated for this project and water treatment and discharge was selected as the

preferable method for managing excess water. Water treatment in Utah typically consists of removing uranium and radium, but arsenic and selenium also could require treatment. Treatment for uranium and radium is not difficult, but trace metals pose greater technical challenges. Treated water also could be used for crop irrigation and livestock watering if approved by the state.

A water treatment facility design report was prepared in 2012. Groundwater monitoring wells were installed at that time around the proposed water treatment site and eight baseline sampling events were conducted. The wells were always dry. Two groundwater samples were collected from the mine and sent to a lab for analysis. The first was collected in the northeast end of the mine via an air compressor pipe. One of the 2011 exploration drill holes purposely intersected the west end of the mine to allow for collecting another sample of mine water. All information collected in the exploration drilling would be pertinent to the characterization of the aquifer(s) overlying the mine. A field study of area wells was initiated but not completed. This information would be used in the discharge permit application.

<u>Utah Air Quality Division (AQD) Minor Permit:</u> Given the large number of vent shafts and anticipated life-of-mine production greater than 100,000 tons of ore, this project would need an air quality permit for fugitive dust and radon emissions from ventilation shafts and disturbed surface areas. As long as exhaust shafts are placed away from residential areas, the technical issues should be minimal. It may be necessary to install an on-site meteorological station to record wind directions and speed in the vicinity of proposed exhaust shafts.

BLM Plan of Operations and Environmental Assessment: Initial communication with the BLM indicated that the portion of the existing decline under BLM managed land would not require a Plan of Operations or a NEPA analysis. Given that no surface disturbance of BLM land is involved, the local BLM office believed they could issue a Categorical Exemption (Cat-Ex) for the underground decline on BLM land. A Cat-Ex would exempt the project from having to file a Plan of Operations with the BLM and prepare an Environmental Assessment. However, there is a possibility that the BLM could insist on greater involvement in the project because of political pressure from their state office and/or environmental groups. If this were to happen, it would add considerable cost and time to the permitting effort. However, the project still would be permitted under an Environmental Assessment (EA) rather than a larger and more comprehensive Environmental Impact Statement (EIS).

Permitting Informational Needs

The following information would need to be collected by exploration and operations personnel prior to preparing the permit applications.

Groundwater Information: The amount and quality of the water flowing into the mine needs to be accurately characterized by discussions with the old miners familiar with the mine, measurements and samples from exploration drill holes, and measurements and samples from the decline and cased vent shaft.

Surface Water Information: The frequency and quantity of surface water flow through Wildhorse Canyon needs to be characterized by discussions with adjacent land owners familiar with the area.

Ventilation: Mine ventilation needs to be evaluated and vent shafts (existing and future) located based on known ore zones.

Mine Design: Surface facility layout needs to be confirmed, then the portal and all vent shafts need to be surveyed, including power lines, roads, water evaporation/treatment facilities, air compressor stations, and power drops.

Permitting Approach

Subcontractors would be hired as needed to support the permitting effort. EFI personnel have considerable experience working with county, state, and federal agencies to permit mines in Colorado, Arizona and Utah. Therefore, EFI can prepare a large percentage of the permit applications in-house, but may need specialists to do any remaining ecological and cultural resource surveys and to file water rights applications. Socioeconomic impacts also would be studied by a specialized contractor.

Permit applications would be reviewed and finalized by EFI's environmental staff with consultants' reports included as attachments. Once the applications have been submitted, on-site meetings with state and BLM personnel may follow to orient the technical reviewers for these agencies.

Permitting Timeline

While much work has already been done to permit the Calliham Mine, approximately a year of additional permitting efforts may be necessary in order to receive final approvals. These efforts include:

- Finalize the NOI, file it, then respond to agency comments
- Finalize the water treatment facility design, finalize and file discharge permit, then respond to agency comments
- Contract with a consultant to prepare and file the air permit application then respond to agency comments
- Contract with a consultant to prepare and file the NESHAPs application to construct then respond to agency comments
- Apply for a water right for beneficial use (for drilling and dust suppression)

Estimated Permitting Costs

Much of the remaining permitting activities would be completed by EFI personnel in order to reduce cost. External costs for the activities listed above are estimated to be \$60,000.

21.0 Capital and Operating Costs

Although EFRCP is advancing this project toward mining, the project is still in the early stages of mine design. A conceptual model exists based on historic mining methods in the region, on mines recently in production by EFRCP (La Sal area Pandora and Beaver mines), and on other projects being developed by EFRCP (Whirlwind mine and Energy Queen mine). The specific plans (equipment, ventilation, man-power, production rates, development scheduling, etc.) have not been developed yet for the Calliham mine. Therefore, the capital and operating costs cannot be discussed in this report in any meaningful fashion. Permitting cost estimates are listed in Section 20 and rehabilitation costs are discussed in Section 18 of this report.

22.0 Economic Analysis

EFRCP is only in the early stage of economic evaluation of the project. Once the mining plan is finalized and cost estimates are more firm, the economics of the project will be analyzed. This will include milling the product at the White Mesa Mill for which EFRCP has very reliable cost information. 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. Sensitivity analyses will follow.

23.0 Adjacent Properties

There are parcels to the north, east, and south of the Sage Plain Project properties that are reported to contain large uranium-vanadium deposits. The surface and mineral rights of the private land are not all leased at this time, but some may still be bound by option agreements of another company with the owners. The nearby BLM land is also mostly claimed by other parties. The private land with private minerals, the federal minerals under private land, and the federal land with federal minerals are identified on Figure 4-5. Based on the resource estimates taken from historic summaries by Umetco Minerals Corporation (Hollingsworth, 1991), knowledge of other prior work in the area, including that by CPP on the Sage mine property, many of these properties are known to have uranium-vanadium deposits or enough mineralization to make them highly prospective exploration targets. A summary of these properties follows:

Sage Mine Property: The Sage mine property consists of approximately 1,765 acres of BLM land covered by the unpatented claims in sections 34 and 35, T32S, R26E, SLPM, San Juan County, Utah and sections 25 and 26, T43N, R20W, NMPM and sections 19, 29, 30, 31, and 32 T43N, R19W, NMPM, San Miguel County, Colorado. EFRCP was the former owner of this property, but sold it to Pinon Ridge Mining in August 2014. Atlas produced from the Sage Mine on these claims in the 1970s through 1981. Butt Mining reportedly mined 3,000 tons of ore from the Sage Mine in 1990 when vanadium prices were relatively high, but the mine has otherwise remained inactive up to the current time. The Sage Mine's historic production, prior to Butt's operation, is not known.

Silver Bell Mine Property: The mineral rights of the N ½, N ½ S ½, SE ¼ SE ¼ sec. 21, S ½, W ½ NW ¼ sec. 22, and S ½ SW ¼ sec. 15, T32S, R26E are held by members of the Knuckles family. Most of this is private land, but the SE ¼ SW ¼ sec. 15 is BLM land on which they own unpatented mining claims. Likewise, they own unpatented claims in the fractional sections 23 and 26, T32S, R26E, along the Colorado state line. This property covers the Silver Bell Mine workings and the reclaimed shaft that accessed it. This mine was closed due to depressed uranium and vanadium prices in the 1980s. Umetco Minerals operated it. At the time that the Calliham Mine closed and was reclaimed, Umetco was driving a drift toward the Silver Bell from the Skidmore lease with plans to connect the two in order to have access for rubber-tired equipment through the Calliham Mine decline. The Silver Bell property is known to hold significant remaining resources. The Silver Bell land borders the Skidmore and Crain leases of the EFRCP project land on the north. It is anticipated that the Silver Bell Mine is flooded similar to the Calliham Mine.

Wilson Mine Property: The mineral rights of the S ½ SE ¼ sec. 15, NE ¼, E ½ NW ¼, sec. 22 is owned by Don Wilson. This property covers the Wilson Mine, which is connected to the Silver Bell and was accessed through a now-reclaimed shaft. It also is known to have some remaining resources. The Wilson parcel is separated from the EFRCP Crain lease by one-half mile width of the Silver Bell property. It is anticipated that the Wilson Mine is flooded similar to the Calliham Mine.

Federal Mineral-BLM and DOE: The land to the east in Colorado which lies north of the Sage et al. claims is owned by the U.S. government. Most of this for three miles to the east on the north side of Summit Canyon is controlled by the DOE. The C-SR-11A lease tract covers parts of sections 23, 24, 25, and 26, T43N, R20W, and the W½ section 16, T43N, R19W, NMPM. It is held by Golden Eagle Uranium LLC. Contiguous to that to the northeast is DOE tract C-SR-11, which is leased by Cotter Corporation. Other federal land east and north of the Sage et al. claims along Summit and Bishop Canyons are covered by unpatented claims of various ownership. South of the Sage claims is a parcel of BLM land with federal minerals in the NW ¼, N½ SW ¼, section 3, T33S, R26E.

Other acreage: The other land in sections 33, 34, and 35, T32S, R26E, and in sections 3, 4, 5, and 6, T33S, R26E, along the south side of the EFRCP property is privately owned surface and minerals of various ownership. Some of this is J.H. Ranch Inc. land. The same is true for the private land surrounding the SITLA lease, ML-49301, which EFCRP sold to WUC.

There is one small exception: W ½ SW ¼ section 9, T33S, R26E is BLM surface, but without locatable minerals. The BLM mineral map shows this parcel as federal ownership of only oil and gas rights. It is assumed that these 80 acres were homesteaded, then the surface rights given back to the federal government. If that is true, then the mineral ownership other than oil and gas remains in private hands and will need to be researched to determine true ownership for uranium rights.

All land south of the Sage claims in Colorado is also private of varying ownership, as is the land east of ML-49301.

Land west and north of the Skidmore lease in section 20 and 29, T32S, R26E is private. Farther north, the land surrounding EFRCP's SITLA leases, ML-51145 and ML-51953 is also private.

24.0 Other Relevant Data and Information

No Social or Community Impact studies have been performed yet, but are planned as part of permitting and additional property analyses. It is expected that reopening of the Calliham mine will have positive financial impacts on the nearby small communities of Dove Creek, Egnar, and Ucolo as well as the larger town of Monticello due to the need for skilled and unskilled labor and supplies for both operations. The surrounding areas of southeastern Utah and southwestern Colorado have been relatively depressed economically since the decline of uranium mining and milling in the 1980s. Additional exploration and production activity in the Sage Plain Project and other planned mines and exploration projects in the region will bring much needed employment and commerce to the area.

25.0 Interpretations and Conclusions

Peters Geosciences has reviewed the EFRCP resource estimates and supporting documentation and is of the opinion that classification of the mineralized material as Measured, Indicated or Inferred Mineral Resources meets the definitions stated by NI 43-101, and also 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).

The CPP 17-hole drilling campaign in late 2011 was successful in meeting the objectives of verifying resources and adding to the Measured, Indicated, and Inferred Mineral Resources, with 10 holes containing mineralization greater than 1.0 ft of 0.10% U_3O_8 . The Measured Mineral Resources (above a diluted cutoff of 0.10% U_3O_8 with a few exceptions) are estimated to be approximately 444,000 tons, diluted in-situ, containing 1,540,400 lbs U_3O_8 and 12,703,900 lbs V_2O_5 . Indicated Mineral Resources are calculated to be approximately 31,100 tons holding 70,600 lbs U_3O_8 and 547,100 lbs V_2O_5 . A minimum mining thickness of 3.0 feet has been employed in this estimate, and dilution has assumed material at a grade of 0.05% U_3O_8 . All of this material is within 2,000 feet of existing underground workings. Inferred Mineral Resources based on geological analysis and available drill holes are estimated to be about 36,800 tons at a grade of 0.16% U_3O_8 (36,764 lbs) and 1.20% V_2O_5 (283,600 lbs).

During the earlier periods of exploration, not all drill holes were assayed for vanadium. Therefore, it must be noted that the stated vanadium content represents the district-wide production average based on a 8.6 multiplier of associated uranium grade. This ratio derives largely from historic drill records and from the mining that occurred in the area mines prior to the Calliham Mine closure in 1991. Vanadium:uranium ratios derived from samples collected during the 2011 CPP drilling program have confirmed this multiplier as a conservative value for use in resource estimation.

There is potential to expand the estimated resources with additional surface drilling and underground development and longhole drilling. EFRCP is planning on utilizing these techniques in the coming years to better define uranium-bearing material suited for extraction. No documented economic analysis has been performed to date which supports classification of any of the Measured, Indicated, or Inferred Mineral Resources as reserves.

26.0 Recommendations

The Author recommends that EFRCP proceeds with the following efforts as the Sage Plain Project re-opens the Calliham mine, begins rehabilitation and development activity, and plans future production.

Permitting

- 1) Complete full hydrogeological investigations for surface and ground water characterization. Revise 2012 report on mine dewatering and water treatment options should any revisions be needed with new and expanded characterization data.
- 2) Perform radiological, biological, and archeological surveys as required for federal and state permitting.
- 3) Obtain necessary state and county permits to allow facilities to be built and mine re-opening to proceed.

Mine Rehabilitation and Planning

- Update plans for ventilation and surface facilities based on revised mineral resources and any resulting changes to the location and sequencing of future mining.
- 2) Perform a Preliminary Economic Assessment (PEA) for the Calliham mine to determine which known resources could be considered reserves, once the inclines are rehabilitated and mines dewatered, including determining current mining costs, production amounts, and so on.

Acquisitions

Investigate cost and timing of acquisition or leasing of the mineral rights for the Silver Bell and Wilson mines and surrounding properties, including such surface rights as may be necessary to provide adequate ventilation and escapeways for those mines and known and potential resource areas to the north of the Calliham mine.

Exploration

1) Although some of the "exploration" of the Calliham mine area will be performed underground as development proceeds, it is recommended that additional surface drilling be done for the areas to the north of the majority of the Calliham workings and up to the Silver Bell mine resources to aid in guiding development of connecting workings between the mines and side entries of those connecting workings.

As a follow-on, a preliminary economic assessment (PEA) should be performed

internally by EFRCP an audited by a QP. If results are favorable, a Prefeasibility Study should be undertaken to convert Measured and Indicated Mineral Resources into Probable and/or Proven Mineral Reserves. (Estimated cost for the PEA = \$70,000).

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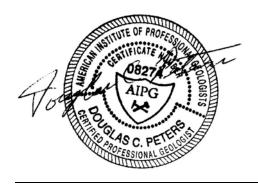
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28.0 Certificate of Qualifications and Signature

- 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.
 - 2. 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.
 - 3. 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 hold the following certifications and memberships applicable to these requirements:
 - A. Certified Professional Geologist #8274 (American Institute of Professional Geologists)
 - B. Registered Member #2516800 (Society for Mining, Metallurgy, and Exploration, Inc.)
 - 4. That I have practiced my profession for over 35 years, the last 19 of which have been as an independent consulting geologist.
 - 5. That I am responsible for this technical report titled: "Updated Technical Report on Sage Plain Project (including the Calliham Mine), San Juan County, Utah", dated March 18, 2015, and that property was visited by me on December 6, 2011.
 - 6. That I have had prior experience with the Sage Plain Property that is the subject of this Technical Report and have had previous experience with other uranium properties in Colorado, New Mexico, Utah, Washington, and Wyoming.
 - 7. That this report dated March 18, 2015, and titled "Updated Technical Report on Sage Plain Project (including the Calliham Mine), San Juan County, Utah" is based on published and unpublished maps and reports, on discussions with representatives of EER Colorado Plateau LLC, Energy Fuels Inc., and discussions with other persons familiar with this type of mineral deposit.

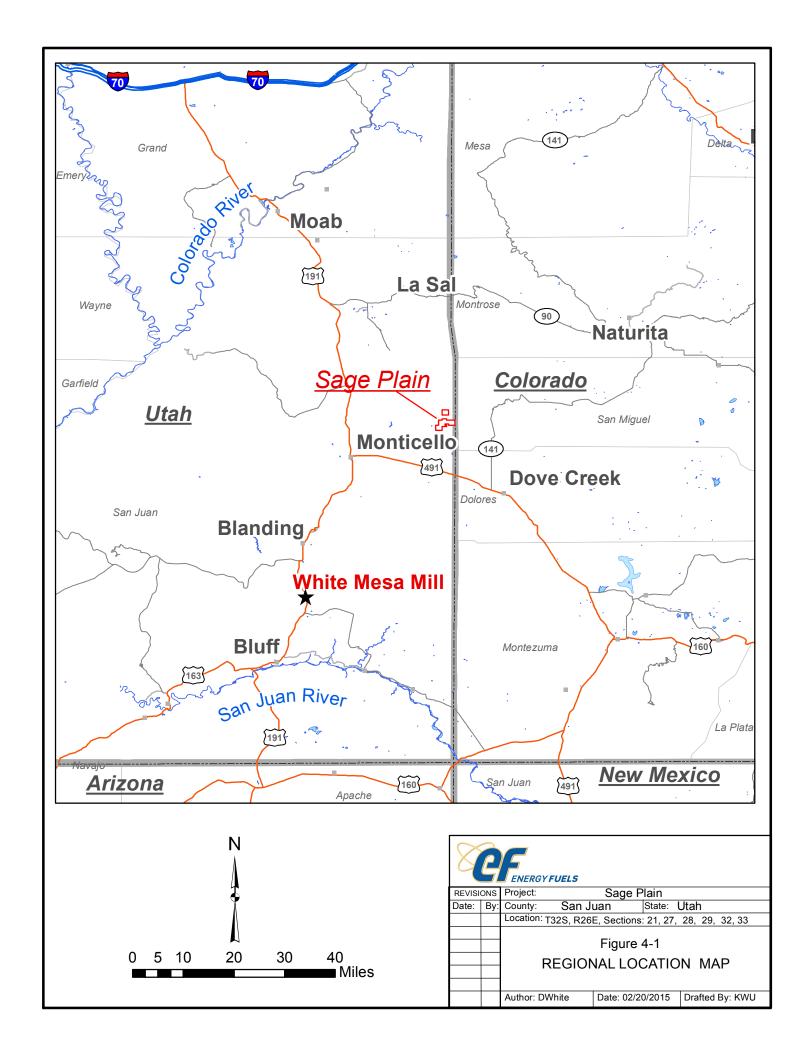
- 8. That I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission of which would make the Technical Report misleading or would affect the stated conclusions.
- 9. That I am independent of EER Colorado Plateau LLC and its parent, Energy Fuels Inc., applying all of the tests in section 1.4 of NI 43-101.
- 10. That I am the owner of Peters Geosciences, whose business address is 825 Raptor Point Road, Golden, Colorado 80403.
- 11. 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.
- 12. 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.

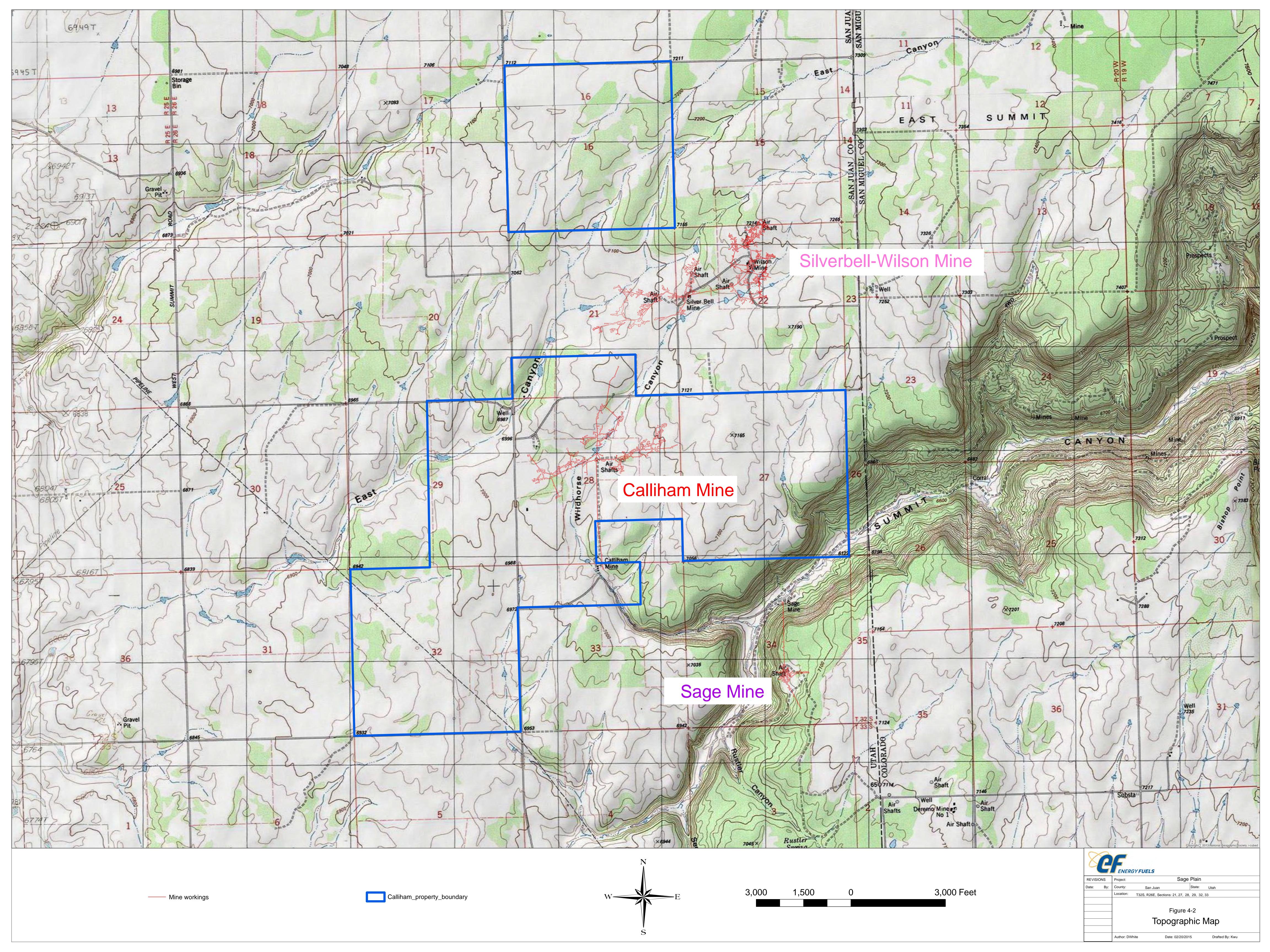
Signed and dated this 18th day of March, 2015.

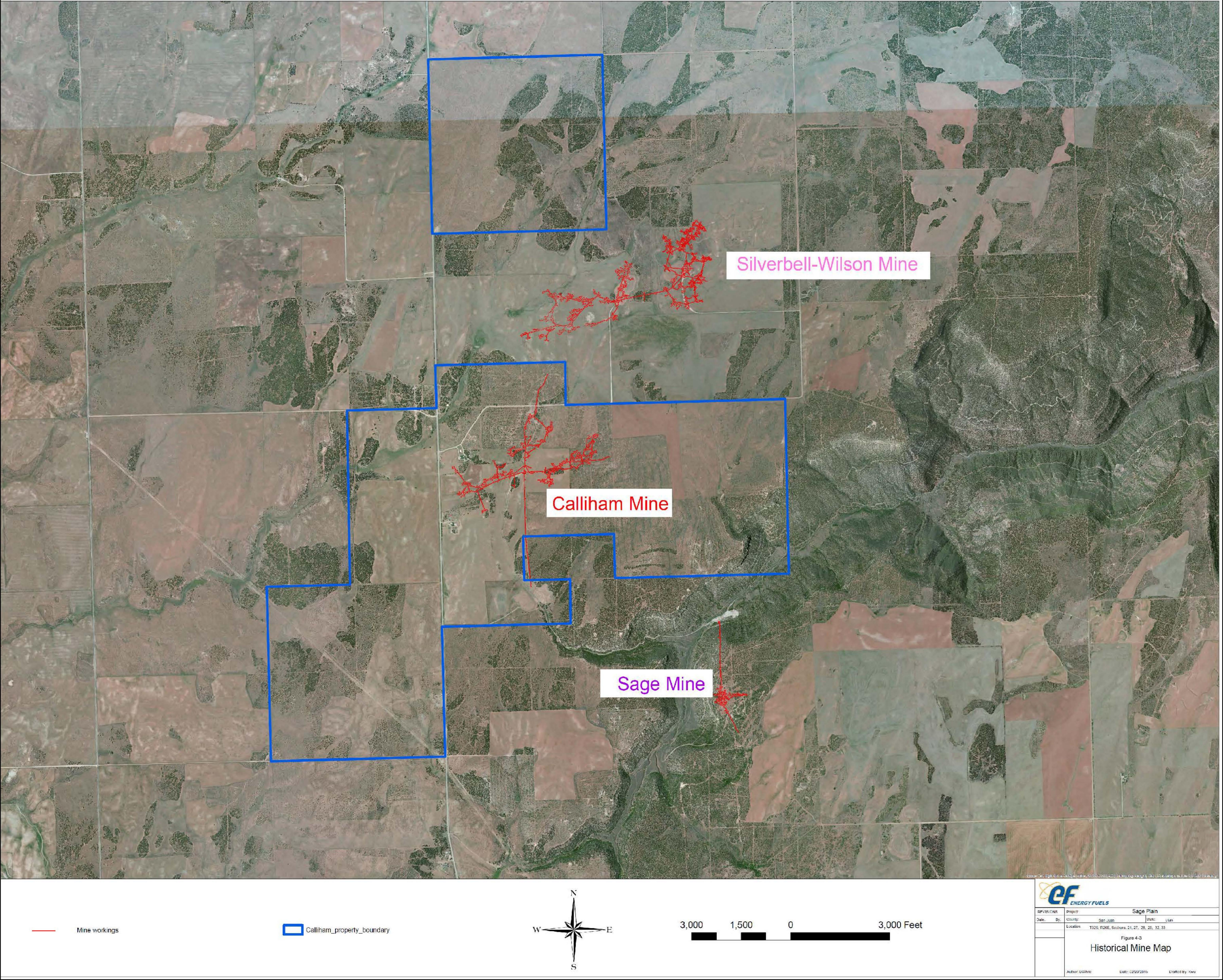


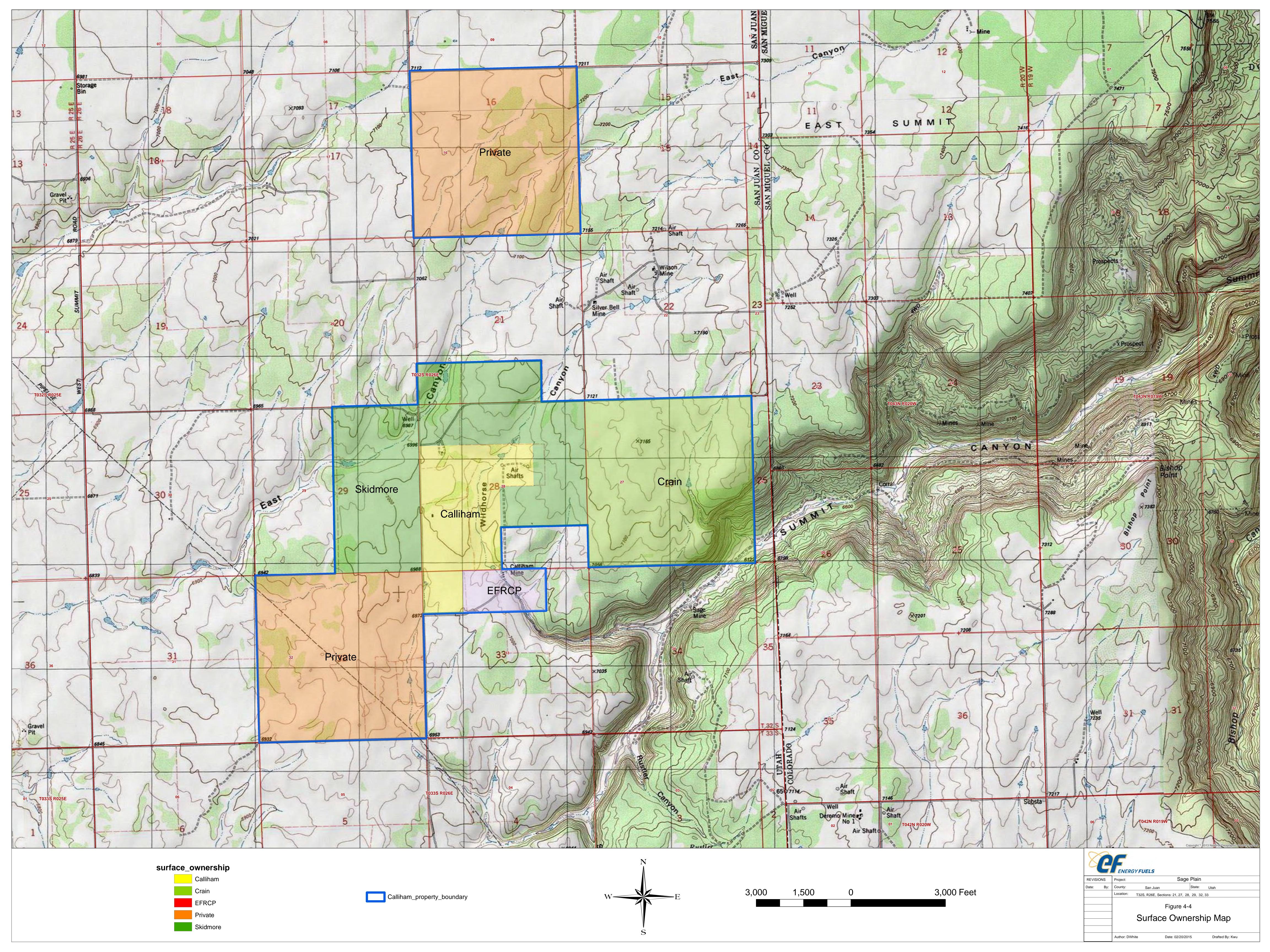
Douglas C. Peters, CPG

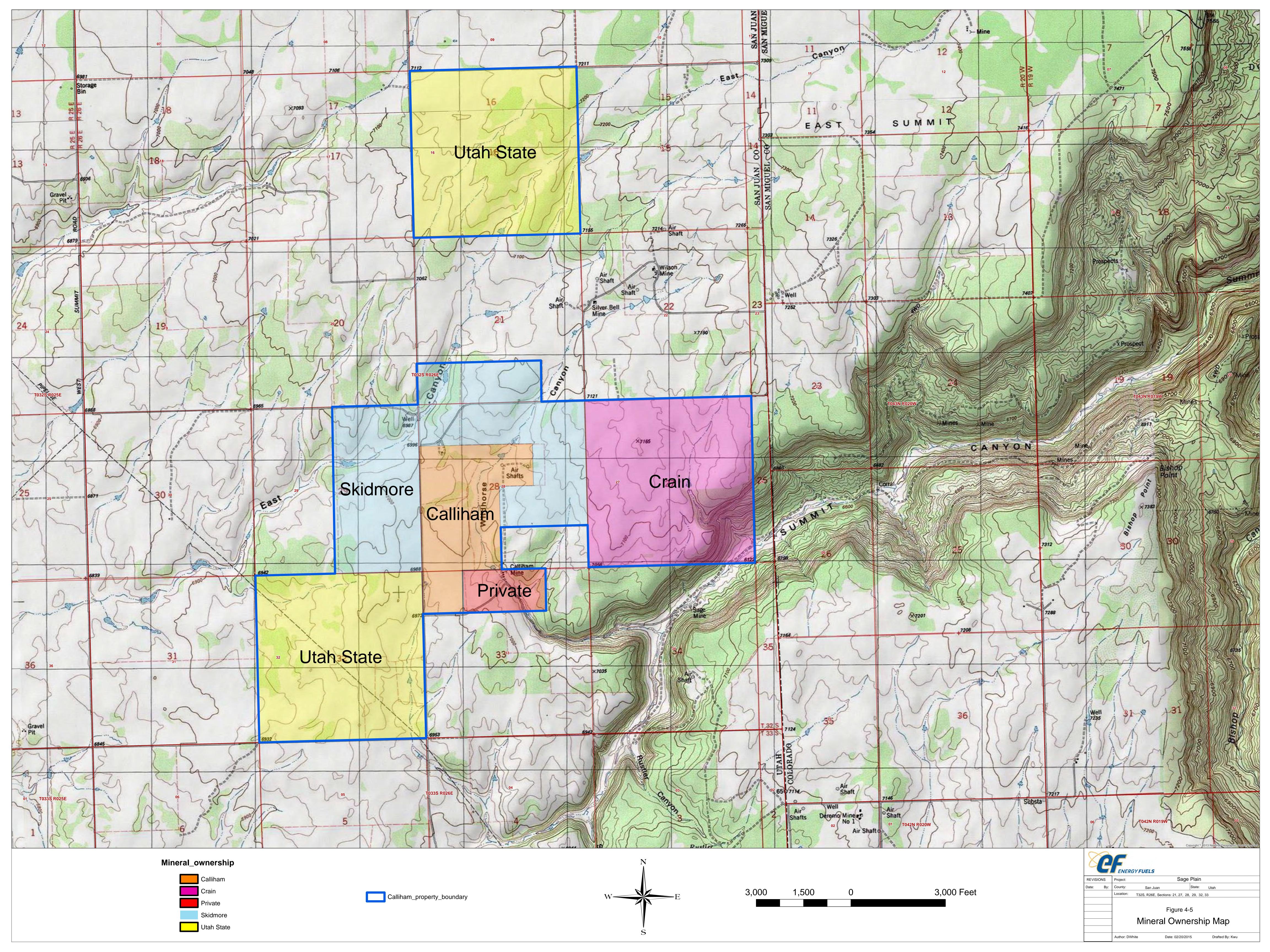
APPENDIX

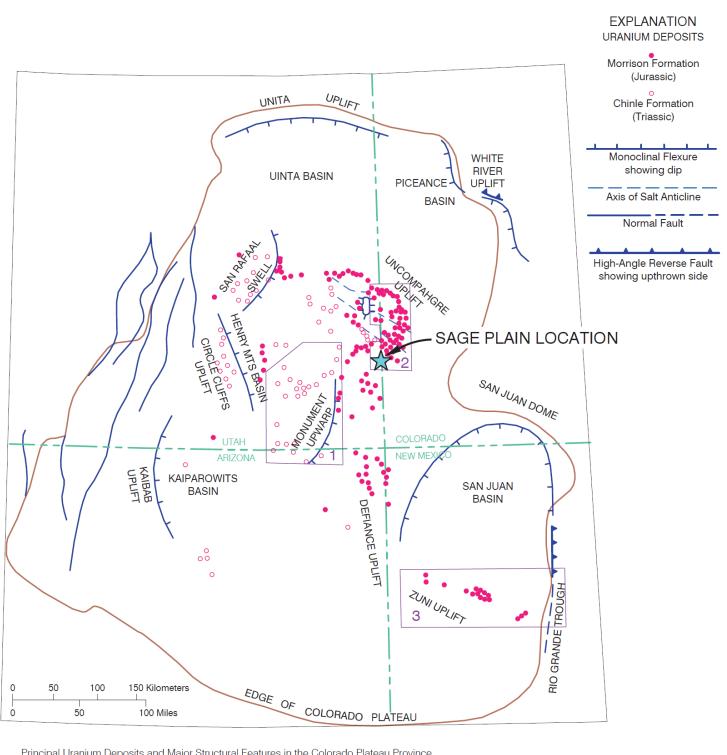








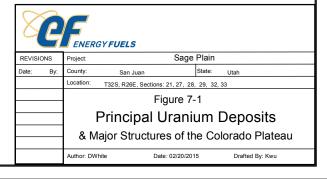




Principal Uranium Deposits and Major Structural Features in the Colorado Plateau Province. Blocks outline the approximate area of the following districts:

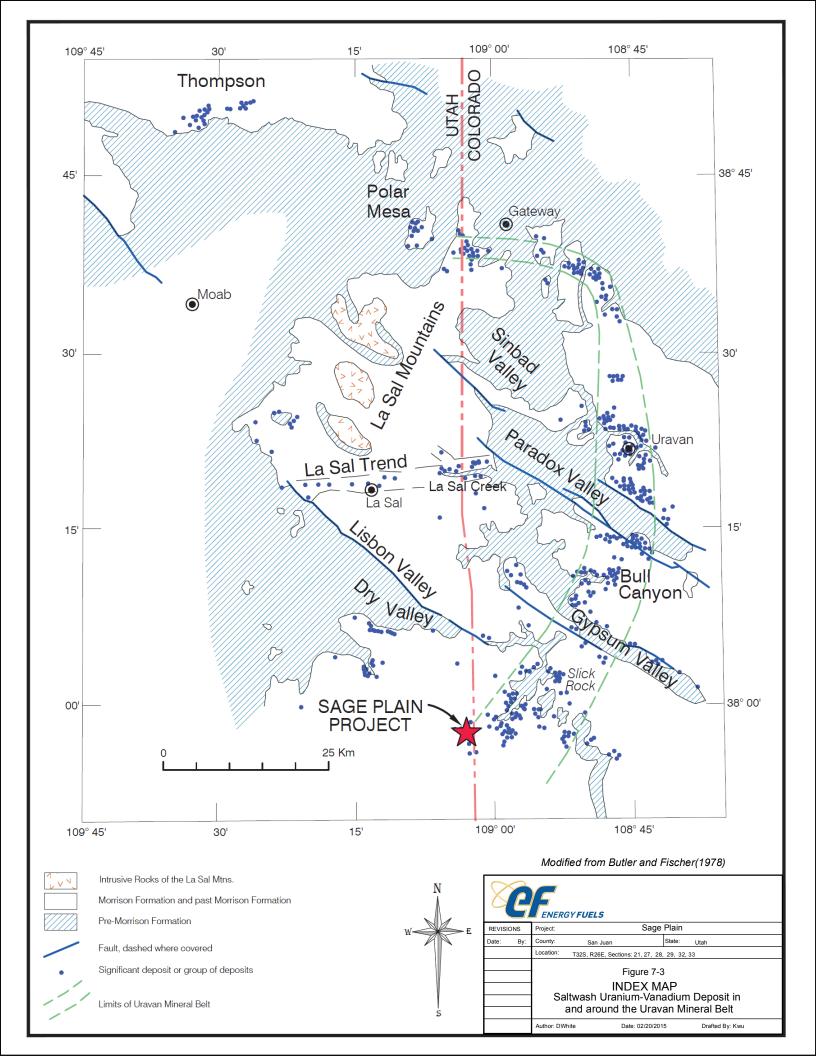
(1) Monument Valley - White Canyon, (2) Uravan, (3) Grants. (after Nash et al., 1981; as modified from Fischer, 1968).

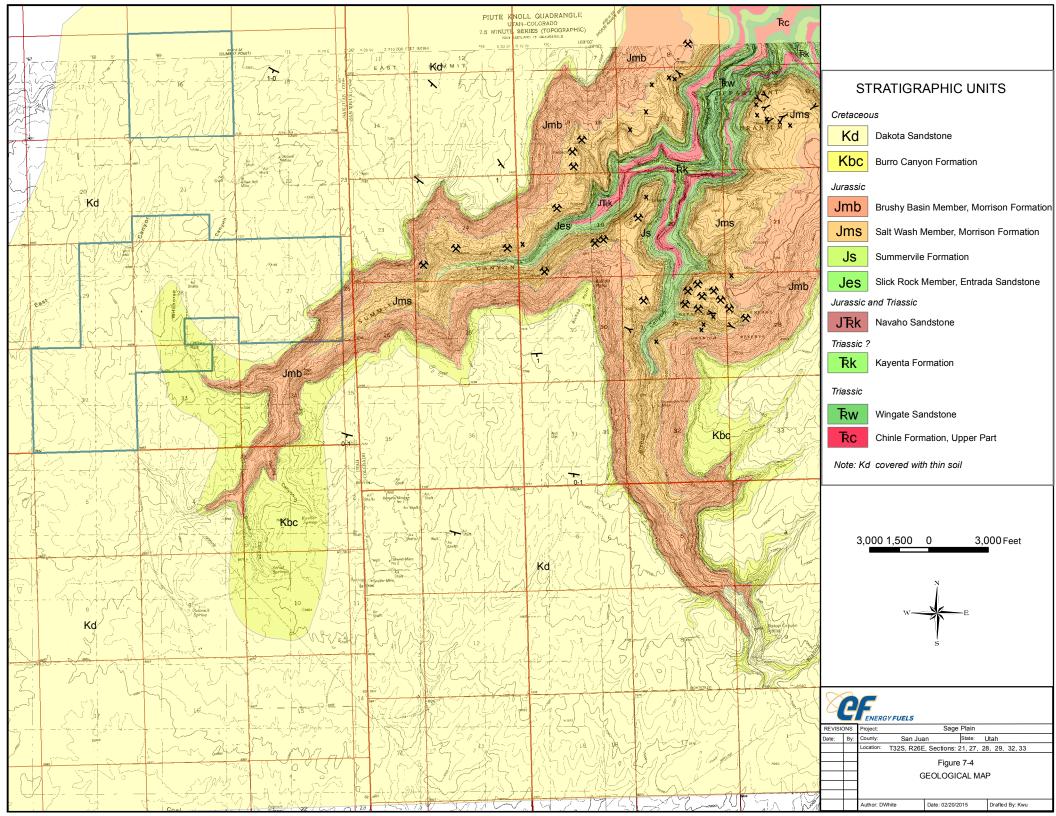




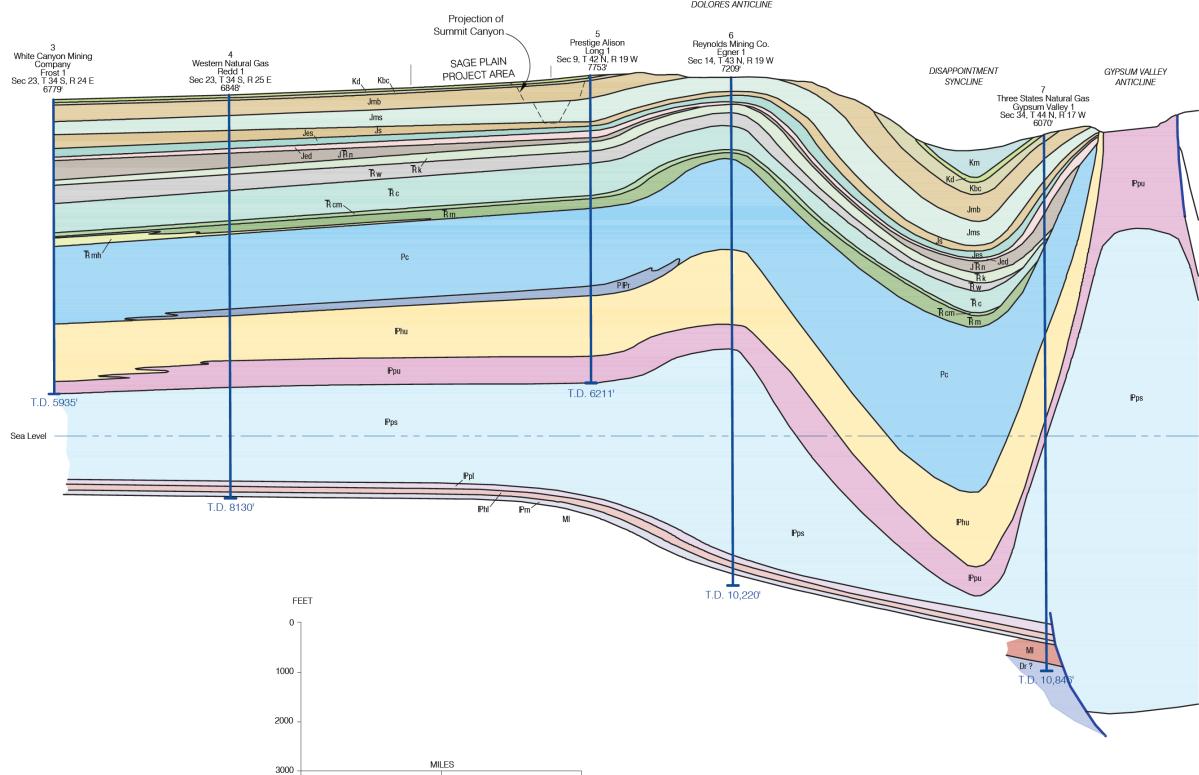
AGE	FORMATION	MEMBER	LITHOLOGY	THICKNESS Feet	DESCRIPTION			
	Soil			0-20	Mostly loess			
Cretaceous	Dakota Sandstone			120-150	Yellow-brown sandstone and conglomerate interbedded with carnonaceous shale and impure coal.			
	Burro Canyon Formation		0 0	140-225	Light gray, yellow to red sandstone and conglomerate interbedded with green and purple shale.			
Jurassic	Morrison	Brushy Basin		350-460	Fluvial and lacustrine variegated bentonitic mudstone with lenticular sandstone and conglomerate beds; local thin limestone beds			
	Formation	Salt Wash		280-350	Fluvial light gray, tan, and red sandstones interbedded with red and minor gray mudstones.			
	Summerville Fm.			90	Red and red-brown, thin bedded, sandy shale and mudstone.			
	Entrada Sandstone			90-150	Eolian tan, orange crossbedded dandstone; red silty beds at base could actually be Carmel Formation.			
	Navajo Sandstone			175-200	Eolian buff-tan crossbeded fine-grained sandstone; thins over salt-cored anticlines.			
	Kayanta Formation			175	Irregularly bedded fluvial red-brown and lavender sandstones, siltstones, and shales.			
Triassic	Wingate Sandstone		5	270	Reddish-brown fine-grained, thick bedded, massive, and crossbeded eolian sandstone; cliff-forming when outcropping.			
	Chinle Formation			600-650	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.			0-120	Chocolate-brown thin bedded shale with sandstone; locally missing due to angular unconformity at base of Chinle			
Permian	Cutler Formation		000000000000000000000000000000000000000	~1750	Maroon and red conglomerate, and arkosic sandstone with interbedded red, brown, and purplish siltstone.			
Pennsylvanian	HERMOSA FORMATION hawe, 1968		======================================	5000+	Gray fossiliferous marine limestone interbedded with sandstone and mudstone. Thick evaporite sequence in middle part.			
After S	After Shawe, 1968							

CF ENERGY FUELS											
REVISIONS		Project:	st: Sage Plain								
Date:	By:	County:	San Juan	State:	Utah						
		Location: T32S, R26E, Sections: 21, 27, 28, 29, 32, 33									
		Figure 7-2									
		Generalized Stratigraphic Section									
		Author: DWhite	Date	: 02/20/2015	Drafted By: Kwu						





SW DOLORES ANTICLINE



STRATIGRAPHIC UNITS

Cretaceous

Km Mancos Shale

d Dakota Sandstone

Kbc Burro Canyon Formation

Jurassic

Brushy Basin Member, Morrison Formation

lms Salt Wash Member, Morrison Formation

Summerville Formation

Slick Rock Member, Entrada Sandstone

Dewey Bridge Member, Entrada Sandstone

Jurassic and Triassic

JRn Navaho Sandstone

Triassic?

Tk Kayenta Formation

Triassic

Tw Wingate Sandstone

The Chinle Formation, Upper Part

m Moss Back Member, Chinle Formation

Moenkopi Formation, Exclusive of Hoskinnini Tongue

Hoskinnini Tongue, Moenkopi Formation

Permia

Cutler Formation

Permian & Pennsylvanian

PIPr Rico Formation

Pennsylvanian

Phu Upper Limestone Member, Hermosa Formation

Upper Unit, Paradox Member, Hermosa Formation

Pps Salt Unit, Paradox Member, Hermosa Formation

Lower Unit, Paradox Member, Hermosa Formation

Lower Limestone Member, Hermosa Formation

Lower Emesione Member, Hermosa Formatic

Pm Molas Formation

Mississippian

Leadville Limestone

Devonian Rocks

Cambrian Rocks

Cr Precambrian Rocks

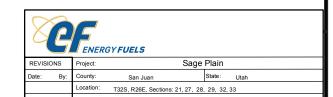


Figure 7-5 Cross Section A

Author: DWhite Date: 02/20/2015 Drafted By: Kwu

