ENERGY FUELS INC.

TECHNICAL REPORT ON THE HENRY MOUNTAINS COMPLEX URANIUM PROPERTY, UTAH, U.S.A.

NI 43-101 Report

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June 27, 2012

ROSCOE POSTLE ASSOCIATES INC.

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1 SUMMARY

EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) has been retained by Energy Fuels Inc. (Energy Fuels) to prepare an independent Technical Report to support the disclosure of Mineral Resource estimates for the Henry Mountains Complex Uranium Property (the Property). This Technical Report is a combination and update of two previous Technical Reports completed by Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA, predecessor to RPA). A Technical Report for International Uranium Corporation (IUC, predecessor to Denison Mines Corp.) dated September 9, 2006 documented a Mineral Resource estimate for the Copper Bench-Indian Bench deposit. A Technical Report for Denison Mines Corp. (Denison) dated March 19, 2009 documented a Mineral Resource estimate for the Tony M-Southwest deposit. Both deposits are located on the Property. RPA visited the Property on October 12, 2005 and July 15, 2008. RPA understands that no exploration work has been carried out on the Property since then.

In June 2012, Energy Fuels acquired all of Denison Mines Corp.'s (Denison) mining assets and operations in the United States.

The Property is located in Garfield County, southeastern Utah. It is accessible from paved State Highway 276 which passes within three miles of the Property. The Property is located in a relatively remote area of Utah, and the infrastructure is limited. Skilled labour can be recruited from the region, which has a tradition of uranium mining. The distance to the Energy Fuels White Mesa Uranium-Vanadium Processing Facility near Blanding, Utah, is 117 miles.

The Mineral Resources are summarized in Table 1-1.

TABLE 1-1 MINERAL RESOURCE ESTIMATE OF THE HENRY MOUNTAINS COMPLEX URANIUM DEPOSITS, DECEMBER 31, 2011
Energy Fuels Inc. – Henry Mountains Complex Property

Category	Million Tons	Grade eU_3O_8 (%)	Contained eU_3O_8 (Million Pounds)
Indicated – Tony M	1.03	0.24	4.83
Indicated - Southwest	0.66	0.25	3.30
Indicated – Copper Bench	0.50	0.29	2.93
Indicated – Indian Bench	0.22	0.40	1.74
Total Indicated Resource	**2.41**	**0.27**	**12.80**
Inferred – Tony M	0.65	0.17	2.17
Inferred - Southwest	0.21	0.14	0.58
Inferred – Copper Bench	0.50	0.32	3.24
Inferred – Indian Bench	0.25	0.42	2.09
Total Inferred Resource	**1.61**	**0.25**	**8.08**

Notes:
1. Mineral Resources were classified in accordance with CIM Definition Standards.
2. Cut-off grade is 0.10% eU_3O_8 over a minimum thickness of 2 ft. for the Tony M-Southwest deposit
3. Cut-off grade is 0.20% eU_3O_8 over a minimum thickness of 4 ft. for the Copper Bench-Indian Bench deposit
4. Mineral Resources have not been demonstrated to be economically viable.
5. All mine production by Plateau and Denison has been deducted.
6. Some totals may not add due to rounding.

CONCLUSIONS

Energy Fuels' Tony M-Southwest and Copper Bench-Indian Bench uranium deposits are of the Colorado Plateau sandstone hosted type. The Henry Mountains Complex Property has been the site of considerable past exploration including the drilling and logging of approximately 3,400 rotary holes and 106 core holes, of which 2,864 rotary holes were used to prepare the current resource estimates. In the opinion of RPA, the drill hole databases for the Tony M-Southwest and Copper Bench-Indian Bench deposits are appropriate and acceptable for Mineral Resource estimation.

Denison estimated the Mineral Resources of the Tony M-Southwest deposit in 2009 using the contour method. Energy Fuels Nuclear Inc. (EFNI, not the same company as Energy Fuels Inc.) estimated the Mineral Resources of the Copper Bench-Indian Bench deposit in 1993 using the polygonal block method. RPA has audited and accepted both the Tony M-Southwest and Copper Bench-Indian Bench Mineral Resources estimates, which are summarized above in Table 1-1. No mineral reserves have been estimated for either deposit.

The Tony M Mine has been extensively developed, including over 18 miles of main haulageways and crosscuts that provide access to a majority of the estimated resources. The drilling and most of the development activity were conducted from about 1976 to the mid-1990s, with much of the work completed by the mid-1980s. From September 1979 to mid-1984, a total of approximately 237,000 tons of muck with an average grade of 0.121% U_3O_8 containing 573,500 pounds U_3O_8 were extracted and stockpiled by Plateau Resources Ltd. (Plateau)

In 2007, the Tony M Mine was reactivated by Denison and, to November 2008, 162,384 tons at 0.131% eU_3O_8 containing 429,112 pounds U_3O_8 were produced from areas of existing mine development. The Tony M Mine is fully permitted for production but is currently on standby awaiting higher uranium prices. The mine is partially dewatered and provides direct access to much of the estimated resources through existing workings.

No development has taken place in the Southwest portion of the Tony M-Southwest deposit, although the Tony M haulageways are developed at the same elevation and within about 1,100 ft. of the Southwest uranium zones. No development has taken place on the Copper Bench-Indian Bench deposit which is located north of the Tony M-Southwest deposit but at a similar elevation above sea level.

The Henry Mountains Complex Mineral Resources have full access to Energy Fuels' operating White Mesa uranium mill at Blanding, Utah, which has recent operating experience processing material from the Tony M Mine.

For various reasons, including the difficulty of surface access, historic surface drilling on the Tony M-Southwest and Copper Bench-Indian Bench deposits has left significant areas untested that are adjacent to known mineralization as well as in areas not accessible from existing or planned drifts or through long-hole drilling from underground at the Tony M Mine. RPA considers that there is excellent potential to add to the Mineral Resources in these areas. There is also significant potential to increase Mineral Resources in the Southwest portion of the Tony M-Southwest deposit and the Copper Bench-Indian Bench deposit where drill hole spacing averages are greater than 100 ft. This is particularly the case in the Indian Bench portion where drill hole spacing averages 200 ft.

RPA is of the opinion that additional drilling should be done on the Henry Mountains Complex Property with an emphasis on delineating areas of higher grade uranium mineralization. Positive drilling results would increase Mineral Resources, as well as provide a more complete database for use in mine development and production planning.

Based on the review of the available analyses, RRA is of the opinion that the V_2O_5:U_3O_8 ratio ranges from 1.3:1 to about 2.0:1 in the Henry Mountains Complex deposits, and that the concentration of vanadium is therefore too low to be economic at current prices.

RPA is of the opinion that the Tony M-Southwest property is of merit and warrants the recommended program and budget.

RECOMMENDATIONS

RPA recommends the following work:

1. Conduct a surface rotary drilling and logging program on the Tony M-Southwest and Copper Bench-Indian Bench deposits to fill in areas of wider spaced drilling, with a view to outlining higher grade mineralization.
2. Re-estimate Mineral Resources of the Copper Bench-Indian Bench and Tony M-Southwest deposits using the contour method or a block modeling approach.
3. Carry out a Preliminary Economic Assessment of re-opening the Tony M Mine and developing other uranium deposits on the Henry Mountains Complex Property.

RPA recommends the budget shown in Table 1-2 to carry out the proposed work program. The total budget is $1.8 million.

TABLE 1-2 RECOMMENDED PROGRAM AND BUDGET
Energy Fuels Inc. – Henry Mountains Complex Property

Item	US$
Drilling and logging 100 rotary holes, 80,000 ft. at $8.00/ft.	640,000
Re-estimate Mineral Resources	50,000
Preliminary Economic Assessment	150,000
Subtotal	840,000
Contingency	160,000
Total	**1,800,000**

TECHNICAL SUMMARY

PROPERTY DESCRIPTION AND LOCATION

The property comprising Energy Fuels' Henry Mountains Complex Property is located in eastern Garfield County, Utah, 17 miles north of Bullfrog Basin Marina on Lake Powell and approximately 40 air miles south of the village of Hanksville, Utah. It is situated three miles west of Utah State Highway 276 and approximately five miles north of Ticaboo, Utah.

The Henry Mountains Complex Property consists of the Tony M Mine and deposit and the Southwest deposit located in the southwest part of the Property, and the combined Copper Bench–Indian Bench uranium deposit in the east and north part of the Property.

LAND TENURE

The Henry Mountains Complex is one contiguous property comprised of 202 unpatented Federal lode mining claims totalling approximately 3,560 acres and one 640-acre Utah State Mineral Lease. Energy Fuels holds title to all of the claims. Of the 202 total claims, 185 have no royalty burden. The remaining 17 "TIC" claims are subject to production royalties based on the gross values of uranium and vanadium sold. The Utah State Mineral Lease is subject to royalties set by the State of Utah. Both the "TIC" claims and the Utah State mineral lease have an annual advance minimum royalty.

EXISTING INFRASTRUCTURE

Road access to the Property is by paved Highway 276, running between Hanksville and Bullfrog Basin Marina, Utah. An unimproved gravel road maintained by Garfield County extends west from Highway 276, passes by the portal of the Tony M Mine, and extends northerly across the property, the northern end of which is crossed by another county road. A network of unimproved, dirt exploration roads provides access over the property except the areas of rugged terrain. The Bullfrog Basin Marina airstrip is located approximately 15 miles south of the project area.

The property is located in a relatively remote area of Utah, and the infrastructure is limited. The town site of Ticaboo, Utah, is located approximately five miles south of the Property. During operation of the Tony M Mine, electricity was generated locally. Skilled labour can be recruited from the region, which has a tradition of uranium mining.

Materials and supplies are transported to the site by truck about 275 miles from Salt Lake City, and about 190 miles from Grand Junction, Colorado. The distance to the Energy Fuels White Mesa Uranium-Vanadium Processing Facility near Blanding, Utah, is 117 miles.

HISTORY

Following the discovery of the Tony M uranium deposit in 1977, Plateau Resources Ltd. (Plateau) developed the Tony M Mine from September 1, 1977, to about May 1984, when development was suspended. By January 31, 1983, over 18 miles of mine workings were developed, and a total of approximately 237,000 tons of muck was extracted with an average chemically adjusted grade of 0.121% U_3O_8 containing about 573,500 pounds U_3O_8.

The Tony M Mine is accessed via two parallel declines extending about 10,200 ft. into the deposit. The mine was allowed to flood after development was suspended in 1984. The southern one-half of the mine remained dry, as it is located above the static water table.

Denison received the necessary permits to restart the Tony M Mine in September 2007, at which time it resumed dewatering of the mine. During its September 2007 to December 2008 reactivation, cleanup and mining, Denison extracted 162,384 tons at radiometric grade of 0.131% containing 429,112 pounds U_3O_8 from within existing workings and from the previously stockpiled material. This material was trucked to Denison's White Mesa Mill for processing.

No pre-production mine development has been conducted on the Southwest portion of the Tony M-Southwest deposit or on the Copper Bench-Indian Bench deposit located further north.

GEOLOGY AND MINERALIZATION

The mineralization on the Henry Mountains Complex Property is of Salt Wash tabular (vanadium)-uranium sandstone deposit type (Colorado Plateau) hosted by the Lower Salt Wash Member of the Upper Jurassic Morrison Formation. The Tony M-Southwest

and Copper Bench-Indian Bench deposits occur over a zone up to 100 ft. from the base of the lowermost interval of the 450 ft. thick Salt Wash Member.

The Henry Mountain Complex Property contains two more or less continuous, elongate mineralized zones - the northerly trending Tony M-Southwest deposit in the south part and the northwesterly trending Copper Bench-Indian Bench deposit in the north part. The two deposits occur within an area of approximately four miles by two miles.

Mineralization making up the Mineral Resources of the Tony M-Southwest and the Copper Bench-Indian Bench has average thicknesses of three feet to six feet depending on assumptions regarding GT cut-off and dilution. Inspection of logs by RPA indicates that the thickness of uranium mineralization in individual drill holes only occasionally exceeds 12 ft.

Uranium mineralization in the Henry Mountains Complex property is hosted by favourable sandstone horizons containing detrital organic debris. Primary uranium mineralization consists of coffinite, accompanied by vanadium minerals comprising mainly the oxide montroseite and vanadium chlorite. In the oxidized zone above the water table in the southern part of the Tony M deposit, the uranium and vanadium occurs in a series of hydrous potassium and calcium uranium-vanadium minerals, together with montroseite.

EXPLORATION STATUS

Most of the drilling done on the Southwest, Copper Bench and Indian Bench deposits on the Bullfrog claims was conducted from 1977 to 1983 by rotary drilling using a tricone bit with a nominal diameter of 5.1 inches. Downhole gamma logging of the rotary surface holes was done by Century Geophysical Corp. and Professional Logging Services, Inc. Rotary drilling on the Property comprises more than 3,400 holes, plus 106 core holes on which chemical assays were carried out to confirm results of radiometric logging of the rotary holes.

The Southwest and Copper Bench deposits are delineated by drilling on approximately 100 ft. centres. The Indian Bench deposit is delineated by drilling on approximately 200 ft. centres. In some areas, the rugged terrain made access difficult, resulting in an irregular drill pattern.

RPA is of the opinion that, based on the information available, the original gamma log data and subsequent conversion to eU_3O_8% values are reliable but slightly conservative estimates of the uranium U_3O_8 grade. Furthermore, there is no evidence that radiometric disequilibrium would be expected to negatively affect the uranium resource estimates of the Tony M-Southwest and Copper Bench-Indian Bench deposits.

MINERAL RESOURCES

Mineral Resources are summarized above in Table 1-1. Mineral Resources of the Tony M-Southwest deposit were estimated in 2009 by Denison using the GT contour method and audited by Scott Wilson RPA in the 2009 Technical Report. Mineral Resources of the Copper Bench-Indian Bench deposit were estimated in 1993 by ENFI using the polygonal block method and audited by Scott Wilson RPA in the 2006 Technical Report.

The Mineral Resources were classified as Indicated and Inferred categories. They are reported at a cut-off grade of 0.10% eU_3O_8 over a minimum thickness of 2 ft. and minimum GT (grade times thickness product) of 0.2 ft.% eU_3O_8 for the Tony M-Southwest deposit and at a cut-off grade of 0.20% eU_3O_8 over a minimum thickness of 4 ft. and minimum GT (grade times thickness product) of 0.8 ft.% eU_3O_8 for the Copper Bench-Indian Bench deposit. Total Indicated Resources are 2.41 million tons at an average grade of 0.27% eU_3O_8 containing 12.80 million pounds eU_3O_8. Additional Inferred Resources total 1.61 million tons at an average grade of 0.25% eU_3O_8 containing 8.08 million pounds eU_3O_8.

SAMPLING AND METALLURGICAL TESTING

From November 2007 to December 2008, a total of 162,384 tons at 0.131% eU_3O_8 containing 429,112 pounds U_3O_8 were trucked from the Tony M Mine to the White Mesa Mill at Blanding, Utah, for processing. Of this material, 90,025 tons at 0.165% eU_3O_8 (297,465 pounds) were extracted by Denison from the Tony M Mine and 72,359 tons at 0.091% eU_3O_8 (131,647 pounds) came from stockpiled material mined by previous operators.

In 1982, the Shootaring Canyon mill processed some 27,000 tons of mineralized material from the Tony M Mine, but details are not available to RPA. A U.S. Nuclear Regulatory Commission (USNRC) report lists a recovery of 90% for the milling operation.

Metallurgical testing in 1983 of drill core from the Southwest and Copper Bench-Indian Bench are of the Property indicated overall recoveries of 99% U_3O_8 and 90% V_2O_5 for a strong acid leach. Additional testing of a mild acid leach and an alkaline leach gave recoveries of 97% U_3O_8 and 40% V_2O_5 for both. Acid consumption for the strong acid leach was 350 pounds per ton.

At the White Mesa Mill of Energy Fuels, run-of-mine ore is reduced to minus 28 mesh in a six-foot by 18-ft. diameter semi-autogenous grinding (SAG) mill. Leaching of the ore is accomplished in two stages: a pre-leach and a hot acid leach. The first, or pre-leach, circuit, consisting of two mechanically agitated tanks, utilizes pregnant (high-grade) strong acid solution from the countercurrent decantation (CCD) circuit which serves both to initiate the leaching process and to neutralize excess acid. The pre-leach circuit discharges to a 125-ft. thickener where the underflow solids are pumped to the second stage leach and the overflow solution is pumped to clarification, filtration, and solvent extraction circuits.

A hot strong acid leach is used in the second stage leach unit, which consists of seven mechanically agitated tanks having a retention time of 24 hours. Free acid is controlled at 70 grams per litre and the temperature is maintained at 75^{o}C.

Leached pulp is washed and thickened in the CCD circuit, which consists of eight high-capacity thickeners. Underflow from the final thickener at 50% solids is discharged to the tailings area. Overflow from the first thickener (pregnant solution) is returned to the pre-leach tanks.

The solvent extraction circuit consists of four extraction stages in which uranium in pregnant solution is transferred to the organic phase, a mixture consisting of 2.5% amine, 2.5% isodeconal, and 95% kerosene. Loaded organic is pumped to six stages of stripping by a 1.5 molar sodium chloride solution, and thence to a continuous ammonia precipitation circuit. Precipitated uranium is settled, thickened, centrifuged, and dried at 1,200^{o}F. The final product at about 95% U_3O_8 is packed into 55-gallon drums for shipment.

PREVIOUS MINING OPERATONS

The Tony M Mine was developed from 1977 to 1983 with a double entry system by two parallel declines spaced 50 ft. apart. The declines measure 9 ft. by 12 ft. in cross-section, have crosscuts on 50 ft. centres, have a minus 3% grade, serve as the primary fresh air intake, and are 10,200 ft. in length.

Access to the individual mining areas is through 8 ft. by 10 ft. laterals driven at right angles to the mine entries. The laterals also provide access for long-hole drilling and detailed information for mine planning and stope development. The mine was planned as a random room and pillar operation with pillar extraction by a retreat system.

Mining equipment consisted of slushers and rubber-tired, five- to ten-ton capacity load-haul-dump (LHD) units. A 36 in. wire rope conveyor was planned for installation in 1985 to transport ore and waste up the decline to storage bins outside the portal of the mine. Exhaust ventilation was provided by five bored ventilation shafts, six feet in diameter, each with a 75-HP exhaust fan mounted at the shaft collar.

Plateau operated the Tony M Mine from September 1, 1978, until April 1984. A total of 237,000 tons were produced at a grade of 0.121% U_3O_8, containing 574,500 lbs of U_3O_8. Denison operated the mine from September 2007 to November 2008. A total of 162,000 tons were produced at a grade of 0.131% U_3O_8, containing 429,000 lbs of U_3O_8. Some of the Denison production was from previously mined stockpiled material.

2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) has been retained by Energy Fuels Inc. (Energy Fuels) to prepare an independent Technical Report to support the first time disclosure of Mineral Resource estimates for the Henry Mountains Complex Uranium Property (the Property). The report has been prepared to meet the requirements of National Instrument 43-101 (NI 43-101).

This Technical Report is a combination and update of two previous Technical Reports completed by Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA, predecessor to RPA), as follows:

- Technical Report on the Henry Mountains Complex Uranium Project, Utah, U.S.A., prepared for International Uranium Corporation, Thomas C. Pool, P.E., September 9, 2006 (the 2006 Technical Report).
- Technical Report on the Tony M-Southwest Deposit, Henry Mountains Complex Uranium Project, Utah, U.S.A., prepared for Denison Mines Corp., Douglas H. Underhill, Ph.D., C.P.G., and William E. Roscoe, Ph.D., P.Eng., March 19, 2009 (the 2009 Technical Report).

International Uranium Corporation (IUC) is a predecessor company to Denison Mines Corp. (Denison). Energy Fuels acquired the Henry Mountains Complex Property from Denison in June 2012.

SOURCES OF INFORMATION

Thomas C. Pool, P.E., Associate Mining Engineer with RPA, visited the Property on October 12, 2005 for the 2006 Technical Report. Douglas H. Underhill, Ph.D., C.P.G., Associate Consulting Geologist with RPA, visited the property on July 15, 2008 for the 2009 Technical Report. Dr. Underhill was in charge of the exploration and evaluation program for the Tony M property for the periods from February 1977 to mid-1984, and from mid-1989 to about 1993.

Discussions were held with personnel from Denison:

- Mr. Terry V. Wetz, Director of Project Development, Denison
- Mr. Mark Mathisen, Senior Project Geologist, Denison

No independent samples were taken because Denison was actively mining at the time of the second RPA visit and sufficient production history exists to verify the presence of uranium mineralization at the Tony M Mine. No samples are available for the Southwest deposit. Relevant reports and data were provided to RPA by Denison and were reviewed and discussed with Denison staff during and following the site visits. Various maps and technical reports were provided by Denison. The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.

LIST OF ABBREVIATIONS

Units of measurement used in this report conform to the Imperial system. All currency in this report is US dollars (US$) unless otherwise noted.

μ	micron
°C	degree Celsius
°F	degree Fahrenheit
μg	microgram
A	ampere
a	annum
bbl	barrels
Btu	British thermal units
C$	Canadian dollars
cal	calorie
cfm	cubic feet per minute
cm	centimetre
cm^2	square centimetre
d	day
dia.	diameter
dmt	dry metric tonne
dwt	dead-weight ton
ft	foot
ft/s	foot per second
ft^2	square foot
ft^3	cubic foot
g	gram
G	giga (billion)
Gal	Imperial gallon
g/L	gram per litre
g/t	gram per tonne
gpm	Imperial gallons per minute
gr/ft^3	grain per cubic foot
gr/m^3	grain per cubic metre
hr	hour
ha	hectare
hp	horsepower
in	inch
in^2	square inch
J	joule
k	kilo (thousand)
kcal	kilocalorie
kg	kilogram
km	kilometre
km/h	kilometre per hour
km^2	square kilometre
kPa	kilopascal
kVA	kilovolt-amperes
kW	kilowatt
kWh	kilowatt-hour
L	litre
L/s	litres per second
lb	pound
m	metre
M	mega (million)
m^2	square metre
m^3	cubic metre
m^3/h	cubic metres per hour
min	minute
MASL	metres above sea level
mm	millimetre
mph	miles per hour
MVA	megavolt-amperes
MW	megawatt
MWh	megawatt-hour
opt, oz/st	ounce per short ton
oz	Troy ounce (31.1035g)
ppm	part per million
psia	pound per square inch absolute
psig	pound per square inch gauge
RL	relative elevation
s	second
st	short ton
stpa	short ton per year
stpd	short ton per day
t	metric tonne
tpa	metric tonne per year
tpd	metric tonne per day
US$	United States dollar
USg	United States gallon
USgpm	US gallon per minute
V	volt
W	watt
wmt	wet metric tonne
yd^3	cubic yard
yr	year

3 RELIANCE ON OTHER EXPERTS

This report has been prepared by Roscoe Postle Associates Inc. (RPA) for Energy Fuels Inc. (Energy Fuels). The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Energy Fuels, Denison Mines Corp. (Denison), and other third party sources.

For the purpose of this report, RPA has relied on ownership information provided by Energy Fuels and Denison. RPA has not researched property title or mineral rights for the Property and expresses no opinion as to the ownership status of the Property.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

4 PROPERTY DESCRIPTION AND LOCATION

The property comprising Energy Fuels' Henry Mountains Complex Property is located in eastern Garfield County, Utah, 17 miles north of Bullfrog Basin Marina on Lake Powell and approximately 40 air miles south of the village of Hanksville, Utah. It is situated three miles west of Utah State Highway 276 and approximately five miles north of Ticaboo, Utah (Figure 4-1).

The Henry Mountains Complex Property consists of the Tony M Mine and deposit and the Southwest deposit located in the southwest part of the Property, and the combined Copper Bench–Indian Bench uranium deposit in the east and north part of the Property (Figure 4-2).

The Property consists of one Utah State Mineral Lease for Section 16 Township 35 South Range 11 East (T35S R11E) Salt Lake Meridian (SLM), and 202 unpatented Federal lode mining claims. The latter consist of 137 B.F., 19 Bull, 19 Star, two Frog (comprising the Bullfrog property), 17 TIC and eight Ticaboo claims (including fractions); the TIC and Ticaboo claims being associated with the Tony M deposit. The claims and state lease comprise one contiguous property located in T34S R11E and T35S R11E SLM. The Utah State Section 16 includes 638.54 acres, and the 202 unpatented lode mining claims consist of about 4,305.72 acres. The surface rights are owned by the federal government, administered by the U.S. Bureau of Land Management (BLM), with the exception of the state lease which has associated state surface rights.

The Tony M–Southwest deposit is located in the northern half of T35S R11E SLM and extends into the southern half of T34S R11E SLM. The Copper Bench-Indian Bench deposit trends northwesterly across the southern one-half of the T34S R11E SLM (Figure 4-2).

All of the Henry Mountains Complex Property holdings are reported by Energy Fuels to be in good standing. The annual mining claim holding costs for the Henry Mountains Complex Property for 2012 will be $30,000. All unpatented mining claims are subject to an annual federal mining claim maintenance fee of $140/claim plus approximately

$10/claim for county filing fees. Energy Fuels also indicated that there are no outstanding environmental liabilities for the properties.

Energy Fuels controls a total of 202 unpatented Federal lode mining claims for the Henry Mountains Complex Property. There is no royalty burden for the 185 claims that comprise the Bullfrog property, as well as for the Ticaboo claims. The 17 TIC claims are held by Energy Fuels, subject to an annual advance minimum royalty. The uranium production royalty burden is 4% yellowcake gross value less taxes and certain other deductions. The vanadium production royalty burden is 2% gross value less certain deductions.

The Utah State Lease has an annual rental of $640, plus an escalating annual advance minimum royalty based on the uranium spot price. The uranium royalty is 8% of gross value less certain deductions. The vanadium royalty is 4% of gross value less certain deductions.

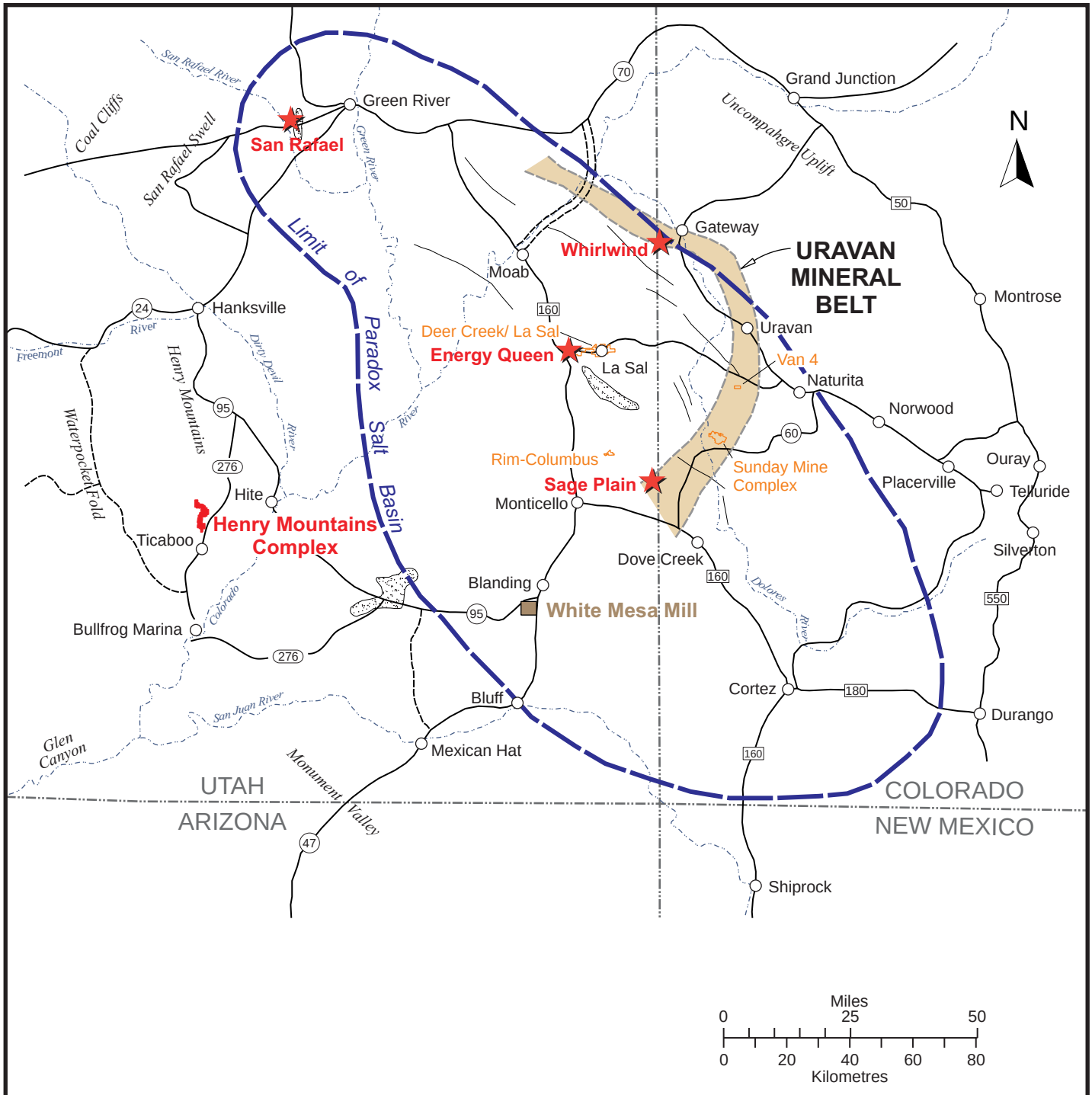


Figure 4-1

Energy Fuels Inc.

Regional Location Map of the Colorado Plateau and Henry Mountains Complex Property

June 2012

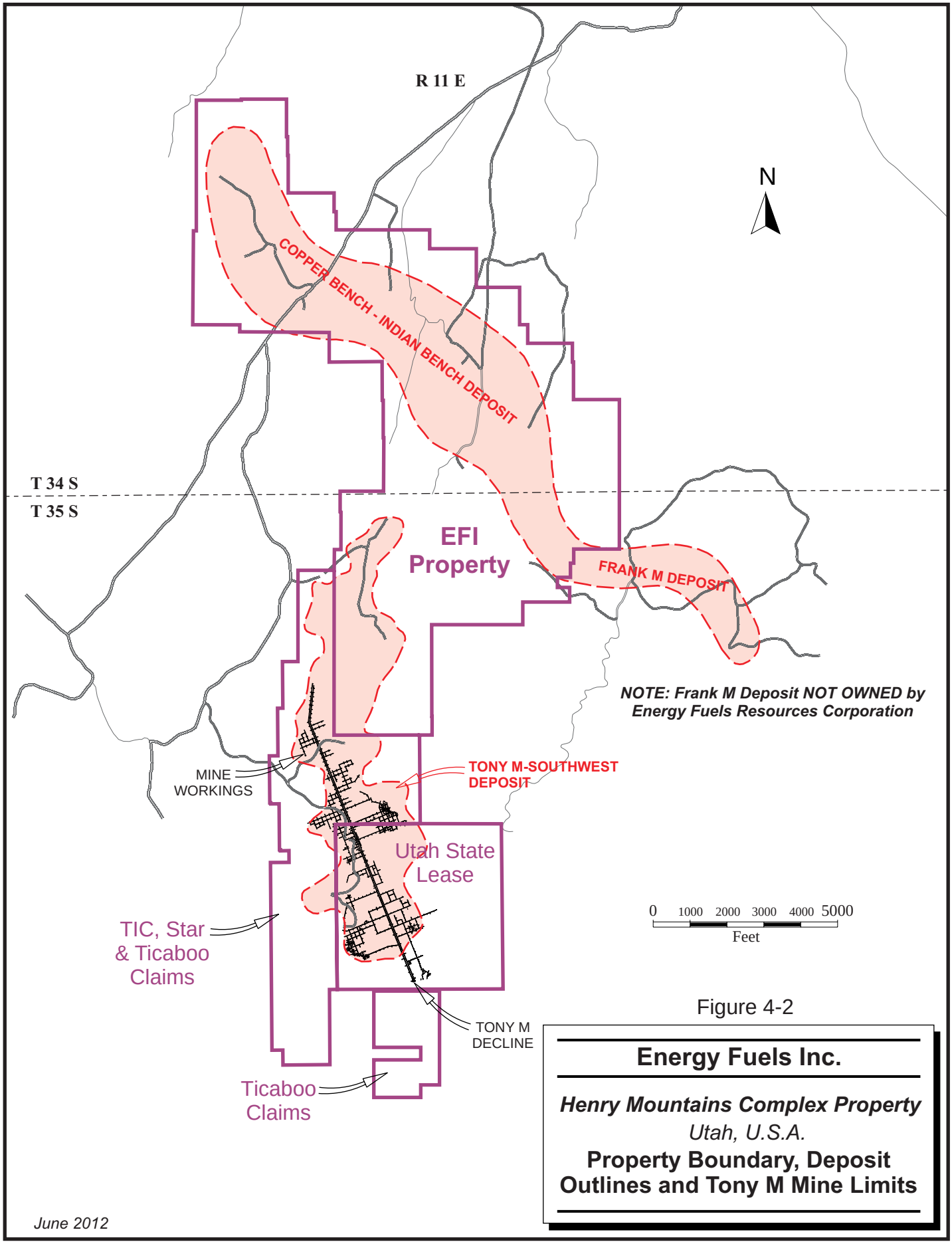


Figure 4-2

Energy Fuels Inc.

Henry Mountains Complex Property

Utah, U.S.A.

Property Boundary, Deposit Outlines and Tony M Mine Limits

June 2012

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Road access to the property is by paved Highway 276, running between Hanksville and Bullfrog Basin Marina, Utah. An unimproved gravel road maintained by Garfield County extends west from Highway 276, passes by the portal of the Tony M Mine, and extends northerly across the property, the northern end of which is crossed by another county road. A network of unimproved, dirt exploration roads provides access over the property except the areas of rugged terrain. The Bullfrog Basin Marina airstrip is located approximately 15 miles south of the project area.

The property is located in a relatively remote area of Utah, and the infrastructure is limited. The town site of Ticaboo, Utah, is located approximately five miles south of Energy Fuels' mineral property. It is used by Energy Fuels to provide housing and municipal services for the Tony M Mine staff. The next closest community is Hanksville, Utah, a small town of a few hundred people, located about 40 miles north of the Property.

During operation of the Tony M Mine, electricity was generated locally, as is the case for Ticaboo. Skilled labour can be recruited from the region, which has a tradition of uranium mining. Materials and supplies are transported to the site by truck about 275 miles from Salt Lake City, and about 190 miles from Grand Junction, Colorado. The distance to the Energy Fuels White Mesa Uranium-Vanadium Processing Facility near Blanding, Utah, is 117 miles.

The climate is distinctly arid, with an average annual precipitation of approximately 8 in., including about 12 in. of snow. Local records indicate the temperature ranges from a minimum of -10^{o}F to a maximum of 110^{o}F. The vegetation consists primarily of small plants including some of the major varieties of blackbrush, sagebrush, and rabbit brush. A few small junipers are also present.

Energy Fuels' Henry Mountains Complex Property deposits are located on the lower southern flank of Mt. Hillers (10,723 ft. elevation), and to the west and northwest of

Mount Ellsworth and Mt. Holmes (7,930 ft. elevation). The land surface slopes south-southwesterly from these mountains to Lake Powell, which has an average elevation of approximately 3,700 ft.

Relief over the combined Henry Mountains Property is approximately 800 ft. The elevation on the property ranges from 4,550 ft. asl at the portal of the Tony M Mine, near the southern end of the property, to 6,800 ft. asl over the northern end of the Property. The terrain is typical canyon lands topography, with some areas deeply dissected by gullies and headwalls of canyons and the rest consisting of gently undulating gravel benches covering the northern part of the project area. The terrain in several parts of the Property is particularly rugged and inaccessible and is the primary reason for the irregular pattern of surface drill holes in parts of the Property.

The Tony M Mine is accessed by a double entry system with two parallel declines spaced 50 ft. apart on centres. The portals of the two 9 ft. high by 12 ft. wide main haulageways are located on the northwesterly side of Shootaring Canyon near the south centre of Section 16 T35S R11E SLM with a sill elevation of about 4,546 ft. asl. The declines follow a minus three percent grade (i.e., 3 ft./100 ft.) along a trend of N22^{o}W. They generally follow the long axis of the mineralized trend and extend approximately 10,200 ft. from the portal. The declines intersected the natural water table about 5,300 ft. from the portal.

Plateau Resources Ltd. (Plateau) developed over 18 miles of underground workings in the Tony M Mine. In 1985, when pumping was suspended, the mine was allowed to flood. When U.S. Energy Corporation (USEC) abandoned the Tony M property in the late 1990s, the portals to the mine were closed and the ventilation shafts were capped as part of mine closure and reclamation activities.

Following rehabilitation work at the Tony M Mine and re-establishment of surface facilities in 2006, Denison received operational permits, reopened the mine and commenced mining in September 2007. Production from exiting workings in the mine ramped up to approximately 400 tons per day by October 2008. In November 2008, Denison announced that the operations at the Tony M Mine would be suspended due to uranium and economic market conditions. Denison announced the Tony M Mine will be

on care and maintenance until it determines that the mine is once again economically viable. The mine continues to be slowly dewatered.

6 HISTORY

During World War I, vanadium was mined from small deposits outcropping in Salt Wash exposures on the eastern and southern flanks of the Henry Mountains. In the 1940s and 1950s, interest increased in both vanadium and uranium, and numerous small mines developed along the exposed Salt Wash outcrops.

In the late 1960s, Gulf Minerals (Gulf) acquired a significant land position southwest of the Henry Mountains Complex Property and drilled about 70 holes with little apparent success. In 1970 and 1971, Rioamex Corporation conducted a 40 hole drilling program in an east-west zone extending across the southerly end of the Bullfrog property and the northerly end of the Tony M–Frank M property. Some of these holes intercepted significant uranium mineralization.

The history of exploration and development of the Bullfrog (including the Southwest deposit) and Plateau properties evolved independently from the mid-1970s until early 2005. The Bullfrog properties were initially explored by Exxon Minerals Company (Exxon), while the Tony M deposit was explored and developed by Plateau, a subsidiary of Consumers Power Company (Consumers) of Michigan. Plateau started exploration east of Shootaring Canyon in about 1974 and drilled the first holes west of the canyon in the Tony M area in early 1977. Development of the Tony M decline and mine started on September 1, 1978. Following extensive development, the mine was put on care and maintenance in mid-1984 as a result of cancellation of Consumers dual Midland, Michigan, nuclear plants. Plateau's Tony M uranium production had been committed to the Midland plants.

Ownership of the Tony M property was transferred from Plateau to Nuclear Fuels Services, Inc. (NFS) in about mid-1990. During its ownership, NFS conducted annual assessment work including drilling and logging of about 39 holes. USEC subsequently acquired ownership of the Tony M property around 1994 and then abandoned it in the late 1990s.

Denison acquired the Bullfrog properties when it purchased most of the assets of Energy Fuels Nuclear Inc. (EFNI) in 1997. EFNI is not the same company as the current owner

Energy Fuels. In February 2005, Denison acquired the former Plateau properties bringing them under common ownership with the Bullfrog properties.

Prior to 2005, all exploration, mine development, and related activities for the two properties were conducted independently. Many historic activities on the Bullfrog and Tony M properties are therefore discussed separately, except where correlations and comparisons are made.

From its evaluation of the two properties, Denison determined that the Tony M and Southwest deposits comprise a continuous zone, with uranium mineralization correlating between the two properties. In addition to providing mining infrastructure, the Tony M Mine is expected to provide access to the contiguous undeveloped Southwest deposit. When the Tony M Mine reopens, Energy Fuels plans to develop a 3,500 ft. extension of the main Tony M drift to the Southwest property and a 600 ft. shaft to hoist mineralized material from the Southwest deposit to the surface.

BULLFROG PROPERTY HISTORY

Exxon conducted reconnaissance in the area in 1974 and 1975, and then staked its first "Bullfrog" claims in 1975 and 1976. A first phase drilling program in 1977 resulted in the discovery of what became the Southwest deposit. Additional claims were subsequently staked and drilling was continued, first by Exxon's Exploration Group, and then by its Pre-Development Group. Several uranium and vanadium zones were discovered in the Southwest and Copper Bench areas, and mineralization exhibiting potential economic grade was also discovered in the Indian Bench area. With the declining uranium markets of the early 1980s, Exxon prepared a prefeasibility report and then discontinued development of the property. Subsequently, Exxon offered the property to Atlas Minerals Corporation (Atlas) in January 1982.

Atlas entered into an agreement to purchase the Bullfrog property from Exxon in July 1982. From July 1982 to July 1983, Atlas completed 112 drill holes delineating the Southwest and Copper Bench deposits on approximately 100 ft. centres. In August, 1983, Atlas commissioned Pincock, Allen and Holt, Inc. (PAH), to conduct a feasibility study for development of the Southwest and Copper Bench deposits. From July 1983 to March 1984, Atlas completed a core drilling program throughout the Bullfrog property, as

well as a rotary drill hole program to delineate the Indian Bench deposit. In November 1983, Atlas renamed the Bullfrog deposits as the "Edward R. Farley Jr. Deposit" (the name is no longer used).

Atlas continued to hold the Bullfrog property until 1990 when a corporate decision was made to consider its sale. During that year, Mine Reserves Associates, Inc. (MRA) Tucson, Arizona, was retained to prepare mineral inventory and mineable reserve estimates for the Indian Bench deposit and incorporate the results into a project-wide reserve base. Steve Milne of Milne and Associates (Milne), a principal engineer for the PAH study, was engaged in November 1990 to update the PAH feasibility study and to complete an optimization study on selected mining/milling scenarios. The completed Milne study was submitted to Atlas in December 1990.

Atlas did not sell the Bullfrog property, and in 1991 returned it to Exxon. In late 1992, EFNI, acting through its subsidiary Energy Fuels Exploration Company, purchased the property from Exxon. EFNI conducted a geologic review and internal economic analysis of the Bullfrog property. In 1997, International Uranium Corp. (IUC) became the owner of the Bullfrog property as part of an acquisition in which IUC acquired substantially all of EFNI's assets. IUC performed no exploration activities on the properties.

On December 1, 2006, IUC combined its operations with those of Denison Mines Inc. (DMI) and DMI became a subsidiary of IUC. IUC was then renamed Denison.

TONY M PROPERTY HISTORY

Exploration drilling in the Shootaring Canyon area was initiated by Plateau during the mid-1970s in the vicinity of small mine workings and outcropping uranium mineralization east of the canyon. In February 1977, drilling commenced in what was to become the Tony M Mine. Subsequently, Plateau drilled more than 2,000 rotary drill holes totalling about 1,000,000 ft. Over 1,200 holes were drilled in the Tony M area and about 700 holes were completed on the Frank M trend.

The Frank M deposit is located about 1.5 miles to two miles to the northeast of the Tony M deposit and extends off the Henry Mountains Complex Property from the Copper Bench-Indian Bench deposit. While reference is made in this report to the Frank M

deposit to provide additional information on the geologic setting of Energy Fuels' Henry Mountains Complex Property, the Frank M deposit is not located on the Energy Fuels property. Furthermore, none of the uranium resources described in this Technical Report is attributable to the Frank M deposit. Section 15 Adjacent Properties gives additional information.

Development of the Tony M Mine started in June 1977, and by September 1, 1977, the mine portals were complete and underground development of the twin haulage ways was initiated. By mid-1984, when work on the mine was suspended, about 18 miles of underground workings had been developed including two parallel 10,200 ft. declines trending N22ºW developed from the west wall of Shootaring Canyon. Figure 4-2 shows a map of the limits of development in the Tony M Mine completed by Plateau.

HISTORICAL PRODUCTION FROM THE TONY M MINE

The Tony M Mine was originally developed by Plateau to provide a nuclear fuel supply to its parent company Consumers Power Company of Michigan. Exploration drilling began in 1976. After confirming the presence of uranium mineralization averaging 0.15% U_3O_8, underground development began in September 1977.

Plateau developed the Shootaring Canyon Uranium Processing Facility (Ticaboo Mill) located about four miles south of the Tony M portals. Operational testing first started at the Ticaboo Mill on April 13, 1982, and the mill was declared ready for operation on June 1, 1982. Before shutdown on August 18, 1982, a total of about 27,267 pounds U_3O_8 were recovered from Tony M ore (Plateau, 1982 Annual Report). Some part of the stockpile of uranium bearing material from the Tony M Mine was trucked to the Ticaboo Mill. The details, however, were not available to RPA.

In 2007, the Ticaboo Mill was purchased by Uranium One Inc. from USEC.

In 1989, NFS entered into an agreement to acquire the Tony M property from Plateau. During its tenure, NFS conducted various investigations including delineation drilling and geologic analysis of the property. The report documenting a "Geologic analysis of the uranium and vanadium ore reserves in the Tony M Orebody" was prepared for NFS by Nuclear Assurance Corporation (NAC, 1989). Drilling by NFS on the Tony M property, consisting of 39 rotary holes, was targeted to delineate zones of high grade uranium

mineralization. In addition, with the cooperation of NFS, BP Exploration Inc. drilled one stratigraphic core hole (91-8-14c) on the northern Tony M property in 1991 (Robinson & McCabe, 1997).

In about 1994, USEC of Riverton, Wyoming, then owner of the Ticaboo Mill (which it had acquired from Plateau), entered into an agreement to acquire the Tony M Mine and Frank M deposit from NFS. USEC held the mineral properties until the late 1990s when the company abandoned them because of the continued low uranium market prices. About that time, USEC conducted a program to close the Tony M Mine and reclaim disturbed surface areas. This included backfilling the portals and capping the mine vent holes. The buildings and structures were removed and the terrain was reclaimed and recultivated.

In February 2005, the State of Utah offered the Utah State Mineral Lease covering Section 16 T35S R11E, SLM, for auction. Both the portal of the Tony M Mine and the southern part of the Tony M deposit are located on this state section. IUC was the successful bidder, and the State of Utah leased Section 16 to IUC. Subsequently, IUC entered into an agreement to acquire the TIC unpatented mineral claims located between Section 16 and the Bullfrog property claims.

The Tony M Mine was developed with a double entry system by two parallel declines spaced 50 ft. apart. The declines measure 9 ft. by 12 ft. in cross-section, have crosscuts on 50 ft. centres, have a minus 3% grade, serve as the primary fresh air intake, and are 10,200 ft. in length.

Access to the individual mining areas is through 8 ft. by 10 ft. laterals driven at right angles to the mine entries. The laterals also provide access for long-hole drilling and detailed information for mine planning and stope development. The mine is planned as a random room and pillar operation with pillar extraction by a retreat system. The pillars are 136 ft. by 136 ft. and form a conventional room and pillar pattern. Plateau completed a total of 90,000 linear feet of room development, outlining as pillars a major part of the known potential ore. During the period April 1982 to December 1982, a test stope covering an area 260 ft. by 260 ft. was mined in the southeastern part of the Tony M deposit in Denison's Mining Blocks E and P producing some 22,500 tons at 0.134% U_3O_8 with no apparent problems (Plateau Annual Report, January 26, 1983).

Mining equipment consisted of slushers and rubber-tired, five- to ten-ton capacity load-haul-dump (LHD) units. A 36 in. wire rope conveyor was planned for installation in 1985 to transport ore and waste up the decline to storage bins outside the portal of the mine. Exhaust ventilation was provided by five bored ventilation shafts, six feet in diameter, each with a 75-HP exhaust fan mounted at the shaft collar.

Plateau operated the Tony M Mine from September 1, 1978, until April 1984. Denison operated the mine from September 2007 to November 2008. As noted above in Section 6 History, some of the Denison production was from the Tony M Mine and some was from previously mined stockpiled material.

Production history for the Tony M Mine is shown in Table 6-1.

TABLE 6-1 HISTORICAL PRODUCTION AT TONY M
Energy Fuels Inc. – Henry Mountains Complex Property

Operator	Period of operation	Tons produced	Average grade	Contained pounds U_3O_8
Plateau	Sept. 1979 to April 1984	237,000	0.121% U_3O_8 (chemical)	574,500
Denison	Sept. 2007 to Dec. 2008	162,384	0.131% eU_3O_8	429,112

During development of the Tony M Mine by Plateau, water inflows in the order of 100 gpm were pumped to the surface for disposal in an evaporation pond. Estimates of inflow to the Southwest and Copper Bench mines, if developed, indicate that simultaneous maximum inflows to both fully developed mines should not exceed 126 gpm.

RECENT MINING

By early 2007, work on reactivating the Tony M Mine was carried out by Denison, and surface and underground rehabilitation and repairs were conducted. The Environmental Assessment for the BLM Plan of Operations was approved in September 2007; prior to that time, limited site work was conducted under an exploration permit, which allowed for reopening of the mine portals and assessing mine conditions.

Surface facilities to support mine operations were constructed, including administration and maintenance facilities, site power and communications, an evaporation pond for disposal of mine water. Worker housing was established in the town of Ticaboo, Utah.

As rehabilitation work advanced in the mine, ventilation was re-established. The water level in the mine had risen to historic pre-mine levels, and upon reaching the flooded workings, mine dewatering was also initiated. During the rehabilitation work, limited amounts of "cleanup ore" were removed. As areas of the mine were made ready for mining, production increased steadily.

Denison commenced dewatering of the Tony M Mine in December 2007 when the static water level stood at about 4,405 ft. asl. Dewatering continued at an average rate of 125 gpm during operation, and by February 2009 the water level in the mine stood at about 4,350 ft. asl.

There are no perennial streams in the vicinity of the Henry Mountains Complex area, but there are ephemeral streams all of which flow in response to snow melt and rainfall. In the western part of the property area, primary surface waters flow from a series of seeps and springs at the base of the Tununk shale, which is located above the Morrison Formation (Figure 7-4). The major regional water source is provided by wells developed in the Jurassic-Triassic Navajo sandstone aquifer. The Navajo Sandstone is located at a depth of about 1,800 ft. in the Bullfrog property area, placing it about 1,000 ft. below the Salt Wash uraniferous zones.

From November 2007 to December 2008, a total of 162,384 tons at 0.131% eU_3O_8 containing 429,112 pounds U_3O_8 were trucked to the White Mesa Mill at Blanding, Utah, for processing. Of this material, 90,025 tons at 0.165% eU_3O_8 (297,465 pounds) were extracted by Denison from the Tony M Mine and 72,359 tons at 0.091% eU_3O_8 (131,647 pounds) came from stockpiled material mined by previous operators.

Denison placed the Tony M Mine on temporary closure status at the end of November 2008. The mine is on care and maintenance, and mine dewatering is continuing. At the time of temporary closure, the Tony M Mine was producing approximately 400 tons per day, with a plan to increase daily tonnage to 600 tons. The mine is being maintained in

a state ready to resume operations when uranium prices improve. Mine supervisory staff have been retained at the site to keep the mine in a ready state.

HISTORICAL MINERAL RESOURCES

A number of Mineral Resource estimates have been carried out in the past on the Tony M, Southwest, Copper Bench, and Indian Bench deposits. None of these are considered relevant by RPA and they have been superseded by the current Mineral Resource estimates in this Technical Report.

VANADIUM STUDIES

HISTORIC VANADIUM PRODUCTION

The V_2O_5/U_3O_8 ratio for the vanadium-uranium deposits for Henry Mountains is routinely reported as 5:1 based on U.S. Atomic Energy Commission production records of 18,300 tons for the period 1956-1965. Focusing only on the South Henry Mountains (also known as the Little Rockies) mining district, the V_2O_5/U_3O_8 ratio is markedly lower at 1.8/1. This value is also based on production records for the period 1956-1965, comprising about 6,900 tons produced from several small mines all located within a few miles of the Tony M Mine portal (Doelling, 1967).

Various evaluations of the vanadium content in both the Southwest and Tony M deposits have been conducted. The results for the Southwest deposits are based solely on 18 samples from the 15 core holes drilled by Exxon and Atlas. Evaluations for the Tony M are based on composite samples from 55,234 tons of mineralized muck produced from the Tony M deposit and sampled at the mine portal, as well as samples from 11 core holes, and extensive muck and chip sampling from the underground workings.

Determining the concentration of vanadium in a deposit is much more costly and time-consuming than making the equivalent determination for uranium. While indirect determinations of the uranium content may be efficiently made at low cost using gamma logging, chemical analysis is the only way to determine the vanadium content.

Northrop and Goldhaber (1990) established that the relationship between the uranium and vanadium mineralization in the Tony M and Frank M deposits was not a simple one.

Vanadium enrichment in the mineralized intervals occurred over a thicker interval than uranium. Northrop and Goldhaber (1990) found that while uranium and vanadium often reached their maximum concentration at the top of each uranium-bearing horizon, the vertical distribution of vanadium was frequently distinct from uranium.

RPA's review of sample data shows that there is a clear tendency for higher grade uranium to be associated with higher grade vanadium; however, the relationship is somewhat erratic and high grade uranium samples frequently have low concentrations of vanadium.

TONY M SAMPLING PROGRAM FOR VANADIUM

In making this evaluation, RPA used information from Denison's files for the Tony M deposit. Throughout the period of development of the Tony M Mine, Plateau conducted several sampling programs to estimate the vanadium content in the Tony M deposit. The programs include sampling and analyzing drill core, underground muck and rock chips, and a longer term program to assay composite samples collected at the mine portal as material was trucked from the mine.

Based on a review of monthly production reports for October 1982 through August 1983, plus January 1984, together with analyses of uranium and vanadium of composite samples, RPA found that 55,234 tons of muck produced from the central part of the mine (Blocks B, E, F, and S) had an average of 0.222% V_2O_5 and 0.133% chemU_3O_8 with a weighted V/U ratio of 1.66. This included 31,049 tons (56%) of the muck produced in nine months from Block B averaging 0.256% V_2O_5 with a weighted V/U ratio of 1.59. The balance of 24,185 tons was produced from blocks E, F, and S.

RPA did not have information to identify whether the samples originated from the Lower Lower or the Upper Lower units of the Lower Salt Wash interval.

RPA is of the opinion that the V_2O_5:U_3O_8 ratio of 1.66:1 for the composite bulk samples collected over the period October 1982 to January 1984 from 55,234 tons of rock mined is representative for the areas sampled. Furthermore, this average of 1.66:1 is the most reliable estimate of the V_2O_5:U_3O_8 ratio for the Tony M deposit. RPA agrees with EFNI that vanadium is not presently technically and economically recoverable from the Tony M deposit.

BULLFROG PROPERTY – VANADIUM

As indicated above, the only sample analyses available to provide an indication of the content of vanadium in the Southwest and Copper Bench-Indian Bench deposits are from core drilling. In November 1983, Atlas (Rajala, 1983, see Section 9 of this report) analyzed a composite sample based on 104 (from 16 drill holes) core intervals. The composite sample gave a V_2O_5:U_3O_8 ratio of 1.1 for the Southwest deposit. The ratio is based on an average uranium grade of 0.35% U_3O_8.

Milne (1990) provides a summary of the results of an analysis of V_2O_5:U_3O_8 ratios prepared by Atlas based on 15 samples from the Southwest deposit (Table 6-2). The average V_2O_5:U_3O_8 ratio ranges from 1.313 to 3.078 for the three levels – Upper, Middle and Lower – and averages 2.450:1. Milne then uses results from this table to estimate the grade and amount of vanadium in the Southwest deposit. RPA did not have access to the initial data from which the table had been developed.

TABLE 6-2 SOUTHWEST PROJECT - V_2O_5 : U_3O_8 RATIOS BY ATLAS
Energy Fuels Inc. – Henry Mountains Complex Property

Deposit	Zone	V_2O_5:U_3O_8	Variance	Std. Dev.	# Samp.
Southwest	U	3.078 : 1	20.935	4.576	11
	M	1.530 : 1	0.000	0.000	1
	L	1.313 : 1	0.343	1.585	3
Deposit Weighted Average		**2.450 : 1**			**Total: 15**

In 1991, EFNI (EFNI, 1991) conducted an evaluation of composite mineral zones from all of the 18 samples from 32 core holes drilled on the Southwest deposit. This included a review of the Atlas results in Table 6-2 above. Following the review, EFNI observed that the results in Table 6-2 were based on an erroneous comparison of raw data. Therefore, they rejected the inference of Atlas' report that the average V_2O_5:U_3O_8 ratio for the Bullfrog Project was about 3:1.

This analysis (EFNI, 1991) indicated a V_2O_5:U_3O_8 ratio for the Southwest deposit of 1.6:1.0 at a thickness of one foot of 0.10% eU_3O_8 cut-off; and a ratio of 1.29:1.0 at a 0.80 GT cut-off (Table 6-3).

TABLE 6-3 SOUTHWEST DEPOSIT - V_2O_5 : U_3O_8 RATIOS BY EFNI
U_3O_8 GT Cut-off = 0.80 ft.%
Energy Fuels Inc. – Henry Mountains Complex Property

Deposit	Zone	V_2O_5:U_3O_8	Number of Intercepts
Southwest	U	1.59 : 1	9
	M	1.25 : 1	6
	L	0.85 : 1	3
Deposit Average		1.29 : 1	**Total: 18**

From EFNI, 1991

Based on these results, EFNI (1991) concluded that it was uneconomic to recover vanadium from the Bullfrog property. They also observed that the V_2O_5: U_3O_8 ratio was highly variable from deposit to deposit, zone to zone, and intercept to intercept. They indicated that it was "…most important that many of the very good vanadium intercepts do not contain mineable uranium values".

Their observations on the variability of vanadium concentration within the uranium bearing zones are consistent with the findings of the Northrop and Goldhaber (1990) discussed under Mineralization in Section 7. In addition, the ratios found in their analyses are somewhat similar to the ratios determined by Rajala (1983) for composite samples for the Southwest, Copper Bench and Indian Bench deposits, as discussed above.

RPA is of the opinion that, based on the information available, the EFNI (1991) findings are the most relevant and provide a reliable estimate of the V_2O_5:U_3O_8 relationship in the Bullfrog property deposits. RPA agrees with EFNI that vanadium is not presently technically and economically recoverable from the Bullfrog property deposits.

7 GEOLOGICAL SETTING AND MINERALIZATION

REGIONAL GEOLOGY

The Henry Mountains Complex uranium deposits occur within the Salt Wash Member of the Morrison Formation. This formation is located within the Colorado Plateau (Figure 7-1). The dominant feature of the geologic history of the Colorado Plateau has been its comparative structural stability since the close of the Precambrian time. During much of the Paleozoic and Mesozoic time, the Colorado Plateau was a stable shelf without major geosynclinal areas of deposition, except during the Pennsylvanian when several thousand feet of black shales and evaporates accumulated in the Paradox Basin of southwestern Colorado and adjacent Utah.

Folding and faulting of the basement during the Laramide orogeny of Late Cretaceous and Early Tertiary time produced the major structural features of the Colorado Plateau. Compared to the adjacent areas, however, it affected the plateau only slightly. The nearly horizontal strata were gently flexed, producing the uplifts and basins indicated in Figure 7-2.

Early Tertiary fluvial and lacustrine sedimentation within the deeper parts of local basins was followed in mid-Tertiary time by laccolithic intrusion and extensive volcanism. Intrusions of diorite and monazite porphyry penetrated the sediments at several sites to form the laccolithic mountains of the central Colorado Plateau. Dikes and sills of similar composition were intruded along the eastern edge of the plateau, probably in Miocene time. Faulting along the south and west margins of the plateau was followed by epirogenic uplift and northeastward tilting of the plateau and by continuing erosion which has shaped the present landforms.

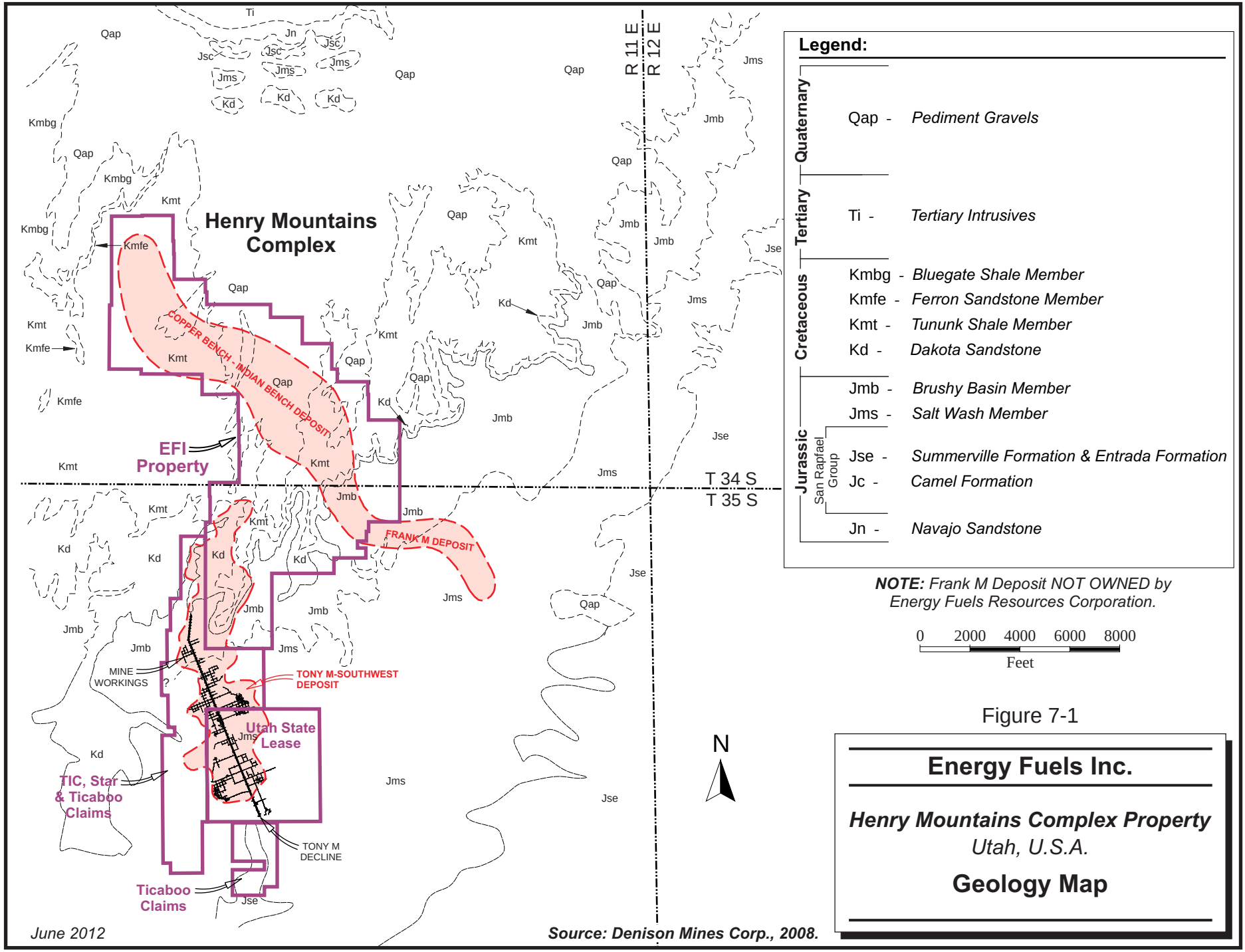


Figure 7-1

Energy Fuels Inc.

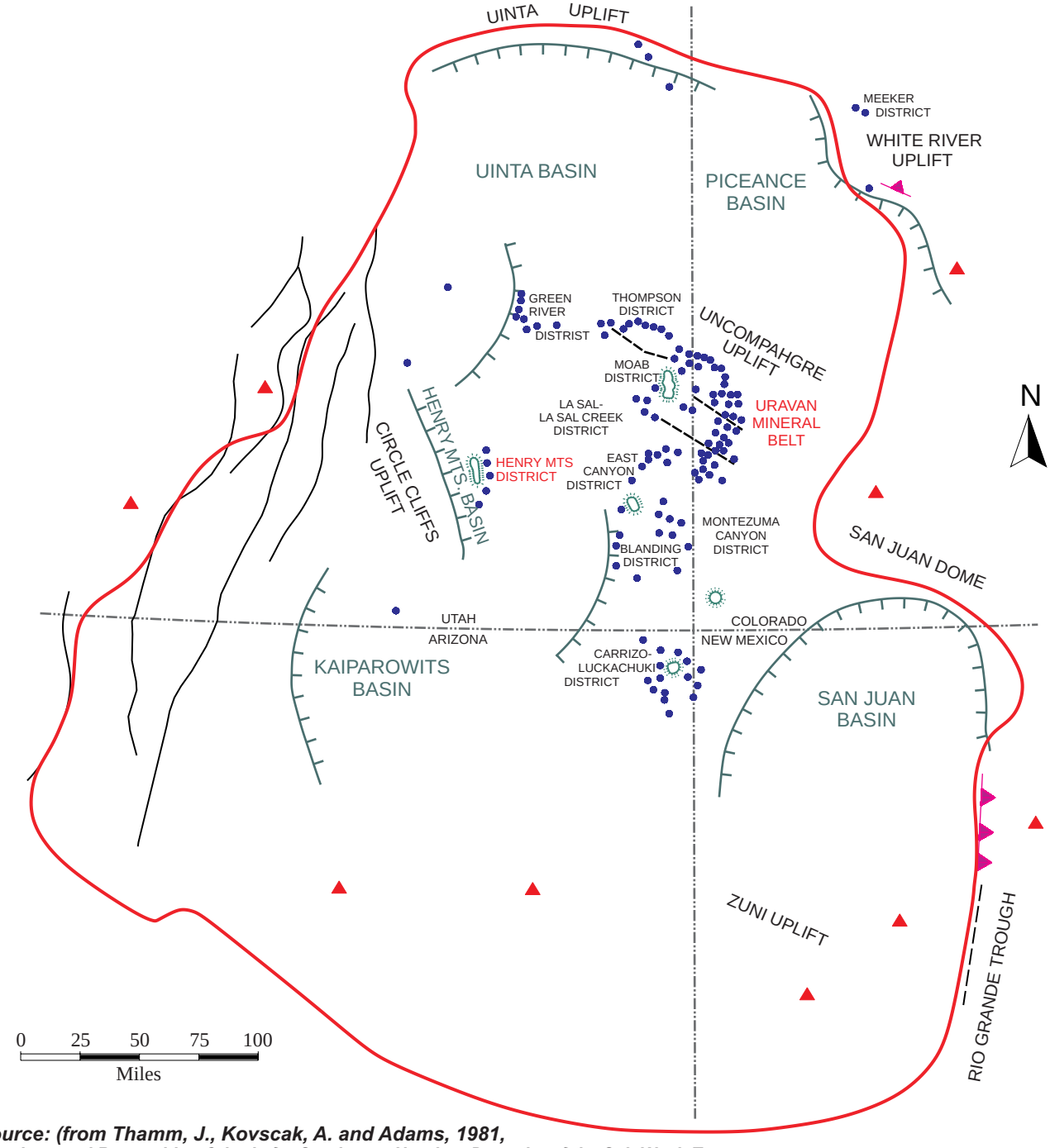
Henry Mountains Complex Property

Utah, U.S.A.

Geology Map

June 2012

Source: Denison Mines Corp., 2008.



Source: (from Thamm, J., Kovscak, A. and Adams, 1981, "Geology and Recognition Criteria for Sandstone Uranium Deposits of the Salt Wash Type, Colorado Plateau Province Final Report", Prepared for U.S,D.O.E., GJBX-6(81))

Legend:

- *Monoclinal Flexure Showing Dip*
- *Axis of Salt Anticline*
- *High-Angle Reverse Fault Showing Upthrown Side*
- *Normal Fault*
- *Uranium Deposit in Salt Wash Member of Morrison Formation*
- *Approximate Centre of Volcanic Field*
- *"Laccolithic" Mountain*

June 2012

Figure 7-2

Energy Fuels Inc.

Henry Mountains Complex Property
Utah, U.S.A.
Colorado Plateau Geology & Deposits Locations

MORRISON FORMATION

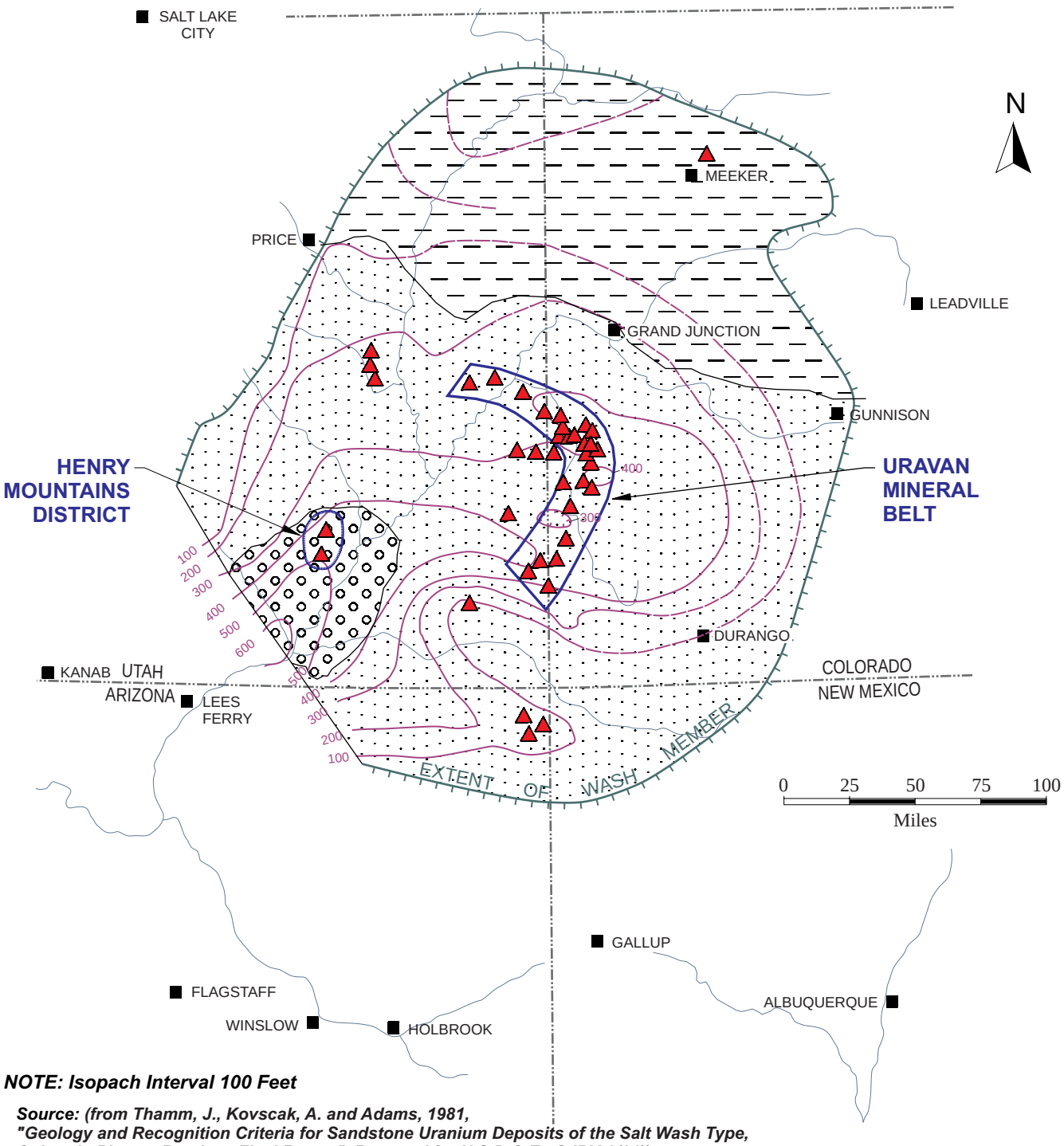
The Morrison Formation is a complex fluvial deposit of Late Jurassic age that occupies an area of approximately 600,000 square miles, including parts of 13 western states and small portions of three Canadian provinces, far to the north and east of the boundary of the Colorado Plateau.

With the exception of the Tidwell Member, which underlies the Salt Wash Member in some districts, in the areas of major Salt Wash uranium production in Colorado and Utah, the Morrison Formation consists of only the Salt Wash and the conformably overlying Brushy Basin Member.

SALT WASH MEMBER

The Salt Wash Member is subdivided into three major facies, as shown in Figure 7-3, an isopach and facies map of the Salt Wash. Uranium-vanadium orebodies have been found in each of the three facies, but the great majority of ore has been mined from the interbedded sandstone and mudstone facies. In outcrop, the Salt Wash is exposed as one or more massive, ledge-forming sandstones, the number varying from one district to another. Closer to the source areas, as in Arizona, the Salt Wash is mainly a massive sandstone or conglomeratic sandstone broken only by a few, thin interbeds of siltstone or clay. Farther from the source areas, as in the area of the Uravan mineral belt, three or more discontinuous sandstone ledges are common, generally interbedded with approximately equal amounts of thick, laterally persistent siltstones or mudstones.

The sandstones of the Salt Wash have been classified as modified or impure quartzite, ranging from orthoquartzite to feldspathic or tuffaceous orthoquartzite. Carbonate cement is a relatively common component in the Salt Wash. The sandy strata of the Salt Wash Member contain many mineable concentrations of uranium throughout the Henry Basin, most of which are relatively small. The Henry Mountains deposits of Energy Fuels, together with adjoining deposits, constitute the largest Salt Wash-hosted uranium concentration on the Colorado Plateau.



NOTE: Isopach Interval 100 Feet

Source: (from Thamm, J., Kovscak, A. and Adams, 1981, "Geology and Recognition Criteria for Sandstone Uranium Deposits of the Salt Wash Type, Colorado Plateau Province Final Report", Prepared for U.S,D.O.E., GJBX-6(81))

Figure 7-3

Legend:

- *Conglomerate Sandstone Facies*
- *Sandstone and Mudstone Facies*
- *Mudstone and Lenticular Sandstone Facies*
- *Location of Major Uranium-Vanadium Deposits*
- *Isopach Line, Dashed Where Inferred*
- *Extent of Salt Wash Member*

June 2012

Energy Fuels Inc.

Henry Mountains Complex Property

Utah, U.S.A.

Salt Wash Member Isopachous and Facies Map

LOCAL AND PROPERTY GEOLOGY

The Henry Mountains Complex Property is situated in the southeastern flank of the Henry Mountains basin, a subprovince of the Colorado Plateau physiographic province. The Henry Mountains Basin is an elongate north-south trending doubly plunging syncline in the form of a closed basin (see Figure 7-2). It is surrounded by the Monument Uplift to the southeast, Circle Cliffs Uplift to the southwest, and the San Rafael Swell to the north. The regional and local geology of the Henry Mountains Basin vanadium-uranium deposits has been the subject of intensive research by staff of the U.S. Geological Survey (USGS) as well as other workers, referenced below. The following descriptions follow Northrop and Goldhaber (1990).

The properties are located to the south of Mt. Hillers (10,723 ft.) and to the northwest of Mount Ellsworth and Mt. Holmes (7,930 ft.). Figures 7-4, 7-5 and 7-6 are a geologic map and stratigraphic section of the project area. Exposed rocks in the project area are Jurassic and Cretaceous in age. Host rocks for the Copper Bench-Indian Bench and Tony M-Southwest uranium-vanadium deposits are Upper Jurassic sandstones of the Salt Wash Member of the Morrison Formation. In addition, a minor portion (i.e., a few percent) of the Tony M uranium mineralization occurs in the uppermost section of the underlying Tidwell Member (PAH, 1985).

STRUCTURAL GEOLOGY

The structural geology of the project area reflects a gentle westward dip off the Monument Uplift, toward the axis of the Henry Mountains Basin, except where the strata have been influenced by the adjacent Mount Hillers and Mount Ellsworth intrusive igneous bodies. Figure 7-7 is a structural contour map of the Henry Mountains area. As a result, dips in the vicinity of the Tony M deposit are characterized by a gentle dip from two to five degrees to the west. Dips in the vicinity of the Southwest deposit vary from one to two degrees to the west and northwest. The Copper Bench-Indian Bench deposit dips a few degrees to the west and southwest.

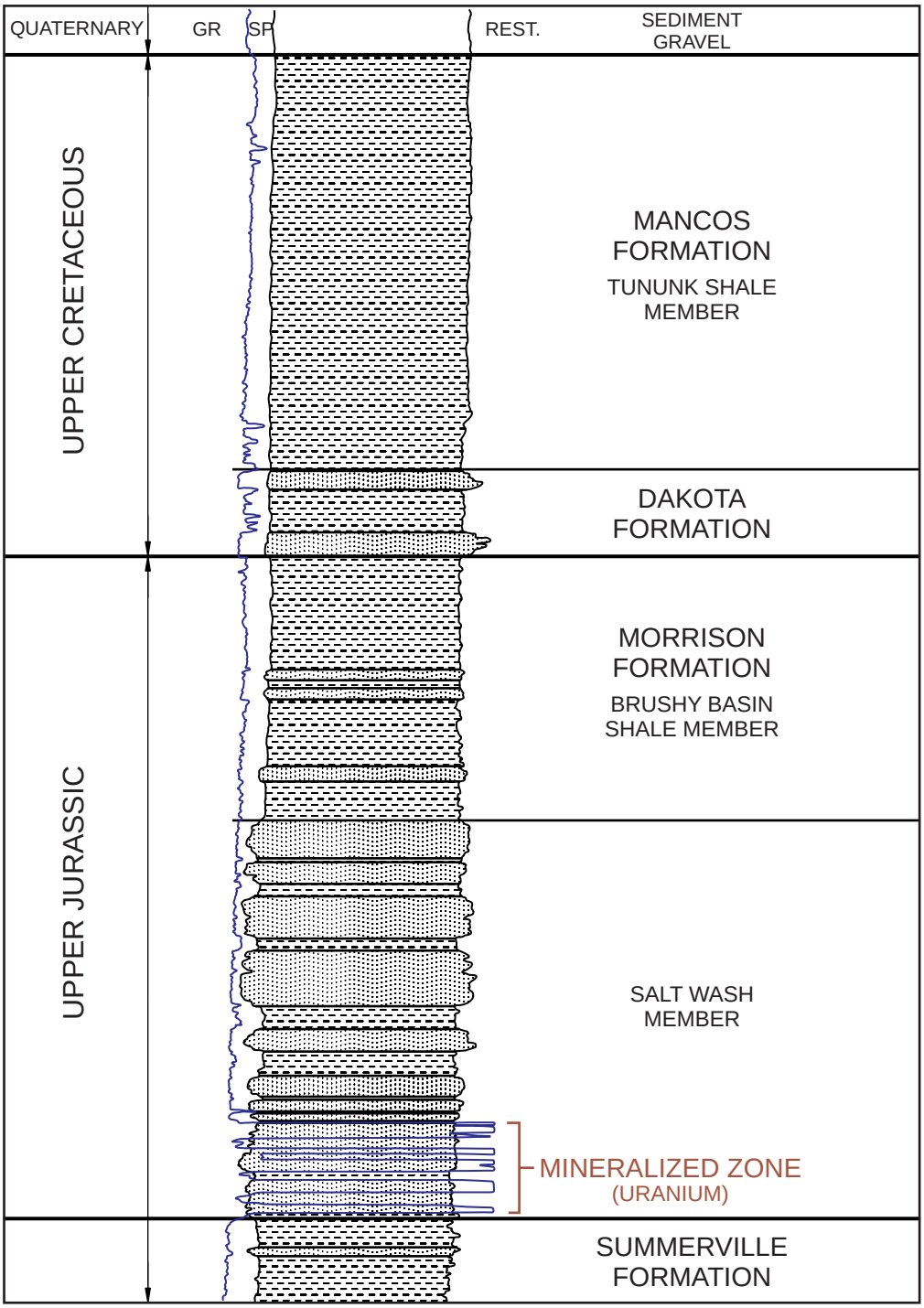


Figure 7-4

Legend:

	Shale	GR	*Gamma Radiation*
	Sandstone	SP	*Self potential*
		REST.	*Resistivity*

Energy Fuels Inc.

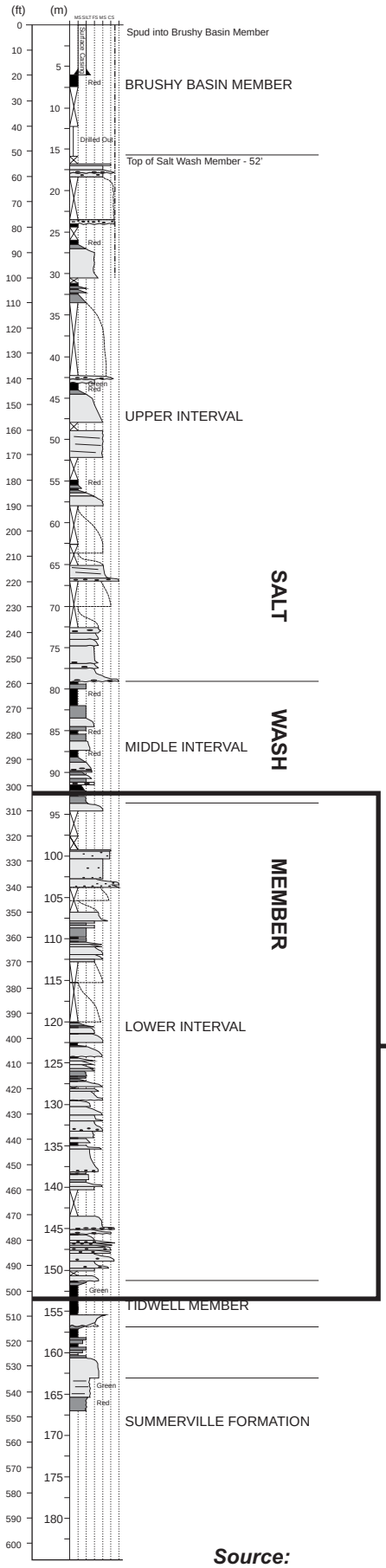
Henry Mountains Complex Property
Utah, U.S.A.

Henry Mountains Complex
Representative Stratigraphic Section

June 2012

Source: Atlas, 1991.

Log of
Core Hole
91-8-14c



Source:
Robinson J.W., 2009, Pers. Comm.

June 2012

Figure 7-5

Energy Fuels Inc.

Henry Mountains Complex Property

Utah, U.S.A.

Measured Stratigraphic Section of Salt Wash Member (Salt Wash Core Hole 91-8-14c)

Log of Core Hole 91-8-14c

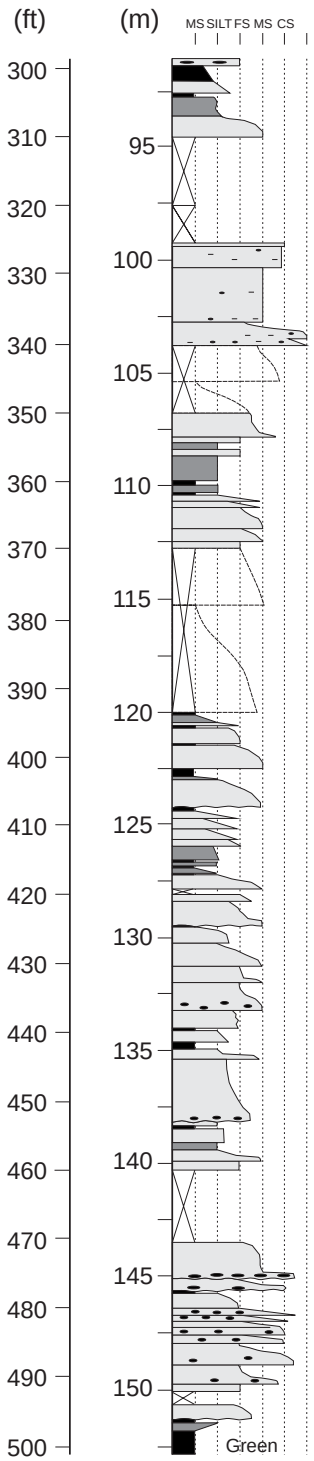


Figure 7-6

Energy Fuels Inc.

Henry Mountains Complex Property

Utah, U.S.A.

Measured Stratigraphic Section of the Lower Interval of Salt Wash Member of Attached Log of Core Hole 91-8-14c

June 2012

Source: Robinson J.W., 2009, Pers. Comm.

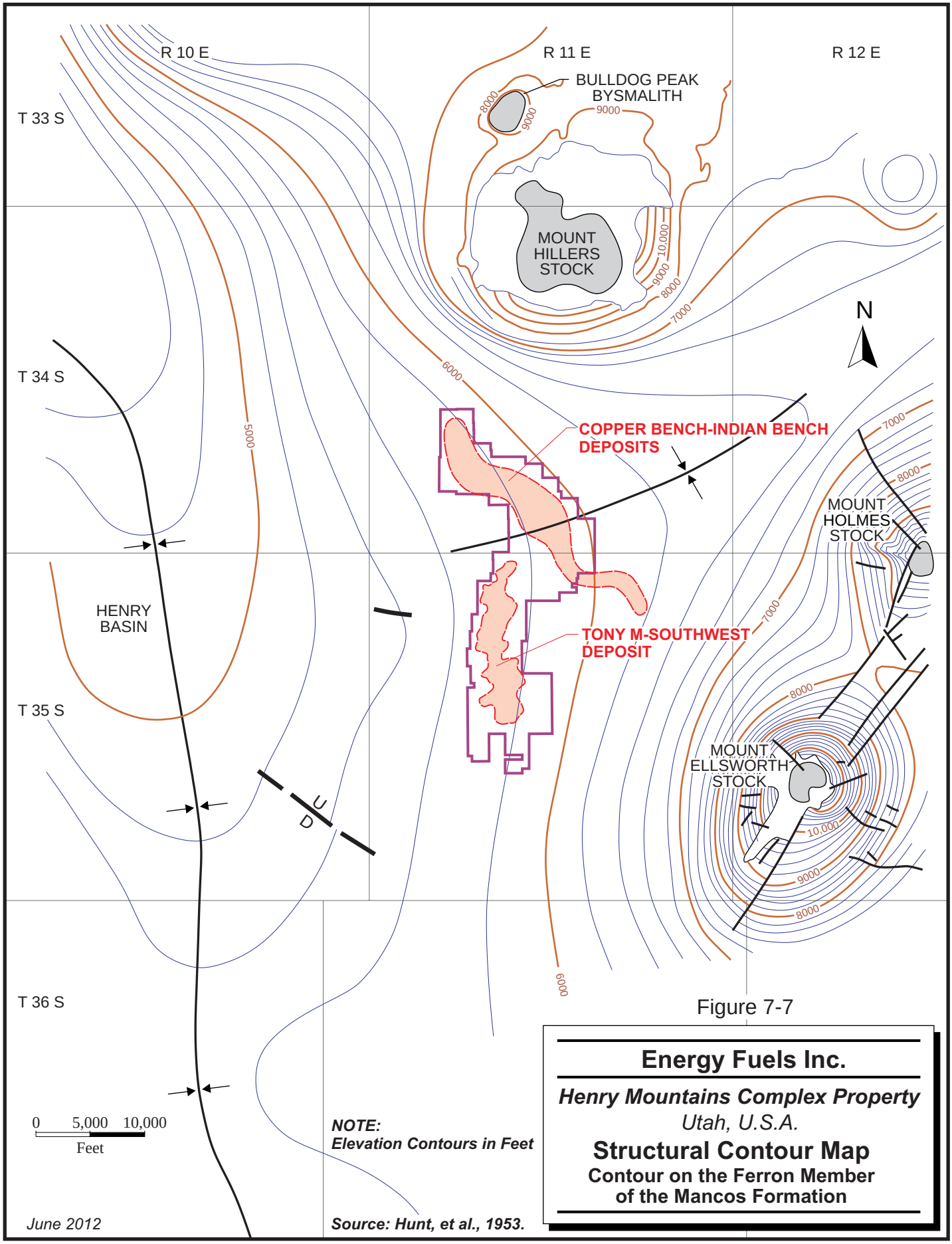


Figure 7-7

Energy Fuels Inc.

Henry Mountains Complex Property

Utah, U.S.A.

Structural Contour Map

Contour on the Ferron Member of the Mancos Formation

FAULTS AND JOINTING

No faulting was detected during underground development of the Tony M Mine workings. In contrast, minor faulting is reported to be present in the vicinity of the southern part of the Copper Bench–Indian Bench deposit.

Plateau personnel mapped fractures and joints using aerial photos in the vicinity of the Tony M Mine as well as through underground mapping in the mine. Joint spacing averages about 1.5 ft., but varies significantly from area to area. Observations of joints in outcrop and underground indicate that they are confined to, or are well developed in, sandstone units with little or no development in mudstone or shale units. Both the strike and dip of individual joints remain relatively constant, with normal variations of less than to 5º to 10º.

The results indicate that the joint pattern in the vicinity of the mine is characterized by vertical to steeply dipping joints with a northwesterly strike. A second northeasterly striking vertical to steeply dipping set is weakly developed, both in terms of the frequency of occurrence, which is less than 10% of total joints, and the degree of continuity. Within the southern part of the Tony M Mine, nearly all joints strike between N30°W and N70ºW and 50% of the joints strike between N45ºW and N55ºW. Within the northern third of the mine, the predominant strike of joints moves clockwise, with most joints striking between N18ºW and N25ºW.

RPA has no information on jointing in the Southwest deposit. The pattern of joint development in and around the Tony M is similar to the regional pattern in the southern Henry Mountains (Underhill et al., 1983).

HOST SANDSTONES

In the southern Henry Basin, including the Henry Mountains Complex Property, the Salt Wash Member ranges from 400 ft. to 510 ft. thick. In the northern part of the Tony M deposit, core hole 91-8-14c intersected 444 ft. of the Salt Wash Member. The lower Salt Wash sandstones are finer grained, while the upper Salt Wash sandstones consist of more coarse grained clastics. The lower Salt Wash is approximately 150 ft. thick in the Property area, thinning and becoming less sandy northward from the project area. Sandstones comprise 80% of the sequence, with siltstones and mudstones making up

the remainder. Significant uranium mineralization occurs only in this lower unit. Figure 7-4 shows a representative stratigraphic section from the Property.

The Tony M deposit is developed in the lowermost 35 ft. to 40 ft. of the Salt Wash, while mineralization in the Southwest deposit reaches 60 ft. above the Salt Wash Member base. The sand sequence occurring in the Tony M deposit also occurs in the Southwest deposit. Mineralization of the Frank M deposit occurs between 60 ft. and 100 ft. above the base of the Salt Wash Member and is correlative with the Copper Bench–Indian Bench deposit.

The lower 100 ft. of the Salt Wash Member have been subdivided into an upper and a lower unit, and each of these subunits, in turn, have been subdivided into upper, middle, and lower horizons. The Tony M–Southwest deposit occurs in the lower, middle, and upper mineralized horizons of the lower 40 ft. thick sand unit. Each of the horizons is 10 ft. to 15 ft. thick. The analysis of the mineralization, however, shows that a high percentage of the mineralization occurs within two units designated in this report as the Lower Lower and the Upper Lower units, with the Middle Lower unit included in the Upper Lower unit. The Copper Bench–Indian Bench deposit occurs in the upper, middle, and lower horizons of the Upper unit (i.e., 60 ft. to 100 ft. above the base).

PETROGRAPHIC DESCRIPTION

The framework minerals of the Salt Wash host beds for the Tony M deposit are predominantly quartz, (averaging 70% to 79% of the rock) with minor, variable amounts of feldspar (ranging from 1% to 14%, and averaging 4%). Rock fragments average about 7%, but range from 1% to 60%. Accessory minerals form about 2% or less of the rock. The sandstones are classified as modified or impure quartzite, ranging from orthoquartzite to feldspathic orthoquartzite.

In and near the Tony M Mine, the Salt Wash sandstone is cemented by carbonate and silica and/or clay minerals that average about 17% of the total volume of the samples studied. Calcite is the most common carbonate. In the mineralized zones, the proportionate of clay minerals increases and the amount of carbonate decreases. The carbonate in the mineralized zone is also marked by the presence of dolomite.

Organic carbon commonly occurs in the concentration of 0.1 to 0.2 weight percent (wt.%), but ranges up to 1 wt.% or higher in some zones. The predominant type of organic matter is coalified detrital plant debris together with a trace amount (<1%) of unstructured organic matter. This detrital debris occurs as individual elongate fragments a few tens of micrometres to about 5 mm in length. Silicified logs, carbonized organic debris and pyrite are locally abundant in the uranium-vanadium bearing zone.

Quartz overgrowths in amounts ranging from 1% to 12% are present with the highest concentrations associated directly with the mineralized zone(s).

MINERALIZATION

Uranium mineralization in the Henry Mountains Complex property is hosted by favourable sandstone horizons containing detrital organic debris. Mineralization primarily consists of coffinite, with minor uraninite which usually occurs in close association with vanadium mineralization. Mineralization occurs as intergranular disseminations, as well as coatings and/or cement on and between sand grains and organic debris. The stratabound primary mineralization routinely occurs as thin layers related to the stratigraphic units that are present over a wide area of the Tony M–Southwest and Copper Bench–Indian Bench deposits. In the areas including the indicated and inferred resources documented in this report, the concentration of uranium mineralization usually increases in both grade and thickness to form the zones exceeding the grade cut-offs.

The vanadium:uranium weight ratios in Salt Wash-type deposits range from about 1:1 to 20:1. The deposits are, therefore, technically classified as vanadium deposits with accessory uranium. Because of the relative economic importance of the uranium, less emphasis is placed on the vanadium. Historic production records from the U.S. Atomic Energy Commission for the South Henry Mountains district suggest that the vanadium content of the district is relatively low. The South Henry Mountains district consists of near surface mines at Shootaring Canyon, Delmonte and Woodruff Springs in the vicinity of the Tony M and Frank M deposits. The records for the period 1956–1965 indicate that the V_2O_5:U_3O_8 weight ratio for about 6,900 tons of ore produced in the South Henry Mountains district was about 1.8:1.

The Henry Mountains Complex vanadium-uranium deposits consist of two extensive elongate, tabular zones containing a large concentration of mineralization (see Figure 4-2). The Tony M–Southwest deposit extends for a distance of approximately 2.5 miles along a north-south trend and has a maximum width of about 3,000 ft. The larger Copper Bench-Indian Bench deposit extends approximately 3.5 miles along a northwesterly trend to the northeast of the Tony M–Southwest deposit.

More specifically, the mineralization making up the indicated and inferred resources documented in this report form high grade zones within the two mineralized trends. The Tony M–Southwest deposit occurs within an arcuate zone over a north-south length of about 15,000 ft. and a width ranging from 1,000 ft. to 3,000 ft. (Figures 14-4 through 14-6). The Copper Bench-Indian Bench deposit extends northwesterly over a length of approximately 15,000 ft. and a width of 1,000 ft. to 2,500 ft.

Mineralization occurs in a series of three individual stratiform layers included within a 30 ft. to 62 ft. thick sandstone interval. Mineralization in the Tony M deposit occurs over three stratigraphic zones of the Salt Wash Member of the Morrison Formation, when a minor zone in the Tidwell is included in the lower zone.

The Tony M-Southwest deposit occurs in the lowermost 35 ft. to 62 ft. of the Salt Wash Member sandstone. Mineralization within the Upper Lower unit is offset to the east as compared to mineralization in the Lower Lower unit. Mineralization forming the Copper Bench–Indian Bench deposit occurs between 60 ft. and 100 ft. above the base of the Salt Wash Member.

Mineralization making up the mineral resources of the Tony M-Southwest and the Copper Bench-Indian Bench has average thicknesses of three feet to six feet, depending on assumptions regarding GT cut-off and dilution. Inspection of logs by RPA indicates that the thickness of uranium mineralization in individual drill holes only occasionally exceeds 12 ft.

URANIUM AND VANADIUM MINERALOGY

Underground in the Tony M Mine, the main mineralized horizons appear as laterally discontinuous, horizontal bands of dark material separated vertically by lighter zones

lacking uranium but enriched in vanadium. On a small scale (inches to feet), the dark material often exhibits lithologic control, following cross-bed laminae or closely associated with, though not concentrated directly within, pockets of detrital organic debris.

The uranium-vanadium mineralization in the Henry Mountains Basin area is similar to the mineralization observed elsewhere in other parts of the Colorado Plateau. It occurs as intragranular disseminations within the fluvial sand facies of the Salt Wash Member. It also forms coatings on sand grains and coatings and impregnations of organic associated masses. A significant portion of the uranium occurs in a very fine grained phase whose mineralogy has best defined with the aid of an electron microscope.

Extensive scanning electron microscope, microprobe, autoradiography, X-ray, and other investigations indicate that coffinite is the dominant primary uranium mineral in the mineralized horizons, with uraninite occurring in only trace amounts. In the higher grade mineralized horizons (U > 0.5%), large masses of coffinite form interstitial cement (Northrop and Goldhaber, 1990).

Vanadium occurs as montroseite (hydrous vanadium oxide) and vanadium chlorite in primary mineralized zones located below the water table (i.e., the northern portion of the Tony M deposit). Montroseite is the only vanadium oxide mineral identified in this interval. An unusual vanadium-bearing chlorite or an interlayered vanadium-bearing chlorite-smectite is the only authigenic clay mineral(s) recognized. The grain size and sorting characteristics of detrital quartz grains vary within the host rocks; cross-bed lamainae with coarser grains and better sorting are invariably more highly mineralized (Wanty et al., 1990).

Above the water table to the south, vanadium chlorite is absent, while montroseite and a suite of secondary uranium-vanadium minerals are present. These include tyuyamunite, metatyuyamunite, rauvite, and carnotite all of which have been identified in samples from the southern part of the Tony M deposit. Carnotite is a secondary hydrous potassium-vanadium-uranium mineral, while the other three are similar minerals with calcium replacing potassium. The later minerals occur above the water table in the zone that has been subjected to near surface secondary oxidation. About 40% of the southern portion

of the Tony M deposit is located in this zone, with the remainder, together with the Southwest deposit, located in the reduced zone below the water table.

Other ore-stage minerals identified in the USGS study include pyrite (0% to 3.3%), quartz overgrowths (0% to 17%), dolomite and calcite (Wanty et al., 1990). The quartz overgrowths are often visible to the naked eye within the Tony M Mine. While dolomite is associated with the mineralized zones, the abundance of calcite decreases in highly mineralized zones. This is thought to occur because calcite postdates the deposition of vanadium bearing chlorite and other ore-stage minerals that preferentially plug the pores of the mineralized zone.

No significant differences between cores, or within cores, have been identified for the sandstone framework mineralogy. Significant mineralogic differences, however, exist in the authigenic pore-filling material; these vary in abundance and type vertically within cores, in association with mineralized intervals (Northrop and Goldhaber, 1990).

The age of the deposit is 115 million years, indicating that the mineralization formed shortly after deposition of the Brush Basin Member of the Morrison Formation (Ludwig, 1986, in Wanty et al., 1990).

CHEMICAL ANALYSIS OF MINERALIZED SAMPLES FROM THE PROPERTY

Atlas conducted a metallurgical testing program on a series of composites prepared from core samples from Exxon drilling (Rajala, 1983). The results of this program are discussed in Section 13 Mineral Processing and Metallurgical Testing of this report. The drill core was from the Indian Bench, Southwest, and Copper Bench deposits (this work does not include results from the 40-hole core drilling program conducted by Atlas from July 1983 to March 1984).

Samples from each deposit were combined to give representative composites. Each composite consisted of 0.5 ft. drill core intervals combined in such a manner as to give a composite head analysis exceeding 0.2% U_3O_8. The Southwest, Copper Bench and Indian Bench composite samples contained, respectively, 104 core intervals from 16 drill holes core intervals, 90 core intervals from seven drill holes, and 45 core intervals from

four drill holes. The results of the analyses for uranium, vanadium, and calcium carbonate are compared with the values calculated based on the weighted value of each of the individual core samples included in the composite. Results of the analysis are given in Table 7-1.

TABLE 7-1 COMPARISON OF COMPOSITE HEAD ANALYSES WITH CALCULATED HEAD ANALYSES
Energy Fuels Inc. – Henry Mountains Complex Property

Composite Area	% U_3O_8	% V_2O_5	V_2O_5/U_3O_8	% $CaCO_3$
Southwest	0.348	0.59	1.70	5.4
Southwest*	0.385	0.63	1.64	6.3
Copper Bench	0.252	0.28	1.11	7.8
Copper Bench*	0.253	0.32	1.26	9.5
Indian Bench	0.391	0.74	1.89	11.3
Indian Bench*	0.388	0.75	1.93	10.9

* Calculated Head Analyses Based on Sample Weighting

Table 7-2 shows the concentration of several minor elements occurring in the composites.

TABLE 7-2 PRESENCE OF VARIOUS ELEMENTS IN COMPOSITE SAMPLES OF THE TONY M AND SOUTHWEST DEPOSITS
Energy Fuels Inc. – Henry Mountains Complex Property

Composite Area	% Cu	% Zn	% Pb	% Mo	% Zr	% As	Ag*	Au*
Southwest (%)	0.004	0.005	0.003	0.02	0.08	0.23	0.01	nil
Copper Bench (%)	0.004	0.005	0.002	0.02	0.07	0.21	0.02	Nil
Indian Bench (%)	0.003	0.008	0.003	0.04	0.05	0.23	0.02	nil
Tony M (ppm)**	72	210	130	150	n.a.	132	n.a.	n.a
Tony M (ppm)***	20	300	500	30	100	n.d.	n.d.	n.d.

* Units are oz/ton
** 300 to 400 pound sample collected by Jim Crock, USGS, from 145E/1015N + 14 ft. on south rib of Tony M Mine and analyzed in USGS Laboratory using ICAP-AES
*** Sample collected by F. Peterson, U.S.Geological Survey from the same site in Tony M Mine and analyzed in USGS Laboratory using alternative semi-quantitative methods.
n.d.: Not detected.

The results provide confirmation of the chemical parameters of the Tony M-Southwest and Copper Bench-Indian Bench deposits.

The average concentration of $CaCO_3$ is a consideration for processing cost and ranges from 5.4% to 11.1% in the Copper Bench, Indian Bench, and Southwest deposits. In its evaluation of mineral zones from 39 core holes from the Copper Bench, Indian Bench, and Southwest deposits, EFNI found that the carbonate content of the composites averaged 9.2% $CaCO_3$ at the 0.80 ft.% GT cut-off (EFNI, 1991). Table 7-4 indicates the presence of elevated concentrations of molybdenum and arsenic.

Plateau analyzed composite samples from monthly production from the Tony M Mine over the period November 1982 to April 1983 and found that the 31,996 tons of ore had an average $CaCO_3$ content of 6.22%, with an average U_3O_8 grade of 0.159%. Much of the production for the period came from the south part of Block B, while the balance was produced from Blocks E, F and S.

Plateau also analyzed 13 uranium bearing zones from 10 core holes distributed over the Tony M deposit and found the $CaCO_3$ content ranges from 2.8% to a high of 18.5%; however, with the exception of a second high value of 17.4%, all of the other zones contain 7.6% $CaCO_3$ or less. If the two high values are excluded, the average $CaCO_3$ content decreases to 5.2%. The high carbonate zones are associated either with the relatively carbonate rich zone which lies within a few feet above the Tidwell contact, or with relatively thin (e.g., 0.5 ft. to 2 ft.) carbonate rich zones which occur higher up in the Salt Wash sandstones (Underhill, 1983).

RPA agrees with the observation by Northrop and Goldhaber (1990) that the character of the mineralized zones which contain significant concentrations of vanadium chlorite and other pore filling minerals effectively blocked the deposition of large amounts of carbonate and therefore the mineralized zones usually have a carbonate content that is less than the non-mineralized Salt Wash sandstone.

Geochemical analyses are available for both mineralized and unmineralized intervals of the sandstone, for minor element constituents in the Tony M and Frank M deposits and adjacent areas (Northrop and Goldhaber, 1990). The only major increase observed is for vanadium for which the average concentration increased from 13 ppm to 3,004 ppm (results for uranium were not given). The other minor elements (Cr, Co, Cu, and Ni) increased from three to almost twelve times over the values for unmineralized sandstone, which range from 4 ppm to 8 ppm.

Molybdenum concentrations above detection levels were found to occur only close to mineralized horizons, and generally each mineralized horizon has an associated zone of molybdenum enrichment. Vanadium and chromium enrichment in the mineralized intervals occurs over a thicker interval than uranium and/or molybdenum.

RPA agrees that sample results indicate that the $CaCO_3$ content in the Tony M deposit is in the range of 6.2% to 7.3%, while the average in the Southwest deposit is in the range from 5.4% to 9.2%. The results for the Southwest deposit suggest that the $CaCO_3$ content increases with GT cut-off.

8 DEPOSIT TYPES

Sandstone-type uranium deposits typically occur in fine to coarse grained sediments deposited in a continental fluvial environment. The uranium is either derived from a weathered rock containing anomalously high concentrations of uranium or leached from the sandstone itself or an adjacent stratigraphic unit. It is then transported in oxygenated water until it is precipitated from solution under reducing conditions at an oxidation-reduction front. The reducing conditions may be caused by such reducing agents in the sandstone as carbonaceous material, sulphides, hydrocarbons, hydrogen sulphide, or brines.

There are three major types of sandstone hosted uranium deposits: tabular vanadium-uranium Salt Wash type of the Colorado Plateau, uraniferous humate deposits of the Grants, New Mexico area, and the roll-type deposits of Wyoming. The differences between the Salt Wash deposits and other sandstone type uranium deposits are significant. Some of the distinctive differences are as follows:

- The deposits are dominantly vanadium, with accessory uranium.
- One of the mineralized phases is a vanadium-bearing clay mineral.
- The deposits are commonly associated with detrital plant trash, but not redistributed humic material.
- The deposits occur entirely within reduced sandstone, without adjacent tongues of oxidized sandstone.

The vanadium content of the Henry Mountains Basin deposits is relatively low compared to many Uravan deposits. Furthermore, the Henry Mountains Basin deposits occur in broad alluvial sand accumulations, rather than in major sandstone channels as is typical of the Uravan deposits of Colorado. The Henry Mountains Basin deposits do, however, have the characteristic geochemistry of the Uravan deposits and are therefore classified as Salt Wash type deposits.

Extensive research by Northrop and Goldhaber (1990) and associates shows that the Henry Mountains Basin deposits were formed at the interface of an underlying brine with overlying oxygenated flowing waters carrying uranium and vanadium in solution. Reduction and deposition of the mineralization were enhanced where the interface

occurred within sandstones containing carbonaceous debris. The multiple mineralized horizons developed at favourable intervals as the brine surface migrated upwards. Geochemical studies indicate the uranium and vanadium were leached either from the Salt Wash sandstone or the overlying Brushy Basin Member.

9 EXPLORATION

Surface drilling using rotary tricone technology, together with radiometric gamma logging, was the primary exploration method used to discover and delineate uranium on the Henry Mountains Complex Property.

During development of the Tony M Mine, Plateau also conducted an intensive Mine Geology program to collect detailed information on the occurrence of uranium, including its thickness, grade, and lateral extent. This was done through geological mapping, together with face and rib scanning, with handheld radiometric scanners, as well as gamma probing of short up and down holes extending to about eight feet. Probing was also done using long-hole drilling to test target zones up to about 150 ft. from mine openings. The results of this program are recorded on systematic set of cross-sections through the Tony M Mine developed at a scale of 10 ft. to the inch.

Denison, and its predecessor IUC, carried out no physical work on the properties, with the exception of review of available data and critical evaluation, until the end of 2005, when certain activities including underground reconnaissance and permitting were initiated. A Notice of Intent to Conduct Exploration E/017/044 was issued by the Utah Division of Oil, Gas and Mining, Department of Natural Resources on December 2, 2005. In addition, IUC filed a Notice of Intent to Conduct Mineral Exploration with the U.S. Bureau of Land Management, UTU-80017 on March 6, 2006. A notice of exploration activities was sent to the Utah State Institutional and Trust Land Administration, the owner of Section 16, on September 7, 2005.

With receipt of all permits in September 2007, Denison commenced work underground in the Tony M Mine as is described in Section 6 History. This work includes a long-hole drilling program to discover and delineate mineralization within about 100 ft. of underground workings.

Energy Fuels has carried out no work on the Property.

10 DRILLING

ROTARY DRILLING

Most of the drilling done on the Southwest, Copper Bench and Indian Bench deposits on the Bullfrog claims was conducted by rotary drilling using a tricone bit with a nominal diameter of 5.1 inches.

The Southwest and Copper Bench deposits are delineated by drilling on approximately 100 ft. centres. The Indian Bench deposit is delineated by drilling on approximately 200 ft. centres. In some areas, the rugged terrain made access difficult, resulting in an irregular drill pattern.

Exxon commenced drilling on the Bullfrog property in 1977. Before it sold the property to Atlas in July 1982, Exxon had drilled 1,782 holes. From July 1982 to July 1983, Atlas completed 112 drill holes delineating the Southwest and Copper Bench deposits on approximately 100 ft. centres. After July 1983, Atlas completed an additional 49 core hole drilling program throughout the Bullfrog property, as well as a 133 rotary drill hole program to delineate the Indian Bench deposit on approximately 200 ft. centres.

A total of 2,232 drill holes were completed on the Bullfrog property (Schafer, 1991):

Exxon	1,782 holes (80%)
Atlas	450 holes (20%)
Total	2,232 holes (100%)

In February 1977, drilling commenced in what was to become the Tony M deposit. Subsequently, Plateau drilled more than 2,000 rotary drill holes totalling about 1,000,000 ft. Over 1,200 holes were drilled in the Tony M area and about 700 holes were completed on the adjacent Frank M trend, which is not located on the Energy Fuels Henry Mountains Complex Property. The balance of the drilling was done in the adjacent properties. The holes were drilled using rotary tricone technology with a nominal hole diameter of 5.1 inches. The rugged terrain over much of the Tony M deposit made drilling access difficult or impossible, resulting in an irregular drill pattern.

The mineralization on the Property is approximately horizontal, and all of the drilling was vertical. Deviation surveys were conducted on most drill holes in the Southwest deposit, providing an indication of how far the holes have drifted from vertical. The vertical holes provide a reliable estimate of the thickness of the deposits.

RPA inspected the gamma logs for the Tony M-Southwest and Copper Bench-Indian Bench drilling. RPA notes that logging records indicate that, for example, some of the holes on the Bullfrog claims were drilled by Energy Drilling Co., McPherson Drilling Co., Pomco Drilling Co., and Southwest Drilling Co., whereas some of the holes on the Tony M property were drilled by Kachina Drilling Co., Beeman Drilling Co., and Petty Drilling Co.

CORE DRILLING

Records indicate that a total of 81 core holes were drilled in the Southwest, Copper Bench, and Indian Bench deposits, while 25 core holes were drilled in the vicinity of the Tony M deposit (Table 10-1).

TABLE 10-1 CORE DRILLING ON THE TONY M AND SOUTHWEST DEPOSITS
Energy Fuels Inc. – Henry Mountains Complex Property

Deposit	Exxon-Atlas	Plateau	NFS/BP Exploration	Total
Southwest	32			32
Copper Bench	42			42
Indian Bench	7			7
Tony M		24		24
Tony M			1	1
Total	**81**	**24**	**1**	**106**

Drilling on the Tony M area includes 24 core holes completed by Plateau and one core hole completed by NFS/BP Exploration Inc. Of the 25 holes, only 11 are located within the mineralized area comprising the Tony M deposit. The core holes provided samples of the mineralized zone for chemical and amenability testing, as well as flow sheet design for the Ticaboo uranium processing facility (or mill). The samples were also used to determine geologic and engineering properties of the mineralized zone.

RPA did not have access to core for the Tony M deposit.

Energy Fuels, Denison, and predecessor IUC carried out no surface drilling on the properties.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

SAMPLING METHOD AND APPROACH

The original downhole gamma logging of surface holes was done on the Bullfrog property by Century Geophysical Corp. (Century) and Professional Logging Services, Inc. (PLS) under contract to Exxon. Atlas also contracted Century for this service. Standard logging suites included radiometric gamma, resistivity and self-potential measurements, supplemented by neutron-neutron surveys for dry holes. Deviation surveys were conducted for most of the holes. Century used its CompuLog system consisting of truck-mounted radiometric logging equipment, including a digital computer. The natural gamma (counts per second, or cps), self potential (millivolts), and resistance (ohms) were recorded at 1/10th foot increments on magnetic tape and then processed by computer to graphically reproducible form. The data were transferred from the tape to computer for use in resource estimation.

Assays of samples from core drilling were collected by company geologists and submitted to various commercial labs for analysis. Exxon used Core Labs, Albuquerque, for at least some of this analytical work. Results of these analyses were compared to eU_3O_8 values from gamma logs to evaluate radiometric equilibrium, logging tool performance, and validity of gamma logging.

Atlas (Rajala, 1983) prepared composite samples from core recovered by Exxon for the Southwest, Copper Bench and Indian Bench deposits for metallurgical testing. The chemical analyses of the samples are described in Section 7 Geological Setting and Mineralization under subsection Chemical Analyses of Mineralized Samples from the Property. The results of the test program are given in the Rajala report and are discussed in Section 13 Mineral Processing and Metallurgical Testing. Testing done includes leach amenability studies, settling, and filtration tests. The report does not indicate where the analytical and test work was performed, however, at the date of the report, Atlas had its own laboratories at its Moab, Utah, uranium/vanadium processing plant, and RPA is of the opinion that the analyses were conducted there.

For the Tony M deposit, the same suite of logging surveys and procedures as employed by Exxon and Atlas was conducted on a majority of the holes. Most of the holes were logged by Century under contract to Plateau. Plateau also used PLS to log a small portion of the holes drilled in the mid-1980s. Deviation surveys were conducted for many of the holes. Holes drilled in about the southern half of the Tony M deposit intersect rocks that are above the water table and were therefore dry. Neither self potential nor resistance logs are available for these holes. Neutron-neutron logging was conducted in some holes in this area providing information on rock characteristics. Assays of samples from core drilling were collected by company geologists and submitted for analysis to Skyline Labs, Hazen Research Inc. (Hazen), and Minerals Assay Laboratory, as well as other commercial labs.

The initial logging by Century was completed using Analog equipment. In 1978 Century's Compulog digital system replaced the Analog equipment. At the time Plateau conducted a series of comparative tests logging selected core holes with both types of equipment as described in LaPoint (1978). The results were discussed with Jim Hallenberg, Century, and analyzed to assure that the Compulog system provided equivalent or higher quality logs than the Analog system.

It was concluded that the Compulog system may provide a more accurate determination of uranium in the relatively thin, high grade mineralized zones occurring in the Tony M deposit. The Compulog results were found to be consistently 10% to 20% less than equivalent Analog logs, however, the results were found to agree more closely with the results of chemical analyses of core from the logged holes.

Plateau contracted Hazen for metallurgical and analytical testing of samples from the Tony M deposit. This information was used to design the processing circuit for the Ticaboo Uranium Processing Facility, which was constructed about four miles south of the portal of the Tony M Mine. The results of this analytical work were not available to RPA.

No drilling, logging, or core sampling was conducted by Energy Fuels or Denison and its predecessor IUC.

Resource estimates for the Tony M–Southwest and Copper Bench-Indian Bench are based on the eU_3O_8% gamma log conversion values used to identify the mineralized zone, its thickness, and calculate an average grade. The procedures implemented to identify the minimum grade and cut-off GT product for resource estimation are described in Section 14, Mineral Resource and Mineral Reserve Estimates.

No adjustment to reflect radiometric disequilibrium in the deposit was made. The gamma log values were used to identify the mineralized zone and its thickness, and to calculate average grade.

Confirmation assays of chemical U_3O_8% were completed on drill core samples for comparison and calibration with eU_3O_8% values from gamma logging. As outlined in LaPoint (1978), Plateau had developed written procedures for the analysis of core to define such factors as carbonate content, and gamma probe versus chemical uranium content. LaPoint (1978) includes a Flow Chart of procedures and describes handling and description of core before splitting, splitting procedure, assaying, evaluation of results, follow-up including duplicate check analyses, minor element analyses, and final storage of the core.

As discussed below, Plateau conducted a systematic program of analysis at independent commercial laboratories to confirm the reliability of results from its own analytical laboratory. Bhatt (1983) reports that for 2,354 analyses of radiometric and chemical uranium performed by Plateau laboratory, 1,118 check analyses were performed on samples at independent commercial labs.

RPA is of the opinion that work on both the Tony M-Southwest and Copper Bench-Indian Bench deposits was conducted using industry practice that was standard at the time.

STATUS OF CHEMICAL EQUILIBRIUM OF URANIUM

SOUTHWEST DEPOSIT

Exxon conducted analyses of samples from core drilling in the Southwest and Copper Bench deposits, using results from Core Labs (Summary of Chemical Data from Cores, 1978-1980, provided by Denison). Exxon found that the radioactive disequilibrium of potentially economic grade intercepts in cores, measured as the ratio of chemical U_3O_8

to log radiometric equivalent (eU_3O_8), varied from 0.80 to 1.35 and averaged 1.06, close to the equilibrium value of 1.0. Milne (1990) reported that, while the investigation by Atlas of samples from core from an additional 40 drill holes was incomplete at the time, Atlas had identified no significant disequilibrium problem.

RPA did not have access to the results of the Atlas study referenced by Milne (1990).

TONY M DEPOSIT

Plateau conducted an extensive investigation of the state of chemical disequilibrium of uranium in the Tony M deposit. Plateau became aware of this issue during initial development of the Tony M Mine, as the uranium mineralization first encountered in developing the southern portion of the Tony M deposit is located above the water table. The mineralization is oxidized and the state of disequilibrium is both quite variable and locally unfavourable. Much of the muck mined was low grade. At the time, the uranium market price was increasing and moving towards its 1980 peak of over $43 per pound U_3O_8 and the mine cut-off grade was 0.04% eU_3O_8.

For several months during this period, Plateau leased a spectrometer from Princton Gamm-Tech (PGT) that measured the concentration of uranium by detecting Protactinium, the first decay product of ^{238}U, thus eliminating the uncertainty of disequilibrium. The PGT spectrometer, together with a nitrogen cooled Germanium crystal, was installed at the portal of the Tony M Mine where it was used to scan and determine the uranium content of every buggy of muck coming from the mine. Use of the PGT unit was discontinued as Plateau developed alternative methods of grade control through sampling and chemical analysis.

The most comprehensive analysis of disequilibrium of uranium in the Tony M deposit was completed by Bhatt (1983) using the results from 2,354 composite samples collected from buggies coming from the Tony M Mine over the period 1980 to 1982. Based on sampling records, Bhatt divided the analytical results according to various areas of origin in the mine. This provided the basis to estimate the relative state of disequilibrium for uranium in different areas of the deposit. A summary of Bhatt's results is given in Table 11-1.

Bhatt reports that the analyses of closed can uranium and chemical uranium were performed at the Plateau laboratory at the Ticaboo Mill. Bhatt also reports that many independent check analyses were sent to commercial labs as a Quality Assurance practice.

TABLE 11-1 TONY M MINE – AVERAGE (ARITHMETIC MEAN)
Energy Fuels Inc. – Henry Mountains Complex Property

	Grade and Factor Analyses (All data)				
Mine Block (Plateau Mine Blocks)	**Average Probe: eU_3O_8%**	**Average closed can radiometric e U_3O_8% (CC)**	**Average chemical U_3O_8 (Chem)**	**Disequilib-rium ratio: Chem/CC (DR)**	**Total number of composite samples: 1980-1982***
B	0.104	0.117	0.114	0.98	426
S	0.090	0.116	0.129	1.11	323
E	0.086	0.103	0.113	1.09	504
F	0.113	0.133	0.141	1.06	262
L	0.080	0.097	0.109	1.13	114
Q	0.094	0.105	0.064	0.61	21
H	0.044	0.055	0.072	1.31	60
I	0.035	0.041	0.048	1.17	53
Mine Average	**0.092**	**0.109**	**0.116**	**1.06**	**1,763**
Protore**	0.047	0.065	0.058	0.89	265

From Bhatt, 1983

*The Tony M Mine production for 1980-1982 was 189,332 tons at an average grade of 0.096% eU_3O_8 and 0.119% chem U_3O_8.
** Protore designates muck with a grade >0.04% eU_3O_8 and <0.06% eU_3O_8.

Based on the analysis, Bhatt concluded: 1) the state of disequilibrium varies from location to location within the deposit; 2) with the exception of one small area in the southern part of the deposit, the equilibrium factor is positive; 3) low grade material with less than 0.06% U_3O_8 is depleted in uranium; and 4) higher grade material containing more than 0.06% U_3O_8 is enriched in uranium.

Bhatt also concluded that the overall weighted equilibrium factor of chemical to radiometric uranium grade (at a grade x thickness cut-off of 0.28 ft.%) for the Tony M deposit is about 1.06. The disequilibrium factor for Tony M is similar to the factor of 1.06 determined by Exxon for the Southwest and Copper Bench Deposits of the Bullfrog property.

RPA is of the opinion that, based on the information available, the original gamma log data and subsequent conversion to eU_3O_8% values are reliable but slightly conservative estimates of the uranium U_3O_8 grade. Furthermore, there is no evidence that radiometric disequilibrium would be expected to negatively affect the uranium resource estimates of the Tony M-Southwest and Copper Bench-Indian Bench deposits. RPA is also of the opinion that the disequilibrium should be taken into consideration when mining is conducted in the Tony M Mine in areas that are above the static water table.

SAMPLE PREPARATION

Following is a description of the method used for preparing the composites as reported by Rajala (1983). Each of the composites consisted of 0.5 ft. drill core intervals combined in such a manner as to give a composite head analysis exceeding 0.2% U_3O_8. Only one half of the full core was available for composite preparation. The Indian Bench, Southwest, and Copper Bench composite samples contained 45, 104, and 90 core intervals, respectively. When possible, the composites were prepared using equal weights from each interval but, since the sample weight were small (e.g., approximately 50 g) for some of the intervals, the total weight of the composites were limited. Each minus 10 mesh interval was blended on a rolling mat prior to splitting out the appropriate weight for the composite.

The composites were stored in cylindrical containers and then placed on a set of rolls for at least eight hours to achieve complete blending of the intervals. The blended samples were placed on a rolling mat and flattened with a spatula. A head sample, along with 500 g test samples, was split out by random cuts of the primary samples. The head samples were pulverized to minus 100 mesh for chemical analysis.

Every interval was analyzed for U_3O_8, V_2O_5, and $CaCO_3$. The initial U_3O_8 analyses were performed fluorometrically, with samples greater than 0.02% U_3O_8 being rerun volumetrically. The Atlas Fluorometric Lab also performed the initial V_2O_5 analyses and the Atlas Ore Lots Lab repeated V_2O_5 assays on samples that assayed greater than 0.2% V_2O_5. Most $CaCO_3$ analyses were run only once in the Ore Lots Lab.

Composite samples were analyzed volumetrically for both U_3O_8 and V_2O_5. Table 7-1 in presents a comparison of the composite head analyses with the calculated head analyses.

Procedures followed by Exxon, Atlas, and Plateau, together with their contractors Century and PLS, were well documented and at the time followed best practices and standards of companies participating in uranium exploration and development. Onsite collection of the downhole gamma data and onsite data conversion limit the possibility of sample contamination or tampering.

12 DATA VERIFICATION

In preparing this report, RPA conducted audits of historic records to assure that the grade, thickness, elevation and location of uranium mineralization used in preparing the current uranium resource estimate correspond to mineralization indicated by the original gamma logs of drill holes on the Henry Mountains Complex Property. RPA reviewed the available information to verify the reliability of the eU_3O_8 grade as determined by downhole gamma logging.

RPA also conducted a review of Plateau's historic production records for the Tony M Mine to determine how many tons of uranium bearing material, and at what average grade, were produced from the mine.

Based on its review of the grade and thickness of uranium mineralization indicated in the original gamma logs for the Tony M-Southwest and Copper Bench-Indian Bench deposits and comparisons with the computer generated GT composites, RPA is of the opinion that the original gamma log data and subsequent conversion to eU_3O_8 values are reliable for both deposits.

Exxon and Plateau both conducted programs to investigate the state of chemical equilibrium of uranium in their respective deposits, and to verify the reliability of the eU_3O_8 grade as determined by downhole gamma logging. This was done by comparing the results of chemical analysis of drill core, closed can radiometric analysis of the core samples, and downhole gamma logs for the core intervals in question. Plateau also conducted a much more extensive sampling program from 189,332 tons of mine production, equal to about 80% of total mine production, of mineralized material extracted from the Tony M Mine. Analyses of these samples were used to establish the relationship between chemical and radiometric uranium grade within most areas of the deposit (Bhatt, 1983).

While RPA reviewed the detailed results of this verification program as described in Bhatt's 1983 report, RPA did not have access to the original analyses for this investigation.

The results of both the core analysis program for the Southwest deposit and Plateau's mine production sampling program indicate that while the state of chemical equilibrium does vary from zone to zone in the deposits, taken overall, the gamma log estimates of grade are slightly conservative and underestimated. Atlas reportedly conducted a program of analysis of core samples, with similar results. RPA did not have access to any of the data from Atlas's investigation.

Furthermore, RPA reviewed the chemical analyses of core from diamond drill holes from the Southwest deposit (discussed in Section 11, Sample Preparation, Analysis and Security)) and the results of the Tony M Mine muck sampling program. Based on this review, RPA is of the opinion that the gamma logging estimates of grade for both the Tony M-Southwest and Copper Bench-Indian Bench deposits are slightly conservative and underestimate the average U_3O_8 grade by up to 6%, as well as some portions of the southern Tony M deposit by as much as 6% to 31%, and it may overestimate one area in the southeast Tony M deposit by about 40%. RPA also agrees with Bhatt who concluded that mineralized material with a grade of <0.06% U_3O_8 has a chemical uranium content that is lower than the radiometric uranium content and is in a negative state of disequilibrium.

RPA did not verify any chemical analyses for the Southwest, Copper Bench or Indian Bench deposits because no core samples were available.

After Tony M Mine production was terminated in mid-1984, Plateau reported that the Tony M ore stockpile consisted of 237,441 tons at an average chemical grade of 0.121% U_3O_8 (PAH, 1985). In addition, by January 31, 1984, Plateau had a surveyed low grade stockpile of 71,600 tons at an average grade of 0.054% U_3O_8 which the company classified as protore. Plateau defined protore as material with an average chemical uranium grade >0.04% U_3O_8 and <0.06% U_3O_8.

In making its review, RPA found that Plateau's historic records of extraction of mineralized material from the Tony M Mine may appear to be contradictory. In RPA's opinion, however, the historic production records provide a reliable estimate of mine production when they are placed in context with the then current spot market price of uranium, Plateau's understanding of the change in chemical disequilibrium of

mineralized material with grade, and the revision to a higher cut-off grade from 0.04% U_3O_8 to 0.06% U_3O_8 by Plateau in August 1981.

No information was available to RPA identifying the current location(s) of the stockpiled material produced from the Tony M Mine.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Drill core from the Bullfrog deposits was tested by Atlas in 1983 to determine metallurgical parameters (Rajala, 1983). Amenability results for a strong acid leach indicated overall recoveries of 99% U_3O_8 and 90% V_2O_5. Additional testing of a mild acid leach and an alkaline leach gave recoveries of 97% U_3O_8 and 40% V_2O_5 for both. Acid consumption for the strong acid leach was 350 pounds per ton.

In 1982, the Shootaring Canyon mill processed some 27,000 tons of mineralized material from the Tony M Mine, but details are not available to RPA. A USNRC report lists a recovery of 90% for the milling operation.

From November 2007 to December 2008, a total of 162,384 tons at 0.131% eU_3O_8 containing 429,112 pounds U_3O_8 were trucked to the White Mesa Mill at Blanding, Utah, for processing. Of this material, 90,025 tons at 0.165% eU_3O_8 (297,465 pounds) were extracted by Denison from the Tony M Mine and 72,359 tons at 0.091% eU_3O_8 (131,647 pounds) came from stockpiled material mined by previous operators. The White Mesa Mill is described in Section 17 Recovery Methods.

14 MINERAL RESOURCE ESTIMATE

GENERAL STATEMENT

Mineral Resources of the Tony M-Southwest deposit were estimated by Denison using the contour method and were audited by Scott Wilson RPA in the 2009 Technical Report (Underhill and Roscoe, 2009). Mineral Resources of the Copper Bench-Indian Bench deposit were estimated by EFNI in 1993 using the polygonal block method and audited by Scott Wilson RPA in the 2006 Technical Report (Pool, 2006). Energy Fuels has reviewed these estimates which now form part of its Mineral Resource portfolio.

Table 14-1 lists the Mineral Resources classified as Indicated and Inferred categories at a cut-off grade of 0.10% eU_3O_8 over a minimum thickness of 2 ft. and minimum GT (grade times thickness product) of 0.2 ft.% eU_3O_8 for the Tony M-Southwest deposit and a cut-off grade of 0.20% eU_3O_8 over a minimum thickness of 4 ft. and minimum GT (grade times thickness product) of 0.8 ft.% eU_3O_8 for the Copper Bench-Indian Bench deposit. Total Indicated Resources are 2.41 million tons at an average grade of 0.27% eU_3O_8 containing 12.80 million pounds eU_3O_8. Additional Inferred Resources total 1.61 million tons at an average grade of 0.25% eU_3O_8 containing 8.08 million pounds eU_3O_8.

The following sections describe the Mineral Resource estimates for the Tony M-Southwest deposit and the Copper Bench-Indian Bench deposit.

TABLE 14-1 MINERAL RESOURCE ESTIMATE OF THE HENRY MOUNTAINS COMPLEX URANIUM DEPOSITS, DECEMBER 31, 2011
Energy Fuels Inc. – Henry Mountains Complex Property

Category	Million Tons	Grade eU_3O_8 (%)	Contained eU_3O_8 (Million Pounds)
Indicated – Tony M	1.03	0.24	4.83
Indicated - Southwest	0.66	0.25	3.30
Indicated – Copper Bench	0.50	0.29	2.93
Indicated – Indian Bench	0.22	0.40	1.74
Total Indicated Resource	**2.41**	**0.27**	**12.80**
Inferred – Tony M	0.65	0.17	2.17
Inferred - Southwest	0.21	0.14	0.58
Inferred – Copper Bench	0.50	0.32	3.24
Inferred – Indian Bench	0.25	0.42	2.09
Total Inferred Resource	**1.61**	**0.25**	**8.08**

Notes:
1. Mineral Resources were classified in accordance with CIM Definition Standards.
2. Cut-off grade is 0.10% eU_3O_8 over a minimum thickness of 2 ft. for the Tony M-Southwest deposit
3. Cut-off grade is 0.20% eU_3O_8 over a minimum thickness of 4 ft. for the Copper Bench-Indian Bench deposit
4. Mineral Resources have not been demonstrated to be economically viable.
5. All mine production by Plateau and Denison has been deducted.
6. Some totals may not add due to rounding.

TONY M-SOUTHWEST DEPOSIT

RESOURCE ESTIMATION DATABASE

The basis for resource estimation of the Tony M part of the Tony M-Southwest deposit was the gamma logs from 1,082 rotary drill holes located on the properties comprising the Tony M deposit (Table 17-2). A total of 24 core holes were drilled to recover samples for chemical and geologic analysis and to establish stratigraphic relationships.

The basis for resource estimation on the Southwest part of the Tony M-Southwest deposit was the gamma logs from 589 rotary drill holes located on the properties comprising the Southwest deposit (Table 14-2). A total of 32 core holes were drilled to recover samples for chemical and geologic analysis and to establish stratigraphic relationships.

All of the drilling and analyses were conducted by past owners of the Tony M and Bullfrog properties prior to their acquisition by Denison and Energy Fuels. Denison had logs from all of the historical drilling, as well as the results of chemical and geologic

radiometric analyses. Denison used the probe radiometric assays at 0.5 ft. intervals as the basis of the resource estimate. This information was made available to RPA. None of the original core or samples were available to RPA.

The Southwest part of the deposit was drilled on a grid of 100 ft. by 100 ft., except in areas where rough terrain did not allow surface access. The Tony M part of the deposit was drilled on an approximate 100 ft. by 100 ft. grid, however, terrain over much of the Tony M is more rugged than over the Southwest area and this prevented development of a regular drilling grid.

TABLE 14-2 2009 INDICATED RESOURCE AND HISTORIC DRILLING DATA SUPPORT
Energy Fuels Inc. – Henry Mountains Complex Property

Deposit	No. of Rotary + Core Drill Holes	No. of Core Drill Holes	Drill Hole Fence Spacing*	Drill Hole Spacing Along Fence*
Southwest	589	32	100 ft	100 ft
Tony M	1,082	25	100 ft	100 ft plus
Total	**1,671**	**57**		

* Drill hole spacing in some areas was irregular and drilling was more widely spaced where rugged terrain did not allow access.

The depth below the surface to the base of the mineralization ranges from about 475 ft. in the Tony M area to nearly 825 ft. in the Southwest area. Mineralization in both the Tony M and the Southwest parts of the deposit, however, are located over a relatively narrow range of elevations above sea level. The average base elevation ranges from about 4,320 ft. in the Southwest part to about 4,380 ft. in the Tony M part.

CUT-OFF PARAMETERS

Denison established minimum grade, thickness, and GT parameters based on conventional Colorado Plateau mining practices and recent operating costs at the Tony M Mine.

As an initial step for compositing of the drill hole assays, minimum grades of 0.10%, 0.08%, 0.05%, and 0.03% eU_3O_8 were used over a minimum thickness of 2 ft., with a 2 ft. minimum for exclusion of waste intervals. This resulted in minimum GT values of 0.20

ft.%, 0.16 ft.%, 0.10 ft.% and 0.06 ft.%. The 2 ft. thicknesses were based on the mining technique of split shooting, which is commonly used in the Uravan district.

For inclusion of blocks in the mineral resource estimate, Denison used a cut-off grade of 0.10% eU_3O_8. This can be supported as an incremental cut-off grade using assumed operating costs in the order of $200 per ton, assumed U_3O_8 price of $60 per pound, and process recovery of 90%. This gives a breakeven grade of 0.19% U_3O_8. Assuming that variable costs are approximately 60% of total operating costs, this gives an incremental cut-off grade of 0.11% U_3O_8 which is rounded to 0.10%.

GEOLOGICAL INTERPRETATION

Denison prepared cross-sections throughout the Tony M-Southwest deposit and picked host rock intervals based on geophysical logs, elevations and average thicknesses of the stratigraphic zones. The stratigraphic host intervals were designated Lower Lower (LL), Middle Lower (ML) and Upper Lower (UL) zones. The mineralization hosting zones are all within the lower interval of the Salt Wash Member.

Denison compiled the 0.5 ft. radiometric assays into composites for each drill hole using minimum grades of 0.10%, 0.08%, 0.05% and 0.03% eU_3O_8 over a minimum thickness of 2 ft. These composites were then assigned into the three stratigraphic zones, LL, ML and UL. The preliminary interpretation was checked by Denison and corrections made where necessary. RPA spot checked the Denison interpretation.

The interpretation of mineralized composites into the LL, ML and UL units was used as the basis for estimation of Mineral Resources in each of the zones. Examples of cross-sections with interpreted UL and LL zones are shown in Figures 14-1 and 14-2. Zone ML is taken as composites between the bottom contact of UL and the top contact of LL.

COMPOSITE STATISTICS

Denison compiled statistics of drill hole intersection composites over 0.1 ft.% eU_3O_8 as shown in Table 14-3. The average GT of composites for the LL and UL zones are similar to and higher than that of the ML zone. Median values for all three are similar. The standard deviation values are higher than the average values, which demonstrates a large dispersion of GT values.

TABLE 14-3 BASIC STATISTICS OF GT VALUES OVER 0.10 FT.% eU_3O_8
Energy Fuels Inc. – Henry Mountains Complex Property

Zone	Average	Median	Std Dev
LL	0.63	0.31	0.82
ML	0.45	0.34	0.48
UL	0.65	0.35	0.89

Figure 14-3 is a histogram of the composite GT values for the LL, ML and UL zones. It can be seen that the values are positively skewed, with many low values and few high values. Figure 14-4 shows the same GT values plotted in geometric or logarithmic intervals. This emphasizes the skewed distribution, as does the cumulative histogram in Figure 14-5. As with any skewed distribution, care must be taken to prevent the highest values from having an undue influence on the average grade of the resource.

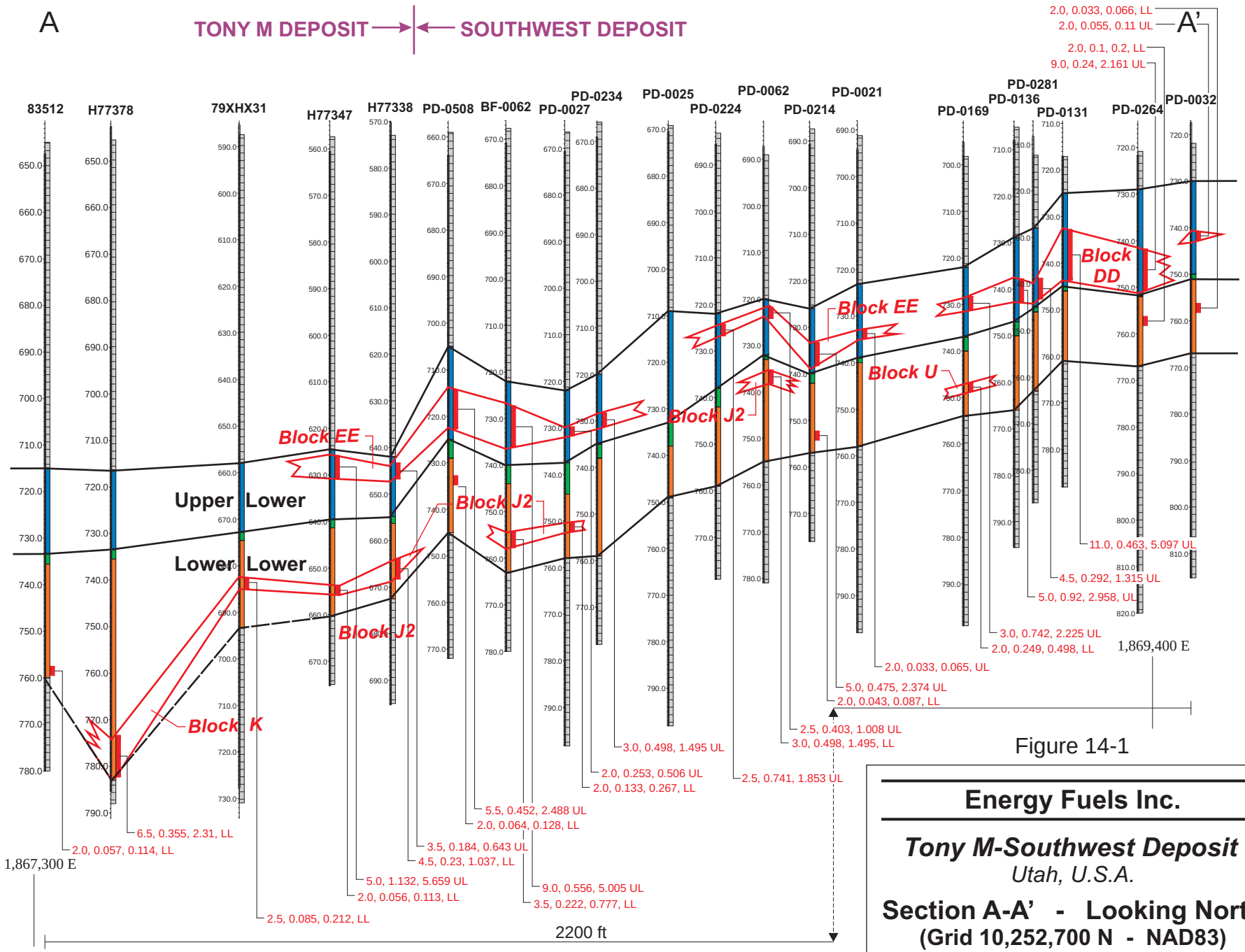


Figure 14-1

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Section A-A' - Looking North

(Grid 10,252,700 N - NAD83)

June 2012

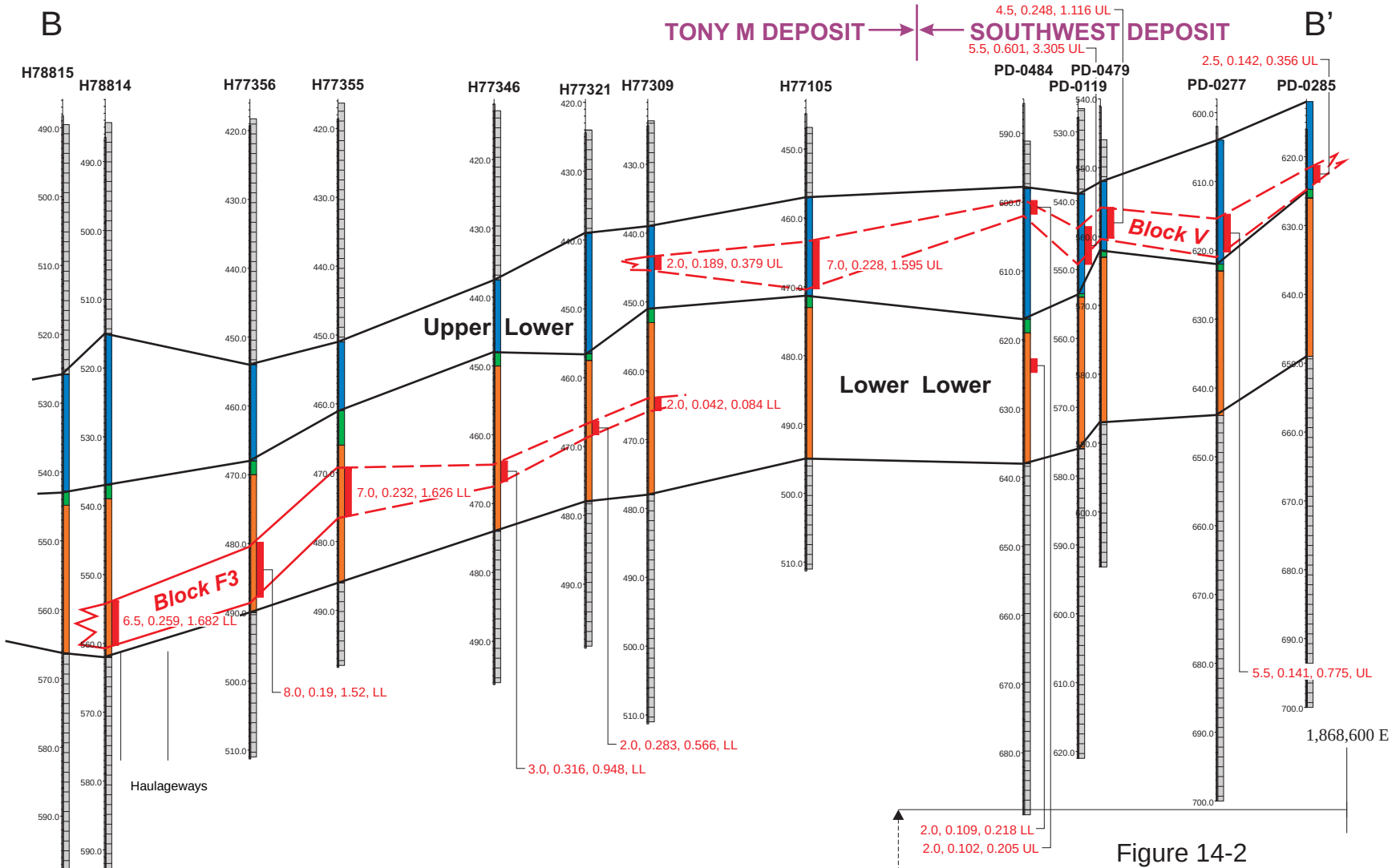


Figure 14-2

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Section B-B' - Looking North

(Grid 10,249,200 N - NAD83)

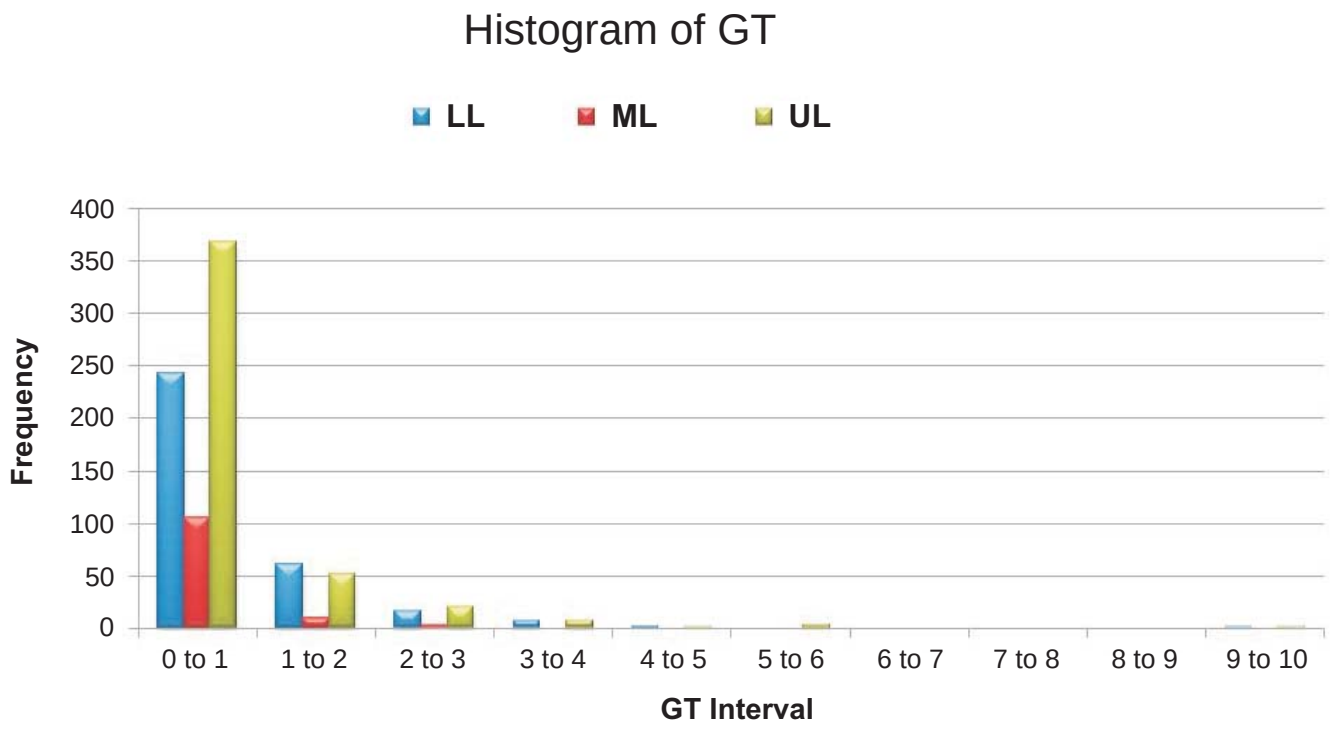


Figure 14-3

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Histogram of GT for the Lower Lower, Middle Lower & Upper Lower Zones

June 2012

Source: Denison Mines Corp., 2009.

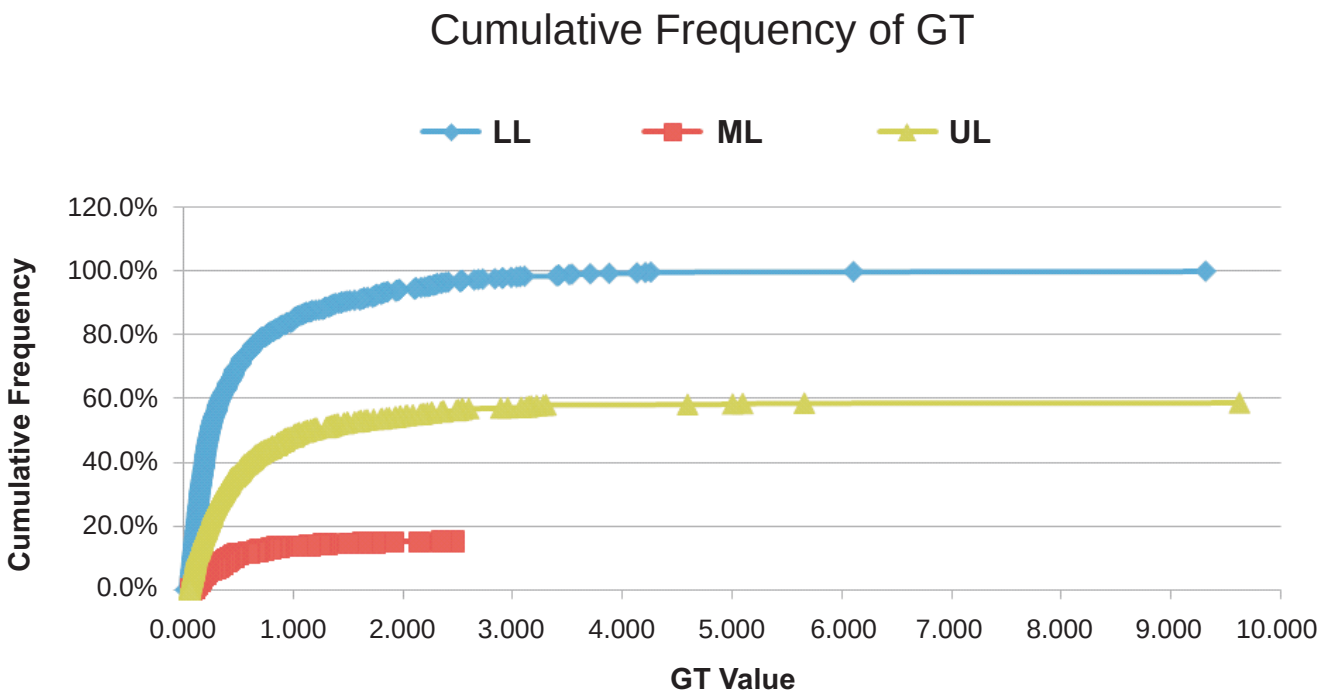


Figure 14-4

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Cumulative Frequency of GT for the Lower Lower, Middle Lower & Upper Lower Zones

June 2012

Source: Denison Mines Corp., 2009.

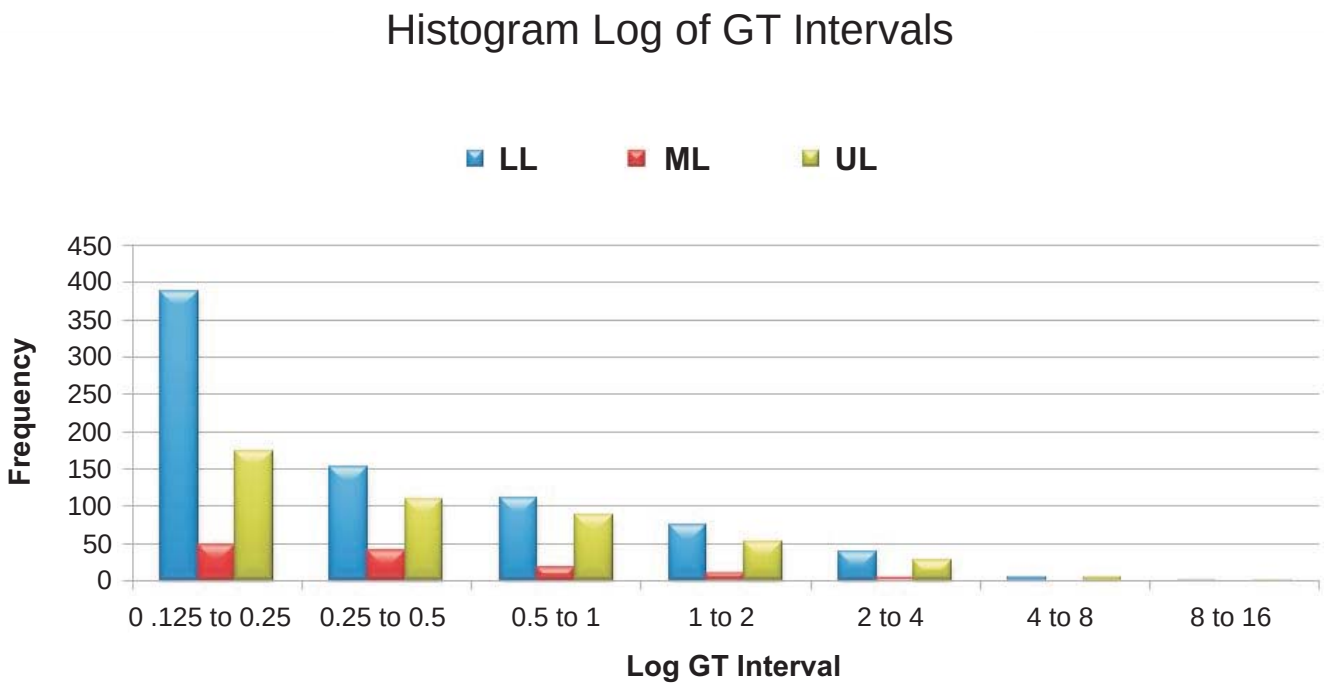


Figure 14-5

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Histogram Log GT Intervals for the Lower Lower, Middle Lower & Upper Lower Zones

June 2012

Source: Denison Mines Corp., 2009.

MINERAL RESOURCE ESTIMATION

Mineral Resources of the Tony M-Southwest deposit have been estimated using the contour method (Agnerian and Roscoe, 2001). For each of the LL, ML and UL zones, drill hole intercept composite values of grade, thickness and GT were plotted in plan view and contoured. Geometric (logarithmic) contour intervals were used for the grade and GT values because of the positively skewed statistical distribution of these parameters. Thickness was contoured in a linear progression at one foot intervals. Contouring was done with Surfer software. The contours were inspected and, where necessary, manually adjusted by Denison personnel to match geological and mineralized trends.

In most drill holes, there was only one composite for each of the LL, ML and UL zones. In some cases, there was more than one composite, in which case the composites were added together for contouring purposes.

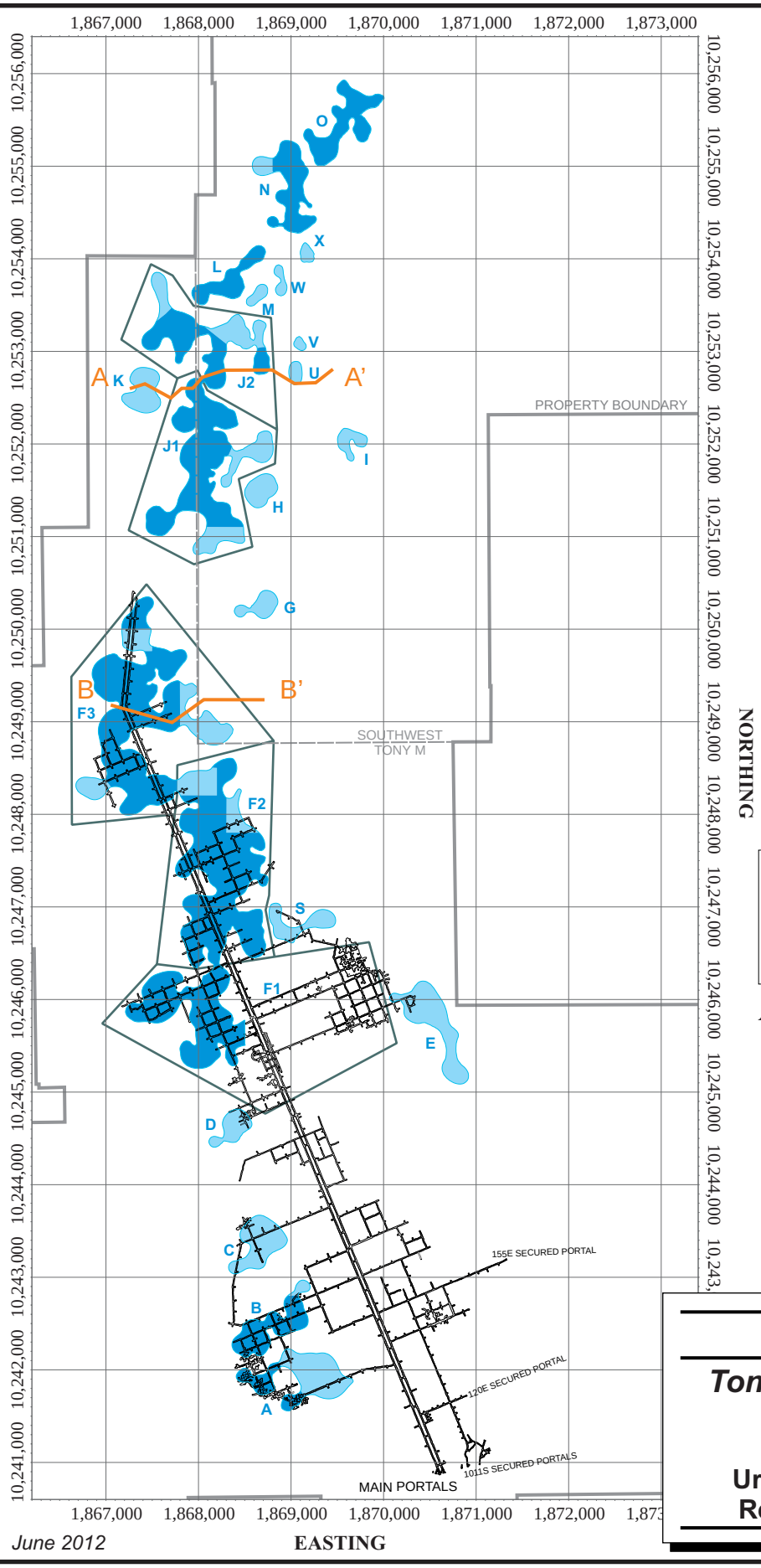
The 0.10% eU_3O_8 contour was established as an outer boundary for mineralization to be considered as resource. The plan areas of the LL, UL and ML zones resolved into numerous lenses of mineralization above the grade of 0.10% eU_3O_8 (Figures 14-6, 14-7, and 14-8). Only GT and thickness contours inside the 0.10% eU_3O_8 "cookie cutter" boundaries were retained. Isolated areas over 0.10% eU_3O_8 defined by a single drill hole were removed.

Examples of the GT and thickness contours are shown in Figures 14-9 and 14-10 for parts of the LL zone. Note that the boundary of blocks F2, F3 and G are defined by a lower limit of 0.10% eU_3O_8 based on grade contours (not shown).

The areas in square feet between the GT and thickness contours were measured using AutoCAD and average values used to calculate GT times area values for each contour interval. Average GT values between contour intervals were calculated and used to multiply by the contour areas. Because of the skewed nature of the GT distribution as discussed above, the average GT value is close to, but slightly lower than, the geometric mean of the bounding contours. For thickness, the average value of the bounding contours was used to multiply by the contour area.

The thickness times area products for each contour interval were summed to give a volume for each of the LL, ML and UL lenses. A tonnage factor of 15 ft.^{3}/ton was applied to give a tonnage for each lens.

The GT times area products for each contour interval were summed and divided by the tonnage factor of 15 ft.^{3} per short ton to give a total that is converted to pounds of contained eU_3O_8 for each lens. The average grade of each lens is obtained from the contained eU_3O_8 and the tonnage.



N

Legend:

- *Lower Lower Indicated Resource*
- *Lower Lower Inferred Resource*
- *Section Line*

Average Grade >0.10% U_3O_8, GT >0.20

0 500 1000 1500 2000
Feet

Source: Denison Mines Corp., 2008.

Figure 14-6

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Lower Lower Zone

Uranium Resource Map after Removal of Historic Mining

June 2012

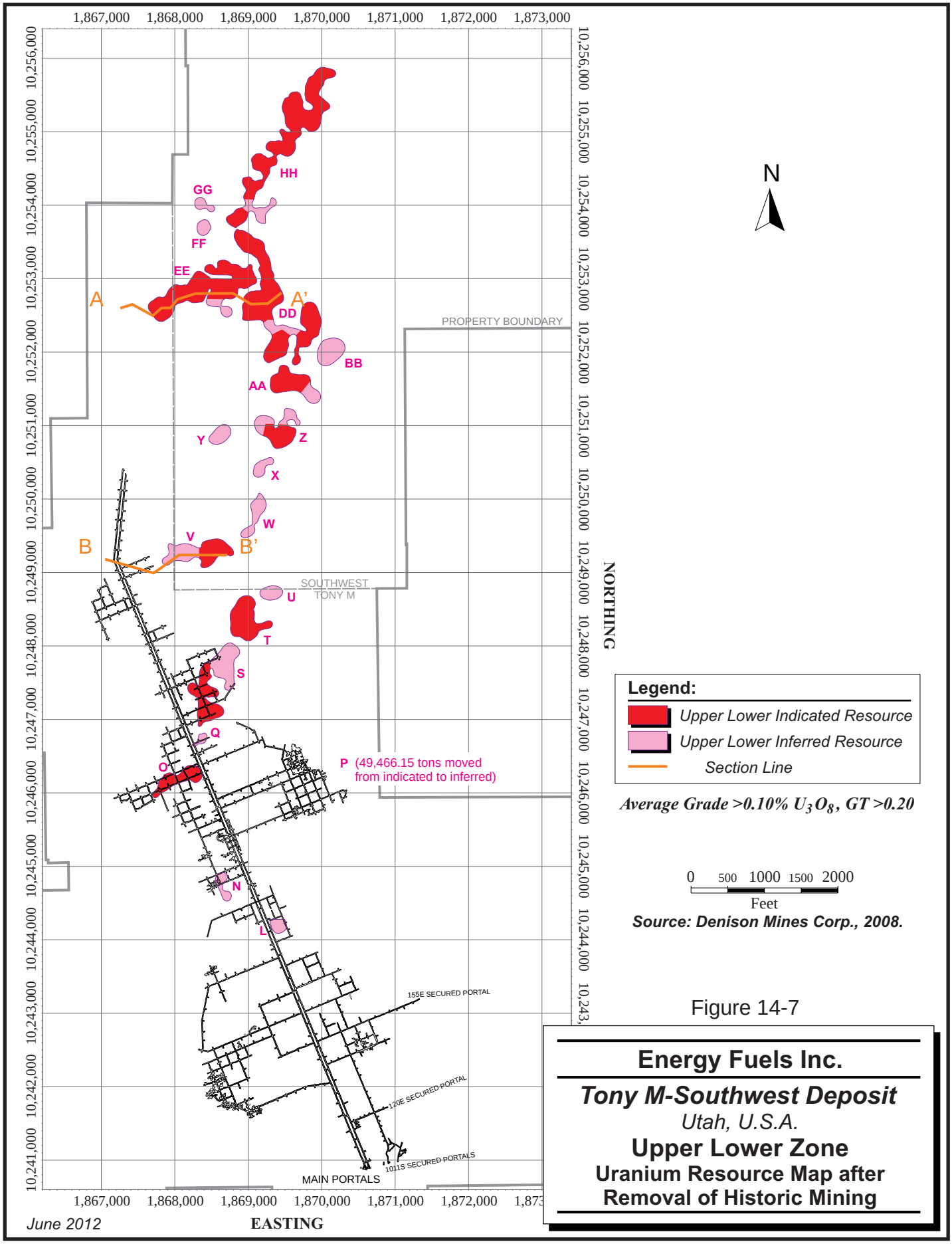


Figure 14-7

Energy Fuels Inc.

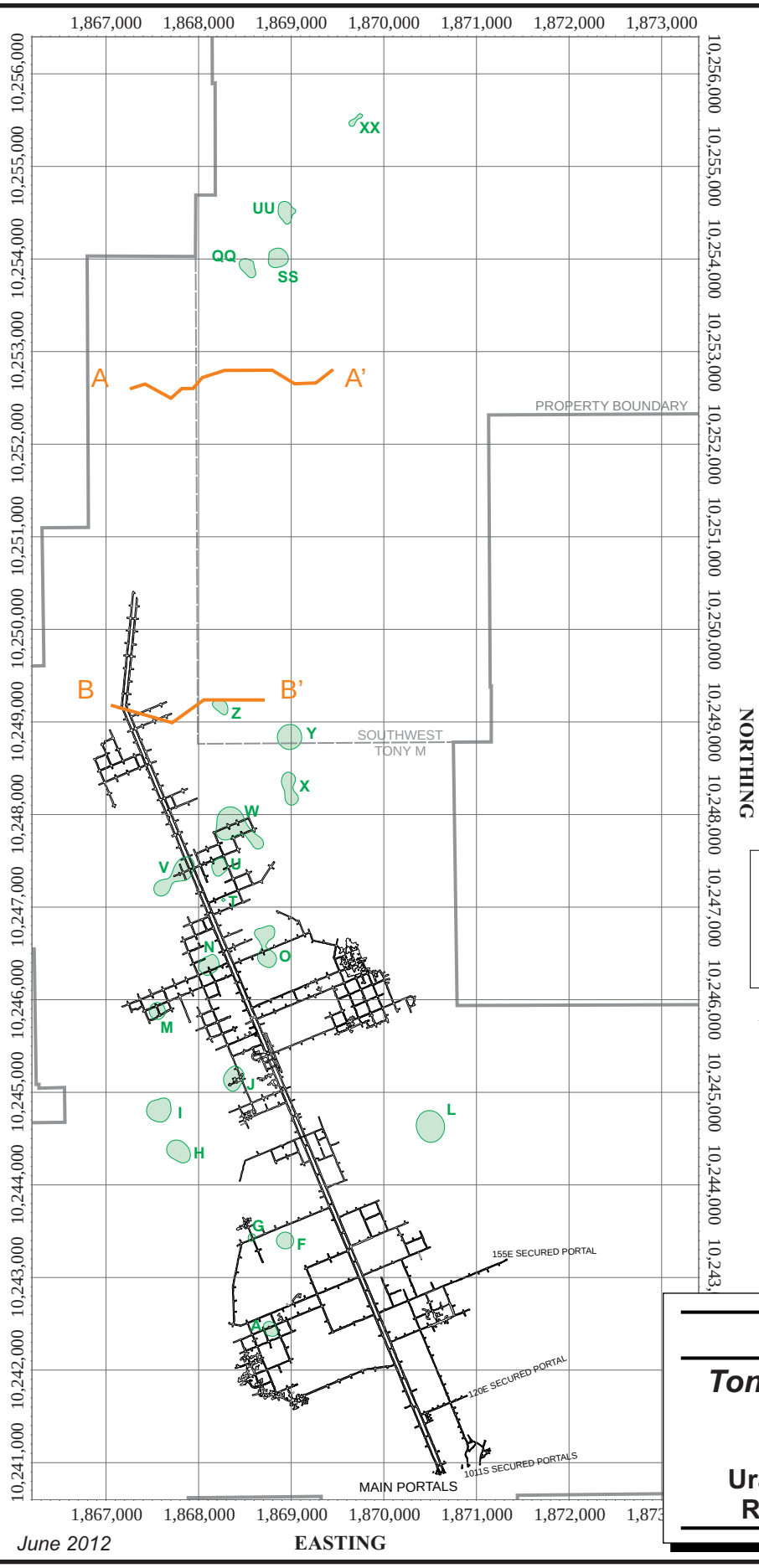
Tony M-Southwest Deposit

Utah, U.S.A.

Upper Lower Zone

Uranium Resource Map after Removal of Historic Mining

June 2012



N

Legend:

- *Middle Lower Indicated Resource*
- *Middle Lower Inferred Resource*
- *Section Line*

Average Grade >0.10% U_3O_8, GT >0.20

0 500 1000 1500 2000
Feet

Source: Denison Mines Corp., 2008.

Figure 14-8

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Middle Lower Zone

Uranium Resource Map after Removal of Historic Mining

June 2012

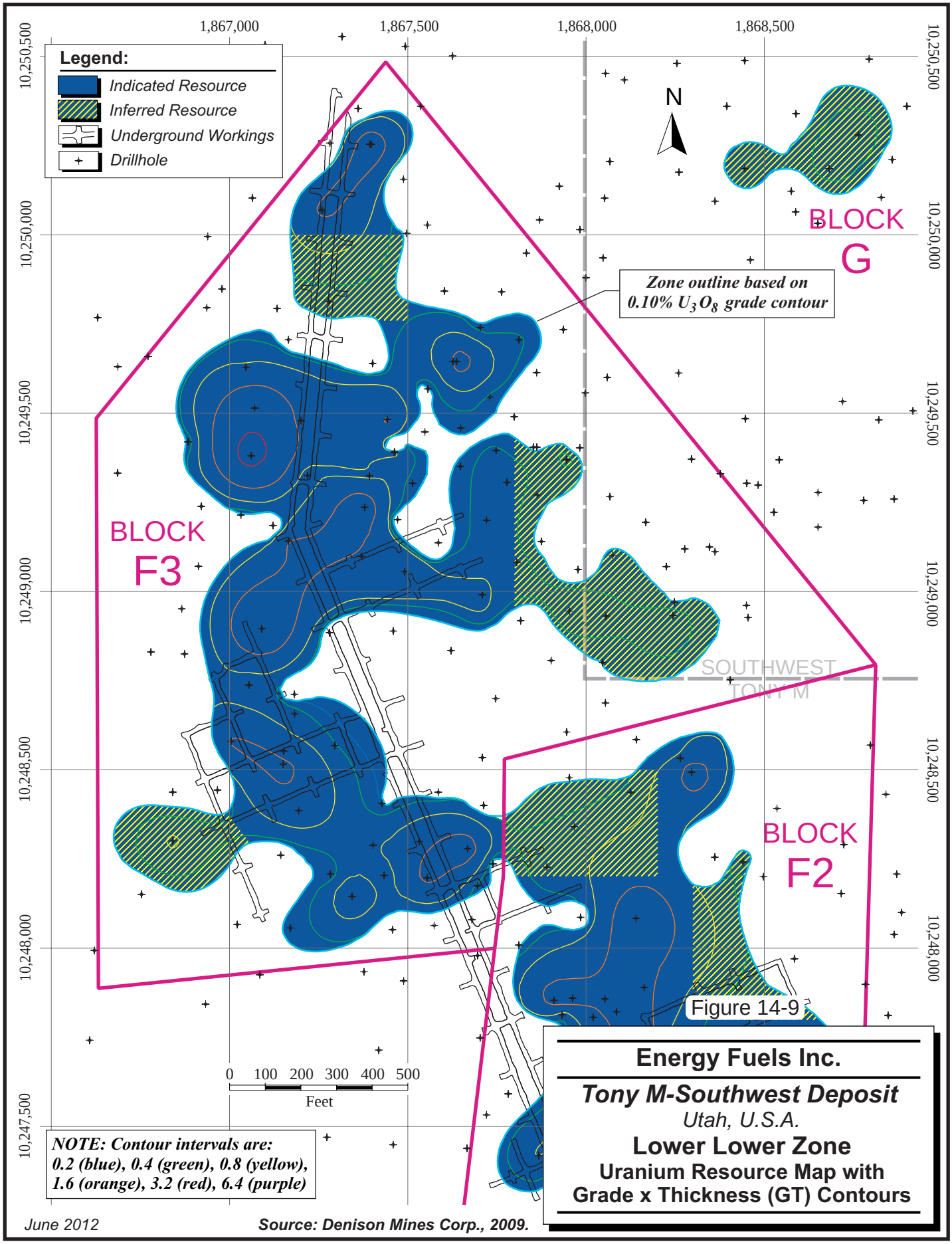


Figure 14-9

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Lower Lower Zone

Uranium Resource Map with Grade x Thickness (GT) Contours

June 2012

Source: Denison Mines Corp., 2009.

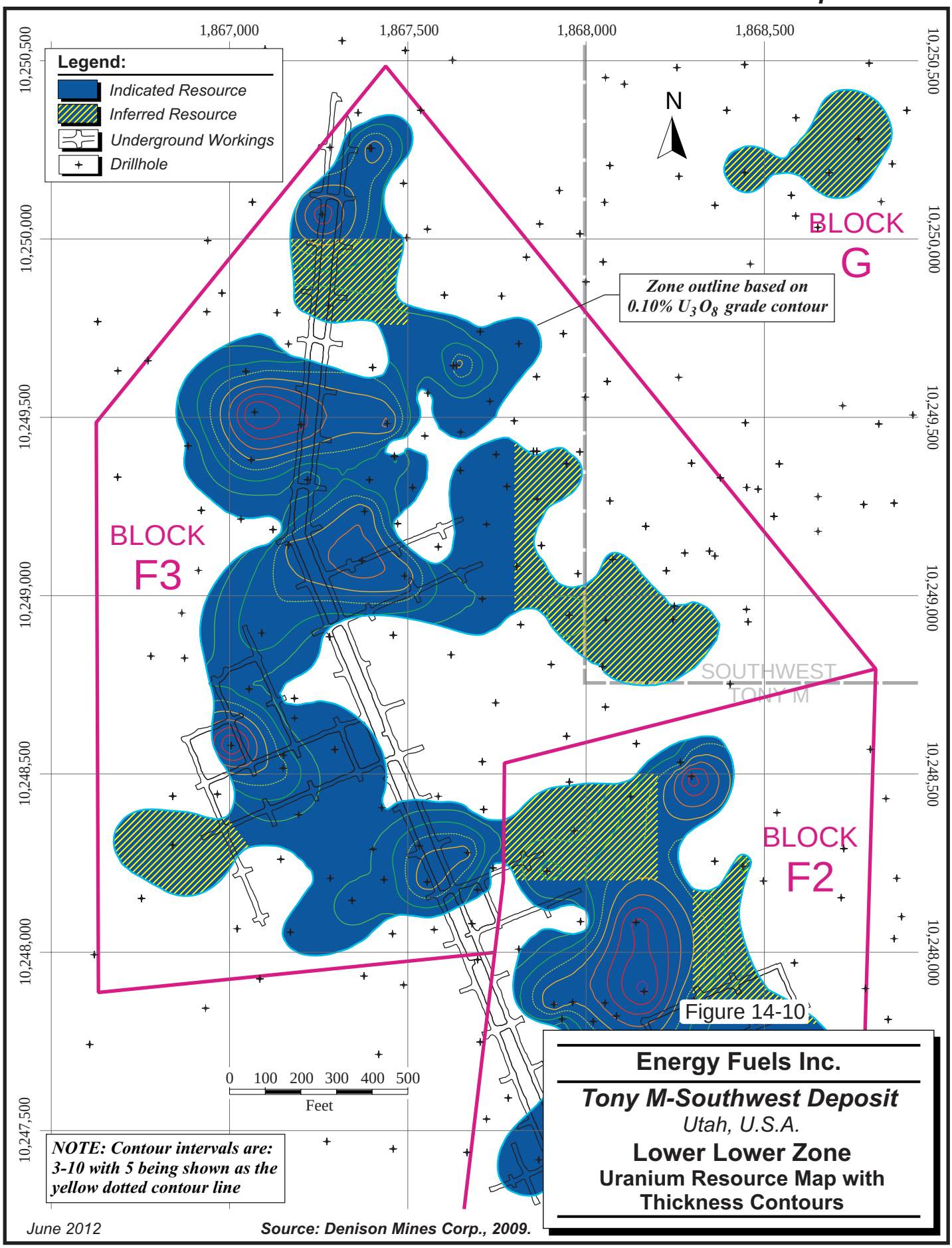


Figure 14-10

Energy Fuels Inc.

Tony M-Southwest Deposit

Utah, U.S.A.

Lower Lower Zone

Uranium Resource Map with Thickness Contours

ALLOWANCE FOR PAST PRODUCTION

As noted above in Section 6 History, there have been two periods of past production at the Tony M Mine. There has been no production from the Southwest portion of the Tony M-Southwest deposit. Of the estimated total production in the 1970s and 1980s period, much of the material mined in the late 1970s was at a low cut-off grade, reflecting the high uranium price at the time, and would have been outside of the current resource blocks. After deducting an estimate of this low grade material (<0.10% U_3O_8), RPA estimates that production of 136,318 tons at 0.128% U_3O_8 (348,048 lbs) from 1982 to 1984 is applicable to the current resource estimate and has been deducted. For the 2007-2008 period of Denison production, a total of 90,025 tons at 0.165% U_3O_8 (297,465 lbs) in 2007 has been deducted from the Tony M mineral resources.

In order to deduct the past production from the undiluted mineral resources, Denison "undiluted" the mined tonnage by subtracting one foot of diluting material. The resulting tonnage and the mined pounds were then deducted from the resource blocks where mining took place. For the latter production period by Denison, mining locations were surveyed and are relatively easy to match with resource areas. For the earlier mining period, some assumptions need to be made to match the production to the resource areas. A total of 177,000 tons at 0.182% U_3O_8 (645,500 lbs U_3O_8) was deducted from the Tony M indicated mineral resource.

In the opinion of RPA, Denison has used the best information available to take a reasonable approach to deduction of past production from reported mineral resources.

CLASSIFICATION OF MINERAL RESOURCES

Denison classified the Tony M-Southwest mineral resources into Indicated and Inferred categories. RPA has reviewed the classification and concurs.

Indicated blocks were defined on the basis of multiple holes within the block, drill hole spacing in the order of 100 ft. or closer, good continuity between mineralized intercepts, and good correlation with previous resource studies. Other blocks or parts of blocks that did not meet these criteria were classified as inferred. Some of the blocks that qualify as indicated are within and adjacent to past mining areas and are classified as inferred

because of uncertainty about future mining potential or because of proximity to mine infrastructure.

A cut-off grade of 0.10% eU_3O_8 was applied to the indicated and inferred blocks. Only those blocks with grades above this cut-off were included in the resources in Table 14-4.

TABLE 14-4 2009 TONY M-SOUTHWEST RESOURCE ESTIMATE AT A CUT-OFF GRADE OF 0.10% eU_3O_8
Energy Fuels Inc. – Henry Mountains Complex Property

Zone and Category	Millions of Tons	Grade eU_3O_8 (%)	Contained eU_3O_8 (Millions of Pounds)
Tony M Indicated			
LL	1.09	0.23	5.06
UL	0.11	0.19	0.42
Subtotal Indicated	1.20	0.23	5.48
Deduct mined material	0.18	0.18	0.65
Total Tony M Indicated	1.03	0.24	4.83
Southwest Indicated			
LL	0.24	0.21	0.97
UL	0.42	0.28	2.33
Total Southwest Indicated	0.66	0.25	3.30
Total Indicated	**1.68**	**0.24**	**8.14**
Tony M Inferred			
LL	0.34	0.16	1.07
ML	0.16	0.18	0.57
UL	0.15	0.10	0.53
Total Tony M Inferred	0.65	0.17	2.17
Southwest Inferred			
LL	0.10	0.14	0.29
ML	0.02	0.15	0.05
UL	0.09	0.13	0.24
Total Southwest Inferred	0.21	0.14	0.58
Total Inferred	**0.87**	**0.16**	**2.75**

Notes:
1. Mineral resources were classified in accordance with CIM Definition Standards.
2. Cut-off grade is 0.10% eU_3O_8 over a minimum thickness of 2 ft.
3. Mineral resources have not been demonstrated to be economically viable.
4. All mine production by Plateau and Denison has been deducted.
5. Some totals may not add due to rounding.

RPA REVIEW

The Denison resource estimate was audited by RPA and accepted as a current Mineral Resource estimate for Energy Fuels. RPA performed the following checks in the course of its audit:

- Reviewed a number of drill hole intersection calculations.

- Reviewed the geological interpretation and correlation of mineralized intervals.
- Compared elevations of adjacent drill hole intersections and groups of intersections as plotted on plans.
- Compared both the average grade and the elevations for a number of drill hole intercepts on original gamma logs with intercepts used to estimate resources.
- Compared a number of chemical analyses of drill core with the equivalent gamma logs for the drill hole.
- Reviewed the collar coordinates of a number of drill logs and compared them to locations on the drill holes on the resource base map.
- Reviewed the methodology used to calculate composites.
- Reviewed the contouring of grade, thickness and GT values.
- Reviewed the conversion of contour values to tons, grade and contained eU_3O_8.
- Reviewed the method of deducting past production from the mineral resources.
- Reviewed the classification of Mineral Resources.

COPPER BENCH-INDIAN BENCH DEPOSIT

RESOURCE ESTIMATION DATABASE

The basis for resource estimation on the Copper Bench-Indian Bench deposit is the gamma logs from 1,193 rotary drill holes (Table 14-5). A total of 49 core holes were drilled to recover samples for chemical and geologic analysis and to establish stratigraphic relationships.

All of the drilling and analyses were conducted by past owners (i.e., prior to ownership by Energy Fuels, Denison and predecessor company IUC) of the Henry Mountains Complex Property. Information including logs from all of the historical drilling, as well as the results of chemical and geologic analyses was made available to RPA. None of the original core or samples were available to RPA.

The Copper Bench deposit was drilled on a grid of 100 ft. by 100 ft., except in areas where rough terrain did not allow surface access. Drill hole spacing on the Indian Bench deposit is on a grid of approximately 200 ft. by 200 ft. Analysis indicates the Indian Bench deposit is similar to the Copper Bench deposit, and it is a northwesterly continuation of the Copper Bench deposit. The Indian Bench mineralization occurs in the same stratigraphic interval of the Salt Wash Member as the Copper Bench mineralization.

TABLE 14-5 2006 INDICATED RESOURCE AND HISTORIC DRILLING DATA SUPPORT
Energy Fuels Inc. – Henry Mountains Complex Property

Deposit	No. of Rotary Drill Holes	No. of Core Drill Holes	Drill Hole Fence Spacing*	Drill Hole Spacing Along Fence*
Copper Bench	998	42	100 ft	100 ft
Indian Bench	195	7	200 ft	200 ft
Total	**1,193**	**49**		

* Drill hole spacing in some areas is irregular and more widely spaced where rugged terrain does not allow access.

The depth below the surface of mineralization is nearly 1,100 ft. in the Copper Bench-Indian Bench deposit. The base elevation of the deposit is approximately 4,500 ft. above sea level.

Mineralized intercepts of indicated resource blocks meeting or exceeding the 0.8 ft.% eU_3O_8 GT cut-off have an average GT of 1.17 ft.% eU_3O_8, a median GT of 1.21 ft.% eU_3O_8, and range from 0.8 to 5.15 ft% eU_3O_8. Mineralized intercepts meeting the cut-off average 5.1 ft. in thickness, have a median thickness of 4.5 ft., and range from 2.0 ft. to 15.0 ft. thick (Table 14-6).

TABLE 14-6 COPPER BENCH, INDIAN BENCH, AND SOUTHWEST DEPOSITS – CHARACTERISTICS OF 202 INDICATED RESOURCE BLOCKS AT MINIMUM CUT-OFF: 0.20% eU_3O_8, GT: 0.80 FT% eU_3O_8
Energy Fuels Inc. – Henry Mountains Complex Property

Characteristic:	Average	Median	Range
GxT, ft% eU_3O_8	1.71	1.42	0.81 – 5.15
Grade, % eU_3O_8	0.324	0.292	0.2 - 2.19
Thickness, ft	5.5	5	2.0 – 14.5

A graph of cut-off grade versus indicated resources for the Copper Bench, Indian Bench, and Southwest deposits is shown in Figure 14-11.

Mineralized intercepts of inferred resource blocks meeting or exceeding the 0.8 ft.% eU_3O_8 GT cut-off have an average GT of 1.17 ft% e eU_3O_8, a median GT of 1.21 ft.% e eU_3O_8, and range from 0.8 to 6.41 ft% e eU_3O_8. Mineralized intercepts meeting the cut-off average 4.8 ft. in thickness, have a median thickness of 4 ft., and range from 2.0 ft. to 15.0 ft. thick (Table 14-7).

TABLE 14-7 COPPER BENCH, INDIAN BENCH, AND SOUTHWEST DEPOSITS – CHARACTERISTICS OF 148 INFERRED RESOURCE BLOCKS AT MINIMUM CUT-OFF: 0.20% EU_3O_8, GT: 0.80FT% EU_3O_8
Energy Fuels Inc. – Henry Mountains Complex Property

Characteristic:	Average	Median	Range
GxT, ft% eU_3O_8	1.56	1.23	0.8 – 6.41
Grade, % eU_3O_8	0.345	0.296	0.2 – 1.05
Thickness, ft	4.8	4	2.0 – 15

A graph of cut-off grade versus Inferred resources for the Copper Bench, Indian Bench, and Southwest deposits is shown in Figure 14-12.

The information in Tables 14-6 and 14-7 and in Figures 14-11 and 14-12 include the Southwest deposit as well as the Copper Bench and Indian Bench deposits and are based on the 1993 EFNI resource estimate audited by RPA. The Southwest deposit resource estimate has been superseded and combined with the Tony M deposit, however, RPA considers that the results shown in Tables 14-6 and 14-7 and Figure 14-11 and 14-12 would not be materially different if the Southwest deposit was excluded.

FIGURE 14-11 CUT-OFF GRADE VS INDICATED RESOURCE FOR COMBINED INDIAN BENCH,COPPER BENCH AND SOUTHWEST DEPOSITS

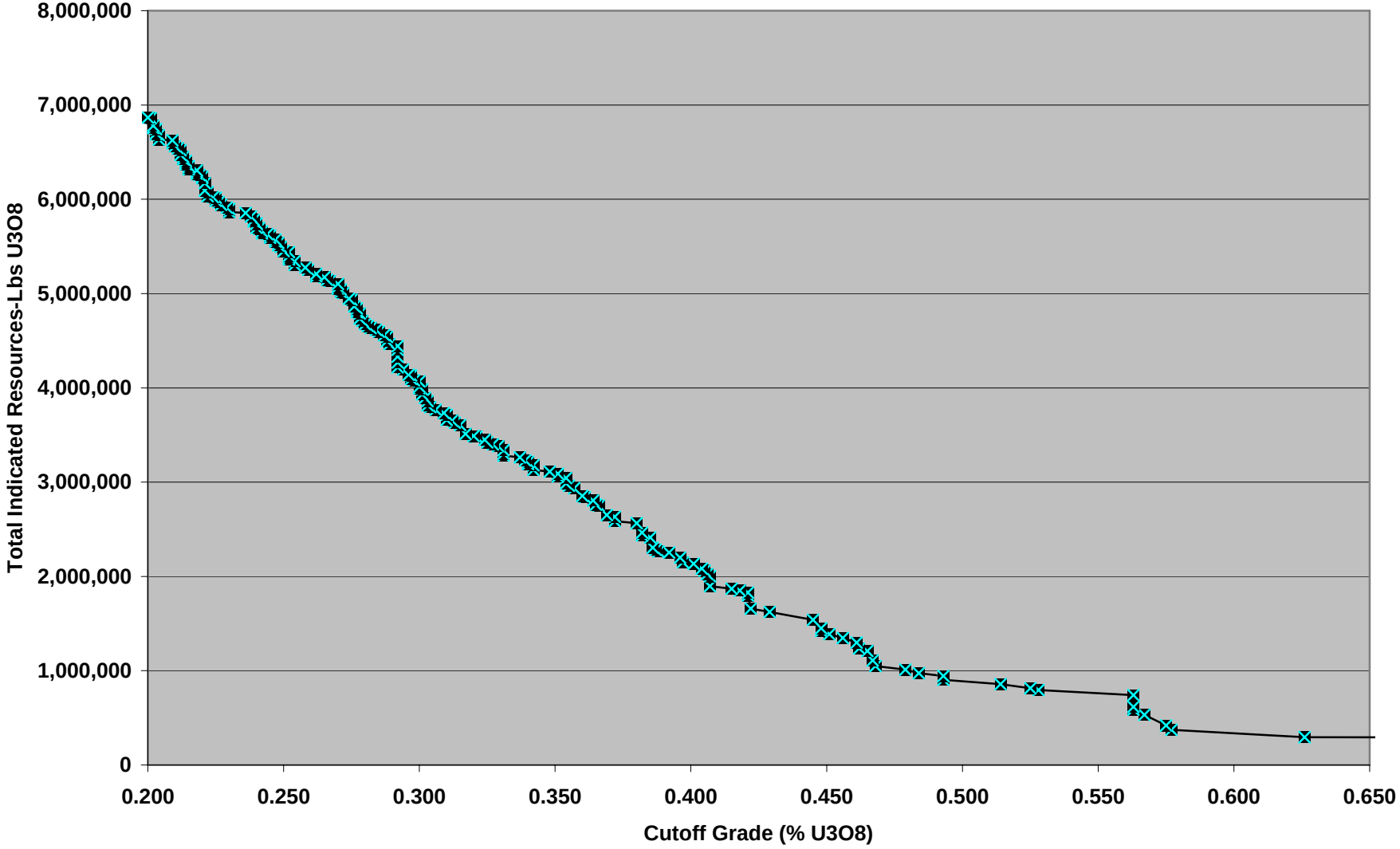
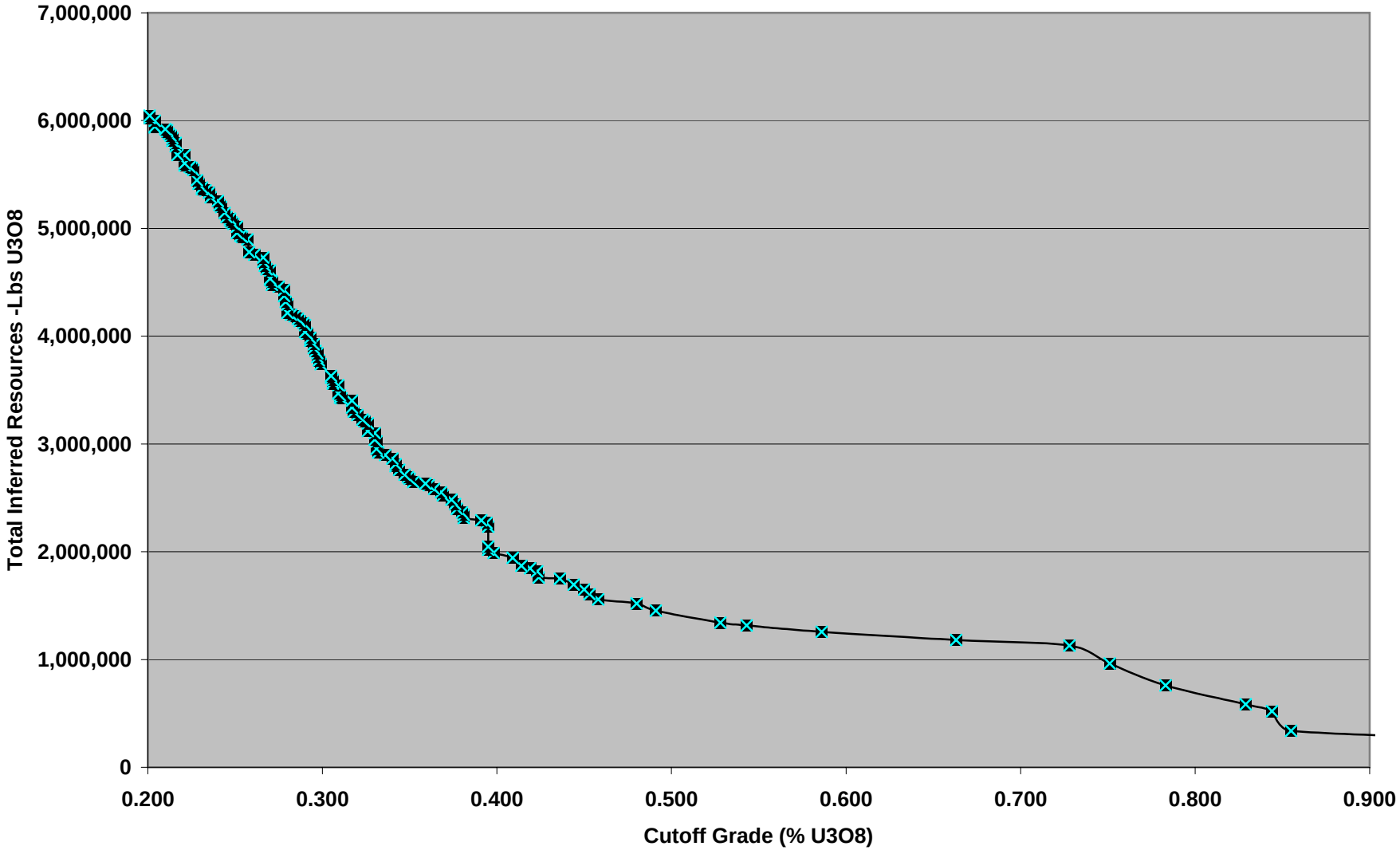


FIGURE 14-12 CUT-OFF GRADE VS INFERRED RESOURCE FOR COMBINED INDIAN BENCH, COPPER BENCH AND SOUTHWEST DEPOSITS



MINERAL RESOURCE ESTIMATION

EFNI estimated the Copper Bench-Indian Bench mineral resources using circles of influence on plans of each of the three deposits. Where the circles of influence overlapped, polygons were drawn. The volume determination is based on circles of influence drawn about the drill hole intercept meeting the cut-off. A radius of 100 ft. was used in estimating resources for the Copper Bench deposit, while a radius of 125 ft. was used to estimate resources for the Indian Bench deposit. While the Indian Bench deposit has been drilled on a wider grid than the Copper Bench deposit, based on its experience with the Copper Bench deposit, EFNI used a radius of influence of 125 ft. about each mineralized intercept for estimating the uranium resources of the Indian Bench deposit.

In each case, the circle center coincides with the drift corrected location and elevation of the mineralized intercept taking into account the downhole drift surveys made at the time of logging each hole. The results of drift surveys are available for nearly all of the drill holes on the Copper Bench-Indian Bench deposit.

EFNI used a density factor of 15.0 $ft.^3$/ton to convert volumes in cubic feet to short tons for the Copper Bench-Indian Bench resource estimate.

The grades of the mineralized zones were calculated on a polygonal block-by-block basis. The pounds of eU_3O_8 for each polygon were then tabulated along with the area and calculated volume for each block. The total number of tons and pounds of eU_3O_8 contained in the blocks were summed to provide a total inventory for each of the three deposits. Average grades for each deposit were estimated from the grades of the drill hole intersections used in the resource estimate weighted by tonnage.

CUT-OFF GRADE AND MINING CONSIDERATIONS

Definition of the mineralized zone assumed the reliability of the gamma log readings and the conversion to eU_3O_8. The selection of a 0.20% eU_3O_8 cut-off was made by Mr. Thomas Pool, P.E., based on evaluations of current mining and processing costs made by both IUC and other operators in the region. Preliminary estimates for mining and processing costs are on the order of $150/ton. The mining costs are based on IUC's experience with underground mining of Salt Wash ores in its Colorado Plateau Uravan

Mineral Belt mines of western Colorado and eastern Utah. The processing costs are based on IUC's experience at its operating White Mesa Mill, Blanding, Utah. Transportation costs for trucking Bullfrog ore 117 miles to the White Mesa Mill are also included.

The weighted average grade of the Indicated Resource blocks for the Copper Bench-Indian Bench deposit is 0.325% eU_3O_8, while the average grade of the individual blocks range from 0.2% eU_3O_8 to 2.193% eU_3O_8. The indicated resource blocks have an average thickness of 5.2 ft and range from 2.0 ft. to 14.5 ft. thick. About 25% of these intercepts have a thickness of 7.0 ft. or greater and represent about one third of the tons and pounds of the total Indicated Resource.

Therefore, while 25% of the indicated resource blocks can be mined at a full mining height of 8 ft. or greater, a majority of the zones are less than 7 ft. in thickness. In the thinner zones the mining technique of split shooting, or *resuing* is typically used to mine Salt Wash hosted ores of the Uravan District. Resuing is a method of stoping wherein the wall rock on one side of the ore zone is removed before the ore is broken. It is employed on ore beds with a thickness of as little as 30 in. or less, and yields cleaner ore than when wall rock and ore are broken together. Split shooting is a standard practice for mining the thin ore beds of the Uravan Mineral Belt.

The 0.20% eU_3O_8 cut-off maximizes the tonnage of higher grade mineralization while maintaining strong positive value at the current uranium price. Based on the extensive review of the drilling of the Copper Bench-Indian Bench deposits, RPA notes that lowering the cut-off criteria will increase total tonnage, by increasing the number of drill hole intercepts meeting the cut-off, while also increasing the apparent continuity of mineralization between adjacent drill holes.

CLASSIFICATION OF MINERAL RESOURCES

RPA has classified the Copper Bench-Indian Bench Mineral Resources as indicated and inferred following the definitions described under NI 43-101. The Mineral Resources for the Copper Bench-Indian Bench deposit are listed in Table 14-8.

TABLE 14-8 COPPER BENCH - INDIAN BENCH MINERAL RESOURCES
Energy Fuels Inc. – Henry Mountains Complex Property

	Category	Thickness (ft.)	Tons (000s)	Grade (% U_3O_8)	Contained (000s lbs U_3O_8)
Copper Bench	Indicated	5.2	502	0.292	2,933
Indian Bench	Indicated	5.5	217	0.402	1,742
Total	Indicated	5.2	718	0.325	4,674
Copper Bench	Inferred	4.9	504	0.321	3,240
Indian Bench	Inferred	4.7	251	0.417	2,092
Total	Inferred	4.7	755	0.353	5,332

Notes:
1. CIM Definitions were followed for Mineral Resources.
2. Mineral Resources are based on a cut-off grade of 0.20% eU_3O_8 over a minimum thickness of 4 ft.
3. Mineral Resources based on a tonnage factory of 15.0 $ft.^3$/ton.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Totals may not add correctly due to rounding.

Indicated resources comprise drill hole intersections that exhibit apparent continuity of mineralized lenses at the same stratigraphic level as indicated by similarity in elevation. In effect, indicated resources are designated where two or more drill holes intersections that meet the cut-off criteria are less than about 200 ft. apart such that their polygons are contiguous. In a few cases, the polygons do not overlap but are very close together or are close to a cluster of polygons at similar elevation.

Inferred resources comprise apparent mineralized lenses represented by single drill hole intersections. Other intersections at similar elevations are either below the cut-off grade or more than approximately 200 ft. away. All of the inferred resources are within the same general mineralized trends represented by the Copper Bench and Indian Bench areas.

Figures 14-13 through 14-15 are maps of the polygons used to calculate the indicated and inferred resources for the Copper Bench and Indian Bench deposits. These figures also show the distribution of drill holes on the respective properties, together with the locations of representative geologic cross sections for the deposits. Figures 14-16 through 14-18 are representative cross sections for the Copper Bench-Indian Bench deposit.

RPA REVIEW

The EFNI resource estimate was audited by RPA and accepted as a current Mineral Resource estimate for Energy Fuels. RPA performed the following checks in the course of its audit:

- Reviewed a number of drill hole intersection calculations.
- Reviewed the geological interpretation and correlation of mineralized intervals.
- Compared elevations of adjacent drill hole intersections and groups of intersections as plotted on plans.
- Compared both the average grade and the elevations for a number of drill hole intercepts on original gamma logs with intercepts used to estimate resources.
- Compared a number of chemical analyses of drill core with the equivalent gamma logs for the drill hole.
- Reviewed the collar coordinates of a number of drill logs and compared them locations on the drill holes on the resource base map.

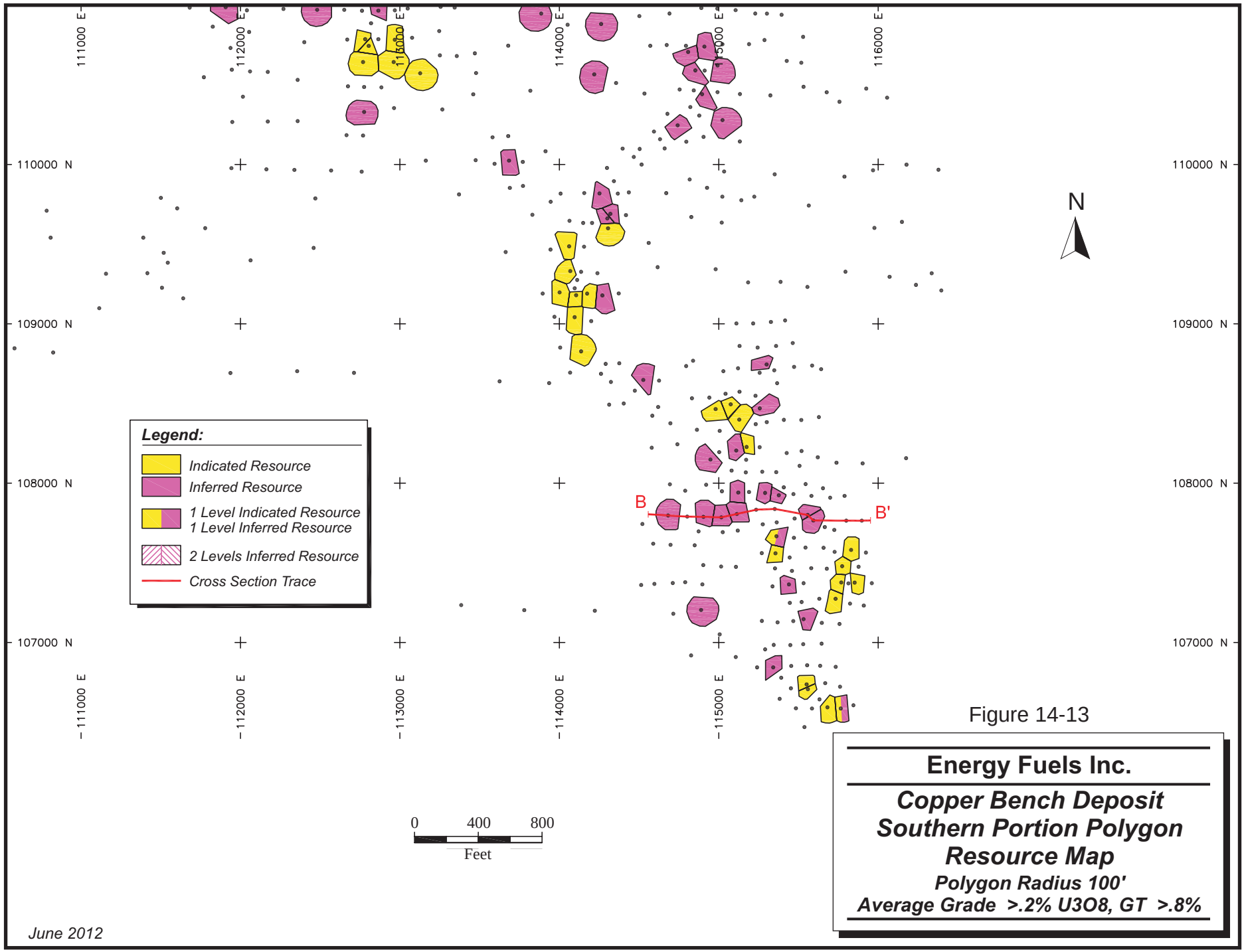


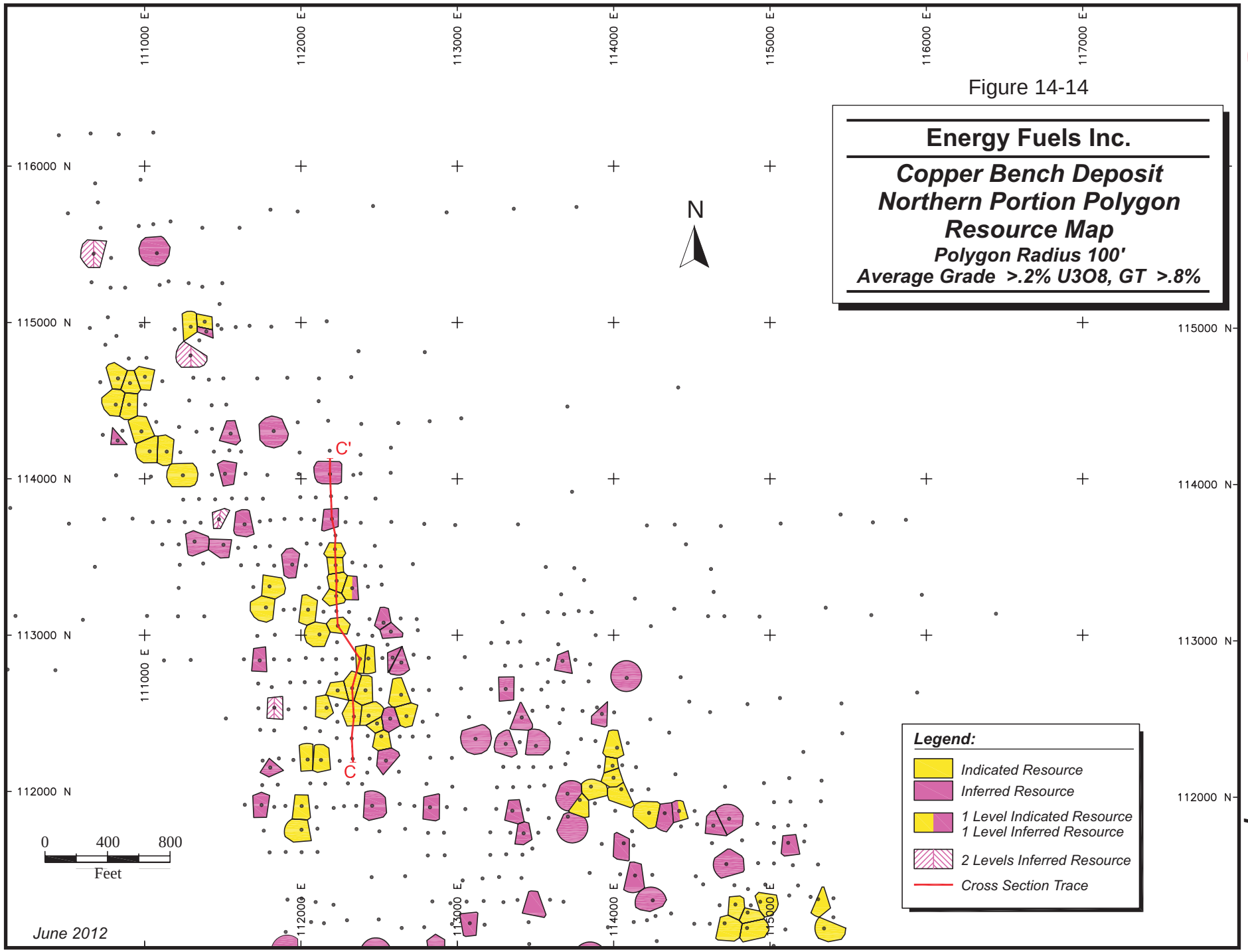
Figure 14-13

Energy Fuels Inc.

Copper Bench Deposit
Southern Portion Polygon
Resource Map
Polygon Radius 100'
Average Grade >.2% U3O8, GT >.8%

June 2012

Figure 14-14


Energy Fuels Inc.
Copper Bench Deposit
Northern Portion Polygon
Resource Map
Polygon Radius 100'
Average Grade >.2% U3O8, GT >.8%
N
111000 E
112000 E
113000 E
114000 E
115000 E
116000 E
117000 E
116000 N
115000 N
114000 N
113000 N
112000 N
C'
C
0
400
800
Feet
June 2012
Legend:
Indicated Resource
Inferred Resource
1 Level Indicated Resource
1 Level Inferred Resource
2 Levels Inferred Resource
Cross Section Trace

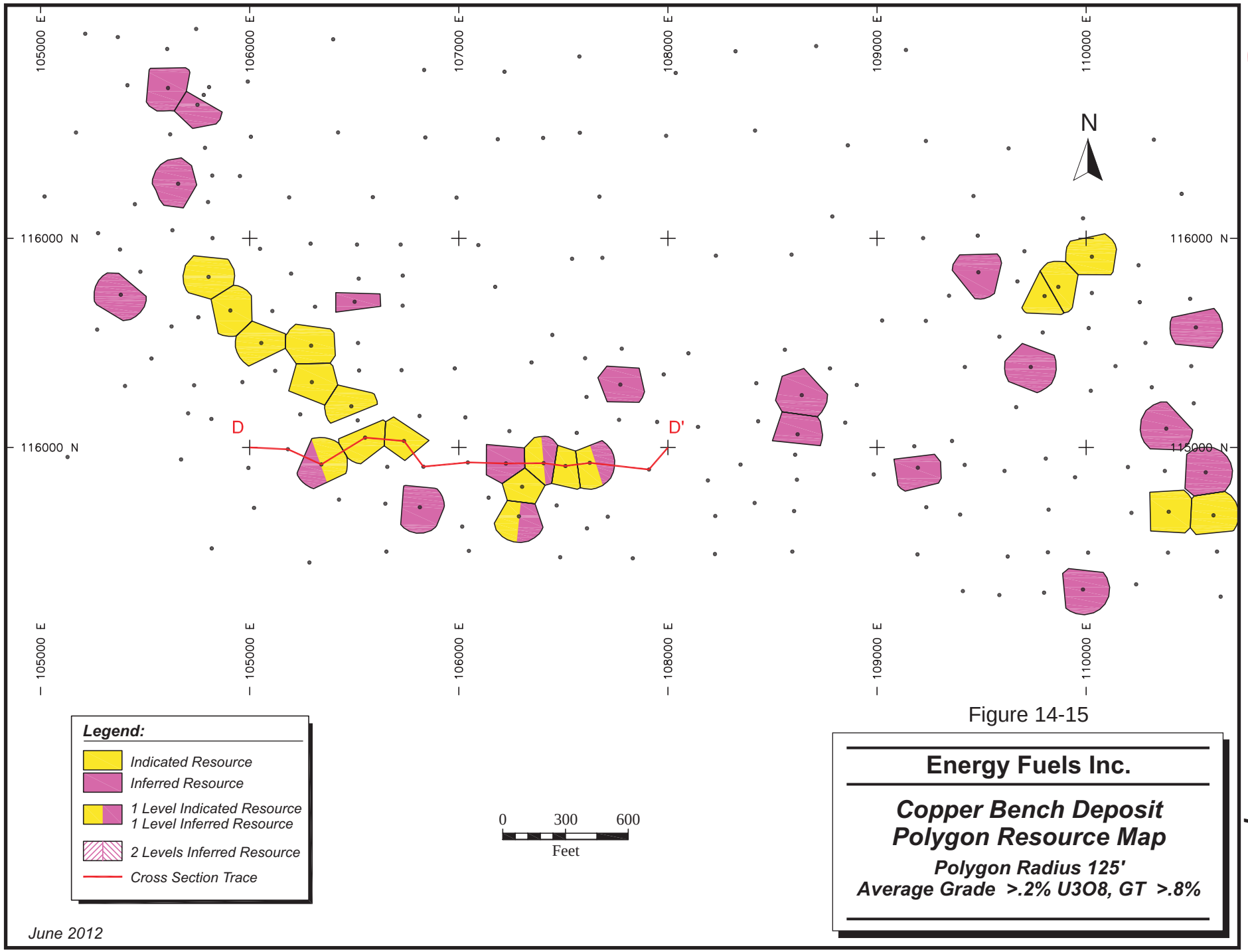


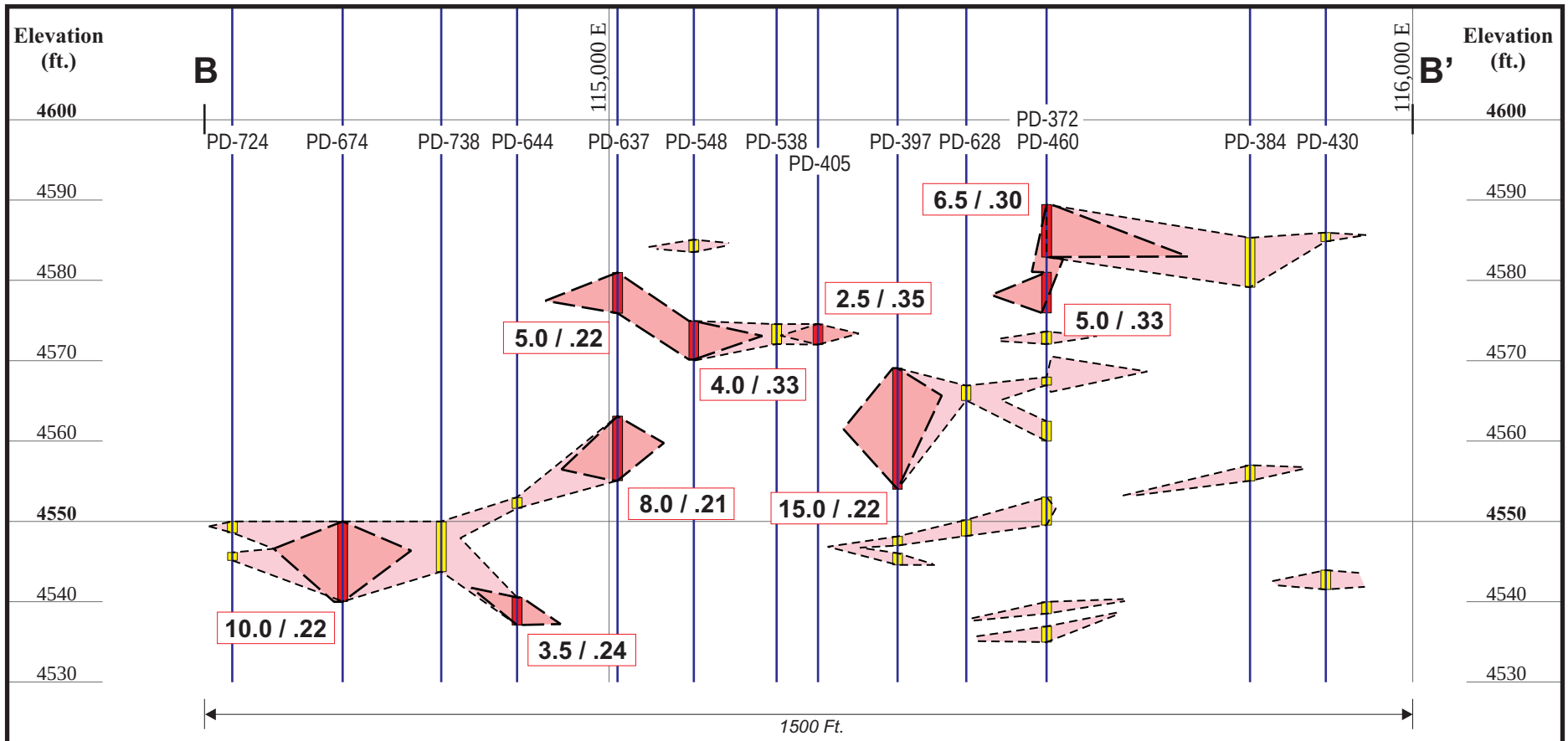
Figure 14-15

Energy Fuels Inc.

Copper Bench Deposit
Polygon Resource Map

Polygon Radius 125'
Average Grade >.2% U3O8, GT >.8%

June 2012



Legend:

Mineralized Intervals in Drill Holes

Above cut-off grade

Below cut-off grade

4.0 / 1.05 *Feet / % U_3O_8*

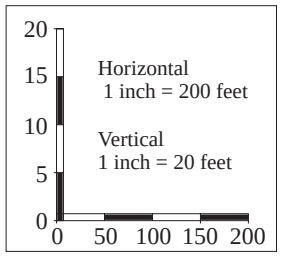


Figure 14-16

Energy Fuels Inc.

Copper Bench Deposit
Southern Portion

Utah, U.S.A.

Section B-B' (Grid 107,850N)

Looking North

June 2012

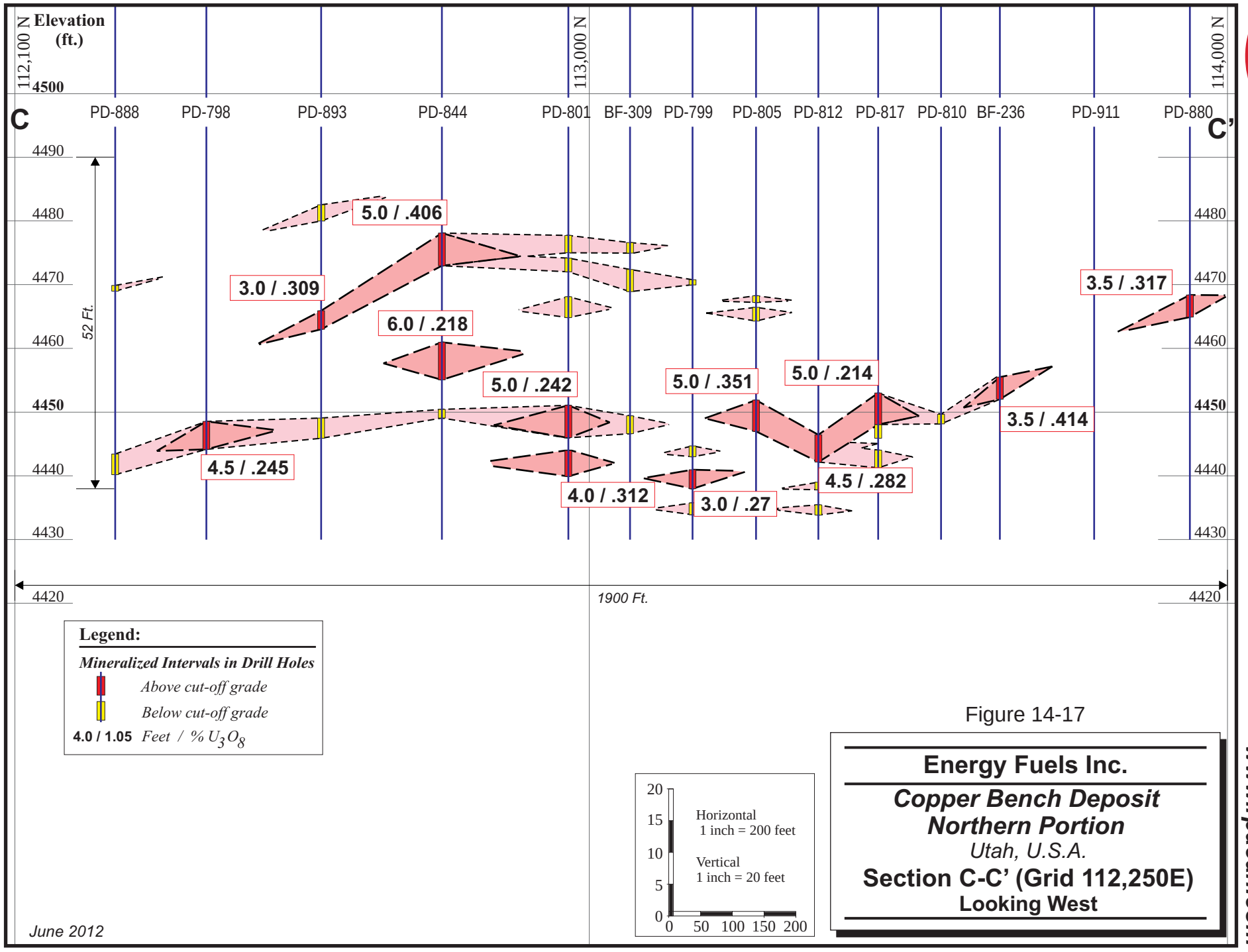


Figure 14-17

Energy Fuels Inc.

Copper Bench Deposit
Northern Portion
Utah, U.S.A.
Section C-C' (Grid 112,250E)
Looking West

June 2012

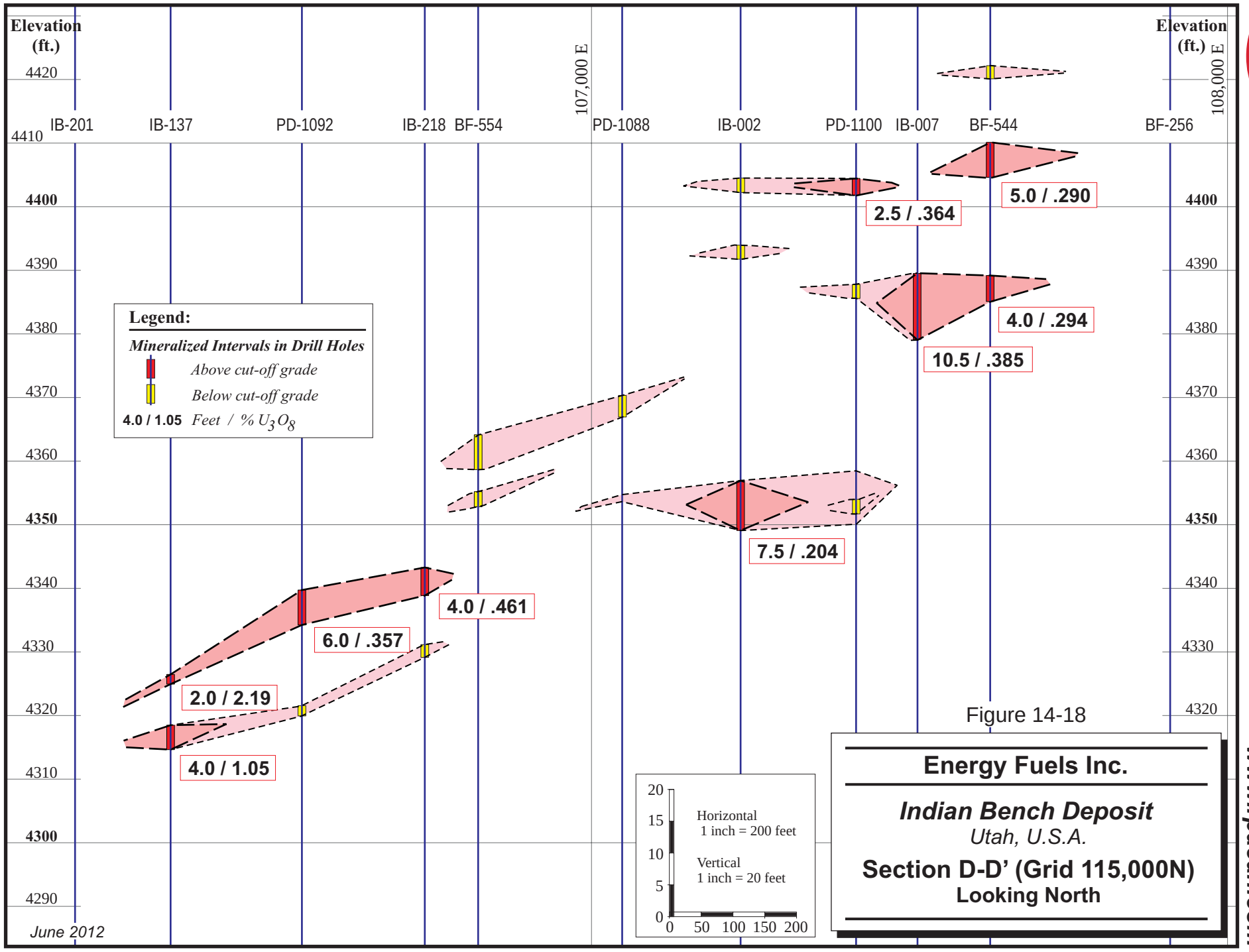


Figure 14-18

Energy Fuels Inc.

Indian Bench Deposit

Utah, U.S.A.

Section D-D' (Grid 115,000N)

Looking North

15 MINERAL RESERVE ESTIMATE

There are currently no Mineral Reserves on the Henry Mountains Complex Property.

16 MINING METHODS

This section is not applicable.

17 RECOVERY METHODS

WHITE MESA MILL

GENERAL

The White Mesa Mill is located six miles south of Blanding in southeastern Utah. Its construction by EFNI was based on the anticipated reopening of many small low-grade mines on the Colorado Plateau, and the mill was designed to treat 2,000 tons of ore per day. The mill has operated at rates in excess of the 2,000 tons per day design rate. Construction commenced in June 1979 and was completed in May 1980. The mill has been modified to treat higher grade ores from the Arizona Strip, as well as the common Colorado Plateau ores. Processing of Arizona Strip ores is typically at a lower rate of throughput than for the Colorado Plateau ores. The basic mill process is a sulphuric acid leach with solvent extraction recovery of uranium and vanadium.

Since 1980, the mill has operated intermittently in a series of campaigns to process ores from the Arizona Strip as well as from a few higher grade mines of the Colorado Plateau. Overall, the mill has produced approximately 30 million pounds U_3O_8 and 33 million pounds V_2O_5.

CRUSHING, GRINDING AND LEACHING

Run-of-mine ore is reduced to minus 28 mesh in a six-foot by 18-ft. diameter semi-autogenous grinding (SAG) mill. Leaching of the ore is accomplished in two stages: a pre-leach and a hot acid leach. The first, or pre-leach, circuit, consisting of two mechanically agitated tanks, utilizes pregnant (high-grade) strong acid solution from the countercurrent decantation (CCD) circuit which serves both to initiate the leaching process and to neutralize excess acid. The pre-leach circuit discharges to a 125-ft. thickener where the underflow solids are pumped to the second stage leach and the overflow solution is pumped to clarification, filtration, and solvent extraction circuits.

A hot strong acid leach is used in the second stage leach unit, which consists of seven mechanically agitated tanks having a retention time of 24 hours. Free acid is controlled at 70 grams per litre and the temperature is maintained at 75^{o}C.

Leached pulp is washed and thickened in the CCD circuit, which consists of eight high-capacity thickeners. Underflow from the final thickener at 50% solids is discharged to the tailings area. Overflow from the first thickener (pregnant solution) is returned to the pre-leach tanks.

SOLVENT EXTRACTION

The solvent extraction (SX) circuit consists of four extraction stages in which uranium in pregnant solution is transferred to the organic phase, a mixture consisting of 2.5% amine, 2.5% isodeconal, and 95% kerosene. Loaded organic is pumped to six stages of stripping by a 1.5 molar sodium chloride solution, and thence to a continuous ammonia precipitation circuit. Precipitated uranium is settled, thickened, centrifuged, and dried at 1,200^{o}F. The final product at about 95% U_3O_8 is packed into 55-gallon drums for shipment.

18 PROJECT INFRASTRUCTURE

When Denison operated the Tony M Mine in 2007-2008, a number of surface facilities were constructed, including a power generation station, compressor station, fuel storage facilities, maintenance building, offices, and dry facilities. An evaporation pond which was originally constructed when the Tony M Mine was in operation in the 1980s, and which is used for storage and evaporation of mine water, was reconstructed by Denison to allow for dewatering of the mine.

19 MARKET STUDIES AND CONTRACTS

MARKETS

Uranium market prices have rebounded from lows of $10.00 per pound in the mid-1990s to recent values around $50 per pound (July 2012). Some of the factors influencing the uranium price are:

- A weak US dollar compared to the currencies of the producer nations
- Disruptions in the uranium supply chain
- Reduced commercial uranium inventories
- Russia's withdrawal from the uranium concentrates market
- Increased demand for uranium
- Market speculation

Fundamentally, the outlook for uranium has improved since 2000 due to factors such as:

- Global warming concerns from fossil fuel use
- Improved safety records
- Increasing efficiencies
- Competitive costs
- Continuing new reactor installations

Although negatively impacted by the Japanese earthquake and tsunami in March 2011, the uranium market has held the $50/lb level since the disaster. The restart of two Japanese reactors with more expected to start over the summer, along with the end of the Russian HEU agreement in 2012 all contribute to strong market fundamentals.

It is now apparent that the market for uranium has moved from one driven by excess secondary supplies to one driven by primary production. The latest global uranium requirements estimate by World Nuclear Association (September 2011) show Reference Case projections of 177 million pounds U_3O_8 in 2012 to approximately 226 million pounds U_3O_8 in 2020.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

PERMITTING

The Tony M Mine is located on BLM and State of Utah managed land in Garfield County, Utah. The mine was originally permitted and developed by Plateau in conjunction with the nearby Shootaring Mill. The mine was reclaimed in 2004, but was then purchased by Denison and re-permitted in 2007 for Phase 1 Operations in which mining would be out of the existing portal. Major permits for the operation include an approved Plan of Operations and Finding of No Significant Impact (FONSI) from the BLM, a Large Mine permit with the Utah Division of Oil, Gas and Mining (DOGM), and an approved ground water discharge permit with the Utah Division of Water Quality (DWQ). A reclamation bond of $708,537 is in place.

The Tony M Mine was re-opened by Denison in late 2007 and was re-commissioned and put into production. The mine was later closed and placed on care and maintenance in November 2008. Standby operations include continued dewatering of the mine where water is pumped to a 20-acre, clay-lined evaporation pond on top of the mesa. The system also employs “land sharks” to enhance evaporation of the water.

If Energy Fuels decides to re-open the Tony M Mine in the future, the primary drift will be extended to the northeast and two production shafts will be developed. This will require the permitting of the two production shafts (Phase 2 and Phase 3), additional ventilation shafts, and greater water evaporation capacity. Because all site power will be diesel generated, an Air Permit (Approval Order) will be required from the Utah Department of Environmental Quality, Division of Air Quality. A Large Mine permit amendment was previously submitted by Denison to DOGM and a revised Plan of Operations and Draft Environmental Assessment (EA) were submitted to the BLM for Phase 2. Denison subsequently requested that the agencies defer permit review of the Phase 2 plans until they evaluated the possibility of also permitting Phase 3 at the same time. Permitting is expected to restart once Energy Fuels decides on which permitting approach to adopt.

21 CAPITAL AND OPERATING COSTS

This section is not applicable.

22 ECONOMIC ANALYSIS

This section is not applicable.

23 ADJACENT PROPERTIES

FRANK M DEPOSIT

The Frank M vanadium-uranium deposit was discovered by Plateau during drilling started on the property in mid-1977. The Frank M deposit is located in Section 2 and 3 of Township 35 South, Range 11 East S.L.M. It is located about 2.5 miles northeast of the Tony M deposit and is a southeasterly continuation of the Copper Bench deposit.

The host for the Frank M uranium deposit is the fluvial sandstone of the Salt Wash Member of the Jurassic Morrison Formation. The mineralized zone occurs between 60 ft. and 100 ft. above the base of the Salt Wash Member. The zone dips between three and five degrees to the northwest, which is generally conformable to the inclination of the sandstone beds hosting the deposit.

The deposit is approximately 7,000 ft. long and is commonly between 1,500 ft. and 2,000 ft. wide. The mineralized zone is located at a depth of 200 ft. below ground surface in the east and over 500 ft. below ground surface to the west. The average drilling depth in the area is approximately 400 ft. Nearly all of the deposit occurs above the static water table, which only intersects the mineralized horizon in the vicinity of the northwesterly limit of the property.

On behalf of Plateau, in 1981, Geostat Inc. estimated the resource for the Frank M deposit using geostatistical methods. The kriged historic estimate at a cut-off of 4 ft. of 0.07% U_3O_8 includes in-place resources of 1.49 million tons at an average radiometric grade of 0.117% U_3O_8 (Plateau, 1981). This estimate for the Frank M deposit is not NI 43-101 compliant, it has not been reviewed by RPA, and is provided for informational purposes only.

Uranium One Inc. owns the Frank M property as of the date of this report.

LUCKY STRIKE 10 DEPOSIT

The Lucky Strike 10 deposit is located on the southeast rim of Shootaring Canyon about 1,400 ft. southeast from the portal of the Tony M Mine. It is a southeasterly extension of the Tony M mineralized trend and is located above the water table. Plateau records

report a historic polygonal resource estimate of about 67,234 tons including 114,410 pounds at a radiometric grade of 0.084% U_3O_8 at a GT cut-off of 0.28%ft. Plateau records indicate that 22,381 tons at a chemical grade of 0.04% U_3O_8 were mined from the deposit during the 1976 to 1978 period (Gupta, 1983).

This estimate for the Lucky Strike 10 deposit is not NI 43-101 compliant, it has not been reviewed by RPA, and is provided for informational purposes only.

24 OTHER RELEVANT DATA AND INFORMATION

This section is not applicable.

25 INTERPRETATION AND CONCLUSIONS

Energy Fuels' Tony M-Southwest and Copper Bench-Indian Bench uranium deposits are of the Colorado Plateau sandstone hosted type. The Henry Mountains Complex Property has been the site of considerable past exploration including the drilling and logging of approximately 3,400 rotary holes and 106 core holes, of which 2,864 rotary holes were used to prepare the current resource estimates. In the opinion of RPA, the drill hole databases for the Tony M-Southwest and Copper Bench-Indian Bench deposits are appropriate and acceptable for Mineral Resource estimation.

Denison estimated the Mineral Resources of the Tony M-Southwest deposit in 2009 using the GT contour method. Energy Fuels Nuclear Inc. (EFNI, not the same company as Energy Fuels Inc.) estimated the Mineral Resources of the Copper Bench-Indian Bench deposit in 1993 using the polygonal block method. RPA has audited and accepted both the Tony M-Southwest and Copper Bench-Indian Bench Mineral Resources estimates, which are summarized in Table 25-1. No mineral reserves have been estimated for either deposit.

TABLE 25-1 MINERAL RESOURCE ESTIMATE OF THE HENRY MOUNTAINS COMPLEX URANIUM DEPOSITS, DECEMBER 31, 2011
Energy Fuels Inc. – Henry Mountains Complex Property

Category	Million Tons	Grade eU_3O_8 (%)	Contained eU_3O_8 (Million Pounds)
Indicated – Tony M	1.03	0.24	4.83
Indicated - Southwest	0.66	0.25	3.30
Indicated – Copper Bench	0.50	0.29	2.93
Indicated – Indian Bench	0.22	0.40	1.74
Total Indicated Resource	**2.41**	**0.27**	**12.80**
Inferred – Tony M	0.65	0.17	2.17
Inferred - Southwest	0.21	0.14	0.58
Inferred – Copper Bench	0.50	0.32	3.24
Inferred – Indian Bench	0.25	0.42	2.09
Total Inferred Resource	**1.61**	**0.25**	**8.08**

Notes:
1. Mineral Resources were classified in accordance with CIM Definition Standards.
2. Cut-off grade is 0.10% eU_3O_8 over a minimum thickness of 2 ft. for the Tony M-Southwest deposit
3. Cut-off grade is 0.20% eU_3O_8 over a minimum thickness of 4 ft. for the Copper Bench-Indian Bench deposit
4. Mineral Resources have not been demonstrated to be economically viable.
5. All mine production by Plateau and Denison has been deducted.
6. Some totals may not add due to rounding.

The Tony M Mine has been extensively developed, including over 18 miles of main haulageways and crosscuts that provide access to a majority of the estimated resources. The drilling and most of the development activity were conducted from about 1976 to the mid-1990s, with much of the work completed by the mid-1980s. From September 1979 to mid-1984, a total of approximately 237,000 tons of muck with an average grade of 0.121% U_3O_8 containing 573,500 pounds U_3O_8 were extracted and stockpiled by Plateau.

In 2007, the Tony M Mine was reactivated by Denison and, to November 2008, 162,384 tons at 0.131% eU_3O_8 containing 429,112 pounds U_3O_8 were produced from areas of existing mine development. The Tony M Mine is fully permitted for production but is currently on standby awaiting higher uranium prices. The mine is partially dewatered and provides direct access to much of the estimated resources through existing workings.

No development has taken place in the Southwest portion of the Tony M-Southwest deposit, although the Tony M haulageways are developed at the same elevation and

within about 1,100 ft. of the Southwest uranium zones. No development has taken place on the Copper Bench-Indian Bench deposit which is located north of the Tony M-Southwest deposit but at a similar elevation above sea level.

The Henry Mountains Complex Mineral Resources have full access to Energy Fuels' operating White Mesa uranium mill at Blanding, Utah, which has recent operating experience processing material from the Tony M Mine.

For various reasons, including the difficulty of surface access, historic surface drilling on the Tony M-Southwest and Copper Bench-Indian Bench deposits has left significant areas untested that are adjacent to known mineralization as well as in areas not accessible from existing or planned drifts or through long-hole drilling from underground at the Tony M Mine. RPA considers that there is excellent potential to add to the Mineral Resources in these areas. There is also significant potential to increase Mineral Resources in the Southwest portion of the Tony M-Southwest deposit and the Copper Bench-Indian Bench deposit where drill hole spacing averages are greater than 100 ft. This is particularly the case in the Indian Bench portion where drill hole spacing averages 200 ft.

RPA is of the opinion that additional drilling should be done on the Henry Mountains Complex Property with an emphasis on delineating areas of higher grade uranium mineralization. Positive drilling results would increase Mineral Resources, as well as provide a more complete database for use in mine development and production planning.

Based on the review of the available analyses, RPA is of the opinion that the V_2O_5:U_3O_8 ratio ranges from 1.3:1 to about 2.0:1 in the Henry Mountains Complex deposits, and that the concentration of vanadium is therefore too low to be economic at current prices.

RPA is of the opinion that the Tony M-Southwest property is of merit and warrants the recommended program and budget.

26 RECOMMENDATIONS

RPA recommends the following work:

1. Conduct a surface rotary drilling and logging program on the Tony M-Southwest and Copper Bench-Indian Bench deposits to fill in areas of wider spaced drilling, with a view to outlining higher grade mineralization.

2. Re-estimate Mineral Resources of the Copper Bench-Indian Bench and Tony M-Southwest deposits using the contour method or a block modeling approach.

3. Carry out a Preliminary Economic Assessment of re-opening the Tony M Mine and developing other uranium deposits on the Henry Mountains Complex Property.

RPA recommends the budget shown in Table 26-1 to carry out the proposed work program. The total budget is $1.8 million.

TABLE 26-1 RECOMMENDED PROGRAM AND BUDGET
Energy Fuels Inc. – Henry Mountains Complex Property

Item	US$
Drilling and logging 100 rotary holes, 80,000 ft. at $8.00/ft.	640,000
Re-estimate Mineral Resources	50,000
Preliminary Economic Assessment	150,000
Subtotal	840,000
Contingency	160,000
Total	**1,800,000**

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28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Henry Mountains Complex Uranium Property, Utah, USA" and dated June 27, 2012 was prepared and signed by the following authors:

(Signed & Sealed) *"William E. Roscoe"*

Dated at Toronto, Ontario
June 27, 2012

William E. Roscoe, Ph.D., P.Eng.
Principal Geologist

(Signed & Sealed) *"Douglas H. Underhill"*

Dated at Toronto, Ontario
June 27, 2012

Douglas H. Underhill, Ph.D., CPG
Associate Consulting Geologist

(Signed & Sealed) *"Thomas C. Pool"*

Dated at Toronto, Ontario
June 27, 2012

Thomas C. Pool, P.E.
Associate Mining Engineer

29 CERTIFICATE OF QUALIFIED PERSON

WILLIAM E. ROSCOE

I, William E. Roscoe, Ph.D., P.Eng., as an author of this report entitled “Technical Report on the Henry Mountains Complex Uranium Property, Utah, USA”, prepared for Energy Fuels Inc. and dated June 27, 2012, do hereby certify that:

1. I am a Principal Consulting Geologist with Scott Wilson Roscoe Postle Associates Inc. of Suite 501, 55 University Ave Toronto, ON, M5J 2H7.

2. I am a graduate of Queen’s University, Kingston, Ontario, in 1966 with a Bachelor of Science degree in Geological Engineering, McGill University, Montreal, Quebec, in 1969 with a Master of Science degree in Geological Sciences and in 1973 a Ph.D. degree in Geological Sciences.

3. I am registered as a Professional Engineer (No. 39633011) and designated as a Consulting Engineer in the Province of Ontario. I have worked as a geologist for more than 40 years since my graduation. My relevant experience for the purpose of the Technical Report is:
   - Twenty-five years experience as a Consulting Geologist across Canada and in many other countries
   - Preparation of numerous reviews and technical reports on exploration and mining projects around the world for due diligence and regulatory requirements
   - Senior Geologist in charge of mineral exploration in southern Ontario and Québec
   - Exploration Geologist with a major Canadian mining company in charge of exploration projects in New Brunswick, Nova Scotia, and Newfoundland

4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.

5. I have not visited the Henry Mountains Complex Property.

6. I share responsibility with my co-authors for the preparation of all sections of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of National Instrument 43-101.

8. I have previously was an author of a Technical Report on the Tony M-Southwest Deposit, Henry Mountains Complex Uranium Project, prepared for Denison Mines Corp., dated March 19, 2009.

9. I have read National Instrument 43-101, and the Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.

10. At the effective date of this Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 27th day of June, 2012

(Signed & Sealed) ***"William E. Roscoe"***

William E. Roscoe, Ph.D., P.Eng.

DOUGLAS H. UNDERHILL, PH.D., C.P.G.

I, Douglas H. Underhill, Ph.D., C.P.G., as an author of this report titled "Technical Report on the Henry Mountains Complex Uranium Property, Utah, USA", prepared for Energy Fuels Inc. and dated June 27, 2012, do hereby certify that:

1. I am an Associate Consulting Geologist with Roscoe Postle Associates Inc. of Suite 501, 55 University Avenue, Toronto, Ontario, Canada M5J 2H7.

2. I graduated with a B.A. degree in Geology from University of Connecticut in 1958, a M.Sc. degree in Geology from McGill University in 1967, and a Ph.D. degree in Geology from McMaster University in 1972.

3. I am registered as a Certified Professional Geologist with the American Institute of Professional Geologists (CPG-11154). I am a Member of the Society for Mining, Metallurgy, and Exploration, Inc. I have worked as a geologist for a total of about 35 of the 38 years since my graduation from my final degree. My relevant experience for the purpose of the Technical Report includes 29 years working as a uranium geologist described as follows:
   - Served in various positions, including Chief Geologist and Exploration Manager (including Head, Mine Geology), as the sole member of senior management responsible for all geological activities with Plateau Resources Limited from 1977 to 1984, during which time the Tony M uranium deposit was discovered and delineated, and the Tony M Mine was developed;
   - Served as Senior Consultant with Nuclear Assurance Corporation from 1986 to 1993 with responsibility for all company geological services to clients, both governmental and commercial entities, including performing assessment work on the Tony M property from 1989 to about 1993;
   - Served as the sole Uranium Resources and Production Specialist for the International Atomic Energy Agency (IAEA), Vienna, Austria, from 1993 to 2002, responsible for implementing all related IAEA programs, including preparation of the organizations contribution to the biannual, joint IAEA-OECD/NEA world report "Uranium Resources, Production and Demand";
   - Served as an independent consulting uranium geologist to the International Atomic Energy Agency, OECD/Nuclear Energy Agency, United States Government and industry since 2003.

4. 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 NI43-101) and past relevant work experience, I fulfill the requirements as a "qualified person" for the purposes of NI43-101.

5. I visited the Henry Mountains Complex Property on July 15, 2008.

6. I share responsibility with my co-authors for the preparation of all sections of the Technical Report.

7. I am independent of the Issuer applying the tests set out in section 1.5 of National Instrument 43-101.

8. I have had extensive prior involvement with that portion of the properties known as the Tony M deposit and mine extending from February 1977 to June 1984, as well as

intermittently from August 1989 to mid-1992. In 2006 I reviewed the available information for both the Tony M and Southwest properties and contributed to preparation of the "Technical Report on the Henry Mountains Complex Uranium Project, Utah", prepared for International Uranium Corporation and dated September 9, 2006, and otherwise I have had no prior involvement with the Southwest property that is subject of the Technical Report. I also previously an author of a Technical Report on the Tony M-Southwest Deposit, Henry Mountains Complex Uranium Project, prepared for Denison Mines Corp., dated March 19, 2009.

9. I have read National Instrument 43-101 and National Instrument 43-101F1 and this Report has been prepared in compliance with both of these Instruments.

10. At the effective date of this Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated this 27th day of June, 2012

(Signed & Sealed) ***"Douglas H. Underhill"***

Douglas H. Underhill, Ph. D., C.P.G.

THOMAS C. POOL, P.E.

I, Thomas C. Pool, P.E., as an author of this report entitled "Technical Report on the Henry Mountains Complex Uranium Property, Utah, USA", prepared for Energy Fuels Inc. and dated June 27, 2012, do hereby certify that:

1. I am an Associate Mining Engineer with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave., Toronto, ON, M5J 2H7.

2. I am a graduate of Colorado School of Mines with a professional degree in Mining Engineering.

3. I am registered as a Professional Engineer in the State of Colorado (Reg.#12108). I am a Member of the Australasian Institute of Mining & Metallurgy, and a Member of Society for Mining, Metallurgy, and Exploration, Inc. I have worked as a mining engineer for a total of 40 years since my graduation. My relevant experience for the purpose of the Technical Report is: approximately 35 years as a consultant in the uranium industry having evaluated scores of projects throughout the world.

4. 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.

5. I visited the Henry Mountains Complex Property October 12, 2005.

6. I share responsibility with my co-authors for the preparation of all sections of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of National Instrument 43-101.

8. I previously prepared a Technical Report on the Henry Mountains Complex Uranium Project for International Uranium Corporation, dated September 9, 2006.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 27th day of June 2012

(Signed & Sealed) *"Thomas C. Pool"*

Thomas C. Pool, P.E.