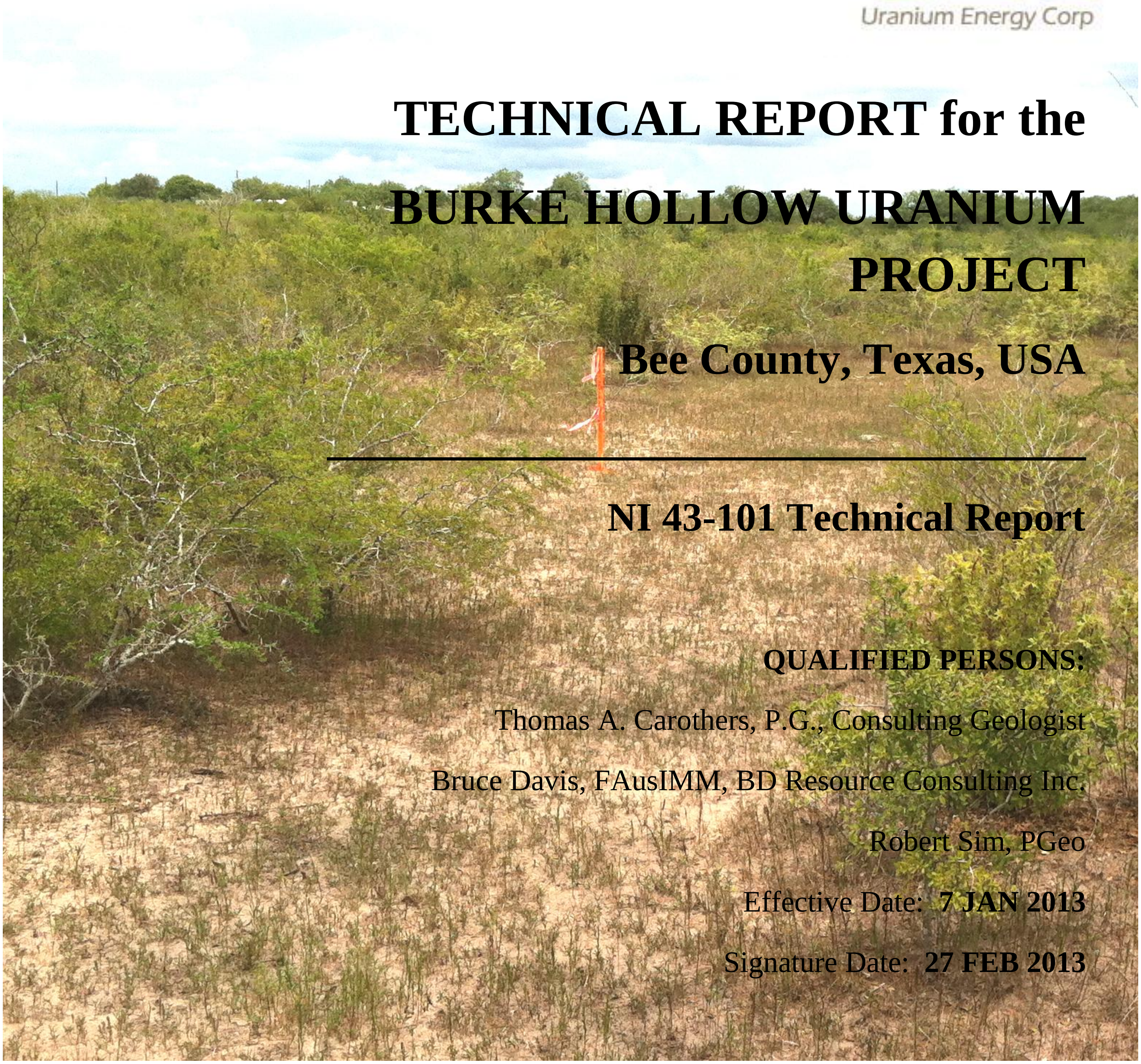

TECHNICAL REPORT for the BURKE HOLLOW URANIUM PROJECT

Bee County, Texas, USA

NI 43-101 Technical Report

QUALIFIED PERSONS:

Thomas A. Carothers, P.G., Consulting Geologist

Bruce Davis, FAusIMM, BD Resource Consulting Inc.

Robert Sim, PGeo

Effective Date: **7 JAN 2013**

Signature Date: **27 FEB 2013**

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1 EXECUTIVE SUMMARY

This Technical Report was prepared for Uranium Energy Corporation (UEC) to present the results of a recent exploration program at the company's Burke Hollow Uranium Project in southeast Bee County, Texas. The report was written under the direction of the primary author (Thomas Carothers, P.G.) while section 14 was authored by Bruce Davis, F.AusIMM, and Robert Sim P.Geo.; all are independent "qualified persons" as defined by CSA National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) and described in Section 28.

The UEC Burke Hollow Project uranium property is located in southeastern Bee County, Texas (Figure 1-1) and consists of an in-situ uranium mining lease that comprises 17,510 net acres (approximately 27.4 sq. miles). Total Minerals Corp. (Total) conducted a short reconnaissance exploration program over a portion of the current leased area in 1993. Records indicate that 12 holes were drilled on the current UEC property, and elevated gamma-ray log responses indicated the potential presence of uranium mineralization in multiple sand units of the upper Goliad Formation. UEC purchased a large database in 2011 from Uranium One in Casper, Wyoming, which included the 12 uranium geophysical logs, lithological descriptions, and grade calculation sheets, as well as a short report describing the mineralization discovered at Burke Hollow Project. The primary author's review of this data shows it to be relevant to the project and to have been done in a proper and professional manner. Although prepared by experienced personnel and considered relevant, the limited amount of data preclude a resource estimate determination based solely on Total's drilling in 1993.

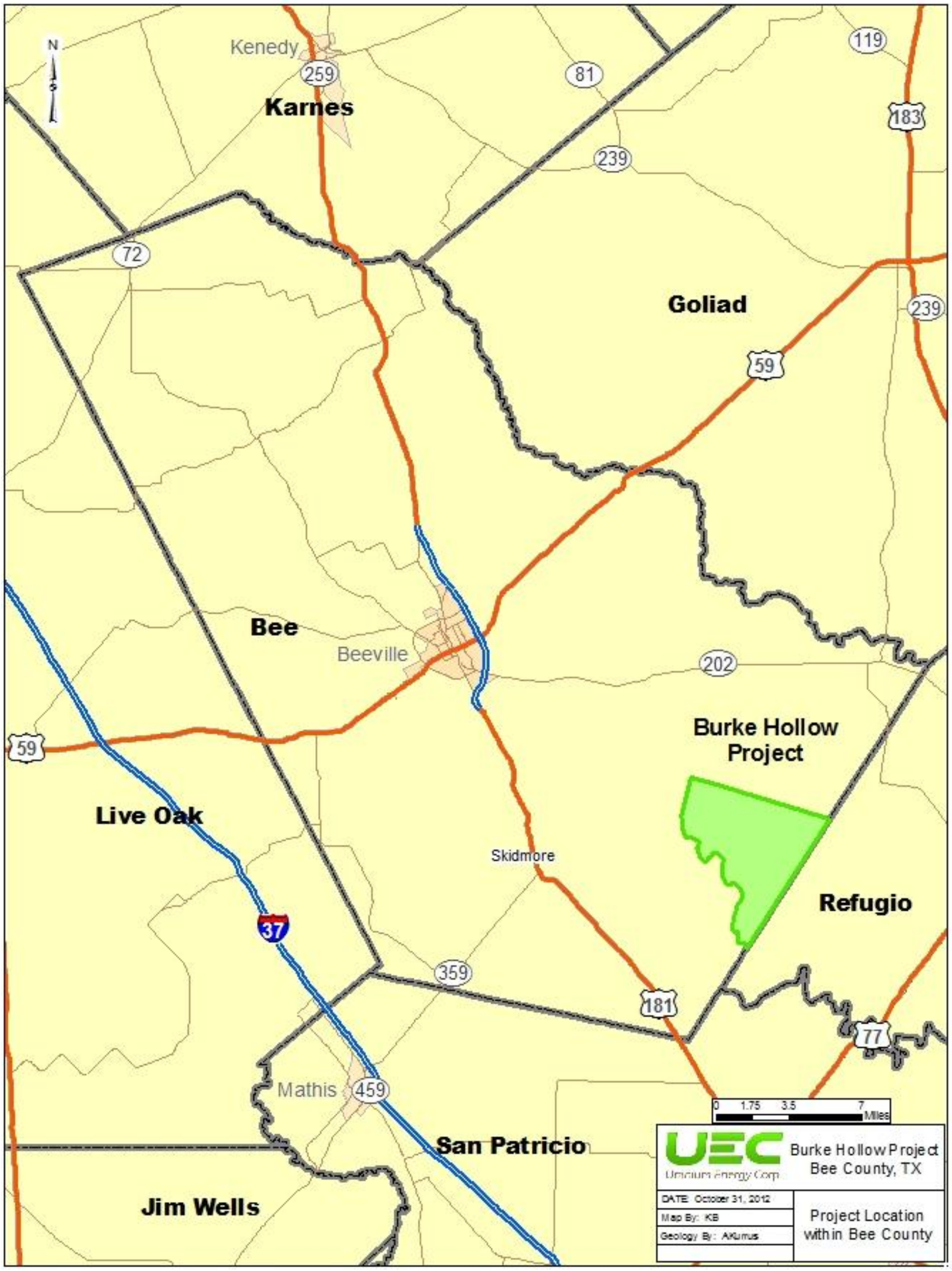

FIGURE 1-1: BURKE HOLLOW PROJECT LOCATION

The UEC Burke Hollow Project is located in the Interior Coastal Plains portion of the Gulf Coastal Plains physiographic province. The geology is characterized by Tertiary age sedimentary units that dip and thicken toward the Gulf of Mexico. Uranium mineralization in South Texas is not uncommon in multiple Tertiary age formations and is predominantly found within sand-sandstone type roll-front deposits. The presence of strong reductant, probably methane and hydrogen sulfide gas and possibly carbonized wood fragments in permeable sands created either widespread or localized areas of reducing conditions in the groundwater that caused dissolved uranium migrating in oxidizing groundwater to precipitate and concentrate.

UEC's 2012 exploration drilling campaign consisted of 268 exploration drill holes totaling 128,075 feet of drilling. Results of the drilling and data collection indicate the presence of uranium in multiple sands at the Burke Hollow Project. The primary author's review of current UEC and historic (Total) geologic data collection and interpretation by UEC shows this work has been done utilizing current industry accepted standards.

The results of historic and contemporary borehole gamma-ray and resistance logs, as well as prompt fission neutron (PFN) logs indicate that uranium mineralization occurs in at least the upper Goliad Formation sand/sandstone units below the water table at depths from approximately 180 to 400 feet below ground surface. Evaluation of existing average grade of uranium mineralization and the depth of mineralized zones indicate in-situ recovery (ISR) would likely be the most suitable mining method for this project.

Based on the results of the UEC focused exploration drilling and wider spaced exploration drilling at the Burke Hollow project, an Inferred Mineral Resource of 3,029,000 tons at a grade of 0.048% pU_3O_8 containing approximately 2.89 million pounds U_3O_8 in the combined upper and lower zones used in the mineral resource model has been estimated at the UEC project (Table 1.1).

Due to the uncertainty that may be attached to this Inferred Mineral Resource, it cannot be assumed that all or any part of this estimated Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. This Inferred Mineral Resource must be excluded from estimates forming the basis of feasibility or other economic studies.

Wide-spaced exploration drilling at the Burke Hollow project exclusive of the above Inferred Mineral Resource, includes two areas that have been designated as Exploration Targets. The Exploration Targets are based on preliminary drilling results and geologic trend evaluations by UEC geologists. The exploration potential has also been subject to review by Thomas Carothers, the qualified person (QP) for this report. The potential range of tons and pU_3O_8 grades for these exploration targets is provided in Section 9. The Exploration Target estimated tonnage and grade ranges (as noted in NI 43-101 Part 2.3.2) are considered as conceptual in nature and there has been insufficient exploration to define a mineral resource. It is uncertain if further exploration will result in the targets being delineated as a mineral resource.

A review of the sample collection and analysis practices used during the various drilling campaigns indicates that this work was conducted using procedures which are accepted within the industry. Review of the historic data and information indicates gamma probe and chemical assay (PFN geophysical logging tool) procedures were carefully calibrated and compared. Correction for differences between equivalent and chemical assay (disequilibrium) was properly applied. Similarities that exist between historic drilling data (location, style and tenor) suggest that there is no reason to question the results from the Total 1993 drilling program. It is Thomas Carothers' opinion that the sample database is of sufficient accuracy and precision to generate a mineral resource estimate. Average bulk density values, based on available data from other UEC operations in the area, were used to estimate resource tonnage.

The resources were classified by their proximity to sample locations and are reported according to the Canadian Institute of Mining, Metallurgy and Petroleum's definition standards on Mineral Resources and Reserves.

As required under NI 43-101, mineral resources must exhibit reasonable prospects for economic viability. The 2012-13 Burke Hollow mineral resource estimate is summarized at various cut-off grades for comparison purposes in Table 1.1. A "base case" cut-off grade of 0.02% U_3O_8 was applied for potential in-situ recovery mining. These assumptions are derived from operations with similar characteristics, scale and location. Note that the Inferred Mineral Resources stated below are not mineral reserves as they have not demonstrated economic viability.

There are no known factors relating to environmental, permitting, legal title, taxation, socio-economic, marketing or political issues which could materially affect the mineral resource estimates.

TABLE 1.1: ESTIMATE OF INFERRED MINERAL RESOURCES (PFN)

Cut-off Grade pU_3O_8%	Ktons	pU_3O_8 (%)	Contained pU_3O_8 (Mlbs)
UPPER ZONE RESOURCES			
0.005	3,768	0.035	2.64
0.010	3,170	0.040	2.56
0.015	2,828	0.044	2.48
0.020	**2,437**	**0.048**	**2.35**
0.025	2,087	0.053	2.20
0.030	1,705	0.058	1.99
0.035	1,453	0.063	1.83
LOWER ZONE RESOURCES			
0.005	815	0.037	0.61
0.010	797	0.038	0.60
0.015	749	0.040	0.59
0.020	**592**	**0.046**	**0.54**
0.025	515	0.049	0.50
0.030	455	0.052	0.47
0.035	379	0.056	0.42

(1) "Base case" cut-off for resources amenable to ISR Mining methods is 0.02%U_3O_8.

Conclusions

Based on the recent assembly and verification of data by UEC on the Burke Hollow Project, the following conclusions can be made:

- The level of understanding of the geology is relatively good.
- The practices used during the historic and current exploration drilling programs were conducted in a professional manner and adhered to accepted industry standards.
- There are no evident factors that would lead one to question the integrity of the database.
- A significant uranium deposit has been outlined. Uranium mineralization is hosted in fluvial Goliad Formation sands where concentrated by migration of the boundary between oxidizing and reducing groundwater
- Drilling to date has outlined an Inferred Mineral Resource (at a 0.02% pU_3O_8 cut-off) in the Upper zone of 2,437 Ktons at 0.048% pU_3O_8 containing an

estimated 2.35 million pounds of U_3O_8 and an estimated 592 Ktons of 0.046% pU_3O_8 containing an estimated 0.54 million pounds of U_3O_8 within the Lower zone.

- Exploration drilling results to the southeast of the current resource area have shown two areas (Exploration Targets) that could potentially host uranium deposits of approximately the same width, thickness and tenor as the current resource area. It is felt that these areas exhibit the potential to contain between 3 million and 6 million tons of resources with grades between 0.03% U_3O_8 and 0.06% U_3O_8 with total contained U_3O_8 between 1.8 million and 7.2 million pounds. It must be stressed that: these projections of potential quantity and grade are extremely conceptual in nature; there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the ability to estimate uranium mineral resources.

Recommendations

The following actions are recommended for the Burke Hollow Project:

- Additional drilling to expand the exploration results from historic and current drilling in both the area with the reported Inferred Mineral resource and in the two Exploration Target areas. Work will include mud rotary drilling, coring, geophysical logging costs, and the use of both PFN and chemical assay of cored intervals of the mineralized sand. Also included are costs for field crew support for the drilling program, dirt work and lease road maintenance. A budget of US$1,535,000 has been proposed to complete this test work (Table 1.2).
- Conduct laboratory testing of selected core samples to include dry bulk density of mineralized intervals and preliminary leachability tests. A budget of US$50,000 has been proposed to complete this work (Table 1.2).
- After drilling is completed, an updated resource estimate should be prepared. A budget of US$75,000 has been proposed to complete this work (Table 1.2).
- Environmental studies are needed tod provide a baseline for future exploration and potential future development work on the project. A budget of $471,000 has been proposed to complete this work (Table 1.3).

Recommended drilling and assaying will aim to further confirm current and historic results and upgrade the classification of resources in some areas. The Prompt Fission Neutron (PFN) logging will continue to be used as the primary indicator of chemical U_3O_8 grade of mineralized intercepts.

TABLE 1.2: EXPLORATION BUDGET

Item	Cost (USD)
Drill, log, and plug 250 exploration holes @ 400' TD	$750,000
Drill, log, and plug 50 exploration holes @ 1000' TD	$350,000
Drill, log, and plug 5 core holes @ 400' avg. depth	$35,000
Drill, log, and plug 5 core holes @ 1000' avg. depth	$50,000
Assay and leach tests, 10 cores	$50,000
Dirt work and field crews	$300,000
Resource model update and report	$75,000
Road maintenance	$50,000
Exploration TOTAL	**$1,660,000**

TABLE 1.3: ENVIRONMENTAL BUDGET

Item	Cost(USD)
Groundwater Quality Studies (25 Regional Baseline Wells)	$375,000
Surface Water Quality Studies	$10,000
Preoperational Air Monitoring (equipment + analysis)	$15,000
Ecology	$32,000
Cultural Resource Assessment	$30,000
Socioeconomic Study	$9,000
Total	$471,000

2 INTRODUCTION

Uranium Energy Corporation (UEC) commissioned Thomas Carothers, P.G., to author a Technical Report for the Burke Hollow Uranium Project. Mr. Carothers is an independent "qualified person" within the meaning of National Instrument 43-101, Standards of Disclosure for Mineral Projects (NI 43-101). He is responsible for preparing all sections of the report except section 14. UEC also engaged Robert Sim, P.Geo. of SIM Geological Inc. and Bruce Davis, F.AusIMM of BD Resource Consulting Inc. (BDRC) to produce an initial mineral resource estimate for the Burke Hollow Uranium Project. Robert Sim, P. Geo. and Bruce Davis, F.AusIMM are both independent "qualified persons", within the meaning of NI 43-101. They are responsible for the preparation of section 14 of this Technical Report which has been prepared in accordance with NI 43-101 and Form 43-101F1.

Bruce Davis, F.AusIMM and Thomas Carothers, P.G. visited the site on 11 December 2012, inspected uranium mineralization in drilling cuttings and core samples, reviewed sampling procedures, inspected historical information and visited selected drill sites.

To prepare this Technical Report, the authors relied on geological reports, maps and miscellaneous technical papers listed in the References section of this Technical Report. This report is based on drilling and sampling data available as of 14 November 2012. The resource model, including subsequent validation and review, was completed in December 2012. All currency in this report is expressed in US dollars (US$) unless otherwise noted.

The effective date for the mineral resource estimate is 31 December 2012.

2.1 List of Abbreviations and Acronyms

.txt	text file
°F	degree Fahrenheit
ASCII	American Standard Code for Information Interchange
cm	Centimeter
cps	counts per second
dpi	dots per inch
ft	Foot
ft2	square foot
ft3/t	cubic foot per short ton
g/l	grams per liter
gpm	grams per meter

gpt	grams per tonne
ha	Hectare
in	Inch
KB	Kilobyte
kg	Kilogram
ktons	Kilotons
lbs	Pounds
MB	Megabyte
Mtons	million tons
PFN	prompt fission neutron
ppm	parts per million
pU_3O_8	U_3O_8 assay from PFN logging
QA/QC	quality assurance/quality control
t/m3	tonnes per cubic meter
TIFF	tagged image file format
tpd	tons per day
US$	US dollar

The primary sources of information and data utilized in the preparation of this technical report are mostly extracted from the UEC database of the 2012 exploration drilling, geophysical logs, maps, cross sections, reports and personal discussions with UEC exploration staff. Additionally, 1993 data from Total files, which were purchased in 2011 from Uranium One were also utilized. The authors made an on-site inspection of the property on 11 December 2012, in addition to an inspection of data in UEC's offices in Corpus Christi that included the review of selected logs and maps.

The authors verified the presence of uranium mineralization at the Burke Hollow site on 11 December 2012 while observing coring operations in Goliad sands, with resulting laboratory confirmation of uranium via chemical assay data.

3 RELIANCE ON OTHER EXPERTS

The information presented in this report was generally obtained from a review of historic data files, reports, and maps, and the 268 exploration borehole geophysical logs from UEC's 2012 drilling campaign, and resultant maps and other data produced by UEC's staff. Personal communications with UEC personnel who are qualified experts in geology and ISR mining in south Texas and especially with the Goliad Sand Formation were utilized in the development of the geologic setting and mineral resource estimates.

The authors of this report have also had discussions with Clyde L. Yancey, P.G., Vice President of Exploration, Andy Kurrus, P.G., Texas Exploration Manager, and other staff all of whom are employees of UEC and are working on the Burke Hollow Project.

The mineral resource estimation portion (Section 14) of this technical report was prepared by Bruce Davis, F.AusIMM of BD Resource Consulting Inc. (BDRC) and Robert Sim, P.Geo. of SIM Geological Inc., both independent "qualified persons" for the purposes of NI 43-101.

The information, conclusions, opinions and estimates contained herein are based on the qualified person's field observations and data, reports and other information supplied by UEC, and third parties.

For the purpose of Sections 4.1 (Property Location) and 4.2 (Property Ownership) of this report, the primary author relied on the ownership data (mineral, surface and access rights) provided by UEC (Leonard Garcia, Land Manager, UEC, 2012). The author believes that this data and information are essentially complete and correct to the best of his knowledge and that no information has been intentionally withheld that would affect the conclusions made herein. The author has not researched the property title or mineral rights for the Burke Hollow Project and expresses no legal opinion as to the ownership status of the property.

4 PROPERTY DESCRIPTION AND LOCATION

The UEC Burke Hollow Project property is located in south Texas near the northeastern end of the extensive South Texas Uranium trend (Figure 4-1). The Burke Hollow project consists of a 17,510 acre lease that would allow the mining of uranium by ISR methods while utilizing the land surface (with variable conditions) as needed, for mining wells and aboveground facilities for fluid processing and uranium production during the mining and groundwater restoration phases of the project. The UEC Burke Hollow Project area is about 18 miles southeast of the town of Beeville, is located on the western side of US 77 (Figure 4-2), and is located northeasterly of US 181 which links with US 59 in Beeville. The nominal center of Burke Hollow Project lease is located at latitude 28.2638 and longitude -97.5176. Site drilling roads are entirely composed of caliche and gravel, allowing for access for trucks and cars in most weather conditions. Four-wheel drive vehicles may be needed during high rainfall periods.

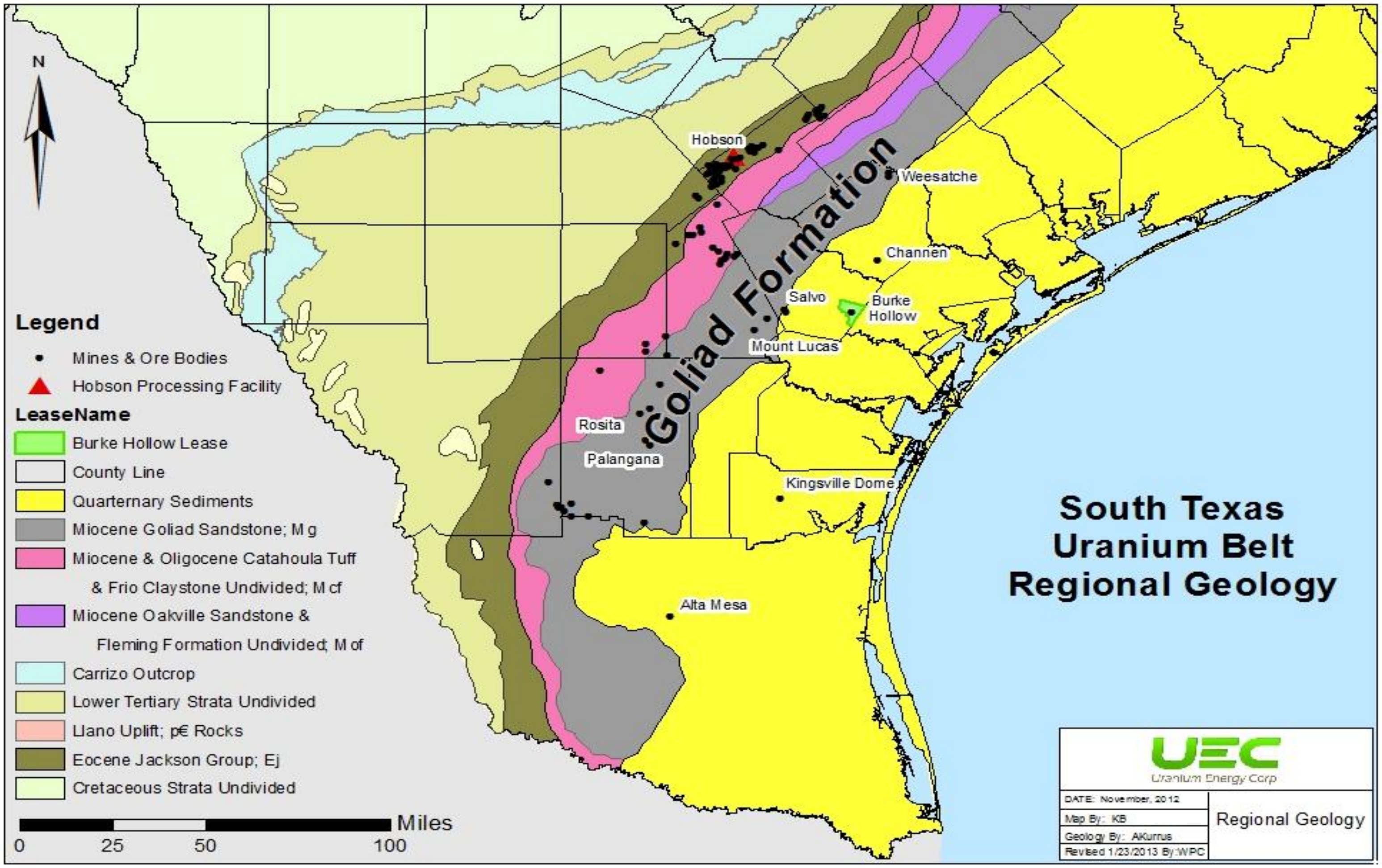

FIGURE 4-1: SURFACE GEOLOGY OF SOUTH TEXAS URANIUM PROVINCE

Virtually all mining in Texas is on private lands with leases negotiated between mining companies and each individual land/mineral owner. The Burke Hollow Project consists of one lease comprised of 17,510.63 acres and was taken from Thomson-Barrow Corporation as mineral owner and Burke Hollow Corporation as surface owner on February 21, 2012 (Figure 4-3). The lease is a paid-up lease for a primary term of five years and allows for an extension term of an additional five years and so long thereafter as uranium or other leased substances are being produced. The lease has various stipulated fees for land surface alterations, such as per well or exploration hole fees (damages). The primary lease stipulation is the royalty payments as a percentage of production. Because the lease is negotiated with a private land and mineral owner and none of the property is located on government and, some of the details of the lease information and terms are considered confidential.

There are no known environmental liabilities associated with the Burke Hollow property. UEC currently has an exploration permit for their work in Bee County from the Texas Railroad Commission. The area included in this permit area is shown on Figure 4-4.

Prior to any mining activity at the Burke Hollow Project, UEC would be required to obtain a Radioactive Materials License, a large area Underground Injection Control (UIC) Mine permit, and a Production Area Authorization (PAA) permit for each well field developed for mining within the Mine Permit area. In addition, a waste disposal well would, if needed, require a separate UIC Permit. These permits would be issued by Texas regulatory agencies.

The Texas Railroad Commission requires exploration companies to obtain exploration permits before conducting drilling in any area. The permits include standards for the abandonment and remediation of test bore holes. The standards include that ASTM type 1 neat-cement be used in the plugging of test bore holes, the filling and abandonment of mud pits, and the marking of bore holes at the surface. Remediation requirements are sometimes specific to the area of exploration and may include segregation, storage, and re-covering with topsoil, re-grading, and re-vegetation. Reclamation and hole abandonment requirements under the permit are discussed in the drilling section (10) of this report. Potential future environmental liability as a result of the mining must be addressed by the permit holder jointly with the permit granting agency. Most permits now have bonding requirements for ensuring that the restoration of groundwater, the land surface, and any ancillary facility structures or equipment is properly completed. If the Burke Hollow Project reaches economic viability in the future, UEC would need to complete a number of required environmental baseline studies such as cultural resources (including archaeology), socioeconomic impact, and soils mapping. Flora and fauna studies will need to be conducted as will background radiation surveys.

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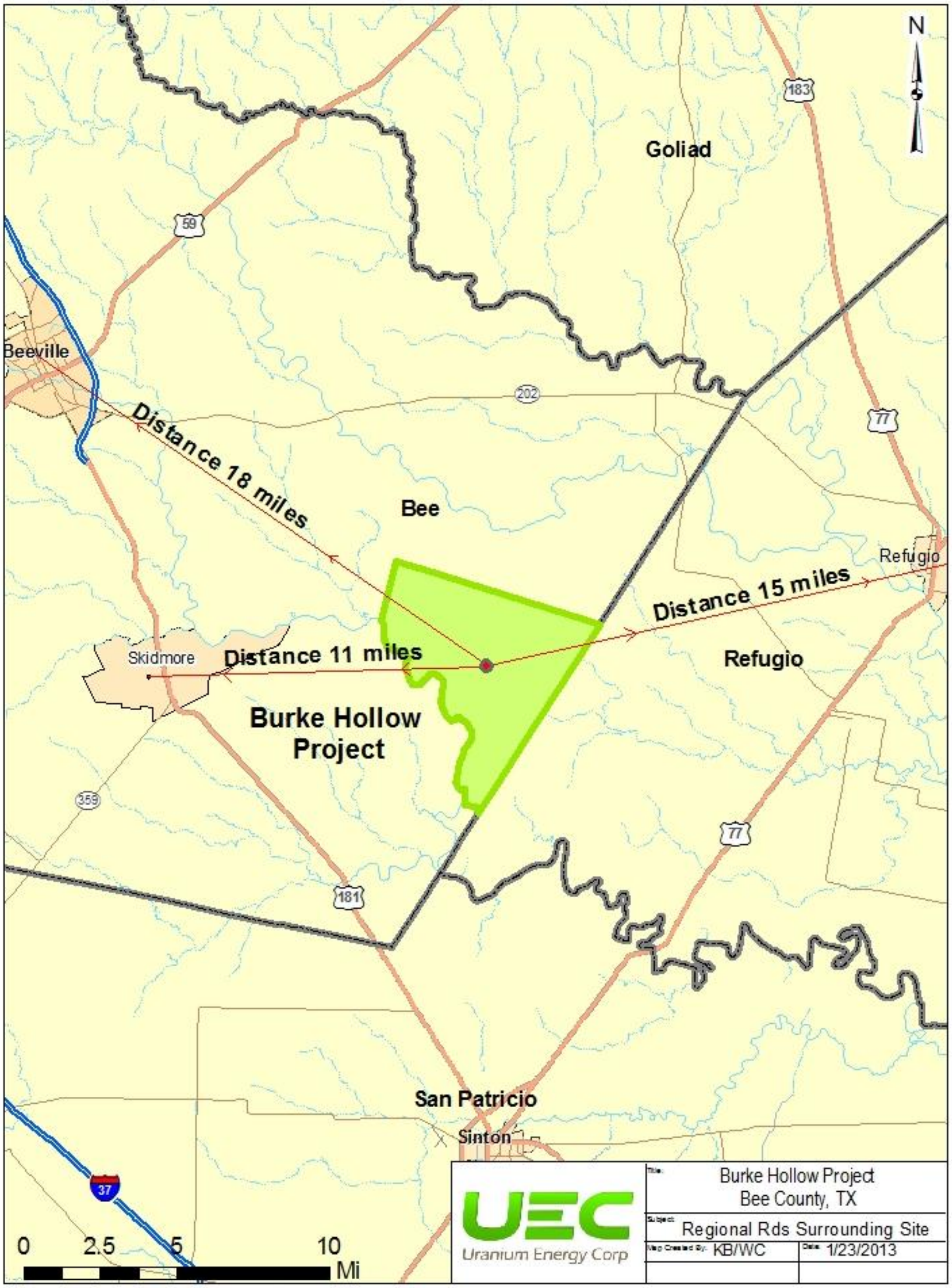

FIGURE 4-2: REGIONAL ROADS SURROUNDING PROJECT SITE

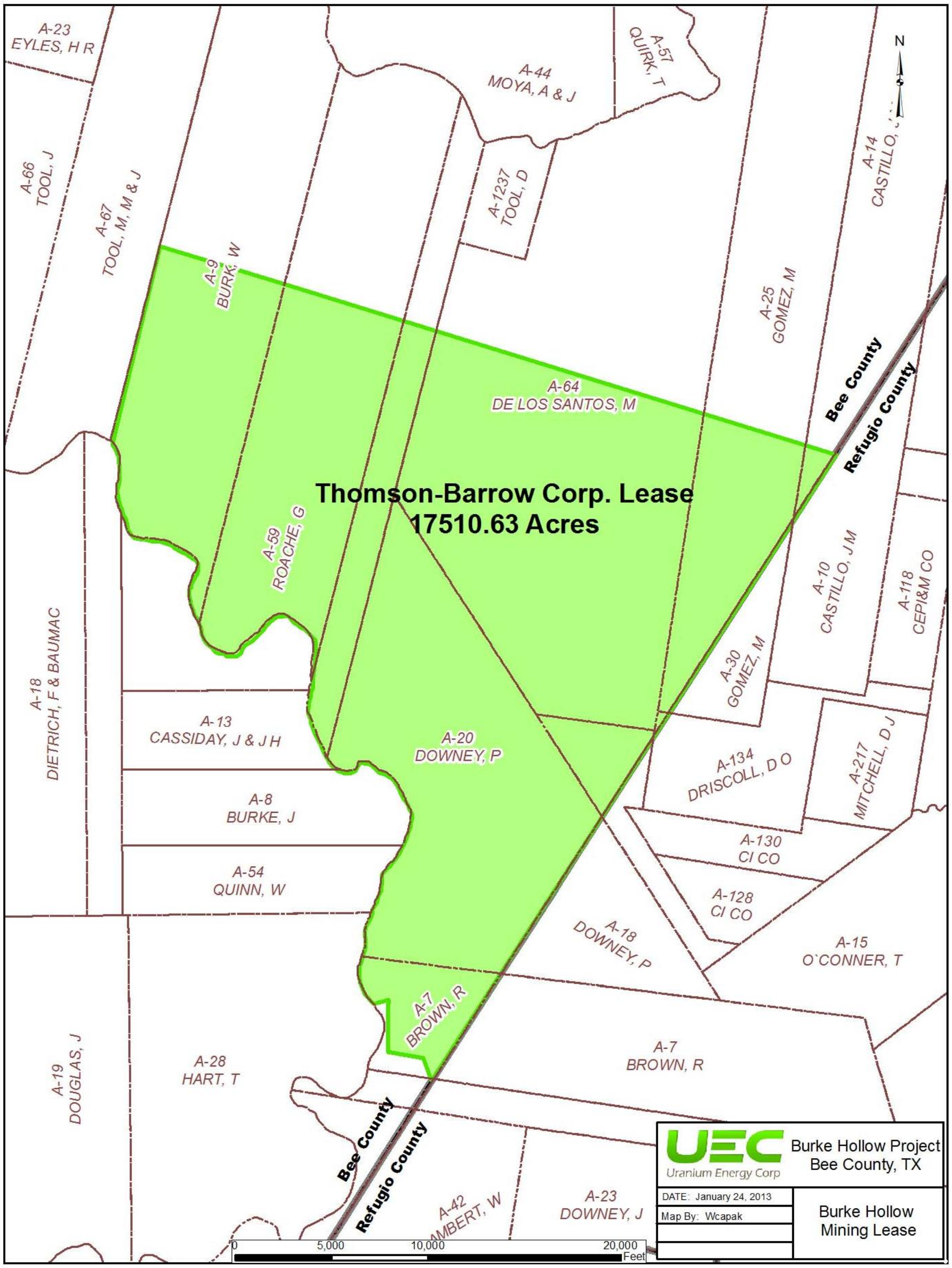

FIGURE 4-3: BURKE HOLLOW PROJECT MINING LEASE

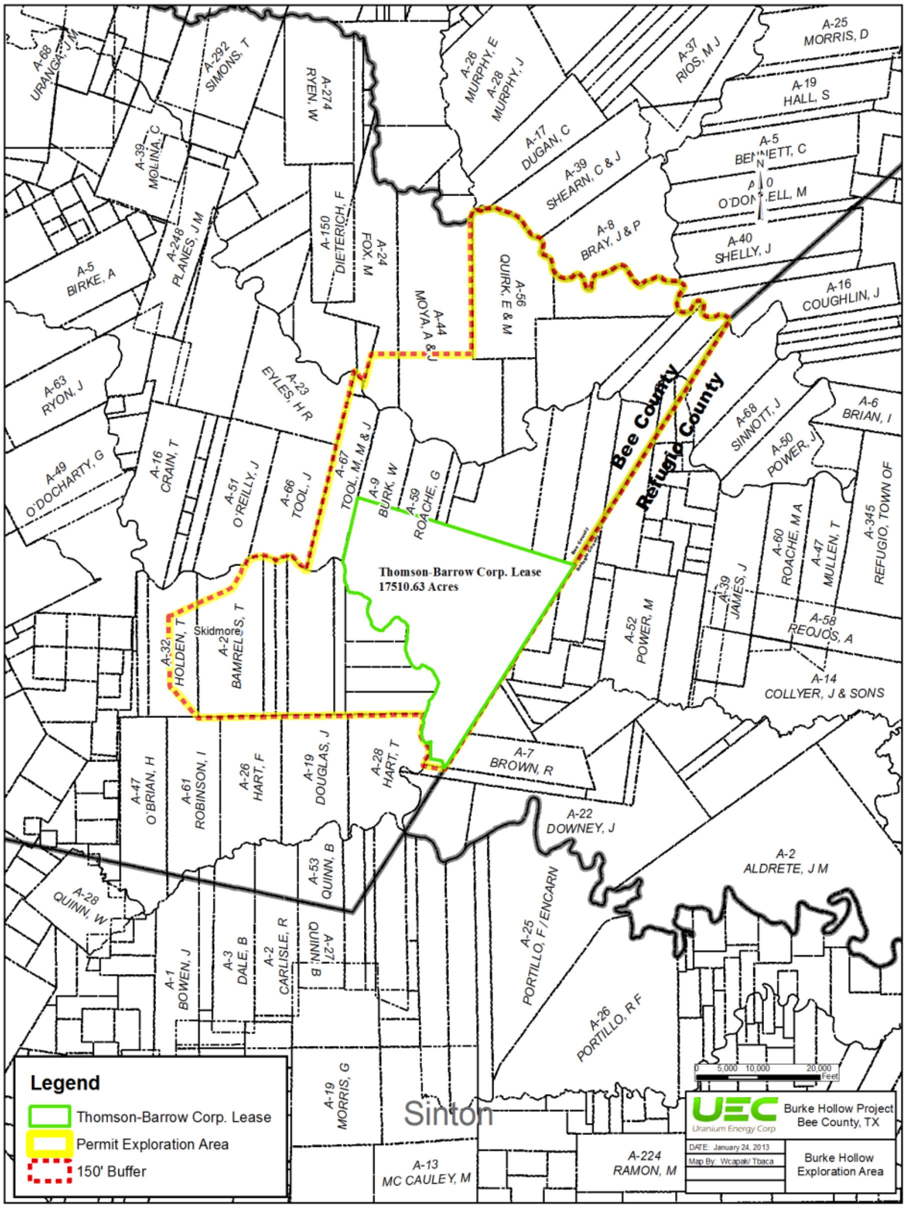

FIGURE 4-4: EXPLORATION PERMIT BOUNDARY

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

The Burke Hollow Project area is situated in the interior portion of the Gulf Coastal Plain physiographic province (Texas BEG, 1996). The area is characterized by rolling topography with parallel to sub-parallel ridges and valleys. There is about 47 feet of relief at the site with ground surface elevations ranging from a low of 92 feet to a high of 139 feet above mean sea level (Figure 4-3). The leased property for the Burke Hollow Project is used mostly for petroleum production, ranching, and game management. Access by vehicular traffic is provided from Hwy. 77 into the property by private gravel roads.

The property is in a rural setting in southeastern Bee County. The nearest population centers are Skidmore, approximately 11 miles west, Refugio about 15 miles east, and Beeville approximately 18 miles northwest. While Skidmore and Refugio are relatively small towns, they provide basic needs for food and lodging and some supplies. Beeville is a much larger city and provides a well-developed infrastructure that has resulted from being a regional center to support oil and gas exploration and production. The Burke Hollow Project site area has good accessibility for light to heavy equipment. There is an excellent network of county, state and federal highways that serve the region and the moderate topography with dominantly sandy, well-drained soils provide good construction conditions for building gravel site roads necessary for site access. Water supply in the project area is from private water wells, mostly tapping sands of the upper Goliad Formation. Water needs for potential future mine development would be from the same sources.

Bee County has a climate characterized by long, hot summers and cool to warm winters. Figure 5-1 is a graph showing the average maximum, minimum, and average temperatures and annual precipitation at Skidmore for a 100 year period of record from 1912 to 2012. The moderate temperatures and precipitation result in excellent conditions for developing an ISR mine. The average annual precipitation is about 32 inches with the months from November to March normally the driest and May through October typically having more precipitation due partly to more intense tropical storms. From June through September the normal high temperatures are routinely above 90 degrees Fahrenheit, while the months from December through February are the coolest with average low temperatures below 50 degrees Fahrenheit. Periods of freezing temperatures are generally quite brief and infrequent. Tropical weather from the Gulf of Mexico can occur during the hurricane season and may affect the site area with large rain storms. The infrequent freezing weather and abnormally large rainfalls are the primary conditions that could cause temporary shutdowns at an operating ISR mine. Otherwise there is not a regular non-operating season

The necessary rights for constructing the needed surface processing facilities are in-place on selected lease agreements. Sufficient electric power is believed to be available in the area, however new lines may be needed to bring additional service to a plant site and well fields. Within a 20 mile radius of the planned Burke Hollow facility there is sufficient population to supply the necessary number of suitable mining personnel.

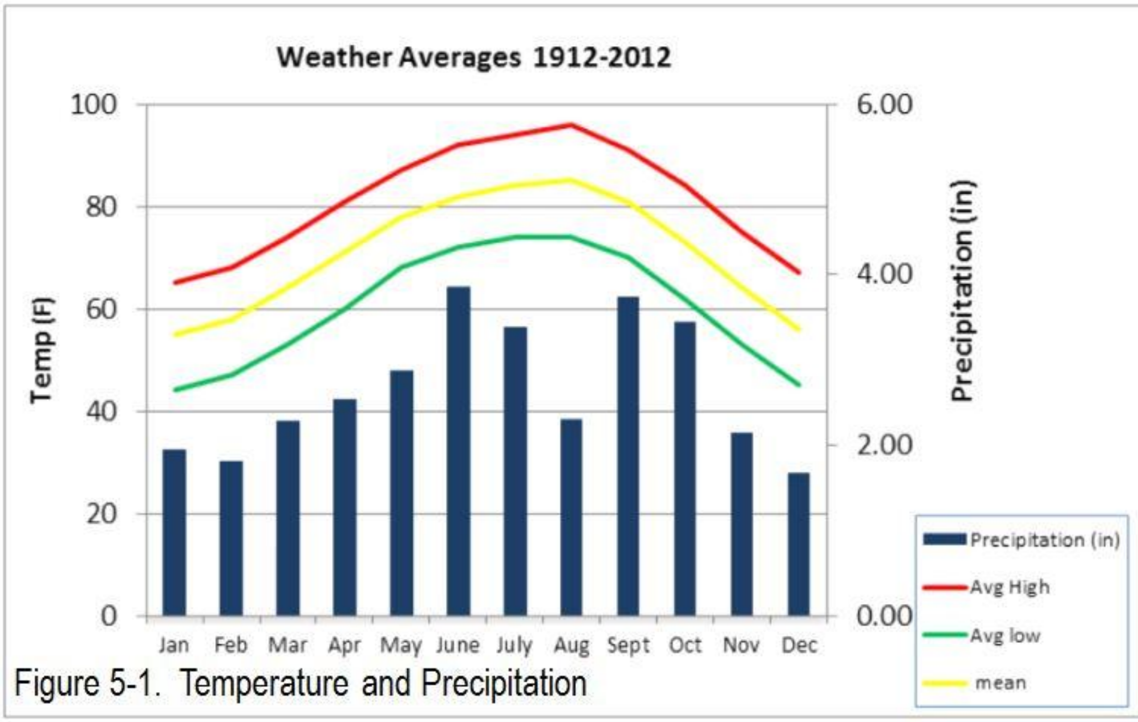

FIGURE 5-1: TEMPERATURE AND PRECIPITATION

6 HISTORY

The only historic uranium exploration that has occurred at the Burke Hollow Project was the work by Total in 1993. Total conducted a short reconnaissance exploration drilling program at Burke Hollow Project in 1993 and drilled a total of 12 holes on the permitted acreage that they acquired. Of the 12 holes, 11 intersected anomalous gamma ray log signatures indicative of uranium mineralization. The resulting 12 log files include good quality electric logs from Total's activities at Burke Hollow in 1993. Each log file also contains a detailed lithological report based on drill hole cuttings, which were prepared by Total's field geologists who were supervising and monitoring drilling activity contemporaneously.

All of the boreholes were drilled using contracted truck-mounted drilling rigs. The holes were drilled by conventional rotary drilling methods using drilling mud fluids. All known uranium exploration at the Burke Hollow property has been vertical holes. Drill cuttings were typically collected from the drilling fluid returns circulating up the annulus of the borehole. These samples were generally taken at five foot intervals and laid out on the ground in rows by the drill crew for review and description by a geologist. At completion the holes were logged for gamma ray, self-potential, and resistance by contract logging companies. Century Geophysical was the logging company utilized by Total, and Century provided primarily digital data. A tool recording down-hole deviation was also utilized for each of the holes drilled.

This description of previous exploration work undertaken at Burke Hollow Project is based primarily on gamma ray and electric logs, several small maps and cross-sections constructed by Total.

A table (6.1) summarizing Total's drilling results is provided below, and a map showing drill hole locations is provided as Figure 6-1.

The historic data package obtained by UEC for a portion of the current Burke Hollow Project area provided the above described information. Based on the very limited number of drill holes, no meaningful resource or reserve determination was made by Total. The actual drilling and geophysical logging results however, have been determined to be properly conducted to current industry standards and usable by UEC's exploration staff in their geologic investigation.

The only historic work relating to uranium exploration or mining is the early exploration work done by Total in 1993, as described above. There has been no known ownership of the Burke Hollow property by a mining company and prior ownership or changes in ownership for the property are not known by UEC or relevant to the project.

TABLE 6.1 HISTORICAL DRILLING BY TOTAL IN 1993
Burke Hollow Project

Hole #	Total Depth	Top of Mineralization	Thickness	Grade % eU308	Grade Thickness
BH-1	800'	Barren			
BH-2	800'	228	10.0'	4.0X BG	
BH-3	800'	228.5	1.0'	0.01	0.01
BH-3	800'	246.5	1.0'	0.01	0.01
BH-4	800'	186.5	4.5'	0.012	0.054
BH-4	800'	219	10.5'	0.086	0.903
BH-4	800'	365	4.0'	0.01	0.04
BH-4	800'	370.5	8.0'	0.021	0.168
BH-5	800'	160	48.0'	4.5X BG	
BH-6	400'	148	16.0'	5.0X BG	
BH-7	400'	191.5	3.0'	0.012	0.036
BH-7	400'	227	1.5'	0.019	0.028
BH-8	400'	182	4.5'	0.015	0.068
BH-8	400'	356	5.5'	0.02	0.11
BH-9	400'	192.5	8.5'	0.022	0.187
BH-9	400'	212	7.5'	0.065	0.48
BH-9	400'	367.5	11.0'	0.114	1.25
BH-10	400'	225	3.5'	0.033	0.115
BH-10	400'	366	11.0'	6.0X BG	
BH-11	400'	215	5.5'	0.04	0.22
BH-11	400'	365.5	4.5'	0.016	0.072
BH-12	400'	179	10.0'	0.015	0.15
BH-12	400'	350.5	3.0'	0.03	0.09
BH-12	400'	361	9.0'	0.04	0.36

*BG (Background Gamma)

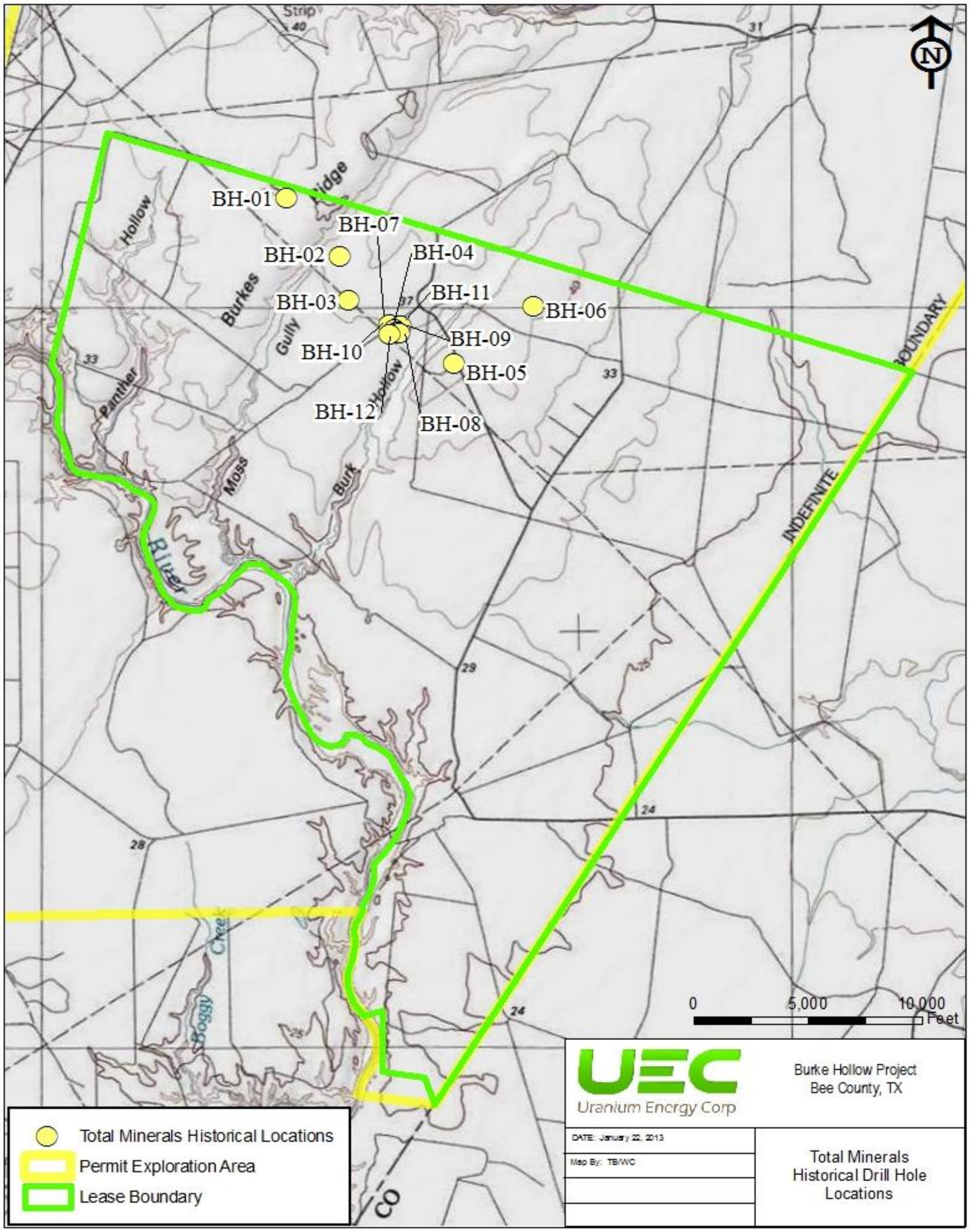

FIGURE 6-1: HISTORICAL DRILL HOLE LOCATIONS OF TOTAL MINERALS, 1993

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The UEC Burke Hollow Project area is situated within the Texas Gulf Coastal Plain physiographic province that is geologically characterized by sedimentary deposits that typically dip and thicken toward the Gulf of Mexico from the northwest source areas. Additionally, the regional dip generally increases with distance in the down dip direction as the overall thickness of sediments increase. The sedimentary units are dominantly continental clastic deposits with some underlying near shore and shallow marine facies. The uranium-bearing units are virtually all sands and sandstones in Tertiary formations ranging in age from Eocene (oldest) to Pliocene (youngest). An updated South Texas Uranium Province stratigraphic column is shown by Figure 7-1.

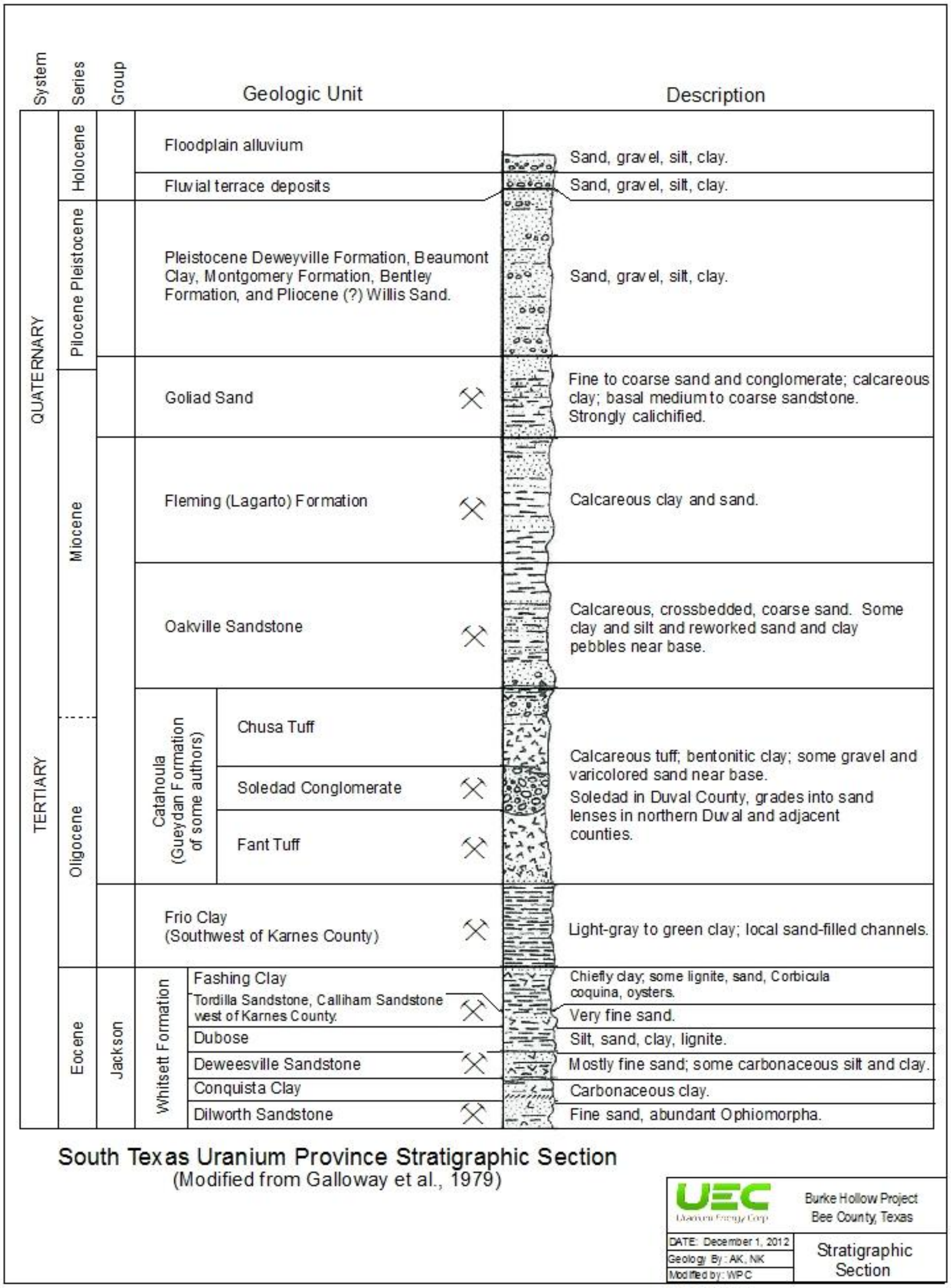

FIGURE 7-1: STRATIGRAPHIC SECTION OF THE SOUTH TEXAS URANIUM PROVINCE

The project area, located about 18 miles southeast of Beeville which is the county seat of Bee County, is situated in the major northeast-southwest trending Goliad Formation of fluvial origin. The Geologic Atlas of Texas, Beeville-Bay City Sheet (Texas Bureau of Economic Geology, Revised 1987) indicates that a thin layer of Pleistocene-aged Lissie Formation overlies the Miocene Goliad Formation. The Lissie Formation unconformably overlies the Goliad Formation, and consists of unconsolidated deposits of sand, silt, and clay, with minor amounts of gravel. The thickness of the Lissie Formation in the project area ranges from approximately 35 feet on the western project edge to a maximum of 70 feet in thickness on the down-dip eastern edge of the project area. Figure 7-2 shows the surface geology at the Burke Hollow Project.

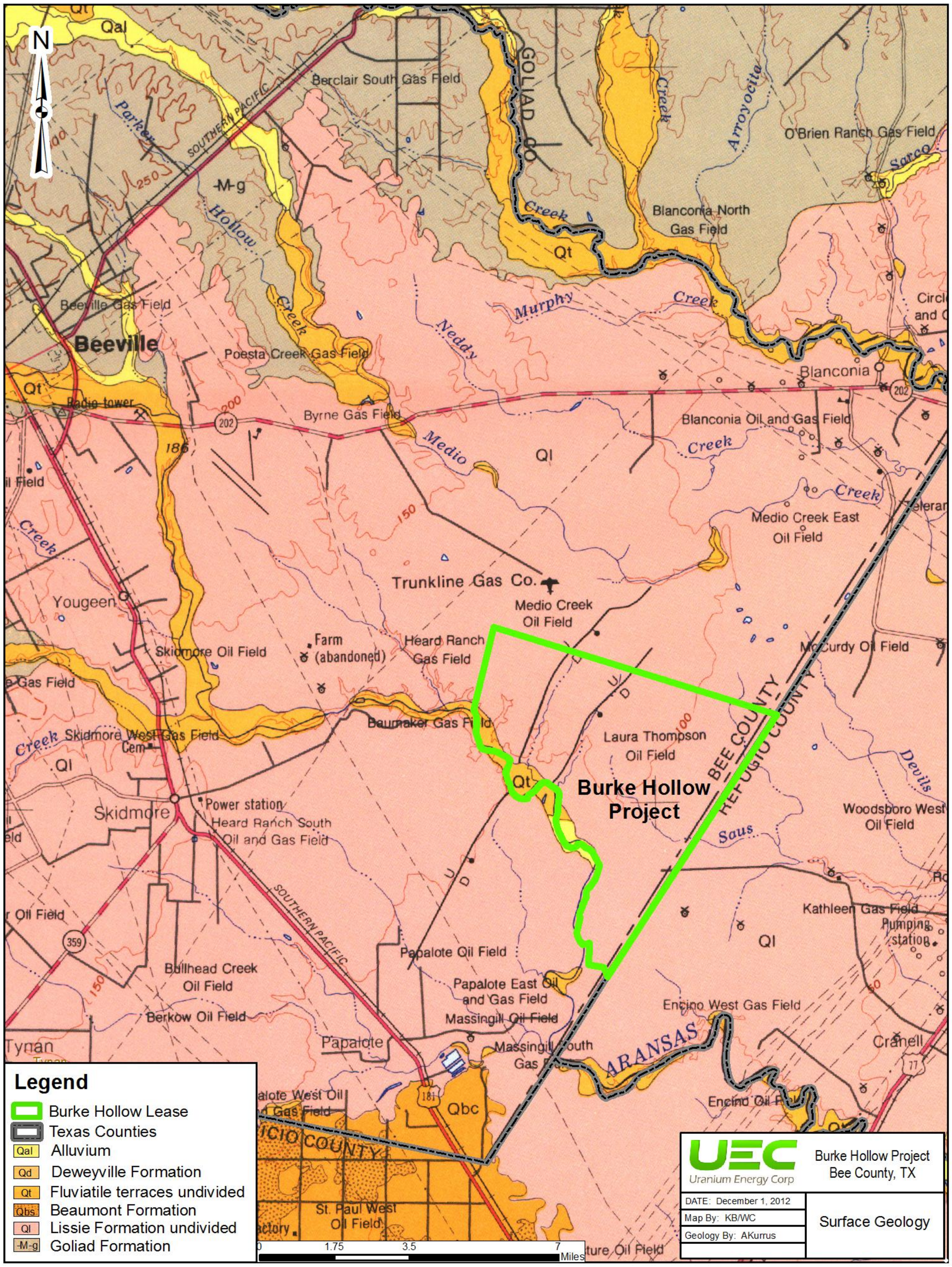

FIGURE 7-2: GENERAL PROJECT LOCATION AND SURFACE GEOLOGY OF BEE COUNTY REGION, TX

The Goliad Formation was originally classified as Pliocene in age, but the formation has been reclassified as early Pliocene to middle Miocene after research revealed the presence of indigenous Miocene-aged mega-fossils occurring in upper Goliad sands. The lower Goliad fluvial sands are correlative with down-dip strata containing benthic foraminifera, indicative of a Miocene age (Baskin and Hulbert, 2008, GCAGS Transactions, v. 58, p. 93-101). The Geology of Texas map published by The Bureau of Economic Geology in 1992 classifies the Goliad as Miocene.

Relevant earlier literature showed the Goliad Formation as Pliocene-aged, including the Geologic Atlas of Texas, Beeville-Bay City Sheet (Bureau of Econ. Geol, revised 1987), and The Geology of Texas, Volume I (No. 3232, 1932, Texas Bureau of Econ. Geology).

7.2 PROJECT GEOLOGY

The uranium-bearing sands of the Goliad Formation at the project site occur beneath a thin layer of Lissie Formation sand, silt, clay, and gravel, which covers most of the project area with a total thickness of approximately 35 feet on the western side to approximately 70 feet thickness on the downdip eastern side of the project. The Goliad Formation underlies the Lissie, and is present at depths ranging from 35 feet to approximately 960 feet in depth on the eastern side of the property. UEC has determined that uranium mineralization discovered to date occurs within at least four individual sand units in the Upper Goliad at depths generally ranging from 160 feet to 400 feet.

The Goliad sand is one of the principal water-bearing formations in Bee County capable of yielding moderate to large quantities of fresh to slightly saline water in the south half of Bee County, which includes the project area.

The hydrogeological characteristics of the water-bearing Goliad sands at the Burke Hollow Project have not yet been determined, but required hydrogeological tests will determine the hydraulic character of the sands and the confining beds separating the individual sand zones. Information regarding the water-bearing characteristics of the Goliad sands from aquifer tests of a city of Beeville and a City of Refugio supply well (O.C. Dale, et al., 1957) reported an average coefficient of permeability of about 100 gallons per day per square foot. This would be the equivalent coefficient of transmissivity of approximately 2,500 gallons per day per foot for a 25-foot thick sand. It is likely that the uranium bearing mineralized sand zones at the Burke Hollow Project will have similar hydraulic characteristics.

The surficial fault expression at Burke Hollow is also shown by Figure 7.2. There are at least two northeast-southwest trending faults at the Burke Hollow property that are likely related to the formation of the uranium mineralization. These faults are shown at a depth of approximately 3,500 feet below ground surface (bgs) based on petroleum industry maps and extend upward into the Goliad Formation. The northwesterly fault is a typical Gulf Coast normal fault, downthrown toward the coast, while the southeastern fault is an antithetic fault downthrown to the northwest, forming a graben structure. The presence of these faults is likely related to the increased mineralization at the site. The faulting has probably served as a conduit to reduce waters/gases migrating from deeper horizons as well as altering the groundwater flow system in the uranium-bearing sands.

Recently prepared structural cross-sections by UEC (Figures 7-3 – 7-6) are presented below, and cross-section A –A′ depicts the graben structure resulting from the faulting (Figure 7-3). Uranium mineralization discovered to date at Burke Hollow Project is associated with the graben structure.

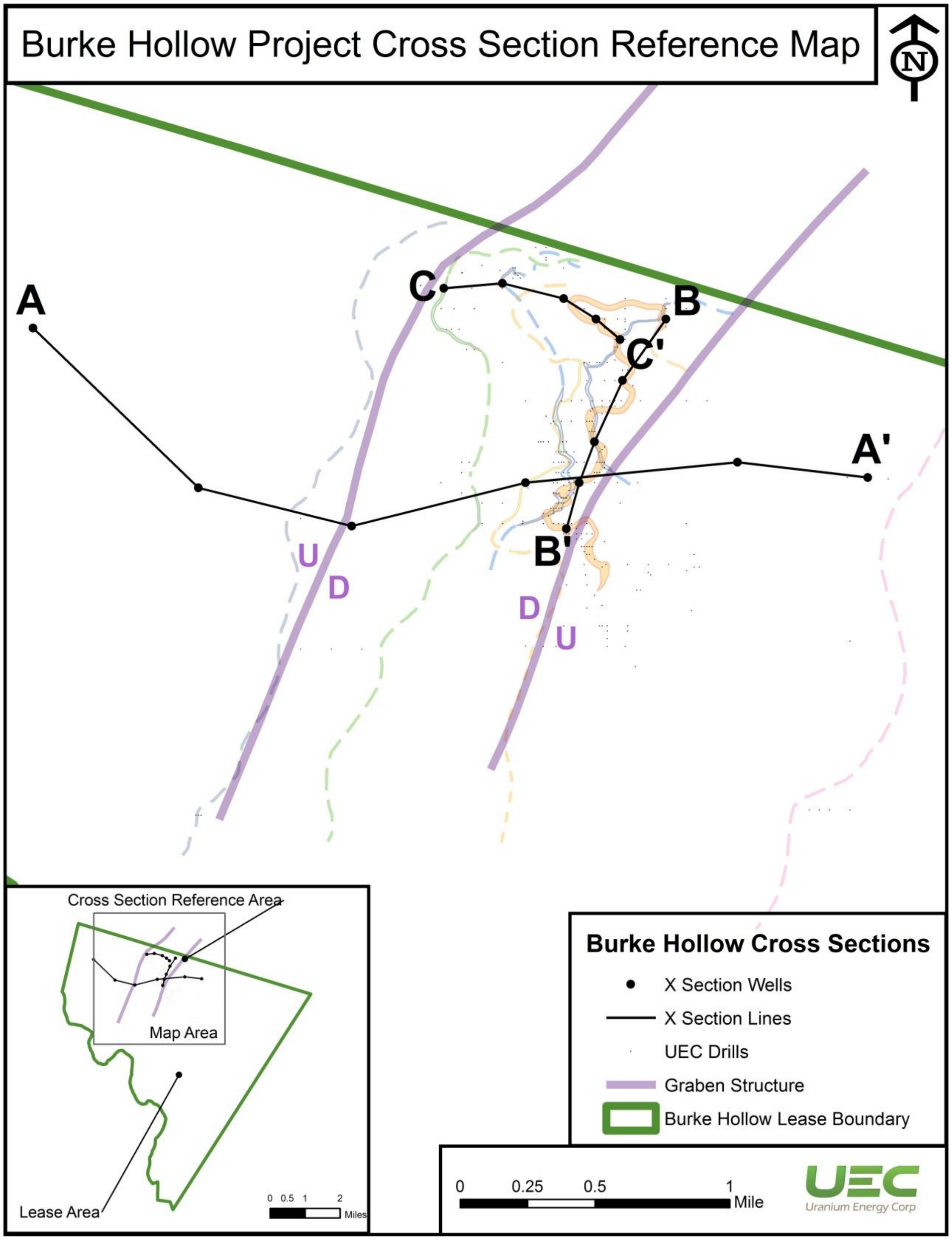

FIGURE 7-3: CROSS-SECTION REFERENCE MAP

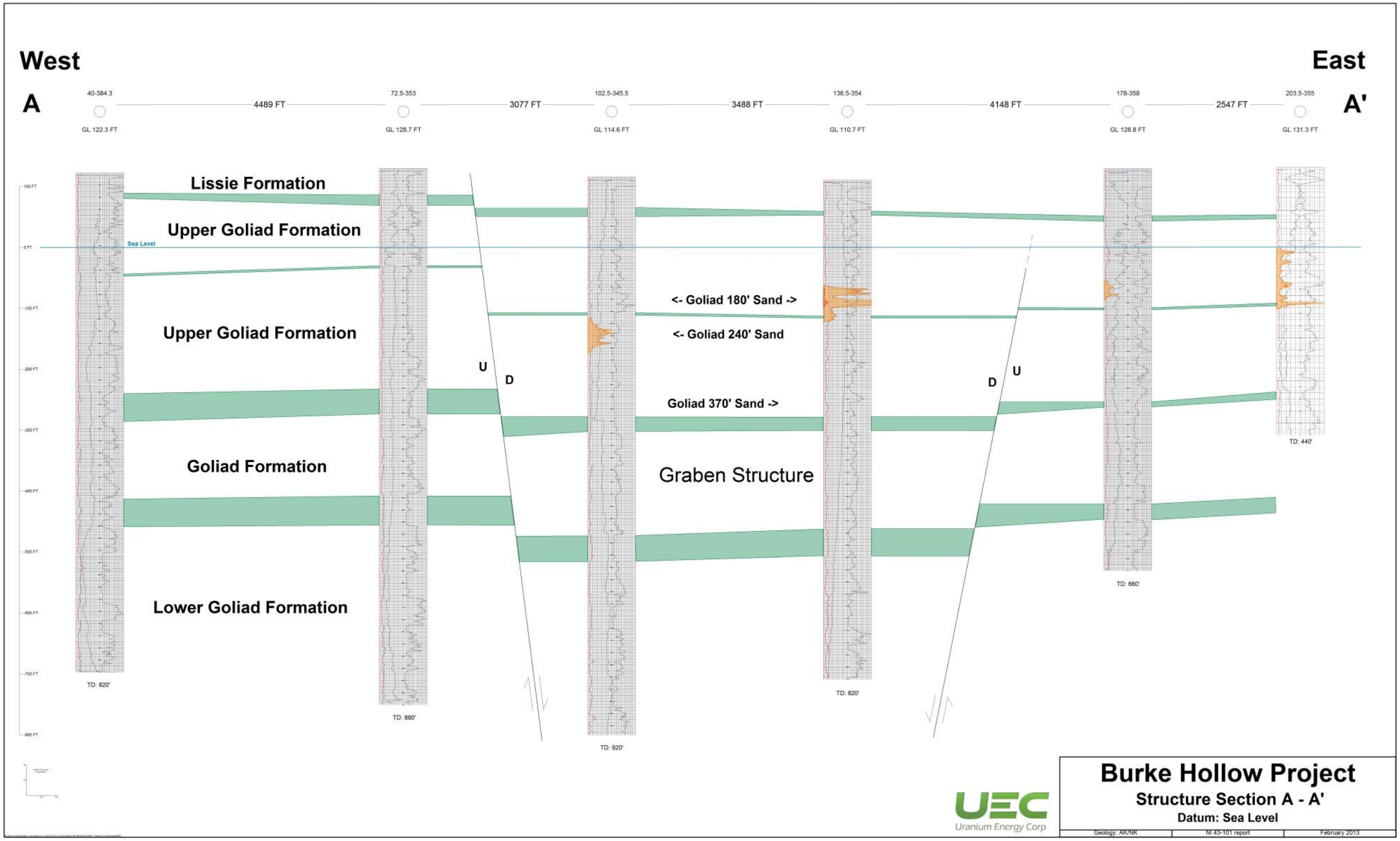

FIGURE 7-4: STRUCTURAL CROSS-SECTION A-A' SHOWING GRABEN STRUCTURE AND ASSOCIATED MINERALIZED ZONES

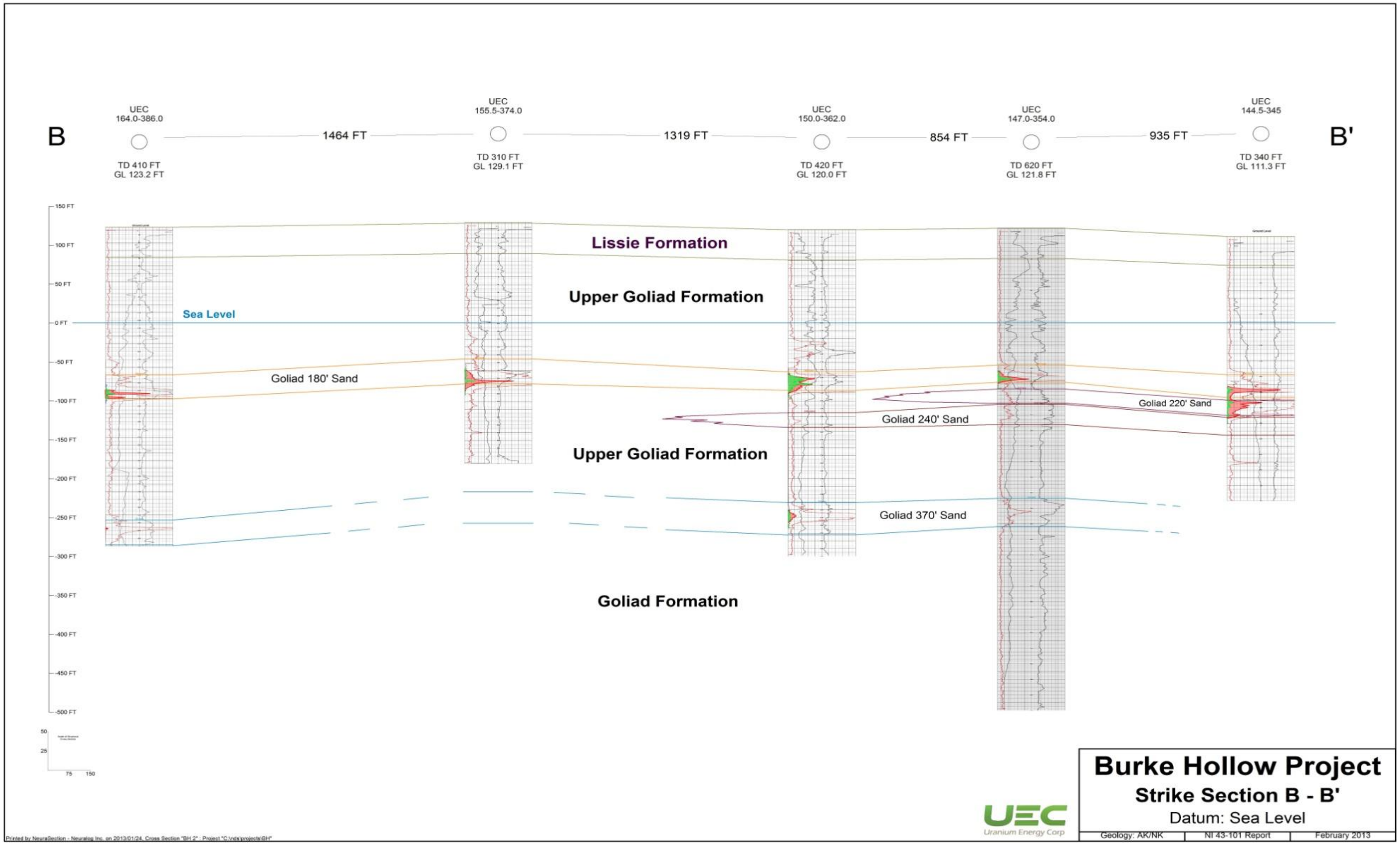

FIGURE 7-5: STRIKE ORIENTED STRUCTURAL CROSS-SECTION B-B' SHOWING MINERALIZED ZONES

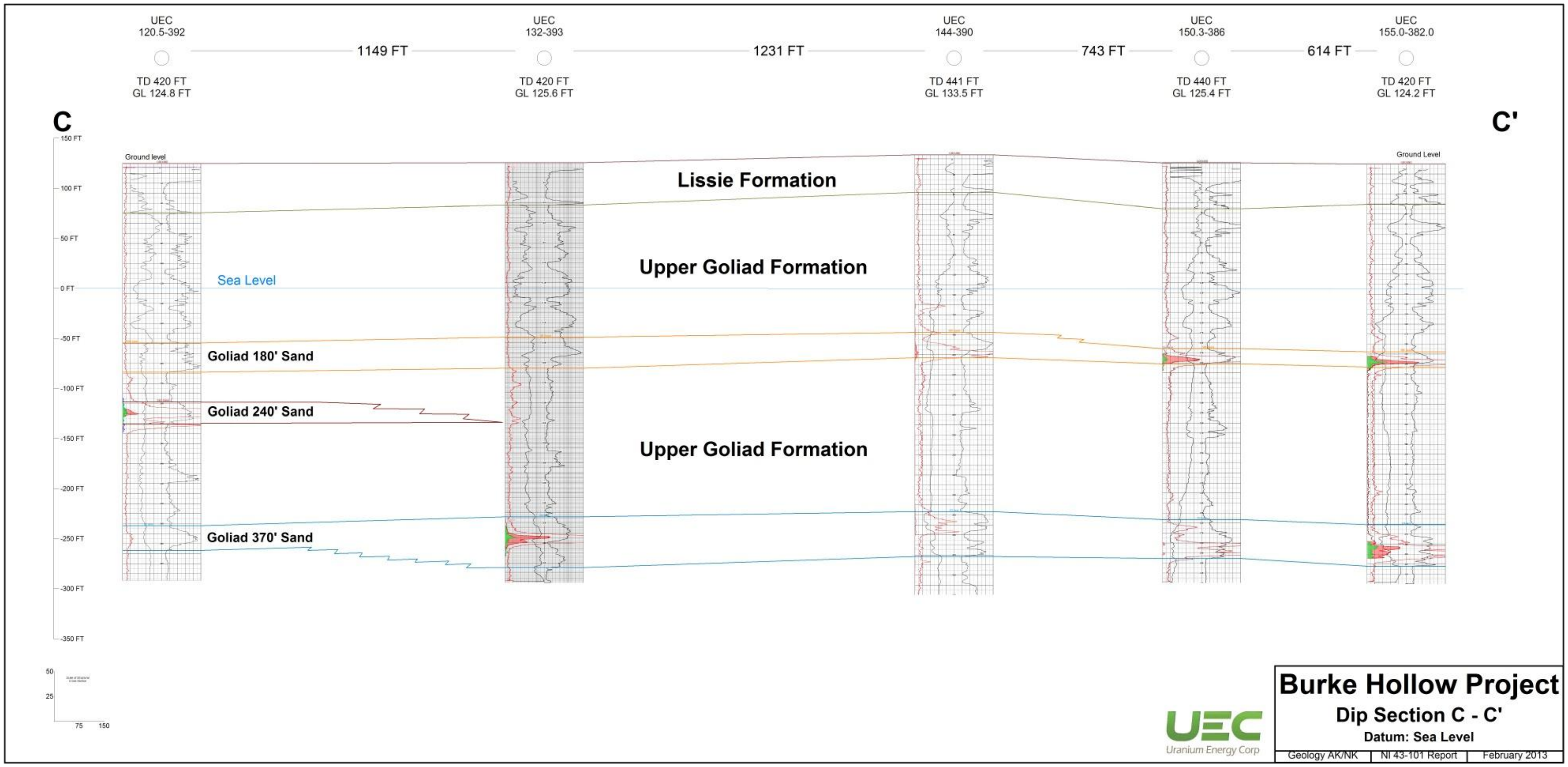

FIGURE 7-6: DIP ORIENTED STRUCTURAL CROSS-SECTION C-C' SHOWING MINERALIZED ZONES

7.3 MINERALIZATION

LOCAL MINERALIZATION

The Burke Hollow Project uranium-bearing units occur as multiple roll-front type deposits in vertically stacked sands and sandstones. Groundwater flowing from northwest to southeast in the Goliad sands likely contained low concentrations of dissolved uranium resulting from oxidizing conditions and the relatively short distance from the recharge area. The geochemical conditions in the sands near the UEC property changed from oxidizing to reducing due to an influx of reductants. Hydrogen sulfide and/or methane dissolved in groundwater are likely sources of creating a reduction-oxidation boundary in the area with consequent precipitation and concentration of uranium mineralization.

Specific identification of the uranium minerals has not been done at the Burke Hollow Project. The very fine uranium minerals found coating quartz grains and within the interstices in most south Texas sand and sandstone roll-front deposits has generally been found to be dominantly uraninite and, to a lesser extent, coffinite. No uraninite has been identified on the Burke Hollow Project and the presence of uraninite on other properties does not mean that such mineralization will be found at the Burke Hollow Project. Detailed petrographic examination of disseminated uranium mineralization within sands/sandstones is generally not suitable for identification of the specific uranium minerals. Laboratory equipment such as x-ray diffraction units may be used to identify the minerals, however the specific mineral species typically found in reduced sands are generally similar in south Texas ISR projects and leaching characteristics are also similar. Based on the experience of the ISR mines throughout south Texas, the use of gamma-ray logging with a calibrated logging probe has become the standard method to determine the thickness and estimated grade of uranium bearing minerals.

At the project site the Goliad Formation is located near the surface underlying the Lissie Formation, and extends to depths exceeding 900 feet. Uranium mineralization occurs in at least four sand/sandstone units that are all below the saturated zone. These are the Goliad 180’ sand, the Goliad 220’ sand, the Goliad 240’ sand, and the Goliad 370’sand. The sands are fluvial-deltaic in origin, and thicken and thin across the project site. Each zone is hydrologically separated by clay or silty clay beds. The uranium deposits discovered to date range from several feet to over 30 feet in thickness. The “C”-shaped configuration is typically convex in a downdip direction with tails trailing on the updip side.

8 DEPOSIT TYPES

The Burke Hollow Project uranium deposits are similar in character to other known Goliad deposits in south Texas. The mineralization occurs within fluvial sands and silts as roll-front deposits that are typically a “C” or cutoff “C” shape. The roll-fronts discovered to date at Burke Hollow generally occur along an extended oxidation–reduction boundary or front, and are associated with a large graben structure which is located on the western half of the project.

At the Burke Hollow Project there are at least four stacked mineralized sand horizons that are separated vertically by zones of finer sand, silt, and clay. Deposition and concentration of uranium in the Goliad Formation likely resulted due to a combination of leaching of uranium from volcanic tuff or ash deposits within the Goliad or erosion of uranium-bearing materials from older Oakville and Catahoula deposits. The natural leaching process occurred near the outcrop area where recharge of oxidizing groundwater increased the solubility of uranium minerals in the interstices and coating sand grains in the sediments. Subsequent down-gradient migration of the soluble uranium within the oxygenated groundwater continued until the geochemical conditions became reducing and uranium minerals were deposited in roll-front or tabular bodies due to varying stratigraphic or structural conditions.

9 EXPLORATION

The author's review of the available records for the UEC Burke Hollow Project indicated that twelve holes were drilled by Total on the current UEC project lease. This historic exploration program resulted in the original find of gamma ray logging responses indicating potential uranium occurring on the small permitted lease as a part of a reconnaissance drilling program conducted by Total in 1993.

UEC has recently acquired Total's south Texas exploration program database and its historic drill information which indicates the occurrence of strong eU_3O_8 intercepts. These intercepts occur in multiple horizons within the Goliad Formation at depths ranging from 180 to 400 feet. Drill-hole spacing ranged from several thousand feet to one hundred feet.

No historic uranium mining is known to have occurred on the Burke Hollow Project lease property, and only state permitted uranium exploration drilling has taken place.

The UEC exploration drilling program at the Burke Hollow Project was initiated in May 2012 and completed in December 2012. Approximately 268 drill holes were completed at the site during this period (Figure 9-1). The main emphasis of the initial drilling was focused in the vicinity of the historic Total drill holes and then expanded as details of the site geology and location of reduction-oxidation boundaries in the target Goliad sands were developed by UEC exploration geologists. During the drilling program, several exploration drill holes were drilled in portions of the site up to several thousand feet from the more focused drilling areas.

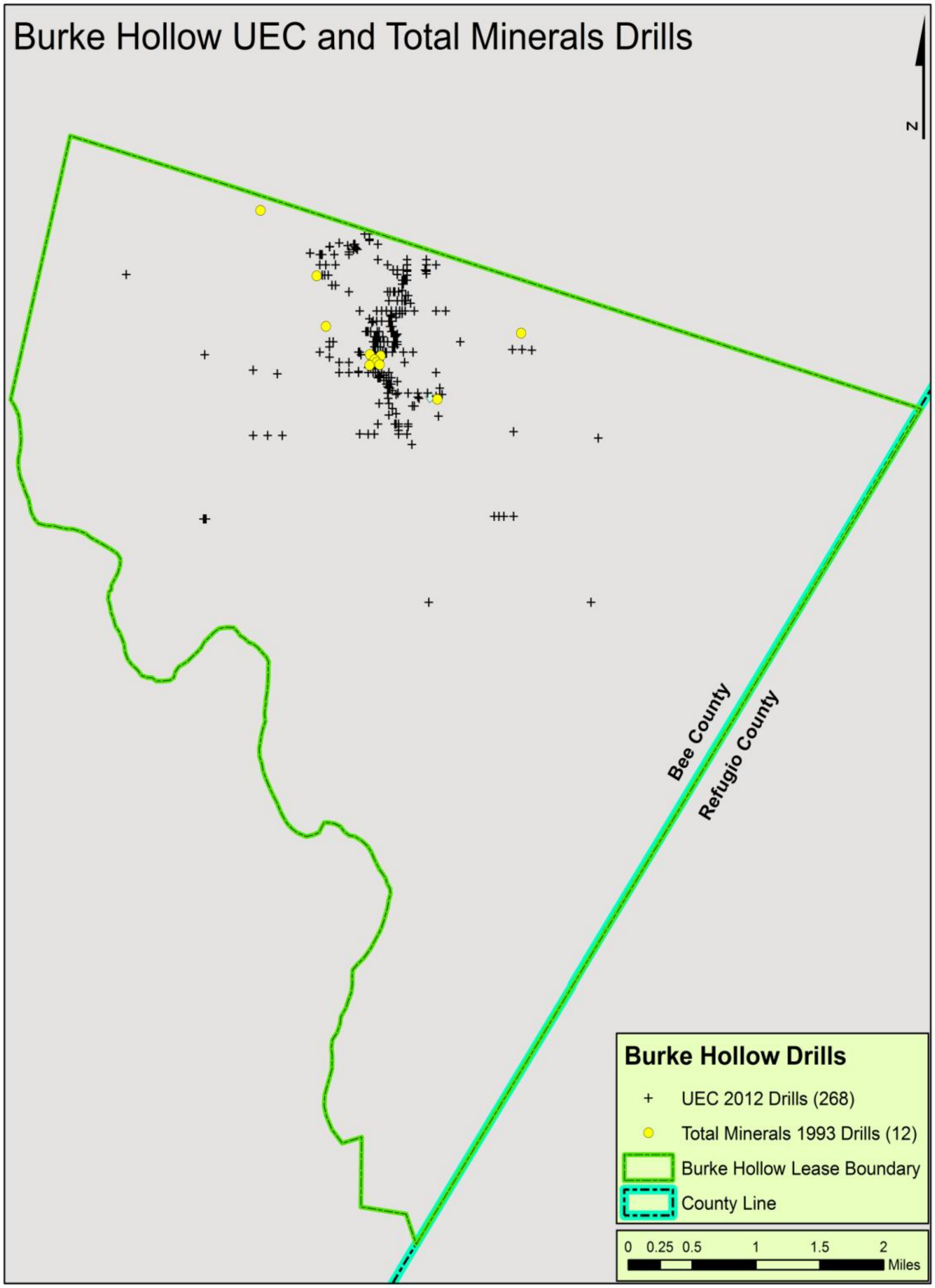

FIGURE 9-1: DRILL HOLE LOCATION MAP

Due to the nature of the uranium exploration in the south Texas region, the data from the drilling program is virtually all that is significant to defining a viable mineralized deposit. The target sands are located well below the land surface and surface expression of outcrop areas that could be sampled are not available at the Burke Hollow Project area. With the extensive use of PFN logs for in-place assays in the borehole, the need for large numbers of core drilling and assays at off-site laboratories has been reduced significantly.

The spacing and location of drill holes at the Burke Hollow Project was based on the accumulated data and updated mapping as the project proceeded. It is the primary author's opinion that UEC exploration geological staff conducted a methodical investigation that focused initially on the original area where Total historic work indicated the presence of gamma log anomalies indicative of U_3O_8 mineralization. The drilling program continued to expand the investigation area as the geologic structure and distribution of mineralized intercepts became better defined. During the program, a small proportion of far spaced bore holes were drilled to expand the area of investigation.

The significant results of the Burke Hollow Project drilling to date is the delineation of an Inferred Mineral Resource (section 14) and trends that indicate two Exploration Target areas with the potential for adding resources after further exploration. These exploration targets are described below.

EXPLORATION TARGETS

The Graben structure, that is thought to relate to the emplacement of U_3O_8 in the deposit, is interpreted to extend south from the current resource area for a considerable distance as shown in Figure 9-2. Scattered exploration drilling in this area indicates that the oxidation/reduction (redox) front that hosts uranium mineralization persists in the sandstone host rocks.

Exploration drill holes located approximately 4,000 feet east of the current resource (Figure 9-2) have intersected another redox boundary at approximately 200 ft. below surface. This feature is interpreted to be the equivalent of the Upper sand horizon that hosts a portion of the current resource. This suggests that conditions may exist in this area for the deposition of additional accumulations of uranium mineralization.

Based on the assumption these two Exploration Target areas could potentially host uranium deposits of approximately the same width, thickness and tenor as the current resource area. It is felt that these areas exhibit the potential to contain between 3 million and 6 million tons of resources with grades between 0.03% U_3O_8 and 0.06% U_3O_8 with total contained U_3O_8 between 1.8 million and 7.2 million pounds. It must be stressed that: these projections of potential quantity and grade are extremely conceptual in nature; there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the ability to estimate uranium mineral resources.

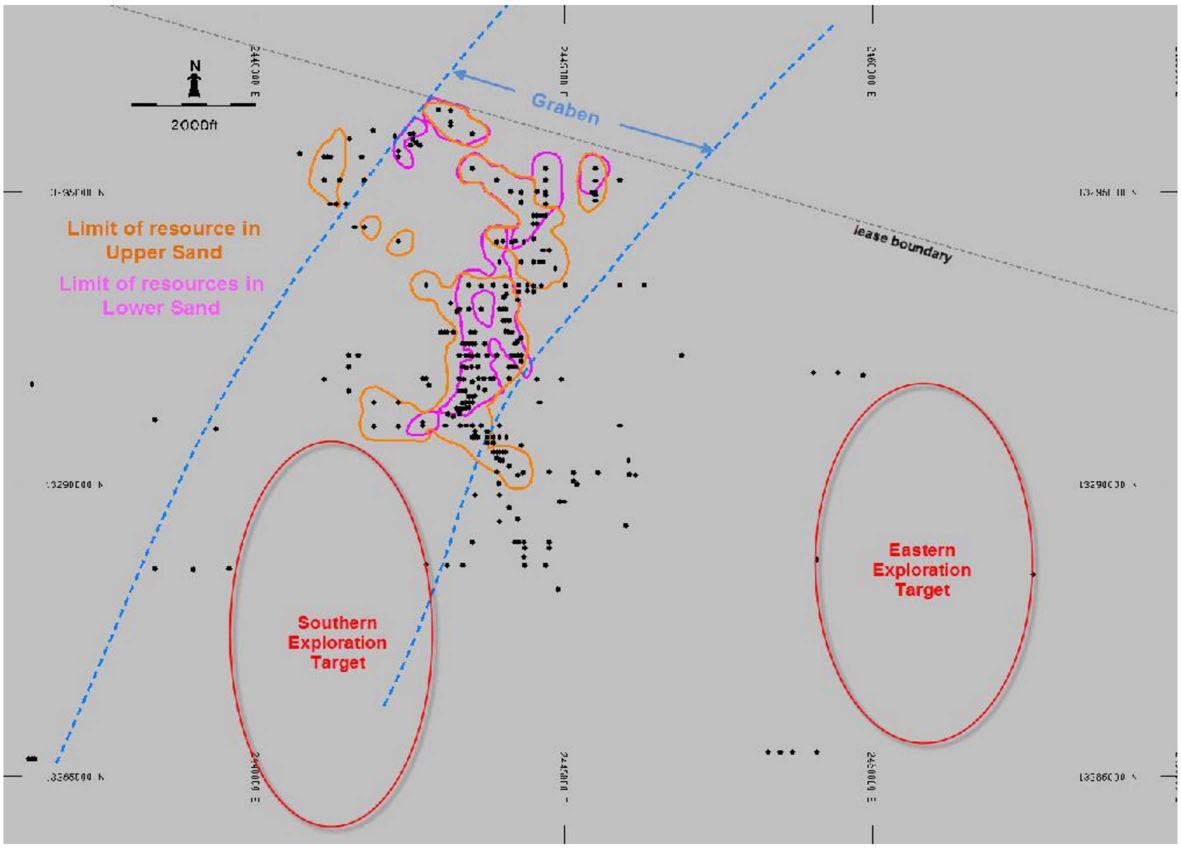

FIGURE 9-2: EXPLORATION TARGET LOCATIONS

10 DRILLING

Exploration drilling at Burke Hollow Project is conducted by truck-mounted rigs drilling vertical holes measuring 5.63 inches in diameter. Upon reaching the designated total depth, the drilling mud is circulated from bottom to clear the heavy cuttings from the hole in order to condition the hole for logging with specialized calibrated tools that record resistance, spontaneous potential, and gamma ray. Gamma ray probes from each logging truck are required to maintain calibration by regular cross checking the probe at a U.S. Department of Energy test pit near George West, Texas. The pit is set up for logging units to calibrate the gamma probe with a known radioactive source. This method has been successfully used in Texas since at least the mid-1970s. The available data indicate that the logging companies contracted for this project have maintained industry standard calibration procedures for their probes. This is discussed in more detail in section 11.

Based on a review of the drilling records with current UEC employees, drilling on the property was conducted using rotary mud drilling with truck-mounted drilling rigs. Cuttings are typically taken at 5-foot intervals and placed in piles on the ground for a geologist to review for lithology and alteration. The drill holes were completed at various depths depending on which of the sand units may have been mineralized in the vicinity of that hole location. Once completed, the drill holes were logged by company loggers using a probe with gamma ray, self-potential and single point resistance capability**.** The drill hole collar location was used to position the hole location for map locations of individual holes.

Bore hole locations are located with a Trimble Geo XH 6000 using TerraSync, version 5.30, operating system. The latitude and longitude and ground elevation are determined with this unit by UEC personnel trained for its proper calibration and use in the field. New hole locations are selected on maps using GIS ArcMap and then imported in to Trimble or entered manually. The new locations are stored in folders on the Trimble and are found using the drop down menus located in the upper left corner of the screen. Once a location is selected and set as the navigation target, the navigation screen is selected and an arrow points the user in the right direction. An audible sound is given when the exact target location is reached and a 3’ long survey stake, marked with the hole location number, is then hammered into the ground. At this point the navigation on the Trimble is canceled, the folder is closed, and a new folder is created. Using the drop down menu again, collect features is then selected. Another menu appears on the screen and Pointgeneric is selected. The Trimble then begins to collect data for the current location from multiple satellites. During this time the name of the hole location is typed in the comment line and the process is completed after an accuracy of about 3 feet is reached.

Accuracy of the drill holes locations is acquired during post processing of the collected data in the Trimble. Once the Trimble is connected to the computer the collected data is imported and processed using GPS Pathfinder Office version 5.00. Differential corrections are performed using data from CORS (Continuously Operating Reference Station), National Geodetic Survey, and NOAA located in towns closest to the survey location. Once the differential corrections are completed, the data is then exported into a data base file on the computer. The corrected coordinates are used for drill hole collar information in all company and state regulatory documents.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 CORING

UEC conducted a small coring program in mid-December of 2012 consisting of two core holes, with the objective of coring mineralized intervals of both the Goliad 180’ sand and the Goliad 370’ sand. A map showing the core hole locations is shown by Figure 11-1. Core analysis was provided by Energy Labs of Casper, Wyoming (NELAP accreditation), and results are summarized by Table 11.2. The results of the core analyses is not meant to be indicative of the relative potential of the two sands but to show the assay grades of U_3O_8 at two sands in the area. The 0.5 ft assayed core samples from the 370’ sand ranged from a low of 20.8 ppm to a high of 287 ppm U_3O_8. It should be noted that only the first four feet of the mineralized 370’ sand was recovered from the coring run. The assayed core samples from the 180’ sand ranged from a low of 108 ppm to a high of 2680 ppm U_3O_8.

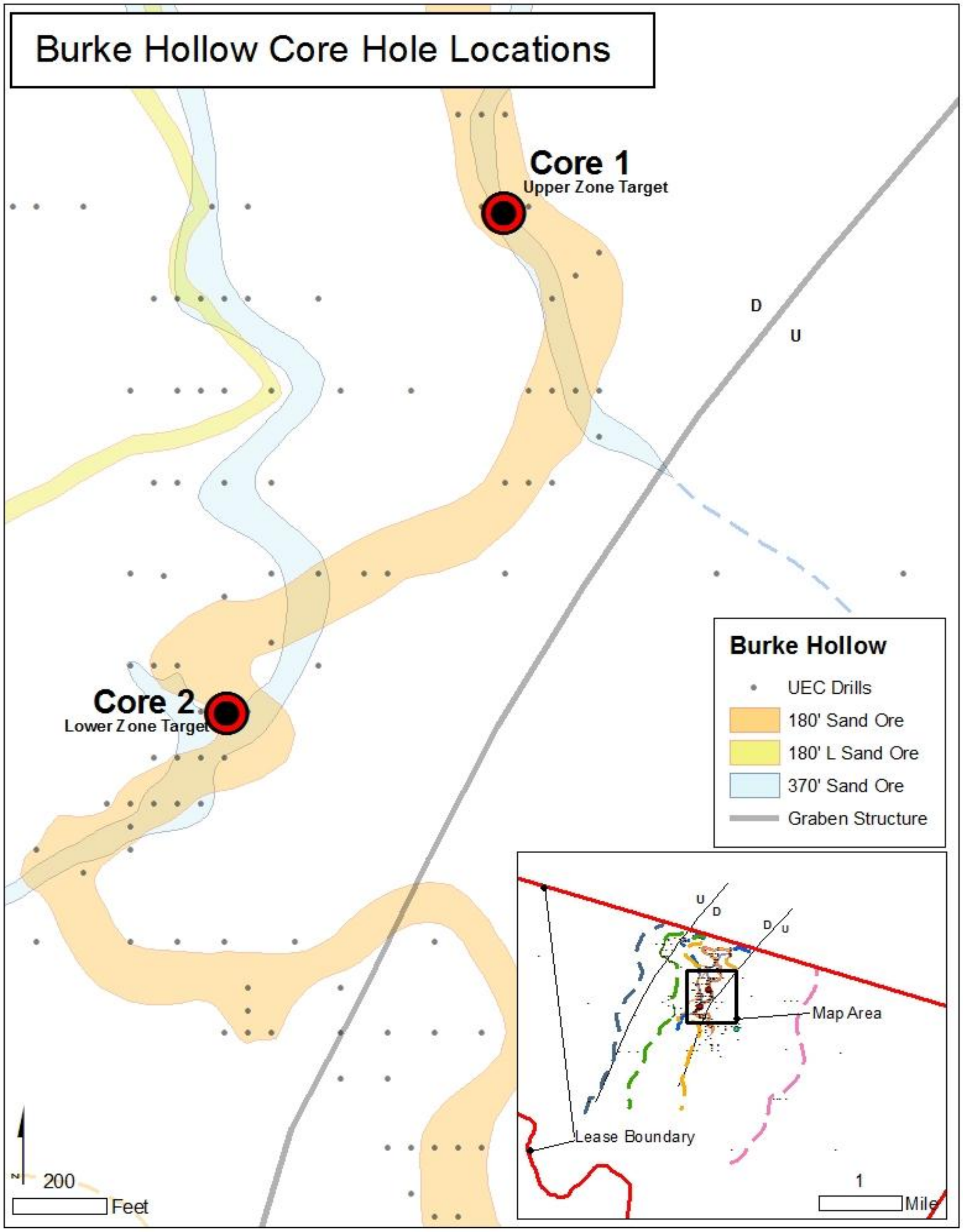

FIGURE 11-1: CORE HOLE LOCATION MAP

TABLE 11.1 BURKE HOLLOW GOLIAD 180' AND GOLIAD 370' SAND CORE ANALYSIS

Sample ID	Analyte	Depth	PPM	CORE # and Zone
C12120780-001A	Uranium	190.5'	91.8	1-180' Sand
C12120780-001A	Uranium, U3O8	190.5'	108.0	1-180' Sand
C12120780-002A	Uranium	191'	225.0	1-180' Sand
C12120780-002A	Uranium, U3O8	191'	266.0	1-180' Sand
C12120780-003A	Uranium	191.5'	300.0	1-180' Sand
C12120780-003A	Uranium, U3O8	191.5'	354.0	1-180' Sand
C12120780-004A	Uranium	192'	456.0	1-180' Sand
C12120780-004A	Uranium, U3O8	192'	538.0	1-180' Sand
C12120780-005A	Uranium	192.5'	519.0	1-180' Sand
C12120780-005A	Uranium, U3O8	192.5'	612.0	1-180' Sand
C12120780-006A	Uranium	193'	2000.0	1-180' Sand
C12120780-006A	Uranium, U3O8	193'	2350.0	1-180' Sand
C12120780-007A	Uranium	193.5	2270.0	1-180' Sand
C12120780-007A	Uranium, U3O8	193.5	2680.0	1-180' Sand
C12120780-008A	Uranium	194'	902.0	1-180' Sand
C12120780-008A	Uranium, U3O8	194'	1060.0	1-180' Sand
C12120780-009A	Uranium	195'	774.0	1-180' Sand
C12120780-009A	Uranium, U3O8	195'	913.0	1-180' Sand
C12120780-010A	Uranium	195.5'	851.0	1-180' Sand
C12120780-010A	Uranium, U3O8	195.5'	1000.0	1-180' Sand
C12120780-011A	Uranium	196'	530.0	1-180' Sand
C12120780-011A	Uranium, U3O8	196'	625.0	1-180' Sand
C12120780-012A	Uranium	196.5'	473.0	1-180' Sand
C12120780-012A	Uranium, U3O8	196.5'	558.0	1-180' Sand
C12120780-013A	Uranium	197.5'	713.0	1-180' Sand
C12120780-013A	Uranium, U3O8	197.5'	841.0	1-180' Sand
C12120780-014A	Uranium	198'	586.0	1-180' Sand
C12120780-014A	Uranium, U3O8	198'	691.0	1-180' Sand
C12120780-015A	Uranium	198.5'	899.0	1-180' Sand
C12120780-015A	Uranium, U3O8	198.5'	1060.0	1-180' Sand
C12120780-016A	Uranium	199'	1190.0	1-180' Sand
C12120780-016A	Uranium, U3O8	199'	1410.0	1-180' Sand
C12120780-017A	Uranium	199.5'	508.0	1-180' Sand
C12120780-017A	Uranium, U3O8	199.5'	600.0	1-180' Sand
C12120780-018A	Uranium	200'	627.0	1-180' Sand
C12120780-018A	Uranium, U3O8	200'	739.0	1-180' Sand
C12120780-019A	Uranium	200.5'	529.0	1-180' Sand
C12120780-019A	Uranium, U3O8	200.5'	624.0	1-180' Sand
C12120780-020A	Uranium	201'	470.0	1-180' Sand
C12120780-020A	Uranium, U3O8	201'	554.0	1-180' Sand
C12120780-021A	Uranium	373'	17.6	2-370' Sand
C12120780-021A	Uranium, U3O8	373'	20.8	2-370' Sand
C12120780-022A	Uranium	373.5'	28.8	2-370' Sand

C12120780-022A	Uranium, U3O8	373.5'	34.0	2-370' Sand
C12120780-023A	Uranium	374'	26.8	2-370' Sand
C12120780-023A	Uranium, U3O8	374'	31.6	2-370' Sand
C12120780-024A	Uranium	374.5'	243.0	2-370' Sand
C12120780-024A	Uranium, U3O8	374.5'	287.0	2-370' Sand

11.2 LOGGING PRACTICES

Gamma-ray Logs

The equivalent mineralized intercepts calculated by UEC for the current resource estimates were derived from gamma-ray logs run as part of an electric log suite on each of the exploration drill holes. In addition to gamma-ray, the electric log suite included self-potential and single point resistance. The self-potential and resistance curves are primarily used to identify lithologic boundaries and to correlate sand and mineralized zones between drill holes. The equivalent U_3O_8 value from the gamma-ray curves was calculated by converting counts per second (CPS) to grade (%U_3O_8) for each one-half foot interval above a specific cutoff grade as requested by UEC. This method is essentially the standard method as developed by the U.S. Atomic Energy Commission (AEC). The majority of the geophysical electric logs run at Burke Hollow were produced by GeoInstruments of Nacogdoches, Texas, with the remaining few produced by GeoScience Associates Australia,(GAA).

Prompt Fission Neutron (PFN) Logs

A prompt fission neutron instrument (PFN) was developed in the late 1980s by Mobil researchers and described in an article by Givens and Stromswold (1989). This instrument improved the accuracy of the chemical assays for uranium by an indirect measurement tool that resulted in faster logging runs and minimal variance due to hole diameter and thin bed stratigraphic effects. This tool is currently the state of the art instrument for direct in-place determination of actual uranium grade. UEC has been operating a company PFN logging tool on the UEC logging unit since 2008. A contract logging company (Geoscience Associates of Australia) has also been utilized for PFN logging and instrument calibration and maintenance at the Burke Hollow Project.

The PFN logging units are similar to the standard gamma-electric logging units but have increased the ability to determine the actual U_3O_8 grade of the mineralized intercepts with less core sampling and laboratory assays. Additionally, since the PFN tool also has a gamma detector, a direct determination of the disequilibrium factor (DEF) can be made at the bore hole. PFN technology provides a direct measure of actual U_3O_8 and is superior to core and assay, as it provides a larger sample and is less expensive (R. Penny, et al., 2012).

UEC has drilled 268 holes at the Burke Hollow Project. Standard gamma-ray logging has been done mostly by a UEC logging unit with some contract logging for confirmation of PFN log results done by GAA. Of the 268 holes, UEC ran the PFN tool on 112 and GAA ran the PFN tool on 21 holes. Of the PFN logs run, 11 were done by both logging units the same day to directly compare the results. A comparison of the logs average DEF from both units at the 11 holes showed excellent correlation with overall average DEF values of 2.08 and 2.07 for the UEC and GAA probes, respectively.

11.3 PROBE CALIBRATION

Each geophysical logging unit that operates at the Burke Hollow Project must conduct periodic calibration against known standards. UEC logging gamma and PFN probes are calibrated by running logs with each probe in the US test pit at George West, Texas. This test pit has been utilized by virtually all south Texas logging companies since the 1970's. Each test run generates calibration files for the operator to review and make necessary tool adjustments. Calibration runs typically are made on a one to two month interval and files with the test pit run results are maintained by the operator.

The results of geophysical logging of drill holes at the Burke Hollow Project has resulted in a database of intercepts which are utilized in preparation of mineral resource estimates. Table 11-2 below presents selected gamma-ray and PFN uranium-mineralized intercepts that have a grade x thickness of 0.30% U_3O_8 or greater.

TABLE 11.2 MINERALIZED INTERCEPTS

DRILLS			GAMMA				PFN				SAND
HOLE	DRILL DATE	TD	TOP	THICK	GRADE	GT	TOP	THICK	GRADE	GT	HORIZON
BH_149.5-362.0	8/22/2012	420	185.5	21.5	0.032	0.690	179.5	37.5	0.137	5.133	180' Sand
BH_150.5-358.0	9/11/2012	420	189.0	10.0	0.030	0.297	186.0	23	0.158	3.623	180' Sand
BH_149.6-362.0	12/12/2012	220	186.0	21.5	0.040	0.861	185.0	24	0.128	3.082	180' Sand
BH_150.0-362.0	8/8/2012	420	187.5	21.0	0.041	0.854	187.0	21	0.120	2.517	180' Sand
BH_148.5-340.0	9/7/2012	340	186.5	15.5	0.049	0.765	181.0	28.5	0.084	2.394	180' Sand
BH_150.3-368.5	9/14/2012	400	370.5	7.0	0.021	0.150	365.5	20.5	0.104	2.124	370' Sand
BH_149.0-366.0	8/29/2012	420	200.0	6.5	0.139	0.905	200.5	17.5	0.092	1.617	180' Sand
BH_143.0-352.0	8/6/2012	420	191.0	8.5	0.036	0.309	186.0	13	0.120	1.562	180' Sand

BH_149.0-340.0	8/30/2012	380	187.0	13.0	0.036	0.471	183.0	21.5	0.070	1.500	180' Sand
BH_144.4-351.0	12/19/2012	410	365.0	12.5	0.031	0.392	364.5	14	0.101	1.410	370' Sand
BH_152.0-361.0	9/14/2012	340	198.5	6.5	0.016	0.105	191.0	17.5	0.080	1.397	180' Sand
BH_149.5-366.0	8/24/2012	420	192.5	14.5	0.033	0.472	190.0	23	0.056	1.290	180' Sand
BH_149.0-364.0	9/12/2012	400	198.0	7.5	0.022	0.161	196.0	12.5	0.103	1.288	180' Sand
BH_151.5-337.5	9/20/2012	340	192.0	10.5	0.021	0.225	191.0	9.5	0.127	1.209	180' Sand
BH_150.5-362.0	8/13/2012	420	186.0	18.0	0.028	0.506	186.0	20.5	0.058	1.195	180' Sand
BH_151.5-360.5	9/10/2012	420	187.5	18.5	0.034	0.625	183.5	23.5	0.048	1.139	180' Sand
BH_143.0-349.0	9/4/2012	420	354.0	20.0	0.017	0.340	346.0	38.5	0.029	1.132	370' Sand
BH_164.0-388.0	9/25/2012	420	207.0	12.5	0.034	0.419	205.5	12.5	0.089	1.108	180' Sand
BH_155.0-382.0	9/19/2012	420	196.0	5.0	0.019	0.094	192.0	14	0.076	1.068	180' Sand
BH_150.5-356.0	9/12/2012	420	195.0	4.5	0.015	0.069	181.0	21	0.049	1.026	180' Sand
BH_147.5-354.0	8/21/2012	420	185.5	9.5	0.033	0.316	184.0	20	0.049	0.978	180' Sand
BH_144.5-351.0	8/22/2012	420	363.0	16.0	0.037	0.589	361.5	18	0.052	0.932	370' Sand
BH_143.0-350.0	5/30/2012	400	358.5	11.5	0.026	0.297	356.5	14.5	0.064	0.932	370' Sand
BH_149.5-364.0	8/21/2012	420	194.5	10.0	0.021	0.207	183.5	22	0.041	0.912	180' Sand
BH_142.5-349.0	8/7/2012	420	352.5	9.0	0.022	0.194	352.5	17	0.053	0.896	370' Sand
BH_148.0-340.5	10/10/2012	340	189.0	23.0	0.029	0.670	188.0	22	0.039	0.875	180' Sand
BH_151.5-358.0	8/30/2012	420	372.0	13.5	0.021	0.270	369.5	23	0.037	0.853	370' Sand
BH_151.5-358.0	8/30/2012	420	188.5	10.0	0.020	0.204	183.0	18	0.046	0.831	180' Sand
BH_149.3-368.0	8/29/2012	370	189.5	10.5	0.027	0.289	186.5	22	0.037	0.818	180' Sand
BH_150.0-339.0	7/25/2012	300	186.5	17.0	0.020	0.332	186.5	13	0.062	0.807	180' Sand
BH_144.0-350.0	5/24/2012	520	183.0	6.5	0.017	0.111	181.5	13.0	0.062	0.806	180' Sand
BH_142.5-352.0	6/5/2012	420	191.5	8.5	0.015	0.131	182.5	23	0.033	0.765	180' Sand
BH_149.5-364.0	8/21/2012	420	371.0	5.5	0.035	0.191	370.5	5.5	0.137	0.753	370' Sand
BH_155.0-382.0	9/19/2012	420	381.5	9.5	0.014	0.133	377.5	16.5	0.044	0.728	370' Sand
BH_145.0-352.5	7/26/2012	420	192.0	12.5	0.025	0.308	193.5	11	0.066	0.723	180' Sand
BH_144.0-351.0	6/26/2012	420	361.5	5.5	0.018	0.099	359.5	20.5	0.035	0.717	370' Sand
BH_142.5-349.0	8/7/2012	420	376.5	6.0	0.035	0.209	370.0	22.5	0.030	0.678	370' Sand
BH_144.0-360.0	7/10/2012	420	370.0	5.0	0.028	0.139	371.0	4.5	0.147	0.663	370' Sand
BH_146.5-344.0	9/20/2012	340	220.0	6.5	0.053	0.346	214.0	10	0.065	0.647	220' Sand
BH_150.0-364.0	8/31/2012	420	193.0	11.0	0.018	0.282	191.5	15.5	0.041	0.641	180' Sand
BH_152.3-338.0	8/27/2012	420	196.5	7.5	0.020	0.149	195.0	20	0.032	0.630	180' Sand
BH_141.0-347.5	8/22/2012	420	178.5	5.0	0.019	0.094	176.0	15	0.040	0.597	180' Sand
BH_154.5-382.0	9/24/2012	400	194.5	8.5	0.022	0.188	191.0	12	0.050	0.596	180' Sand
BH_149.0-341.5	10/15/2012	420	185.5	18.5	0.028	0.517	186.0	16	0.036	0.588	180' Sand
BH_146.0-354.0	7/19/2012	420	192.0	13.5	0.018	0.242	192.5	13	0.044	0.570	180' Sand

BH_149.0-366.0	8/29/2012	420	190.5	7.5	0.019	0.139	188.5	11.5	0.047	0.545	180' Sand
BH_132.0-346.0	6/15/2012	420	193.5	9.5	0.025	0.240	194.5	8	0.067	0.538	180' Lower Sand
BH_164.0-385.5	9/24/2012	420	208.0	12.0	0.021	0.251	207.0	10	0.049	0.495	180' Sand
BH_143.0-350.0	5/30/2012	400	184.0	4.0	0.018	0.073	182.0	10	0.049	0.493	180' Sand
BH_155.5-374.0	10/30/2012	310	198.0	11.5	0.021	0.240	193.0	16.5	0.029	0.486	180' Sand
BH_132.0-393.0	7/23/2012	420	372.0	8.5	0.024	0.203	370.0	9.5	0.051	0.484	370' Sand
BH_143.5-351.0	7/3/2012	420	358.0	3.0	0.015	0.045	357.0	10.5	0.045	0.473	370' Sand
BH_143.0-360.0	6/6/2012	400	372.0	3.5	0.025	0.088	369.0	11.5	0.040	0.460	370' Sand
BH_164.0-386.0	9/13/2012	420	207.5	13.5	0.025	0.337	206.5	13.5	0.034	0.459	180' Sand
BH_148.5-341.5	8/6/2012	320	184.5	10.5	0.025	0.265	182.0	12.5	0.036	0.455	180' Sand
BH_144.0-356.0	7/9/2012	420	380.0	5.5	0.039	0.213	381.0	4	0.111	0.445	370' Sand
BH_143.5-351.0	7/3/2012	420	370.0	6.5	0.023	0.149	369.5	7	0.064	0.445	370' Sand
BH_144.5-345.0	9/21/2012	340	211.5	12.0	0.017	0.207	207.5	14	0.031	0.433	180' Sand
BH_146.5-345.0	9/26/2012	420	217.5	8.5	0.020	0.167	217.0	10.5	0.041	0.430	220' Sand
BH_144.0-351.0	6/26/2012	420	183.5	8.2	0.020	0.171	186.0	9.5	0.045	0.424	180' Sand
BH_151.0-358.0	8/6/2012	420	190.5	7.5	0.025	0.187	189.5	8	0.053	0.423	180' Sand
BH_142.5-352.0	6/5/2012	420	218.0	4.0	0.022	0.088	213.5	9.5	0.045	0.423	220' Sand
BH_143.8-362.0	7/20/2012	420	376.0	12.5	0.028	0.348	377.0	11.5	0.037	0.420	370' Sand
BH_152.5-325.0	8/30/2012	420	185.5	5.0	0.018	0.090	183.5	14.5	0.029	0.414	180' Sand
BH_136.0-346.0	6/13/2012	420	348.0	4.0	0.016	0.066	345.5	7	0.058	0.409	370' Sand
BH_142.0-352.0	6/14/2012	420	366.5	13.0	0.022	0.292	364.0	12.5	0.032	0.400	370' Sand
BH_150.0-356.0	8/10/2012	420	194.5	7.0	0.025	0.172	193.0	9	0.043	0.389	180' Sand
BH_143.5-360.0	7/4/2012	420	201.0	2.5	0.014	0.034	201.0	9.5	0.041	0.389	180' Lower Sand
BH_154.5-382.0	9/24/2012	400	383.0	8.5	0.026	0.220	380.5	9.5	0.040	0.379	370' Sand
BH_144.5-351.0	8/22/2012	420	188.0	8.0	0.015	0.117	190.5	15.5	0.024	0.375	180' Sand
BH_152.0-357.0	8/17/2012	420	382.0	4.5	0.020	0.090	379.0	10.5	0.036	0.374	370' Sand
BH_143.0-349.0	9/4/2012	420	181.5	5.0	0.015	0.076	182.0	4	0.092	0.370	180' Sand
BH_151.0-360.0	8/23/2012	420	370.5	8.5	0.018	0.155	370.0	9	0.041	0.368	370' Sand
BH_149.5-370.0	8/16/2012	640	373.5	7.5	0.018	0.135	373.0	5.5	0.067	0.368	370' Sand
BH_120.5-392.0	7/18/2012	420	244.5	9.0	0.020	0.179	243.5	10	0.037	0.367	240' Sand
BH_146.5-343.0	8/10/2012	420	193.5	6.5	0.012	0.078	195.0	13	0.027	0.357	180' Sand
BH_148.0-377.5	8/13/2012	660	360.5	5.0	0.023	0.113	360.5	8.5	0.042	0.354	370' Sand
BH_143.0-356.0	6/4/2012	420	382.0	2.0	0.015	0.030	379.0	12.5	0.028	0.347	370' Sand
BH_149.5-341.5	10/18/2012	340	184.5	12.5	0.019	0.243	186.5	11.5	0.030	0.343	180' Sand
BH_152.0-386.0	10/9/2012	420	194.5	8.0	0.021	0.165	191.5	9	0.038	0.341	180' Sand
BH_134.0-396.0	7/3/2012	420	367.0	4.5	0.024	0.106	363.0	8.5	0.040	0.338	370' Sand
BH_156.5-326.0	9/19/2012	360	195.0	2.5	0.018	0.045	194.0	5.5	0.061	0.338	180' Sand

BH_144.0-344.0	9/4/2012	420	223.0	2.5	0.024	0.060	217.0	11.5	0.028	0.327	180' Sand
BH_144.5-344.5	9/13/2012	340	181.0	10.0	0.014	0.135	180.0	11	0.029	0.321	180' Sand
BH_144.0-351.0	6/26/2012	420	196.5	5.0	0.021	0.106	196.5	5.5	0.058	0.317	180' Sand
BH_144.0-353.5	5/22/2012	820	215.5	4.0	0.028	0.111	214.5	8	0.039	0.314	180' Sand
BH_143.0-360.0	6/6/2012	400	201.0	5.0	0.016	0.079	198.0	12.5	0.025	0.312	180' Lower Sand
BH_163.5-386.0	10/15/2012	420	196.5	7.5	0.039	0.290	196.5	6.5	0.048	0.310	180' Sand
BH_154.0-380.5	10/24/2012	390	193.0	7.5	0.022	0.162	190.0	8	0.038	0.304	180' Sand

It is the primary author's opinion that the sample preparation, security and analytical procedures used by UEC during the extensive drilling and geophysical logging program and the minimal coring that was completed for only two core runs, were well executed and adequate for the purpose of the this Technical Report and mineral resource determination.

12 DATA VERIFICATION

Burke Hollow Project data verification has included the generalized determination of the 12 drilling locations of exploration holes completed by Total in 1993. No other historic uranium exploration has been known to be conducted at the Burke Hollow Project. Little evidence exists today of these historic locations due to extensive and repeated root-plowing of the brushy pasture land currently used for cattle grazing. No surface markers of plugged exploration holes were located. UEC field personnel verified several areas where surface disturbance indicated previous drilling activity resulting from Total's 1993 drilling. Some of the apparent locations were validated and the data incorporated into the UEC database. The location was deemed to be valid if the location of the drill hole matched an apparent drill pad and the location and elevation of the hole matched the log header information.

The primary author is of the opinion that UEC staff have properly located and validated the map location with the physical locations of all drill holes in the current UEC 2012 drilling and the approximate locations of most the 12 drill holes in the Total historic database.

During his site visit in December 2012, Mr. Carothers observed numerous UEC current 2012 drill hole collars in the field and verified that these correlate with the digital database and are representative of the extent of drilling coverage over the deposit area. Hardcopy (paper) gamma logs from storage were also reviewed and correlated with results in the digital database.

Black to gray sands indicative of typical south Texas deposit uranium-bearing minerals were observed in core recovered from a core hole drilled as an offset to a gamma/PFN exploration drill hole intercepts. The wet cuttings samples for matching five foot intervals in the core hole also correlated with the darker sands believed to be mineralized. Due to the depth of the mineralized horizons, no in-place outcrops of uranium mineralized sands are present at the project site. Observations and inspection during the site visit convinced the qualified person that data collected to characterize uranium mineralization on the property is adequate for resource estimation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Based on the current exploration of the Burke Hollow Project, no significant processing and testing has been conducted. There is an extensive history of ISR operations mining Goliad sands in south Texas, but the basic processing methodology and metallurgical testing will likely not be investigated until the Burke Hollow Project has advanced further.

14 MINERAL RESOURCE ESTIMATE

14.1 INTRODUCTION

This mineral resource estimate was prepared by Bruce Davis, FAusIMM and Robert Sim, P.Geo,; both are independent Qualified Persons within the meaning of NI 43-101 for the purposes of mineral resource estimates contained in this report. Estimations are calculated using a 3-D block model based on geostatistical applications using commercial mine planning software (MineSight® v7.50). The project limits are in imperial units using a nominal block size of 50 x 50 x 10 ft (L x W x H). All drill holes are vertically oriented with variably spaced holes throughout the deposit: 50-100 ft in the main deposit area, and widening to 400 ft spacing in the flanks of the deposit.

The resource estimate was generated using drill hole sample results and the interpretation of a geologic model that relates to the spatial distribution of U_3O_8. Interpolation characteristics were defined based on the geology, drill hole spacing, and the geostatistical analysis of the data. The resources were classified according to their proximity to the sample locations and are reported, as required by NI 43-101, according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (CIM, 2010).

14.2 GEOLOGIC MODEL, DOMAINS, AND CODING

Uranium mineralization occurs within a sequence of sub-horizontal sand horizons inter-layered with zones of relatively impermeable clay and silt intervals. Two main sand units were interpreted from the drilling data: the Upper horizon gently dips to the west and averages at a depth of 200 ft below surface; and, the Lower horizon is horizontal and occurs at a depth of 370 ft below surface. The Upper zone is thicker and more extensive than the Lower zone and is locally comprised of two (or rarely three) separate mineralized seams typically separated by 10 to 20 feet of barren clays and silts. Multiple seams in the Upper zone have been composited into single intervals for use in resource estimation. Figure 14-1 shows a view, looking north, of the two horizons. Figures 14-2 and 14-3 show plan views of the overall extent of the Upper and Lower horizons; they also show the projected extents of appreciable sand within each horizon.

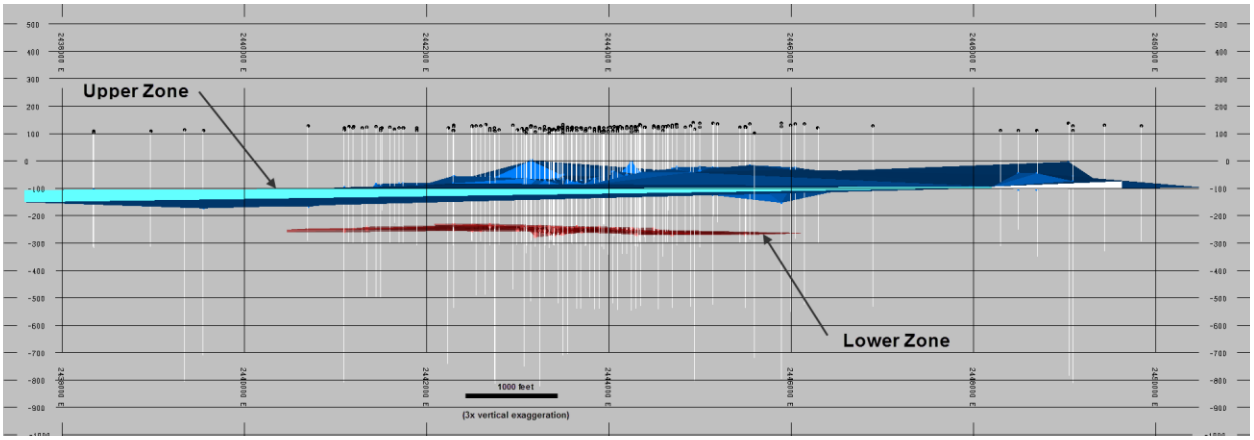

FIGURE 14-1: VIEW LOOKING NORTH SHOWING DRILL HOLES AND THE INTERPRETED UPPER AND LOWER SAND HORIZONS

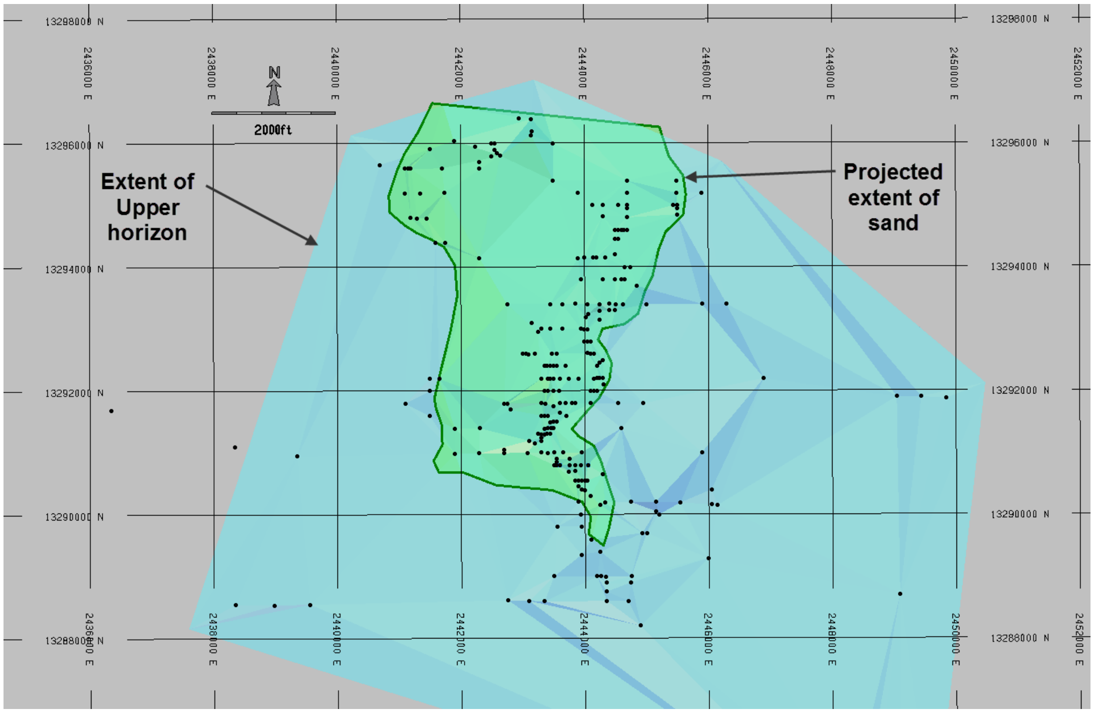

FIGURE 14-2: PLAN VIEW SHOWING THE EXTENT OF THE UPPER SAND HORIZON

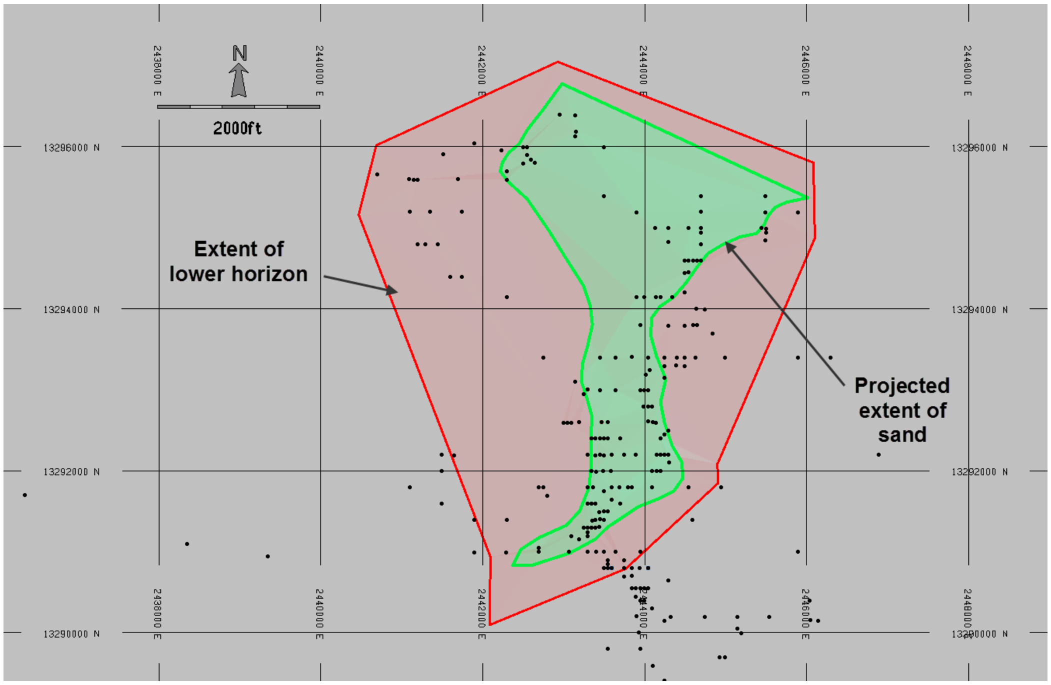

FIGURE14- 3: PLAN VIEW SHOWING THE EXTENTS OF THE LOWER SAND HORIZON

14.3 AVAILABLE DATA

Sample data was extracted from an Excel® file (*BH Intercepts Master.xls*) provided by UEC. The worksheet contains sample data from 266 vertical drill holes, including collar locations, and U_3O_8 grades and thicknesses derived from Gamma and PFN (Prompt Fission Neutron) logging. The distribution of Gamma data is more extensive than PFN data. PFN data tends to be present in the central parts of the deposit where U_3O_8 contents are higher; note that the detection limit for PFN data is approximately 0.02% U_3O_8. As a result, surrounding low-grade sample data is not present in the PFN data set. Where both Gamma and PFN data are present, the locations of the mineralized zones are quite similar, but both the grades and thicknesses derived only from PFN tend to be, on average, higher than the Gamma results.

Some low-grade intervals in the Gamma data are listed as a multiple of background radiation (for example, 5 x BG). It is assumed that BG (background) is equal to 0.0001 U_3O_8, and these were converted to numeric data, accordingly.

Table 14.1 shows a basic statistical summary of the Gamma and PFN sample data.

TABLE 14.1: BASIC SUMMARY OF RAW SAMPLE DATA

Data type	# Samples	Total Length of Samples (ft)	Minimum	Maximum	Mean	Standard Deviation
Gamma :						
Thickness (ft)	341	3521	0.5	80	10.4	14.3
eU_3O_8 (%)	341	3521	0.0002	0.139	0.009	0.011
PFN :						
Thickness (ft)	160	1617	0.5	38.5	10.1	7.0
pU_3O_8 (%)	160	1617	0.011	0.158	0.050	0.027

14.4 COMPOSITING

The original drill hole sample grades are composited to the full thickness of the Upper and Lower domains. In some instances, multiple horizons are present. In these cases, the two (or three, which is rare) intervals were combined into a single grade times thickness (GT) composite at that location.

Drill holes that extend through the expected elevation of the Upper and Lower horizons, but do not have measured U_3O_8 values, are assigned zero grade and zero thickness for resource estimation purposes.

Ultimately, two data sets are used to produce two resource model estimates. The first data set uses all available Gamma data. The second data set uses all the PFN data, where available, and where PFN data was not present, Gamma data was substituted.

14.5 BASIC STATISTICS BY DOMAIN

The basic statistics of the two data sets in the two domain horizons are listed in Table 14-2. As stated previously, these data sets include zero grade and zero thickness values inserted for drill holes that passed the horizons but did not encounter uranium mineralization. Also, as noted, the PFN data set includes substituted Gamma results where PFN data were not available.

Note that the PFN data shows average horizon thicknesses that are 20% to 30% greater than the Gamma thickness, and U_3O_8 grades that are almost twice those based on Gamma data. The PFN readings give the most accurate values for grade and thickness. The PFN results are considered to be the best reflection of the actual U_3O_8 in place as they are not affected by disequilibrium (or the difference between a radiometric and chemical assay). It is believed that the uranium at Burke Hollow is (geologically) relatively young and the gamma radiation tends to indicate a lower than actual (**pU_3O_8**) grade of uranium present in the system.

TABLE 14.2: BASIC SUMMARY OF COMPOSITED SAMPLE DATA

Data type	# Samples	Minimum	Maximum	Mean	Standard Deviation
Upper Zone					
Gamma :					
Thickness (ft)	199	0	80	8.4	12.9
eU_3O_8 (%)	199	0	0.075	0.014	0.011
PFN :					
Thickness (ft)	199	0	80	10.0	13.4
pU_3O_8 (%)	199	0	0.158	0.024	0.027
Lower Zone					
Gamma :					
Thickness (ft)	117	0	26	3.3	4.8
eU_3O_8 (%)	117	0	0.039	0.010	0.011
PFN :					
Thickness (ft)	117	0	38.5	4.2	6.6
pU_3O_8 (%)	117	0	0.147	0.019	0.027

Note: Mean **U_3O_8** values are arithmetic averages.

14.6 BULK DENSITY DATA

There is no bulk density sample data available. In lieu of samples, a tonnage factor of 17 ft^3/st was used. This tonnage factor is consistent with the factor applied in other South Texas, roll-front deposits.

14.7 EVALUATION OF OUTLIER GRADES

There were no adjustments made during the development of the resource model to account for potentially anomalous samples.

14.8 VARIOGRAPHY

The degree of spatial variability in a mineral deposit depends on both the distance and direction between points of comparison. Typically, the variability between samples is proportionate to the distance between samples. If the degree of variability is related to the direction of comparison, then the deposit is said to exhibit *anisotropic* tendencies which can be summarized with the search ellipse. The semi-variogram is a common function used to measure the spatial variability within a deposit.

The components of the variogram include the nugget, the sill, and the range. Often samples compared over very short distances (including samples from the same location) show some degree of variability. As a result, the curve of the variogram often begins at some point on the y-axis above the origin; this point is called the *nugget*. The nugget is a measure of not only the natural variability of the data over very short distances, but also a measure of the variability which can be introduced due to errors during sample collection, preparation, and assaying.

Typically, the amount of variability between samples increases as the distance between the samples increase. Eventually, the degree of variability between samples reaches a constant or maximum value; this is called the *sill*, and the distance between samples at which this occurs is called the *range*. The variogram parameters for each zone are summarized in Table 14-3.

The spatial evaluation of the data was conducted using a correlogram instead of the traditional variogram. The correlogram is normalized to the variance of the data and is less sensitive to outlier values; this generally gives cleaner results.

Variograms were generated using the commercial software package Sage 2001© developed by Isaacs & Co. Due to the available data, one variogram was generated for all directions from the composited Gamma data set. Variograms were produced for the distributions of *thickness* and *grade x thickness*. The results are summarized in Table 14-3.

TABLE 14.3: VARIOGRAM PARAMETERS

				1st Structure			2nd Structure		
Zone/Data type	**Nugget**	**Sill 1**	**Sill 2**	**Range (m)**	**Azimuth**	**Dip**	**Range (m)**	**Azimuth**	**Dip**
Upper Zone									
Thickness	0.447	0.252	0.301	359	104	0	1776	1	0
	Spherical			126	14	0	575	91	0
				30	0	-90	30	0	-90
Grade x Thickness (GT)	0.407	0.250	0.343	863	318	0	3767	344	0
	Spherical			111	48	0	362	74	0
				30	0	-90	30	0	-90
Lower Zone									
Thickness	0.179	0.228	0.593	588	86	0	414	134	0
	Spherical			194	356	0	154	44	0
				30	0	-90	30	0	-90
Grade x Thickness (GT)	0.374	0.425	0.201	303	85	0	277	95	0
	Spherical			156	355	0	157	5	0
				30	0	-90	30	0	-90

14.9 MODEL SETUP AND LIMITS

A block model was initialized in MineSight® and the dimensions are defined in Table 14-4. The selection of a nominal block size measuring 50 x 50 x 10 ft is considered appropriate with respect to the current drill hole spacing. In this case, where the thickness of the resource interval is estimated into the block, the vertical extent of the block is not used to calculate the volume of mineralization.

TABLE 14.4: BLOCK MODEL LIMITS

Direction	Minimum (ft)	Maximum (ft)	Block size (ft)	# Blocks
East	2438000	2450000	50	240
North	13286000	13297500	50	230
Elevation	-500	150	10	65

Note: Block model is not rotated.

Using the interpreted Upper and Lower sand domains, blocks in the model are assigned zone code values on a majority basis. During this stage, blocks that have more than 50% of their volume inside the wireframe domain are assigned a unique zone code value.

14.10 INTERPOLATION PARAMETERS

Ordinary kriging was used to estimate thickness (T) and GT in the blocks. The closest composite samples are captured using a 1000 x 1000 x 30 V ft search ellipse, but the block estimates are made using only the four closest composite samples. Estimates are only conducted in model blocks located within the Upper and Lower sand domains. The U_3O_8 grade is then calculated by dividing estimated GT by estimated T.

14-11 VALIDATION

The results of the modeling process were validated through several methods: a thorough visual review of the model grades in relation to the underlying drill hole sample grades; comparisons with other estimation methods; and, grade distribution comparisons using swath plots.

VISUAL INSPECTION

A detailed visual inspection of the block model was conducted to ensure the desired results following interpolation. This included confirmation of the proper coding of blocks within the respective zone domains. The distribution of block values was also compared relative to the drill hole samples to ensure the proper representation in the model.

In general, all models show a reasonable degree of correlation with the underlying sample data. Examples of the distribution of thickness values and U_3O_8 block grades in the models are shown in Figures 14-4, 14-5, 14-6, and 14-7.

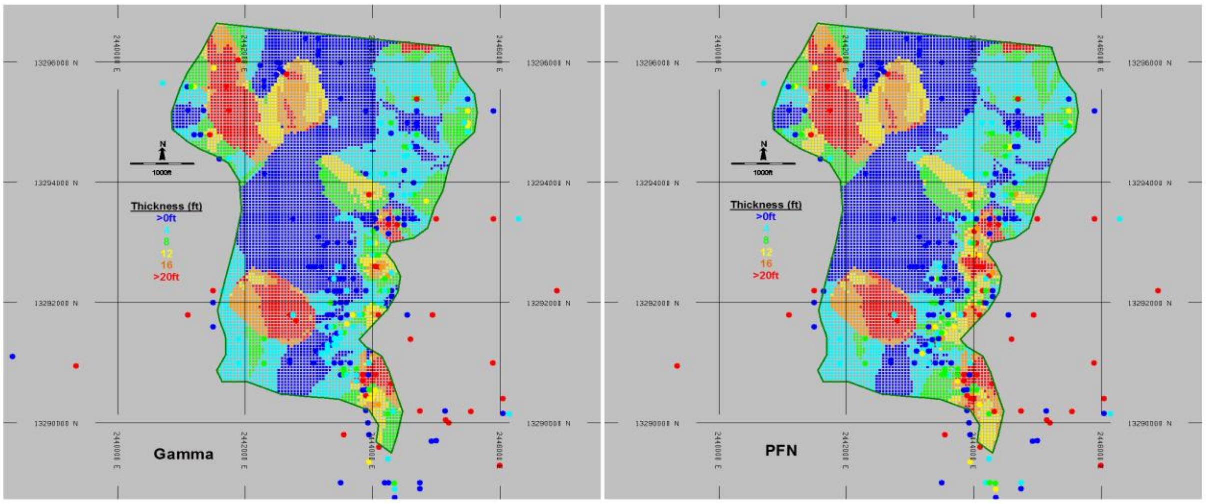

FIGURE 14-4: THICKNESS OF SAND IN UPPER ZONE

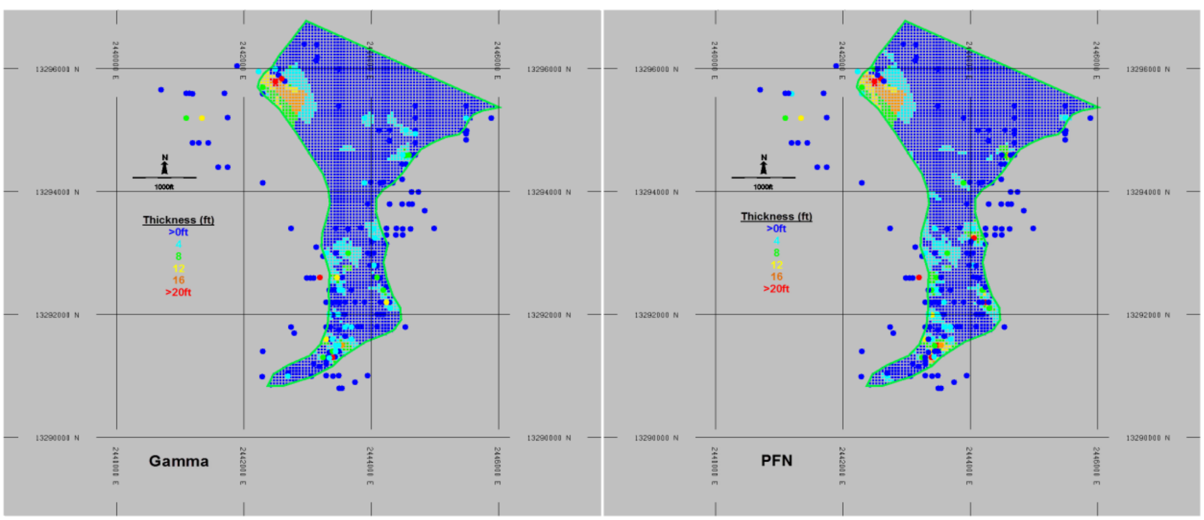

FIGURE 14-5: THICKNESS OF SAND IN LOWER ZONE

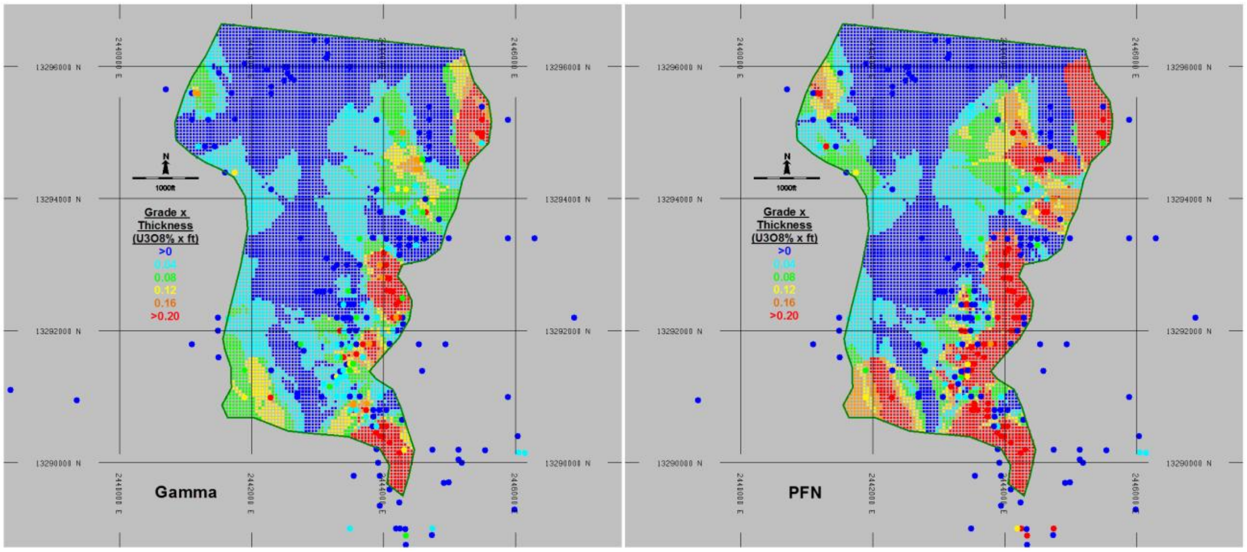

FIGURE 14-6: GRADE X THICKNESS OF SAND IN UPPER ZONE

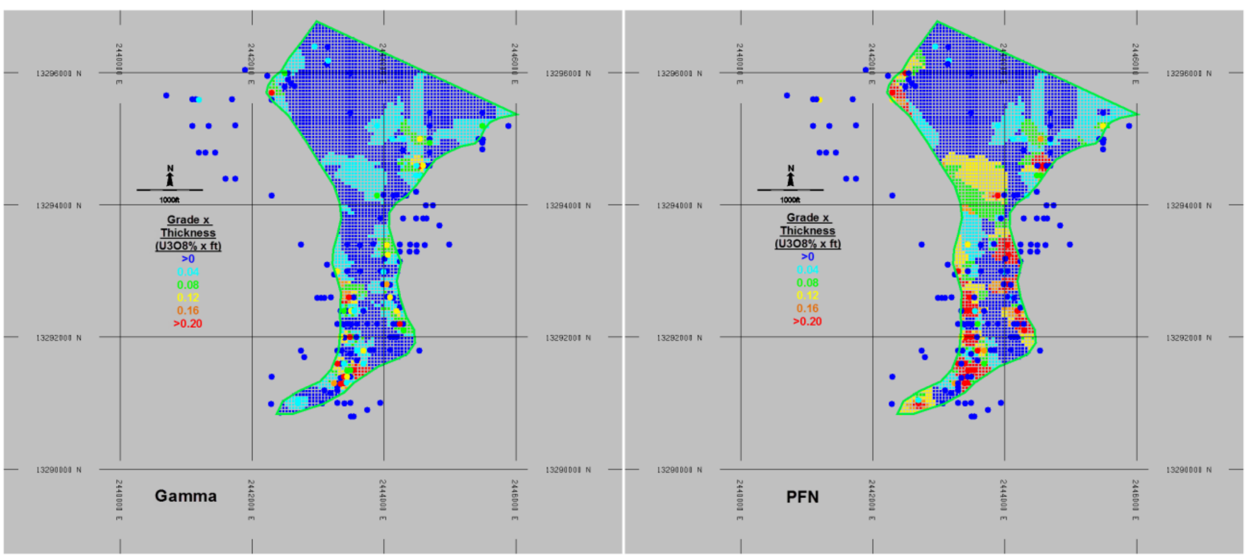

FIGURE 14-7: GRADE X THICKNESS OF SAND IN LOWER ZONE

COMPARISON OF INTERPOLATION METHODS

For comparison purposes, additional models for thickness and U_3O_8 were generated using both the inverse distance weighted (IDW) and nearest neighbour (NN) interpolation methods. The results of these models are compared to the OK models at various cut-off grades in the grade/tonnage graphs. Overall, there is an acceptable degree of correlation between these models. Reproduction of similar results using different methods increases the level of confidence in the overall resource estimate. An example showing the OK, IDW and NN models for grade x thickness using PFN data is shown in Figure 14-8.

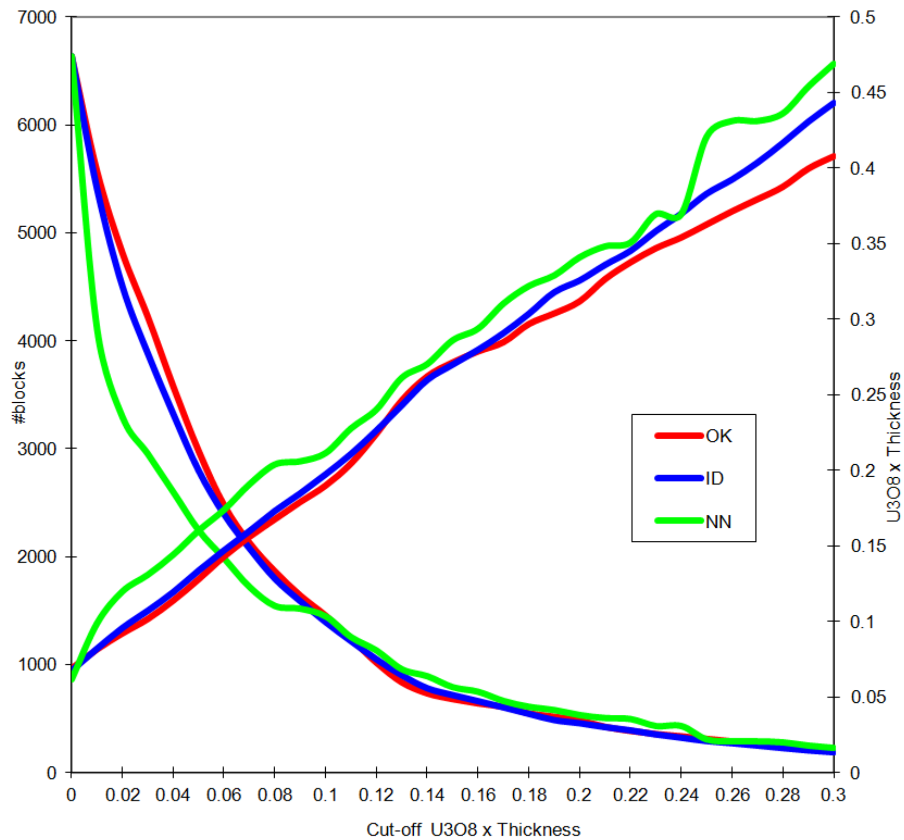

FIGURE 14-8: COMPARISON OF GRADE X THICKNESS MODEL TYPES – PFN DATA

SWATH PLOTS (DRIFT ANALYSIS)

A swath plot is a graphical display of the grade distribution derived from a series of bands, or swaths, generated in several directions through the deposit. Grade variations from the OK model are compared using the swath plot to the distribution derived from the declustered (NN) grade model.

On a local scale, the NN model does not provide reliable estimations of grade, but, on a much larger scale, it represents an unbiased estimation of the grade distribution based on the underlying data. Therefore, if the OK model is unbiased, the grade trends may show local fluctuations on a swath plot, but the overall trend should be similar to the NN distribution of grade.

Swath plots were generated in N-S and E-W directions comparing the OK and NN distributions of thickness, grade x thickness and U_3O_8 in the deposit. Overall, there is good correspondence between the models through most of the deposit area. An example showing W-E swaths from the PFN grade x thickness model is shown in Figure 14-9.

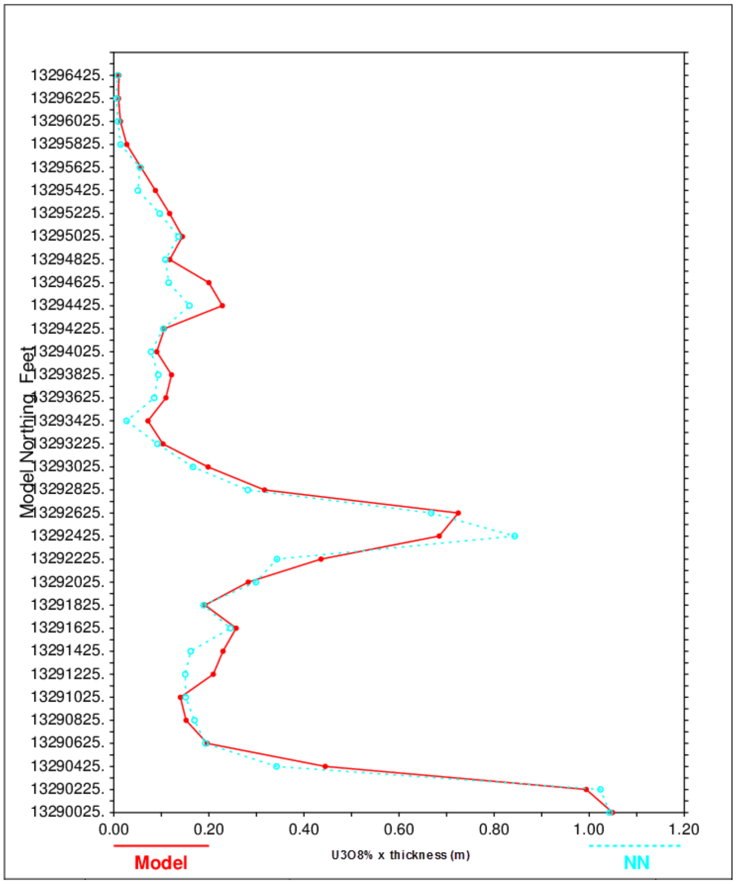

FIGURE 14-9: SWATH PLOT UPPER ZONE GRADE X THICKNESS PFN DATA

14.12 RESOURCE CLASSIFICATION

Mineral resources for the Burke Hollow project were classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (CIM, 2010). The classification parameters are defined relative to the distance between sample data and are intended to encompass zones of reasonably continuous mineralization.

Grade x thickness (GT) variograms and indicator variograms were reviewed, together with evidence gained from the visual interpretation of the drilling results, to understand the classification criteria for the mineral resources at Burke Hollow.

At this stage, none of the resource exhibits the level of confidence required to classify resources in the Indicated category. Additional, closer-spaced drilling is required to achieve this.

Resources in the Inferred category include model blocks within a maximum distance of 250 ft from a drill hole.

14-13 MINERAL RESOURCES

When reporting mineral resources, the requirements of NI 43-101 state that resources must exhibit reasonable prospects for economic extraction. A potential extraction option for this deposit is in-situ leaching of the U_3O_8. This is considered to be a potentially viable option in the relatively porous sand host horizons. The resources also tend to occur in zones of appreciable volume which would make them more amenable to this method of extraction. As a result, all blocks that meet the classification criteria described here are included in the resource estimate.

As discussed previously, PFN provides the most representative measurements of in-situ uranium concentrations encountered in the drill holes. PFN data, supplemented by Gamma measurements where PFN is not available, forms the basis for the estimate of Inferred mineral resources at Burke Hollow as listed in Table 14-5. The base case cutoff grade of 0.02% U_3O_8 is highlighted in the tables.

A second estimate of resources derived using the Gamma data alone is provided for comparison purposes in Table 14-6. The significantly lower Gamma-based estimate tends to highlight the effects of disequilibrium in the deposit.

There are no known factors related to environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues which could materially affect this mineral resource estimate.

Tables 14-5 and 14-6 summarize the current Inferred mineral resources for the Burke Hollow Project. The distribution of estimated U_3O_8 grades in inferred class blocks are shown in Figures 14-10 and 14-11.

TABLE 14-5: ESTIMATE OF INFERRED MINERAL RESOURCES (PFN)

Cut-off Grade pU_3O_8%	Ktons	pU_3O_8 (%)	Contained pU_3O_8 (Mlbs)
UPPER ZONE RESOURCES			
0.005	3,768	0.035	2.64
0.010	3,170	0.040	2.56
0.015	2,828	0.044	2.48
0.020	**2,437**	**0.048**	**2.35**
0.025	2,087	0.053	2.20
0.030	1,705	0.058	1.99
0.035	1,453	0.063	1.83
LOWER ZONE RESOURCES			
0.005	815	0.037	0.61
0.010	797	0.038	0.60
0.015	749	0.040	0.59
0.020	**592**	**0.046**	**0.54**
0.025	515	0.049	0.50
0.030	455	0.052	0.47
0.035	379	0.056	0.42

TABLE 14-6: COMPARISON OF INFERRED MINERAL RESOURCES USING GAMMA DATA

Cut-off Grade eU_3O_8%	Ktons	eU_3O_8 (%)	Contained eU_3O_8 (Mlbs)
UPPER ZONE RESOURCES			
0.005	2,677	0.019	1.00
0.010	2,251	0.021	0.94
0.015	1,821	0.023	0.83
0.020	**1,111**	**0.027**	**0.60**
0.025	669	0.030	0.40
0.030	339	0.033	0.22
0.035	105	0.036	0.08
LOWER ZONE RESOURCES			
0.005	684	0.019	0.25
0.010	624	0.020	0.25
0.015	499	0.021	0.21
0.020	**264**	**0.025**	**0.13**
0.025	116	0.030	0.07
0.030	45	0.035	0.03
0.035	19	0.040	0.02

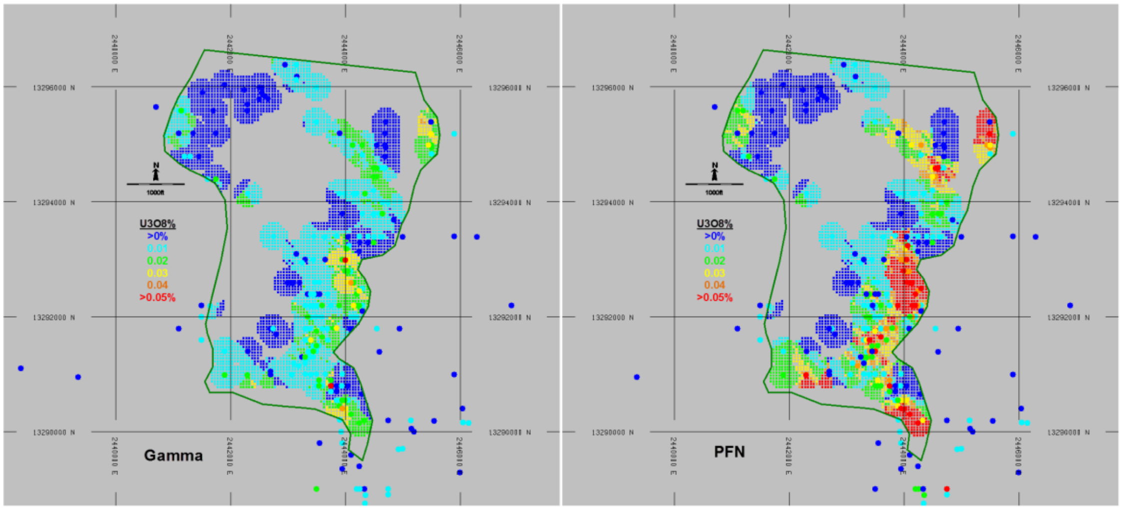

FIGURE 14-10: DISTRIBUTION OF U_3O_8 GRADES IN UPPER ZONE

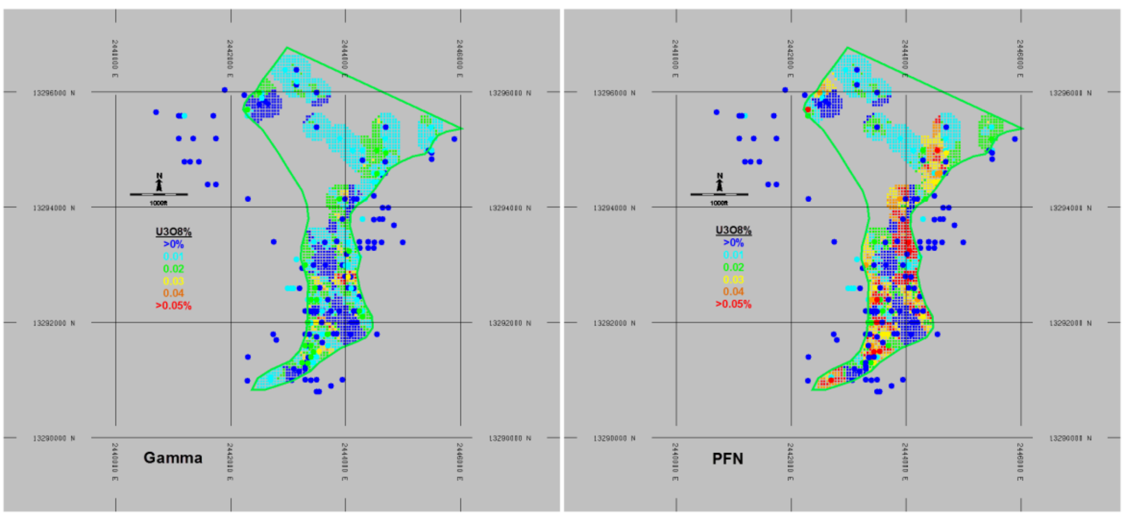

FIGURE 14-11: DISTRIBUTION OF U_3O_8 GRADES IN LOWER ZONE

15 MINERAL RESERVE ESTIMATE

This section is not applicable.

16 MINING METHODS

This section is not applicable.

17 RECOVERY METHODS

This section is not applicable.

18 PROJECT INFRASTRUCTURE

This section is not applicable.

19 MARKET STUDIES AND CONTRACTS

This section is not applicable.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

UEC is not aware of significant environmental liabilities on the property.

Based on the known project area site characteristics, there appear to be no significant environmental considerations that would preclude ISR mining at the Burke Hollow Project should future economic and mineral resource determinations be favorable. Prior to applying for mining permits, UEC would need to complete a number of required environmental baseline studies including: cultural resources (including archaeology), socioeconomic impact, soils mapping, flora and fauna studies and background radiation surveys.

21 CAPITAL AND OPERATING COSTS

This section is not applicable.

22 ECONOMIC ANALYSIS

This section is not applicable.

23 ADJACENT PROPERTIES

The Burke Hollow Project is located in southeastern Bee County. To the best of the author's knowledge, there have been no active or historical uranium projects on properties immediately adjacent to the UEC Burke Hollow Project and there has been no adjacent property information used in this report. A review of uranium scout maps from the 1960's through the mid 1980's reveals that no uranium exploration activity occurred in the vicinity of the Burke Hollow Project, other than Total exploration at Burke Hollow in 1993. A review of Texas Railroad Commission permit records shows no other active permits in this area of Bee County or in adjacent Refugio County.

24 OTHER RELEVANT DATA AND INFORMATION

This section is not applicable.

25 INTERPRETATION AND CONCLUSIONS

The author's review of the project historic and current data files, electric geophysical log files, geologic cross sections, and working maps indicate that the data density and reliability are suitable and that the map posting by UEC was developed in a competent, knowledgeable, and accurate manner to the current in-situ industry standards. It is also concluded that the property has good potential to drill additional mineralization. The objectives of the project going forward are to complete a suitable density of drill holes that would potentially confirm a NI 43-101 defined indicated and/or measured mineral resource at the Burke Hollow Project. Additionally, further drilling within the Exploration Target areas might confirm the potential mineralization in these areas.

Based on the recent assembly and verification of data by UEC on the Burke Hollow Uranium Project, the following conclusions can be made:

- The level of understanding of the geology at Burke Hollow Project is relatively good.
- The practices used during the recent UEC exploration drilling project were conducted in a professional manner and adhered to accepted industry standards.
- There are no evident factors that would lead one to question the integrity of the database.
- There are no unusual risks associated with the resource estimates.
- A significant uranium deposit was outlined. Mineralization is hosted in fluvial sand and silty-sand facies fixed by the presence of a well-defined reduction-oxidation boundary.
- Drilling to date has outlined an Inferred Mineral Resource (at a 0.02% U_3O_8 cut-off) of a combined upper and lower units of 3,030,000 tons at 0.047% U_3O_8 which contains an estimated 2.9 Mlbs of U_3O_8. An Inferred mineral resource does not have the confidence level to be included with higher classifications of mineral resource and should not form the basis for economic development. In addition to the Inferred Mineral Resource, two Exploration Target areas at the project area have been estimated to have the potential of containing between 3 million and 6 million tons of potential resources with grades between 0.03% U_3O_8 and 0.06% U_3O_8 with total contained U_3O_8 between 1.8 million and 7.2 million pounds. It must be stressed that: these projections of potential quantity and grade are extremely conceptual in nature; there has been insufficient exploration to define

a mineral resource and it is uncertain if further exploration will result in the ability to estimate uranium mineral resources.

26 RECOMMENDATIONS

The following actions are recommended for the Burke Hollow Project:

- Additional drilling is recommended to potentially expand the confirmation results by drilling in both the Inferred mineral resource area and the Exploration Target areas of the project. PFN logging with supporting chemical assays used for confirmation of grade, drilling field crew support, and lease road maintenance are included in the estimated budget of US$1,535,000 proposed to complete this work (Table 26.1).

- Assays and leach testing, amenability testing, and bulk density determinations need to be completed and are included in the estimated budget of US$50,000 proposed to complete this work (Table 26.1).

- After drilling is completed, an updated resource estimate should be prepared for an estimated budget of US$75,000 proposed to complete this work (Table 26.1).

- Environmental studies to provide a baseline for future exploration and possible development work on the project should be completed and are included for an estimated budget of US$471,000 proposed to complete this work (Table 26.2).

The recommended drilling and assaying will further confirm recent and historic results and attempt to upgrade the classification of resources in some areas. The Prompt Fission Neutron (PFN) logging will also be used to confirm recent and historic results.

TABLE 26-1: EXPLORATION BUDGET

Item	**Cost (USD)**
Drill, log, and plug 250 exploration holes @ 400' TD	$750,000
Drill, log, and plug 50 exploration holes @ 1000' TD	$350,000
Drill, log, and plug 5 core holes @ 400' avg. depth	$35,000
Drill, log, and plug 5 core holes @ 1000' avg. depth	$50,000
Assay and leach tests, 10 cores	$50,000
Dirt work and field crews	$300,000
Resource model update and report	$75,000
Road maintenance	$50,000
Exploration TOTAL	**$1,660,000**

TABLE 26-2: ENVIRONMENTAL BUDGET

Item	Cost(USD)
Groundwater Quality Studies (25 Regional Baseline Wells)	$375,000
Surface Water Quality Studies	$10,000
Preoperational Air Monitoring (equipment + analysis)	$15,000
Ecology	$32,000
Cultural Resource Assessment	$30,000
Socioeconomic Study	$9,000
Total	**$471,000**

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28 CERTIFICATE OF QUALIFIED PERSONS

CERTIFICATE of AUTHOR

I, Bruce Davis, FAusIMM, do hereby certify that:

1. I am an independent consultant of BD Resource Consulting, Inc., located at 4253 Cheyenne Drive, Larkspur, CO, U.S.A., 80118, incorporated January 18, 2008.
2. I graduated with a Doctor of Philosophy degree in Statistics with an emphasis in Geostatistics from the University of Wyoming in 1978.
3. I am a fellow of the Australasian Institute of Mining and Metallurgy, Registration Number 2111185.
4. I have practiced my profession continuously for 33 years and have been involved in geostatistical studies, mineral resource and reserve estimations and feasibility studies on numerous uranium deposits in Canada and the United States .
5. 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.
6. I am responsible for section 14 of the technical report titled, "Technical Report for the Burke Hollow Uranium Project, Bee County, Texas". I personally visited the site December 11, 2012.
7. I have had no prior involvement with the property that is the subject of the Technical Report.
8. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to make the Technical Report not misleading.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report

Dated this day of February 27, 2013.

Bruce M. Davis

CERTIFICATE of AUTHOR

I, Thomas A. Carothers, P.G. do hereby certify that:

1. I am an Independent Consulting Geologist, located at 633 Vine Street, Clyde, OH, U.S.A., 43410.

2. I graduated with a Bachelor of Science degree in Geology in 1968 from The Ohio State University and a Master of Science degree from Kent State University in 1973.

3. I am a licensed Professional Geoscientist in the State of Texas, No. 1877.

4. I have practiced my profession as a geologist and hydrogeologist for my full working career (39 years) and have worked for multiple geological and engineering consulting firms and two operating in-situ uranium mining operations in Texas and as an independent consultant and have been involved in numerous mineral resource and reserve estimations, as well as in-situ mine design, planning, and production, and potential mine property evaluations in Texas, Wyoming, and New Mexico.

5. I have read the definition of "qualified person" as defined in NI 43-101, and I certify that by reason of my education, affiliation with a professional organization (Foreign association in Appendix A), and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for the technical report titled: "Technical Report for the Burke Hollow Uranium Project, Bee County, Texas" dated February 27, 2013, with an effective date of January 7, 2013. I personally visited the site on December 11, 2012.

7. I have had no prior involvement with the property that is the subject of this Technical Report.

8. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

9. I have read NI 43-101 and Forms 43-101F1 and this Technical Report has been prepared in compliance with this instrument and the form.

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

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated in Clyde, Ohio this 27th day of February 2013.

Thomas A. Carothers

CERTIFICATE of AUTHOR

I, Robert Sim, P.Geo, do hereby certify that:

I am an independent consultant of: SIM Geological Inc.
6810 Cedarbrook Place
Delta, British Columbia, Canada V4E 3C5

1. I graduated from Lakehead University with an Honours Bachelor of Science (Geology) in 1984.
2. I am a member, in good standing, of the Association of Professional Engineers and Geoscientists of British Columbia, License Number 24076.
3. I have practiced my profession continuously for 28 years and have been involved in mineral exploration, mine site geology and operations, mineral resource and reserve estimations and feasibility studies on numerous underground and open pit base metal, uranium, oil sands and gold deposits in Canada, the United States, Central and South America, Europe, Asia, Africa and Australia.
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 am responsible for the preparation of section 14 of the technical report titled Technical Report for the Burke Hollow Uranium Property, Bee County, Texas, dated 27 Feb, 2013 (the "Technical Report").
6. I have not visited the property that is the subject of the Technical Report.
7. I have had no prior involvement with the property that is the subject of the Technical Report.
8. As of as of 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.
9. I am independent of Uranium Energy Corp. applying all of the tests in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 27th day of February, 2013.

PROFESSIONAL
PROVINCE OF
R.C. SIM
BRITISH COLUMBIA
GEOSCIENTIST

Robert Sim, P.Geo