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S-K 1300 INITIAL ASSESSMENT
TEXAS HUB AND SPOKE ISR PROJECT, TX USA

Prepared for:

Uranium Energy Corp

Report Current On: April 11, 2024

Signed Date: June 10, 2024

CONTENTS

TABLES

FIGURES

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1.0 EXECUTIVE SUMMARY

This independent Technical Report Summary (TRS) for the Texas Hub and Spoke In-Situ Recovery (ISR) Project (the Project) has been prepared for Uranium Energy Corp. (UEC), under the supervision of Western Water Consultants, Inc., d/b/a WWC Engineering (WWC), pursuant to Regulation S-K Subpart 1300, "Modernization of Property Disclosures for Mining Registrants" (S-K 1300). This TRS identifies and summarizes the scientific and technical information and conclusions reached from the Initial Assessment (IA) to support disclosure of mineral resources on the Project. The objective of this TRS is to disclose the mineral resources on the Project.

1.1 Property Description

The Project consists of five project areas: Hobson Central Processing Plant (Hobson CPP), Burke Hollow, Goliad, Palangana and Salvo. The Project is located in Karnes, Bee, Goliad and Duval counties, Texas, USA (Figure 1-1). The Hobson CPP will serve as the 'hub' of the Project, with the other project areas serving as satellite facilities, or the 'spokes.' The Hobson CPP will process all the mineral mined on each of the other project areas. The Project is located in the South Texas Uranium Province (STUP) (Figure 1-2), which is part of the South Texas coastal plain portion of the Gulf of Mexico Basin (GMB).

Mineral rights for the Project are all private (fee) mineral leases. Fee mineral leases are obtained through negotiation with individual mineral owners. Section 3 discusses the different mineral leases for each project area. All costs associated with these leases are confidential.

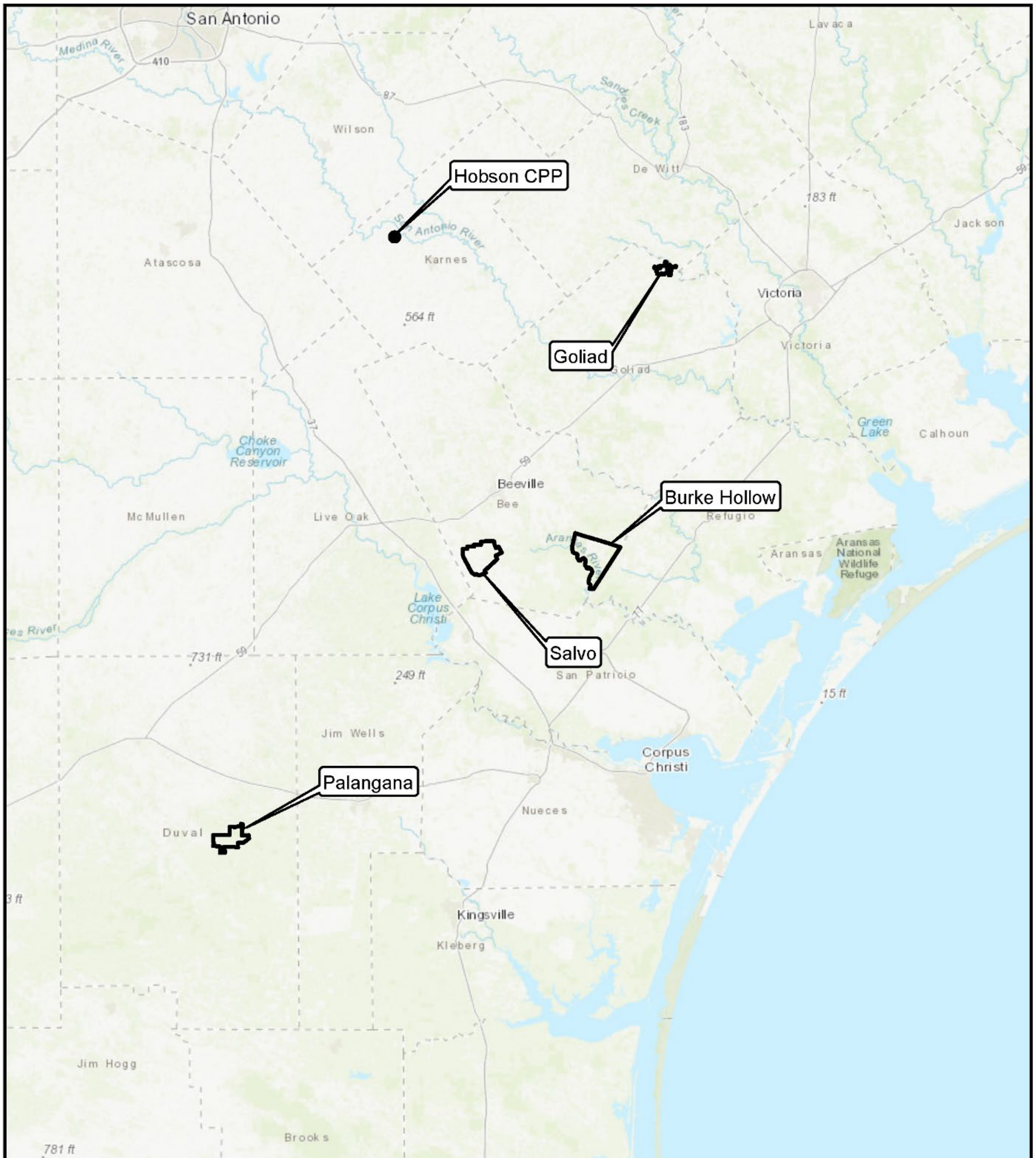
1.2 Ownership

This Project is owned and operated by UEC. UEC has executed surface use and access agreements and fee mineral leases with surface and mineral owners within and outside the various Project boundaries.

1.3 Geology and Mineralization

The Project resides in the GMB. The GMB extends over much of South Texas and includes the Texas coastal plain and STUP where the Project is located. The coastal plain is bounded by the Rocky Mountain uplift to the west and drains into the Gulf of Mexico. The coastal plain is composed of marine, non-marine and continental sediments ranging in age from Paleozoic through Cenozoic.

Uranium mineralization at the Project is typical of Texas roll-front sandstone deposits. The formation of roll-front deposits is largely a groundwater process that occurs when uranium-rich, oxygenated groundwater interacts with a reducing environment in the subsurface and precipitates uranium. The most favorable host rocks for roll-fronts are permeable sandstones with large aquifer systems. Interbedded mudstone, claystone and siltstone are often present and aid in the formation process by focusing groundwater flux.



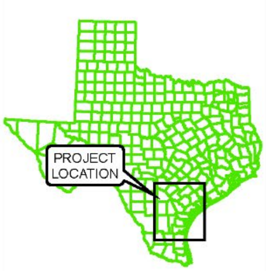


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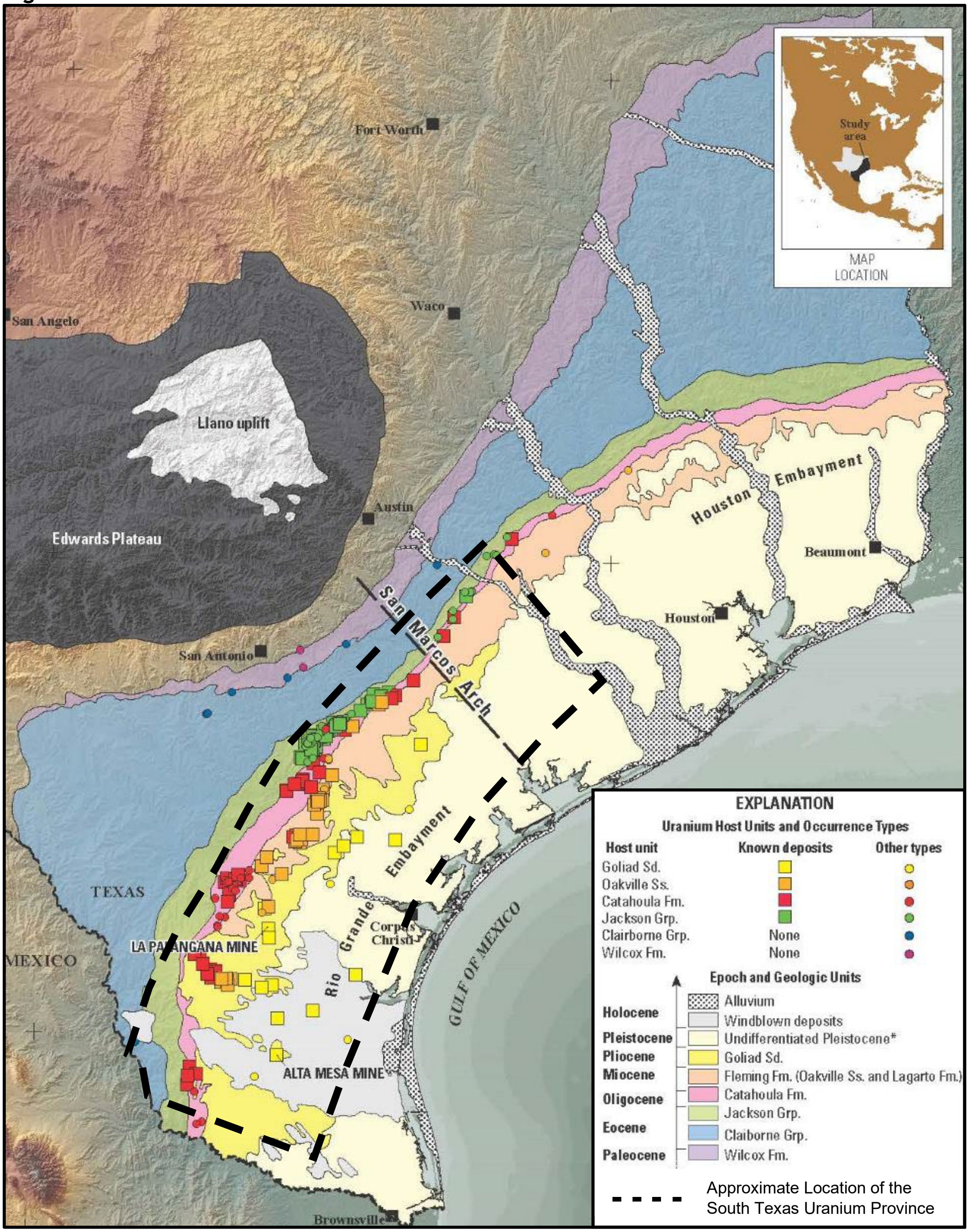
Figure 1-1
Texas Hub and Spoke Project Area Location Map
Texas S-K 1300 Technical Report
Karnes, Duval, Bee, and Goliad Counties, Texas

Date: May 2024	By: WWC/RAV	Checked: WWC/CGM

Figure 1-2: South Texas Uranium Province



USGS, 2015

1.4 Exploration Status

To date, UEC holds data from approximately 9,135 drill holes that have been completed by UEC and prior uranium exploration companies on and nearby the Burke Hollow, Goliad, Palangana and Salvo project areas held by UEC. Data from the drilling, including survey coordinates, collar elevations, depths and grade of uranium intercepts, have been incorporated into UEC's database.

1.5 Recent Development and Operations

Recent development and operations include all work that has been done to develop and operate the Project properties since the last TRS was written to update the resources and development at each project area. All other development and operations from the past are included in Section 5.0.

Summary capital and operating cost estimates are not included with this TRS, since UEC is reporting the results of an IA without economic analysis. No new construction/development has occurred at Salvo since the 2010-2012 drilling campaign. However, UEC initiated drilling projects on Palangana in 2010-2015 and in 2023, on Goliad in 2014, and on Burke Hollow in 2019-2024. UEC also activated several wellfields at Palangana to produce uranium from 2010-2016. In 2023, the licensed capacity of the Hobson CPP was increased to 4 million pounds of uranium concentrates (yellowcake or U_3O_8) per year.

1.5.1 Palangana

From 2010-2015, UEC drilled 891 drill holes at Palangana. Most of the drilling occurred in 2010 (391 holes), 2011 (281 holes) and 2012 (186 holes), with the remaining holes drilled from 2013-2015. The majority of these holes were drilled for delineation purposes, and the rest were drilled for monitor and production wells. In 2010, UEC activated wellfields in Production Area 1 (PA-1), PA-2 and PA-3 at Palangana. From 2010-2016, 563,600 lbs of uranium were produced by ISR methods.

In 2023, UEC drilled 30 holes in PA-4 for delineation purposes. Also in 2023, license and mine area applications were submitted to the Texas Commission on Environmental Quality (TCEQ) to reduce acreage inside the existing license and mine area boundary that did not have mineral resources for production. The mine area boundary reduction has been approved, and the license boundary reduction application is under technical review and awaiting approval for release to unrestricted use.

1.5.2 Goliad

In 2014, UEC conducted a drilling program at Goliad for exploration and water wells. 35 holes were drilled and logged for exploration and water supply purposes, with a majority of the holes being drilled in PA-1 and PA-2.

1.5.3 Burke Hollow

In 2019, UEC completed 129 drill holes, mostly focusing on delineating the Lower B1 and Lower B2 sands in the proposed PA-1. In addition, UEC began installing perimeter monitor wells in PA-1. In total, 57 holes were drilled solely for delineation and exploration purposes and 72 holes were drilled for monitoring purposes.

From 2021 to present, UEC conducted another drilling program to upgrade a portion of the resources from inferred to measured and indicated, to better define the mineralization in PA-1, PA-2 and PA-3 and to install monitor wells. As of April 11, 2024, 714 delineation and exploration holes and 44 monitor wells were drilled. This program is ongoing for the purpose of completing additional holes for delineation, exploration and monitor wells. No historical data were used in the Burke Hollow mineral estimate, only data from drilling conducted by UEC from 2012-2024. In total, 887 new holes were drilled and logged between 2019 and April 11, 2024, to complete this estimate.

1.6 Mineral Resource Estimates

Cautionary Statement:

This TRS is preliminary in nature and includes mineral resources. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is increased risk and uncertainty to commencing and conducting production without established mineral reserves which may result in economic and technical failure and may adversely impact future profitability.

The in-place resources were estimated separately for each project area. Table 1-1 and Table 1-2 list the resources by project area.

1.7 Permitting Requirements

The Hobson CPP is fully permitted. Burke Hollow, Goliad and Palangana are fully permitted to mine. Salvo still requires all mining permits. Regulatory agencies include the TCEQ, the Railroad Commission of Texas (RRC) and the U.S. Environmental Protection Agency (EPA). Table 1-3 lists the permits for each project area and their corresponding regulatory agencies.

1.8 QP Conclusion and Recommendations

Key conclusions and recommendations from WWC, a third-party firm, which employs professionals meeting the definition of “qualified person” (QP) set out in S-K 1300, are as follows:

- The QP considers the scale and quality of the mineral resources at the Project to indicate favorable conditions for future extraction.
- Hobson CPP, Burke Hollow, Goliad and Palangana are fully permitted for ISR operations.
- UEC should develop a Preliminary Feasibility Study for the Project and continue to maintain mineral leases along with surface use agreements to accommodate future development.

- UEC should advance the baseline studies necessary to obtain regulatory authorizations required to mine at Salvo.
- UEC should complete the design and purchase of long-lead items for the Burke Hollow satellite ion exchange plant.
- UEC should advance the design and acquisition of any long-lead items for the Underground Injection Control (UIC) Class I disposal well(s) at Burke Hollow.

Table 1-1: Texas Hub and Spoke Project Measured and Indicated Resource Summary

Mineral Resource	GT Cutoff	Average Grade (% eU_3O_8)	Ore Tons (000s)	eU_3O_8 (lbs)
Burke Hollow				
Measured	0.30	0.086	581	964,000
Indicated	0.30	0.083	3,329	5,191,000
Total Measured and Indicated	0.30	0.083	3,910	6,155,000
Goliad				
Measured	0.20	0.053	1,595	2,667,900
Indicated	0.20	0.102	1,504	3,492,000
Total Measured and Indicated	0.20	0.085	3,099	6,159,900
Palangana				
Measured	-	-	-	-
Indicated	None	0.134	232	643,100
Total Measured and Indicated	None	0.134	232	643,100
Salvo				
All mineral resources at Salvo are classified as Inferred.				
Project Totals				
Measured				3,631,900
Indicated				9,326,100
Total Measured and Indicated				12,958,000

Notes:
1. Pounds reported with Disequilibrium Factor (DEF) applied (except at Burke Hollow).
2. Measured and indicated mineral resources as defined in 17 CFR § 229.1300.
3. All reported resources occur below the static water table.
4. The point of reference for mineral resources is in-situ at the Project.
5. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
6. Delineation drilling conducted at Palangana after 2010 was not incorporated into the resource estimate as in the experience of the QP, this type of drilling does not generally substantially change the resource estimates.
7. An 80% metallurgical recovery factor was considered for the purposes of determining the reasonable prospect of economic extraction.
8. The reasonable prospects of economic extraction are discussed in Section 11.1.1.

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Table 1-2: Texas Hub and Spoke Project Inferred Resource Summary

Mineral Resource	GT Cutoff	Average Grade (% eU_3O_8)	Ore Tons (000s)	eU_3O_8 (lbs)
Burke Hollow				
Inferred	0.30	0.104	2,596	4,883,000
Goliad				
Inferred	0.20	0.195	333	1,224,800
Palangana				
PA-1 and PA-2 Inferred	None	0.100	96	192,500
Dome, NE Garcia, SW Garcia, CC Brine, Jemison Fence, Jemison East Inferred	0.10	0.110 - 0.300	206	808,800
Salvo				
Inferred	0.30	0.091	1,125	2,839,000
Project Totals				
Total Inferred			4,356	9,948,100

Notes:
1. Pounds reported with DEF applied (except at Burke Hollow).
2. A range of grades is presented for the Palangana inferred mineral because the resource estimation methods differed between PA-1/PA-2 and the rest of the trends. There was no cutoff for PA-1 and PA-2 block models. See Section 11.1 for a more detailed explanation.
3. Inferred mineral resources as defined in 17 CFR § 229.1300.
4. All reported resources occur below the static water table.
5. The point of reference for mineral resources is in-situ at the Project.
6. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
7. Delineation drilling conducted at Palangana after 2010 was not incorporated into the resource estimate as in the experience of the QP, this type of drilling does not generally substantially change the resource estimates.
8. An 80% metallurgical recovery factor was considered for the purposes of determining the reasonable prospect of economic extraction.
9. The reasonable prospects of economic extraction are discussed in Section 11.1.1.

Table 1-3: Texas Hub and Spoke Permits

Property	Permits					
	RRC (Surface Mining and Reclamation Division) Exploration Permit	TCEQ Class I Waste Disposal Well Permit(s)	TCEQ Underground Injection Control Mine Area Permit	TCEQ Area Permit	TCEQ/EPA Aquifer Exemption	TCEQ Radioactive Materials License
Hobson CPP	N/A	2	N/A	N/A	N/A	✓
Burke Hollow	✓	2	✓	✓	✓	✓
Goliad	✓	2	✓	✓	✓	✓
Palangana	✓	2	✓	✓	✓	✓
Salvo	-	-	-	-	-	-

Note: Some permits are not applicable to the Hobson CPP because no mineral is being mined there.

2.0 INTRODUCTION

2.1 Registrant/Issuer of Report

This TRS was prepared for UEC to report the results of an IA and describe the Project, which includes the Hobson CPP and the Burke Hollow, Goliad, Palangana and Salvo project areas. This IA was prepared for UEC, under the supervision of WWC. The project areas are located in Karnes, Bee, Goliad and Duval counties, Texas, USA. The Hobson CPP will serve as the 'hub' of the Project with the other project areas serving as satellite facilities, or the 'spokes.' For the purposes of this TRS, the satellite facilities are considered material to the Hobson CPP. Mineral is mined at the project areas and is then transported to the Hobson CPP for processing.

UEC is incorporated in the State of Nevada, with principal offices located at 500 North Shoreline Boulevard, Suite 800N, Corpus Christi, Texas, 78401 and at 1030 West Georgia Street, Suite 1830, Vancouver, British Columbia, Canada, V6E 2Y3.

2.2 Terms of Reference

The Project is owned and operated by UEC. This TRS has been prepared for UEC to report mineral resources for the Project. The Project includes multiple project areas located in Karnes, Bee, Goliad and Duval counties, Texas. The objective of this TRS is to disclose the mineral resources on the Project.

2.3 Data Sources, Units of Measurement and Abbreviations

The information and data presented in this TRS were gathered from various sources listed in Chapters 24.0 and 25.0 of this TRS.

Uranium mineral resource estimates and mapping for the Project are based on data from approximately 9,135 drill holes that included survey coordinates, collar elevations, depths and grade of uranium intercepts.

Units of measurement unless otherwise indicated are feet (ft), miles, acres, pounds (lbs), short tons (2,000 lbs), grams (g), milligrams (mg), liters (L) and parts per million (ppm). Uranium production is expressed as pounds U_3O_8, the standard market unit. ISR refers to in-situ recovery, sometimes also termed in-situ leach (ISL). Unless otherwise indicated, all references to dollars ($) refer to United States currency.

2.4 Personal Inspection

WWC professionals most recently visited the Hobson CPP, Palangana and Salvo facilities on November 2, 2021, the Goliad facilities on November 4, 2021, and the Burke Hollow facilities on February 6, 2024.

2.4.1 QP Qualifications

This TRS was completed under the direction and supervision of WWC. WWC is a third-party QP as defined by Regulation S-K 1300. Additionally, WWC has approved the technical disclosure contained in this TRS.

2.5 Previous Technical Report Summaries

UEC filed a TRS for the Hobson CPP, Burke Hollow, Goliad, Palangana and Salvo projects in 2022 and an Amended TRS for the same projects in 2023. Although they were filed in 2022 and 2023, respectively, the current or effective date for both the TRS and the Amended TRS is March 7, 2022, as no underlying data were updated in the preparation of the Amended TRS. Additionally, UEC has previously filed Technical Reports conforming to Canadian National Instrument 43-101 (NI 43-101) standards for the Project. The previous Technical Reports and TRSs are listed in Table 2-1.

Table 2-1: Previous Technical Report Summaries

Property	TRS Title	Report Type	Effective Date
Burke Hollow	Technical Report for UEC's Burke Hollow Uranium Project, 2017 Update, Bee County, Texas, USA	NI 43-101	November 27, 2017
Goliad	Technical Report for Uranium Energy Corp's Goliad Project In-situ Recovery Uranium Property, Goliad County, Texas	NI 43-101	March 7, 2008
Palangana	NI 43-101 Technical Report on Resources, Uranium Energy Corp., Palangana ISR Uranium Project, Deposits PA-1, PA-2 and Adjacent Exploration Areas, Duval County, Texas	NI 43-101	January 15, 2010
Salvo	Technical Report for Uranium Energy Corp, Salvo Project In-situ Recovery Uranium Property, Bee County, Texas	NI 43-101	March 31, 2011
Texas Hub and Spoke ISR Project	S-K 1300 Mineral Resource Report, Texas Hub and Spoke ISR Project, TX, USA.	S-K 1300	March 7, 2022
Texas Hub and Spoke ISR Project	Amended S-K 1300 Mineral Resource Report, Texas Hub and Spoke ISR Project, TX, USA.	S-K 1300	March 7, 2022

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3.0 PROPERTY DESCRIPTION

3.1 Location, Description, Leases and Mineral Rights

The Project includes the Hobson CPP, Burke Hollow, Goliad, Palangana and Salvo project areas located in Karnes, Bee, Goliad and Duval counties, Texas, USA. The locations of the project areas are depicted in Figure 1-1, while Figures 3-1 through 3-4 depict the Burke Hollow, Goliad, Palangana and Salvo project areas in more detail. Each project area is described in detail in Sections 3.1.1 through 3.1.5.

Mineral rights for the Project are private (fee) mineral leases. Fee mineral leases were obtained through negotiation with individual mineral owners. Table 3-1 summarizes the mineral leases for each project area and their expiration dates.

Fee minerals have varying royalty rates and calculations, depending on the agreements negotiated with individual mineral owners. In addition, surface use and access agreements may include a production royalty, depending on agreements negotiated with individual surface owners at various levels. UEC's average combined mineral plus surface production royalty applicable to the Project is variable and based upon the selling price of U_3O_8.

Most of the leases have term periods of 5 years with a 5-year renewal option. The primary lease stipulation for ISR mining is the royalty payments as a percentage of production. Royalties at the Project vary by lease and are confidential. The various lease fees and royalty conditions are negotiated with individual lessors, and conditions may vary from lease to lease. No resources are reported in areas outside of the project area boundaries, which are determined by the leases within each project area.

Surface ownership at the Project consists of fee lands predominantly used for agriculture and wind turbine development. On the project areas that are currently permitted, UEC has surface use agreements in place with the private landowners where appropriate. Obtaining surface access rights is a standard process in mine permitting, and UEC does not anticipate that maintaining these rights presents a significant risk to UEC's ability to perform work on the Project.

The QP has not verified the leases within the various project areas or how the leases are mapped or plotted. The QP has relied on information provided by UEC with regards to royalty rates and has not independently verified royalty agreements, rates or surface use and access agreements.

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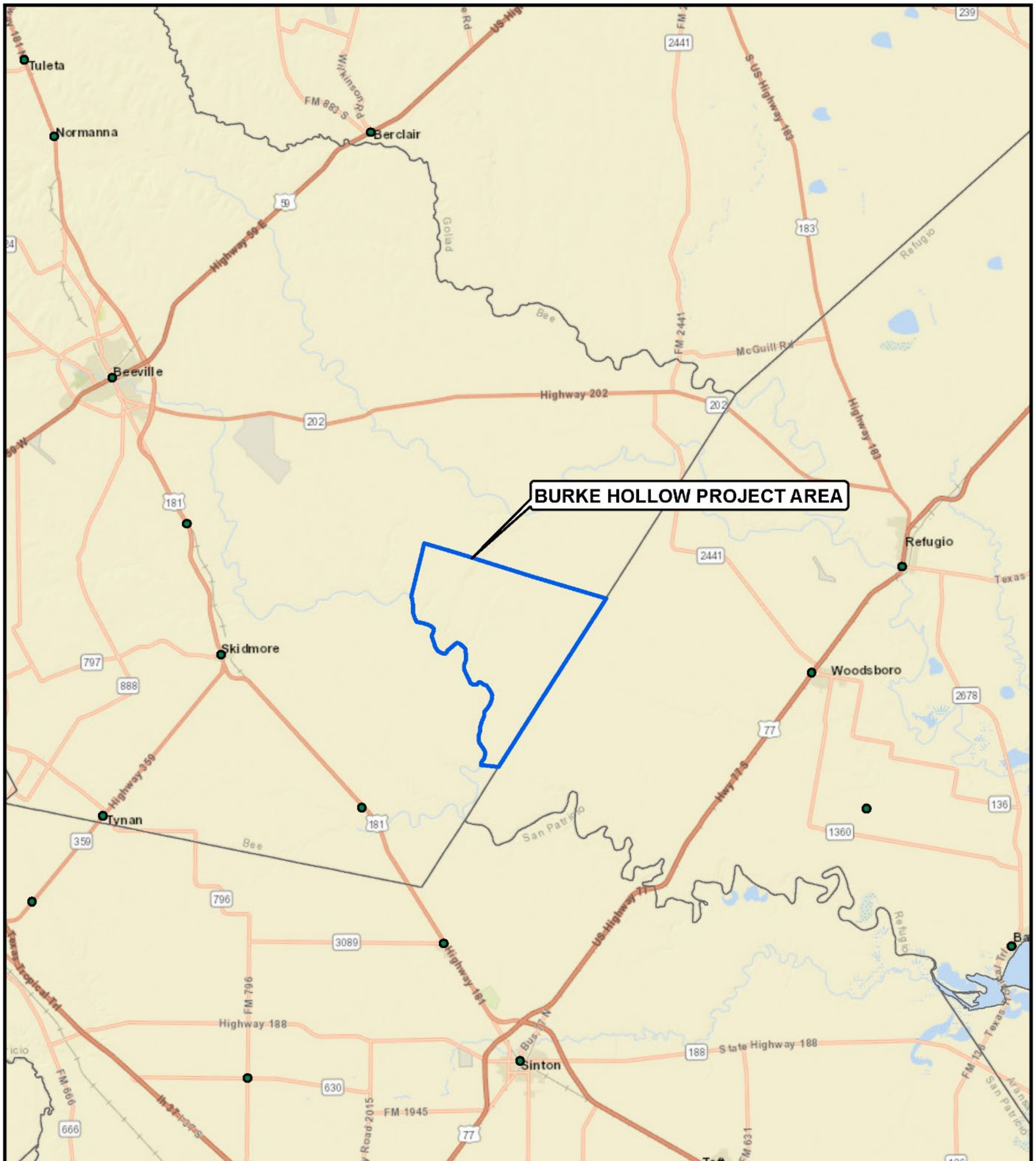

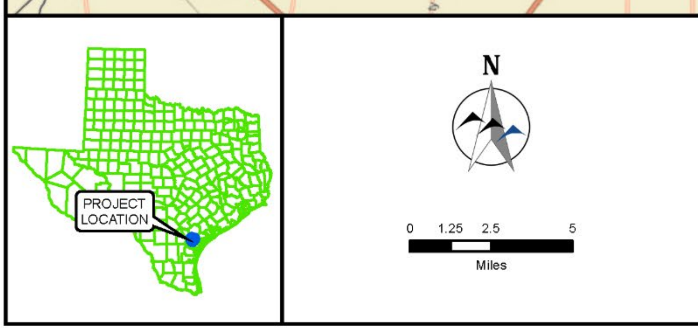

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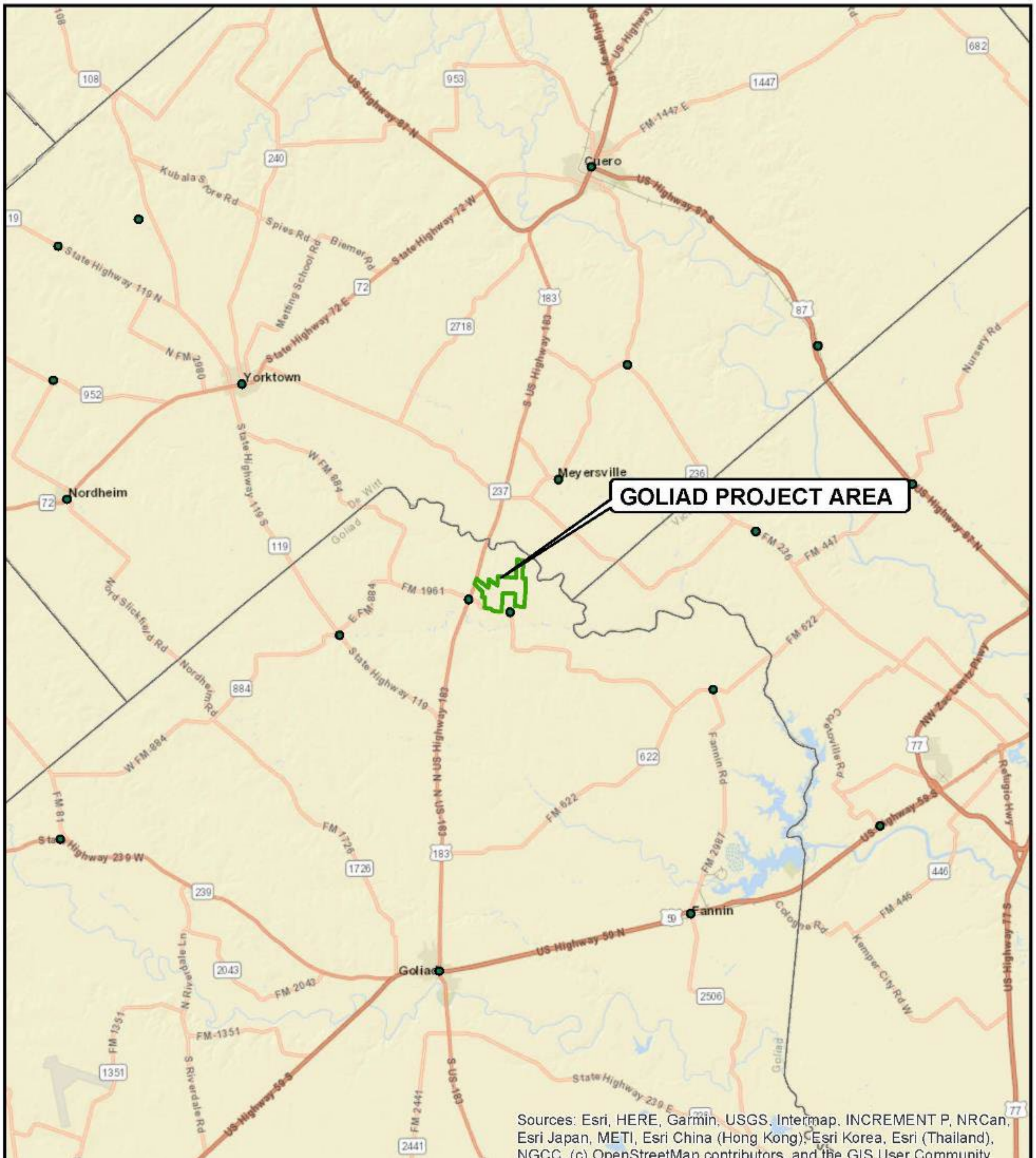
Figure 3-1
Burke Hollow Project Area Location Map
Texas S-K 1300 Technical Report
Bee County, Texas

Date: 5/28/2024	By: WWC/RAV	Checked: WWC/CGM



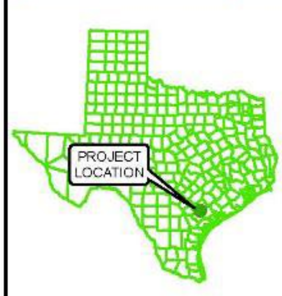


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Figure 3-2
Goliad Project Area Location Map
Texas S-K 1300 Technical Report
Goliad County, Texas

Date: 7/7/2022	By: WWC/ALC	Checked: WWC/BJS

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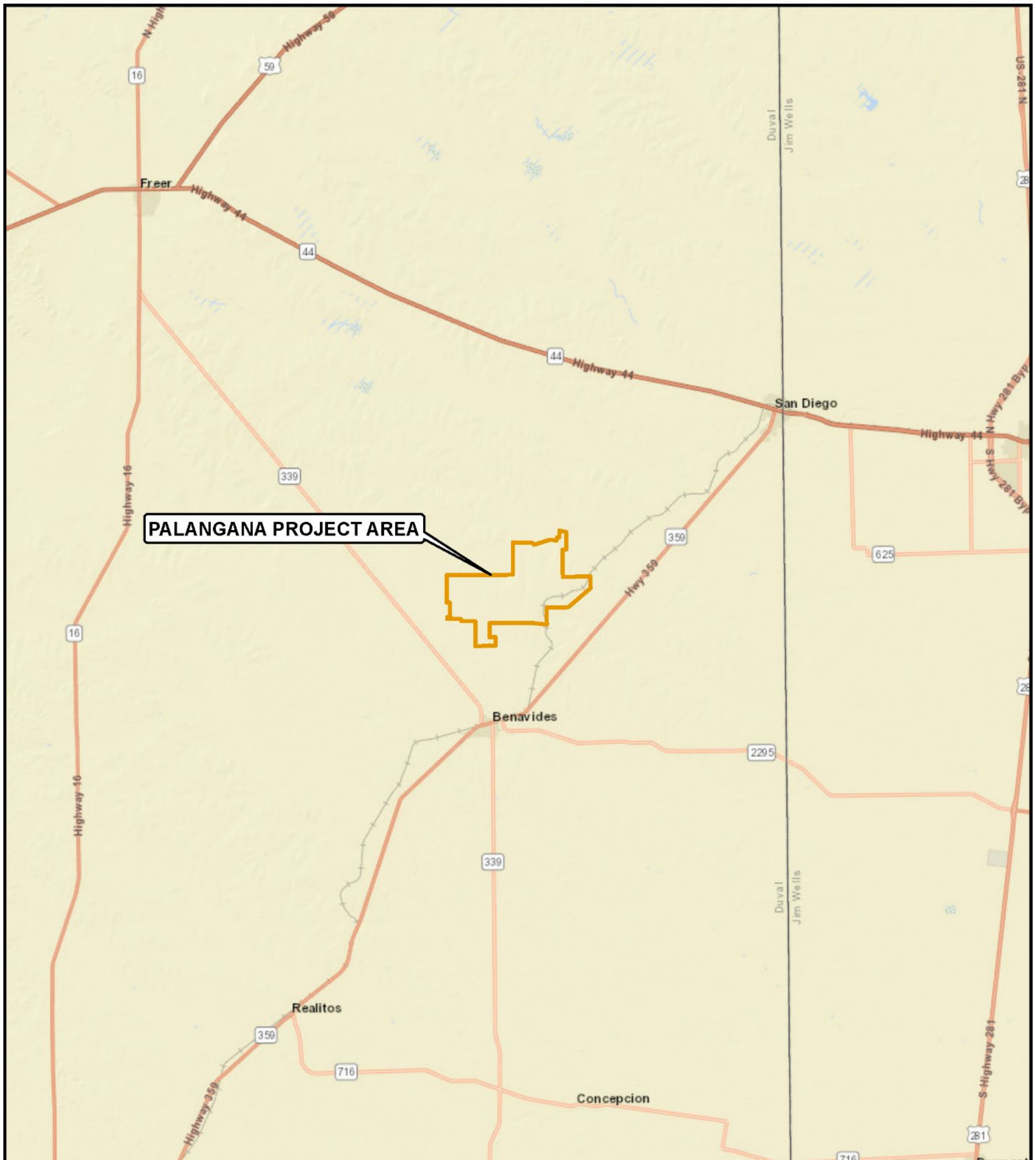

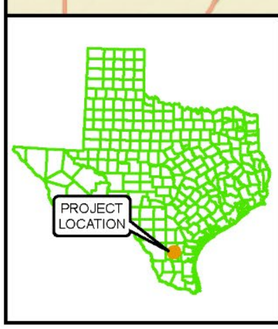

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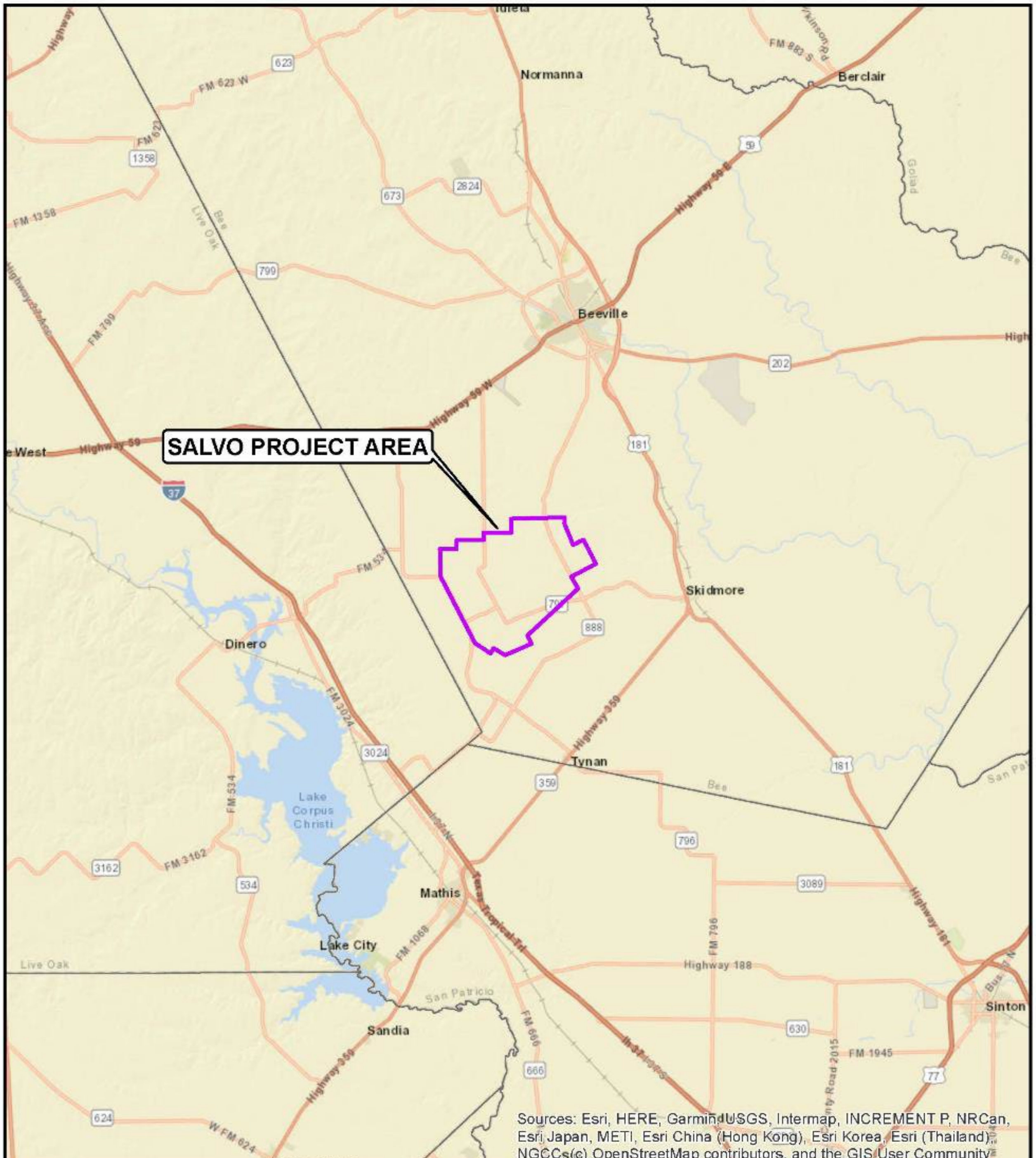
Figure 3-3
Palangana Project Area Location Map
Texas S-K 1300 Technical Report
Duval County, Texas

Date: 4/9/2024	By: WWC/RAV	Checked: WWC/CGM



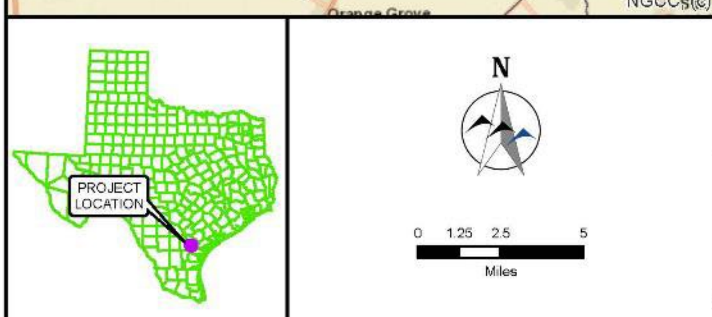


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Figure 3-4
Salvo Project Area Location Map
Texas S-K 1300 Technical Report
Bee County, Texas

Date: 7/7/2022	By: WWC/ALC	Checked: WWC/BJS

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Table 3-1: Project Area Mineral Lease Summary

Project Area	Fee Mineral Leases	County	Expires
Hobson CPP			
Acreage	7.29	Karnes	Renewable Annually
Leases	1		
Burke Hollow			
Acreage	17,511	Bee	2/2027
Leases	1		
Goliad			
Acreage	636	Goliad	10/2024, 8/2024, 8/2025 and 12/2025
Leases	7		
Palangana			
Acreage	6,182	Duval	1/2023, held by shut-in royalty, 2/2025 and 5/2027
Leases	4		
Salvo			
Acreage	800	Bee	9/2026 and 7/2027
Leases	2		

3.1.1 Hobson CPP

The Hobson CPP (Figure 1-1) is located in Karnes County, Texas, northwest of Karnes City, within the GMB and approximately 100 miles northwest of Corpus Christi and 40 miles southeast of San Antonio at latitude 28.9447 and longitude -97.9887 in decimal degrees. This facility represents the 'hub' of UEC's 'hub-and-spoke' business model, which comprises a central processing facility supplied with uranium-loaded ion exchange resin from ISR mining at one or more of the project areas. The Hobson CPP was constructed in 1978 when the project area was mined. In 2008, the plant was refurbished. The Hobson CPP has previously processed uranium from the Palangana satellite facility (i.e., the first UEC 'spoke'), and UEC plans to also process uranium from the Burke Hollow, Goliad and Salvo satellite facilities in the near future.

The CPP consists of a resin transfer circuit for loading/unloading ion exchange resin from tanker trucks, an elution circuit to strip uranium from the ion exchange resin, a circuit to precipitate uranium oxide solids, a yellowcake thickener (if necessary) and a modern, zero-emission vacuum dryer. Other facilities and equipment include an advanced laboratory with inductively coupled plasma mass spectrometry, office building, yellowcake and 11e.(2) byproduct material storage area, chemical storage tanks and one permitted and constructed waste disposal well. Another waste disposal well is permitted but has not been drilled, because additional disposal capacity is not needed at present. The Hobson CPP is permitted for 4 million lbs per year of uranium concentrates (yellowcake or U_3O_8). With an average dryer cycle time of 40 hours and a current dryer loading capacity of 8 to 10 drums, the plant appears capable of yielding up to 1.5 million lbs per year without requiring physical modifications. WWC personnel visited the Hobson CPP on November 2, 2021, and found it to be in a well-maintained and apparently fully operational condition, although the plant was inactive (i.e., not processing a batch of uranium-loaded resin) during the site visit.

3.1.2 Burke Hollow

The Burke Hollow project area is located within the STUP and currently consists of a 17,511-acre lease area. The project area is about 18 miles southeast of the town of Beeville, west of US Highway 77 (Figure 3-1) and northeast of US Highway 181. The approximate center of the Burke Hollow project area is located at latitude 28.2638 and longitude -97.5176, in decimal degrees. Site drilling roads are entirely composed of caliche and gravel, allowing access for trucks and cars in most weather conditions. Four-wheel drive vehicles may be needed during high rainfall periods.

Virtually all uranium mining in Texas is on private lands with leases negotiated between companies and each individual landowner/mineral owner. Burke Hollow consists of one fee (private) mineral lease comprising 17,511 acres. UEC has indicated to the QP that payments for the private lease are up to date as of the effective date of this TRS. Table 3-1 lists the leases as provided to the QP. No resources are reported in areas outside of the Burke Hollow project area boundary.

UEC has fully permitted Burke Hollow with state and federal agencies and the production area authorization (PAA) application for PA-1 is under review with TCEQ (see Section 3.2).

3.1.3 Goliad

The Goliad project area is located in South Texas near the northeast end of the STUP. The Goliad project area consists of multiple contiguous leases that would allow the mining of uranium by ISR methods. The project area is about 14 miles north of the town of Goliad on the east side of US Highway 77A/183, a primary highway that intersects with US Highway 59 in Goliad and I-10 to the north (Figure 3-2). The approximate center of the project area is at latitude 28.8686 and longitude -97.3433, in decimal degrees. Site drilling roads are mostly gravel based and allow access for trucks and cars in most weather conditions. Four-wheel drive vehicles may be needed during high rainfall periods.

There are seven fee (private) mineral leases comprising 636 acres on the Goliad project area. UEC has indicated to the QP that payments for the private leases are up to date as of the effective date of this TRS. A list of leases that make up the Goliad project area are shown in Table 3-1. Moore Energy Corporation (Moore Energy) obtained leases for exploration work in the project area in the early 1980s and completed an extensive drilling program resulting in a historical uranium mineral resource estimate in 1985. UEC obtained mining leases by assignment from a private entity (Brad A. Moore) in 2006. No resources are reported in areas outside of the Goliad project area boundary.

UEC has completed all the required permitting in order to mine at Goliad.

3.1.4 Palangana

The Palangana project area is located in Duval County, Texas, 25 miles west of the town of Alice along US Highway 359. More specifically, the site lies 5 miles north of the town of Benavides, 15 miles southeast of the town of Freer and 10 miles southwest of the town of San Diego (Figure 3-3). Freer, San Diego and Benavides are small rural agricultural towns. The approximate center of the Palangana project area is located at latitude 27.6732 and longitude -98.3934, in decimal degrees.

The Palangana project area has been developed by several operators since the 1950s and has several wellfields that are drilled and ready for operations. In addition, Palangana produced 563,600 lbs U_3O_8 from 2010-2016 and currently has the infrastructure to begin mining immediately.

There are four fee mineral leases comprising 6,182 acres at the Palangana project area. In 2023, license and mine area applications were submitted to the TCEQ to reduce acreage inside the existing license and mine area boundary that did not have mineral resources for production. The mine area boundary reduction has been approved, and the license boundary reduction application is under technical review and awaiting approval for release to unrestricted use.

Table 3-1 lists the leases as provided to the QP. No resources are reported in areas outside of the Palangana project area boundary. UEC has indicated to the QP that payments for the private leases are up to date as of the effective date of this TRS.

UEC has completed all the required permitting in order to mine at Palangana.

3.1.5 Salvo

The Salvo project area is located in South Texas near the northeast end of the STUP. The Salvo project area consists of two leases that would allow the mining of uranium by ISR methods. The project area is about 10 miles south of the city of Beeville and approximately 5 miles west of US Highway 181 (Figure 3-4), a primary highway that intersects with US Highway 59 in Beeville and I-10 to the north. Site drilling roads are mostly based of caliche and gravel and allow access for trucks and cars in most weather conditions. Four-wheel drive vehicles may be needed during high rainfall periods. The approximate center of the Salvo project area is located at latitude 28.2632 and longitude -97.7889, in decimal degrees.

The Salvo project area is located in an area of Texas that has extensive farming activity. Most of the property is used for farming and has a high level of crop cultivation.

A listing of current individual leases that make up the Salvo project area are shown in Table 3-1. No resources are reported in areas outside of the project area boundary.

No historical uranium mining is known to have occurred on any of the Salvo project area leases; only state permitted (RCC) uranium exploration drilling has taken place. Prior to any mining activity at Salvo, UEC will need to acquire all the necessary permits from the RCC, TCEQ and EPA.

There are two mineral leases comprising 800 acres at the Salvo project area. UEC has indicated to the QP that payments for the private lease are up to date as of the current date of this TRS.

3.2 Encumbrances

To the QP’s knowledge, there are no unusual encumbrances to the project areas. However, there are general regulatory and permitting liabilities, depending on the specific project area.

The environmental liability for the Project falls under the jurisdiction of the RRC and TCEQ, which regulates mining operations and the extraction of minerals and provides mine permits and radioactive material licenses. No environmental liabilities are present at the Project.

The Burke Hollow, Goliad and Palangana project areas are fully permitted with all state and federal agencies. UEC has obtained all the necessary permits and licenses to begin ISR mining operations at Palangana and Goliad. In contrast, the resources in the Salvo project area are not permitted.

Other potential permitting requirements, depending on the status of each project area, may include the following:

- The TCEQ will require UEC to apply for and obtain a radioactive material license pursuant to Title 30 Texas Administrative Code Chapters 305 and 336. The application must address a number of matters including, but not limited to, site characteristics (ecology, geology, topography, hydrology, meteorology, historic and cultural landmarks and archaeology), radiological and non-radiological impacts, environmental effects of accidents, decommissioning, decontamination and reclamation.
- To produce uranium from subsurface deposits, an operator must obtain an area permit and PAA pursuant to the Texas Water Code, Chapter 27. Underground injection activities cannot commence until the TCEQ has issued an area permit and PAA to authorize such activities. In addition, all portions of the proposed production zone in groundwater with a total dissolved solids concentration less than 10,000 mg/L, which will be affected by mining solutions, are included within an aquifer exemption approved by TCEQ and the EPA. The PAA application may be developed concurrently with or after the area permit application. As additional production areas are proposed to be activated within the area permit, additional PAA applications must be submitted to the TCEQ for processing and issuance before injecting within the production area.
- In 1975, the Texas Legislature gave the RRC jurisdiction to regulate surface mining for coal and uranium. No surface mining for uranium is currently conducted at the Project, but uranium exploration for ISR operations is administered by the Surface Mining and Reclamation Division of the RRC. Active uranium exploration sites are inspected monthly (RRC, 2022). The RRC requires exploration permits for any uranium exploration in the state.
- Texas state law does not provide any agency with the authority to regulate the use or production of groundwater unless the location lies within a water conservation district (WCD). Burke Hollow and Salvo are both located in the Bee County WCD, Goliad is located in the Goliad County WCD and Palangana resides in the Duval County WCD. Prior to initiating uranium recovery at the Project, UEC will need to acquire industrial permits to withdraw groundwater from the host sandstones (L. Yosko personal communication, 2022).
- Class I and III injection wells are also regulated by the TCEQ. Therefore, UEC is required to acquire the appropriate permits in order to construct and operate these wells.

3.3 Property Risk Factors

A variety of property risk factors exist but are not unique to the specific project areas. Many uranium deposits occur in relatively compact special areas. Large horizontal well pads or wind turbine pads sited on top of mineralization could limit the ability to access resources. Oil and gas development or wind turbines are common in South Texas. Property risk factors are included in the following list, with accompanying descriptions of the risk:

- Drill Hole Reclamation
  - The drilling, reclamation and abandonment of uranium exploration holes on any of the leases is permitted by the RRC. Potential future environmental liability as a result of the mining must be addressed by the permit holder jointly with the permit granting agency. Permits have bonding requirements for ensuring that the restoration of groundwater, the land surface and any ancillary facility structures or equipment is properly completed. It is the opinion of the QP that uranium exploration holes present a low risk of impacting development of the resources.
- Oil and gas horizontal pads and development
  - Aquifer dewatering due to shallow water supply wells used in oil and gas operations could impact target aquifers and limit the ability to conduct ISR. Large horizontal well pads could limit surface accessibility, placement of wellfields and the ability to recover resources through ISR. It is the opinion of the QP that oil and gas development presents a low risk of impacting development of the uranium resources.
- Industrial wells impacting aquifers
  - Industrial wells could impact available water in target aquifers but will not impact the resources. It is the opinion of the QP that industrial wells present a low risk of impacting development of the resources.
- Commercial oilfield waste disposal facilities (COWDFs) and/or lined ponds
  - COWDFs or other lined ponds may limit surface access and could impact optimal placement of wellfields. It is the opinion of the QP that COWDFs and other lined ponds present a low risk of impacting development of the resources.
- Utility corridors
  - Utility corridors consisting of high voltage electrical transmission lines or buried natural gas pipelines are present at Burke Hollow. Due to the width of the right-of-way, there is a moderate risk that these corridors could limit the development of a portion of the uranium resources at the Burke Hollow project area. It is the opinion of the QP that utility corridors present a low risk of impacting development of the resources at the other project areas.
- Commercial wind power
  - Commercial wind power could limit surface accessibility and impact optimal placement of wellfields. Some of the project areas have wind turbines constructed on the property. However, UEC already has an agreement in place with the operators and landowners to prevent any further wind development on top of ore bodies. It is the opinion of the QP that there is a low risk that commercial wind power could limit development of uranium resources.

3.4 Royalties (Confidential)

Due to the confidentiality of royalties in private agreements, these data are not included in the TRS.

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4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 Physical Setting

The Hobson CPP, Burke Hollow, Goliad, Palangana and Salvo project areas are located in Karnes, Bee, Goliad and Duval counties in South Texas. The physiographic settings for the project areas are similar and located in the coastal plain/prairies and interior portion of the Gulf Coastal Plain Physiographic Province (Texas Bureau of Economic Geology (BEG), 1987). Nearly flat strata in the coastal plain/prairies at Burke Hollow transitions to strata tilted towards the Gulf of Mexico at the Palangana, Salvo and Goliad project areas. Surface stratigraphy includes deltaic sands and muds near the coast transitioning to unconsolidated sands and muds in the interior (BEG, 1987).

The Gulf Coastal Plain is part of a passive continental margin along the Gulf of Mexico. The tectonic setting yields low relief and a relatively flat landscape along the coast from Mexico and Texas to Mississippi. Thick formations of Quaternary and Tertiary fluvial clastic sediments were deposited on the continental shelf from the Mississippi Embayment (USGS, 2022 and Galloway et al., 1979).

The surface is characterized by rolling hills with parallel to sub-parallel ridges and valleys. Changes in relief typically range from 10 to 100 ft near the coast to upwards of 200 ft further inland. Ground surface elevations at the project areas range from a low of 92 ft above mean sea level (msl) at Burke Hollow to a high of 500 ft above msl at Palangana.

Livestock grazing and open pastures with woodlands are common in the region and are typical for this type of habitat in the Southern Great Plains Eco-region. Vegetation consists primarily of mesquite and post oak woods, forests and grassland mosaic vegetation/cover types (BEG, 2000). Native and introduced grasses and woody species such as honey mesquite, blackjack oak, eastern redcedar, black hickory, live oak, sandjack oak and cedar elm are common for this cover type.

Shrub species in the region include hackberry, yaupon, poison oak, American beautyberry, hawthorn, supplejack, trumpet creeper, dewberry, coral-berry, little bluestem, silver bluestem, sand lovegrass, beaked panicum, three-awn, spranglegrass and tickclover. Interspersed among these major vegetation communities, within and along the drainages, are grasslands and meadow grasslands with some seeded grasslands and improved pastures for agriculture (Texas Parks & Recreation, 2022).

The region's temperatures in the summer range from about 75° to 95°F, although highs above 100°F are common; winter temperatures range from about 45° to 65°F (U.S. Climate Data, 2022). Humidity is generally over 85 percent (%) year-round and commonly exceeds 90% during the summer months. Average annual rainfall ranges from about 26 to 30 inches. The climate is characterized by a warm desert-like to subtropical climate. Periods of freezing temperatures are generally very brief and infrequent. Tropical weather systems from the Gulf of Mexico can occur during the hurricane season and may affect the Project with large rainstorms and wind.

4.2 Accessibility and Local Resources

The combined Project includes multiple assets in four Texas counties with various accessibility and resource options for the five project areas. Corpus Christi is about 65 miles east of Palangana (Duval County). This project area can be accessed off Texas Highway 44 toward Freer. Halfway between San Diego and Freer is a turn-off to the south called Ranch Road 3196 that runs through the project area. The road continues south, after passing Palangana, for about 6 miles to the town of Benavides. Access is excellent with major two-lane paved roads connecting the three surrounding towns and dirt secondary roads connecting to Palangana. For water supply, shallow wells in the Goliad Formation in Duval County generally yield mineralized water, whereas deeper wells yield water of comparatively low mineral content and are used for water supply (USGS, 1937). Corpus Christi, with a population of 317,773, and Alice, with a population of 17,761 (U.S. Census Bureau, 2020), are the largest nearby cities that should provide an ample workforce and any necessary supplies for the Project.

Salvo and Burke Hollow are located in Bee County. The Salvo project area can be accessed from several routes including I-37, Texas Route 359 and Farm to Market (FM)-797, which runs northeast to southwest through the project area. The southern portion of the project area can also be accessed from US Highway 181 and FM-797. Salvo and Burke Hollow have several other secondary gravel roads that provide access to the project areas. The nearest population centers are Skidmore (about 3 miles east of Salvo with a population of 863), Tynan (about 4 miles south with a population of 254) and Beeville (about 10 miles north with a population of 13,641) (U.S. Census Bureau, 2020). While Skidmore and Tynan 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, resulting from regional oil and gas exploration and production. The Salvo project area has very good accessibility for light to heavy equipment.

The Burke Hollow project area is located about 10 miles east of the Salvo project area. The nearest population centers are Skidmore, approximately 11 miles west, Refugio, about 15 miles east with a population of 2,712 (U.S. Census Bureau, 2020) and Beeville, approximately 18 miles northwest. Refugio is a relatively small town but offers basic needs for food and lodging and some supplies. The Burke Hollow project area has good accessibility for light to heavy equipment. There is an excellent network of county, state and federal highways that serve the region. The topography is composed of dominantly sandy, well-drained soils, which provide satisfactory construction conditions for building gravel access site roads.

The Salvo and Burke Hollow projects areas located in Bee County are rural, but have excellent county, state and federal highways that serve the region and good construction conditions. Water supply in the project areas is from private water wells, mostly tapping sands of the Goliad Formation (Kurrus and Yancey, 2017 and Myers and Dale, 1966). Water supply for potential future mine development would be from the same sources. The Salvo and Burke Hollow project areas are about 30 to 35 miles north of Corpus Christi, the closest metropolitan district to the Bee County project areas.

The Goliad project area is in Goliad County. The project area is accessed using route US 77A-183 that runs north-south to the west of the project area. FM-1961 intersects with 77A-183 at the crossroad town of Weser. FM-1961 to the east of the intersection trends along the south side of the project area. Access onto the project area is via vehicular traffic on private gravel roads. The project area is in a rural setting at the north end of Goliad County. The nearest population centers are Goliad (14 miles south with a population of 1,620), Cuero (16 miles north with a population of 8,128) and Victoria (about 30 miles east with a population of 65,534) (U.S. Census Bureau, 2020). While Goliad and Cuero are relatively small towns, they provide basic needs for food and lodging and some supplies. Victoria is a larger city, which provides excellent infrastructure and serves as a regional support center for oil and gas exploration and production. The Goliad project area has very 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 provides good construction conditions for building gravel roads necessary for site access. Groundwater from the Goliad Formation is used for water supply over much of the northern portion of Goliad County (Carothers, 2007). Water quality in the Goliad Formation is variable, and wells typically can yield small to moderate amounts of water according to Dale et al. (1957). The Project is about 60 miles from San Antonio (population of 1,451,853), the closest metropolitan district to the Goliad project area.

The Hobson CPP is about 40 miles west of the Goliad project area, about 55 miles northwest of the Burke Hollow project area, about 50 miles north-northwest of the Salvo project area and about 90 miles north of the Palangana project area.

North-south rail lines (Union Pacific) and east-west rail lines (Kansas City Southern Railway) are located approximately 10 air miles from the Palangana project area and about 10 to 20 air miles from the Salvo, Burke Hollow and Goliad project areas (Texas Department of Transportation, 2021).

4.3 Availability of Infrastructure

Equipment, supplies and personnel needed for exploration and day-to-day operation are available from population centers such as San Antonio and Corpus Christi. Specialized equipment for the wellfields is often available in Texas but may need to be acquired from outside of the state. The local economy for all five project areas is geared toward oil and gas exploration, energy production and farming and ranching operations, providing a well-trained and capable pool of workers for ISR production and processing operations. Workers will reside locally and commute to work daily (Carothers, 2007). As a result of energy development since the early 1900s, all the project areas have existing or nearby electrical power, natural gas and adequate telephone and internet connectivity.

Generally, the local and regional infrastructure is in place for all five project areas including roads, power and maintenance facilities. The exceptions include local access roads, wellfield development, local power and well control facilities that must be constructed. Specific information for available infrastructure for each project area is described below.

The Palangana project area has a history of past use and existing access roads (SRK Consulting, 2010). Power for operating the Palangana wellfield is already established. Existing buildings and ancillary facilities include a maintenance facility and office in the project area. Manpower requirements targeting field technicians, welders, electricians, drillers and pipefitters exist within a 12-mile radius in the local communities. The technical workforce for facility operations has largely disappeared from the area, although ample qualified resources can be found in the

South Texas area from the petrochemical industry (SRK Consulting, 2010). The necessary rights for constructing surface processing facilities at the Palangana project area are in place with the uranium leaseholders. Most of the current leases have conveyed the surface rights under certain conditions of remuneration. These conditions require payments for surface area taken out of usage.

For the Salvo and Burke Hollow project areas, good access roads exist and sufficient electrical power is available in the area within a reasonable distance from the sites (Kurrus and Yancey, 2017 and Carothers, 2011). New power lines may be needed to bring additional service to the project areas. Within a 7-mile radius of the Salvo project area there is sufficient population to supply the necessary mining personnel including technicians, welders, electricians, drillers and pipefitters. For the Burke Hollow project area, there is sufficient population available within a 20-mile radius to provide the required workforce. The technical workforce for both facility operations can be found in the South Texas area from the petrochemical industry. The necessary rights for constructing the needed surface processing facilities are in place on selected lease agreements for both project areas.

The Goliad project area is similar to the Burke Hollow and Salvo project areas. Sufficient access roads exist and electrical power is available in the area within a reasonable distance of several miles (Carothers, 2007). New power lines may be needed to bring additional service to the project area. However, the area is further from populated areas compared to the other project areas and there is a sufficient population to supply the required workforce within a 30-mile radius. The necessary rights for constructing surface processing facilities are in place on selected lease agreements.

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5.0 HISTORY

Uranium exploration and mining in South Texas primarily targets sandstone formations throughout the Coastal Plain bordering the Gulf of Mexico (Adams and Smith, 1981). The area has long been known to contain uranium oxide, which was first discovered in Karnes County, Texas in 1954 using airborne radiometric survey (Bunker and MacKallor, 1973). The uranium deposits discovered were within a belt of strata extending 250 miles from the middle coastal plain southwestward to the Rio Grande. This area includes the Carrizo, Whitsett, Catahoula, Oakville and Goliad geologic formations (Larson, 1978). Open-pit mining began in 1961, and ISR mining was initiated in 1975. The uranium market experienced lower demand and price in the late 1970s, and in 1980 there was a sharp decline in all Texas uranium operations (Eargle and Kleiner, 2022).

During the late 1970s and early 1980s, exploration for uranium in South Texas had evolved towards deeper drilling targets within the known host sandstone formations (Carothers, 2011). Deeper exploration drilling was more costly and excluded many of the smaller uranium mining companies from participating in the down-dip, deeper undrilled trend extensions. Uranium had been mined by several major oil companies in the past in South Texas, including Conoco, Mobil, Humble (later Exxon), Atlantic Richfield (ARCO) and others. Mobil had found numerous deposits in South Texas in the past, including the O'Hern, Holiday-El Mesquite and several smaller deposits, mostly in Oligocene-age Catahoula Formation tuffaceous sands. ARCO discovered several Oakville Formation (Miocene-age) uranium-bearing deposits and acquired other deposits located nearby in Live Oak County. They were exploring deeper extensions of Oakville Formation trends when they discovered the Mt. Lucas Goliad Formation deposit, located near Lake Corpus Christi in Live Oak County near the Bee County line (Carothers, 2011).

Ownership, control and operation of the project areas has varied greatly since the 1950s. Table 5-1 summarizes the operations and activities of various companies, the timeframe during which these activities were completed and the results of the work. Table 5-1 also summarizes historical drilling and the number of drill holes completed during each period. Cited references and supporting literature can be found following Table 5-1 and in Section 24.0.

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Table 5-1: Past Operations Summary

Year	Company	Operations/Activity	Amount (No. of Drill holes)	Results of Work
Hobson CPP				
1979-1988	Everest Minerals Corporation (later Everest Exploration, Inc. [EEI])	Hobson CPP facility constructed	N/A	N/A
2005	Standard Uranium	N/A	N/A	N/A
2006	Energy Metals Corporation	~ Standard Uranium and Energy Metals Corporation merger ~ Extensive renovation of the plant	N/A	N/A
2007	Uranium One	~ Renovation of the plant	N/A	CPP capable of processing 1.5 million lbs per year
2009	UEC	Acquired the Hobson Plant through acquisition of South Texas Mining Venture (STMV)/Uranium One	N/A	N/A
Burke Hollow - Primary Source: Kurrus and Yancey (2017)				
1982-1993	Mobil Corporation subsidiary Nufuels Corporation (Nufuels)	Original controller of the project area	~ 18 exploration holes on or near the Welder lease	Nufuels drilled 18 exploration holes on or nearby UEC's 1,825-acre Welder lease in conjunction with a larger regional program, which was conducted by Nufuels. Exploration holes were drilled to ~1,100 ft below ground surface (bgs) and tested the entire prospective Goliad Formation. Results showed the presence of a reduction-oxidation interface in sands of the lower Goliad Formation, but there were insufficient data to link economically viable uranium mineralization.
1993-2011	Total Minerals Corp. (Total)	Exploration program	~ 12 exploration holes on or near the Thomson-Barrow lease	Total conducted a short reconnaissance exploration drilling program on the Thomson-Barrow lease. Total drilled 12 holes on permitted acreage that they negotiated for exploration. 11 of the 12 drill holes intersected anomalous gamma ray log signatures indicative of uranium mineralization, but there were insufficient data to link economically viable uranium mineralization.
2011-2017	UEC	Burke Hollow project area acquired by UEC from Total	~ From 2012-2017, 707 uranium exploration drill holes, including 30 monitor wells, completed at the Welder lease (Kurrus and Yancey. 2017)	The historical data package was obtained and reviewed by UEC for portions of the current Burke Hollow project area (Kurrus and Yancey, 2017). Based on the limited number of drill holes, no meaningful resource or reserve determination was made using the historical exploration data. However, the actual drilling and geophysical logging results were determined to be properly conducted per industry standards. UEC completed two drilling campaigns to delineate the open-ended Lower B1 and B2 trends (Carothers, Davis & Sim, 2013). The results of historical and contemporary borehole gamma-ray, spontaneous potential and resistance logs, as well as prompt fission neutron (PFN) logs indicate that uranium mineralization occurs in the upper to lower Goliad Formation sand/sandstone units below the water table at depths from approximately 180 to 1,100 ft bgs. Evidence indicates ISR would likely be the most suitable mining method for this project. In 2017, UEC utilized these data to develop a resource estimate for the combined Graben and Eastern Lower B trends.

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Table 5-1: Past Operations Summary (Continued)

Year	Company	Operations/Activity	Amount (No. of Drill holes)	Results of Work
Goliad - Primary Source: Carothers (2007)				
1979-1980	Coastal Uranium, Inc. (Costal Uranium)	Exploration program	~ 12 exploration holes	Coastal Uranium drilled widely spaced exploration holes in the region as part of the Coastal States wide-spaced drilling exploration effort. Eight of these holes were drilled at or near the Goliad project area. Addition information on the exploration is described below.
1980-1984	Moore Energy Corporation (Moore Energy)	Review of data and leases from Coastal Uranium and exploration program	~ 479 exploration and delineation holes	Moore Energy reviewed the Coastal States exploration data and soon after acquired several leases from Coastal Uranium, including several in the Goliad project area. From March 1983 through August 1984, Moore Energy conducted an exploration program at Goliad. All of the boreholes were drilled using truck-mounted drilling rigs contracted with various drilling companies. Samples were taken by the driller for review and logged by a geologist. The holes were logged for gamma ray, self-potential and resistance by contract logging companies. No down-hole deviation tool was available. Historical resource estimates were prepared by Moore Energy from data gathered in 1983-1985. For each drill hole, a Grade x Thickness (GT) was determined and the mineral was outlined with a 0.3 GT contour. The average GT of the holes within the contoured outline was used to estimate the resources meeting the specified criteria. Moore Energy developed a historical resource estimate with an average grade of 0.05% equivalent U_3O_8 (eU_3O_8) and an average disequilibrium factor of 1.494 (Moore Energy, 1986).
1984-2006	N/A	N/A	N/A	N/A
2006-2008	UEC	Goliad Project Area acquired by UEC	~ 360 exploration and delineation holes	UEC obtained mine leases by assignment from Brad A. Moore for the current Goliad project area in 2006. UEC drilled 360 more holes at the property from May 2006 through June 2007. These holes include closer-spaced delineation work on the areas drilled by Moore Energy. Additionally, several of the UEC holes were drilled to further exploration on contiguous leases to the east of the property. A 2007/2008 report by Thomas Carothers, PG estimated historical mineral resources based on the UEC 2006-2007 confirmation drilling results and the Moore Energy historical estimate. The author concluded that significant uranium resources from the work in 1983-85 described by Moore Energy appear to be backed and supported by the more recent UEC exploration data.
Palangana - Primary Source: SRK Consulting (2010)				
1952-1958	Columbia Southern Inc. (CSI), a subsidiary of Pittsburgh Plate Glass Corp.	Original controller of project area	Records of CSI's exploration work was unavailable	Right to mine secured. Uranium mineralization was discovered during potash exploration drilling of the Palangana Dome in 1952 by CSI. CSI conducted active uranium exploration drilling on the property starting in March 1956. CSI and the U.S. Atomic Energy Commission estimated underground mineable uranium resources. The estimation method included identifying 0.15% eU_3O_8, a minimum mining thickness of 3 ft and exploration using widely spaced drilling on a nominal 200 ft exploration grid.
1958-1981	Union Carbide Corporation (UCC)	UCC acquired project area in 1958 and ceased operations shortly after until 1967 when operations resumed for over a decade due to new technology. UCC placed the project up for lease in 1980.	1,117 exploration and development holes in 1960s and 70s (296 cores) Over 3,000 injection-production holes	Early development work was quickly abandoned because of concentrations of hydrogen sulfide gas. The property was reacquired in 1967 after emerging ISR mining technologies were available. ISR operation occurred from 1977 through 1979. About 340,000 lbs of U_3O_8 were produced from portions of a 31-acre wellfield block. The production lbs indicate a 32% to 34% recovery rate. The ISR work was conducted at a research level in contrast to the current level of knowledge. Historical production lies on the western flank of the dome and is not part of this resource estimate.
1981 - Unknown	Chevron Corporation (Chevron)	Chevron acquired the UCC leases and conducted their own resource evaluation.	163	Chevron completed a historical estimate on the entire site within unclassified material containing 0.125% eU_3O_8.
Unknown to late 1990s	General Atomics	General Atomics acquired project area for restoration work.	N/A	General Atomics acquired the property and dismantled the process plant in a property-wide restoration effort. Upon formal approval of the cleanup by the Texas Natural Resources Conservation Commission and the U.S. Nuclear Regulatory Commission, the property was returned to the landowners in the late 1990s.
Late 1990s to 2005	N/A	Project area returned to surface rights landowners.	N/A	N/A
2005-2009	EEI and Energy Metals/Uranium One	EEI acquired Palangana and joint ventured with Energy Metals by forming the STMV. In 2008, Energy Metals was acquired by Uranium One.	~ Approximately 236 exploration and confirmation holes	Blackstone (2005) completed a historical estimate in the area referred to as the Dome trend proximal to the dome on the west side, north of the prior UCC leach field. In 2006 and 2007, Energy Metals drilled approximately 200 additional confirmation and delineation holes. The PA-1 and PA-2 areas were delineated during this drilling program. During 2008 and 2009, the remainder of the holes were drilled by Uranium One. During this time, five exploration trends on the east side of the dome were identified and partially delineated.
2009-2023	UEC	Palangana project area acquired by UEC from Uranium One.	30	UEC acquired Palangana. SRK Consulting, Inc. (SRK) was retained by UEC in 2010 to provide an independent resource and reserve evaluation on PA-1 and PA-2 and adjacent exploration areas. SRK concluded the sandstone, roll-front deposits on the east side of the Palangana Dome contain significant resources of eU_3O_8. Specifically, PA-1 and PA-2 bodies are adequately delineated for the calculation of Measured and Indicated Resources. SRK developed resource estimates within distinct sand and roll-front zones utilizing detailed computer block modeling of grade and GT modeling. The results of the resource estimation are complex and presented in more detail in this TRS. In 2010, UEC resumed production at Palangana. Approximately 563,600 lbs were produced from 2010 to 2016 in PA-1, PA-2 and PA-3. In 2023 UEC drilled 30 delineation holes in PA-4 and reduced the size of the permit and license area by removing an area that had been restored and released for unrestricted use.

Table 5-1: Past Operations Summary (Continued)

Year	Company	Operations/Activity	Amount (No. of Drill holes)	Results of Work
Salvo - Primary Source: Carothers (2011)				
Unknown to 1983	Mobil Corporation subsidiary Nufuels	Original controller of project area	~ 111 exploration holes	Nufuels discovered uranium mineralization in La Para sands of the Miocene-aged Goliad Formation in 1982 in Bee County, Texas. Mobil's reconnaissance drilling located two areas of interest, known as the Salvo and Seger projects. Mobil had drilled a total of 111 exploration holes at Salvo and Seger in 1982. Shortly after conducting their exploration drilling in this area, Mobil elected to discontinue their uranium exploration efforts and sell their uranium production facilities. The early Salvo exploration drilling conducted by Nufuels indicated significant uranium mineralization was present.
1983-1993	Uranium Resources Inc. (URI) joint venture with Saaberg Interplan Uran Gmbh (SIPU) (URI/SIPU)	URI formed a joint venture exploration program with SIPU, a German utility. The joint venture acquired Salvo from Mobil, along with the Seger Project, an eastward extension along the same geochemical roll-front system. URI/SIPU leased the property until about 1993 when secondary lease expired.	~ 295 exploration and delineation holes in 1984 ~ 19 exploration holes at nearby Seger Project	URI/SIPU completed a historical estimate at Salvo in 1984 using a 0.5 GT cutoff. Average GT was modeled at 0.989, with a ratio of 0.194, width of 45 ft, length of 140 ft and tonnage factor of 1.236 lbs/ft^2. Due to low uranium prices, URI/SIPU elected not to permit the project at that time (R.B. Smith, 2005). URI utilized a Monte Carlo-based computer simulation to calculate the historical resource (URI, 1984).
1993-2005	N/A	N/A	N/A	N/A
2005-2010	R.B. Smith & Associates Inc. (R.B. Smith)	Review of past exploration data	N/A	R.B. Smith (2005) completed an evaluation of the Goliad Formation trend project data at the Salvo and Seger projects. Data were on loan from URI/SIPU. Smith did not retain copies of maps or electric logs and the original data set of logs and maps was returned to URI. URI held the data in storage until 2010.
2010	UEC	Salvo project area acquired by UEC from URI/SIPU. UEC negotiated a purchase of available data from URI. URI and UEC reached agreement on sales of Salvo and Seger project data in 2010. The adjacent Seger property is no longer included in UEC's Salvo leases.	105 exploration holes	Ownership transition. UEC received 425 exploration log files and several drill hole location maps and land maps. The 425 log files include good quality electric logs from Mobil's activities at Seger and Salvo in 1982, as well as URI/SIPU's drill hole logs from exploration activities in 1984. Each log file also contains a detailed lithological report based on drill hole cuttings prepared by Mobil's and later by URI's field geologists supervising and monitoring drilling activity. Four core holes were drilled by URI and core analysis reports were included in the appropriate log files. Eight holes were logged by Princeton Gamma-Tech (PGT, an early form of PFN), a logging company which specialized in uranium chemical assay logging. The PGT logs were utilized and verified as having excellent correlation to actual chemical uranium content by several south Texas ISR mining operations. These results are believed to be pertinent to the understanding of this deposit and indicated a generally positive DEF like other known Goliad Formation sandstones in the region. The historical mineralized intercepts from URI exploration boreholes were presented in the initial NI 43-101 UEC Salvo Project TRS dated July 16, 2010.

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6.0 GEOLOGICAL SETTING, MINERALIZATION AND DEPOSIT

6.1 Regional Geology

6.1.1 South Texas Gulf Coastal Plan

The Project is located in the STUP, which lies along the GMB (Figure 1-2). The coastal plains of the GMB were formed by the downfaulting and down warping of Paleozoic Era (252-541 Mya) basement rocks during the breakup of the Paleozoic supercontinent, Pangaea and the opening of the North Atlantic Ocean in the Late Triassic Epoch (201-237 Mya). The Rocky Mountain Uplift in the Paleogene Period (43-65 Mya) gave rise to the vast river systems that flowed toward the Gulf of Mexico, carrying abundant sediments. Deposits typically thicken down-dip towards the Gulf of Mexico from western-northwestern sources. Stratigraphy in this area can be complex because of the cyclic deposition of sedimentary facies. Shallow inland seas formed broad continental shelves that covered most of Texas and deposited sedimentary units that are dominantly continental clastic with some near shore and shallow marine facies. Volcanic episodes during deposition (more than 20 Mya) are credited as being the source of the uranium deposits through ash-fall and related sediments (Nicot et al., 2010).

Three main structural zones are present in the STUP: the Balcones Fault Zone, the San Marcos Arch and the Rio Grande Embayment (Figure 1-2). The Balcones Fault Zone is north of the Project and divides the Upper Cretaceous and Eocene strata. The Balcones Fault Zone is composed of mainly normal faults that displace sediments by up to 1,500 ft, moving downward to the Gulf of Mexico. The San Marcos Arch, northeast of the Project between the Rio Grande Embayment and East Texas Basin, is a broad area of lesser subsidence and a subsurface extension of the Llano Uplift. The arch is crossed by basement-related normal faults that parallel the buried Ouachita Orogenic Belt of Paleozoic age. The Rio Grande Embayment is a small, deformed basin that lies between the El Burro Uplift in northeast Mexico and the basin marginal Balcones Fault Zone to the south. Some data indicate that the embayment was possibly compressed during the Laramide Orogeny in the Late Cretaceous–Paleogene (Nicot et al., 2010).

The uranium-bearing units in the STUP include most sands and sandstones in Tertiary formations ranging in age from Eocene (oldest) to Lower Pliocene (youngest). A STUP stratigraphic column is shown in Figure 6-1, and a cross-section of the Project can be viewed in Figure 6-2.

All mineralization at the Project occurs in the Goliad Formation. The Goliad Formation was originally classified as Pliocene in age by most sources, but the formation has been reclassified as early Pliocene to middle Miocene after recent research revealed the presence of indigenous Pliocene-aged mega-fossils occurring in upper Goliad sands, whereas the lower Goliad fluvial sands are correlative with down-dip strata containing benthic foraminifera, indicating a Miocene age (Baskin and Hulbert, 2008). The Geology of Texas map published by BEG in 1992 classifies the Goliad as Miocene in age.

The BEG's geologic map of Texas describes the Goliad Formation as clays, sandstones, marls, caliches, limestones and conglomerates with a thickness of 100 to 500 ft. Above the Goliad Formation lies the Deweyville Formation, Beaumont Clay, Lissie Formation, Montgomery Formation and the Willis Sand, which are composed of sand, gravel, silt and clay.

Figure 6-1: South Texas Uranium Province Stratigraphic Column (modified from Galloway et al., 1979)

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

Note: The Goliad Sand is the target for the Project and is highlighted in green

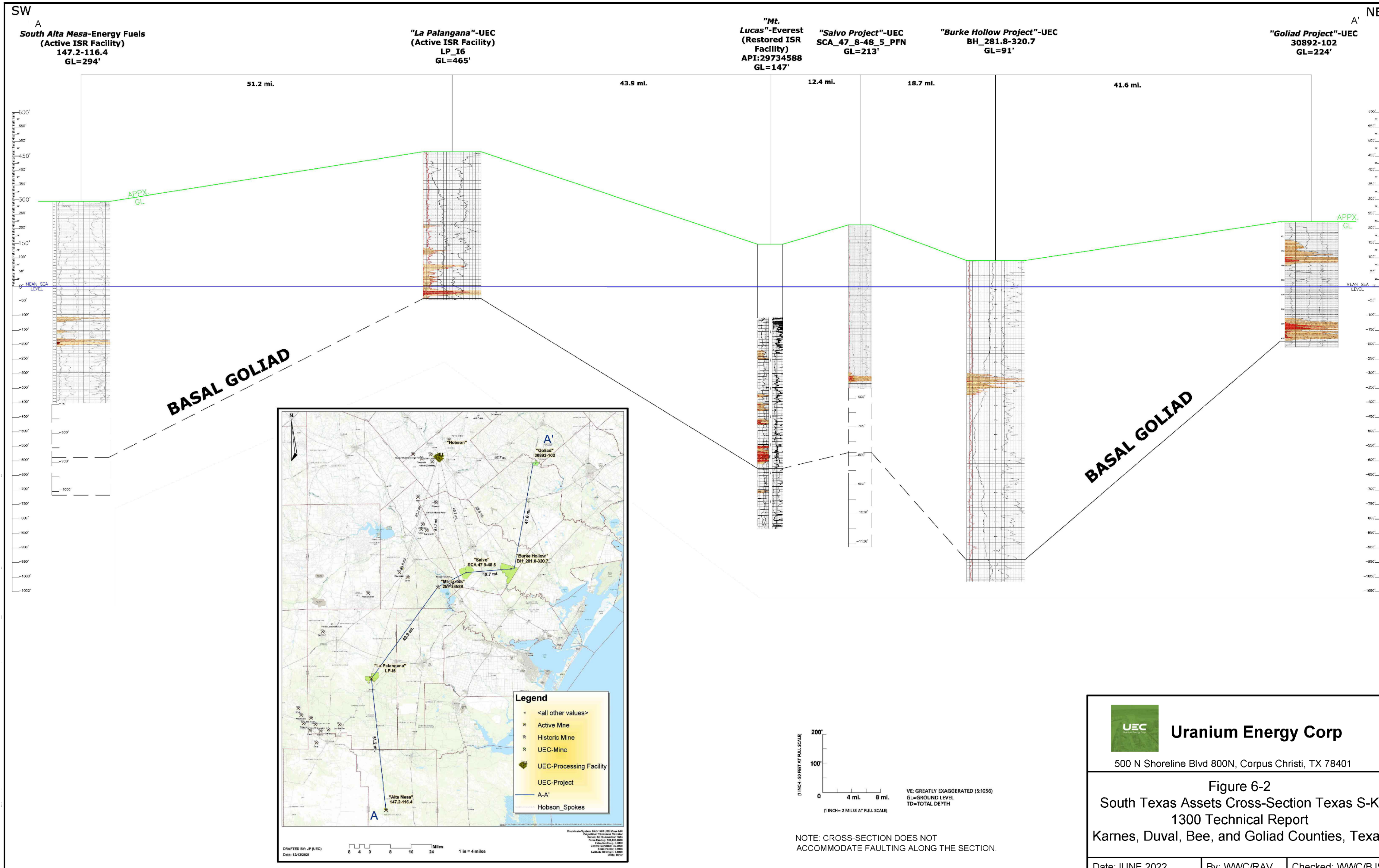

Figure 6-2
South Texas Assets Cross-Section Texas S-K 1300 Technical Report
Karnes, Duval, Bee, and Goliad Counties, Texas

Uranium mineralization occurs along oxidation/reduction interfaces in fluvial channel sands of the Goliad Formation. These deposits consist of multiple mineralized sand horizons, which are separated vertically by confining beds of silt, mudstone and clay.

6.2 Local Geology

6.2.1 South Texas Local Geology – Goliad Formation Hosted Mineralization

Burke Hollow

The uranium-bearing sands of the Goliad Formation at Burke Hollow occur beneath a thin layer of Pleistocene-aged Lissie Formation gravels, sands, silts and clays, which overlie much of the project area. The Goliad Formation uncomformably underlies the Lissie Formation. Uranium mineralization discovered to date occurs within three of the four sand members of the Goliad, designated as the uppermost Goliad A, Goliad B and the lowermost Goliad D.

There are two northeast-southwest trending faults at the Burke Hollow project area that are likely related to the formation of the uranium mineralization. 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 large graben structure. The presence of the increased mineralization at the site is likely related to these faults. The faulting may have served as conduits for reducing waters and natural gas to migrate upward from deeper horizons, as well as altering the groundwater flow system in the uranium-bearing sands.

Goliad

The Goliad Formation occurs at surface on the Goliad project area. The mineralized units are sandstones within the Goliad Formation designated by UEC as the A through D sands from younger (upper) to older (lower), respectively. The sand units are generally fine to medium-grained sands with silt and varying amounts of secondary calcite. The sand units vary in color depending upon the degree of oxidation-reduction, from light brown-tan to grays. The sand units are generally separated from each other by silty clay or clayey silts that serve as confining units between the sand units.

The four sandstone units (A-D) designated as containing uranium mineralization at the site are all considered to be a part of the Gulf Coast Aquifer on a regional basis. At the project area, each unit is a hydrogeologic unit with similar but variable characteristics. Groundwater from sands of the Goliad Formation is used for water supplies over much of the northern portion of Goliad County.

The Goliad structures include two faults that intersect and offset the mineralized units. These faults are normal faults, with one downthrown toward the coast and one downthrown toward the northwest. The fault throws range from about 40 to 80 ft.

Palangana

The local geology at Palangana is characterized by the occurrence of a Gulf Coast piercement salt dome. This dome is approximately 2 miles in diameter and is overlain by Pliocene sediments of the Goliad Formation. The Palangana dome is marked at the surface by a shallow circular basin surrounded by low hills rising above the basin floor. The Palangana dome has an almost perfectly circular salt core with a remarkably flat top that is approximately 10,000 ft across and occurs from 800 to 850 ft bgs. Radial faulting is present in all Goliad Formation sands on the flanks of the dome due to uplift during the intrusion of the dome. Faults and fractures also exist in a random nature in the sands above the caprock due to dissolution of the salt dome from groundwater. Once the salt was solubilized and removed, the overlying sediment collapsed, creating the basin and associated faults.

The Goliad Formation at the Palangana project area is composed of fine- to medium-grained, often silty, channel sands interbedded with lenses of mudstone and siltstone. For the most part, the sand is very sparsely cemented although it varies from friable to indurated. There is known to be minor faulting on the north end of the PA-1 deposit. The Palangana stratigraphy is horizontal to sub-horizontal, with a 2° to 3° southeasterly dip at most.

Salvo

The Salvo project area is situated in the major northeast-southwest trending Goliad Formation of fluvial origin. The Geologic Map of Texas (BEG, 1992) indicates that a thin layer of Pleistocene-aged Lissie Formation uncomformably overlies the Miocene Goliad Formation. The Lissie Formation consists of unconsolidated deposits of sand, silt and clay, with minor amounts of gravel.

The uranium-bearing Goliad Formation underlies the Lissie Formation and is present at depths ranging from near-surface to approximately 600 ft on the eastern side of the project area. URI determined that uranium mineralization occurs within six individual sand units in the lower Goliad La Para member at depths generally ranging from 400 to 600 ft.

The entire La Para member can be considered to be a single thick uranium roll-front migration system, which is separated into six definable units designated as the L, M, N, O, P and Q, with the Q member located at the base. Each unit is separated from the other by continuous beds of clay or silts, which serve as confining units between the sand beds.

6.2.2 Goliad Formation Hydrogeology

The Goliad sand is one of the principal water-bearing formations in South Texas and is capable of yielding moderate to large quantities of water. All of the project areas included in this Project target the Goliad Formation, which is a proven aquifer with characteristics favorable to ISR.

6.3 Mineralization and Deposit Type

Uranium mineralization at the project areas is typical of Texas roll-front sandstone deposits. The formation of roll-front deposits is largely a groundwater process that occurs when uranium-rich, oxygenated groundwater interacts with a reducing environment in the subsurface and precipitates uranium. The most favorable host rocks for roll-fronts are permeable sandstones with large aquifer systems. Interbedded mudstone, claystone and siltstone are often present and aid in the formation process by focusing groundwater flux. The geometry of mineralization is dominated by the classic roll-front "C" shape or crescent configuration at the redox interface. The highest-grade portion of the front occurs in a zone termed the "nose" within reduced ground just ahead of the alteration front. Ahead of the nose, at the leading edge of the solution front, mineral quality gradually diminishes to barren within the “seepage” zone. Trailing behind the nose, in oxidized (altered) ground, are weak remnants of mineralization referred to as “tails” which have resisted re-mobilization to the nose due to association with shale, carbonaceous material or other lithologies of lower permeability. Tails are generally not amenable to ISR because the uranium is typically found within strongly reduced or impermeable strata, therefore making it difficult to leach (Davis, 1969 & Rackley, 1972).

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7.0 EXPLORATION

7.1 Drilling Programs

Drilling was conducted by conventional rotary methods using a variety of bit diameters and configurations. Drilling programs generally followed industry standards where cuttings are collected at regular intervals and examined by an on-site geologist to record lithology and geochemical alteration (redox state). Holes are then typically logged using gamma ray, spontaneous potential, single point resistance, PFN (if necessary) or other logging methods to aid in grade estimation and lithologic correlation. Cores were also collected from a limited number of holes throughout the project areas. Cores were collected at the drill rig by a geologist, boxed and labeled as appropriate and transported to a secure facility. Cores were then logged and scanned with radiation detection devices, and samples were identified and marked. Core samples were then sent to laboratories for testing for disequilibrium, metallurgy and hydrogeological parameters. It is the opinion of the QP that the drilling and core sampling methods were consistent with standard industry practices at the time the programs were conducted.

UEC has performed limited exploration at Salvo since the last NI 43-101 technical report was published and has relied entirely on legacy data for the updated mineral resource estimates and Project planning at Salvo. Historical and more recent drilling programs were also conducted at Palangana, Goliad and Burke Hollow in 2010-2015, 2014 and 2019-2021, respectively. In addition, UEC has also produced a new estimate for Goliad and Burke Hollow. Table 7-1 summarizes the historical and recent exploration programs that have been conducted at the project areas. Figures 7-1 through 7-4 depict the drill holes at each project area.

Palangana Drilling Program

From 2010-2015, UEC drilled 891 drill holes at Palangana. Most of the drilling occurred in 2010 (391 holes), 2011 (281 holes) and 2012 (186 holes), with the remaining holes drilled from 2013-2015. The majority of these holes were drilled for delineation purposes, and the rest were drilled for monitor and production wells. In 2023, UEC drilled 30 holes in PA-4 for delineation purposes.

Goliad Drilling Program

In 2014, UEC conducted a drilling program at Goliad for exploration and water wells. 35 holes were drilled and logged for exploration and water supply purposes with a majority of the holes being drilled in PA-1 and PA-2. No exploration has occurred at Goliad since this drilling program ended.

Burke Hollow Drilling Program

From 2019 to present, UEC has conducted two drilling programs at Burke Hollow. The first drilling program began in 2019 when UEC completed 129 drill holes, mostly focusing on in-fill delineation of the Lower B1 and Lower B2 sands in the proposed PA-1. Additionally, UEC began installing perimeter monitor wells in PA-1 at the same time. In total, 57 holes were drilled solely for delineation and exploration purposes, and 72 holes were drilled for monitoring purposes.

From 2021 to present, UEC conducted another drilling program to upgrade a portion of its resources from inferred to measured and indicated, to better define the mineralization in PA-1, PA-2 and PA-3 as well as to install monitor wells. As of April 11, 2024, 714 delineation and exploration holes and 44 monitor wells were drilled. This program is ongoing for the purpose of completing additional holes for delineation, exploration and monitor wells. No historical data were used in the Burke Hollow mineral estimate, only data from drilling conducted by UEC from 2012-2024. In total, 887 new holes were drilled and logged between 2019 and April 11, 2024, to complete this estimate.

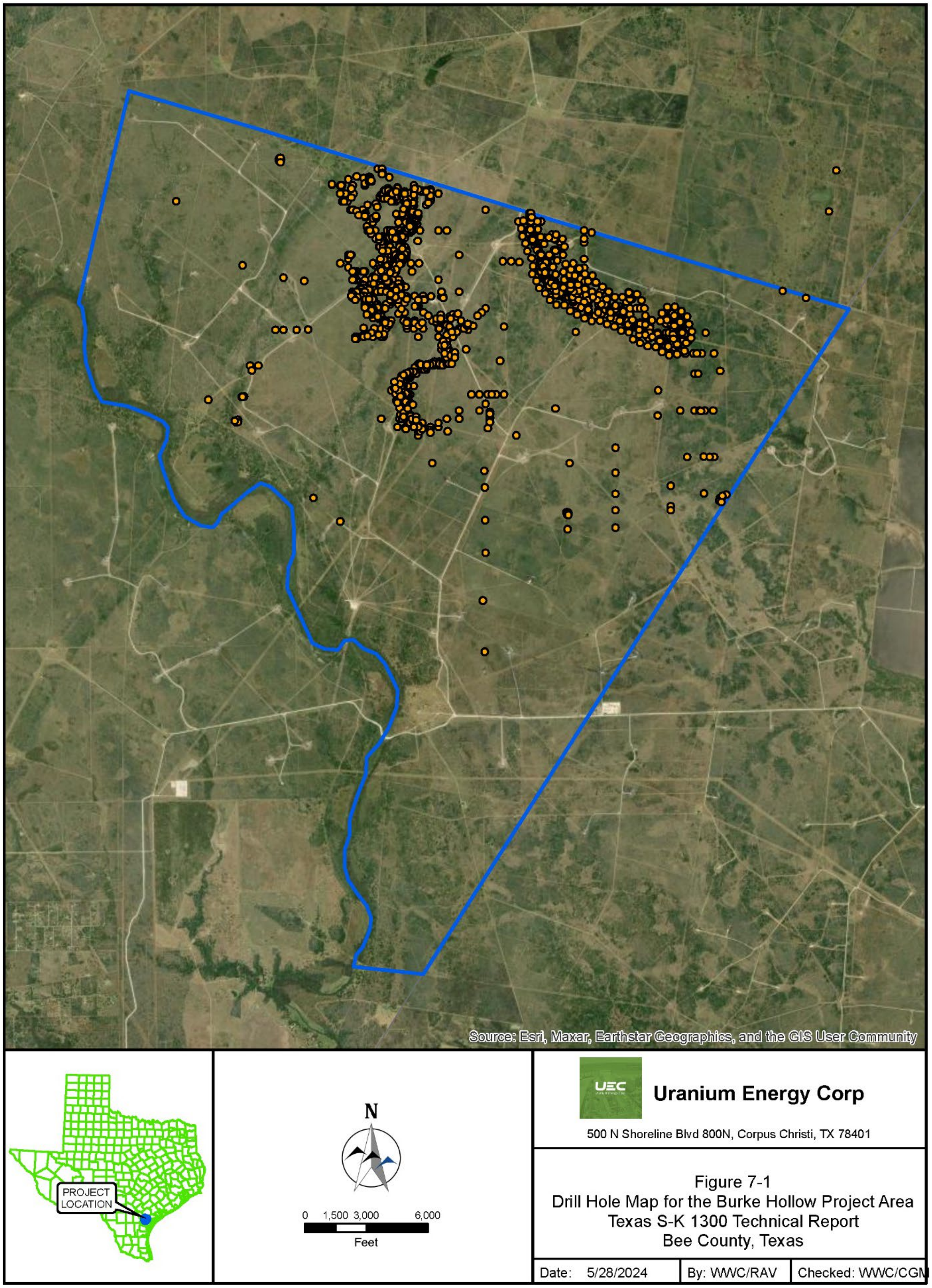
The QP reviewed logs for Burke Hollow since a new estimate was completed in 2024. Approximately 10% of the logs used in this analysis were reviewed for quality assurance purposes.

Table 7-1: Project Area Exploration Drilling Programs Summary

Project Area	Number of Drill Holes	Number of Core Holes	Company	Exploration Year Range	Probe/Testing
Burke Hollow	18	-	Nufuels	1982	-
	12	-	Total	1993	-
	707	2	UEC	2012-2017	Gamma, PFN
	129 (72 Monitor Wells)	-	UEC	2019	Gamma, PFN
	758 (44 Monitor Wells)	-	UEC	2021-2024	Gamma, PFN
Goliad	8	-	Coastal Uranium	1980	Gamma
	479	-	Moore Energy	1983-1984	Gamma, PGT
	599	20	UEC	2006-2008	Gamma, PFN
	35	-	UEC	2014	Gamma, PFN
Palangana	Approximately 4,000	296	UCC	1958-1981	Gamma
	163	-	Chevron	1981-1990s	Gamma, PGT
	200	8	STMV (Everest Exploration and Energy Metals)	2005-2008	Gamma, PFN
	36		Uranium One	2008-2009	Gamma, PFN
	30	-	UEC	2023	Gamma, PFN
Salvo	111	-	Mobil	1982	-
	314	3	URI/SIPU	1984	Gamma, PGT
	105	-	UEC	2010-2011	Gamma, PFN

Notes:
1. Core holes included in drill hole count.
2. The total drill footage is not available.

Considering the number of drill holes and associated data, the QP did not review all of the drilling information for the project areas. Rather, the QP reviewed data from each of the project areas and evaluated the quality and nature of the work done by previous owners. In the opinion of the QP, previous work was conducted using industry standard practices and procedures meeting regulatory requirements in place at the time the work was conducted.



Uranium Energy Corp
500 N Shoreline Blvd 800N, Corpus Christi, TX 78401

Figure 7-1
Drill Hole Map for the Burke Hollow Project Area
Texas S-K 1300 Technical Report
Bee County, Texas

Date: 5/28/2024 | By: WWC/RAV | Checked: WWC/CGM

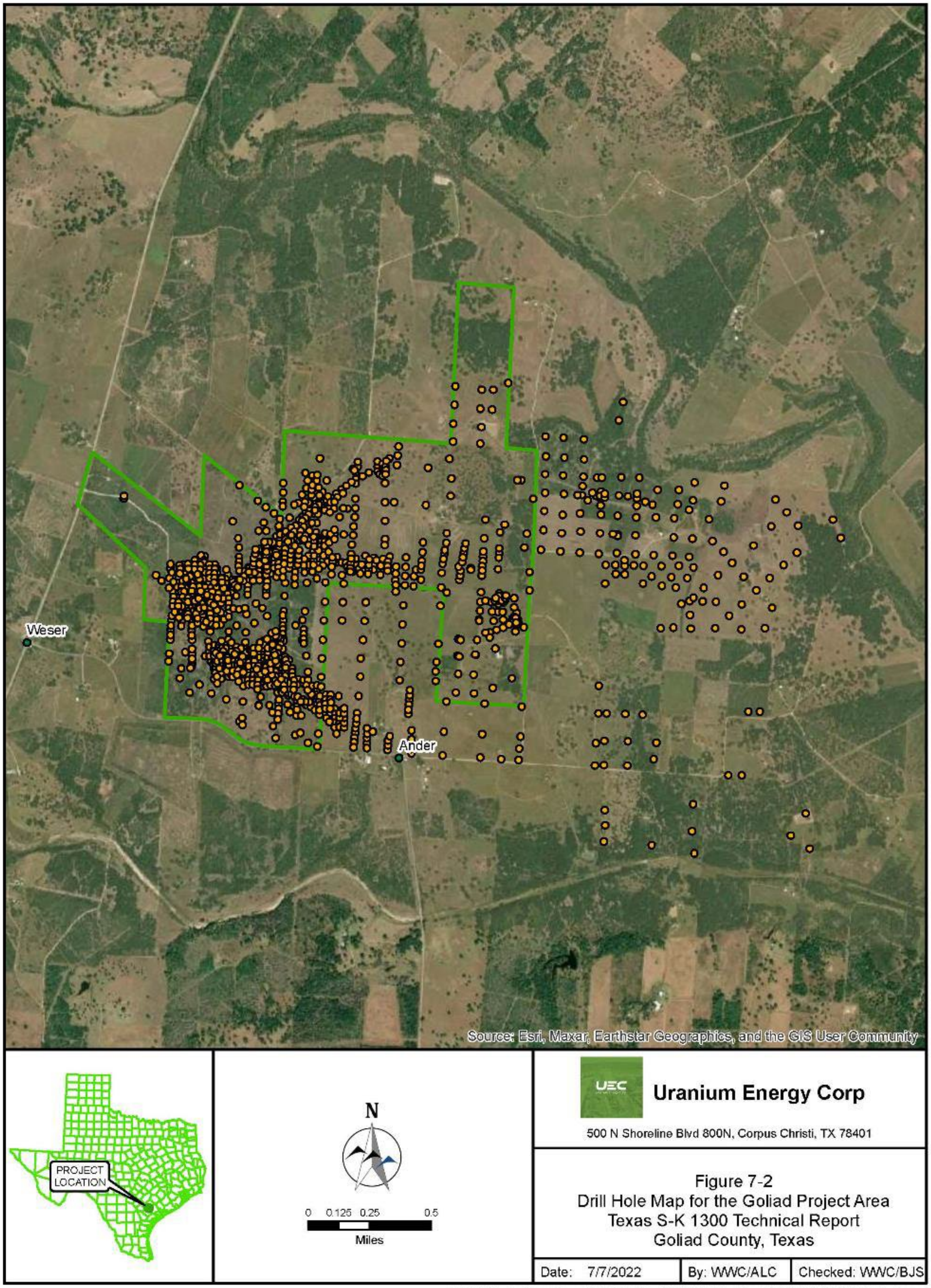
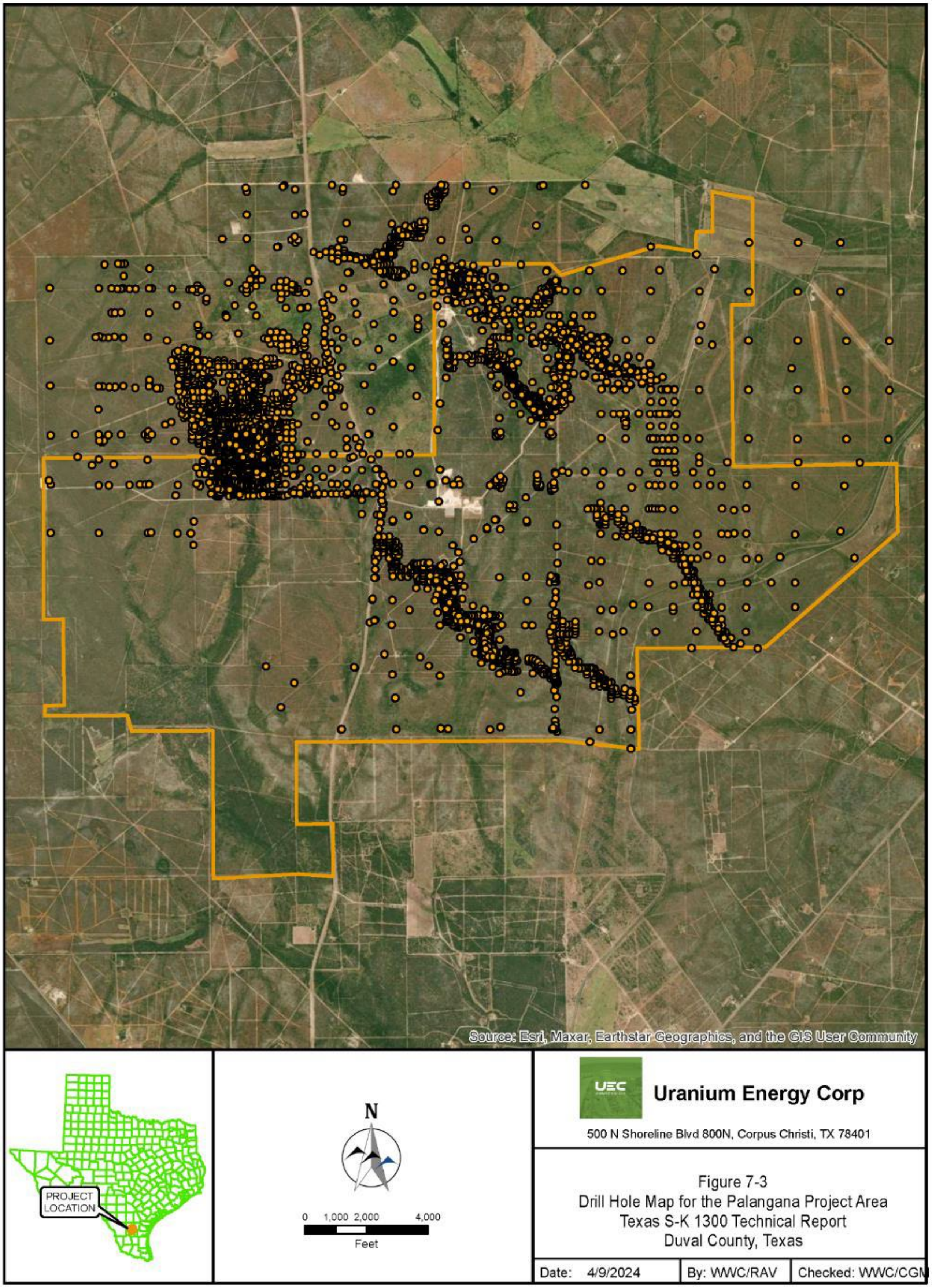


Figure 7-2
Drill Hole Map for the Goliad Project Area
Texas S-K 1300 Technical Report
Goliad County, Texas

Date: 7/7/2022	By: WWC/ALC	Checked: WWC/BJS

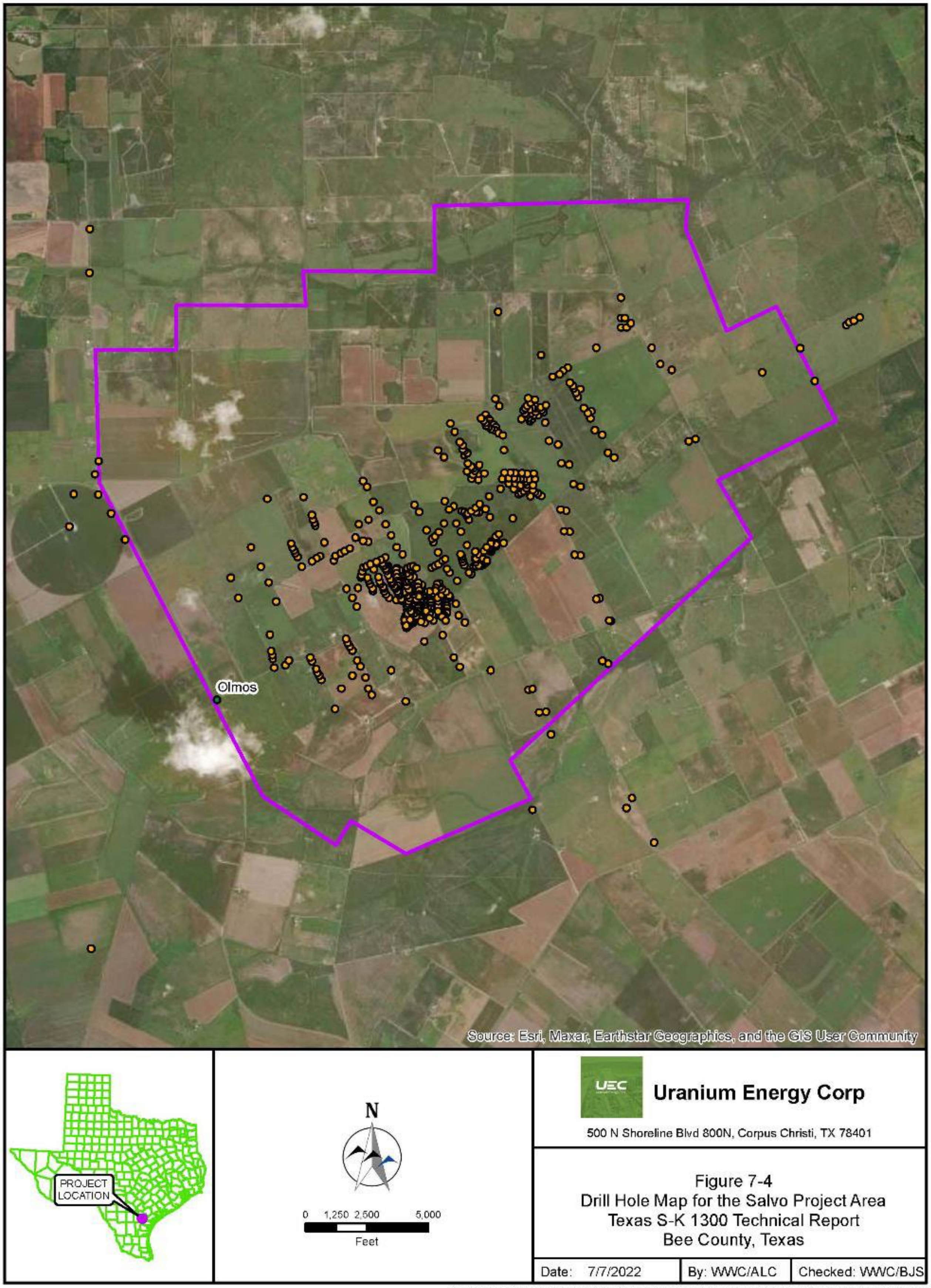


Uranium Energy Corp

500 N Shoreline Blvd 800N, Corpus Christi, TX 78401

Figure 7-3
Drill Hole Map for the Palangana Project Area
Texas S-K 1300 Technical Report
Duval County, Texas

Date: 4/9/2024 | By: WWC/RAV | Checked: WWC/CGM



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7.2 Hydrogeologic Information

Groundwater investigations have been conducted at the Project as part of general site investigations and to satisfy regulatory requirements for baseline site characterization. The dominant method for determining hydraulic properties of the aquifers in the project areas is in-situ testing using aquifer pump tests. The observations from the pump tests are analyzed using a regression analysis to estimate parameters such as the transmissivity and storage coefficient of the aquifer. Aquifer pump test results allow in-situ characterization of the production zone aquifer to demonstrate sufficient geologic confinement and transmissivity for ISR operations. Aquifer pump testing has historically been and is currently the industry standard for characterizing groundwater flow parameters. In some cases, laboratory physical testing of core samples for permeability and porosity was also conducted.

Aquifer testing has been performed on all of the project areas except for Salvo. The specific hydrogeologic characteristics of the water-bearing Goliad Formation sands at Salvo have not yet been determined. Should UEC proceed to development, required hydrogeologic tests will determine the hydraulic character of the sands and the confining beds separating the individual sand zones.

A pump test was conducted at the Burke Hollow Graben area by an independent hydrologist from February 2 to February 5, 2015, with the objective of determining drawdown and confinement of the Lower A proposed production zone. No drawdown was observed in the overlying Goliad Formation Upper A sands, which were monitored in three nearby ranch wells (Grant, 2015).

A 15-day hydrologic test program was conducted at Burke Hollow in PA-1 by an independent geologist from October 12 to October 24, 2022. The objective of this aquifer test program was to determine the hydraulic properties of the production zone, to assess the vertical hydraulic connection, if any, between the production zone and overlying aquifers and to determine the presence of any hydraulic boundaries or recharge features. The test program consisted of four tests in four separate areas within PA-1. During each test, pre-pumping background data, drawdown data while pumping and post-pumping recovery data were recorded. The aquifer test program noted no distinguishable hydrologic communication between the production zone and the overlying aquifers and no indications of any boundary conditions or recharge features within the test areas. Hydraulic conductivity within the four test areas ranged from 3.2 to 16.6 ft/day (Grant, 2022).

The Burke Hollow and Salvo project areas both lie within Bee County, Texas. Information regarding the water-bearing characteristics of the Goliad Formation sands in Bee County can be derived from aquifer tests performed by the cities of Beeville and Refugio (Dale et al., 1957). These wells 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 (Carothers et al., 2013).

At Goliad, a pump test was conducted to comply with TCEQ requirements to obtain a PAA for ISR. The pump test occurred in PA-1 on July 8 through July 15, 2008 and included wells that were completed in Sand B. Over the 18-hour monitoring period for this test, the maximum change in water levels was approximately 0.6 inch. These data from the well tests were analyzed using Aqtesolv (version 4.5), a widely used and successfully applied analysis program that has been used for decades. The test results show that the Sand B aquifer has a transmissivity ranging from approximately 377 to 1,521 ft^2/day and storativity ranging from 0.00001 to 0.001. No communication was found between Sand A and Sand B (Larkin, 2008).

Several hydrologic tests and analyses have been conducted at Palangana since the 1970s. Hydrologic data were available for pump tests conducted in PA-2 and PA-4 in 2008 and 2013, respectively. In 2008, Petrotek Engineering conducted an analysis on pump testing for PA-2 for the purpose of permitting PA-2. This test was conducted in the E Sand and has an average transmissivity of 141 ft^2/day based on an average sand thickness of 27 ft in PA-2. The average hydraulic conductivity is 5.3 ft/day with a permeability of 2,125 millidarcies. Storativity ranges from 3.6×10^{-5} to 2.2×10^{-4} (Lawrence, 2008).

A second pump test was conducted at Palangana in 2013 by Terra Dynamics Inc. This pump test was conducted to better determine the hydraulic properties of PA-4 in the production zone sands (C/D/E Sands). In PA-4, average transmissivity is 123 ft^2/day, average storativity is 6.4×10^{-5} and average hydraulic conductivity is 6.7 ft/day (Grant, 2013). ISR mining has occurred at Palangana as recently as 2016 and has successfully demonstrated that ISR processes are viable within the Palangana host aquifers.

The QP was unable to review all of the data associated with hydrogeologic investigations at the project areas due to the quantity of data. In addition, some of these data were not available for review. It is the opinion of the QP that previous hydrogeologic studies were generally conducted using industry standard practices and procedures meeting regulatory requirements in place at the time the work was conducted. Historical mining in areas not previously evaluated for hydrogeologic conditions would suggest that physical characteristics of the Goliad Formation are conducive to ISR.

The level of hydrogeologic investigation conducted for the individual project areas generally correlates to the overall progress of the Project, as it relates to regulatory permitting and approval. Extensive hydrogeologic testing is required to obtain state and federal permits for ISR operations. UEC's project areas included in this TRS are in varying stages of development. For additional details on the hydrogeologic investigations conducted in the project areas, please refer to the applicable permit documents for each project area available from the TCEQ and EPA.

7.3 Geotechnical Information

Soil sampling has been performed on all properties, other than Salvo, as part of the environmental baseline studies completed as required by the permitting process. In addition, satellite or remote ion exchange plants will require geotechnical drilling and analysis for the slab designs. No geotechnical data or analysis were provided or reviewed for this TRS.

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8.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

8.1 Typical and Standard Industry Methods

This TRS was prepared using a variety of sources, including data collected directly by UEC, data collected by previous property owners and information presented in prior reports for which not all underlying data are available. UEC has quality assurance (QA) and quality control (QC) procedures to guide drilling, logging, sampling, analytical testing, sample handling and storage. Details of sample preparation, analyses and security are presented separately for each project area.

Although UEC conducts core sampling on some projects, its primary method for evaluating eU_3O_8 is through geophysical logging. Geophysical logs typically included gamma ray, resistance, spontaneous potential and drill hole deviation. PFN logs are conducted in drill holes with significant gamma ray log responses. Resistance and spontaneous potential curves are primarily used to identify lithological boundaries and to correlate sand units and mineralized zones between drill holes. Gamma ray and PFN logs provide indirect (gamma ray) and direct (PFN) measurements of eU_3O_8.

Because geophysical logging measures in-place sediments, rather than collected samples, it minimizes the effects of variations in drill hole diameter and thin bed stratigraphy. Since no samples are collected with this method, sample security is not a consideration. Documentation of probe calibration, observation of logging runs and secure data management practices are comparable measures.

Gamma ray logs provide an indirect measurement of uranium content by logging gamma radiation in counts per second (CPS) at one-tenth foot intervals. CPS are then converted to eU_3O_8. The conversion requires an algorithm and several correction factors that are applied to the CPS value. Comparing gamma logs to PFN logs also provides a way to measure the radiometric DEF, which indicates whether uranium is dispersed or depleted and can be used to help pattern uranium roll-fronts.

PFN uranium assay logs provide a direct measurement of actual uranium grade in U_3O_8. PFN logging is considered superior to laboratory assay/analysis of core samples, as it provides a larger sample and is less expensive (Penney et al., 2012). In some cases, UEC compares PFN logs to core sample assays to validate grade findings.

8.1.1 Burke Hollow

Sampling has been carried out by UEC (2012-present), Total (1993) and Nufuels (1982). UEC acquired a database of existing Total and Nufuels data for the Project in 2011. These data were used for geologic modeling but were not included in the resource estimate (Kurrus and Yancey, 2017). All data used to prepare the resource estimate were collected by UEC from 707 drill holes completed from 2012-2017 (Kurrus and Yancey, 2017) and 887 additional drill holes completed from 2019 to April 11, 2024.

Drill Hole Locations

UEC exploration drill hole locations are planned in advance using GIS software. Locations are exported from GIS files into a Trimble Geo XH 6000 using Trimble® TerraSync™ software. At the project site, planned locations are navigated to, staked and the exact position is then recorded by the GPS. Accuracy of the drill hole locations is correctly adjusted through post-processing of the collected field data via Trimble® TerraSync™ and GPS Pathfinder® software. Once post-processing is completed, the corrected data are then exported into a database file. The corrected coordinates are then used for drill hole collar information and are reported in all UEC and state documents (Kurrus and Yancey, 2017).

Coring

UEC collected 24 0.5-foot samples from two core holes in 2012 and one 2-foot sample from a core hole in 2015. Each of these samples was assayed and analyzed by National Environmental Laboratories Accreditation Program (NELAP)-accredited Energy Laboratories Inc. in Casper, Wyoming (Energy Labs). The 2012 samples were analyzed for uranium and uranium as U_3O_8, both in ppm (Carothers et al., 2013). The 2015 sample was assayed for percent as U_3O_8 and bottle roll tested for percent recovery by tails (Kurrus and Yancey, 2017). No further details on the sample preparation, analyses and security are available.

Geophysical Logging

UEC completed 1,594 drill holes at Burke Hollow from 2012-2024. Geophysical logging was conducted in every drill hole and included gamma ray, spontaneous potential, resistance and drill hole deviation. PFN logs were run in drill holes with significant gamma ray log responses. Most of this logging was performed by UEC using company-owned logging units designed and produced by GeoInstruments of Nacogdoches, Texas (Kurrus and Yancey, 2017).

In 2012, UEC conducted PFN logging in 112 drill holes, and independent contract logging company Geoscience Associates of Australia (GAA) conducted PFN logging in 21 drill holes. In addition, 11 drill holes were logged by both UEC and GAA to directly compare the readings from their PFN equipment. The PFN logs for the 11 drill holes showed excellent correlation, with overall average DEF values of 2.08 (UEC) and 2.07 (GAA) (Carothers et al., 2013).

UEC's gamma ray and PFN probes are calibrated against known standards at the U.S. Department of Energy (DOE) test pit at George West, Texas. Calibration is performed every one to two months, and test pit results are maintained by the operator (Kurrus and Yancey, 2017).

Previous NI 43-101 reporting assessed that "all drilling, sample collection and logging practices, including probe calibration, was performed in a manner consistent with industry standards" (Kurrus and Yancey, 2017). No additional information on these practices was available for review.

8.1.2 Goliad

Sampling has been carried out by Coastal Uranium (1979-1980), Moore Energy (1983-1984) and UEC (2006-2008). UEC acquired a database of existing Coastal Uranium and Moore Energy data for the project area. Moore Energy and UEC data were used to prepare the resource estimate (Carothers, 2008).

Drill Hole Locations

Information on how the Moore Energy drill holes were located is not available. However, previous NI 43-101 reports considered the well locations accurate enough to use in preparing resource estimates (Carothers, 2008). UEC drill holes were located based on the drill hole collar (Carothers, 2008).

Coring

From 2006-2008, UEC collected 58 3-inch core samples from eight core holes. Samples were bagged, labeled and placed in core boxes for transport to the laboratories. The remaining core was locked in a storage shed at the project site. Each of the samples was assayed and analyzed by Energy Labs. The laboratory analysis included moisture content, uranium, molybdenum, chemical U_3O_8 (cU_3O_8) for disequilibrium evaluations, leachability tests and X-ray diffraction for mineral identification. Density analyses were performed by Professional Service Industries in Austin, Texas (Carothers, 2007).

In 2007, UEC collected 205 1-foot samples from three core holes with the intent of obtaining representative samples from each mineralized sand zone for DEF analysis. Core extrusions were measured, scanned with a scintillometer and the lithologic descriptions of the core were documented. The core was then cut into 1-foot sections and bagged in a clear polyethylene core sleeve. The bags were sealed with fiberglass strapping tape and labeled. The samples were placed in core boxes and stored in UEC's secure field trailer. The trailer was locked when it was not in use. The core boxes were shipped under proper chain of custody to NELAP-accredited Energy Labs for analysis. The laboratory analysis determined the cU_3O_8 value, which was used in combination with gamma log data to calculate DEF (Carothers, 2008). Energy Labs also conducted leach amenability tests on four core samples and X-ray diffraction on representative samples from three core holes (Carothers, 2008).

Geophysical Logging

Moore Energy completed 479 drill holes on the project area in 1983-1984. These drill holes were logged with gamma ray, spontaneous potential and resistance; 32 drill holes were logged with PGT (Carothers, 2007 and 2008).

UEC conducted additional drilling from 2006-2008 and completed 599 drill holes. Geophysical logs were conducted in every UEC exploration drill hole at Goliad. These logs typically included gamma ray, spontaneous potential, resistance and drill hole deviation. UEC did not conduct PFN logs at Goliad because PGT logging had already been performed by Moore Energy; UEC's core sampling program validated the Moore Energy PGT data (Carothers, 2008).

Moore Energy and UEC used contract logging companies for gamma ray and PGT logging. These companies maintained scheduled calibration of their probes against known standards at the U.S. DOE test pit at George West, Texas. Calibration records were kept by the logging companies and were not available for review (Carothers, 2008). UEC began using its own logging equipment at Goliad in mid-2007. UEC's probe was calibrated at the U.S. DOE test pit at George West, Texas prior to being put into service (Carothers, 2008).

Previous NI 43-101 reporting assessed that UEC's drilling files were "in excellent condition with mostly original geophysical logs and the procedures and organization indicated these data obtained from field data gathering and geophysical logging was properly conducted" (Carothers, 2008).

8.1.3 Palangana

Sampling has been carried out by UCC (1958-1981), Chevron (1981-1990s) and Energy Metals/STMV (2005-2009). UEC acquired Palangana data from STMV in 2009. Most of the data used to prepare the resource estimate was collected by STMV from 2005-2009 (SRK Consulting, 2010).

Drill Hole Locations

Drill hole collar locations were surveyed and recorded (SRK Consulting, 2010).

Coring

UCC completed 296 cores on Palangana. Assays for these cores were conducted by UCC's in-house laboratories in Grand Junction or Rifle, Colorado and at Core Laboratories Inc. in Corpus Christi, Texas. Samples were assayed for cU_3O_8 and closed can or radio assay. Most samples were also analyzed for metals, and Core Laboratories Inc. analyzed select samples for permeability, porosity and density. UCC examined 33 core holes in detail, but no records exist of QA/QC procedures. There was reportedly regular loss of core recovery in the mineralized interval (SRK Consulting, 2010).

STMV completed eight core holes on the project area. Cores were sampled at 1-foot intervals in the mineralized sand. Core samples were boxed, split, logged and scanned with a scintillometer. One-half of the core was bagged for assay and the other half was stored; however, none of the core samples are available today. Core samples were frozen immediately after they were collected. Core samples were analyzed by Energy Labs for cU_3O_8 (SRK Consulting, 2010).

Previous NI 43-101 reporting assessed that "sampling and analysis methods employed by [STMV] and previous operators meet or exceed industry standards" (SRK Consulting, 2010).

Geophysical Logging

Palangana drill holes were logged with gamma ray, spontaneous potential, resistance and continuous drift (SRK Consulting, 2010).

UCC completed 1,117 drill holes on the project area. These drill holes are unevenly distributed, with few in the PA-1 and PA-2 areas, and although geophysical logging was apparently performed, additional details are not available (SRK Consulting, 2010).

Chevron completed 163 drill holes on the project area, and geophysical logging was conducted by Century Geophysical Corp. In addition to standard geophysical logs, PGT logs were conducted in all Chevron drill holes (SRK Consulting, 2010).

STMV and its predecessors completed over 2,500 drill holes on Palangana. In addition to standard geophysical logs, PFN logs were conducted in all Palangana drill holes except for within the Dome trend. There was an issue with lack of initial calibration of PFN probes (due to unavailability of calibration pits). Adjustments were made to correct for PFN probe calibration drift. PFN values were additionally reduced based on core assay data. Previous NI 43-101 reporting assessed that these adjustments "partially compensated for [the lack of probe calibration]" and that "adjustment of the DEF values to account for the PFN drift is acceptable" (SRK Consulting, 2010).

Previous NI 43-101 reporting assessed that, for STMV work, "proper methods for sampling and logging were being conducted and geophysical logging methods were at or above the industry standard" (SRK Consulting, 2010).

In 2023, UEC drilled 30 delineation holes at Palangana. In addition to standard geophysical logs, PFN logs were conducted in all of these drill holes.

8.1.4 Salvo

Sampling has been carried out by Mobil (1982), URI (1984) and UEC (2010-2011). UEC acquired the Mobil and URI data in 2010. Data collected by Mobil, URI and UEC were used to prepare the resource estimate (Carothers, 2011).

Drill Hole Locations

Information on how the Mobil and URI drill holes were located is not available; however, location maps were included in the data acquired by UEC. Each UEC drill hole was located using calibrated GPS surveying equipment (Carothers, 2011).

Coring

URI collected core samples from four core holes on Salvo in 1984. Each of these samples was analyzed by Core Labs in Corpus Christi, Texas for uranium, molybdenum, disequilibrium, leachability, density and X-ray diffraction mineral identification. QA/QC procedures were not available, but previous NI 43-101 reporting assessed that the core sampling and analysis “are believed to have been carried out to proper industry standards for 1984” and are “pertinent to [the] report” (Carothers, 2011).

Geophysical Logging

Mobil completed 111 drill holes on Salvo in 1982, and URI completed 314 drill holes on Salvo in 1984. Geophysical logging conducted in these drill holes included gamma ray, spontaneous potential and resistance. Down-hole deviation logging was also conducted in most drill holes. Logging was performed by Century Geophysical of Tulsa, Oklahoma or by GeoScience Associates of Boulder, Colorado (Carothers, 2011). Eight URI drill holes were logged with PGT. Additional details are not available.

UEC completed 105 drill holes on the Project in 2010-2011. Geophysical logging conducted in these drill holes included gamma ray, spontaneous potential, resistance and vertical deviation. PFN logs were run in drill holes with significant gamma ray log responses. Logging was performed by UEC using company-owned logging units.

UEC’s gamma ray and PFN probes are calibrated against known standards at the U.S. DOE test pit at George West, Texas. Calibration is scheduled and calibration records are maintained by UEC but were not available for review (Carothers, 2011).

Previous NI 43-101 reporting assessed that, “the standard geophysical logs, the historic PGT logs and the current UEC PFN uranium assay tool logs are proper and in order” (Carothers, 2011).

8.2 QP’s Opinion on Sample Preparation, Security and Analytical Procedures

In the opinion of the QP:

- Available records and previous reporting indicate that sample collection, preparation, analysis and security for drill programs are in line with industry-standard methods for roll-front uranium deposits at the time they were conducted.
- Coring programs varied but were in line with uranium industry standard methods at the time they were conducted. Laboratory-reported uranium grades are considered to have adequate quality control.

- Geophysical logging programs for Burke Hollow and Goliad included gamma ray, spontaneous potential, resistance and PGT/PFN logs. Gamma and PGT/PFN probes were calibrated at the test pits in George West. Laboratory analysis/assay of core samples was also conducted. Uranium grades (eU_3O_8) based on the combination of gamma ray, PGT/PFN and core sample assays are considered to have excellent quality control and meet or exceed uranium industry standard operating procedures.
- The geophysical logging program for Salvo included gamma ray, spontaneous potential, resistance and PGT/PFN logs. Gamma and PGT/PFN probes were calibrated at the test pits in George West. Laboratory data from core sampling and QA/QC details are limited. Uranium grades (eU_3O_8) based on the combination of gamma ray and limited PGT/PFN and core sample assays are considered to have adequate quality control and meet uranium industry standard operating procedures.
- The geophysical logging program for Palangana included gamma ray, spontaneous potential, resistance and PGT/PFN logs. The only issue identified was the lack of calibration of the PFN probes that was later mitigated by relogging a core hole and adjusting the DEF readings by the probe-specific calibration drift. The presumption has been made that this drift in accuracy occurred uniformly throughout the program. Without initial calibration information at the start of the PFN logging program, there is no conclusive answer in this regard. Since both probes read higher than the chemical in the core hole, the PFN values in all instances have been reduced to account for a reduction in the DEF value ultimately used for disequilibrium adjustment. Core sampling in the PA-1 and PA-2 areas was very limited, and QA/QC records are not available. In-situ uranium mining has been conducted at Palangana. Uranium grades (eU_3O_8) based on gamma ray, with very limited PGT/PFN and core sample assays are considered to have adequate quality control and meet minimum uranium industry standard operating procedures.
- Digital database construction and security are adequate.
- Data are subject to validation and numerous checks that are appropriate and consistent with industry standards.
- The QP did not review all procedures conducted for sample preparation, analysis and security for each sample due to the quantity of the associated data and the limited availability of historical data. In the opinion of the QP, previous operators/owners used industry standard practices and procedures meeting regulatory requirements in place at the time the work was conducted. The QP is of the opinion that the quality of the uranium analytical data is sufficiently reliable to support mineral resource estimation without limitations on mineral resource confidence categories.

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9.0 DATA VERIFICATION

9.1 Summary

The following is a summary of all data verification efforts for the project areas discussed in this TRS.

Burke Hollow

- The resource estimate is based on data from 1,594 UEC drill holes completed from 2012-2024 and 572 GT intercepts in excess of the cutoff within these drill holes. These drill holes were logged with gamma-ray, spontaneous potential and resistance. PFN logging was conducted in over 492 drill holes. QA/QC documentation indicates these data were collected in accordance with current industry standard methods.
- In 2012, duplicate PFN logs were run by an independent contractor in 11 drill holes to provide confirmation of UEC logs. Records indicate that the confirmation logging found a difference in DEFs of less than 0.5% (Carothers et al., 2013).
- QP reviewed approximately 10% of the logs used to prepare the resource estimate and confirmed that the log data were presented correctly and interpreted in accordance with industry standards.
- QP reviewed UEC roll-front mapping and confirmed that this work was supported by the underlying data and prepared in accordance with industry standards.
- QP reviewed the methodology used in UEC's resource estimates and confirmed that it is valid and consistent with industry standards.

Goliad

- The resource estimate is based on data from 599 UEC drill holes completed from 2006-2008. These drill holes were logged with gamma-ray, spontaneous potential and resistance. QA/QC documentation indicates these data were collected in accordance with current industry standard methods (Carothers, 2008).
- UEC drill hole data were supplemented with data from 479 historical drill holes completed in 1983-1984. These drill holes were logged with gamma ray, spontaneous potential and resistance; 32 drill holes were logged with PFN (Carothers, 2007 and 2008).
- To verify disequilibrium conditions, PFN and gamma-ray data from recent and historical logs were correlated with chemical assays of 263 core samples collected from 2006-2008. QA/QC documentation indicates these samples were collected and analyzed in accordance with industry standard methods (Carothers, 2008).

Palangana

- The resource estimate is for PA-1 and PA-2 and is based on 757 drill holes. These drill holes were logged with gamma-ray, spontaneous potential, resistance and PFN. QA/QC documentation indicates there were some issues with PFN probe calibration, but that core assay data were used to correct for PFN drift and the resulting data were acceptable (SRK Consulting, 2010).

- To verify disequilibrium conditions, PFN and gamma-ray logs were correlated with chemical assays from eight core holes collected from 2006-2008. QA/QC documentation indicates these samples were collected and analyzed in accordance with industry standard methods (SRK Consulting, 2010).
- The resource estimate is included in an approved NI 43-101 technical report (SRK Consulting, 2010). The QP reviewed the methodology used in this report and confirmed that it is consistent with industry standards.
- ISR uranium mining was successfully conducted in a different area of the Palangana project area in the 1970s and produced approximately 340,000 lbs of U_3O_8 with a recovery rate of 32% to 34%. This was achieved using outdated and inefficient mining techniques (SRK Consulting, 2010).
- UEC successfully conducted ISR mining in previous Palangana production areas from 2010-2016 and recovered 563,600 lbs of U_3O_8.
- The mineral resource estimate was not changed by the 2023 delineation drilling program.

<u>Salvo</u>

- The resource estimate is based on 105 drill holes completed in 2010-2011. These drill holes were logged with gamma-ray, spontaneous potential and resistance. Drill holes with significant gamma-ray response were also logged with PFN. QA/QC documentation indicates these data were collected in accordance with current industry standard methods (Carothers, 2011).
- To verify disequilibrium conditions, PFN and gamma-ray logs were correlated with historical chemical assays from the 1970s and 1980s. This work is believed to have been performed in accordance with industry standards for 1984 (Carothers, 2011).
- The resource estimate is included in an approved NI 43-101 technical report (Carothers, 2011). The QP reviewed the methodology used in this report and confirmed that it is consistent with industry standards.

9.2 Limitations

As noted in previous chapters, some of these data used for the mineral resource estimates is from historical drill holes and core samples that were collected by previous owners of the properties. In some instances, these data are not in the possession of UEC and therefore were not available for review and verification by the QP. In addition, due to the sheer quantity of data associated with the project areas, the QP was unable to review all these data. The QP visited all the project areas.

9.3 QP's Opinion on Data Adequacy

The QP finds the historical and more recent exploration data and the overall data adequacy to be reasonably sufficient for applying QA/QC techniques and verifying the legitimacy of these data incorporated into this TRS. The QP has reviewed past technical resource reports and studies.

10.0 MINERAL PROCESSING AND METALLURGICAL TESTING

10.1 Summary of Properties

UEC plans to use an ISR mineral extraction process to recover uranium from the host sandstone formations in the project areas. UEC will employ a leaching solution (lixiviant), composed of native groundwater supplemented with an oxidant and complexing agent, to recover the uranium through a series of injection and production wells.

The proposed mineral processing for the Project is the same as is currently being used or proposed at other ISR operations in Texas, Nebraska and Wyoming. The processes for ISR are typically the following:

- wellfields for injection of the lixiviant solution and recovery of the uranium, which is pumped to the surface through production wells and then to a satellite plant;
- processing in a satellite plant, which recovers dissolved uranium through an ion exchange circuit onto ion exchange resin and transportation of the loaded resin to a CPP; and
- further processing in the CPP, including the following:
    - elution circuit to remove the uranium from the ion exchange resins and produce a rich eluate;
    - yellowcake circuit to precipitate the uranium as yellowcake from the rich eluate; and
    - yellowcake dewatering, drying and packaging circuit.

UEC has only performed metallurgical testing at Goliad. A summary of the historical mineral processing and metallurgical testing on each property is as follows:

<u>Burke Hollow</u>

UEC submitted selected core samples from core hole #BHC 224.6-343 to Energy Labs. This hole was drilled at the Burke Hollow Eastern Lower B trend area and was submitted for assay and leach testing. A 2-foot interval was assayed and analyzed; it produced an average grade of 0.22% U_3O_8. The bottle roll test results were 99.1% recovery by tails.

<u>Goliad</u>

UEC submitted selected core samples from UEC core hole #30892-111C to Energy Labs in January 2007. These samples were sent to the laboratory for leach amenability studies intended to demonstrate that uranium mineralization at Goliad was capable of being leached using conventional ISR chemistry. The tests provide an indication of a sample's reaction rate and the potential chemical recovery.

Four core samples were subjected to the leach amenability tests and were determined to contain from 0.04% to 0.08% cU_3O_8 before testing. Leach tests conducted on the core samples from the A Zone indicate leach efficiencies of 60% to 80% U_3O_8 extraction, while the tails analyses indicate efficiencies of 87% to 89%. Based on post-leach solids analysis, the core intervals were leachable to a very favorable 86% to 89%. After tests, the tails were reanalyzed for uranium concentration to determine the recovery, which, for the various samples and methods, ranged from 60% to 89%.

Laboratory amenability testing of the core samples indicated the uranium (dissolved elemental U) recoveries ranged from 86% to 89% in the four tests. These results show that the mineralized intervals at Goliad are amenable to ISR mining even when exposed to only one-half of the oxidant concentration normally used in the leach amenability test.

Palangana

In 1970, UCC conducted its own pilot plant leach study using ammonia and hydrogen peroxide as oxidants. These tests concluded that Palangana ores were easy to leach with carbonate solutions at ambient temperature. Some permeability reduction occurred as a result of montmorillonite swelling.

Energy Metals submitted selected core samples to Energy Labs in April 2008. These core samples from Palangana were sent to the laboratory for leach amenability studies intended to demonstrate that uranium mineralization at Palangana was capable of being leached using conventional ISR chemistry. The tests do not approximate other in-situ variables (permeability, porosity and pressure) but provide an indication of a sample's reaction rate and the potential chemical recovery.

From 2010-2016, uranium was mined at Palangana through ISR methods. Mineral was processed through an ion exchange circuit onto ion exchange resin. The enriched resin was then transported to the Hobson CPP for further processing.

Salvo

UEC has not conducted any mineral processing or metallurgical testing on samples from Salvo at this time. However, URI conducted a column leach test on a portion of whole core taken from Salvo exploration hole 119-72C, which was drilled in December 1984. URI submitted 1.5 ft of the cored interval for chemical analysis, yielding the following assay data: 534.5–535 ft: 0.330% U_3O_8; and 537–538 ft: 0.280% U_3O_8. Although this leach test is not verified and is historical in nature, it represents typical results of leaching noted in most of the ISR operations that have mined Goliad Formation sands. It also indicates the strong amenability of these uranium-bearing sands to the ISR mining method.

In 1984, URI also tested core by X-ray diffraction in order to assess the uranium mineralogy. No determination of specific uranium mineral species were found. Other reported information from core tests by URI included a determination of bulk density of 16.18 ft^3 per ton and core permeabilities ranging from 6 to 8 darcies.

10.2 QP's Opinion on Data Adequacy

The QP considers the metallurgical and physical test work and results to date to be adequate to support general process design and selection at all of the project areas other than Salvo. Equilibrium lab testing was not performed since disequilibrium could be calculated by comparing PFN log data with gamma log data. Laboratory leach testing demonstrates that the uranium can be solubilized using a carbonate and oxygen-based lixiviant. In addition, ISR mining has been successfully performed at Palangana, which indicates amenability to ISR mining in the future.

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11.0 MINERAL RESOURCE ESTIMATES

11.1 Mineral Resource Assumptions and Parameters Applied to Each Project Area

The following key assumptions were used for resource estimates, unless otherwise noted:

- resources are located in permeable and porous sandstones; and
- resources are located below the water table.

Mineral resource estimation methods used for the project areas include the GT contour, GT outline, block model using VULCAN software and Delaunay Triangulation method using RockWorks software. Each method is briefly discussed below.

The GT contour and outline methods are some of the most widely used and dependable methods to estimate resources in uranium roll-front deposits. The basis of these methods is the GT values, which are determined for each drill hole using radiometric log results and a suitable GT cutoff below which the GT value is considered to be zero. The GT values are then plotted on a drill hole map and GT contours or a GT outline are drawn accordingly using roll-front data derived from cuttings and logs data trends. The resources are calculated from the area within the GT contour/outline boundaries considering the disequilibrium factor and the ore zone density. The GT outline method was used to estimate the mineral resources at the Burke Hollow (2024 estimate) and Salvo project areas and portions of the Palangana project area (Dome, NE Garcia, SW Garcia, CC Brine, Jemison Fence and Jemison East).

In 2022, mineral resources at Goliad were estimated using computerized geologic and volumetric modeling methods. The estimation method was a two-dimensional (2D) Delaunay Triangulation implemented in RockWorks, a comprehensive software program for creating 2D and three-dimensional (3D) maps and an industry standard in the environmental, geotechnical, petroleum and mining industries. The Delaunay Triangulation method connects data points (drill holes) via a triangular network with one data point at each triangle vertex and constructs the triangles as close to equilateral as possible. Once the network was determined, the slope of each triangular plate was computed using the three vertex point values. Next, a 25 ft x 25 ft grid was superimposed over the triangular network and each grid node (grid center) was assigned a z-value, based on the intercept of the node and the sloping triangular plate. Only grid nodes falling within the boundary of the triangular network (convex hull) were estimated. The distance of the grid node from a drill hole location was computed and determined whether the node was located within UEC's property boundary. Triangulations and grids for both grade and thickness were constructed. Next, the thickness and grade grids were multiplied to obtain a GT grid. Finally, the mineral resource classification criteria was applied to the GT grid to obtain a classified mineral resource. Resource pounds were determined by taking the average GT in each GT contour interval and multiplying it by the area and a conversion factor, then dividing that value by the tonnage factor.

Block models were constructed for the resource estimates at Palangana. SRK developed its resource estimates within distinct sand and roll-front zones utilizing detailed computer block modeling of grade and GT modeling. For PA-1 and PA-2, the targeted mineralized sands were differentiated and evaluated at each trend. The block model was derived from the stratigraphic grid models using an automated process in the computer program VULCAN. This procedure sets the x and y block dimensions at 10 ft x 10 ft, which allows each block height to match the thickness of the stratigraphic model. Thus, each subzone is one block thick. The model extents were defined by the limits of the overall resource. After the block model is generated, GT data and other attributes are assigned to each block, which allows for resources to be evaluated in each block.

For the Dome, NE Garcia, SW Garcia, CC Brine, Jemison Fence and Jemison East trends at Palangana, GT contouring was conducted, which became the basis for the block models for each of the trends. Using the top and bottom elevations for each of the zone composite intercepts, digital terrain models for the top and bottom of the surfaces were created and loaded into the block models to create a thickness representation for each zone of each trend. The horizontal extent of the zones was limited by the respective zone outlines/contours. After the blocks were generated, GT data and other attributes were assigned to each block (SRK Consulting, 2010).

UEC resumed ISR production at Palangana in 2010. In addition to PA-1 and PA-2, UEC permitted PA-3 in the CC Brine trend. Between these three PAs, 563,600 lbs U_3O_8 were produced from 2010-2016. A list of production in each PA can be seen in Table 11-1. For the current estimate, production from 2010-2016 was subtracted from the 2010 estimate prepared by SRK.

Table 11-1: Palangana Production from 2010-2016

Production Area	U_3O_8 (lbs)
PA-1	345,600
PA-2	67,800
PA-3 (CC Brine Trend)	150,200
Total Pounds U_3O_8 Produced (2010-2016)	563,600

The resource estimate methods, general parameters and mineralized cutoffs used at the project areas are summarized in Table 11-2.

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Table 11-2: Methods, Parameters and Cutoff Summary by Project Area

Project Area		Mineral Resource Estimation Method	DEF	Bulk Density (ft^3/Ton)	Cutoff Parameters		
					Min. Grade (% U_3O_8)	Min. Thickness (ft)	Min. GT
Burke Hollow		GT outline method	2.07 (not used in 2024 estimate)	17.00	0.02	2.0	0.30
Goliad		2-D Delaunay Triangulation using RockWorks software	A Sand = 1.722 B Sand = 1.409 C Sand = 1.393 D Sand = 1.729	16.90 (A, B and C Zones) and 15.2 (D Zone)	0.02	0.5	0.20
Palangana	PA-1 and PA-2	Block models (VULCAN) method	1.453 - 2.424[1]	17.00	0.00	None[2]	None
	Dome, NE Garcia, SW Garcia, OC Brine, Jemison Fence and Jemison East	GT contouring in conjunction with 3D block models	None	17.00	0.02	None[2]	0.10
Salvo		GT outline method	1.100 - 2.000[1]	16.18	0.02	None[2]	0.30

Notes:

[1] A range of disequilibrium data is presented because each production area/trend was divided into multiple zones that were each assigned a separate DEF.

[2] Minimum thickness was not reported for several of the project areas. However, minimum thickness is inherent in minimum GT, which is reported in every estimate other than PA-1 and PA-2 for Palangana.

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11.1.1 Reasonable Prospects of Economic Extraction

Based on the depths of mineralization, average grade, thickness and GT, it is the QP's opinion that the mineral resources at the Project can be recoverable by ISR methods using a long-term uranium price of $92.13/lb. and an estimated recovery factor of 80%, which is consistent with leach testing results (where applicable) and typical in uranium ISR projects. The cutoffs were determined separately for each project area with the unique aspects of each project area taken into consideration.

Uranium does not trade on the open market and many of the private sales contracts are not publicly disclosed. UEC used $92.13/lb. as the forecast uranium price for the Project. This is based on the average Mid Price Midpoint spot price forecast from UxC LLC's Q4 2023 Uranium Market Outlook report for the period from 2024-2040 (UxC LLC, 2023).

There are no material handling costs associated with uranium ore at ISR projects; therefore, GT, rather than grade, is the most practical and useful term to depict mineral content and quality. Grade cutoffs in ISR are not based on an algorithm or formula; instead, they are typically selected based on industry convention or the personal experience of the resource geologist (VanHolland & Beahm, 2017). Based on the QP's experience, typical ISR operating costs for sandstone-hosted uranium deposits range from approximately $25 to $55 per pound. At a commodity price of $92.13 per pound, production costs of $25 to $55 per pound will support the cutoffs at the project areas and the reasonable prospects of economic extraction at the Project.

11.1.2 Confidence Classification of Mineral Resource Estimates

Measured, indicated and inferred resource classifications at the Project are defined by the density of the drill hole data. Higher drill hole densities allow more confidence in the shape and size of the interpreted mineral horizons and the accuracy of the geologic model. Table 11-3 details the resource classification criteria used in the resource estimates in each of the project areas.

Table 11-3: Resource Classification Criteria by Project Area

Project Area		Distance Between Drill Hole Locations for Resource Classifications (ft)		
		Measured	Indicated	Inferred
Burke Hollow		< 50	50 - 250	250 - 500
Goliad		< 50	50 - 250	250 - 350
Palangana	PA-1 and PA-2	< 50	50 - 100	> 100
	Dome, NE Garcia, SW Garcia, OC Brine, Jemison Fence and Jemison East	-	-	≤ 400
Salvo		-	-	≤ 500[1]

[1] All mineral at the Salvo Project is classified as inferred.

There are several reasons that mineralization was interpreted as measured resources within the project areas:

- First, the drill hole spacing used to classify the measured resource is generally less than or equal to the 100-ft well spacing in a typical production pattern, which enables a detailed wellfield design to be completed.
- Second, the subsurface geology within each project area is very well characterized, with aquifers that correlate, consistent host sandstone intervals and reliable aquitards across each project area.
- Third, mineralization in the Goliad Formation occurs along the redox interface, and the oxidized sands have different coloration than the reduced sands. These color variations are visible in drill cuttings and are used to map the redox interface and mineral trends.
- Finally, historical production has occurred commercially at the Palangana project area from 1977-1979 and later by UEC from 2010-2016. Approximately 340,000 lbs of U_3O_8 were produced during historical operations and 563,600 lbs U_3O_8 were produced from 2010-2016.

This combination of drill hole spacing, well-known subsurface geology, well-understood deposit models, successful production and the variety of data collected lead the QP to conclude that the mineralization in areas with drill hole spacing tabulated above fits the definition for measured resources.

11.2 Site-by-Site Summaries

Cautionary Statement:

This TRS is preliminary in nature and includes mineral resources. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is increased risk and uncertainty to commencing and conducting production without established mineral reserves which may result in economic and technical failure and may adversely impact future profitability.

Mineral resources were estimated separately for each of the project areas. The estimates of measured and indicated mineral resources for the Project are reported in Table 11-4, and estimates of inferred mineral resources are reported in Table 11-5.

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Table 11-4: Project Area Measured and Indicated Resources Summary

Mineral Resource	GT Cutoff	Average Grade (% eU_3O_8)	Ore Tons (000s)	eU_3O_8 (lbs)
Burke Hollow				
Measured	0.30	0.086	581	964,000
Indicated	0.30	0.083	3,329	5,191,000
Total Measured and Indicated	0.30	0.083	3,910	6,155,000
Goliad				
Measured	0.20	0.053	1,595	2,667,900
Indicated	0.20	0.102	1,504	3,492,000
Total Measured and Indicated	0.20	0.085	3,099	6,159,900
Palangana				
Measured	-	-	-	-
Indicated	None	0.134	232	643,100
Total Measured and Indicated	None	0.134	232	643,100
Salvo				
All mineral resources at Salvo are classified as Inferred.				
Project Totals				
Measured				3,631,900
Indicated				9,326,100
Total Measured and Indicated				12,958,000

Notes:
1. Pounds reported with DEF applied (except at Burke Hollow).
2. Measured and indicated mineral resources as defined in 17 CFR § 229.1300.
3. All reported resources occur below the static water table.
4. The point of reference for mineral resources is in-situ at the Project.
5. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
6. Delineation drilling conducted at Palangana after 2010 was not incorporated into the resource estimate as in the experience of the QP, this type of drilling does not generally substantially change the resource estimates.
7. An 80% metallurgical recovery factor was considered for the purposes of determining the reasonable prospect of economic extraction.
8. The reasonable prospects of economic extraction are discussed in Section 11.1.1.

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Table 11-5: Project Area Inferred Resources Summary

Mineral Resource	GT Cutoff	Average Grade (% eU_3O_8)	Ore Tons (000s)	eU_3O_8 (lbs)
Burke Hollow				
Inferred	0.30	0.104	2,596	4,883,000
Goliad				
Inferred	0.20	0.195	333	1,224,800
Palangana				
PA-1 and PA-2 Inferred	None	0.100	96	192,500
Dome, NE Garcia, SW Garcia, CC Brine, Jemison Fence and Jemison East	0.10	0.110 - 0.300	206	808,800
Salvo				
Inferred	0.30	0.091	1,125	2,839,000
Project Totals				
Total Inferred			4,356	9,948,100

Notes:
1. Pounds reported with DEF applied (except at Burke Hollow).
2. A range of grades is presented for the Palangana inferred mineral because the resource estimation methods differed between PA-1/PA-2 and the rest of the trends. There was no cutoff for PA-1 and PA-2 block models. See Section 11.1 for a more detailed explanation.
3. Inferred mineral resources as defined in 17 CFR § 229.1300.
4. All reported resources occur below the static water table.
5. The point of reference for mineral resources is in-situ at the Project.
6. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
7. Delineation drilling conducted at Palangana after 2010 was not incorporated into the resource estimate as in the experience of the QP, this type of drilling does not generally substantially change the resource estimates.
8. An 80% metallurgical recovery factor was considered for the purposes of determining the reasonable prospect of economic extraction.
9. The reasonable prospects of economic extraction are discussed in Section 11.1.1.

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11.3 Uncertainties (Factors) That May Affect the Mineral Resource Estimate

Factors that may affect the mineral resource estimate include:

- assumptions as to forecasted uranium price;
- changes to the assumptions used to generate the GT cutoff;
- changes to future commodity demand;
- variance in the grade and continuity of mineralization from what was interpreted by drilling and estimation techniques;
- host formation density assignments; and
- changes that affect the continued ability to access the site, retain mineral and surface rights titles, maintain environmental and other regulatory permits and maintain the social license to operate.

Mineral resource estimation is based on data interpretation and uses a limited number of discrete samples to characterize a larger area. These methods have inherent uncertainty and risk. Three elements of risk are identified for the Project:

- Grade interpretation methods: interpreted to be low to moderate risk. Automated grade estimates depend on many factors, and interpretation methods assume continuity between samples. A risk exists that a grade estimate at any three-dimensional location in a deposit will differ from the actual grade at that location when it is mined.
- Geological definition: interpreted to be a moderate risk. The geological roll-front interpretation by the UEC geologists was checked using several techniques. The host units are relatively flat-lying, but there is a possibility of miscorrelation of a horizon when multiple closely spaced intercepts are present.
- Continuity: interpreted to be low risk. The QP and coworkers supervised by the QP reviewed multiple maps, drilling records and prior work at the Project that demonstrate and confirm the continuity of the roll-fronts within the Project.

Mineral resources do not have demonstrated economic viability, but they have technical and economic constraints applied to them to establish reasonable prospects for economic extraction. The geological evidence supporting indicated mineral resources is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to reasonably assume geological and grade continuity. The measured and indicated mineral resources are estimated with sufficient confidence to allow the application of technical, economic, marketing, legal, environmental, social and government factors to support mine planning and economic evaluation of the economic viability of the Project.

The inferred mineral resources are estimated on the basis of limited geological evidence and sampling; however, the information is sufficient to imply, but not verify, geological grade and continuity. The QP expects that the majority of the inferred mineral resources could be upgraded to indicated mineral resources with additional drilling.

11.4 QP Opinion on the Mineral Resource Estimate

In the opinion of the QP, it is difficult to fully resolve all issues relating to relevant technical and economic factors likely to influence the prospect of economic extraction. However, the work undertaken on the Project to date, both through historical in-situ and recent laboratory testing, demonstrates that uranium can be extracted using common industry methods and standard leaching technology. Further, through work conducted in support of receiving regulatory authorization, UEC has demonstrated that the host sandstones have the hydraulic properties required for in-situ extraction with adequate confinement by overlying and underlying intervals. Finally, the host sandstones of the Goliad Formation have been mined in South Texas since the 1970s using ISR technology with significant production under similar conditions to those of the project areas.

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12.0 MINERAL RESERVE ESTIMATES

This chapter is not relevant to this TRS.

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13.0 MINING METHODS

This chapter is not relevant to this TRS.

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14.0 PROCESSING AND RECOVERY METHODS

This chapter is not relevant to this TRS.

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15.0 INFRASTRUCTURE

This chapter is not relevant to this TRS.

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16.0 MARKET STUDIES

This chapter is not relevant to this TRS.

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17.0 ENVIRONMENTAL STUDIES, PERMITTING AND PLANS, NEGOTIATIONS, OR AGREEMENTS WITH LOCAL INDIVIDUALS OR GROUPS

This chapter is not relevant to this TRS.

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18.0 CAPITAL AND OPERATING COSTS

This chapter is not relevant to this TRS.

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19.0 ECONOMIC ANALYSIS

This chapter is not relevant to this TRS.

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20.0 ADJACENT PROPERTIES

The Burke Hollow, Goliad, Palangana and Salvo project areas are located in the STUP and target the uranium ore bodies within the Goliad Formation. Commercial ISR uranium mining from the Goliad Formation within the STUP started in the 1970s (Gallegos et al., 2022).

enCore Energy Corporation's (enCore Energy) Rosita ISR uranium mine is located approximately 10 miles north of the Palangana project area and produced approximately 2.65 million lbs of U_3O_8 from 1990-2009 (Gallegos et al., 2022). The Rosita ISR uranium mine restarted uranium production in 2023.

Everest Exploration, Inc.'s (EEI) Mt. Lucas ISR uranium mine was located approximately 8 miles southwest of the Salvo project area and 25 miles west of the Burke Hollow project area. The Mt. Lucas mine produced over 2 million lbs of U_3O_8 from 1983-1987 (Gallegos et al., 2022).

Other ISR uranium production from the Goliad Formation has occurred at enCore Energy's Alta Mesa mine, located in Brooks County approximately 50 miles south of the Palangana project area. The Alta Mesa mine produced 4.9 million lbs of U_3O_8 from 2005-2015 (BRS, 2016). enCore Energy's Kingsville Dome mine in Kleberg County produced 4.24 million lbs of U_3O_8 from 1988-2009 (Gallegos et al., 2022). The Kingsville Dome mine is located approximately 45 miles east-southeast of the Palangana project area.

The QP has not verified the information from the adjacent properties. In addition, this information is not necessarily indicative of the mineral resources for the Project. These data presented above have been sourced from public information obtained from company, state and federal websites.

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21.0 OTHER RELEVANT DATA AND INFORMATION

To the QP's knowledge, there is no additional information or explanation necessary to make this TRS understandable and not misleading.

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22.0 INTERPRETATION AND CONCLUSIONS

This independent TRS for the Project has been prepared in accordance with the guidelines set forth in S-K 1300. Its objective is to disclose the mineral resources at the Project.

22.1 Conclusions

Based on the density of drilling, continuity of geology and mineralization, testing and data verification, the mineral resource estimates meet the criteria for measured, indicated and inferred mineral resources as shown in Tables 11-4 and 11-5.

Assumptions regarding uranium prices, mining costs and metallurgical recoveries are forward-looking, and the actual prices, costs and performance results may be significantly different. The QP is not aware of any relevant factors that would materially affect the mineral resource estimates. Additionally, the QP is not aware of any environmental, regulatory, land tenure or political factors that will materially affect the Project from moving forward to mineral resource recovery operations.

The QP has weighed the potential benefits and risks presented in this TRS and has found the Project to be potentially viable and meriting further evaluation and development.

22.2 Risks and Opportunities

This TRS is based on the assumptions and information presented herein. The QP can provide no assurance that recovery of the resources presented herein will be achieved. The most significant potential risks to recovering the resources presented in this TRS will be associated with the success of the wellfield operation and recovery of uranium from the targeted host sands. The amount of uranium ultimately recovered from the Project is subject to in-situ wellfield recovery processes that can be impacted by variable geochemical conditions.

UEC has not completed a Preliminary Feasibility Study nor a Feasibility Study to apply detailed capital and operational expenditures to the Project. Since these studies have not been completed for the Project, there has not been a formal demonstration of economic and technical capability. Therefore, since mineral resources are not mineral reserves and do not have demonstrated economic value, there is uncertainty in the Project achieving acceptable levels of mineral resource production with a positive economic outcome. However, it is the QP's opinion that the Project risks are low, since UEC has fully permitted three of the four properties on the Project to the point at which construction and operations can commence within specific project areas.

In addition, the Project is located in a state where ISR projects have been operated successfully. The ISR mining method has been proven effective in the geologic formations at the Project as described herein.

The Project is located in Karnes, Bee, Goliad and Duval counties in the South Texas Coastal Plain, USA. Electrical power and major transportation corridors I-37, TX-359, US-181 and US-183) are located within or near the project areas. Thus, the basic infrastructure necessary to support an ISR mining operation — power, water and transportation — are located within reasonable proximity of the project areas.

There are some inherent risks to the Project similar in nature to mining projects in general and more specifically to uranium mining projects. These risks are:

- Market and Contracts – Unlike other commodities, uranium does not trade on an open market. Contracts are negotiated privately by buyers and sellers. Changes in the price of uranium can have a significant impact on the outcome of the Project.
- Uranium Recovery and Processing – This TRS is based on the assumptions and information presented herein. The QP can provide no assurance that recovery of the resources presented herein will be achieved. The most significant potential risks to recovering the resources presented in this TRS will be associated with the success of the wellfield operation and recovery of uranium from the targeted host sands.
- Wellfield Operations – Reduced hydraulic conductivity in the formation due to chemical precipitation during production, lower natural hydraulic conductivities than estimated, recovery of significant amounts of groundwater requiring the need for additional injection wells to increase uranium recovery rates, variability in the uranium concentration in the host sands and discontinuity of the mineralized zone confining layers are all potential issues that could occur. The risks associated with these potential issues have been minimized to the extent possible by delineation and hydraulic studies of the sites. These conditions could limit recovery of the mineral resources delineated across the Project.
- Social and Political - As with any uranium project in the USA, there will undoubtedly be some social/political/environmental opposition to development of the Project. The Project sites are relatively remote. As such, there are very few people that could be directly impacted by the Project. Texas is known to be friendly to mining and has a well-established, robust regulatory framework. While ever present with permitting projects, social, political or environmental opposition to the Project is not likely to be a major risk, especially since all mineral leases are on private (fee) lands.

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23.0 RECOMMENDATIONS

The QP considers the scale and quality of the mineral resources determined by this TRS to indicate favorable conditions for future extraction from the Project. UEC's ongoing exploration drilling at Burke Hollow has consistently identified additional mineralization, and the QP believes that UEC's plan to continue this exploration drilling is appropriate and has the potential to increase the estimated mineral resources and to upgrade the classification of indicated and inferred resources.

The QP recommends that the mineral resources in this TRS be used for development of a Preliminary Feasibility Study. Estimated cost based on UEC hiring a third-party engineering firm to develop a Preliminary Feasibility Study is $120,000. UEC should also advance the baseline studies necessary to effectuate regulatory authorizations required to mine at Salvo. Estimated costs based on UEC hiring a third-party engineering firm to advance baseline studies are $350,000. Additionally, UEC should complete the design and purchase of long-lead items for the satellite ion exchange plant and the UIC Class I disposal well(s) at Burke Hollow. Estimated costs for the design of the satellite ion exchange and UIC Class I disposal well are $1.25 million. Finally, the QP recommends continuing to maintain private mineral leases along with surface use agreements.

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25.0 RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT

For this TRS, the QP has relied on information provided by UEC regarding property ownership, title and mineral rights in light of: (a) reviews by mineral title specialists retained by UEC; (b) regulatory status and environmental information including liabilities on the Project; and (c) estimated commodity sales prices. Additionally, this TRS was prepared by the QP with reliance on reports and information from others as cited throughout this TRS and as referenced in Chapter 11.0 and Chapter 24.0.

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26.0 DATE AND SIGNATURE PAGE

CERTIFICATE OF AUTHOR

Western Water Consultants, Inc., d/b/a WWC Engineering (WWC), of 1849 Terra Avenue, Sheridan, Wyoming, USA do hereby certify that:

- WWC is an independent, third-party engineering firm employing mining experts, such as professional geologists, professional mining engineers and certified environmental scientists.

- WWC read the definition of "qualified person" set out in S-K 1300 and certify that by reason of education, professional registration and relevant work experience, WWC professionals fulfill the requirements to be a "qualified person" for the purposes of S-K 1300.

Western Water Consultants, Inc., d/b/a WWC Engineering
("Signed and Sealed") Western Water Consultants, Inc.

June 10, 2024