1176-01

NI 43-101 TECHNICAL REPORT
GREEN RIVER POTASH AND LITHIUM PROJECT
GRAND COUNTY, UTAH
USA

Prepared for:

American Critical Minerals Corp.
1100–1199 West Hastings Street.
Vancouver, BC
Canada V6E 3T5

October 27, 2025

Biao Qiu, Ph.D., P.E., P.Eng.
Deliang Han, Ph.D., P.Geo.
Agapito Associates, LLC
715 Horizon Drive, Suite 340
Grand Junction, Colorado 81506 USA

Prepared by:

AGAPITO ASSOCIATES, INC.
715 Horizon Drive, Suite 340
Grand Junction, CO 81506

350 Indiana St., Suite 600
Golden, CO 80401

NI 43-101 Technical Report
Green River Potash and Lithium Project
Grand County, Utah
USA

Table of Contents

LIST OF TABLES

Page

LIST OF FIGURES

DISCLAIMER: *This report contains professional opinions based on information provided by the Owner. Agapito Associates, LLC. makes no warranties, either expressed or implied, as to the accuracy or completeness of the information herein. Opinions are based on subjective interpretations of geotechnical data; other equally valid interpretations may exist. Identification and control of hazardous conditions are the responsibilities of the Owner.*

If the Company elects to file this report voluntarily, it should be clearly stated that such filing is not required under NI 43-101, in accordance with Part 4.2(12) of Companion Policy 43-101CP. The Company must also ensure that no undue significance is attributed to the conceptual target information presented herein, in compliance with section 2.3(2) of NI 43-101.

1 SUMMARY

Agapito Associates, LLC. (Agapito) was commissioned by American Critical Minerals Corp. (American Critical Minerals) to provide an independent Qualified Person (QP) review and National Instrument (NI) 43-101 Technical Report (the Report) on the Green River Potash and Lithium Project (GRPLP) Property (the Property) located near the town of Moab in Grand County, Utah, United States of America (USA).

This report incorporates information from a maiden NI 43-101 report (Allen 2009) on the Property prepared for American Critical Minerals. The Allen report (2009) was an informational document focused on the Property's incipient exploration potential. This report quantifies the Property's potash, lithium, and bromine exploration potential in the form of an NI 43-101 Exploration Targets. This report is a re-issuing of a 10 October 2012 version of the same report and contains the updated project ownership and drilling and exploration plan.

American Critical Minerals Corp. is advancing the acquisition and development of high-value mineral assets in the United States, with a strategic focus on potash, lithium brine, and bromine—commodities essential to agriculture, energy storage, and advanced technologies. The company's flagship asset, the Green River Potash and Lithium Project in Utah, provides a significant land position in one of North America's most prospective basins. Founded in 2006 and rebranded from American Potash Corp. to American Critical Minerals Corp. in December 2024, the company is headquartered in Vancouver, Canada, and is positioned to play a key role in securing domestic supplies of critical minerals for the U.S. market.

1.1 Property Description

The Property encompasses 13,812 hectares (ha) of land owned by the State of Utah and the Bureau of Land Management (BLM) located in Grand County, Utah, 32 kilometers (km) west of Moab and Arches National Park and is adjacent to the Green River to the west and Canyonlands National Park to the south (Figure 1-1). The Property is accessed by the Blue Hill Road off US Highway 191 at a point 23 km south of Crescent Junction (intersection of US Highway 191 and Interstate 70). Alternate access is available via numerous improved and unimproved roads from US Highway 191 and Interstate 70. The Canyonlands Field airport, which services Moab and the surrounding area, is located on US Highway 191 at the Blue Hills Road.

The town of Moab is the county seat of Grand County and the principal town in the region with a population of approximately 5,500. The Property is located approximately 32 km west of Moab and is within a 50-minute drive from the center of town. Originally a uranium mining center, Moab has an experienced workforce and well-established infrastructure to support exploration activities. The BLM Moab District field office is located in Moab.

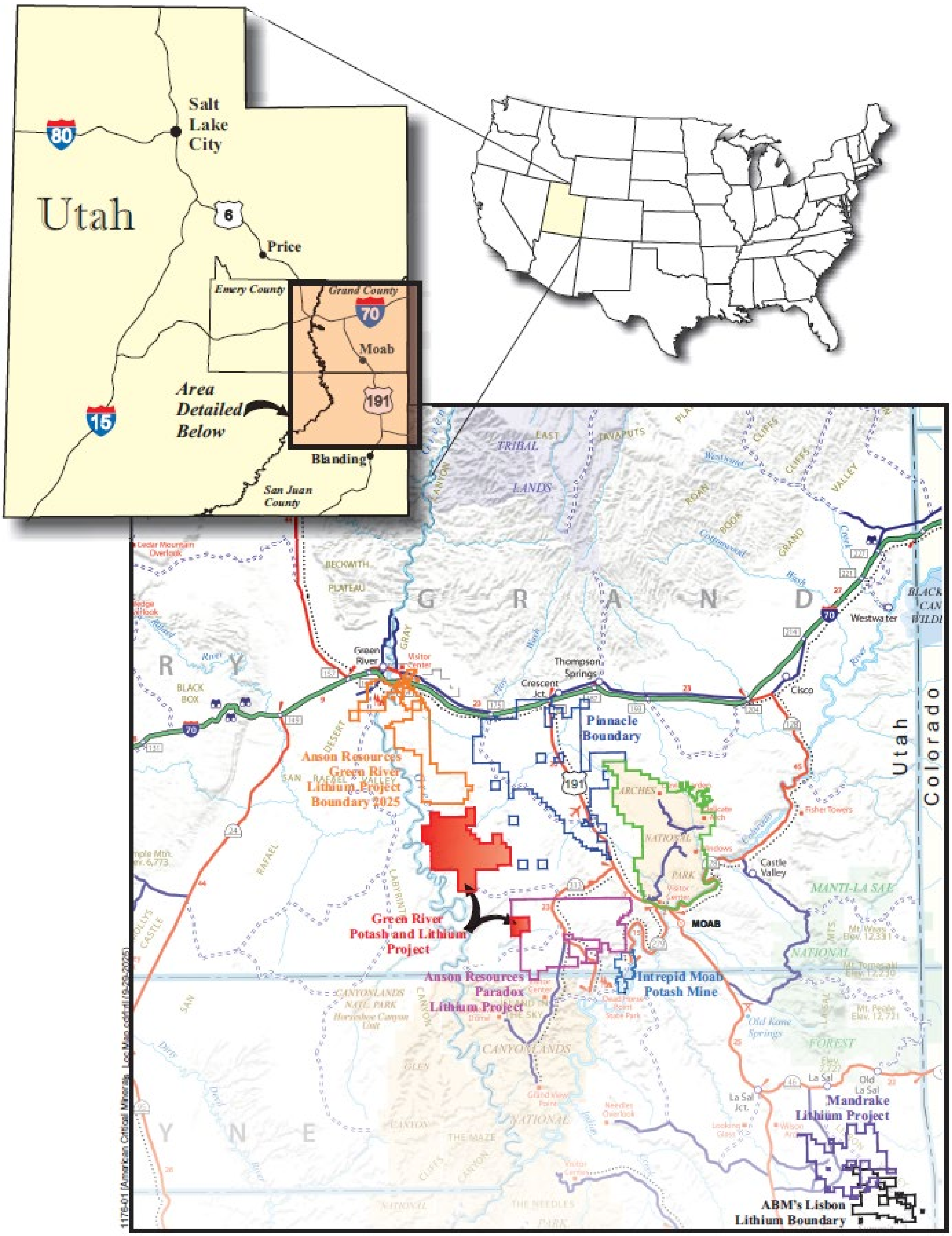


Figure 1-1. American Critical Minerals Project Location Map

Interstate 70, a major traffic corridor, connects the Property with Grand Junction to the east (180 km) and Denver (570 km) to the west, and Salt Lake City via Highway 6 to the northwest (370 km). Major oil and gas pipelines and electrical transmission lines pass through utility corridors east of the Property adjacent to Highway 191 and north of the Property adjacent to Interstate 70, and along a northwest-southeast corridor immediately northeast of the Property. Natural gas is abundant from wells and collector pipelines on and around the Property.

The Union Pacific Railroad Central Corridor mainline connects Denver and Salt Lake City and runs adjacent to the Interstate 70 corridor approximately 18 km north of the Property's north boundary. The Cane Creek Subdivision railroad spur, a common carrier line, runs from Thompson, Utah, to the Moab potash solution mine operated by Intrepid Potash Inc. (Intrepid). The spur parallels Highway 191 approximately 16 km east of the Property's east boundary.

The Property encompasses relatively flat, sparsely vegetated terrain on the east side of the Green River, consisting of broad stepped mesas with low rolling hills generally ranging in elevation between 1,370 and 1,670 meters (m), but incised below 1,200 m in southwest-draining creek gullies and along the Green River canyon. The topography is sufficiently flat to accommodate evaporation ponds on various parts of the Property. The arid to semi-arid climate is suitable for solar evaporation. Intrepid's Moab potash mine operates approximately 160 ha of evaporation ponds.

1.2 Tenure and Surface Rights

The Property comprises 11 state potash leases totaling 2,853 ha and 11 federal potash prospecting permits (FPPP) totaling 10,311 ha. American Critical Minerals also holds 8,559 ha of federal placer claims, of which 7,911 ha were staked over a portion of the federal potash prospecting permit area. The total property area is 13,812 ha.

1.3 Geology

The Property is located within a geologic province known as the Paradox Salt Basin that extends approximately 160 km in width and 320 km in length in a northwest-southeast direction spanning southeastern Utah and southwestern Colorado, with small portions in northeastern Arizona and northwestern New Mexico. In the middle Pennsylvanian period, the Paradox Basin developed as a shallow sea that was cut off from open circulation. Over time, this setting produced 29 layers of evaporite deposits, as first described by Hite (1960). Toward the edges of the basin, these evaporite deposits gradually change into shallow-water and open-marine sediments. The limestone-dolomite-anhydrite-halite sequences are broken by siliciclastic beds marking periods of sediment influx related to glaciation (Hite 1961). The apex of the penesaline to hypersaline evaporation in a sequence may be marked by the accumulation of potassium salts.

Potash is noted in 17 of the 29 evaporite cycles (Hite 1983). Intrepid is solution mining potash in Cycles 5 and 9. The Moab Mine is located about 32 km west of Moab, Utah, and 14 km southeast of the Property. The mine began as a conventional underground mining operation in 1965 and was converted in 1971 to a system using solution mining to extract the potash and solar evaporation to re-crystallize the product.

Brines saturated with various salts are widespread throughout the Pennsylvanian, Mississippian, and Devonian formations of the Paradox Basin, particularly in porous Mississippian dolomites and limestones and in Devonian units like the McCracken Sandstone at the Lisbon oil field. Mississippian rocks, 200–800 feet (ft) thick in southeastern Utah, often have vuggy and intercrystalline porosity, making them promising brine reservoirs, especially where faulted against Paradox Formation salt beds, with depths ranging from ~3,500 to over 16,000 ft. The most concentrated, high-pressure brines occur in Pennsylvanian Paradox Formation clastic interbeds between salt beds, such as Clastic Break 31 and Clastic Zone 17, which serve as pathways for brine accumulation and occasionally hydrocarbons, as in the Cane Creek Marker producing oil. Proper well control is critical, as some high-pressure zones have caused blowouts, while others are safely developed with weighted drilling fluids, indicating the complex fluid systems and significant brine potential across these formations.

Seismic data indicate that the Leadville Formation and Paradox clastic zones dip north–northeast, with structural lows and localized closures favoring accumulation of lithium-bearing brines. Northward thickening of the Paradox Formation and high-angle faults may enhance both the volume and quality of brine resources.

1.4 Exploration Targets

The GRPLP Property contains significant potash mineralization in sufficient quantities and of sufficient grade to be an attractive target for exploration and further study of solution mining potential. Lithium brines also occur on the Property and represent upside solution mining potential. Potash is present in at least six evaporite cycles on the Property. Of these, Potash 5 is the principal bed of interest. Potash 18 occurs in sufficient grade and thickness to be of interest to the east of the Property. The grades of the other prominent beds, Potash 6, 9, 13, and 16, are too low to be of current economic interest. Potash 16 shows improved grade and thickness beyond the Property to the north.

Potash 5 is a regionally extensive sylvinite bed in the northern Paradox Basin and is continuous in solution-mineable thicknesses across most of the Property, based on the preliminary interpretation of downhole electric log (elog) data from 33 oil and gas wells dispersed across the Property or within 8 km of its borders. Potash 5 is classified as an NI 43-101 Exploration Target projected to contain between 500 and 950 million tonnes (Mt) of sylvinite with an average grade ranging between 12% and 18% potassium oxide based on elog (eK_2O_ 19% and 29% potassium chloride based on elog [eKCl]), assuming a bed thickness cutoff of 2.0 m and a composite grade cutoff of 10% eK_2O. Potash 5 ranges between 1,200 and 1,900 m in depth on the Property.

Preliminary analysis of elog data suggests that Potash 5 is generally thin and low grade to the west and improves in thickness and grade across the Property to the northeast. The best resource appears centralized to the northeast quadrant of the Property where Potash 5 ranges from about 3 to 6 m thick at 14% to 16% eK_2O (22% to 25% eKCl). Regional information suggests that attractive occurrences of Potash 5 persist to the east beyond the Property boundary.

The Exploration Target for lithium and bromine in the Paradox Basin is based on brine-hosting intervals within key geologic units, including the Mississippian Leadville Formation and Pennsylvanian Paradox clastic zones 17, 19, 29, 31, and 33. These units were evaluated using porosity, volume, and brine chemistry data, with effective porosity ranging from 5.1–8.5% in the Leadville and 9.9–20.7% across the clastic zones. Lithium concentrations range from 42.9–201.3 ppm and bromine from 2,194–4,741 ppm, based on representative drillhole data. Using aquifer volumes and porosity estimates, potential brine-hosted metal content was calculated under Low and High Case scenarios, yielding lithium estimates of ~615,000 to 1,710,000 tonnes LCE and bromine estimates of ~3,288,000 to 9,134,000 tonnes Br_2. These ranges reflect current geological uncertainties while illustrating the substantial resource potential and guiding future exploration.

The potash, lithium, and bromine exploration targets for the Project, summarized in Table 1-1, is based on available geological data and analogues from adjacent projects.

Table 1-1. Exploration Target Estimates Summary (effective date September 30, 2025)

	Grade	Tonnage
Potash	19%-29% eKCl	500-950 Mt Ore
Lithium	91-152 ppm	0.6-1.7 Mt LCE
Bromine	2,647-4,412 ppm	3.3-9.1 Mt Br_2

Exploration Targets are conceptual in nature and there has been insufficient exploration to define them as Mineral Resources, and, while reasonable potential may exist, it is uncertain whether further exploration will result in the determination of a Mineral Resource under NI 43-101. The Potash, Lithium, and Bromine Exploration Targets are not being reported as part of any Mineral Resource or Mineral Reserve.

1.5 Conclusions

The Property is an early-stage exploration property. Exploration drilling on the Property is warranted based on existing geologic evidence, notwithstanding any risk associated with securing mineral tenure on federal lands. Initial exploration drilling should be focused on the northern part of the Property where Potash 5 resource potential is highest.

Principal risks associated with advancing the Property are geologic uncertainty and uncertainty with mineral tenure. Risks associated with the future feasibility of solution mining, which include engineering design, permitting, and environmental, socioeconomic, and market constraints, are concerns to be evaluated at later stages.

The principal risk in the exploration phase is geologic uncertainty. While oil and gas well data indicate strong bed continuity across the property, variations in potash thickness, grade, and mineralogy are possible. Faults, collapse features, diapirism, and other structural disturbances can sterilize resources locally. Sylvinite mineralogy can be affected by varying depositional environments or structures, including basement carbonate mounds, algal reefs, post-depositional gypsum dewatering, groundwater leaching along fault conduits, and by other complex depositional and structural features.

Carnallite and halite intrusions are known to occur in the Paradox Basin and can degrade or eliminate sylvinite resource on a localized or regional basis. The loss of grade or introduction of problematic mineralogy can substantially affect the size of a potential resource. Exploration drilling is required to define the presence or absence of these features and the thickness and grade variability of the deposit before a Mineral Resource can be claimed. Core drilling and chemical analysis is required to confirm grade and mineralogy.

1.6 Recommendations

Potash 5, as well as lithium and bromine, warrant systematic exploration drilling to fully delineate the mineral resources across the Property. Initial exploration should target the northern portion, where previous data indicate the highest concentrations of Potash 5, along with favorable brine-hosting intervals for lithium and bromine. The first phase of exploration should focus on establishing the lateral continuity and thickness of the Potash 5 horizon, while simultaneously sampling brine-bearing zones to determine lithium and bromine grades. Specific recommendations for a first and second phase of exploration are as follows:

Phase I Exploration, Resource Evaluation, and Pre-Feasibility Studies

Objective: Confirm and expand the potash, lithium, and bromine resource potential at the Green River Project, and evaluate the technical and economic viability of future solution-mining and brine-extraction operations. The combined program is designed to advance the project from exploration and resource definition through to pre-feasibility-level assessment and preparation of an updated NI 43-101 Technical Report.

Proposed Work:

- **Exploration and Resource Evaluation**: Drill three exploration core holes targeting the potash-bearing interval and water-bearing clastic zones in the Paradox and Leadville formations. Conduct comprehensive downhole geophysical logging (gamma ray, spectral gamma, neutron, density, caliper, and sonic), detailed core assays at 0.3-m intervals through the potash zone, and extend sampling into bounding salt. Core water-bearing zones for porosity and permeability testing, perform drill stem tests (DSTs) using the straddle-packer method, and analyze formation waters for lithium, bromine, potassium, pH, and TDS. These data will confirm grade, thickness, mineralogy, and hydrogeological characteristics to support mineral resource estimation.
- **Potash Mining Pre-Feasibility Study (PFS)**: Build upon exploration and resource data to assess the feasibility of a solution-mining operation. Work will include updated geological modeling, mining method selection, wellfield and cavern design, surface facility layouts, process flow diagrams, production rate forecasting, infrastructure planning, and utility requirements. The study will include capital and operating cost estimates, environmental and permitting assessments, and a preliminary economic analysis with sensitivity testing.
- **Lithium Mining Pre-Feasibility Study (PFS)**: Evaluate the potential for lithium extraction from subsurface brines through detailed hydrogeological modeling of brine distribution, flow, and recharge potential. Activities will include wellfield design, production forecasting, assessment of direct lithium extraction (DLE) technologies, preparation of process flow diagrams and material balances, and infrastructure and

permitting evaluations. Economic analyses will include capital and operating cost estimation and financial sensitivity testing.

- **NI 43-101 Technical Report Update**: Integrate results from exploration and both PFS studies into an updated NI 43-101 Technical Report. The report will include revised geological models, updated mineral resource estimates, and new technical and economic evaluations for both potash and lithium. It will also document updated infrastructure, permitting considerations, and market assumptions, ensuring full compliance with NI 43-101 and CIM guideline requirements, and will include an updated effective date, QP certifications, and project status summary.

Expected Outcome: The integrated work program will confirm the geological and chemical characteristics of the mineralized intervals, upgrade exploration targets to Mineral Resource status (inferred and indicated), and establish the technical and economic foundation for feasibility-level assessment and eventual project development.

Estimated Cost: The estimated cost for Phase I is USD $8,150,000, including a contingency allowance of USD $2,012,500, for a total estimated cost of USD $10,162,500.

Advancement to Phase II will be contingent on the evaluation of Phase I results, particularly confirmation of grade continuity, mineralogical consistency, and hydrogeochemical potential sufficient to justify step-out drilling and improvement of resource confidence. The decision to proceed will be based on an overall assessment of results and project objectives rather than a single defined decision point.

Phase II Feasibility Study

Objective: Advance the Green River Project to a feasibility-level assessment to confirm the technical, geological, and economic viability of commercial potash and lithium extraction. Building upon results from Phase I exploration and pre-feasibility studies, Phase II will focus on expanding and upgrading mineral resources, improving geologic confidence, and refining engineering parameters to support mine design, reserve estimation, and future development decisions.

Proposed Work:

- **Step-Out Drilling:** Drill four to five step-out core holes in the northern area of the Property to improve confidence in resource continuity and expand the Mineral Resource base. Core locations will be selected based on Phase I results and structural interpretations. Data from these holes will be used to delineate lateral and vertical variability in grade, thickness, and lithology.
- **Downhole Geophysics and Sampling:** Conduct comprehensive downhole geophysical logging (gamma ray, neutron, density, caliper, and sonic), potash zone assays, and coring of target water-bearing zones to collect geotechnical and hydrogeological data. Perform drill stem tests (DSTs) to evaluate formation pressures and permeability, and analyze water samples for lithium, bromine, potassium, and other key ions to refine hydrogeochemical models.
- **Laboratory Testing:** Conduct dissolution tests on potash cores under controlled temperature and pressure to assess leaching behavior and solution-mining efficiency.

Perform rock mechanics testing on salt and interbedded rock samples to evaluate cavern stability, roof span limits, and geomechanical design parameters for wellfield planning.

- **Vertical Seismic Profile (VSP):** Acquire a VSP survey in at least one well to generate a synthetic seismogram that will improve correlation between well data and existing 2D or future 3D seismic datasets. This will enhance structural interpretation and improve subsurface imaging of potash-bearing intervals and fault zones.
- **Dipole Sonic Logging:** Include dipole sonic logging as part of the VSP program to measure formation velocities both around and below the borehole. This data will improve velocity models for seismic processing, enhance depth conversion accuracy, and refine structural modeling of the deposit.
- **3D Seismic Survey**: Conduct a 3D seismic survey (or a high-resolution 2D grid if 3D coverage is not feasible) over the central and northern project areas. The survey will provide detailed imaging of stratigraphic and structural features, identify faults and dissolution zones, and enable more precise resource block modeling for both potash and lithium brine targets.
- **LiDAR Surface Mapping**: Carry out a LiDAR-based surface elevation survey to generate a high-resolution digital elevation model (DEM). This dataset will be used for surface infrastructure planning, cavern subsidence risk assessment, hydrological modeling, and future environmental monitoring.
- **Deep Disposal Well Study**: Initiate a deep disposal well assessment to identify potential injection zones for brine or process water disposal. The study will include regulatory and permitting review, baseline groundwater quality testing, and preliminary design of the disposal system to ensure long-term operational compliance and environmental protection.
- **Environmental, Permitting, and Social Assessments:** Complete baseline studies and impact assessments required for major permits, including water rights, disposal well approvals, and environmental compliance documentation. Engage with local and regulatory stakeholders to ensure project alignment with permitting and ESG requirements.
- **Detailed Engineering and Design:** Develop final designs for solution-mining wells, caverns, and surface facilities (including processing plants, pipelines, and utilities). Prepare detailed process flow diagrams, piping and instrumentation diagrams (P&IDs), material balances, and equipment specifications. Finalize plans for power supply, water sourcing, brine and tailings management, access roads, and deep disposal wells. Perform detailed site layout and construction sequencing plans. Develop detailed capital and operating cost estimates supported by vendor quotations and engineering take-offs. Perform discounted cash flow (DCF) modeling, sensitivity and risk analyses, and financial evaluations to determine project economics under various market conditions.
- **NI 43-101 Feasibility-Level Report Update:** Prepare an updated NI 43-101 Technical Report reflecting feasibility-level data, including updated mineral reserve estimates, finalized mine plans, detailed process design, cost estimates, and economic analyses. Ensure all work complies with NI 43-101 and CIM standards and is supported by Qualified Person certifications.

Expected Outcome: Phase II work will strengthen the geological and engineering understanding of the Green River Project, significantly enhance the confidence of potash and lithium resource estimates, and support the conversion of Mineral Resources to Mineral Reserves. The new data will refine wellfield and cavern design, optimize process and infrastructure planning, and reduce technical and permitting uncertainties. Results from this phase will form the foundation for completion of a full Feasibility Study and support financing and development decisions.

Estimated Cost: USD $20,000,000 (subject to refinement following completion of Phase I results and detailed work planning)

Progression beyond Phase II will depend on verification of adequate tonnage, grade, and continuity to warrant completion of the final Feasibility Study, detailed mine design, and readiness for project financing and construction.

2 INTRODUCTION

American Critical Minerals is a publicly traded Canadian-based mineral exploration and development company focused on advancing critical mineral projects in the United States, primarily potash and lithium in Utah's Paradox Basin. Agapito was retained by American Critical Minerals to perform an independent review as a Qualified Person (QP) and to prepare this Technical Report on the Property located near the town of Moab in Grand County, Utah, USA. The purpose of this Report is to evaluate the current potash and lithium exploration potential of the Property in accordance with the requirements of National Instrument 43-101 (NI 43-101).

This Report incorporates and builds upon the findings of a prior NI 43-101 Technical Report prepared by Allen in 2009 for American Potash, the former name of American Critical Minerals. The Allen (2009) report provided a preliminary assessment of the Property and was focused primarily on presenting general geological context and identifying areas with early-stage potash exploration potential, without providing quantitative estimates.

In contrast, the current Report provides a more comprehensive and data-driven evaluation of the Property. It incorporates additional geological, geophysical, and historical drilling data to support the delineation of both potash and lithium exploration potential. The Report quantifies these potentials by defining Exploration Targets for both commodities. These targets are based on the interpreted distribution and continuity of mineralized horizons within the Paradox Basin's evaporite sequences, as well as lithium-bearing brine zones historically encountered in deep exploration wells in the region. The dual focus on potash and lithium reflects the evolving strategic importance of both commodities and aligns with American Critical Minerals' expanded exploration objectives for the Property.

2.1 Terms of Reference

Agapito initially obtained project data during a meeting held on June 22, 2011, at its head office in Grand Junction, Colorado. Additional information was subsequently provided by American Critical Minerals personnel through follow-up meetings at Agapito's office and via correspondence. The most recent data received from American Critical Minerals includes the 2022 exploration plan and proposed drillhole location surveys. The information provided by American Critical Minerals includes the following:

- Overall project scope
- Company history and background
- Property ownership, location, and mineral tenure
- Public domain geophysical logs from oil and gas wells
- Cycles 5 and 9 grade-thickness contour maps
- 2011 2D trade lines seismic analysis
- 2022 exploration plan and proposed drillhole surveys

Key reference texts are included in the References section of this Report. Relevant data were reviewed in sufficient detail for the preparation of this Report. Agapito's previous personnel, Mr. Leo Gilbride and Ms. Vanessa Santos, visited the property on 25 April 2012 and prepared the previous version of the report. The following current Agapito personnel provided QP review and support for the current version of the report:

- Biao Qiu, Ph.D., P.E., P. Eng., acted as project manager, reviewed technical data, and the Exploration Target estimate and developed conclusions (Sections 1–6 and 13–27).
- Deliang Han, Ph.D., P. Geo., reviewed geological data, edited related sections, and developed conclusions (Sections 1–3, 7–12, and 25–26).
- Agapito technical staff (geologists, engineers, and Geographical Information System [GIS] specialists) provided support to the QPs that authored this Technical Report on geological analysis and map preparation used in the development of the mineral assessment.

The current QPs have not conducted a site visit for this Report. A visit was not considered necessary, as other Agapito personnel have previously visited the site, and no exploration or development activities have taken place there since 2012. Given the lack of recent on-site work and the availability of prior firsthand observations by Agapito staff, the existing site knowledge was considered sufficient for the purposes of this Report.

2.1.1 Units

Units used in this Technical Report are expressed in the metric system unless otherwise noted. As the project is located in the USA, currencies are expressed in 2025 USA dollars (USD). The exchange rate as of the report effective date was approximately US $1.00 equal to Canadian $1.34

2.1.2 Acronyms and Abbreviations

Agapito Associates, Inc.	Agapito
American Petroleum Institute	API
American Potash, LLC	American Potash
American Critical Minerals Corp.	American Critical Minerals
Approximation Base on Smoothing	ABOS
Area of Interest	AOI
Bureau of Land Management	BLM
Buttes Resources Company	Buttes
centimeter	cm
Canadian Institute of Mining, Metallurgy and Petroleum	CIM
CIM Definition Standards on Mineral Resources and Mineral Reserves	CIMDS
Code of Federal Regulations	CFR
Confederation Minerals Ltd.	Confederation
degrees Celsius	°C
electric log	elog

Green River Potash and Lithium Project	GRPLP
halite or salt (sodium chloride)	NaCl
hectare	ha
Intrepid Potash Inc.	Intrepid
kilometer	km
Known Potash Leasing Area	KPLA
Magna Resources Ltd.	Magna
Master Leasing Plan	MLP
meter	m
million tonnes	Mt
million years ago	Ma
National Instrument	NI
North American Datum of 1983	NAD83
Notice of Intent to Conduct Exploration	NOI
percent	%
portable document format	pdf
potassium chloride based on elog	eKCl
potassium chloride	KCl
potassium oxide based on elog	eK_2O
potassium oxide	K_2O
federal potash prospecting permit	FPPP
Qualified Person	QP
radius of influence	ROI
Reunion Potash Company	Reunion
square kilometer	km^2
sylvite (potassium chloride)	KCl
Sweetwater River Resources, LLC	Sweetwater
Tag Image File Format	TIFF
Texasgulf Sulphur Company	Texasgulf
three-dimensional	3D
tonnes per cubic meter	t/m^3
tonnes per year	tpy
two-dimensional	2D
Utah Division of Oil, Gas and Mining	UDOGM
Utah Geological and Mineralogical Survey	UGMS
Utah Geological Survey	UGS
Utah State Geographic Information Database	USGID
United States Geological Survey	USGS
United States of America	USA
Universal Transverse Mercator	UTM
U.S. Code	USC
USA Dollars	USD
Vertical Seismic Profile	VSP
Wilderness Study Areas	WSA

3 Reliance on Other Experts

The authors state that they are QPs for those areas as identified in the appropriate QP "Certificate of Qualified Persons" attached to this Technical Report. The authors have relied upon and disclaim responsibility for information derived from the following expert opinions and reports pertaining to mineral tenure, surface rights, access and permitting issues, and environmental liabilities as allowed under Item 3 of Form 43-101F1.

This Technical Report carries forward the principal body of information reported in the NI 43-101 Technical Report titled *Report on the Potash Potential of the Green River Potash Project Area, Grand County, Utah*, dated 15 August 2009, prepared by Gordon J. Allen, P. Geo. (Allen 2009). The QPs accept certain information provided by Allen as reproduced in this Technical Report.

3.1 Mineral Tenure

Agapito QPs have not reviewed mineral tenure, nor independently verified the legal status or ownership of the mineral title, and underlying property agreements. Agapito has relied upon American Critical Minerals for this information from the data files including state potash lease portable document format (pdf) files (multiple pdf files), notice of location placer mining claim files (Placer Claims American Potash LLC.PDF), and an unpublished report (BLM Exploration Plan Jan. 2020 Final - (Nov 2021) copy 6.doc).

The QPs did confirm the activity status and leaseholder or applicant name for all mineral rights identified by American Critical Minerals via the relevant online databases administered by the BLM and State of Utah. Although no conflicts were identified, this does not constitute an expert legal opinion. Instead, the QPs relied on American Critical Minerals and its experts on all matters of mineral tenure.

3.2 Surface Rights, Access, Permitting, and Environmental

American Critical Minerals has agreements with the BLM that were negotiated directly by American Critical Minerals for facilitating prospecting activities on the Property. Agapito QPs have relied on information regarding the status of current surface rights, road access, and permits through opinions and data supplied by American Critical Minerals, and independent experts retained by American Critical Minerals for Sections 4.2 and 4.3 of this Technical Report.

4 PROPERTY DESCRIPTION AND LOCATION

The Property encompasses 13,812 ha of land owned by the State of Utah and BLM, located in Grand County, southeastern Utah, USA (Figure 4-1).

4.1 Location

The Property is located in Grand County, Utah, 32 km west of Moab and Arches National Park (Figure 4-2). The Property is adjacent to the Green River to the west and Canyonlands National Park to the south. The Property is located on the United States Geological Survey (USGS) San Rafael Desert and Moab 1:100,000 scale topographic maps. The Property is centered at Universal Transverse Mercator (UTM) North American Datum 1983 (NAD83) coordinates of zone 12N 593,000E and 4,273,000N, and encompasses parts of Townships 23 to 26 South by Ranges 16 to 19 East, Salt Lake Meridian.

4.2 Mineral Tenure and Agreements

The Property comprises 11 state potash leases totaling 2,853 ha and 11 federal potash FPPP totaling 10,311 ha, as shown in Figure 4-3[1]. American Critical Minerals also holds 1,036 ha of federal placer claims, of which 388 ha are staked over a portion of the federal potash prospecting permit area. American Critical Minerals has surface access as authorized by the BLM and the State of Utah, and as stipulated under the terms of the Potash Prospecting Permits (BLM) or State Potash Leases (Utah). Under the FPPPs, BLM restricts activities to exploration only, including prospect drilling; extraction is prohibited. The State leases are unrestricted and allow exploration through extraction provided specific plans are submitted to and approved by the State.

4.2.1 State of Utah Potash and Lithium Leases

American Critical Minerals acquired the state mineral leases through competitive filings on November 9, 2009, and August 15, 2011, as summarized in Table 4-1. Through these leases, American Critical Minerals holds a 100% interest in the potash mineral rights, which include all associated chlorides, sulfates, carbonates, borates, silicates, and nitrates of potassium. Lithium rights are included under the classification of chlorides. Nine of the leases, covering 2,464.7 hectares, became effective on December 1, 2009, for a primary term of 10 years and were subsequently renewed for an additional 10-year term, now set to expire on November 30, 2029. The remaining two leases, totaling 388.5 hectares, commenced on September 1, 2011, and were similarly renewed for a second 10-year term, with expiry on August 31, 2031. Under standard provisions, these leases may be further extended at the lessee's election upon expiration. As of the effective date of this Report, all leases were in good standing, with annual rental payments fully paid. Annual rental obligations required to maintain the leases are presented in Table 4-1.

---

[1] The BLM claims, SITLA leases, and Potash Prospecting Licences are held by American Potash, LLC, a wholly owned U.S. subsidiary of American Critical Minerals Corp., a Canadian public company. It should be noted that the company name was changed in November 2024 from American Potash Corp. to American Critical Minerals Corp.

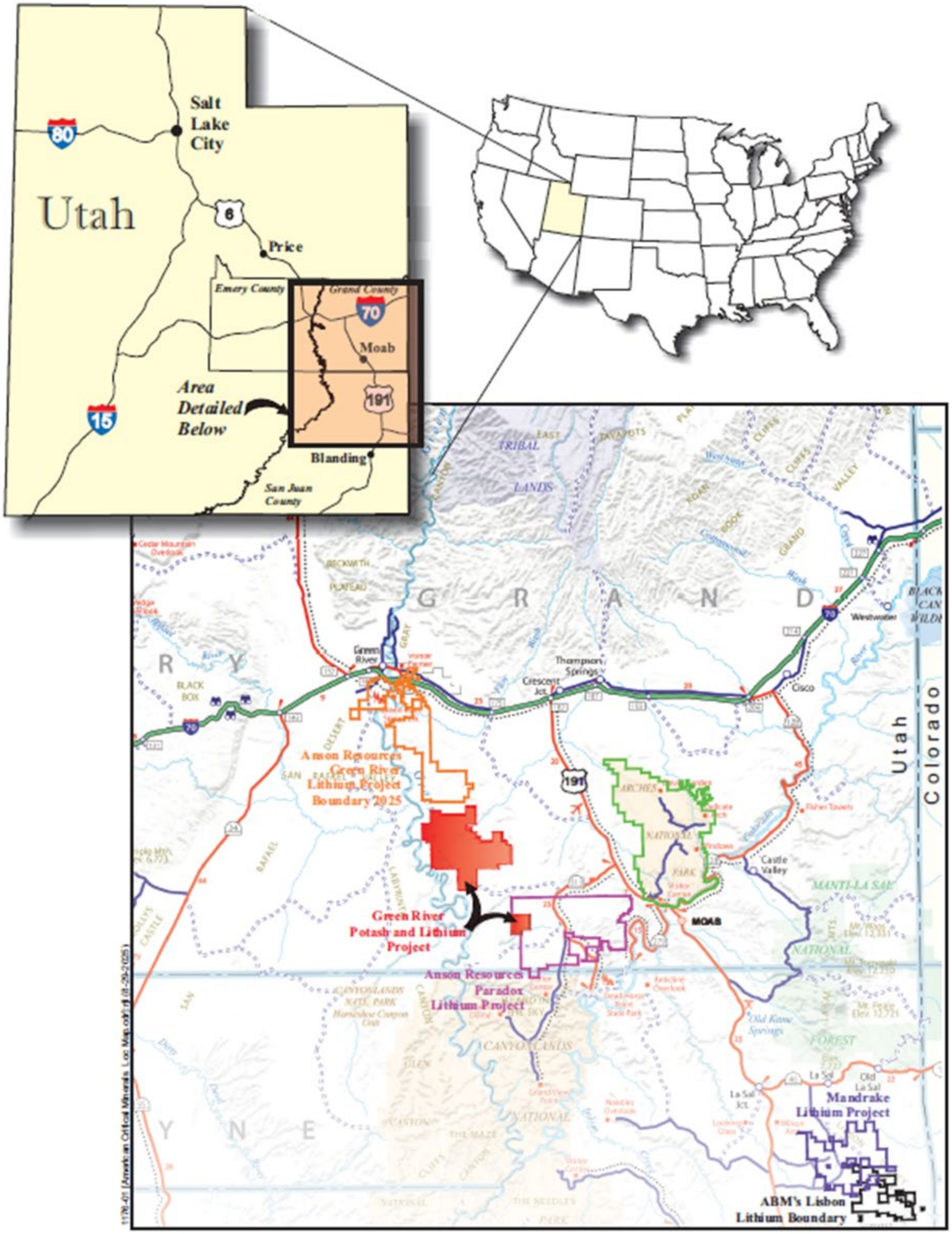
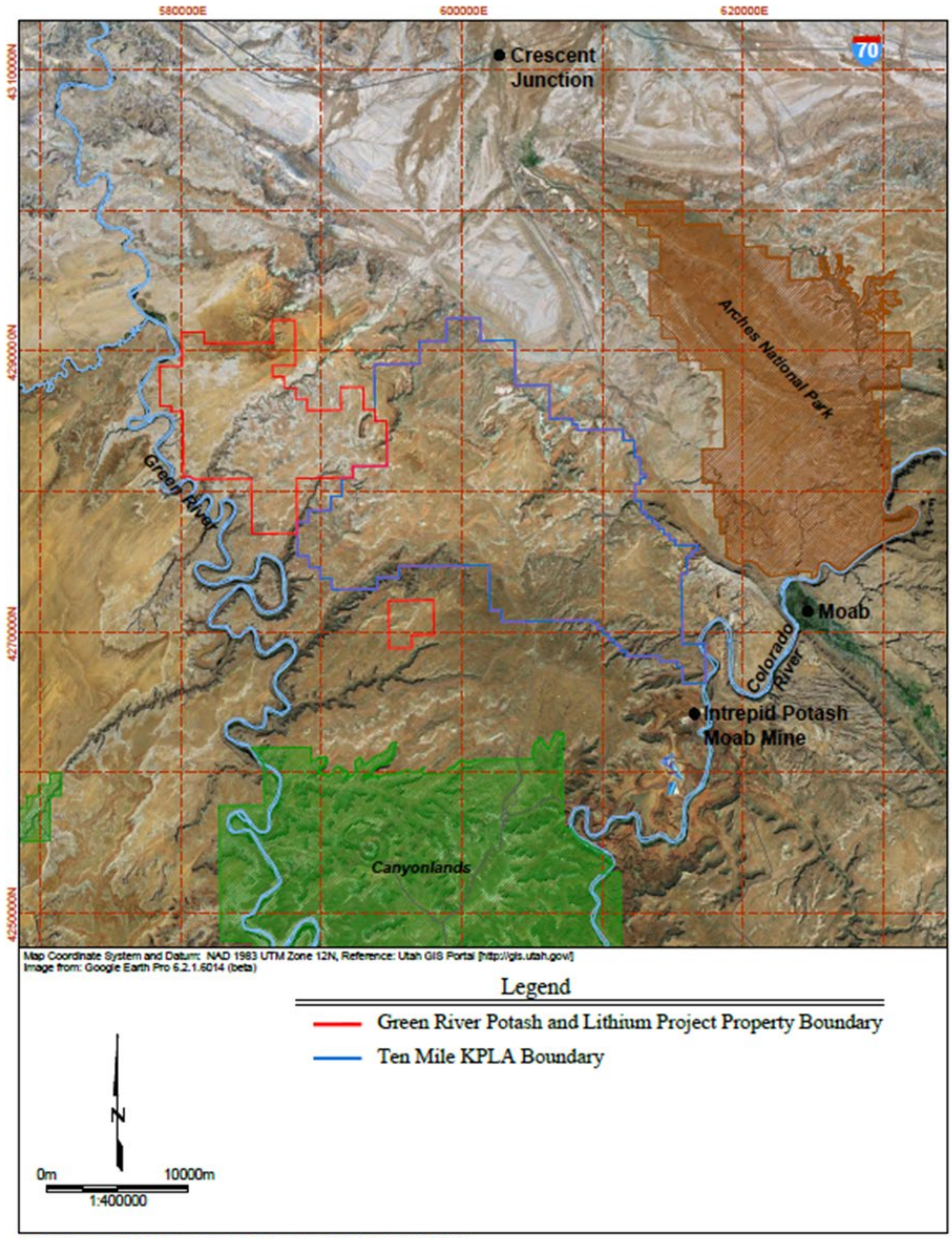
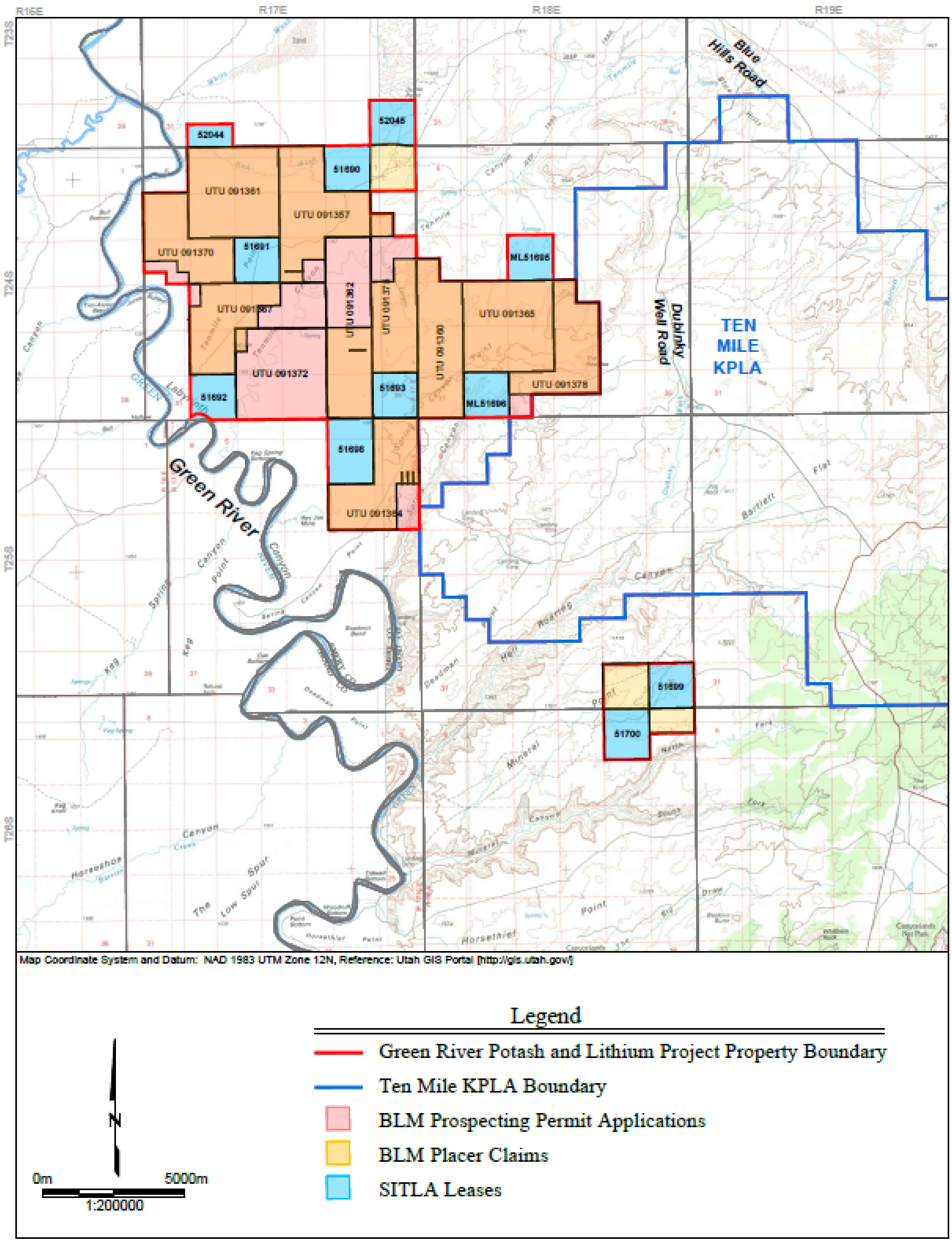


Figure 4-1. American Critical Minerals Project Location Map



1176-01 American Critical Minerals[Base Map.dwg; Layout: Area Map]:bq (9-8-2025)

Figure 4-2. Green River Potash and Lithium Project Property Area Map



1176-01 American Critical Minerals[Base Map.dwg; Layout: Land Tenure]:bq (9-8-2025)

Figure 4-3. Green River Potash and Lithium Project Property Land Tenure Map

Table 4-1. American Critical Minerals State Potash and Lithium Leases

Serial Number	Type	Date Begin	Date Expire	Lessee	Hectares	Annual Rental Rate†
ML51690	Potash	1-Dec-09	11/30/2029	American Potash LLC	260.0	US$5,787.00
ML51691	Potash	1-Dec-09	11/30/2029	American Potash LLC	259.0	US$5,760.00
ML51692	Potash	1-Dec-09	11/30/2029	American Potash LLC	246.9	US$5,499.00
ML51693	Potash	1-Dec-09	11/30/2029	American Potash LLC	259.0	US$5,760.00
ML51695	Potash	1-Dec-09	11/30/2029	American Potash LLC	259.0	US$5,760.00
ML51696	Potash	1-Dec-09	11/30/2029	American Potash LLC	259.0	US$5,760.00
ML51698	Potash	1-Dec-09	11/30/2029	American Potash LLC	373.2	US$8,307.00
ML51699	Potash	1-Dec-09	11/30/2029	American Potash LLC	259.0	US$5,760.00
ML51700	Potash	1-Dec-09	11/30/2029	American Potash LLC	289.5	US$6,444.00
ML52044	Potash	1-Sep-11	8/31/2031	American Potash LLC	129.5	US$6,280.00
ML52045	Potash	1-Sep-11	8/31/2031	American Potash LLC	259.0	US$7,560.00
				Total:	2,853.2	US$68,677.00

† Rental rates US$9.00/acre

Leases are granted under the authority of the Utah Administrative Code, as compiled and organized by the Division of Administrative Rules (Subsection 63G-3-102(5); see also Sections 63G-3-701 and 702), and described under Rule R850-25 Mineral Leases and Material Permits. Filing information is available through the Utah Trust Lands Administration and online at http://trustlands.utah.gov. Surface rights on the state potash leases belong to the State of Utah, with the exception of ML52044 where surface rights are privately owned.

4.2.2 Federal Potash Prospecting Permit

Sweetwater River Resources, LLC (Sweetwater) filed applications for 31 potash prospecting permits with the BLM on 26 June 2008, covering 25,593 ha (Table 4-2). In 2009, American Critical Minerals purchased the rights to the FPPPs and has been working with the BLM to advance plans for potash prospecting since that time. American Critical Minerals applied for two additional prospecting permits adding another 912 ha to the application area on 1 December 2011. All 33 prospecting permits covering 26,505 ha are currently closed. The new Exploration Plan is focused on the northwest sector of the original application area and will be referred to as the Northwest Area of Interest (AOI). The Northwest AOI encompasses 10,311 ha of the original 26,505 ha. It consists of eleven FPPPs (Table 4-2), all of which have been approved.

Prospecting permits grant the exclusive right to prospect on and explore lands available for leasing to determine if a valuable deposit exists. The leasing of solid minerals other than coal and oil shale, including potash prospecting permits and leases, is codified under 43 Code of Federal Regulations (CFR) §3505, issued under the authority of the Mineral Leasing Act of 1920, as amended (30 U.S. Code [USC] 181 *et seq.*) and other acts as described in 43 CFR §3501.1.

Surface rights on the federal potash FPPPs belong to the BLM.

Table 4-2. Federal Potash Prospecting Permits

Prospecting Permit	Former (Closed) Prospecting Permit Application	Meridian	Township	Range	Sections	Hectare
UTU 091357	UTU 86438	26 (SLM)	24S	17E	Sec. 3 Lots 1-4, S2N2, S2 (all); Sec. 10, 11, and 15 all.	1,036
UTU 091360	UTU 86440	26 (SLM)	24S	18E	Sec. 18 Lots 3-4, E2SW; Sec. 19 Lots 1-4, E2, E2W2 (all); Sec. 30 Lots 1-4, E2, E2W2 (all); Sec. 31 Lots 1-4, E2, E2W2 (all).	846
UTU 091361	UTU 86441	26 (SLM)	24S	17E	Sec. 4 Lots 1-4, S2N2, S2 (all); Sec. 5 Lots 1-4, S2N2, S2 (all); Sec 8 and 9 all.	1,036
UTU 091362	UTU 86442	26 (SLM)	24S	17E	Sec. 12 SW; Sec. 13, 24, and 25 all.	842
UTU 091364	UTU 86448	26 (SLM)	25S	17.5E	Sec. 1 Lots 1-12, S2N2, S2; Sec. 11 and 12 all.	891
UTU 091365	UTU 86439	26 (SLM)	24S	18E	Sec. 20, 21, 28, and 29 all.	1,036
UTU 091367	UTU 86433	26 (SLM)	24S	17E	Sec. 20,21, 22, and 29 all.	1,036
UTU 091370	UTU 86434	26 (SLM)	24S	17E	Sec. 7 Lots 1-4, E2, E2W2; Sec. 17 all; Sec. 18 Lots 1-3, E2, E2NW, NESW.	739
UTU 091372	UTU 86435	26 (SLM)	24S	17E	Sec. 27, 28, 33, and 34 all.	1,036
UTU 091375	UTU 86436	26 (SLM)	24S	17E	Sec. 14, 23, 26, and 35 all.	1,036
UTU 091378	UTU 86437	26 (SLM)	24S	18E	Sec. 22 W2, SE; Sec. 27 all; Sec. 33 N2, SW; Sec. 34 N2.	777
Total Hectares						**10,311**

4.2.3 Federal Placer Mining Claims

On 1 November 2021, American Critical Minerals staked 128 federal placer mining claims totaling 1,036 ha, of which 388 ha were staked over a portion of the federal potash FPPP area. The claims were located according to projected subsurface lithium brine occurrences defined in the Utah Geological and Mineralogical Survey Special Studies 13 (UGMS 1965). The claims were located in 3 separate blocks as shown in Figure 4-3. Claims in block 1 are identified as AP 1-1 through AP 1-48. This block is in unsurveyed federal lands and the claim descriptions provided are in metes and bounds. Claims in Block 2 consist of AP-25 through AP-38, AP-209 through AP-240, AP-156, and AP-161. Claims in Block 3 consists of AP 3-1 through AP 3-32. In September and November of 2023, American Critical Minerals staked additional 966 federal placer mining claims totaling 7,513 ha which were identified as APC001 through APC966. Appendix A listed the information of all the placer mining claims.

The placer claims grant mineral rights to placer deposits of all locatable minerals, including lithium. Federal mining claims are codified under 43 CFR §3800, issued under the authority of sections 302 and 603 of the Federal Land Policy and Management Act of 1976.

American Critical Minerals intends to evaluate the presence and composition of subsurface lithium-potash bearing brines on the claims during the course of exploration drilling for potash.

4.3 Environmental Liability

No environmental liabilities from previous industrial activities are known to exist on the Property.

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

5.1 Access

The Property is accessed by the Blue Hill Road off US Highway 191 at a point 23 km south of Crescent Junction (intersection of US Highway 191 and Interstate 70). Alternate access is available via numerous improved and unimproved roads from US Highway 191 and Interstate 70, including the Ruby Ranch, Ten Mile, Dubinky Well, and Mineral Canyon roads. The Canyonlands Field airport, which services Moab and the surrounding area, is located on US Highway 191 at the Blue Hills Road.

5.2 Climate

The climate is arid to semi-arid, with an average annual rainfall of 20 to 28 centimeters (cm). Through the year, the average daily high temperature ranges between 5 degrees Celsius (°C) and 37°C, and the average daily low temperature between –8°C and 17°C. The area receives approximately 300 days of sunshine annually. At Intrepid's Moab Mine, the pumping of water into the mine and evaporation ponds is only conducted for 7 months per year during the peak evaporation period. The Arches National Park Headquarters climate station reports an average pan evaporation rate of 169 cm per year and an average precipitation rate of 22 cm per year, for a net evaporation rate of 147 cm per year.

5.3 Local Resources and Infrastructure

The town of Moab is the county seat of Grand County and the principal town in the region with a population of approximately 5,500. The Property is located approximately 32 km west of Moab and is within a 50-minute drive from the center of town. Originally a uranium mining center, Moab has an experienced workforce and well-established infrastructure to support exploration activities. The BLM Moab District field office is located in Moab.

Interstate 70, a major traffic corridor, connects the Property with Grand Junction (180 km) and Denver (570 km) to the east and Salt Lake City via Highway 6 to the northwest (370 km). Grand Junction, an approximate 1.5-hour drive from the Property, has a population of approximately 150,000 and is a regional support center for the oil and gas and mining industries. Extensive drilling and mining suppliers and service companies are located in Grand Junction, including majors such as Schlumberger, Halliburton, and BJ Services. Grand Junction hosts the regional airport with daily connecting flights to major hubs, including Denver, Salt Lake City, Phoenix, Dallas, and Houston.

Major oil and gas pipelines and electrical transmission lines pass through utility corridors east of the Property adjacent to Highway 191 and north of the Property adjacent to Interstate 70, and along a northwest-southeast corridor immediately northeast of the Property. Natural gas is abundant from wells and collector pipelines on and around the Property.

The Union Pacific Railroad Central Corridor mainline connects Denver and Salt Lake City and runs adjacent to the Interstate 70 corridor approximately 18 km north of the Property's north boundary. The Cane Creek Subdivision railroad spur, a common carrier line, runs from Thompson, Utah, to Intrepid's Moab Mine. The spur parallels Highway 191 approximately 16 km east of the Property's east boundary. The principal function of the spur is to service Intrepid's potash mine. In recent years, the spur has seen additional service for transporting the former Atlas uranium tailings pile from Moab to Crescent Junction under an environmental remediation program. The spur is underutilized, and surplus capacity is available.

5.4 Physiography

The Property encompasses relatively flat terrain on the east side of the Green River, consisting of broad stepped mesas with low rolling hills generally ranging in elevation between 1,370 and 1,670 m, but incised below 1,200 m in southwest-draining creek gullies and along the Green River canyon. The topography is sufficiently flat to accommodate evaporation ponds on various parts of the Property.

Vegetation consists of sparse sage and black brush, clumps of native grasses, and sporadic pinion and juniper. Photographs of the Property in Figures 5-1 and 5-2 illustrate typical surface topography and vegetation.

Figure 5-1. Photograph to the Southwest along Ten Mile Point Road Accessing the Northeast Corner of the Property and Historical Quintana Fed 1-1 Well in the Distance (taken 25 April 2012)

Figure 5-2. Photograph to the Northwest along Spring Canyon Point Road Accessing the North Central Part of the Property (taken 25 April 2012)

The land supports typical desert fauna including mule deer, pronghorn, coyote, rabbit, foxes, rodents, and reptiles. The Mexican spotted owl is classified by the State of Utah as a threatened species with potential foraging, breeding, and nesting habitat throughout the Property. Species identified by the BLM to be of special concern include the burrowing owl, desert bighorn sheep, and golden eagle. Endangered fish in the Green River include the Colorado pikeminnow, humpback chub, bonytail chub, and razorback sucker.

The Property is divided into four BLM grazing allotments, principally to support cattle. Mineral Canyon, Hell Roaring Canyon, and Spring Canyon are closed to grazing because they support desert bighorn sheep lambing and rutting areas. Barbed-wire fences and cattle guards divide the grazing areas. Occasional corrals have been built. Agricultural water is relatively scarce and supplied by springs and wind-powered well pumps throughout the area.

No Wilderness Study Areas (WSA) are located on the Property. The BLM 2008 Master Leasing Plan (MLP) identifies most of the Property as "Non-WSA lands inventoried and determined to lack wilderness characteristics," with the exception of the major southwest-trending drainages and a buffer along the Green River which are designated as "Non-WSA lands inventoried and determined to have wilderness characteristics." The BLM 2008 MLP identifies the Ten Mile Wash corridor central to the Property as an "area of critical environmental concern."

6 HISTORY

Moab is the regional center of southeastern Utah. First settlers arrived in 1878–79, but before that Native American Indians, including the Sabuagana Utes, had long occupied the valley and used the nearby crossing of the Colorado River.

Construction of the Denver and Rio Grande Western Railroad between Denver and Salt Lake City brought the railroad to within 56 km of Moab at Thompson Springs and provided a much-desired railroad connection.

By the beginning of the twentieth century, Moab had developed as one of Utah's finest fruit-growing areas, producing peaches, apples, and some grapes.

Although some mining was done along the Colorado River and in the La Sal Mountains, Moab's economy was based upon farming, ranching, and fruit growing until the uranium boom of the early 1950s brought in scores of prospectors, miners, workers, and speculators, increasing the population of Moab from 1,275 in 1950 to 4,682 in 1960. During the boom, the nation's second largest uranium processing mill was completed just outside Moab in 1956, employing more than two hundred workers. The uranium boom brought new motels, cafes, stores, schools, and businesses to Moab.

In 1911, the first attempt to drill a commercial oil well between Thompson Springs and Moab was undertaken. Oil promised to enrich the Moab economy during the 1920s, but it was not until 1957 when three oil-producing fields were opened near Moab that something of an oil boom hit the area—a boom that lasted into the 1960s.

As the demand for uranium began to decrease in the early 1960s, potash became the most recent boom industry to emerge in Moab. A potash plant was built in 1963 and a railroad spur line completed from the former Denver and Rio Grande Railroad at Crescent Junction to what was then the Texasgulf Sulphur Company (Texasgulf) (today Intrepid) mill outside of Moab.

While Intrepid's potash solution mine remains active, the predominant industry at least for the last quarter century has been the tourist industry. The initial boost to tourism came with the designation of Arches National Monument in 1929. The Great Depression and World War II brought few visitors to the Moab area. After World War II, the river-running craze began slowly in the 1950s, gained momentum in the 1960s, and became a staple of the region's tourist industry by the early 1970s. The establishment in 1964 of Canyonlands National Park, for which Moab serves as the northern gateway, was another milestone along the way to Moab becoming an important tourist and recreation destination. During the 1980s, Moab, with its hundreds of miles of slickrock trails, gained worldwide fame as a mountain biking center.

Commercial activities in and around the Property have been limited to the exploration for and production of oil and gas. Since the mid-1950s, a total of 21 wells have been drilled on the Property and 70 more within a distance of 5 km of the outside Property boundary. These wells appear to have been largely targeting hydrocarbons in clastic horizons in Cycles 2, 4, 12, and 21 of the Paradox Formation and the disconformable surface on the top of the Mississippian Leadville Formation. The most productive hydrocarbon reservoirs in this region are hosted in vertically fractured shale of the Cane Creek horizon, within Cycle 21 of the Paradox Formation (Peterson 1989).

No wells were drilled specifically for potash exploration on the Property, although potash was observed in some holes. There has been no historical potash production from the Property.

The Paradox Basin was the subject of evaluation work for the purpose of nuclear waste storage within the Paradox salts, and holes were drilled and evaluated in 1955. The Gibson Dome-1 hole was drilled and partially cored. Two holes were drilled for potash by the Delhi-Taylor Oil Company—the Cane Creek No. 1 and the Shafer No. 1—and included the upper part of the Paradox Formation (Raup and Hite 1992). The two holes are located on a non-diapiric salt anticline and provided the basis for early evaluation of potash by prominent geologist Robert Hite (1961) in the Paradox Basin beginning with the identification of the approximate 29 evaporite cycles which are numbered from youngest to oldest. Few holes have been drilled specifically for potash in recent years.

Among Hite's earliest evaluations of potash potential in the vicinity of the Property was the review of drill logs that penetrated the Cycle 13 potash horizon (Hite 1976). Hite estimated an average horizon thickness of 18 m at a conservative grade of 15% K_2O, for a potential resource of 4.74 billion tonnes of potash, equivalent to 711 Mt of K_2O. Hite used an average 60 feet (19.3 m) thickness and an area of 100 square miles (259 km^2) to make a rough estimate of the resource. The estimate relied upon indirect estimates of grade and thickness from gamma ray and neutron density logs in a limited number of widely spaced holes. The Hite estimate is historical in nature and does not comply as a Mineral Resource estimate under NI 43-101. **The historical estimates are relevant only for the purpose of demonstrating a potential for potash mineralization on the Property. The QPs have not done sufficient work to classify the historical estimate as current Mineral Reserves, and the historical estimates cannot be relied upon as if they were current Mineral Reserves.**

Potash exploration to date in the region has largely consisted of the compilation and correlation of downhole geophysical records. Mineralogy and gross estimate of grade may be made with a more complete suite of records, specifically gamma ray, sonic, caliper, neutron, and density logs. Most evaluation work in this regard had been done by government agencies, but recent interest in the Paradox Basin has escalated due to the rapid increase in the price of potash in recent years.

There are believed to be about a dozen companies holding mineral prospecting and/or exploration permits or applications on private, state, and federal lands in the Paradox Basin. Some of these companies have identified Exploration Targets of brines as well as the above-mentioned potash beds, the former to produce various minerals including potassium, lithium, magnesium, bromine, and boron (Durgin 2011). This Technical Report does not recognize the brines as a potential target and has not researched the possibility of exploitation on the subject Property.

7 GEOLOGIC SETTING AND MINERALIZATION

The Paradox Basin is located in southeastern Utah and southwestern Colorado with a small portion in northeastern Arizona and the northwestern-most corner of New Mexico (Figure 7-1). The La Sal, Abajo, Sleeping Ute, and La Plata mountains are igneous intrusive centers, all Tertiary age. The solid gray outline marks the maximum extent of salt within the Paradox Basin (Nuccio and Condon 1996; Raup and Hite 1982; Kelley 1958). It is an elongate, northwest-southeast trending evaporitic basin that predominately developed during the Pennsylvanian period (Desmoinesian series), about 330 to 310 million years ago (Ma). During the Pennsylvanian period, a pattern of basins and fault-bounded uplifts developed from Utah to Oklahoma as a result of the continental collision of South America, Africa, and southeastern North America (Kluth and Coney 1981; Kluth 1986), and/or from a smaller scale collision of a micro-continent with south-central North America (Harry and Mickus 1998).

The Uncompahgre Highlands in eastern Utah and western Colorado initially formed as the westernmost range of the Ancestral Rocky Mountains. The Uncompahgre Uplift is bounded along the southwestern flank by a high-angle reverse fault identified from geophysical seismic surveys and exploration drilling. The Paradox Basin formed to the southwest at the front of this fault and continued to subside during arid to semi-arid conditions. In the Pennsylvanian period, the Paradox Basin filled with thick evaporitic and marine sequences unconformably overlying the karstic Mississippian Limestone surface. These are the Pennsylvanian Hermosa Formation and the Paradox Member, the sequence composed of salts in the center portion of the Paradox Basin, changing laterally to carbonates at the basin edges and outward to terrigenous clastics.

Towards the end of the Pennsylvanian period, the Paradox Basin became flooded with non-marine arkosic material shed from the Uncompahgre and surrounding uplifted area (Hintze 1993).

In current times, the Paradox Basin is surrounded by other uplifts and basins that formed during the late-Cretaceous, early Tertiary Laramide orogeny. The Paradox Basin represents a complex combination of structure, eustasy (transgressive and regressive events), climate, and sediment supply.

The stratigraphy of interest are the Paradox Formation of the Hermosa Group and the Mississippian Leadville Formation (Figure 7-2). The Paradox Basin formed as a restricted shallow marine environment marked by 29 evaporite sequences as defined by Hite (1960) with facies change towards basin-edge to shallow and open water marine sediments. The limestone-dolomite-anhydrite-halite sequences are broken by siliciclastic beds marking periods of sediment influx related to glaciation (Hite 1961). The apex of the penesaline to hypersaline evaporation in a sequence may be marked by the accumulation of potassium salts. Potash is noted in 17 of the 29 cycles (Hite 1983).

The 29 evaporitic cycles have been identified and correlated largely through downhole geophysical oil and gas records. It is those potash beds that are the target in areas where they have accumulated in sufficient thickness, grade, and desired mineralogy to be economically attractive. The evaporitic cycles are persistent and are correlated over the entire length and breadth of the Paradox Basin.

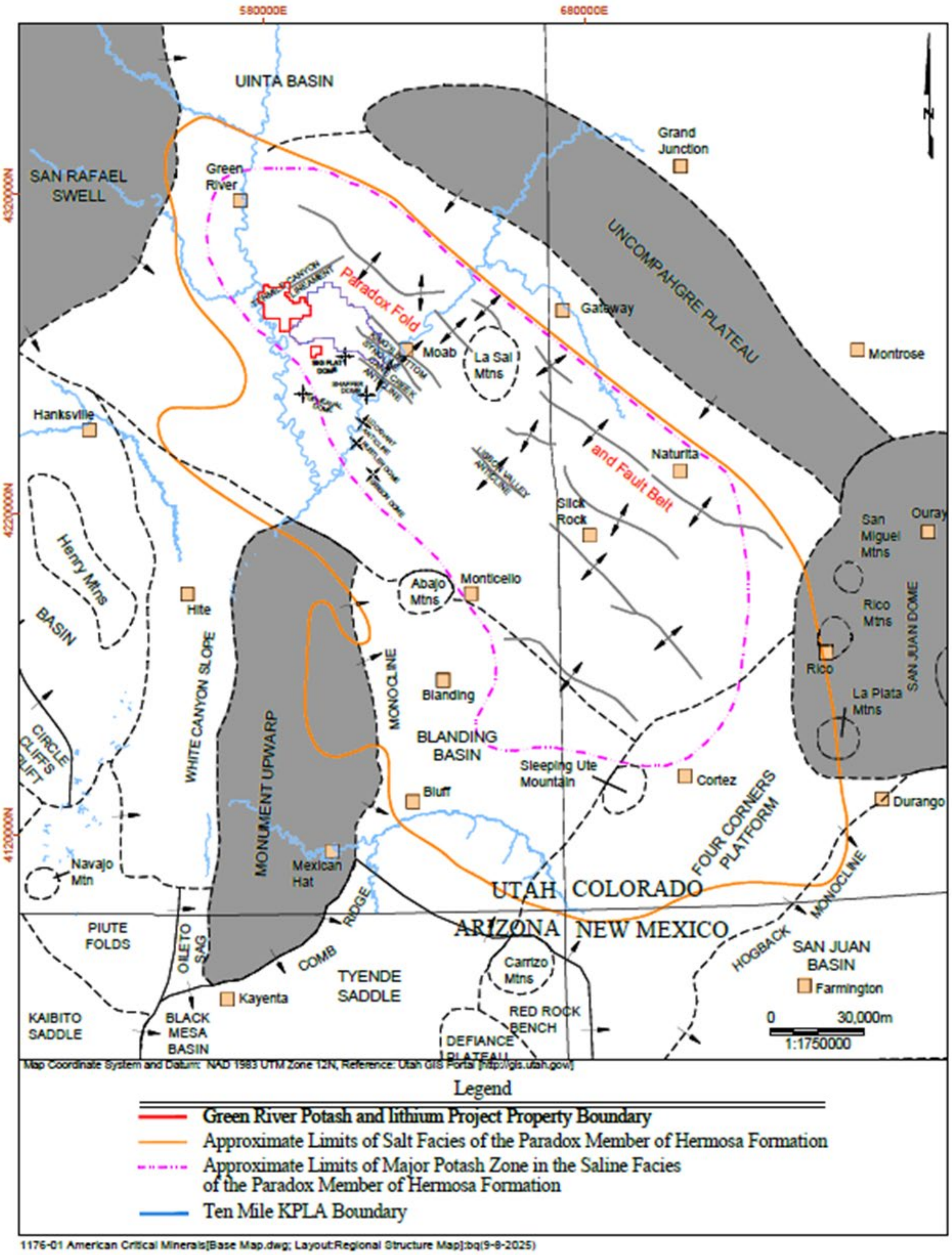


Figure 7-1. Map Illustrating the Structural Features and Highlands in and Around the Paradox Basin (after Nuccio and Condon 1996)

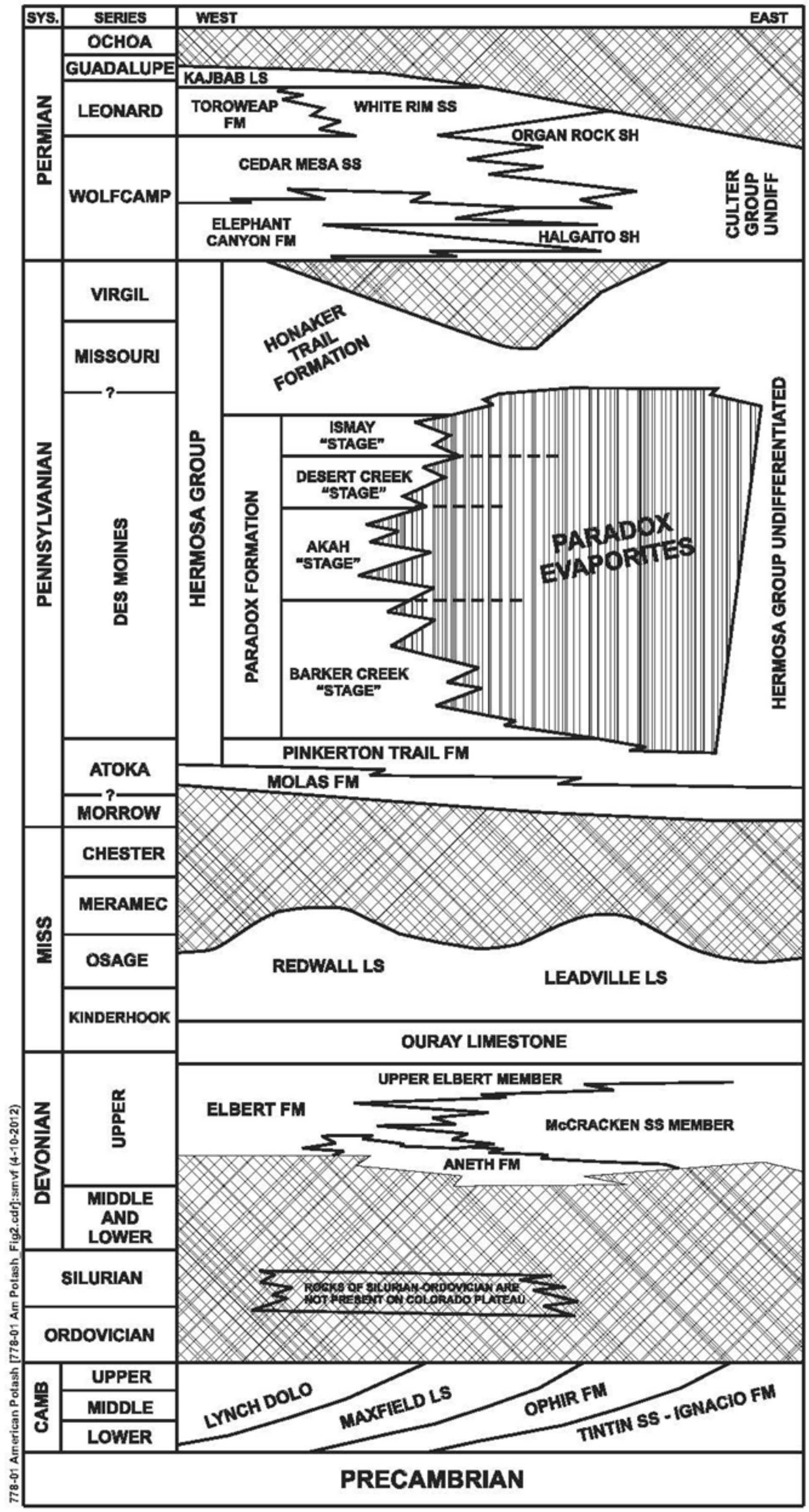


Figure 7-2. Generalized Stratigraphic Column for the Paradox Basin (from Stevenson and Baars 1986)

The cycles may be interrupted by post-depositional faulting, folding, and salt mobilization. Further, the potash cycles are also persistent across the Paradox Basin, showing variation in thickness, grade, and mineralogy. Detailed analysis of the logs and regional structure is required to determine the depositional environment within the Paradox Basin and possible post-depositional structural effects that may result in mineralogical changes and mobilization of the potash.

7.1 Regional Stratigraphy

The oldest rocks in the Paradox Basin are early Proterozoic and consist of gneisses and schists intruded by Early to Middle Proterozoic plutonic igneous rocks, overlain by Middle Proterozoic (1,695–1,435 Ma) sedimentary rocks in the western part of the Basin. A younger Middle to Late Proterozoic (1,250–800 Ma) sequence of metasedimentary rocks accumulated in a convergent plate setting on the edge of the craton (Figure 7-2). Note the relationship between the Hovenweep Shale, Gothic Shale, and Desert Creek Members of the Paradox Formation relative to the larger Hermosa Group.

The platform-margin type sediments dominated the region from the Cambrian to Devonian time (Condon 1997). A wedge of clastic and carbonate Cambrian rocks unconformably overlies the basement, thickest on the west side of the study area and thinning eastward. They are from oldest to youngest the Tintic Quartzite, Ophir Formation, Maxfield Limestone, Lynch Dolomite, and Ignacio Quartzite.

Unconformably overlying the Cambrian are Upper Devonian rocks. In the Four Corners area, it is the basal Aneth Formation that overlies the Cambrian. Overlying the Aneth, probably unconformably, is the Elbert Formation, consisting of the basal McCracken Sandstone Member. Overlying the McCracken is a shale and dolomite member known informally as the upper member and then the Ouray Limestone. An unconformity separates Devonian from Mississippian rocks in the Paradox Basin.

The Leadville Limestone and the western equivalent Redwall Limestone are unconformably overlain by Pennsylvanian rocks in the Paradox Basin. In most areas, that is the Molas Formation which includes a basal regolith. In a few areas, the Mississippian strata are overlain by carbonate rock, the Pinkerton Trail Formation of the Hermosa Formation.

During Pennsylvanian Desmoinesian time, three main intertonguing sedimentary facies were deposited: (1) a coarse clastic facies, in places arkosic, that is thickest along the northeastern border with the Uncompahgre Uplift; (2) the evaporite facies including halite and potash, anhydrite, finely crystalline dolomite, and black organic-rich shale or shaly dolomite; and (3) a shelf carbonate facies, along the southern and southwestern shelf of the Paradox Basin, where the carbonate facies locally contain mound-like buildups of biogenic carbonates. A narrow belt of mound-bearing sandy to silty carbonate also is present between the clastic and evaporite facies along the western border of the San Luis uplift near the main marine accessway originating from the San Juan trough (Peterson 1989).

The Paradox Formation consists dominantly of halite rock with minor potash salts and substantially smaller amounts of anhydrite, dolomite, silty dolomite, limestone, siltstone, and shale. Hite (1960) identified 29 cycles ideally consisting of siliciclastics, carbonates, and anhydrite, overlain by a rock-salt interval with or without potash-bearing beds. Hite numbered these cycles, or salt intervals, from 1 (youngest) through 29 (oldest) (Figure 7-3). The upper boundary of the Paradox Formation is defined as the uppermost halite bed as suggested by Hite (1983). In the area of interest, that would be Cycle 2. The upper cycles may or may not be present due to non-deposition or dissolution. The salt cycles are punctuated by clastic units that are valuable correlation markers and both oil and gas exploration targets and source rocks. The most widespread clastic is the Akah (Hite Cycle 6), the entire Desert Creek with the Gothic and Chimney Rock Members (Hite Cycles 5 and 4) and the base of the Hovenweep Shale in the Ismay (Hite Cycle 2).

The upper Paradox Formation environment transitions from hypersaline to shallow marine conditions. It is light gray to dark gray in color, consists chiefly of fossiliferous limestones with highly variable amounts of clastics and chert and some beds of sandstone, dolomite, siltstone, and claystone. This sequence, including the overlying Honaker Trail Formation, is dominantly shallow-water marine to transitional, with overlying Permian rocks.

The Permian Cutler Group rocks are variegated, generally thin bedded, calcareous siltstones, sandstones, and shales with occasional limestones. The sandstones are often cross-bedded, with mica flakes concentrated along bedding planes consistent with immature detritus deposited in a near-shore marine and tidal environment. These grades to calcareous, pale red to grayish-red sandstones and silty sandstones that are intercalated with red to purplish red arkosic sandstones; the former were deposited in eolian and tidal environments, and the latter in fluvial channel environments (Condon 1997).

Rocks of the Triassic Moenkopi and Chinle Formations are largely mudstones, siltstones, and sandstones that continued to fill the Paradox Basin followed by the Triassic Wingate and Kayenta, the Jurassic Navaho and Entrada fluvial and eolian sandstone formations which are expressed as cliff-forming units seen on the surface in present day (Graham 2004). Faulting and differential weathering resulted in the dramatic landscapes of the Arches, Canyonlands, and Needles National Parks seen in the present day (Baars and Doelling 1987).

7.2 Regional Structure

The Paradox Basin formed at the thrust front of the Uncompahgre Uplift and is bound to the southwest by the Monument Upwarp and the Defiance Uplift, and to the northwest by the San Rafael Swell (Figure 7-1). The deepest part of the Basin (thickest evaporites and sediments) is at the front, and the depocenter migrated from the northwest to southeast during the Pennsylvanian period.

Two major intersecting lineament systems originated 1,700 Ma (Precambrian): (1) the northwest-trending Olympic-Wichita lineament (Figure 7-4) (Baars and Stevenson 1981; Baars 1976), likely a right-lateral strike slip displacement and (2) the northeast-trending Colorado lineament (Warner 1978), displacing the basement left laterally. The rejuvenation of the former in the Paradox Basin was during Cambrian, Devonian, and Mississippian times (Baars 1966; Baars and Sees 1968). During Late Mississippian time, the entire carbonate platform in southeastern Utah and southwestern Colorado was subjected to subaerial erosion, resulting in formation of a lateritic regolith (Welsh and Bissell 1979), solution breccias, and karstified surfaces in the Leadville Limestone (Fouret 1996).

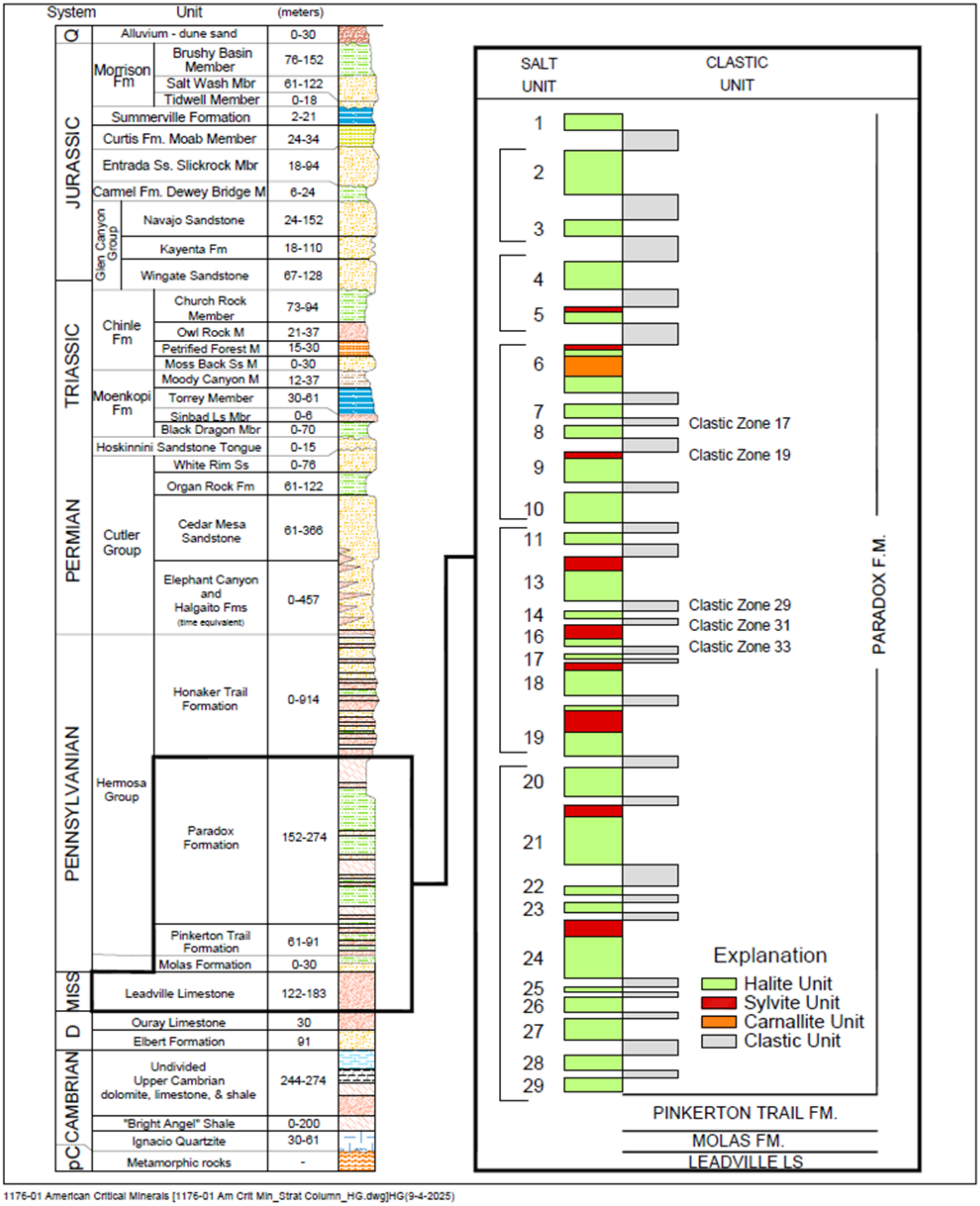


Figure 7-3. Stratigraphic Nomenclature of the Pennsylvanian Rocks of the Paradox Basin (from Hite, et al. 1984)

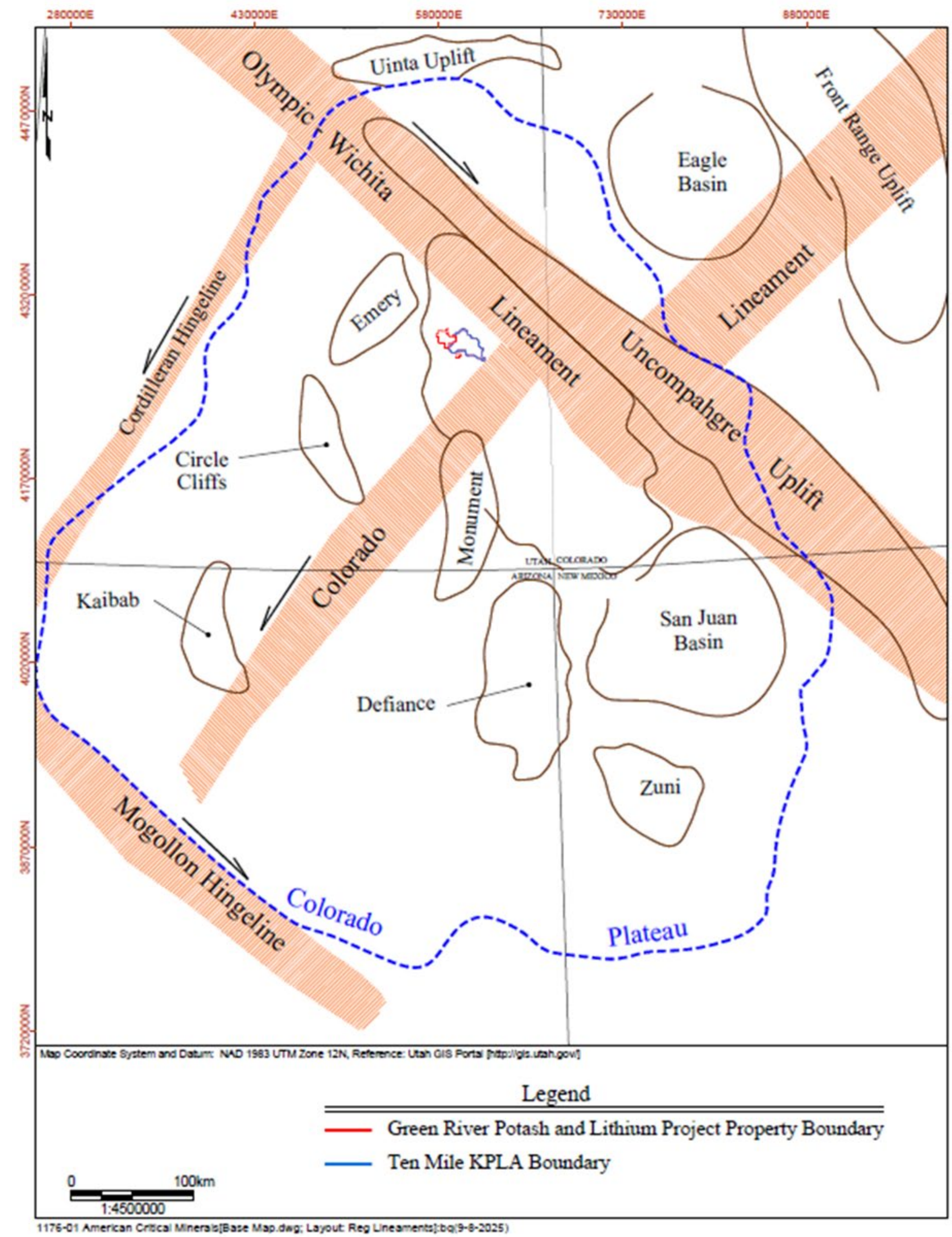


Figure 7-4. Map Showing Location of Colorado Plateau and Relationship to Orthogonal Set of Lineaments

It is likely that basement faulting was active only in the lower cycles of the Paradox Basin and the cycles above 18 were deposited largely in a quieter restricted basin. Further, it is suggested that the Uncompahgre may have been below sea level during most of Early and Middle Desmonian time; hence, the extreme lateral continuity of the evaporite beds and the absence of heavy sediment influx until formation of the Cutler (Trudgill and Arbuckle 2009). It is likely that lesser amounts of sediment were sourced from the south from the San Luis Uplift and from the southeast, the Silverton Delta, coincident with the San Juan Trough marine accessway representing a break in the Paradox Basin (Peterson 1989).

The Paradox Basin is surrounded by other uplifts and basins, which formed during the Late Cretaceous, Early Tertiary Laramide orogeny (Figure 7-1). The northwest-southeast trending Paradox fold and fault belt is in the northeast portion of the Basin and was created during the Tertiary and Quaternary periods by a combination of (1) reactivation of basement normal faults; (2) salt flowage, dissolution, and collapse; and (3) regional uplift (Doelling 2000).

7.3 Property Geology

7.3.1 Stratigraphy

The uppermost salt bed seen in the reviewed wells is Salt 2, the lowermost is 29. Cycle 29 is seen in the central part of the Property in Ten Mile 1-26 and Federal 1-27U, defining an early depocenter. Generally, Cycles 23 through 21 represent the basal units of the Property. Initial deposition of the evaporites was in the northern part of the Paradox Basin near the thrust front and migrated to the west and south. By Cycle 19 through Cycle 13, the Basin had wide extent, followed by regression in Cycles 9 and 10. Cycles 9 through 6 showed the maximum expansion of the Basin (Hite 1970). In the area of interest, the early cycles were formed on the irregular Mississippian surface, in some cases on the Molas or Pinkerton Trail Formations; in others, directly on the Leadville Dolomite.

7.3.2 Structure

The Property of interest is in the northern part of the Paradox Basin at the edge of the northwest-southeast trending Fold and Fault Belt. The area likely shows influence of the northernmost extent of the Cane Creek Anticline on and near the western and southern part of the Property, and the Kings Bottom Syncline to the west and northwest of the Property (Figure 7-5).

Strike is approximately east-west to east-southeast–west-northwest and dips gently at a grade of about 4% to the north and northeast. The Big Flat dome represents the structural high on the Property. Figure 7-4 indicates a northeast-southwest lineament at Tenmile Canyon that runs perpendicular to most structural features seen in the Fold and Fault Belt. It was identified in a regional gravity study and likely represents a basement left lateral compressional feature (Hildenbrand and Kucks 1983).

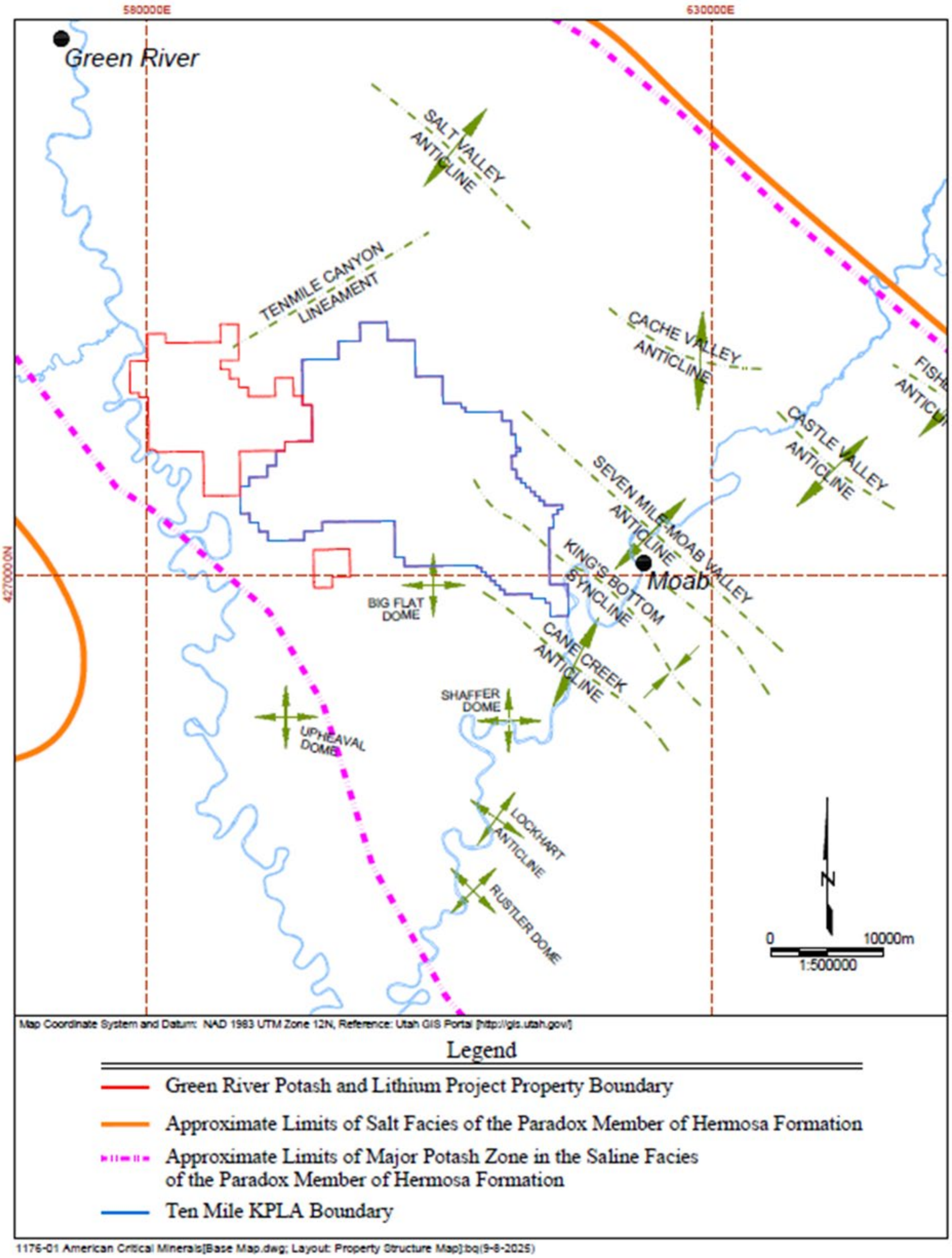


Figure 7-5. Map Showing Structure of Property Area

7.3.3 Mineralization-Potash

Potash is used to describe any number of potassium salts. By and large the predominant economic potash is sylvite, a KCl usually found mixed with salt to form the rock sylvinite which may have a K_2O content of up to 62% in its purest form. Carnallite, a potassium magnesium chloride ($KCl \bullet MgCl_2 \bullet 6H_2O$), is also abundant, but has K_2O content only as high as 17%. “Carnallite” defines the mineral and the rock interchangeably, although carnallitite is the more correct terminology for the carnallite and halite mixture. Besides being a lower grade potassium source, carnallite represents a more complex path of production, so it is less economically attractive.

Potash, in the form of sylvinite and carnallite, forms in 17 of the 29 evaporite cycles (Hite 1960) and is marked by increased salinity as defined by bromine distribution near or at the top of the halite beds. Potash mineralization is indicative of extreme brine salinities, resulting from the extreme aridity in the final stages of the cycles (Raup and Hite 1992). In the subject Property’s previous Technical Report, Allen (2009) identified Cycle 13 as the formation of interest, resulting from review of Hite’s USGS Open-File Report 76-755 (1976).

A review of 33 historical oil and gas drillholes (Figure 7-6) has identified mineralization in potash beds 5, 13, 9, and 18. Potash 5 is identified to be the most prospective.

On the Property, Cycles 5, 13, and 18 mineralization appears to mostly be sylvinite, although Cycle 13 shows some instances of sylvinite over carnallite. Potash 19 has been noted to be mineralized in the northern portion of the Paradox Basin, specifically near Crescent Junction; however, mineralization is usually carnallitic.

The mineralization in Potash 5 is largely sylvinite, but a few holes north of it are interpreted to be sylvinite mixed with carnallite. Potash 5 is found at depths from 1,336 to 1,827 m in wells on the Property at thicknesses of 1.2 to 3.4 m. In wells in areas adjacent to the Property, depths are as great as 2,066 m to the northeast. Overall, Potash 5 shows regional post-depositional dip from highs of a 300-m elevation to lows of –450 m in the northeast. Thickness is greatest along the axis of the Property, reaching an estimated 5.2 m in Kane Springs Fed 10-1 (see Figure 7-6). In some cases, the sylvinite appears to be just below Clastic 4 with no intermediate salt bed, which is a little unusual and suggests a rapid sediment influx that terminated potash precipitation rather than a more gradual transgressive event to a more open marine environment.

Potash 9 showed no appreciable mineralization in the wells examined in the subject area. The potash is not persistent in this cycle, appearing only in some wells with thicknesses ranging from 0.9 to 16.5 m, with very low estimated grades.

Potash 13 in the Property area is present, but low grade and usually in multiple beds separated by lower grade material, salts, or anhydrite. The thickness of Potash 13 in the assessed holes ranges from 1.1 to 9.1 m. The thicker intervals are interpreted to be carnallite.

Potash 16 occurs north of the Property and appears of sufficient thickness and grade to warrant exploration.

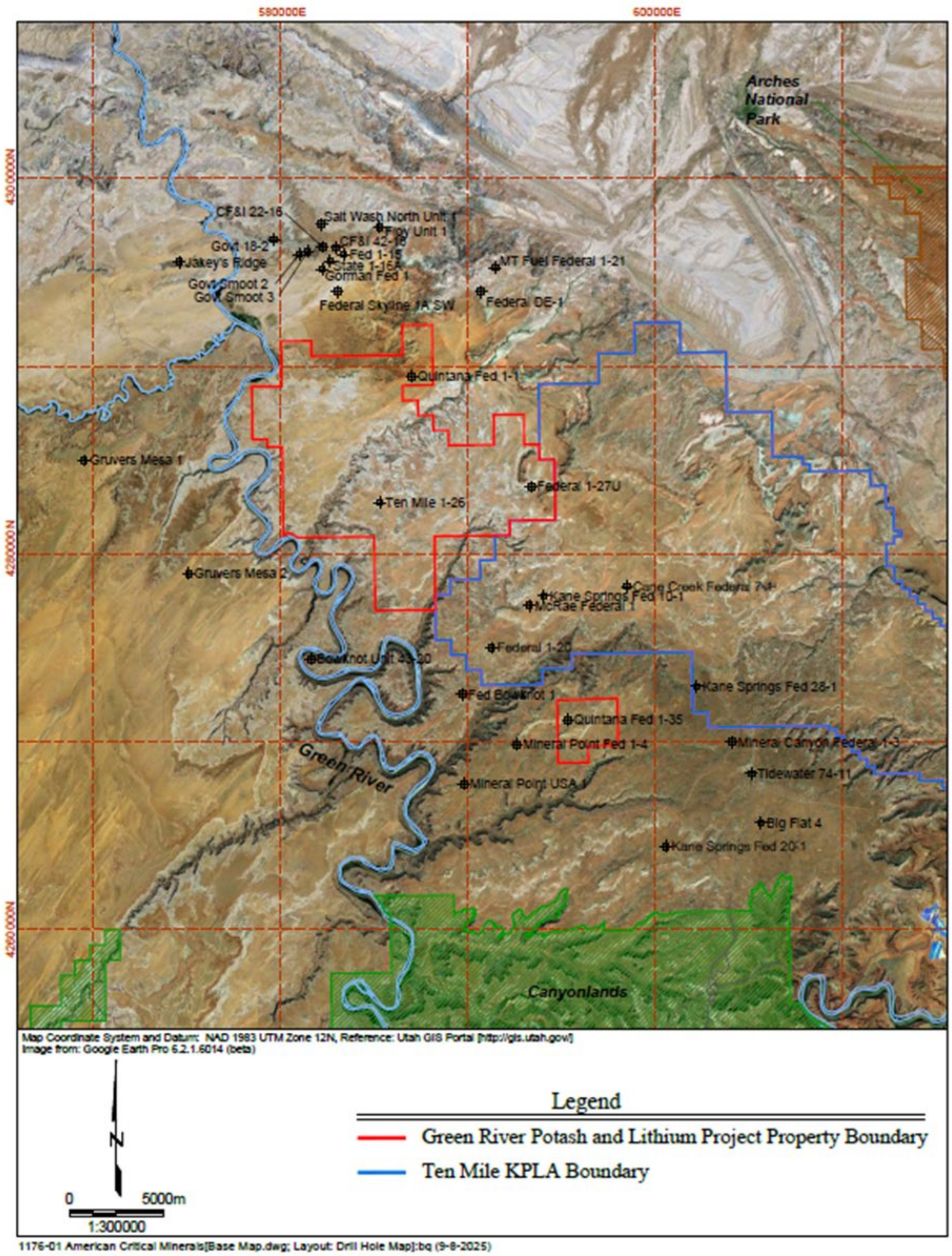


Figure 7-6. Map Showing Drillhole Locations on or Near the Property

Potash 18 is interpreted to be sylvinite of moderate to low grade and is seen in the center part of the Property and extends eastward into the Ten Mile Known Potash Leasing Area (KPLA). In many cases, it is not present or of very low grade. Where present, only Potash 18 Upper is found. In reviewed wells, Potash 18 is found at depths from 1,640 to 2,590 m, mimicking the post-depositional structure seen in Potash 5. The thickness of the potash, where present, is 1.4 to 8.7 m; the latter is in Federal 1-27U (see Figure 7-6), but it is of very low grade.

7.3.4 Mineralization – Subsurface Brine

Brines saturated with various salts have been encountered in nearly every well that has penetrated the Pennsylvanian, Mississippian, and Devonian formations in the Paradox Basin. In particular, saturated brines have been discovered in porous dolomites and limestones of Mississippian age across multiple wells. One notable example is the Lisbon oil field (Township 33 S, Range 24–25 E, San Juan County), where saturated brines have been found in the McCracken Sandstone of Devonian age.

From a reservoir potential standpoint, the Mississippian rocks may be just as promising for brine accumulation as the overlying Pennsylvanian units. These Mississippian limestones and dolomites are between 200 and 800 ft thick in southeastern Utah. They often display vuggy and intercrystalline porosity, which enhances their reservoir quality, although in some areas they are dense and impermeable. The likelihood of encountering highly concentrated brines in Mississippian and Devonian rocks is especially high where these units have been faulted against the salt beds of the Paradox Formation. The depth to the top of the Mississippian formation varies significantly—from approximately 3,500 to over 16,000 ft—depending on structural position and surface elevation.

To date, the most concentrated and high-pressure brines have been discovered in the Pennsylvanian-age Paradox Formation, particularly in the thin clastic interbeds that separate individual salt beds (see Figures 7-2 and 7-3). These clastic breaks are composed of black, fetid shale, siltstone, dolomite, anhydrite, and occasionally fine-grained sandstone. They are often brecciated and can act as pathways for brine migration and accumulation.

Several of these clastic zones are known to produce brine flows. For example, “Clastic Break 31,” located between Hite’s Salt Beds 15 and 16, has consistently yielded flows of supersaturated brine in the Big Flat–Long Canyon area. Similarly, “Clastic Zone 17,” situated between Hite’s Salt Beds 8 and 9, is the source of brine flow in the Pure Oil No. 1 Hobson–U.S.A. well, located in Section 30, Township 26 S, Range 20 E, Grand County.

In some Big Flat wells, high-pressure brine blowouts occurred when drilling mud was not adequately weighted, underscoring the need for careful well control practices. In other wells, the use of properly weighted drilling fluids successfully prevented blowouts. Additional brine-bearing zones exist throughout the Paradox Formation and may be developed alongside the primary producing intervals.

In some cases, these clastic zones also contain hydrocarbons. For instance, two wells are currently producing sweet oil from the Cane Creek Marker—a well-developed clastic zone located between Hite’s Salt Beds 21 and 22, near the base of the Paradox Formation. This dual occurrence of brine and oil highlights the complex fluid systems present within the formation.

8 DEPOSIT TYPES

The depositional environment of the Paradox Basin is that of a restricted marine basin, influenced by eustasy, sea floor subsidence, and/or uplift and sediment input. The Basin has been variably described as a reflux (Hite 1970) and a drawdown basin. It is likely a combination of both. Reflux represents a basin isolated from open marine conditions by a shallow bar thereby restricting inflow, increasing density, and increasing salinity. Drawdown is simple evaporation in an isolated basin resulting in brine concentration and precipitation. This is the classic "bulls-eye" model (Garrett 1995).

In that classic model, a basin that is cut off from open marine conditions will experience drawdown by evaporation in an arid to semi-arid environment. In the absence of sediment influx, precipitation will proceed from limestone to dolomite to gypsum and anhydrite to halite. Depending on the composition and influences of the brine at that time, the remaining potassium, magnesium, sulfates, and chlorides will progress from potassium and magnesium sulfates to sylvite and then carnallite. As each cycle, in theory, represents a complete regressive and transgressive event, the ideal cycle in the vertical orientation would be a mirror of this with the peak of evaporation represented by halite and potash sandwiched in the center of a cycle. In the Paradox Basin, siliciclastic units have variedly been interpreted as a flood event in a deeper part of the basin at the base of a cycle, or a sediment influx to break at the top of evaporation cycle. These cycles are seen as silty dolomite, anhydrites, halite, and black shale suggesting the influence of a reflux basin. The vertical component represented by elogs and core is actually a broader area of accommodation within the Basin; one that may be influenced by location in the medial or distal part of the Basin and/or proximity to structure and/or sediment source. In this context, the evaporites will have contemporaneous formation of anhydrite and carbonates towards the basin edge.

8.1 Potash

The formation of sylvite and carnallite are proposed as being primary and secondary. The precipitation of potash will be influenced by brine chemistry, i.e., availability of potassium, magnesium, sulfates, and chlorides (Williams-Stroud 1994). It is thought that the mechanism of seawater evaporation is not enough to provide the concentration and suite of potash minerals found here, but the brine may be influenced by subsurface percolation of brines from the Mississippian carbonates and/or meteoric runoff (Stewart 1963). In particular, sylvite (KCl) is considered the more desirable mineralogy as opposed to carnallite, a potassium magnesium chloride ($KCl{\bullet}MgCl_2{\bullet}6H_2O$) due to the higher percentages of K_2O found in the former. The mineral sylvite usually occurs with halite; the rock is called sylvinite. Potassium mineralization in the Paradox Basin is almost exclusively sylvite and carnallite, suggesting a basin depleted of sulfates. Minor kieserite, a highly unstable magnesium sulfate mineral ($MgSO_4{\cdot}H_2O$), has been reported (Hite 1982).

The formation of dolomite and limestone may not be necessary as precipitates, but may be introduced as sediment sourced or enriched from subaerially exposed carbonates on the basin edge eroding into the basin. It is likely that gypsum formed as a primary mineralogy on broad shallow shelves and was later altered to anhydrite under conditions of increased salinity and pressure (burial) (Stewart 1963), although anhydrite as primary nodules is seen in core. Further, some of the siliciclastic units may be carbonaceous shale, which could be interpreted as back-basin type sediment in a reducing environment. A reducing environment is also caused by hypersaline conditions in the basin allowing for no decay or oxidation of the organics (Peterson 1966).

Sediment influx into the Paradox Basin is attributed to flood events, both seasonal and related to glacial cycles. In this model, an increase of ice volume would result in a lowering of sea level, isolating the basin from open marine waters, thereby increasing salinity. Conversely, a retreat of glaciers would cause a rise in sea level, allowing marine waters to flood and circulate within the Paradox Basin. The fresher water would cause some dissolution of the most soluble minerals, creating a solution disconformity (Hite 1976). During this time of higher sea level, the clastic intervals would have been deposited. Alternatively, the clastic units have been timed to maximum glacial cycles and high ice loading rather than periods of glacial decline (Williams-Stroud 1994). The former carries fine grained sediment without large amounts of freshening water that would preserve the maximum salinity events seen at the top of the cycles.

It is known that calcium enrichment will lead to precipitation of sylvite, by way of sulfate depletion to gypsum ($CaSO_4 \cdot 2H_2O$) and anhydrite ($CaSO_4$). Dolomitization will result in calcium enrichment by reducing the availability of magnesium for the formation of carnallite. Alternatively, exposure and erosion of dolomite and introduction into the Paradox Basin could cause magnesium enrichment resulting in carnallite precipitation. It has also been proposed that the clastic units may act as a magnesium sink in the clay structures, also resulting in calcium enrichment (Williams-Stroud 1994).

In the simplest and most direct methodology, exploration would try to identify areas of likely sylvinite formation in the Paradox Basin where the salts were the thickest, magnesium is depleted, calcium is enriched, and cycles appear complete in areas of the Basin where reflux and drawdown are maximized. This methodology excludes the post-depositional action of the salts which can be incredibly mobile and are further influenced by later structure and sediment loading, the latter attributed to the Cutler Formation (Trudgill and Arbuckle 2009).

8.2 Lithium

Lithium is a silver-gray alkali metal that often occurs alongside sodium, potassium, rubidium, and cesium. With an atomic number of 3 and an atomic weight of 6.94, it is the lightest metal and the least dense solid element at 20 °C, with a density of 534 kg/m³. Lithium has excellent electrical conductivity, with a low resistivity of 9.5 mΩ·cm, which makes it essential in battery manufacturing—where lithium ions move between electrodes during charge and discharge cycles. It also enhances mechanical strength and thermal shock resistance in ceramics and glass.

The average crustal abundance of lithium is approximately 17–20 parts per million (ppm), with higher concentrations found in igneous rocks (28–30 ppm) and sedimentary rocks (53–60 ppm) (Evans, 2014; Kunasz, 2006). For reference, 1 mg/L lithium is equivalent to 1 ppm, or 0.0001%. Because of its high reactivity, lithium does not occur in elemental form in nature. Although more than 100 minerals contain lithium, only a few are considered economically viable for extraction.

Lithium is typically described, priced, and quoted in several forms. Lithium oxide (Li_2O) contains 46.4% lithium, with a conversion factor of lithium multiplied by 2.153. Lithium carbonate (Li_2CO_3) contains 18.8% lithium, with a conversion factor of lithium multiplied by 5.323. The most common reporting unit in the industry is lithium carbonate equivalent (LCE), which is used for both resource estimates and production quantities.

Lithium is known to occur in economic concentrations in three types of deposits: pegmatites, continental brines, and clays. Lithium is produced from pegmatites and brines, with brines the largest producer of lithium worldwide. Brine deposits are either unconfined (continental) in evaporative playas or confined in deep reservoirs.

Continental lithium brines are found in endorheic basins—closed drainage systems where surface water and groundwater inflow becomes enriched in lithium. All currently producing lithium brine operations are associated with unconfined, or in some cases partially confined, continental deposits. These deposits share several defining characteristics: they occur in arid climates; within closed basins containing playas or salars; in regions of tectonically driven subsidence; and are often associated with igneous or geothermal activity. The presence of suitable lithium source rocks, one or more productive aquifers, and sufficient geologic time for brine concentration are also essential conditions (Bradley et al., 2006).

Economic lithium-bearing continental brine aquifers are typically located in regions where intense solar evaporation concentrates the brine to higher lithium grades. Geothermal and volcanic systems are often key contributors, as they introduce lithium into basins through hydrothermal fluids. As a result, lithium-rich brines are commonly associated with volcanic regions such as the Imperial Valley in California, the Reykjanes geothermal field in Iceland, and the Taupo Volcanic Zone in New Zealand. In commercially developed deposits, lithium concentrations generally range between 200 and 1,500 milligrams per liter (mg/L).

Some of the most significant examples of continental brine deposits include the Salar de Uyuni in Bolivia (Bradley et al., 2017), the Salar de Atacama in Chile (Garrett, 2004), and the Salar de Hombre Muerto in Argentina (Meridian, 2008). Other notable deposits in Argentina include the Salar del Rincon and the Salar de Olaroz (Pavlovic and Fowler, 2004; Meridian, 2008; Houston and Gunn, 2011). In China, major brine resources occur at the Zhabuye Salt Lake on the Tibetan Plateau, the DXC Salt Lake, and the Qaidam Basin (Shengsong, 1986; Zheng et al., 2007). In North America, the only active lithium brine operation is at Silver Peak, Nevada, where production began in 1966.

In addition to shallow continental brines, lithium is also found in deep saline aquifers, often encountered as a byproduct of hydrocarbon production. These brines occur at depths of up to 4,000 meters in confined aquifers and show lithium enrichment in sedimentary basins of various ages. Examples include Cambrian brines in the Siberian Platform, Russia (Shouakar-Stash et al., 2007); Devonian brines in the Michigan Basin (Wilson and Long, 1993); Mississippian–Pennsylvanian reservoirs of the Illinois Basin (Stueber et al., 1993); Pennsylvanian brines in the Paradox Basin, Utah (Garrett, 2004); Triassic strata of the Paris Basin, France (Fontes and Matray, 1993); and Jurassic brines of the Smackover Formation in the Gulf Coast region of Arkansas and Texas (Moldovanyi and Walter, 1992).

8.3 Bromine

Bromine is a chemical element with the symbol Br and atomic number 35. In the Earth's crust, bromine occurs at an average concentration of approximately 2.5 ppm, primarily as bromide salts.

It is significantly more abundant in seawater, where concentrations reach about 65 mg/L, due to long-term leaching from continental rocks. Salt lakes and brine wells often exhibit even higher bromine concentrations.

Bromine and its compounds have a wide range of industrial applications. Organo-bromine compounds are used in brominated flame retardants, photographic emulsions, high-density drilling fluids, dyes (such as Tyrian purple and the indicator bromothymol blue), pharmaceuticals, anti-knock additives for leaded gasoline, disinfectants, water-treatment chemicals, and in zinc–bromine hybrid flow batteries, which provide stationary electrical power storage from household to industrial scales (Price et al., 1988). Some bromine compounds are produced directly from elemental bromine, while others are synthesized from hydrogen bromide, which is obtained by reacting hydrogen with bromine.

Elemental bromine is typically extracted via halogen exchange, in which chlorine gas oxidizes bromide ions (Br^-) to molecular bromine (Br_2). The bromine is then separated using a stream of air or steam, condensed, and purified. Commercial bromine is transported in large-capacity metal drums or lead-lined tanks capable of holding hundreds of kilograms or even tonnes. Laboratory-scale production is rarely necessary, as bromine is commercially available and has a long shelf life.

9 EXPLORATION

Sample descriptions and well log data from oil/gas wells are available from the UDOGM website (2012). Trudgill and Arbuckle (2009) produced isopach maps of all the evaporite sequences in the Paradox Basin based on those records.

Thirty-three well records have been acquired in and around the subject Property and scanned to obtain a digital record (Table 9-1).

9.1 Seismic

In 2011, American Potash commissioned John F. Arestad, Ph.D., ExplorTech LLC, of Denver, Colorado, to license, process, and interpret four 2D seismic reflection lines (profiles) covering the northwest part of the Property surrounding Shell Quintana Fed 1-1 (Figure 9-1) (Arestad 2011). Key stratigraphic horizons were picked by him and mapped across the Property, including tops for Cycles 5, 13, and 18.

From those interpreted lines, a time structure map of the top of the Paradox Formation salt was constructed by ExplorTech LLC (Figure 9-2). The map indicates a structural high, likely the Big Flat Dome (Figure 7-1), in the south dipping on a fairly regular slope to the north (Figure 9-2). This conforms to the regional interpretation from modeling of an overall dip of about 4%.

No major faulting, collapses, or diapirism were observed. Minor faulting is identified in the lowermost part of the target Paradox evaporite sequence, while the uppermost part of the evaporite interval, including Cycle 5, showed no interpretable faulting. Faulting extending as high as Cycle 13 is apparent to the southwest.

ExplorTech suggests that salt within the evaporite sequence may have moved as a result of plastic deformation, as evidenced by the “hummocky” appearance of the salt beds in the seismic profiles. ExplorTech notes that such movement, if present, could have implications for solution mining. The interpretation of evaporites from seismic lines can be problematic. Petroleum industry sourced and brokered lines may have been targeting formations hundreds or even thousands of feet below the salts. It is well known that sylvinite is difficult to detect within salt cycles due to little variability of density. The reprocessing and interpretation of these lines is specialized work and may require expertise specific to the Paradox Basin. That said, geologic modeling based on tops picked from existing oil and gas wells supports the interpretation of a gentle regional dip in the cycles of interest. The selection of tops on formations of regional extent such as the Leadville, Hermosa, or Chinle is regarded as straightforward.

The 2D seismic interpretations (Arestad, 2011) indicate that the principal stratigraphic sequences of interest, including the Leadville Formation and the Paradox clastic intervals, exhibit a general dip toward the north to northeast, with strike orientations ranging from east–west to southeast–northwest. Structural mapping at the top of the Paradox salt horizon demonstrates a comparable configuration across the Property, consistent with the regional tectonostratigraphic framework of the Paradox Basin.

Brecciated and fractured clastic units within the Paradox succession constitute prospective reservoir facies capable of hosting brines sourced from dissolution of subjacent halite members. Seismic evidence suggests that enriched brine accumulations are likely to migrate preferentially into structural lows, particularly in the northern portion of the Property, or to be entrapped within localized structural closures. Such closures may be related to fault-bounded geometries or irregular, “hummocky” morphologies developed within the Paradox salt and associated clastic strata, as observed on the seismic profiles. These structural and stratigraphic configurations are interpreted to provide enhanced potential for the occurrence of lithium-enriched brine reservoirs relative to other sectors of the Property.

The seismic data further demonstrate a northward thickening of the Paradox Formation, which may correspond to increased development of porous clastic intervals and, consequently, a higher probability of encountering lithium-bearing brine resources in the northern part of the Property. In addition, locally developed, high-angle fault systems are evident on the 2D seismic lines. These faults may act as vertical conduits for the migration of deeper-sourced brines into shallower clastic reservoirs, thereby enhancing both the quality (through potential chemical enrichment) and the volumetric potential of brine resources.

9.2 2022 Exploration Plan

In 2022, American Critical Minerals proposed an exploration plan of seven drillholes on the property with three holes on state leases and four holes on federal permit area. Figure 9-3 shows the proposed drillholes and radius of influence (ROI) map. Table 9-2 shows the list of proposed drillhole locations.

In October 2023, American Critical Minerals received formal permits from the UDOGM to drill exploratory wells on three of its 100% owned Potash and Lithium State mineral leases which form part of the Green River Potash and Lithium Project, located within the Paradox Salt Basin, Utah. American Critical Minerals also received approval from the U.S. Department of the Interior's Bureau of Land Management (BLM) in October 2024 for its Plan of Operations, which includes authorization for four additional exploratory wells with conditions. American Critical Minerals is currently authorized to drill a total of 7 drill holes across the Project (pending bonding the recently approved 4 drill holes).

The permits provide for drilling to depths of up to 2,743 m, allowing detailed information to be acquired from multiple potash and lithium (brine) horizons encountered in nearby historical oil and gas wells, including the Shell Quintana Fed 1-1 oil well, which intersected 24.3% gamma-log equivalent KCl over 5.9 m and is located less than 0.8 km east of the Company’s first proposed well.

The seven permitted wells, referred to as Dumas Point (S2), Mineral Springs (S36), Ten Mile (S16), Keg Springs (F34), Trail Canyon (F24), Lost World (F28), and Hey Joe (F12) are spaced widely apart, providing a large area of influence to draw upon for estimating potential potash, lithium, and bromine resources within this portion of the project area.

Table 9-1. Reviewed Well Records

Hole Name	Coordinates		
	Easting (m)	Northing (m)	Elevation (KB-m)
Salt Wash North Unit 1	582207.00	4297566.00	1,360.3
Floy Unit 1	585303.00	4297413.00	1,310.0
Govt 18-2	579679.00	4296730.00	1,280.8
CF&I 22-16	582276.00	4296350.00	1,368.6
CF&I 42-16	582992.00	4296329.00	1,383.2
Govt Smoot 3	581472.00	4296105.00	1,322.5
Govt Smoot 2	581021.00	4295952.00	1,310.3
Fed 1-15	583396.00	4295950.00	1,309.1
State 1-16A	582674.00	4295610.00	1,346.6
Jakey's Ridge	574634.32	4295547.26	1,239.6
MT Fuel Federal 1-21	591474.00	4295244.00	1,379.2
Gorman Fed 1	582261.00	4295161.00	1,313.1
Federal DE-1	590705.00	4293983.00	1,385.0
Federal Skyline 1A SW	583056.42	4293969.18	1,261.3
Quintana Fed 1-1	**587024.45**	**4289446.16**	**1,365.2**
Gruvers Mesa 1	569563.32	4284974.30	1,455.1
Federal 1-27U	**593400.46**	**4283563.14**	**1,540.3**
Ten Mile 1-26	**585313.45**	**4282735.18**	**1,417.9**
Gruvers Mesa 2	575128.39	4278937.26	1,448.1
Cane Creek Federal 7-1	598495.00	4278249.00	1,578.9
Kane Springs Fed 10-1	594054.47	4277760.15	1,614.5
McRae Federal 1	593287.00	4277250.00	1,602.3
Federal 1-20	591266.48	4274999.16	1,567.3
Bowknot Unit 43-20	581655.44	4274382.22	1,408.5
Kane Springs Fed 28-1	602208.00	4272935.00	1,707.5
Fed Bowknot 1	589711.48	4272525.17	1,575.8
Quintana Fed 1-35	**595345.49**	**4271144.15**	**1,672.7**
Mineral Canyon Federal 1-3	604072.51	4269985.13	1,790.7
Mineral Point Fed 1-4	592625.00	4269836.00	1,616.0
Tidewater 74-11	605134.00	4268293.00	1,874.8
Mineral Point USA 1	589804.49	4267733.18	1,545.9
Big Flat 4	605628.00	4265682.00	1,834.0
Kane Springs Fed 20-1	600569.52	4264409.16	1,724.6

Bold typeface indicates wells on Property. KB-m = Kelly Bushing meter

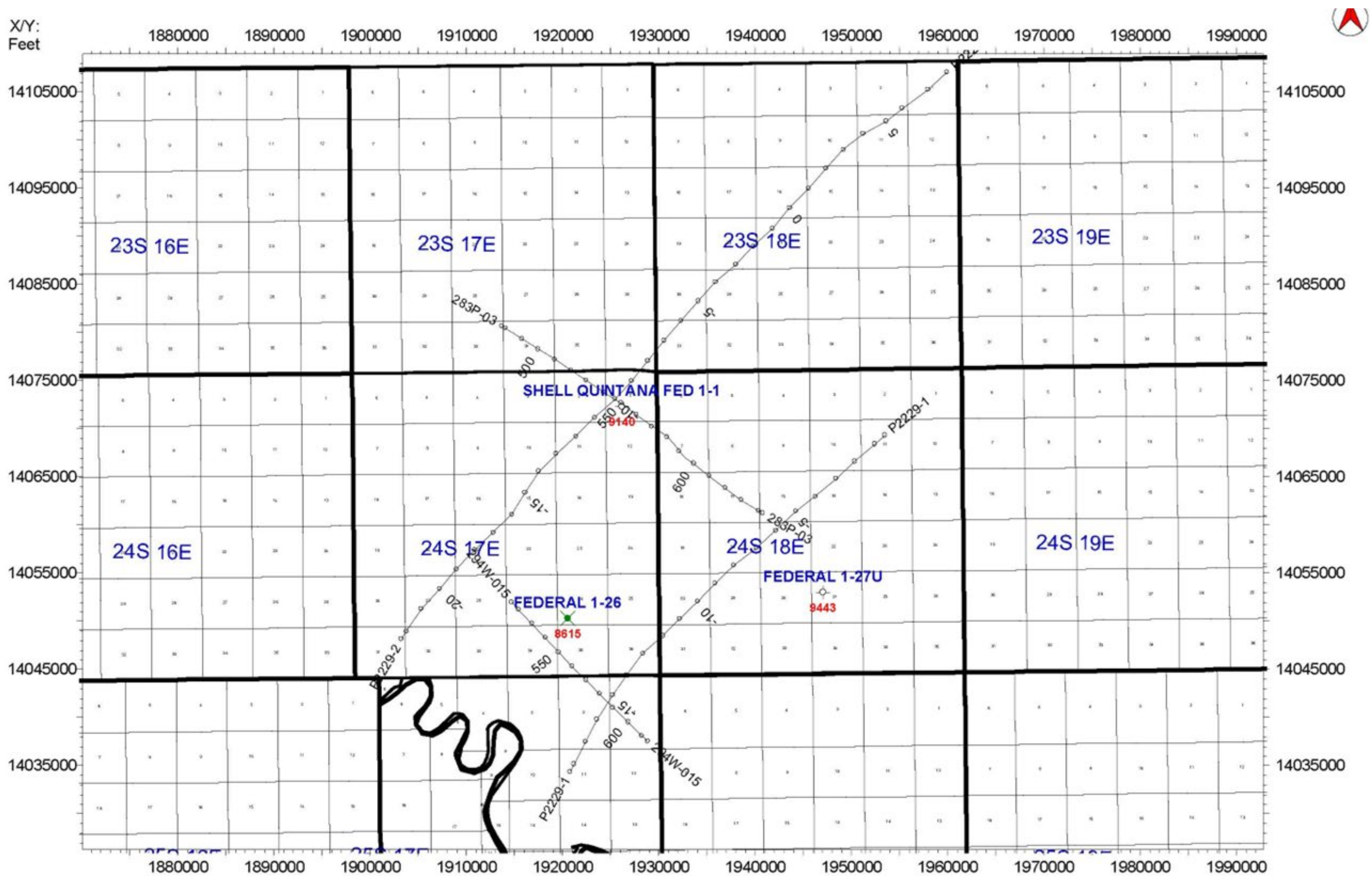


Figure 9-1. Seismic Lines Location Map

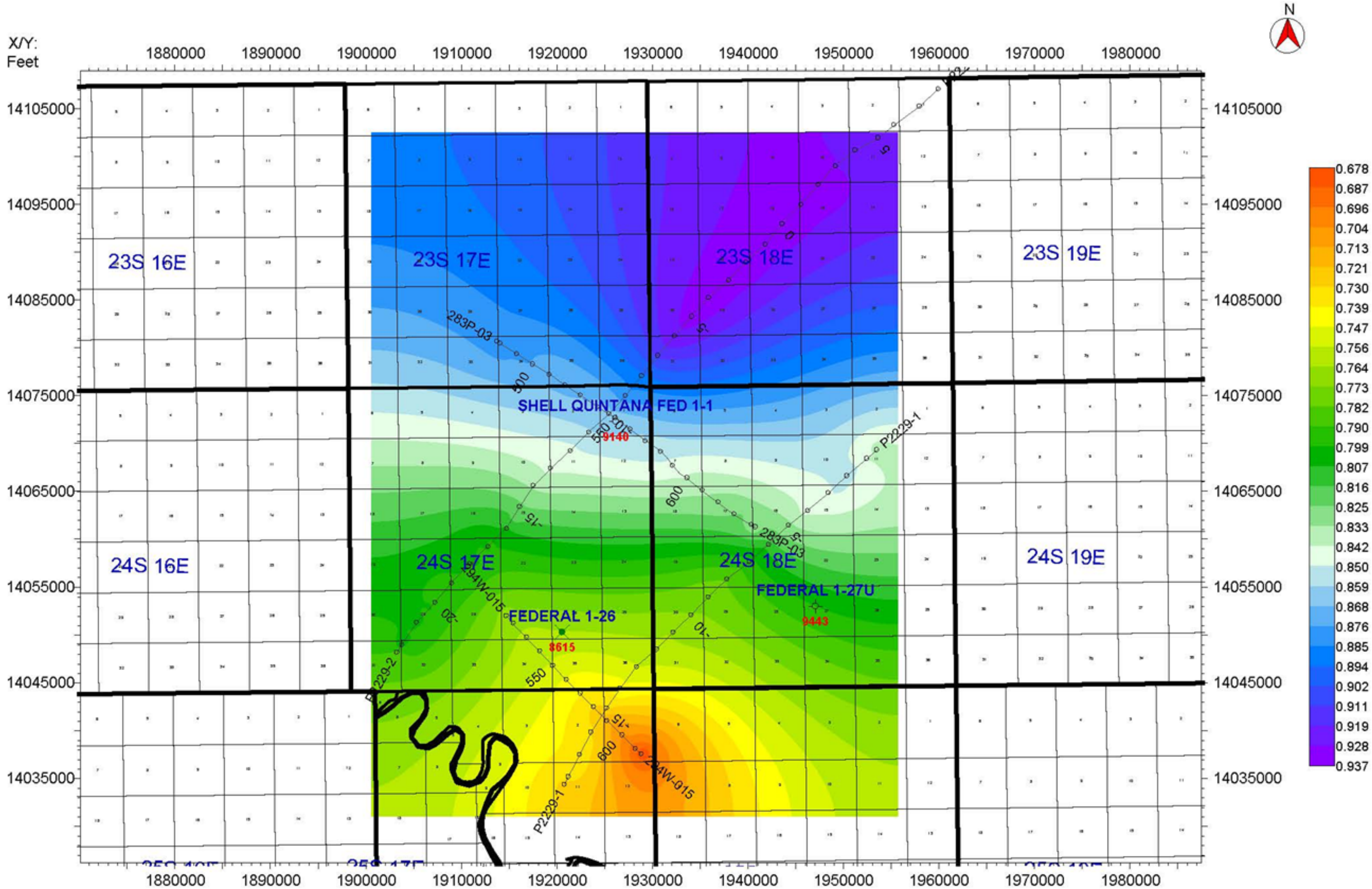
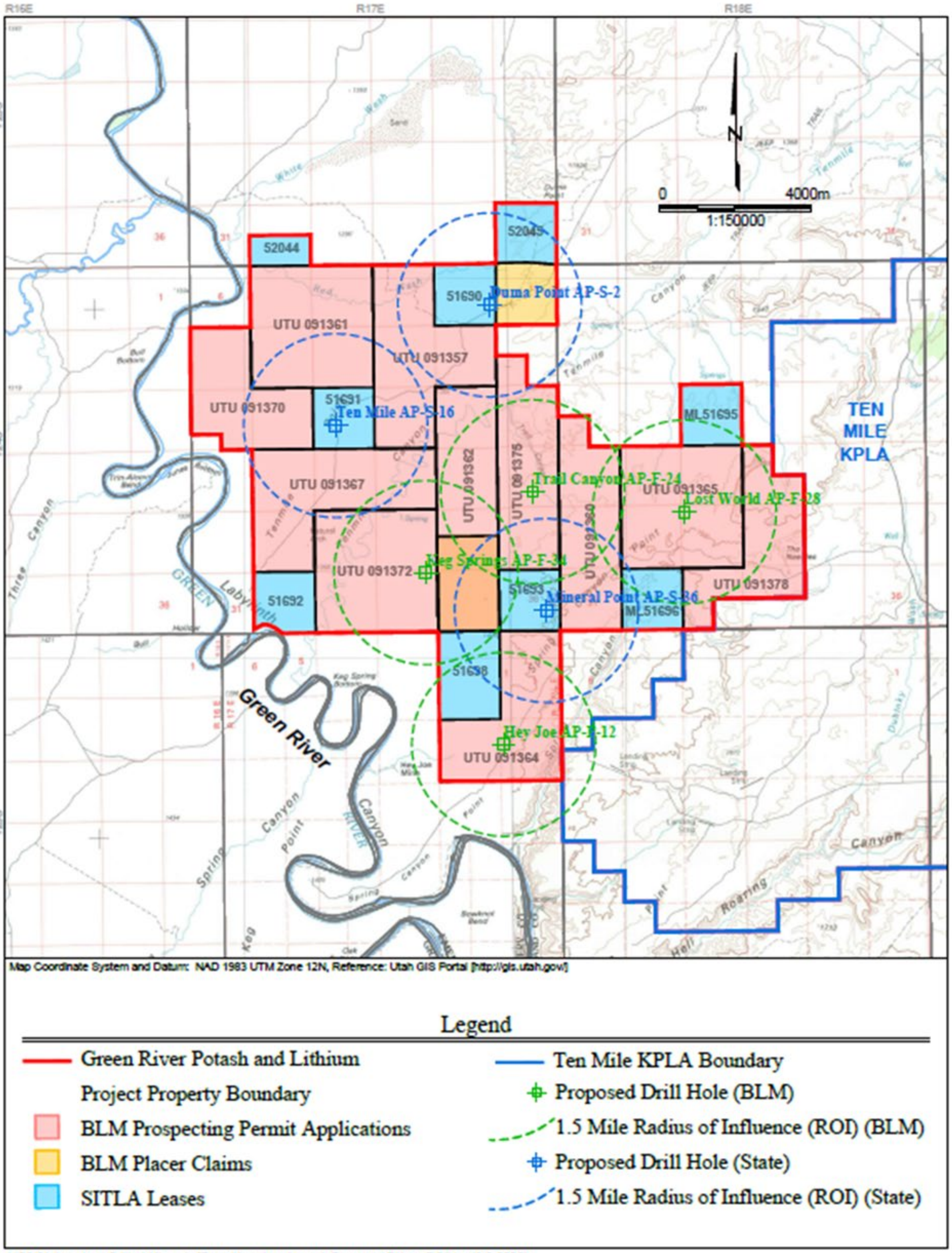


Figure 9-2. Time Structure Map on Top of Paradox Salts



1176-01 American Critical Minerals [Base Map.dwg; Layout: Proposed DHs w ROI]:bq (9-9-2025)

Figure 9-3. Proposed Drillholes and Radius of Influence Map

Table 9-2. American Critical Minerals Drillholes in 2022 Exploration Plan

No.	Identifier	Easting	Northing	Area	Status
1	Duma Point AP-S-2	586,371	4,289,499	ML51690	Formal Permit Received
2	Ten Mile AP-S-16	582,322	4,286,328	ML51691	Formal Permit Received
3	Mineral Point AP-S-36	587,865	4,281,468	ML51693	Formal Permit Received
4	Keg Springs AP-F-34	584,697	4,282,463	UTU 091372	Approved with Conditions*
5	Trail Canyon AP-F-24	587,499	4,284,587	UTU 091375	Approved with Conditions*
6	Lost World AP-F-28	591,489	4,284,059	UTU 091365	Approved with Conditions*
7	Hey Joe AP-F-12	586,742	4,277,951	UTU 091364	Approved with Conditions*

*authorized to proceed pending completion of bonding and compliance with the specified permit terms and stipulations.

10 DRILLING

The Property is an early-stage exploration property that has never been drilled for potash. Exploration core drilling for potash was conducted in the 1970s and early 1980s by Buttes Resource Company (Buttes) on what is today Reunion Potash Company's (Reunion) Ten Mile property, which borders the GRPLP Property to the east. Reunion advanced the Ten Mile project through a preliminary economic assessment based on favorable discoveries of sylvinite. Details of Reunion's potash resource remain proprietary.

While no potash drilling has been conducted on the Property, the Property and surrounding area have been the focus of hydrocarbon exploration since the early 1950s. Numerous oil and gas wells blanket the area. Hydrocarbon targets include various clastic horizons in the Paradox Formation and the underlying Mississippian Leadville dolomite.

A total of 4 wells have been drilled on the Property and a total of 33 regional wells have been reviewed (Figure 10-1). Holes were drilled vertically with conventional rotary equipment and typically staged down in diameter from 35 cm at the surface to 20 cm at the bottom. The majority of holes penetrated the potash beds of interest. Wireline elogs are publicly available for most wells through the UDOGM website (2012). The log suites vary by hole and typically include some combination of lithology, caliper, gamma ray, neutron density, neutron, resistivity, and sonic logs.

The basis for exploration work completed to date has been evaluation of oil and gas records to determine the presence of potash as well as literature research. Oil and gas records are submitted and stored with the UDOGM and are made available for public use after a period of 2 years. Those records include downhole geophysical and drilling records. Potash, as well as salt and clastics, can be located and defined through the use of the elog suites. Gamma ray logs provide the principal information used in the location, identification, and evaluation of potash. Neutron, sonic, and density logs, in various combinations, can augment the analysis.

The Exploration Target developed in this Technical Report is based on the analysis and interpretation of the historical oil and gas well elogs available in the public domain. In 2011, the Utah Geological Survey (UGS) compiled a digital database of salt cycle correlations based on elogs from 174 wells covering the Paradox Basin in Utah (Massoth and Tripp 2011). The UGS followed the same industry-standard principles of log interpretation used in the development of the Exploration Target estimate in this Technical Report. While potash occurrences were noted in various wells, the UGS study did not quantify the thicknesses and grades of the potash beds.

10.1 Electrical Logs for Potash Definition

Downhole gamma ray logs in combination with sonic, neutron, density, and caliper logs may be used to identify the presence of potash. Naturally occurring radioactivity in the form of the ^{40}K isotope derived from the potassium in the potash beds give a characteristic signature that is used to correlate the different cycles as well as estimate grade. The correlation between gamma ray response and potassium content was chiefly advanced by Schlumberger, beginning in the 1960s with the interpretation of elogs in the Prairie Evaporite Formation in Saskatchewan. E. R. Crain, a Schlumberger geophysicist, furthered this work and related log response to apparent K_2O content, the customary unit of the potash industry. The established methodology developed by Schlumberger calculates K_2O% combining gamma ray American Petroleum Institute (API) units and correcting to hole diameter (from caliper logs) and mud weight (Figure 10-1). Used in combination with the other logs, mineralogy may be determined. Experience has shown good agreement between the estimation when compared with assay but cannot be considered certifiable in a resource assessment. Agapito refers here to an $eK_2O\%$, an estimated rather than an assayed grade.

Elogs may be influenced by any number of factors including rock type influences, initial calibration, logging speed, temperature, borehole fluid type, and mud weight.

Caliper logging provides an indication of wash-out which may indicate the presence of very soluble minerals, i.e. sylvinite or carnallite. A gamma reading in a washed-out zone may be attenuated due to the increased hole diameter. A more complex combined mineralogy may give responses resulting in misinterpretation.

Borehole Compensated Sonic is in current use and helps to eliminate effects of hole size change. The formation density log measures electron density, which is closely related to true bulk density and is expressed in modern wells as ρu, density units in grams per cubic centimeter (g/cc). It is influenced by rock matrix density, porosity, and pore fluid density. They must be run in an uncased hole.

Neutron logs are generally used in the oil industry to define and determine zones of porosity by responding to the amount of formation hydrogen present. It is expressed as "effective porosity," the porosity which contains fluids. Neutron logs may be used with more than one type of porosity log (%) for greater accuracy in determining lithology. Historical logs are in API units (counts per second) and are calibrated to limestone or sandstone in a "clean" environment with oil- or water-filled pores (Schlumberger 1968).

Typical readings of log responses for evaporite minerals are shown in Table 10-1.

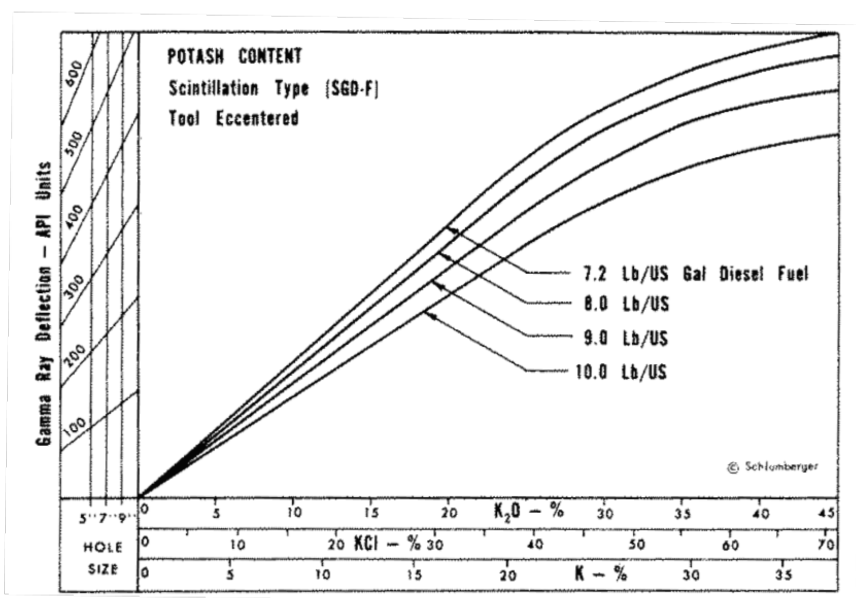


Figure 10-1. Empirical Chart Relating Gamma Ray Deflection to Potassium Content (after Schlumberger 1991; best available image)

Table 10-1. Geophysical Values for Evaporite Minerals (after Schlumberger 1991)

Mineral	Composition	Specific Gravity (g/cc)	Log Density (g/cc)	Sonic (msec/ft)	Neutron (θN)	GNT (θN)	Gamma (API)	K_20 (%)
Anhydrite	$CaSO_4$	2.96	3.0	50	0	0	0	0
Carnallite	$KCl•MgCl_2•6H_2O$	1.61	1.6	78	65	65	200	17
Gypsum	$CaSO_4•2H_2O$	2.32	2.4	52	49		0	0
Halite	NaCl	2.17	2.0	67	0		0	0
Kainite	$MgSO_4.KCl•3H_2O$	2.13	1.1		45		225	18.9
Langbeinite	$K_2SO_4•2MgO_4$	2.83	2.8	52	0		275	22.6
Polyhalite	$K2SO_4•MgSO_4.2CaSO_4•2H_2O$	2.78	2.8	57.5	15		180	15.5
Sylvite	KCl	1.98	1.9	74	0		500	63
Calcite	$CaCO_3$	2.71	2.7	47.5	0		0	0
Dolomite	$CaMg(CaO_3)_2$	2.87	2.9	43.5	4		0	0
Limestone		2.54	2.5	62	10		5–10	0
Dolomite		2.68	2.7	58	13.5		10–20	0
Shale			2.2–2.8	70–150	25–60		80–140	0

Notes:
msec/ft = millisecond per foot
θN = apparent limestone porosity from a neutron log
GNT = gamma ray/neutron tool
API = American Petroleum Institute

10.2 Potash Picks from Electric Logs

The suites of geophysical logs for the wells used in the interpretation are found in Table 10-2. Thirty-three holes were evaluated (Figure 7-4). Of those 33, four are located on the Property and shown in bold in the following tables.

10.2.1 Cycle 5

Cycle 5 has the most prospective potash zone on the Property; grades are moderate (Table 10-3). The best intersection of grade and thickness centers on Shell Quintana Fed 1-1 with a composited 15.2% eK_2O and a thickness of 5.9 m. Quintana Fed 1-1 is just outside the western boundary in the northern part of the Property. Ten Mile 1-26 with a composited 16.4% eK_2O and a 3.4-m thickness is in the central part of the property.

Potash 5 has peak grades over 22.1% K_2O and composited grades of 12.7% to 15.9% K_2O in four holes in the central and western part of the Property, where this area trends basinward and towards the syncline. The cluster of holes near the zero elevation mark have grades that increase from 12.7% to 15.9% eK_2O, from Federal 1-20 to Cane Creek Federal 7-1 to Kane Springs Fed 10-1. McRae Federal-1 has no scale on the log to estimate grade but appears to be similar in thickness and amplitude to the neighboring Fed-1. There is no correlation of grade to overall Cycle 5 salt bed thickness (Figure 10-2).

Table 10-2. List of Drillholes and Elogs used for Interpretation

	Elogs Available/Analyzed										
Hole Name	Gamma Ray	Caliper	Sonic	NPHI (CNL)	DRHO	DPHI	Density (RHOB)	Porosity	Neutron	Resistivity	Spontaneous Potential
Salt Wash North Unit 1	x	x		x	x		x				
Floy Unit 1	x	x	x								
Govt 18-2	x	x	x	x	x		x				
CF&I 22-16	x	x	x								
CF&I 42-16	x	x	x								
Govt Smoot 3	x	x	x								
Govt Smoot 2	x	x	x								
Fed 1-15	x	x		x	x		x				
State 1-16A	x	x		x	x		x				
Jakey's Ridge	x	x	x							x	
Mt Fuel Federal 1-21	x	x	x								
Gorman Fed 1	x	x	x	x	x		x				
Federal DE-1	x	x	x								
Federal Skyline 1A SW	x	x		x	x		x				
Quintana Fed 1-1	**x**	**x**	**x**		**x**		**x**				
Gruvers Mesa 1	x	x							x	x	x
Federal 1-27U	**x**	**x**	**x**					**x**			
Ten Mile 1-26	**x**	**x**		**x**	**x**		**x**				
Gruvers Mesa 2	x	x							x		x
Cane Creek Federal 7-1	x		x								x
Kane Springs Fed 10-1	x		x								
McRae Federal 1	x			x							
Federal 1-20	x	x	x		x		x				
Bowknot Unit 43-20	x	x	x						x	x	
Kane Springs Fed 28-1	x	x	x					x			
Fed Bowknot 1	x								x		
Quintana Fed 1-35	**x**	**x**	**x**		**x**		**x**				
Mineral Canyon Federal 1-3	x	x	x	x		x					
Mineral Point Fed 1-4	x	x	x								
Tidewater 74-11	x			x							
Mineral Point USA 1	x	x							x	x	x
Big Flat 4	x	x	x						x		
Kane Springs Fed 20-1	x	x	x								

Dt = change in time; NPHI = neutron porosity; CNL = compensated neutron log; RHOB = bulk density from a lith-density or formation compensated density log; DRHO = density correction; DPHI = corrected density; **bold typeface indicates wells on Property.**

Table 10-3. Cycle 5 Picks

Hole Name	Salt 5			Potash 5				
	From (m)	To (m)	Thickness (m)	From (m)	To (m)	Thickness (m)	Peak eK_2O (%)	Composite eK_2O (%)
Salt Wash North Unit 1	1,887.9	1,913.2	25.3	1,888.1	NP			
Floy Unit 1	1,934.1	1,965.8	31.7	1,934.6	1,940.5	5.9	11.8	7.0
Govt 18-2	1,789.8	1,816.6	26.8	1,789.8	1,792.8	3.0	23.9	16.9
CF&I 22-16	1,827.1	1,862.2	35.1	1,829.1	1,836.4	7.3	12.6	6.0
CF&I 42-16	1,860.8	1,892.5	31.7	1,861.9	1,866.7	4.9	12.6	5.7
Govt Smoot 3				IC				
Govt Smoot 2	1,885.3	1,933.0	47.7	1,885.3	1,892.7	7.3	18.2	10.0
Fed 1-15	1,770.1	1,802.3	32.2	1,770.6	1,771.8	1.2	3.6	3.0
State 1-16A	1,823.3	1,853.2	29.9	1,823.3	1,826.4	3.0	13.5	8.6
Jakey's Ridge	1,715.9	1,751.5	35.7	1,718.2	1,720.6	2.4	5.9	5.4
MT Fuel Federal 1-21	2,036.4	2,079.0	42.7	2,036.5	2,050.2	13.7	10.4	6.0
Gorman Fed 1	1,851.2	1,884.0	32.8	1,851.2	NP			
Federal DE-1	2,015.6	2,042.0	26.4	2,015.9	2,020.8	4.9	13.9	10.7
Federal Skyline 1A SW	1,803.8	1,837.0	33.2	1,805.8	NP			
Quintana Fed 1-1	**1,762.7**	**1,798.9**	**36.3**	**1,763.3**	**1,769.2**	**5.9**	**22.1**	**15.2**
Gruvers Mesa 1	1,723.6	1,758.5	34.9	1,731.3	NP			
Federal 1-27U	**1,821.6**	**1,861.0**	**39.3**	**1,827.4**	**1,830.8**	**3.4**	**10.2**	**6.8**
Ten Mile 1-26	**1,636.8**	**1,671.8**	**35.1**	**1,637.7**	**1,641.0**	**3.4**	**21.3**	**16.4**
Gruvers Mesa 2	1,465.3	1,499.9	34.6	1,470.4	NP			
Cane Creek Federal 7-1	1,694.1	1,727.6	33.5	1,694.1	1,698.7	4.6	21.2	13.5
Kane Springs Fed 10-1	1,618.9	1,658.6	39.6	1,620.0	1,625.2	5.2	22.1	15.9
McRae Federal 1	1,594.1	1,630.7	36.6	1,594.1	1,599.3	5.2	*No grade estimate*	
Federal 1-20	1,415.8	1,464.1	48.3	1,416.4	1,419.3	2.9	19.0	12.7
Bowknot Unit 43-20	1,268.6	1,304.2	35.7	1,268.9	1,269.9	1.1	4.7	3.5
Kane Springs Fed 28-1	1,401.0	1,442.8	41.8	1,401.0	1,409.9	8.8	11.7	6.0
Fed Bowknot 1	1,332.6	1,367.8	35.2	1,336.1	1,343.3	7.2	1.6	1.3
Quintana Fed 1-35	**1,414.6**	**1,466.4**	**51.8**	**1,419.0**	**NP**			
Mineral Canyon Federal 1-3	1,394.3	1,450.7	56.4	1,394.6	1,398.4	3.8	17.6	12.4
Mineral Point Fed 1-4	1,346.9	1,385.3	38.4	1,347.2	1,349.3	2.1	4.3	4.2
Tidewater 74-11	1,415.8	1,450.8	35.1	1,415.8	1,420.4	4.6	*No grade estimate*	
Mineral Point USA 1	1,357.9	1,392.9	35.1	1,362.2	NP			
Big Flat 4	1,508.8	1,540.0	31.2	1,508.8	1,510.9	2.1	4.7	4.4
Kane Springs Fed 20-1	1,447.5	1,491.4	43.9	1,449.6	1,452.4	2.7	3.8	3.6

NP = not present; IC = incomplete; **bold typeface indicates wells on Property**

Not mineralized/very low grade (shaded cells: Potash 5 values for Fed 1-15, Fed Bowknot 1, Big Flat 4)

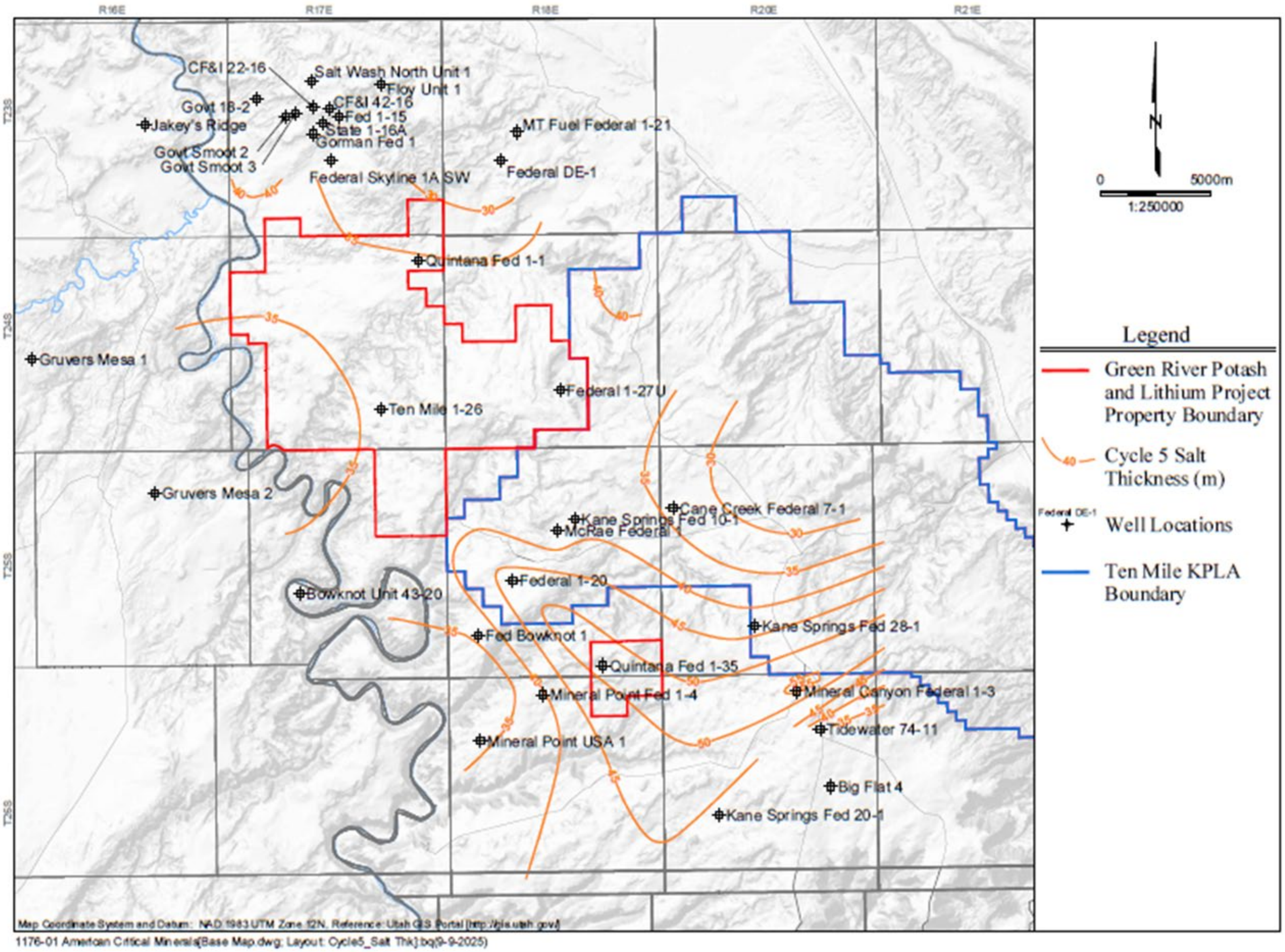


Figure 10-2. Cycle 5 Salt Thickness

The mineralization in Potash 5 on the wells located on the Property is sylvinite. Carnallite mixed with sylvinite is interpreted in a few holes north of the Property, specifically CF&I 22-16, CF&I 42-16, Govt. Smoot-2 and Mt. Fuel Federal 1-21. Notably, these holes show greater thicknesses of interpreted mineralization, which is an indication of carnallite due to the volume of water in the mineral structure of carnallite versus sylvinite. There are a few holes, also north of the Property, where the grades of potash exceed 10% and are as high as 16.9% K_2O; they are notably interpreted to be sylvinite in Govt 18-2, Quintana Fed 1-1, and Fed DE-1. As such, the thickness of the mineralized zones is attenuated.

In some cases, the sylvinite appears to be just below Clastic 4, with no intermediate salt bed. This was seen in Ten Mile 1-26 as well as in the aforementioned cluster of holes in the center portion of the Property, notably potash with higher grades. This is a little unusual and would suggest a rapid sediment influx that terminated potash precipitation rather than a more gradual transgression to a more open marine environment. This could indicate where the siliciclastic unit directly above acted as a magnesium sink where post-depositional alteration of carnallite to sylvinite occurred.

Grade decreases to the south and southeast from the center part of the Property and, in some cases, Potash 5 is not present.

A structure map at the base of Cycle 5 shows the bed gently dipping to the north on a strike approximately east-west (Figure 10-3).

10.2.2 Cycle 9

Cycle 9 is usually carnallitic and shows no appreciable mineralization on the subject property (Table 10-4). The carnallitic nature of Potash 9 is best illustrated as seen by the extreme thickness (16.5 m) in Federal 1-27U.

10.2.3 Cycle 13

Thickness and grade for Potash 13 was estimated for four separate beds and composited over the entire interval (Table 10-5). Although estimated grades were as high as 14.3% eK_2O north of the Property, overall the unit showed composited grades of less than 4.1% over thicknesses from 7.9 to 22.3 m. Typically mineralization was interpreted to be sylvinite but carnallite was sometimes below the sylvinite in Beds A and B and found in Beds C and D on the south and southwestern area on and near the Property boundary. Composited thicknesses were up to 85.5 ft in the center of the Property.

10.2.4 Cycle 18

Potash 18 is not always seen on the Property and, where present, only Potash 18 Upper is seen, and it is interpreted to be sylvinite (Table 10-6). In the central portion of the Property in Cane Creek Federal 7-1 and Kane Springs Fed 10-1, the estimated grade is 13.9% and 14.4% eK_2O, with peak estimated grade of 20.6% and thicknesses of 2.0 m and 1.4 m, respectively. McRae Federal-1 has no scale on the log to estimate grade but appears to be similar in thickness and amplitude to the neighboring Fed 10-1.

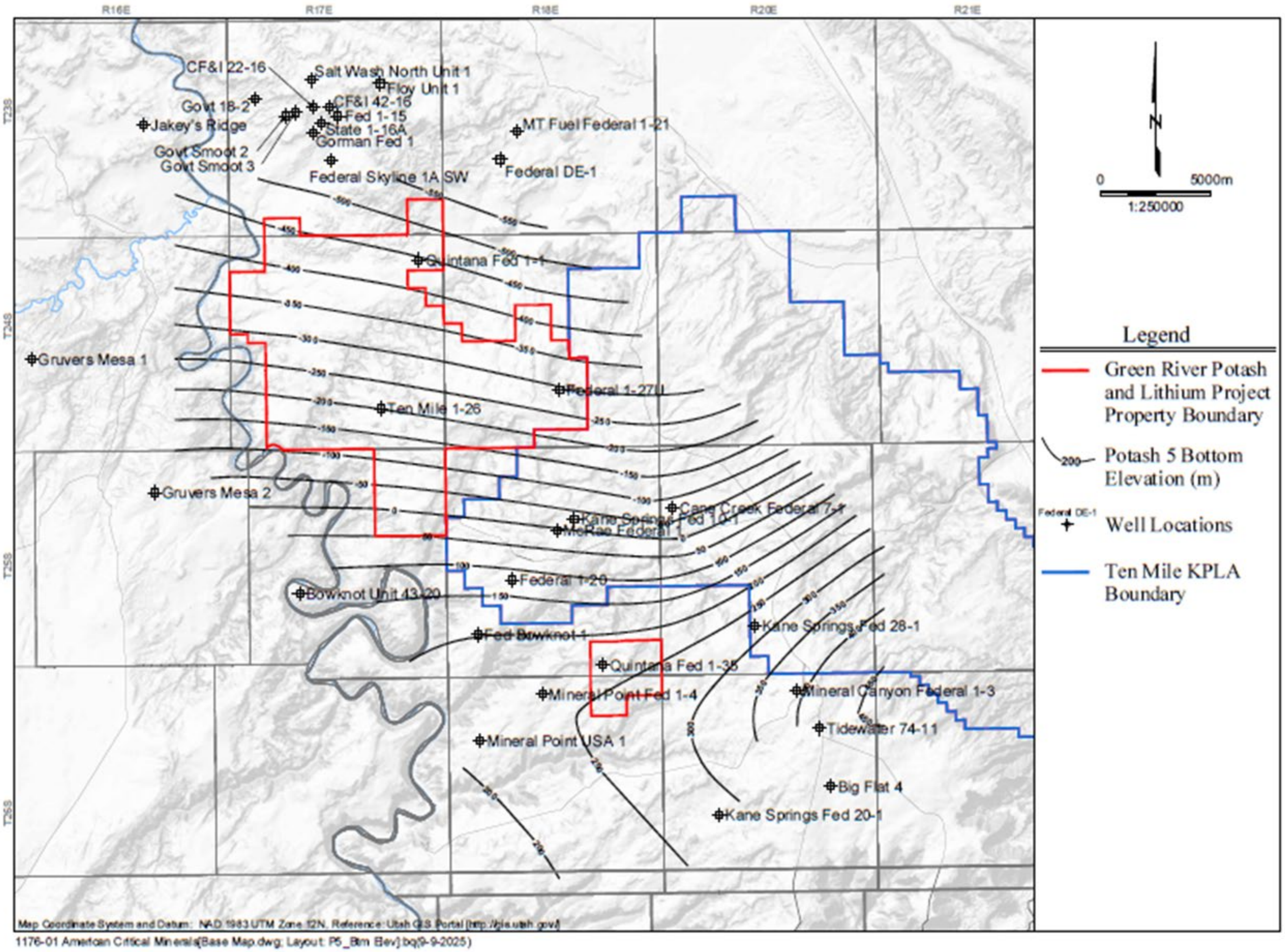


Figure 10-3. Potash 5 Structure

Table 10-4. Cycle 9 Picks

Hole Name	Potash 9				
	From (m)	To (m)	Thickness (m)	Peak eK_2O (%)	Composite eK_2O (%)
Salt Wash North Unit 1	2,072.8	NP			
Floy Unit 1	2,132.1	2,133.4	1.4	2.4	1.9
Govt 18-2	1,953.3	NP			
CF&I 22-16	2,005.6	NP			
CF&I 42-16	2,042.2	NP			
Govt Smoot 3	*Invalid log*				
Govt Smoot 2	2,085.4	NP			
Fed 1-15	1,969.0	NP			
State 1-16A	2,000.9	NP			
Jakey's Ridge	1,870.6	1,874.5	4.0	7.4	5.5
MT Fuel Federal 1-21	2,244.2	2,245.2	0.9	2.2	2.2
Gorman Fed 1	2,045.8	NP			
Federal DE-1	2,188.5	2,189.5	1.1	3.1	2.5
Federal Skyline 1A SW	1,986.4	NP			
Quintana Fed 1-1	**1,967.5**	**NP**			
Gruvers Mesa 1	1,875.4	NP			
Federal 1-27U	**2,029.7**	**2,046.1**	**16.5**	**2.3**	**1.6**
Ten Mile 1-26	**1,821.0**	**NP**			
Gruvers Mesa 2	1,601.7	NP			
Cane Creek Federal 7-1	1,953.0	1,954.2	1.2	3.1	2.3
Kane Springs Fed 10-1	1,811.4	NP			
McRae Federal 1					
Federal 1-20	1,628.9	NP			
Bowknot Unit 43-20	1,417.9	NP			
Kane Springs Fed 28-1	1,610.9	NP			
Fed Bowknot 1	1,515.8	NP			
Quintana Fed 1-35	1,637.4	NP			
Mineral Canyon Federal 1-3	1,664.4	NP			
Mineral Point Fed 1-4	1,546.3	1,549.1	2.9	3.6	2.3
Tidewater 74-11					
Mineral Point USA 1	1,527.7	NP			
Big Flat 4	1,676.4	NP			
Kane Springs Fed 20-1	1,636.8	NP			

NP = not present; **bold typeface indicates wells on Property**

(shaded) *Not mineralized/very low grade*

Table 10-5. Cycle 13 Picks

Hole Name	Potash 13A					Potash 13B					Potash 13C					Potash 13D					Potash 13 Totals	
	From (m)	To (m)	Thickness (m)	Peak eK_2O (%)	Composite eK_2O (%)	From (m)	To (m)	Thickness (m)	Peak eK_2O (%)	Composite eK_2O (%)	From (m)	To (m)	Thickness (m)	Peak eK_2O (%)	Composite eK_2O (%)	From (m)	To (m)	Thickness (m)	Peak eK_2O (%)	Composite eK_2O (%)	Thickness (m)	Composite eK_2O (%)
Salt Wash North Unit 1	2,222.6	2,226.4	3.8	6.6	4.3	0.0	0.0	0.0			0.0	0.0	0.0								3.8	4.3
Floy Unit 1	2,278.4	2,281.0	2.6	4.0	3.3	2,288.1	2,291.5	3.4	4.4	3.2	2,294.5	2,296.7	2.1	9.6	6.8						8.1	4.2
Govt 18-2	2,110.4	2,113.6	3.2	5.2	4.0	2,115.2	2,116.7	1.5	7.5	6.0	2,118.5	2,121.1	2.6	9.0	6.5	2,128.1	2,130.7	2.6	13.9	8.6	9.9	6.2
CF&I 22-16	2,118.5	2,126.7	8.2	7.1	4.9	2,137.6	2,144.9	7.3	8.4	4.1											15.5	4.5
CF&I 42-16	2,171.9	2,172.9	1.1	3.9	3.1	2,178.3	2,183.3	5.0	4.9	2.9	2,189.4	2,195.3	5.9	8.6	5.0						12.0	4.0
Govt Smoot 3																						
Govt Smoot 2	2,189.1	2,193.0	4.0	5.9	5.4	2,195.9	2,202.2	6.2	6.1	4.8	2,203.9	2,207.4	3.5	7.8	5.3	2,210.9	2,213.8	2.9	14.3	9.3	16.6	5.8
Fed 1-15	2,104.9	2,117.0	12.0	7.2	3.6	2,120.0	2,122.9	2.9	10.4	6.5											14.9	4.2
State 1-16A	2,127.4	2,131.6	4.3	6.2	3.7	2,134.1	2,135.0	0.9	5.6	4.6	2,136.5	2,140.0	3.5	5.4	4.0	2,143.2	2,145.6	2.4	13.0	9.0	11.1	5.0
Jakey's Ridge	2,017.9	2,019.8	1.8	8.3	7.3	2,027.7	2,037.4	9.8	6.5	3.7											11.6	4.3
MT Fuel Federal 1-21	2,379.3	2,387.3	8.1	5.7	4.6																8.1	4.6
Gorman Fed 1	2,179.0	2,184.3	5.3	4.7	3.7																5.3	3.7
Federal DE-1	2,336.1	2,342.5	6.4	5.8	4.6	2,351.7	2,358.1	6.4	6.7	3.9	2,373.6	2,378.0	4.4	5.4	3.9	2,385.7	2,390.2	4.6	6.8	5.7	21.8	4.5
Federal Skyline 1A SW	2,140.2	NP																			0.0	0.0
Quintana Fed 1-1	**2,102.1**	**2,109.2**	**7.2**	**4.5**	**3.3**	**2,109.2**	**2,112.0**	**2.7**	**4.2**	**3.2**	**2,112.1**	**2,118.7**	**6.6**	**5.3**	**3.3**	**2,120.3**	**2,127.5**	**7.2**	**9.3**	**4.6**	**23.6**	**3.7**
Gruvers Mesa 1	1,962.8	1,967.2	4.4	9.4	6.0	1,972.2	1,975.7	3.5	3.6	2.3											7.9	4.3
Federal 1-27U	**2,162.6**	**2,166.1**	**3.5**	**3.9**	**3.2**	**2,167.6**	**2,170.2**	**2.6**	**3.2**	**2.4**	**2,170.2**	**2,175.5**	**5.3**	**4.5**	**3.2**	**2,179.6**	**2,181.6**	**2.0**	**6.3**	**4.5**	**13.4**	**3.2**
Ten Mile 1-26	**1,950.7**	**1,956.8**	**6.1**	**7.0**	**4.4**	**1,956.8**	**1,961.8**	**5.0**	**5.6**	**3.3**	**1,961.8**	**1,971.3**	**9.4**	**5.8**	**3.6**	**1,974.2**	**1,979.7**	**5.5**	**11.5**	**4.6**	**26.1**	**4.0**
Gruvers Mesa 2	1,675.6	1,680.2	4.6	12.3	6.5	1,680.2	1,685.8	5.6	16.1	5.3	1,685.8	1,694.2	8.4	15.1	6.1	0.0	0.0	0.0			18.6	5.9
Cane Creek Federal 7-1	2,129.0	2,133.4	4.4	5.5	3.6	2,133.4	2,136.8	3.4	5.2	3.4	2,136.8	2,143.2	6.4	5.3	3.8	2,145.5	2,150.1	4.6	9.7	5.6	18.7	4.1
Kane Springs Fed 10-1	1,940.1	1,947.2	7.2	4.3	3.2	1,947.2	1,950.0	2.7	4.0	3.0	1,950.0	1,955.7	5.8	4.7	3.2	1,957.7	1,961.8	4.1	7.3	5.1	19.8	3.6
McRae Federal 1	1,926.3	1,929.4	3.0	*No grade estimate*		1,930.3	1,934.0	3.7	*No grade estimate*		1,954.7	1,959.9	5.2	*No grade estimate*							11.9	
Federal 1-20	1,751.2	1,754.7	3.5	3.2	1.8	1,756.7	1,761.9	5.2	7.4	3.8	1,761.9	1,766.8	4.9	8.8	3.4	1,766.8	1,771.0	4.3	1.9	1.7	17.8	2.8
Bowknot Unit 43-20	1,506.0	1,509.7	3.7	13.4	7.5	1,509.7	1,513.8	4.1	9.4	5.7	1,516.5	1,523.5	7.0	4.2	2.4						14.8	4.6
Kane Springs Fed 28-1	1,743.0	1,748.5	5.5	5.4	4.7	1,750.9	1,752.1	1.2	5.2	4.3	1,757.5	1,764.5	7.0	5.2	4.2	1,767.7	1,770.9	3.2	6.5	5.2	16.9	4.5
Fed Bowknot 1	1,659.9	1,665.9	5.9	4.4	2.7	1,665.9	1,673.5	7.6	6.4	3.7	1,676.9	1,682.5	5.6	7.0	4.1	*Clastic Based on Neutron*					19.2	3.5
Quintana Fed 1-35	**1,748.3**	**1,753.8**	**5.5**	**4.3**	**2.9**	**1,753.8**	**1,757.0**	**3.2**	**3.7**	**2.8**	**1,757.0**	**1,763.9**	**6.9**	**4.4**	**3.1**	**1,766.6**	**1,770.9**	**4.3**	**7.7**	**3.7**	**19.8**	**3.1**
Mineral Canyon Federal 1-3	1,805.0	1,810.1	5.0	3.8	2.8	1,810.1	1,814.3	4.3	3.7	2.5	1,814.3	1,818.1	3.8	4.9	3.2	1,820.7	1,825.9	5.2	10.2	5.5	18.3	3.6
Mineral Point Fed 1-4	1,682.3	1,686.8	4.4	4.0	2.6	1,686.8	1,690.9	4.1	4.4	2.5	1,690.9	1,698.5	7.6	5.2	3.0	1,702.5	1,708.7	6.2	9.6	5.1	22.4	3.4
Tidewater 74-11	1,842.5	1,847.1	4.6	*No grade estimate*		1,851.7	1,856.2	4.6	*No grade estimate*		1,859.3	1,867.8	8.5	*No grade estimate*							17.7	
Mineral Point USA 1	1,626.6	1,628.5	2.0	2.8	2.1	1,631.9	1,640.6	8.7	5.2	2.4	1,640.6	1,645.9	5.3	2.8	2.3						16.0	2.4
Big Flat 4	1,806.2	1,815.4	9.1	4.3	2.9	1,818.7	1,822.7	4.0	6.3	3.5											13.1	3.1
Kane Springs Fed 20-1	1,768.3	1,769.8	1.5	3.8	2.4	1,769.8	1,773.0	3.2	7.5	4.2	1,773.0	1,778.7	5.6	8.1	4.2	1,782.5	1,786.4	4.0	9.7	6.0	14.3	4.5

NP = not present; **bold typeface indicates wells on Property**

Not mineralized/very low grade (light blue shading) *Carnallite* (green shading)

Table 10-6. Cycle 18 Picks

Hole Name	Potash 18A				
	From (m)	To (m)	Thickness (m)	Peak K_2O (%)	Composite eK_2O (%)
Salt Wash North Unit 1	2,353.1	NP			
Floy Unit 1	2,435.4	2,436.7	1.4	13.9	9.9
Govt 18-2	2,264.7	NP			
CF&I 22-16	2,260.4	NP			
CF&I 42-16	2,334.8	NP			
Govt Smoot 3	0.0	0.0	0.0	*Invalid log*	
Govt Smoot 2	2,317.2	2,318.2	0.9	2.9	2.8
Fed 1-15	2,250.6	NP			
State 1-16A	2,277.8	NP			
Jakey's Ridge	2,161.0	NP			
MT Fuel Federal 1-21	2,589.9	2,593.5	3.7	18.9	13.5
Gorman Fed 1	2,305.1	2,305.8	0.8	2.3	2.0
Federal DE-1	2,552.9	2,554.5	1.7	17.9	11.9
Federal Skyline 1A SW	2,273.0	NP			
Quintana Fed 1-1	**2,267.7**	**NP**			
Gruvers Mesa 1	2,097.9	NP			
Federal 1-27U	**2,329.3**	**2,338.0**	**8.7**	**1.7**	**1.5**
Ten Mile 1-26	2,133.0	NP			
Gruvers Mesa 2	1,838.6	1,839.9	1.4	3.5	3.2
Cane Creek Federal 7-1	2,303.4	2,305.4	2.0	20.6	13.9
Kane Springs Fed 10-1	2,099.5	2,100.8	1.4	20.6	14.4
McRae Federal 1	2,144.3	2,147.3	3.0	*No grade estimate*	
Federal 1-20	1,909.6	NP			
Bowknot Unit 43-20	1,640.9	NP			
Kane Springs Fed 28-1	1,954.7	1,957.1	2.4	14.5	9.7
Fed Bowknot 1	1,826.2	NP			
Quintana Fed 1-35	**1,944.3**	**1,949.3**	**5.0**	**2.4**	**1.8**
Mineral Canyon Federal 1-3	1,979.4	1,982.3	2.9	18.3	9.7
Mineral Point Fed 1-4	1,862.3	NP			
Tidewater 74-11	2,094.6	2,100.1	5.5	*No grade estimate*	
Mineral Point USA 1	1,787.7	NP			
Big Flat 4	1,983.0	1,984.4	1.4	13.8	9.9
Kane Springs Fed 20-1	1,949.8	1,952.2	2.4	12.8	10.2

NP = not present; **bold typeface indicates wells on Property**

Not mineralized/very low grade (shaded rows)

11 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

No samples have been collected or evaluated on the subject Property.

12 DATA VERIFICATION

The well records obtained are of varying vintages, and scanning for digital output could compound error in the records. Well records are available as Tag Image File Format (TIFF) files and, in many cases, originate from photocopied records from as far back as the 1950s. In many cases, the wells have an incomplete suite of logs making confirmation of grade and mineralogy difficult or impossible. In addition, some logs lack scale or a scale that can be used for proper evaluation.

Most of the data available for the subject Property area were collected during the exploration for hydrocarbons, and evidence for the occurrence of potash is generally indirect in the form of geophysical logs from oil and gas wells. Well log data and reports are available online through the UDOGM website (2012). UDOGM notes that "historical information may not be 100% complete or accurate. Much of the data for older activity comes from a previously used database where the tracking of historical information was not a function. Information for work done prior to 1999 has the greatest potential for error." Drillhole locations and base maps are available through the Utah State Geographic Information Database (USGID 2012).

A site visit was made to the Property by Agapito's previous personnel Mr. Leo Gilbride and Ms. Vanessa Santos on 25 April 2012. The property was inspected along paved, gravel, and dirt roads and two historical holes of interest were located, Shell Quintana Fed 1-35 (Figure 12-1) and Ten Mile 1-26 (Figures 12-2 and 12-3).

It is the opinion of the QPs that the data used, including records obtained from the UDOGM database, are adequate for the definition of the NI 43-101 Exploration Target defined in this report.

Figure 12-1. Shell Quintana Fed 1-35 Well Cap

Figure 12-2. Ten Mile 1-26 Well Pump

Figure 12-3. Ten Mile 1-26 Well Pump Placard

13 Mineral Processing and Metallurgical Testing

The Property is an exploration property. No mineral processing or metallurgical testing has been conducted to date.

14 MINERAL RESOURCE ESTIMATES

The Paradox Basin hosts up to 29 evaporative cycles with as many as 11 of economic interest for potash mining containing sylvinite or carnallite. On the Property, potash mineralization occurs in Potash (bed) 5 and Potash 18, while trace amounts of potash also occur in Potash 6, 9, 13, and 16. Potash 5 is the principal bed of interest with potential for solution mining. Potash 18 is considered a secondary bed of interest. Potash 5 is classified as an NI 43-101 Exploration Target based on elog data from historical oil and gas wells, as described in Section 10—Drilling. Numerical estimates of potential mineralization are based on indirect indicators of potash grade and thickness derived from the elogs.

The clastic zones that occur between the evaporite cycles of the Paradox Formation and the underlying Leadville Limestone are known to host laterally extensive, highly saturated brine reservoirs. These brines are of significant economic interest due to their elevated concentrations of lithium and bromine, which make them attractive for commercial brine mining. On the subject property, clastic zones 17, 19, 29, 31, and 33, along with the Leadville Limestone, have been identified as priority target formations. These units have been classified as NI 43-101 Exploration Targets, supported by subsurface data derived from historical oil and gas well logs, drilling records, and assays, as well as published geological and hydrochemical data from adjacent properties within the Paradox Basin.

No core or assay data exist on the Property.

The 2012 Potash Exploration Target estimates were prepared by Leo J. Gilbride, P.E., a former employee of Agapito and member of the Society for Mining, Metallurgy, and Exploration, Inc. The current QP, Dr. Biao Qiu, has updated the potash Exploration Target estimates to reflect revised project boundaries and has also estimated the lithium and bromine Exploration Targets for the property. The effective date of the Exploration Target estimates is 30 September 2025.

14.1 Definitions and Applicable Standards

For this report and in accordance with NI 43-101, the definitions of "resource" and "reserve" apply as published in the Canadian Institute of Mining, Metallurgy, and Petroleum (CIM) Definition Standards on Mineral Resources and Mineral Reserves (CIMDS) that were adopted 19 May 2014 (CIM 2014). In this standard, a **Mineral Resource** is defined as

> *… a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.*
>
> *The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors*

Mineral Resources are subdivided into classes of measured, indicated, and inferred, with the level of confidence reducing with each class, respectively. Potash resources are reported as in situ tonnage and are not adjusted for mining losses or mining recovery.

A **Mineral Reserve** is defined as "… the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study…"

CIMDS states that for the reporting of industrial mineral resources and reserves, issuers are to use the above definitions. CIM provides further guidance on reporting practice under Best Practice Guidelines for Industrial Minerals adopted by CIM Council on 29 November 2019 (CIM 2019).

NI 43-101 Part 2.3.1(a) restricts disclosure of "the quantity, grade, or metal or mineral content of a deposit that has not been categorized as an inferred mineral resource, an indicated mineral resource, a measured mineral resource, a probable mineral reserve, or a proven mineral reserve." Despite Part 2.3.1(a), Part 2.3.2 allows an issuer to disclose in writing the potential quantity and grade, expressed as ranges, of a target for further exploration if the disclosure (a) states with equal prominence that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource; and (b) states the basis on which the disclosed potential quantity and grade has been determined. Such disclosure is referred to as an **Exploration Target**.

14.2 Base Case Mining Scenario

A Mineral Resource must meet the minimum requirement of "reasonable prospects for economic extraction." This requires the concurrent collection and storage of preliminary economic, mining, metallurgical, environmental, legal, and social data and other information for use in the estimation of Mineral Resource and Mineral Reserve. As a minimum, reasonable prospects for economic extraction must consider a base-case mining scenario for the purpose of establishing geologic cutoffs for defining the Mineral Resource. An Exploration Target assumes potential exists for identifying reasonable prospects for economic extraction as exploration matures, although such prospects are not assured.

The GRPLP Property is reasonably assumed to have prospects for economic extraction by solution mining if favorable geologic conditions are discovered. The uppermost potash mineralization averages 1,700 m deep and is presently considered too deep to be economically attractive by conventional underground mining; however, it is comparable to other mainstream potash solution-mining operations throughout the industry.

Solution mining involves the circulation of heated water through wells to either selectively or non-selectively dissolve the targeted potash beds. Solution mining produces caverns in the potash beds that are generally supported by fluid pressure during the extraction phase. The success of solution mining depends upon numerous geologic factors, including potash grade, bed thickness, bed dip, the presence of structural disturbance such as faults or folding, insolubles content in the potash bed, ground temperature, depth, and the time-dependent deformation characteristics of the potash and host salt.

Subsurface brines hosted within the clastic zones and the Leadville Formation are proposed to be extracted through a network of production wells and lifted to the surface for processing, where lithium and bromine would be selectively recovered. Following processing, the depleted brine would be returned to the same aquifer system via a series of strategically located injection wells, sited at sufficient distance from the production well network to reduce hydraulic interference. The production wells that are drilled for injecting water and recovering potash-rich brine can also be utilized for lithium/bromine brine extraction activities. By integrating these functions into a shared well network, operators can reduce the number of wells required, streamline infrastructure needs, and significantly lower both drilling and operating costs. The actual recoverable quantities of lithium and bromine will be governed by the hydraulic characteristics of the clastic zones and the Leadville Formation, as well as the design and efficiency of the production and injection well fields. A critical limitation on both sustainable production rates and overall project life is the need to control the migration, or "breakthrough," of reinjected depleted brine into the production wells. Such breakthrough would dilute the lithium and bromine concentrations of the extracted brine, potentially lowering grades below economically viable cutoff thresholds.

14.3 Methodology

The estimation of exploration targets for both solid potash ore deposits and lithium- or bromine-bearing brine resources requires a methodology that integrates geological, geophysical, and geochemical data to define the potential scale and grade of the resource. For potash, the process involves delineating stratigraphic horizons, correlating ore zones from drillhole and seismic data, and applying bulk density and grade assumptions to derive tonnage ranges. In contrast, lithium and bromine brine targets are evaluated through hydrogeological modeling, aquifer geometry definition, and chemical assays of formation waters to assess recoverable volumes and concentrations. Together, these approaches provide a framework for generating transparent, consistent, and justifiable exploration target ranges in accordance with industry reporting standards.

14.3.1 Potash Exploration Target - Methodology

Potash bed correlations were developed from a total of 33 historical oil and gas wells, as described in Section 10—Drilling. Top and bottom picks and bed composite eK_2O grades were estimated and compiled in a computer-based Microsoft Excel™ spreadsheet for resource modeling. Potash bed thicknesses and grades were spatially modeled across the Property using Carlson Mining 2022 Software™ Geology Module (Carlson, 2022), an industry-recognized commercial-grade geologic and mine modeling software system that runs within AutoDesk Inc.'s AutoCAD 2022©.

The potash beds of interest were gridded into single layers of 50-m-square blocks of variable vertical thickness representing the local thickness of the respective potash bed. Block thickness and eK_2O grade values were estimated from neighboring wells (point data) using an Approximation Base on Smoothing (ABOS) modeling algorithm. ABOS is a method for modeling values of irregularly spaced points by using a continuous function dependent on numerical tensioning and smoothing parameters. The ABOS method is well-suited to modeling tabular deposits with widely spaced holes and produces results comparable to other common methods such as kriging, radial basis functions, or minimum curvature.

Grids were also created for top and bottom elevations of each bed based on well intercept elevations and using the ABOS method. Seam conformance was invoked in the ABOS algorithm which forced the prescribed sequence of stratigraphy at all grid locations, thus improving structural accuracy in areas with weaker drillhole control. Bed overburden (depth) and interburden thickness grids were created by subtracting the respective grids. The ground surface elevation grid used for the depth calculations was generated from a commercially available USGS 7.5-minute digital elevation model.

In-place potash tonnages were calculated using an in situ bulk density of 2.08 tonnes per cubic meter (t/m^3) typical for sylvinite.

14.3.2 Lithium/Bromine Brine Exploration Target - Methodology

Exploration Target estimates were prepared independently for six distinct geologic target units. These units include the Leadville Formation and Paradox Basin clastic zones 17, 19, 29, 31, and 33. While the current evaluation is limited to these intervals, it is recognized that additional Paradox clastic zones may also be prospective and could be incorporated into future testing and assessments. The Exploration Target for lithium/Bromine was calculated using a volumetric approach, expressed as: bulk rock volume × effective porosity × lithium/Bromine concentration in brine. For each geologic unit, a range of porosity values and lithium/Bromine concentrations was applied to capture geological uncertainty and variability in brine chemistry, thereby producing a range of potential lithium brine volumes and grades.

The volumes of the individual geologic units were modeled using a stepwise methodology designed to integrate historical well control with regional geologic interpretations. First, historical oil and gas well logs located within and around the GRPLP project area were compiled and digitized in Carlson software to establish a consistent subsurface dataset. Geologic tops were then interpreted using regional cross-sections, with published stratigraphic picks from Massoth (2012) serving as a reference framework for identifying clastic zone tops. These reference tops were subsequently correlated to well data within the GRPLP acreage to refine local stratigraphic control. For each geologic interval, isopach thickness maps were generated in Carlson software to capture lateral variations in unit thickness. Finally, total rock volumes were calculated by applying the GRPLP lease boundary polygons over the isopach grids, ensuring that the modeled volumes accurately reflected only the acreage under evaluation.

The in situ brine water volume for each geologic unit was derived by applying both maximum and minimum average porosity values to the previously calculated bulk rock volumes. This approach establishes a range of potential pore volumes and accounts for geological uncertainty. The calculation assumes that the effective pore space within each unit is fully saturated with brine, consistent with subsurface hydrogeologic conditions. Because porosity is the primary control on storage capacity, variability in effective porosity directly influences the estimated brine volumes. Available porosity datasets differ among the geologic units, reflecting variations in depositional facies, diagenetic alteration, and the quantity and quality of subsurface data. As a result, each unit was modeled using porosity parameters most representative of its geologic characteristics and data availability.

At present, no direct brine samples from Paradox clastic zones have been collected within the GRPLP area. To address this data gap, lithium/bromine concentration estimates were informed by results from nearby projects where drilling, well re-entry, and brine sampling have been undertaken by Anson Resources and Mandrake Resources. These regional datasets provide the most relevant analog information and were used to establish average lithium/bromine concentration values applicable to the GRPLP target units. In addition, historical lithium/bromine brine concentration data published by Mayhew and Heylmun (1965) were incorporated into the analysis to broaden the dataset and provide context for regional variability. Together, these modern and historical datasets were used to define representative lithium/bromine concentration ranges for use in Exploration Target estimation.

It is important to recognize that the lithium concentration values applied to the GRPLP are derived entirely from analog datasets and historical literature, rather than direct sampling within the project boundaries. As such, there is inherent uncertainty in assuming that the geochemical characteristics of brines from adjacent projects or regional studies are representative of the GRPLP clastic zones. Factors such as local variations in lithology, permeability, fluid flow pathways, and geochemical evolution of the brines may result in concentrations that differ significantly from the adopted averages. In addition, some of the historical data sources are several decades old and may not fully reflect modern sampling and analytical standards. These limitations should be considered when interpreting the Exploration Target estimates, which are conceptual in nature and subject to modification as new drilling and brine sampling data become available from within the GRPLP area.

14.4 Potash Exploration Target Estimates

The Exploration Target estimate for potash in the Green River Project is based on key stratigraphic horizons within the Paradox Basin. Potash beds 5, 18, 13, 9, 16, and 6, reported in order of importance, were modeled individually using available geologic and historical data to evaluate their potential tonnage and grade.

14.4.1 Potash 5

Potash 5 is an Exploration Target projected to contain between 500 and 950 Mt of sylvinite at an average grade ranging between 12% and 18% eK_2O (19% and 29% eKCl), assuming a bed thickness cutoff of 2.0 m and a composite grade cutoff of 10% eK_2O. Detailed engineering feasibility and economic analysis may or may not require higher cutoffs at the Mineral Resource or Mineral Reserve stage depending upon specific project evaluation criteria. The Potash 5 Exploration Target is summarized in Table 14-1.

Table 14-1. Potash 5 Exploration Target (effective date 30 September 2025)

Average grade (% eK_2O)	12	–	18
Average grade (% eKCl)	19	–	29
Average thickness (m)	2.5	–	5
Tonnage (million tonnes)	500	–	950

† Target cutoffs: 10% eK_2O bed composite grade and 2.0 m bed thickness.

A baseline estimate of tonnes and grade was calculated using the Carlson geologic model. Modeled bed thickness and eK_2O grade contours for Potash 5 are shown in Figure 14-1. The Exploration Target is stated in terms of ranges that surround the model computations. The ranges reflect geologic uncertainty at this preliminary exploration stage, as well as the inherent uncertainty associated with thickness and grade estimated from elogs.

The lower and upper limits of the tonnage range consider the variability in bed thickness and presence of potash mineralization that may be encountered. While the oil and gas well data indicate strong bed continuity across the property, thinning or thickening between wells is possible. Faults, collapse features, and other structural disturbances can sterilize resource locally.

The occurrence of sylvinite can be affected by basement carbonate mounds, algal reefs, post-depositional gypsum dewatering, groundwater leaching along fault conduits, and by other complex depositional and structural mechanisms. Carnallite and halite intrusions are known to occur in the Paradox Basin and can degrade or eliminate sylvinite resource on a localized or regional basis. The loss of grade or introduction of problematic mineralogy associated with these intrusions or transitions zones can substantially affect resource tonnes. Exploration drilling is required to define the presence or absence of these features and the thickness and grade variability of the deposit before a Mineral Resource can be claimed.

Well data indicate that Potash 5 is continuous across the Property and of thickest and highest grade in the central and north-central part of the Property. Regional information suggests that attractive occurrences of Potash 5 persist to the east beyond the Property boundary. Contrary to this, Well Federal 1-27U indicates a decrease in grade near the northeastern Property boundary. Exploration is especially warranted in the northeast area to substantiate the resource and investigate the counter-trending lower grade in Well Federal 1-27U.

14.4.2 Potash 18

Potash 18 is a regionally extensive potash bed prominent in the central and southern Paradox Basin. Potash 18 persists as far north as the Ten Mile area. Potash 18 (sylvinite) occurs at the extreme southeast margin of the Property where it is estimated to be 2 to 3 m thick and average between 10% and 20% eK_2O (16% and 32% eKCl). Elogs suggest that the bed decreases in grade and eventually transitions to halite to the west. Modeled bed thickness and eK_2O grade contours for Potash 18 are shown in Figure 14-2.

The limited property acreage to the east where Potash 18 is most prevalent precludes the estimation of an Exploration Target at present.

14.4.3 Potash 13

Potash 13 is a regionally extensive potash bed that attains its greatest thickness in the northern part of the Paradox Basin. Potash 13 achieves a maximal thickness on the Property of 26 m in well Ten Mile 1-26. Potash 13 is projected to average on the order of 20 m thick across the Property based on preliminary geologic modeling. Modeled contours of bed thickness and K_2O grade are shown in Figure 14-3.

Potash 13 is low grade, ranging between about 2% and 6% eK_2O in wells across the Property. Within the bed itself, local grades were observed to climb as high as 16% eK_2O over small intervals, typically 0.3 m or less. No instances were observed of composite grades reaching or exceeding 10% eK_2O over mineable thicknesses. Potash 13 is primarily sylvinitic, but carnallitic at its base in multiple holes.

Potash 13 is projected to contain between 9 and 12 billion tonnes of potash averaging between 2% and 5% eK_2O (3% and 8% eKCl). Potash 13 is presently considered subgrade for solution mining and, accordingly, is excluded as an Exploration Target. Limited exploration drilling of Potash 13 is warranted to confirm expectations.

14.4.4 Potash 9

Potash 9 is characteristically a thin, high-grade potash bed which is solution mined at Intrepid's Moab Mine to the southeast. Potash 9 generally occurs as a thin, low-grade bed in seven holes located disparately across the Property. The bed grades to halite in the majority of holes on the Property. The strongest showing occurs in well Jakey's Ridge 34-15, 7 km northwest of the Property where Potash 9 is on the order of 4 m thick at a composite grade of 5% eK_2O (8% eKCl). An unusually thick (16 m), but very low grade (<2% eK_2O) occurrence of Potash 9 appears in well Federal 1-27U located in the northeast quadrant of the Property. Potash 9 is excluded as an Exploration Target.

14.4.5 Potash 16

Potash 16 appears absent on the Property but occurs in three neighboring wells located 3 to 5 km north-northeast of the Property. Potash thicknesses range from 3 to 9 m with composite grades ranging between 8% and 11% eK_2O (13% and 17% eKCl). Within the Property boundaries, Potash 16 is excluded as an Exploration Target, but may warrant exploration drilling if mineral holdings are extended to the north in the future.

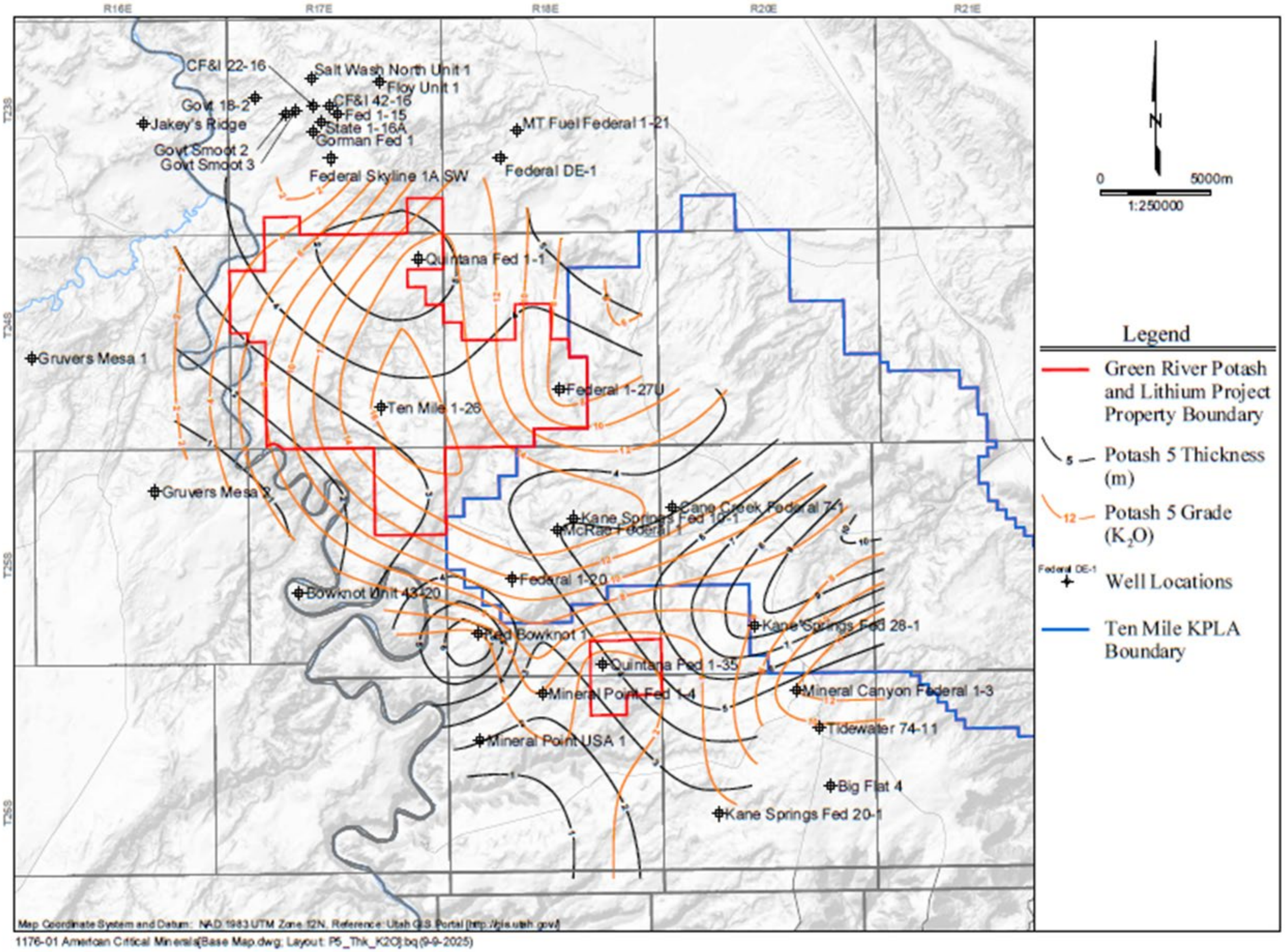


Figure 14-1. Potash 5 Modeled Bed Thickness and Grade Contours

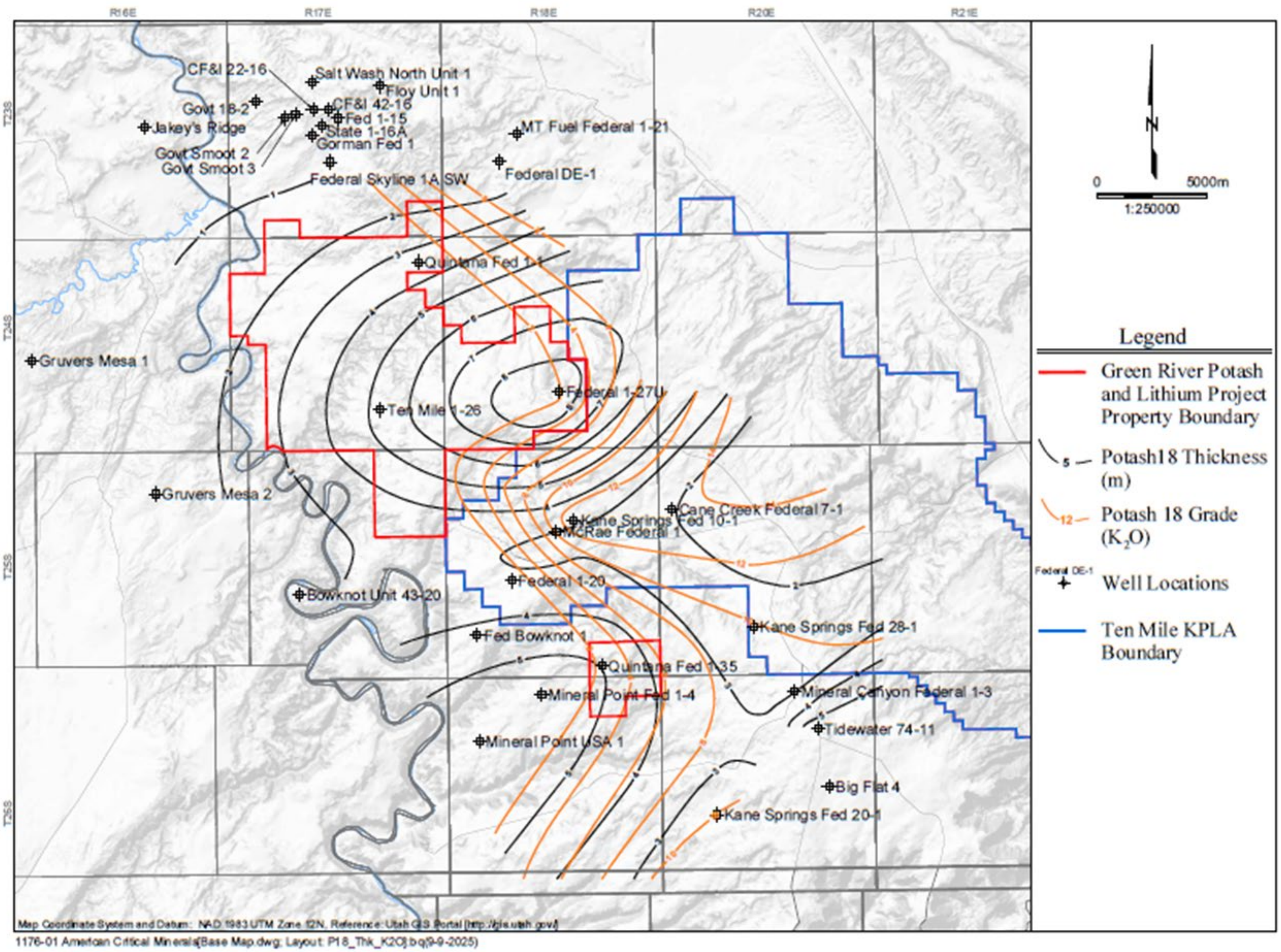


Figure 14-2. Potash 18 Modeled Bed Thickness and Grade Contours

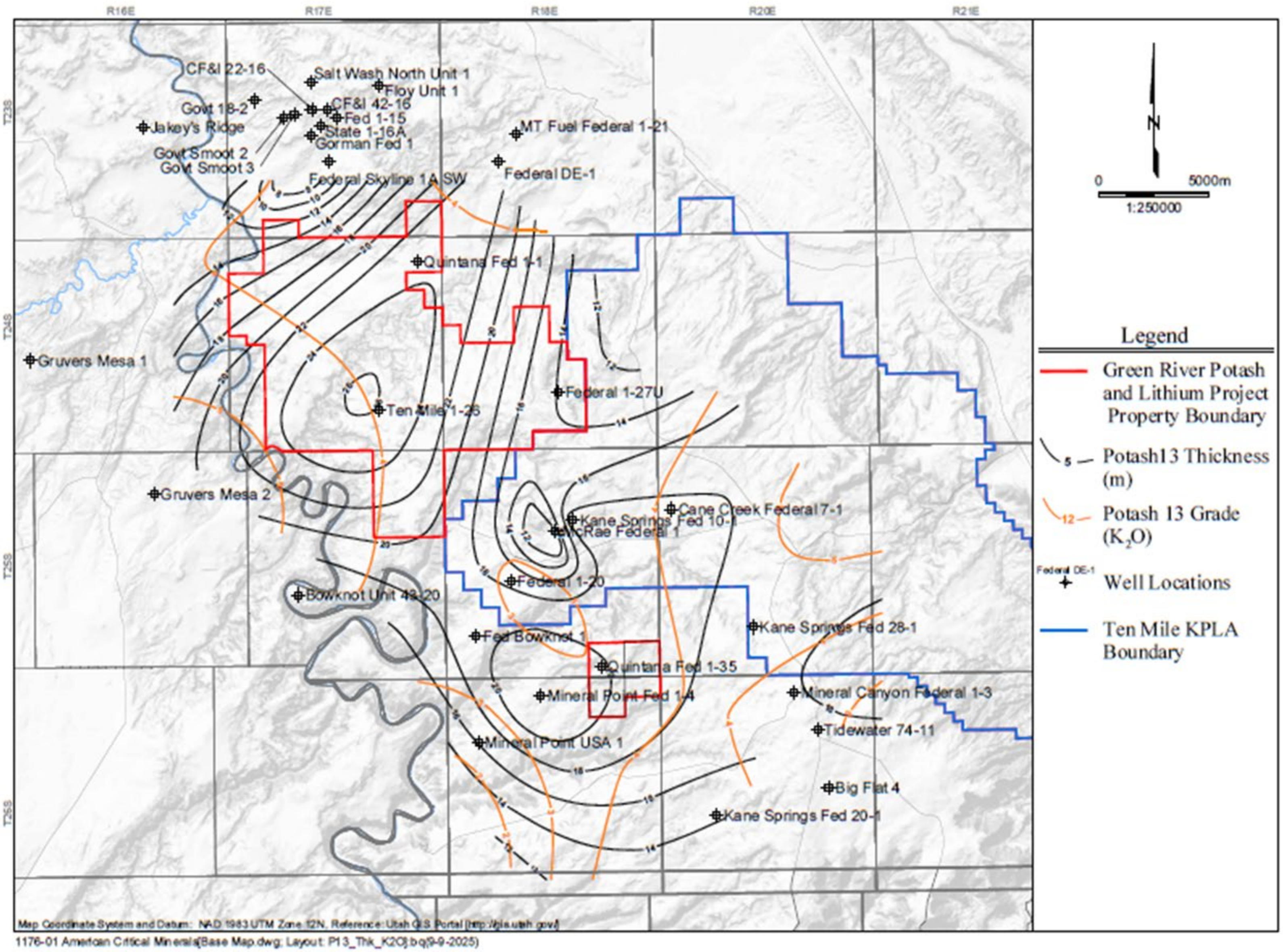


Figure 14-3. Potash 13 Modeled Bed Thickness and Grade Contours

14.4.6 Potash 6

Potash 6, referred to as the "Carnallite Marker" (Hite 1960), has great regional extent throughout the Paradox Basin and locally attains thicknesses of over 30 m. The bed consists principally of carnallite. Core from other areas in the Paradox Basin reveals that Potash 6 typically consists of carnallite occurring in thin bands interspersed with anhydrite laminae and halite, with minor amounts of the mineral kieserite. Hite (1982) described the potash content of Potash 6 as consistently low across the Paradox Basin, averaging on the order of 1.0% K_2O over its full interval. Potash 6 is considered too low grade to have economic potential and is excluded from an Exploration Target.

Carnallite is ordinarily considered an impurity in potash solution mining because it adversely affects the solubility of halite and sylvite. The presence of magnesium is unfavorable for K_2O recovery, and concentrations over 0.25% magnesium can impact plant performance and require special non-standard processing. Carnallite, while not mined in North America, is solution mined to limited extents in Europe and Africa. Carnallite is a low-grade source of K_2O compared to potash. Pure carnallite is equivalent to 17.0% K_2O compared to 63.0% K_2O for pure potash, for a ratio of 1:3.71. Carnallite also can be a source of magnesium.

Carnallite is distinguished from other potassium minerals in the geophysical logs by a distinctively low log density and/or high neutron porosity. Carnallite has the lowest specific gravity (1.6) relative to sylvite (2.0), halite (2.2), limestone (2.5), dolomite (2.6), anhydrite (3.0), and other minor potassium minerals (2.1 to 2.8) in the Paradox Formation. Mixtures of carnallite, sylvinite, kieserite ($MgSO_4 \cdot H_2O$), and other potassium minerals are common. Bed density can indicate the dominant mineral when density is biased to one extreme or the other. Intermediate densities can indicate mixed mineralogy. Minor impurities generally cannot be identified from the electronic logs. Chemical analysis of core is normally required to accurately determine the relative fraction of the mineral constituents.

14.5 Lithium and Bromine Exploration Target Estimates

The Exploration Target estimate for lithium and bromine is based on brine-hosting intervals within the Paradox Basin. Key geologic units, including the Leadville Formation and Paradox clastic zones 17, 19, 29, 31, and 33, were evaluated individually using available porosity, volume, and brine chemistry data to establish potential ranges for contained lithium and bromine. Figures 14-4 ~ 14-9 show the thickness contours of the Leadville Formation and Paradox clastic zones 17, 19, 29, 31, and 33.

The Pennsylvanian-age Paradox Formation comprises thick, regionally extensive halite units interbedded with evaporitic anhydrite and potash horizons, as well as clastic and carbonate intervals including sandstone, shale, limestone, and dolomite. Core data published from Anson Resources' Paradox Lithium and Green River Lithium Project areas provide direct petrophysical and lithological measurements that can be correlated to the clastic zones identified within the GRPLP lease area. These datasets confirm the lateral continuity and stratigraphic equivalency of the principal reservoir intervals. Table 14-2 summarizes drillholes from adjacent project areas that report porosity values, which are considered representative values for the GRPLP clastic zones. Effective porosity ranges of 10.3–17.1%, 11.0–18.4%, 9.9–16.4%, and 12.4–20.7% were assigned to Clastic Zones 17, 19, 29, 31, and 33, respectively, with the reported values representing average effective porosity estimates for each interval.

The Mississippian Leadville Formation is a marine carbonate sequence that is typically composed of limestone and dolomite. Because the Leadville currently and historically has been a target for hydrocarbons, CO_2 and helium, there is abundant well data available. At GRPLP location, the Leadville has been shown to have excellent vuggy porosity and good reservoir deliverability. A range of 5.1% - 8.5% average effective porosity was used for the Mississippian Leadville Formation.

Table 14-3 provides a summary of drillholes from adjacent project areas reporting lithium and bromine concentrations, which are interpreted as representative values for the GRPLP clastic zones and the Mississippian Leadville Formation. Average lithium concentration ranges of 42.9–71.6 ppm, 86.1–143.4 ppm, 76.1–126.9 ppm, 129.8–216.3 ppm, 47.6–79.4 ppm, and 120.8–201.3 ppm were applied to Clastic Zones 17, 19, 29, 31, 33, and the Mississippian interval, respectively. Corresponding average bromine concentration ranges of 2,551–4,251 ppm, 2,333–3,888 ppm, 2,508–4,180 ppm, 2,587–4,311 ppm, 2,194–3,656 ppm, and 2,845–4,741 ppm were assigned to the same stratigraphic units in order.

Table 14-2. List of Drillholes with Porosity Data from Adjacent Project Areas

Well Name	Clastic Zone	Depth From (m)	Depth To (m)	Thickness (m)	Total Porosity	Effective Porosity
Skyline	17	1642.3	1652.0	9.8	19.3%	13.7%
Skyline	19	1695.0	1706.0	11.0	20.8%	14.7%
Cane Creek 32-1	29	1873.9	1880.6	6.7	21.0%	14.9%
Skyline	29	1878.0	1884.0	6.0	16.0%	11.4%
Big Flat Unit 1	31	1813.6	1819.7	6.1	26.0%	18.4%
Big Flat 2	31	1914.1	1917.2	3.0	21.0%	14.9%
Big Flat 3	31	1871.5	1874.5	3.0	31.0%	22.0%
Big Flat Unit 6	31	1896.5	1899.5	3.0	30.0%	21.3%
Skyline	31	1895.9	1906.2	10.4	20.1%	14.2%
Long Canyon 1	31	1833.7	1839.8	6.1	24.2%	17.2%
Utah State 16	31	1854.7	1862.3	7.6	27.0%	19.2%
Matthew Fed 1	31	1716.0	1722.1	6.1	20.0%	14.2%
Mathew Fed 2	31	1837.9	1844.0	6.1	18.5%	13.1%
Gold Bar 1	31	2089.7	2094.0	4.3	20.0%	14.2%
Gold Bar 2	31	2158.0	2164.7	6.7	17.5%	12.4%
Coors	31	1926.3	1929.4	3.0	25.0%	17.7%
Bosydaba #1	Mississippian				8.5%	6.0%
No. 2 Long Canyon Unit	Mississippian	2238.0	2380.0	142.0	10.7%	7.6%

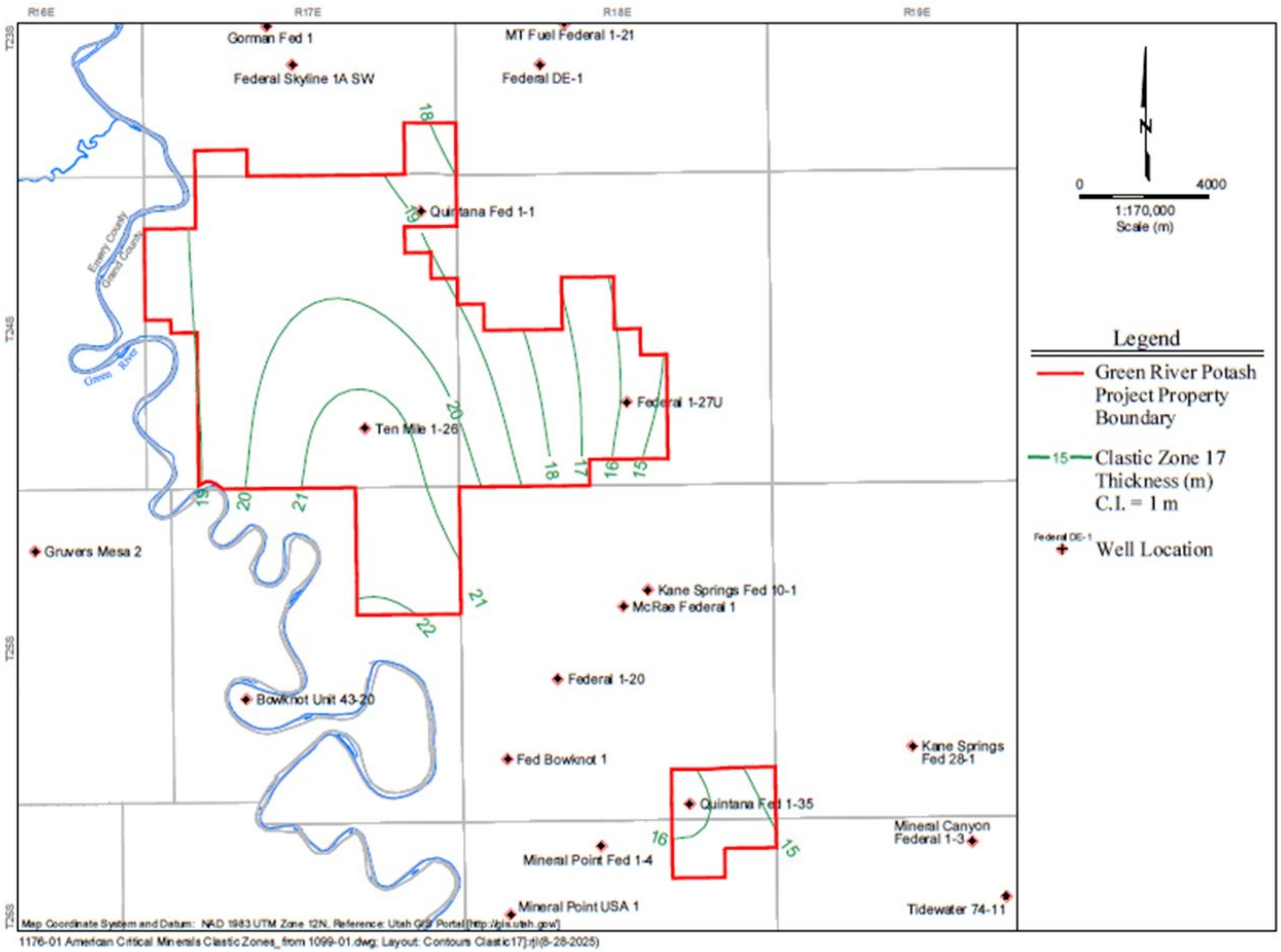


Figure 14-4. Clastic Zone Thickness Contours

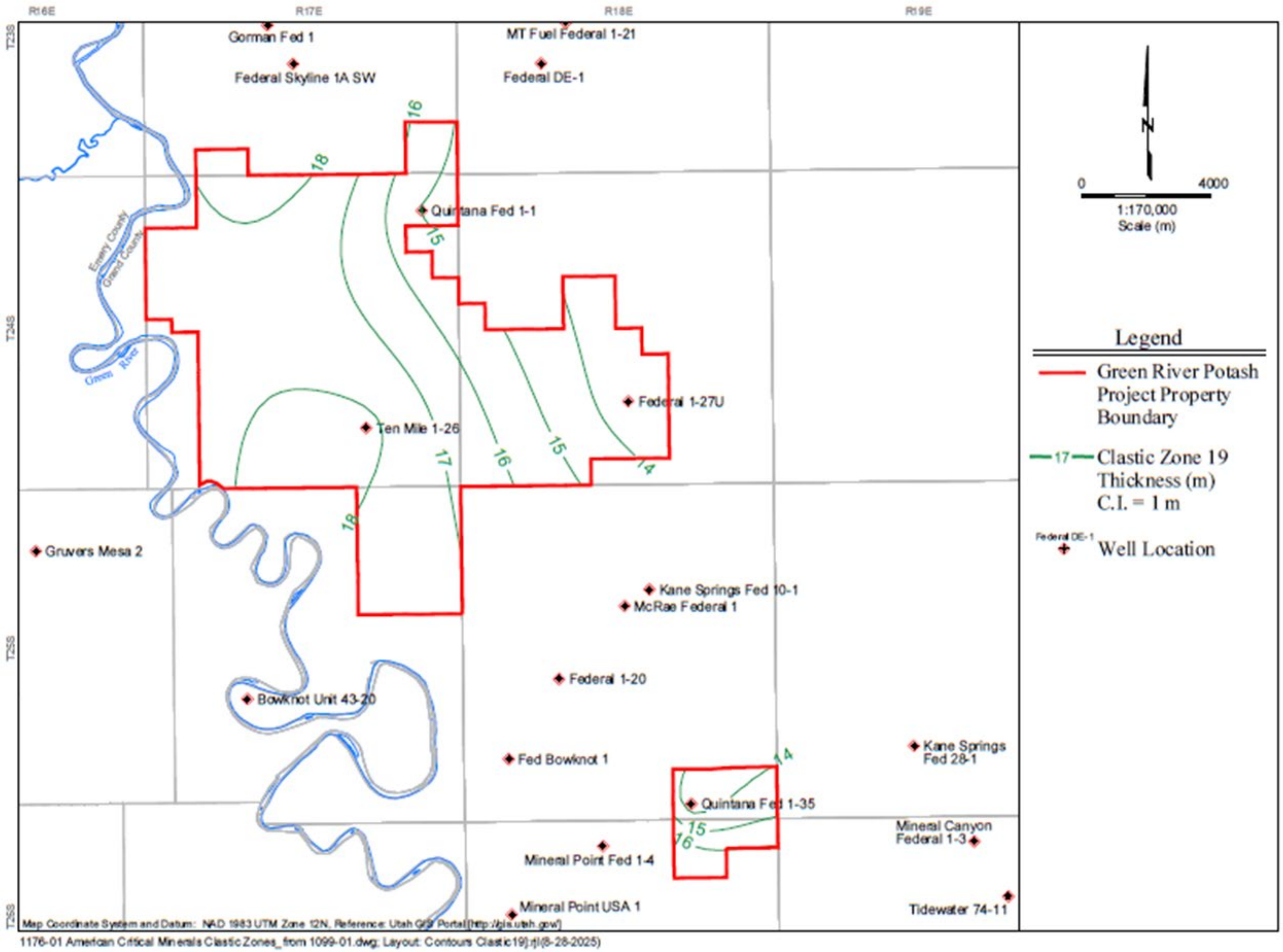


Figure 14-5. Clastic Zone 19 Thickness Contours

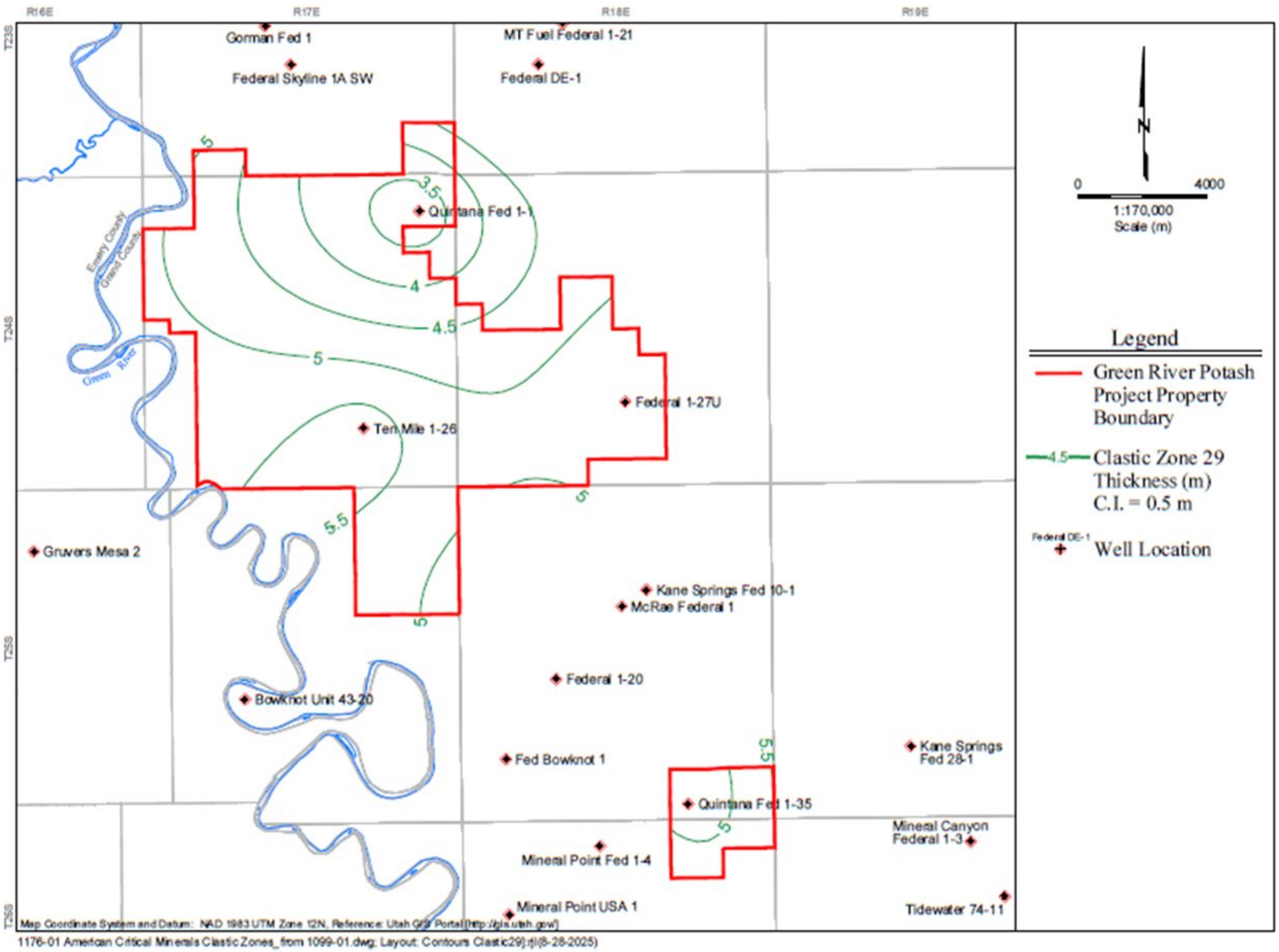
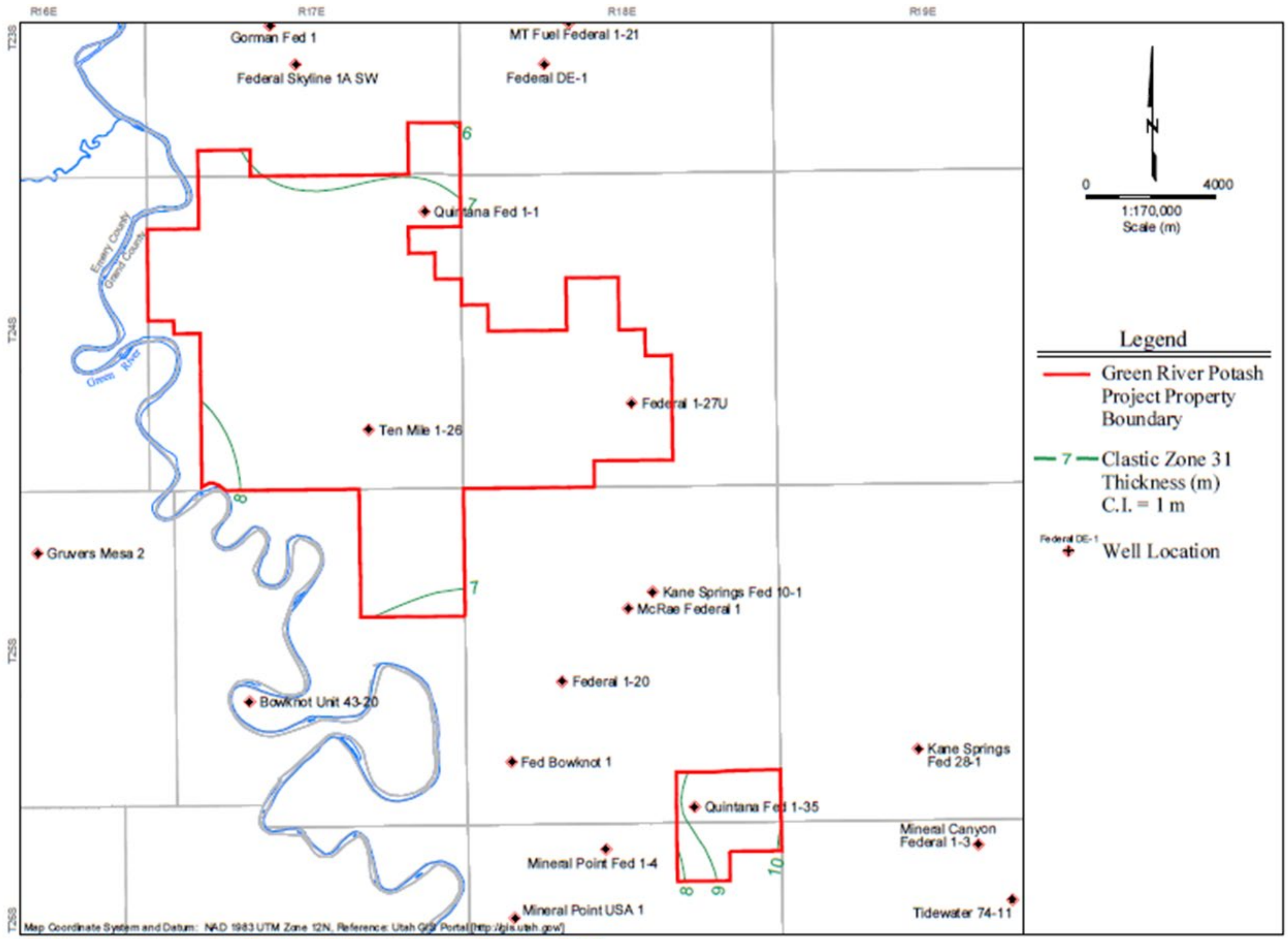


Figure 14-6. Clastic Zone 29 Thickness Contours



1176-01 American Critical Minerals Clastic Zones_from 1099-01.dwg; Layout: Contours Clastic31]:rjl(8-28-2025)

Figure 14-7. Clastic Zone 31 Thickness Contours

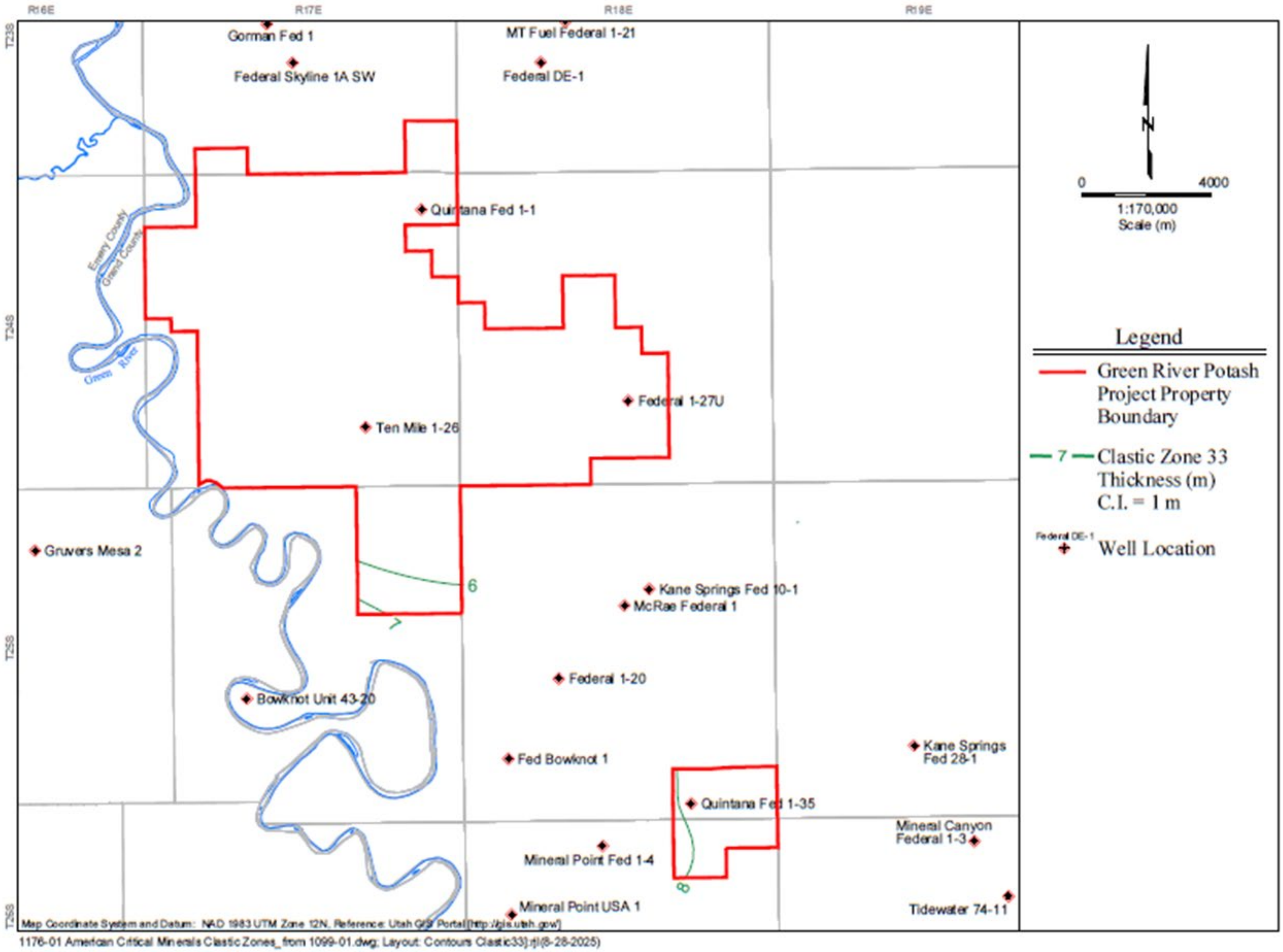


Figure 14-8. Clastic Zone 33 Thickness Contours

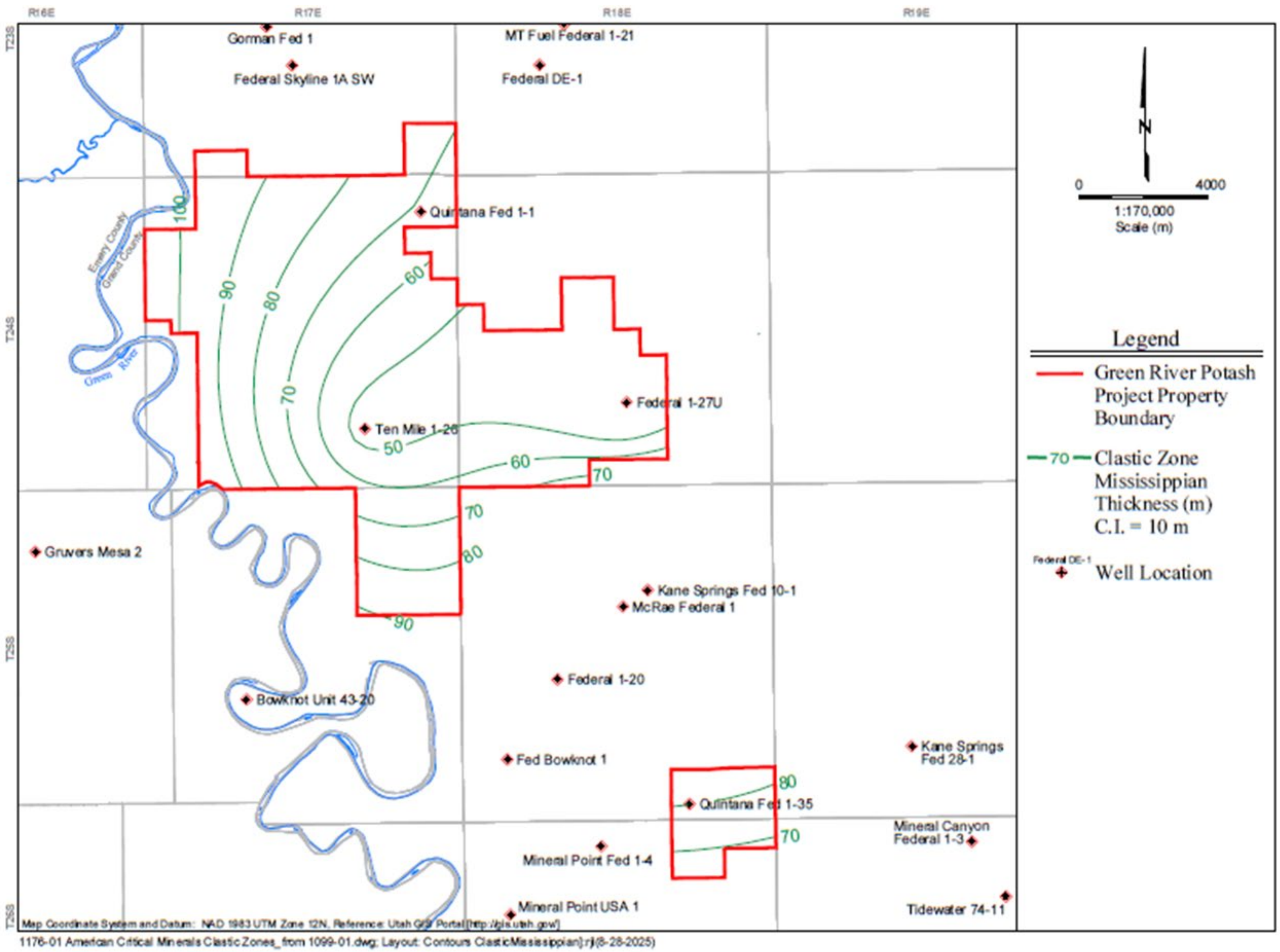


Figure 14-9. Leadville Formation Thickness Contours

Table 14-3. List of Drillholes with Lithium/Bromine Concentration Date from Adjacent Project Areas

Well Name	Aquifer	Depth From (m)	Depth To (m)	Thickness (m)	Lithium (ppm)	Bromine (ppm)
Cane Creek 32-1	17	1,667	1,678	11	60	4166
Gold Bar Unit 2	17	1,891	1,897	6	6	2550
No. 2 Long Canyon Unit	17	1,665	1,679	14	102	4292
Skyline Unit 1	17	1,642	1,652	10	61	2595
Cane Creek 32-1	19	1,728	1,738	10	68	3345
No. 1 USA Hobson	19	1,659	1,668	9	134	1612
No. 2 Long Canyon Unit	19	1,725	1,737	12	111	4022
Skyline Unit 1	19	1,695	1,706	11	146	3462
Cane Creek 32-1	29	1,874	1,881	7	107	3932
Gold Bar Unit 2	29	2,140	2,145	5	24	1825
No. 2 Long Canyon Unit	29	1,909	1,914	5	111	4112
Skyline Unit 1	29	1,878	1,884	6	164	3508
Cane Creek 32-1	31	1,922	1,926	4	56	1150
Big Flat Unit 2	31	1,885	1,893	8	173	4145
Cane Creek No. 2	31	1,550	1,553	3	66	3080
Gold Bar Unit 2	31	2,158	2,165	7	17	680
No. 1 Long Canyon Unit	31	1,834	1,840	6	500	6100
No. 2 Long Canyon Unit	31	1,926	1,931	5	216	3038
Skyline Unit 1	31	1,896	1,903	7	183	3652
Cane Creek 32-1	33	1,938	1,951	13	31	4968
No. 2 Long Canyon Unit	33	1,970	1,974	4	96	882
No. 2 Long Canyon Unit	Mississippian	2,238	2,380	142	187	3793
Bosydaba #1	Mississippian				135	

The two tables, designated as Table 14-4 and Table 14-5, present a range of potential in situ mineral quantities for an exploration target containing lithium and bromine brines. These tables define the estimates for a Low Case and a High Case scenario, a standard practice in mineral exploration to bracket the potential resource based on the current level of geological knowledge and data uncertainty. The foundational calculation for both estimates begins with the geometric properties of the aquifer, specifically its total volume. This aquifer volume is then combined with a range of effective porosity values—a lower percentage for the conservative Low Case and a higher percentage for the optimistic High Case—to calculate the total volume of brine potentially hosted within the rock pores.

The subsequent calculations apply grade estimates to these brine volumes to determine the total contained metal. For instance, a Low Case brine volume of 25 million cubic meters multiplied by a conservative lithium grade of 200 parts per million could yield a total lithium metal estimate on the order of tens of thousands of tonnes. This lithium figure is also converted into its Lithium Carbonate Equivalent (LCE), the industry-standard unit for commercial transactions, which could range from a Low Case in the realm of 615,000 tonnes to a High Case potentially exceeding 1,710,000 tonnes. Simultaneously, the bromine content is calculated using its own range of concentration values, potentially resulting in a Low Case estimate of approximately 3,288,000 tonnes of elemental bromine (Br_2) and a significantly larger High Case figure of 9,134,000 tonnes.

The substantial spread between the low and high estimates for both minerals effectively captures the geological uncertainties at this early stage, serving to illustrate the potential scale of the discovery and guide future exploration efforts to better define the resource.

Table 14-4. Lithium and Bromine Exploration Target Low Case Estimates

Aquifer	Average Thickness (m)	Aquifer Volume (m^3)	Effective Porosity Low	Brine Volume (m^3)	Lithium Low (ppm)	Total Lithium Low (t)	Total LCE Low (t)	Bromine Low (ppm)	Total Br_2 Low (t)
Paradox CZ 17	19.16	2,646,919,140	10.3%	271,970,942	42.9	11,678	62,161	2,550.6	693,679
Paradox CZ 19	16.56	2,287,641,660	11.0%	252,212,493	86.1	21,706	115,541	2,332.7	588,333
Paradox CZ 29	4.88	674,457,574	9.9%	66,518,378	76.1	5,064	26,954	2,508.2	166,841
Paradox CZ 31	7.49	1,034,897,445	12.4%	128,586,008	129.8	16,684	88,809	2,586.9	332,636
Paradox CZ 33	4.34	599,997,312	12.4%	74,549,666	47.6	3,550	18,899	2,193.8	163,543
Mississippian	67.02	9,259,243,356	5.1%	472,221,411	120.8	57,021	303,521	2,844.8	1,343,352
Total		16,503,156,487		1,266,058,898	91	115,703	615,885	2,647	3,288,383

Table 14-5. Lithium and Bromine Exploration Target High Case Estimates

Aquifer	Average Thickness (m)	Aquifer Volume (m^3)	Effective Porosity High	Brine Volume (m^3)	Lithium High (ppm)	Total Lithium High (t)	Total LCE High (t)	Bromine High (ppm)	Total Br_2 High (t)
Paradox CZ 17	19.16	2,646,919,140	17.1%	453,284,903	71.6	32,438	172,669	4,250.9	1,926,886
Paradox CZ 19	16.56	2,287,641,660	18.4%	420,354,155	143.4	60,295	320,948	3,887.8	1,634,258
Paradox CZ 29	4.88	674,457,574	16.4%	110,863,964	126.9	14,066	74,873	4,180.3	463,446
Paradox CZ 31	7.49	1,034,897,445	20.7%	214,310,013	216.3	46,345	246,692	4,311.5	923,989
Paradox CZ 33	4.34	599,997,312	20.7%	124,249,443	79.4	9,862	52,497	3,656.3	454,287
Mississippian	67.02	9,259,243,356	8.5%	787,035,685	201.3	158,391	843,115	4,741.3	3,731,533
Total		16,503,156,487		2,110,098,163	152	321,396	1,710,793	4,412	9,134,399

14.6 Exploration Target Estimates Summary

The exploration target for the Project, summarized in Table 14-6, is based on available geological data and analogues from adjacent projects. Target tonnages are estimated to range between 500 and 950 million tonnes (Mt) of ore for potash, 0.6 and 1.7 Mt LCE for lithium, and 3.3 and 9.1 Mt Br_2 for bromine. Corresponding grades are estimated at 19–29% eKCl for potash, 91–152 ppm for lithium, and 2,647–4,412 ppm for bromine. These ranges highlight the prospective nature and potential scale of the mineralized clastic zones.

The lower end of the target range (500 Mt ore, 0.6 Mt LCE, 3.3 Mt Br_2) with grades of approximately 19% eKCl, 91 ppm LCE, and 2,647 ppm Br_2 represents the minimum expected potential. The upper end (950 Mt ore, 1.7 Mt LCE, 9.1 Mt Br_2) with grades up to 29% eKCl, 152 ppm LCE, and 4,412 ppm Br_2 reflects the upside potential should continuity and thickness be confirmed through further drilling. These estimates provide a framework for prioritizing exploration activities, including step-out drilling and detailed geophysical interpretation.

Table 14-6. Exploration Target Estimates Summary

	Grade	Tonnage
Potash	19%-29% eKCl	500-950 Mt Ore
Lithium	91-152 ppm	0.6-1.7 Mt LCE
Bromine	2,647-4,412 ppm	3.3-9.1 Mt Br_2

Exploration Targets are conceptual in nature and there has been insufficient exploration to define them as Mineral Resources, and, while reasonable potential may exist, it is uncertain whether further exploration will result in the determination of a Mineral Resource under NI 43-101. The Potash, Lithium, and Bromine Exploration Targets are not being reported as part of any Mineral Resource or Mineral Reserve.

15 Mineral Reserve Estimates

The Property is an exploration property. No estimates of Mineral Reserves are stated.

16 Mining Methods

The Property is an exploration property. No advanced evaluation of mining methods is being disclosed in this Technical Report.

17 RECOVERY METHODS

The Property is an exploration property. No advanced evaluation of recovery methods is being disclosed in this Technical Report.

18 PROJECT INFRASTRUCTURE

The Property is an exploration property. No advanced evaluation of infrastructure is being disclosed in this Technical Report

19 MARKET STUDIES AND CONTRACTS

The Property is an exploration property. No advanced evaluation of market conditions or contracts is being disclosed in this Technical Report.

20 Environmental, Permitting, and Community Impact

The Property is an exploration property. No advanced evaluation of environmental, permitting, or community impacts is being disclosed in this Technical Report.

21 Capitol Operating Costs

The Property is an exploration property. No advanced evaluation of capital or operating costs is being disclosed in the Technical Report.

22 ECONOMIC ANALYSES

The Property is an exploration property. No advanced economic analysis of mining is being disclosed in this Technical Report.

23 ADJACENT PROPERTIES

23.1 Moab Potash Mine

Intrepid (NYSE:IPI) operates the Moab solution mine, historically known as the Cane Creek Mine, located approximately 14 km southeast of the Property. The operation was started by Texasgulf in 1964 as a conventional room-and-pillar potash mine in the Cycle 5 potash horizon at a depth of approximately 900 m. The mine faced problems with high temperatures, methane, a highly folded and undulating potash bed, and squeezing ground conditions. After driving over 560 km of underground workings (Garrett 1995), the mine was intentionally flooded in 1970 and subsequently operated as a solution mine. Intrepid purchased the mine from Potash Corporation of Saskatchewan in 2000, which acquired Texasgulf in 1995. The mine is located on Utah State potash leases.

Water is saturated with salt (NaCl) and the resulting brine is pumped through injection wells into the underground mine workings. The NaCl-saturated brine preferentially dissolves the potash (KCl), producing a heavier-than-NaCl-saturated brine which sinks to low points in the mine. Extraction wells are installed at low points to pump the KCl-rich brine to the surface, where it is placed into 164 ha of shallow evaporation ponds just southwest of the mine. Blue dye, similar to food coloring, is added to the evaporation pond brines to aid in the absorption of sunlight. There, the water, aided by approximately 300 days of sunshine and an average of just 5% relative humidity, evaporates, leaving potash and salt crystals in the pond. The solar ponds are lined with high-density polyethylene and Hypalon (a synthetic rubber) to prevent brine from escaping the ponds (Bartosh 2021).

The end result of the evaporation process is a bed of potash and salt crystals that is harvested using scrapers adapted from the earth-moving industry. The crystals from the ponds are sent to a mill where the potash is separated from the salt by flotation. The potash and salt are dried, sorted, and processed into various agricultural, feed, and industrial products (Bartosh 2021).

In the past two decades, Intrepid began mining the Cycle 9 potash horizon located 240 m stratigraphically below Cycle 5. Solution mining is conducted through a network of horizontal wells directionally drilled in the potash bed (Bartosh 2021).

The Moab Mine presently produces on the order of 100,000 tonnes per year (tpy) muriate of potash (or KCl), down from the underground mine's original nameplate capacity of 540,000 tpy. Intrepid reports a remaining mine life of 125 years based on current production rates and remaining reserves (Bartosh 2021). The mine is serviced by the Cane Creek Subdivision railroad spur which extends south from the Union Pacific Railroad mainline at Thompson, Utah.

The potash horizons mined by Intrepid in Cycles 5 and 9 persist to the west and northwest along the Cane Creek Anticline and extend into the GRPLP Property.

The QPs and Agapito technical staff have not verified information related to the Moab Mine. Such information is not necessarily indicative of mineralization on the Property.

23.2 Anson Resources

Anson Resources, via its U.S. subsidiary A1 Lithium, is strategically advancing two lithium-brine projects in Utah's Paradox Basin—its flagship Paradox Lithium Project and the recently staked Green River Lithium Project. These initiatives aim to bolster the supply of high-purity lithium carbonate essential for the clean energy transition, particularly electric vehicle battery production.

Paradox Lithium Project is Anson's core asset and is already at an advanced stage of development. Spanning approximately 167 km² in southern Utah, it benefits from proven Direct Lithium Extraction (DLE) technology powered by hydro and solar energy, resulting in low carbon emissions and minimal waste. A September 2022 Definitive Feasibility Study projects Phase 1 output of up to 13,074 tpy of battery-grade lithium carbonate over an initial 10-year life. Financially, it shows robust economics with a pre-tax NPV7 of USD 1.3 billion (IRR 47%), rising to USD 5.1 billion (IRR 98%) under a spot price scenario. The project holds a substantial JORC Mineral Resource—1.5 million tonnes LCE and 7.6 million tonnes of bromine—providing a solid resource base and planned expansion via the Western drilling strategy.

Green River Lithium Project, staked in January 2023 and located approximately 50 km northwest of Paradox, covers around 106 km² and shares promising geological, metallurgical, and structural similarities with its counterpart. It benefits from strong infrastructure, including rail, road, power, and water access (with water diversion rights secured). The exploration target is substantial—2.0 to 2.6 billion tonnes of brine grading 100–150 ppm Li and 2,000–3,000 ppm Br—though still conceptual at this stage. The Green River project will employ a similar development model to Paradox, re-entering legacy oil wells to efficiently assess lithium brine volumes and quality. Early drilling and sampling suggest promising potential, with natural brine flow in some wells, indicating favorable porosity, permeability, and pressure conditions.

Together, these two projects form a complementary development strategy: Paradox offers an established, near-term revenue stream, while Green River presents significant upside in resource scale. This gives Anson a layered, growth-focused lithium brine portfolio well-positioned to supply the expanding EV battery market.

The (Koch Technology Solutions) Koch pilot program for Anson has achieved notable success, with test results confirming consistently low concentrations of key contaminants in the processed brine. This outcome is highly significant for the performance of direct lithium selective (DLS) extraction, as brine purity directly impacts lithium recovery efficiency and downstream processing requirements. The results provide strong technical validation of Koch's process design and underpin the company's production guarantee of 10,000 tpy LCE. Furthermore, the demonstrated brine quality aligns with the objectives of the recently signed Memorandum of Understanding between Anson and Pohang Iron and Steel Company (POSCO) Holdings to construct a DLE demonstration plant in Utah, supporting POSCO's strategy to advance commercialization of DLE technologies in North America. Collectively, the pilot results not only confirm the technical feasibility of large-scale lithium production from Anson's resources but also strengthen the commercial framework for future development under the POSCO partnership.

The QPs and Agapito technical staff have not verified information related to the Paradox Lithium Project and Green River Lithium Project. Such information is not necessarily indicative of mineralization on the Property.

24 Other Relevant Data and Information

There is no other relevant information to report.

25 INTERPRETATION AND CONCLUSIONS

The GRPLP Property contains significant potash mineralization in sufficient quantities and of sufficient grade to be an attractive target for exploration and further study of solution mining potential. Lithium/bromine brines also occur on the Property and represent upside solution mining potential. Potash is present in at least six evaporite cycles on the Property. Of these, Potash 5 is the principal bed of interest. Potash 18 occurs in sufficient grade and thickness to be of interest to the east off the Property. The grades of the other prominent beds, Potash 6, 9, 13, and 16, are too low grade to be of current economic interest. Potash 16 shows improved grade and thickness beyond the Property to the north.

Potash 5 is a regionally extensive sylvinite bed in the northern Paradox Basin and is continuous in solution-mineable thicknesses across most of the Property, based on the preliminary interpretation of elog data from 33 oil and gas wells dispersed across the Property or within 8 km of its borders. Potash 5 is classified as an NI 43-101 Exploration Target projected to contain between 500 and 950 Mt of sylvinite with an average grade ranging between 12% and 18% eK_2O (19% and 29% eKCl), assuming a bed thickness cutoff of 2.0 m and a composite grade cutoff of 10% eK_2O. Potash 5 ranges between 1,200 and 1,900 m deep on the Property. Intrepid currently solution mines Potash 5, as well as Potash 9, at the Moab Mine 14 km to the southeast.

Preliminary analysis of elog data suggests that Potash 5 is generally thin and low grade to the west and improves in thickness and grade across the Property to the northeast. The best resource appears centralized to the northeast quadrant of the Property in the vicinity of the Quintana Fed 1-1, Ten Mile 1-26, and Kane Springs Fed 10-1 wells where Potash 5 ranges from about 3 to 6 m thick at 14% to 16% eK_2O (22% to 25% eKCl). Regional information suggests that attractive occurrences of Potash 5 persist to the east beyond the Property boundary. Contrary to this, Well Federal 1-27U near the Property's northeastern boundary shows a decrease in grade to less than 8% eK_2O (13% eKCl). Exploration is especially warranted in this area to substantiate the Potash 5 resource and investigate the counter-trending lower grade in Well Federal 1-27U.

Potash 18 is a regionally extensive potash bed prominent in the central and southern Paradox Basin and persists as far north as the Ten Mile area. Potash 18 (sylvinite) occurs east of the Property in the Ten Mile KPLA where it is estimated to be 2 to 3 m thick and average between 10% and 20% eK_2O (16% and 32% eKCl). Elogs suggest that the bed decreases in grade and eventually transitions to halite to the west. Potash 18 is approximately 500 m below Potash 5.

Exploration Targets are conceptual in nature and there has been insufficient exploration to define them as Mineral Resources, and, while reasonable potential may exist, it is uncertain whether further exploration will result in the determination of a Mineral Resource under NI 43-101 standards. The Potash 5 and 18 Exploration Targets are not being reported as part of any Mineral Resource or Mineral Reserve.

Seismic data indicate that the Leadville Formation and Paradox clastic zones dip north–northeast, with structural lows and localized closures favoring accumulation of lithium-bearing brines. Northward thickening of the Paradox Formation and high-angle faults may enhance both the volume and quality of brine resources.

The exploration target for lithium and bromine in the Paradox Basin is defined from brine-hosting intervals within the Mississippian Leadville Formation and several Paradox clastic zones (17, 19, 29, 31, and 33). These stratigraphic units were assessed using porosity, aquifer volume, and brine chemistry data to establish potential ranges of contained metals. Effective porosity values range from about 10–21% for the clastic zones and 5–9% for the Leadville Formation, supported by well and core data from both the Green River Lithium Project (GRPLP) area and adjacent projects. This geological and petrophysical framework confirms that these units have significant brine storage capacity and are regionally continuous.

Brine chemistry data further supports the resource potential of these intervals. Drillholes from nearby projects report lithium concentrations ranging from 43 to 216 ppm across the clastic zones, and 121–201 ppm in the Leadville Formation. Corresponding bromine values range from approximately 2,200 to 4,700 ppm. These geochemical ranges were applied to both low and high case scenarios for in situ brine volumes, resulting in modeled outcomes that capture geological uncertainties. For example, estimates suggest lithium contents equivalent to 615,000–1,710,000 tonnes of Lithium Carbonate Equivalent (LCE), while bromine ranges between 3.3 and 9.1 million tonnes (Br_2), depending on porosity and concentration assumptions.

The GRPLP is an early-stage exploration property. Exploration drilling on the Property is warranted based on existing geologic evidence, notwithstanding any risk associated with securing mineral tenure on federal lands. Initial exploration drilling should be focused in the north and north-central part of the Property where the Potash 5 and brine resource potential is highest.

Principal risks associated with advancing the Property are geologic uncertainty and uncertainty with mineral tenure. Risks associated with the future feasibility of solution mining, which include engineering design, permitting, and environmental, socioeconomic, and market constraints, are concerns to be evaluated at later stages.

The principal risk at the exploration phase is geologic uncertainty. While oil and gas well data indicate strong bed continuity across the Property, variations in potash thickness, grade, and mineralogy are possible. Faults, collapse features, diapirism, and other structural disturbances can sterilize resource locally. Sylvinite mineralogy can be affected by varying depositional environments or structures, including basement carbonate mounds, algal reefs, post-depositional gypsum dewatering, groundwater leaching along fault conduits, and by other complex depositional and structural features. Such factors can also influence the brine composition and migration.

Carnallite and halite incursions are known to occur in the Paradox Basin and can degrade or eliminate sylvinite resource on a localized or regional basis. The loss of grade or introduction of problematic mineralogy can substantially affect the size of a potential resource. Exploration drilling is required to define the presence or absence of these features and the thickness and grade variability of the deposit before a Mineral Resource can be claimed. Core drilling and chemical analysis is required to confirm grade and mineralogy.

26 RECOMMENDATIONS

Potash 5, as well as lithium and bromine, warrant systematic exploration drilling to fully delineate the mineral resources across the Property. Initial exploration should target the northern portion, where previous data indicate the highest concentrations of Potash 5, along with favorable brine-hosting intervals for lithium and bromine. The first phase of exploration should focus on establishing the lateral continuity and thickness of the Potash 5 horizon, while simultaneously sampling brine-bearing zones to determine lithium and bromine grades. Specific recommendations for a first and second phase of exploration are as follows:

Phase I Exploration, Resource Evaluation, and Pre-Feasibility Studies

Objective: Confirm and expand the potash, lithium, and bromine resource potential at the Green River Project, and evaluate the technical and economic viability of future solution-mining and brine-extraction operations. The combined program is designed to advance the project from exploration and resource definition through to pre-feasibility-level assessment and preparation of an updated NI 43-101 Technical Report.

Proposed Work:

- **Exploration and Resource Evaluation**: Drill three exploration core holes targeting the potash-bearing interval and water-bearing clastic zones in the Paradox and Leadville formations. Conduct comprehensive downhole geophysical logging (gamma ray, spectral gamma, neutron, density, caliper, and sonic), detailed core assays at 0.3-m intervals through the potash zone, and extend sampling into bounding salt. Core water-bearing zones for porosity and permeability testing, perform drill stem tests (DSTs) using the straddle-packer method, and analyze formation waters for lithium, bromine, potassium, pH, and TDS. These data will confirm grade, thickness, mineralogy, and hydrogeological characteristics to support mineral resource estimation.
- **Potash Mining Pre-Feasibility Study (PFS)**: Build upon exploration and resource data to assess the feasibility of a solution-mining operation. Work will include updated geological modeling, mining method selection, wellfield and cavern design, surface facility layouts, process flow diagrams, production rate forecasting, infrastructure planning, and utility requirements. The study will include capital and operating cost estimates, environmental and permitting assessments, and a preliminary economic analysis with sensitivity testing.
- **Lithium Mining Pre-Feasibility Study (PFS)**: Evaluate the potential for lithium extraction from subsurface brines through detailed hydrogeological modeling of brine distribution, flow, and recharge potential. Activities will include wellfield design, production forecasting, assessment of direct lithium extraction (DLE) technologies, preparation of process flow diagrams and material balances, and infrastructure and permitting evaluations. Economic analyses will include capital and operating cost estimation and financial sensitivity testing.
- **NI 43-101 Technical Report Update**: Integrate results from exploration and both PFS studies into an updated NI 43-101 Technical Report. The report will include revised geological models, updated mineral resource estimates, and new technical and economic evaluations for both potash and lithium. It will also document updated infrastructure, permitting considerations, and market assumptions, ensuring full compliance with NI 43-

101 and CIM guideline requirements, and will include an updated effective date, QP certifications, and project status summary.

Expected Outcome: The integrated work program will confirm the geological and chemical characteristics of the mineralized intervals, upgrade exploration targets to Mineral Resource status (inferred and indicated), and establish the technical and economic foundation for feasibility-level assessment and eventual project development.

Estimated Cost: The estimated cost for Phase I is USD $8,150,000, including a contingency allowance of USD $2,012,500, for a total estimated cost of USD $10,162,500.

Advancement to Phase II will be contingent on the evaluation of Phase I results, particularly confirmation of grade continuity, mineralogical consistency, and hydrogeochemical potential sufficient to justify step-out drilling and improvement of resource confidence. The decision to proceed will be based on an overall assessment of results and project objectives rather than a single defined decision point.

Phase II Feasibility Study

Objective: Advance the Green River Project to a feasibility-level assessment to confirm the technical, geological, and economic viability of commercial potash and lithium extraction. Building upon results from Phase I exploration and pre-feasibility studies, Phase II will focus on expanding and upgrading mineral resources, improving geologic confidence, and refining engineering parameters to support mine design, reserve estimation, and future development decisions.

Proposed Work:

- **Step-Out Drilling:** Drill four to five step-out core holes in the northern area of the Property to improve confidence in resource continuity and expand the Mineral Resource base. Core locations will be selected based on Phase I results and structural interpretations. Data from these holes will be used to delineate lateral and vertical variability in grade, thickness, and lithology.
- **Downhole Geophysics and Sampling:** Conduct comprehensive downhole geophysical logging (gamma ray, neutron, density, caliper, and sonic), potash zone assays, and coring of target water-bearing zones to collect geotechnical and hydrogeological data. Perform drill stem tests (DSTs) to evaluate formation pressures and permeability, and analyze water samples for lithium, bromine, potassium, and other key ions to refine hydrogeochemical models.
- **Laboratory Testing:** Conduct dissolution tests on potash cores under controlled temperature and pressure to assess leaching behavior and solution-mining efficiency. Perform rock mechanics testing on salt and interbedded rock samples to evaluate cavern stability, roof span limits, and geomechanical design parameters for wellfield planning.
- **Vertical Seismic Profile (VSP):** Acquire a VSP survey in at least one well to generate a synthetic seismogram that will improve correlation between well data and existing 2D or future 3D seismic datasets. This will enhance structural interpretation and improve subsurface imaging of potash-bearing intervals and fault zones.

- **Dipole Sonic Logging:** Include dipole sonic logging as part of the VSP program to measure formation velocities both around and below the borehole. This data will improve velocity models for seismic processing, enhance depth conversion accuracy, and refine structural modeling of the deposit.
- **3D Seismic Survey**: Conduct a 3D seismic survey (or a high-resolution 2D grid if 3D coverage is not feasible) over the central and northern project areas. The survey will provide detailed imaging of stratigraphic and structural features, identify faults and dissolution zones, and enable more precise resource block modeling for both potash and lithium brine targets.
- **LiDAR Surface Mapping**: Carry out a LiDAR-based surface elevation survey to generate a high-resolution digital elevation model (DEM). This dataset will be used for surface infrastructure planning, cavern subsidence risk assessment, hydrological modeling, and future environmental monitoring.
- **Deep Disposal Well Study**: Initiate a deep disposal well assessment to identify potential injection zones for brine or process water disposal. The study will include regulatory and permitting review, baseline groundwater quality testing, and preliminary design of the disposal system to ensure long-term operational compliance and environmental protection.
- **Environmental, Permitting, and Social Assessments:** Complete baseline studies and impact assessments required for major permits, including water rights, disposal well approvals, and environmental compliance documentation. Engage with local and regulatory stakeholders to ensure project alignment with permitting and ESG requirements.
- **Detailed Engineering and Design:** Develop final designs for solution-mining wells, caverns, and surface facilities (including processing plants, pipelines, and utilities). Prepare detailed process flow diagrams, piping and instrumentation diagrams (P&IDs), material balances, and equipment specifications. Finalize plans for power supply, water sourcing, brine and tailings management, access roads, and deep disposal wells. Perform detailed site layout and construction sequencing plans. Develop detailed capital and operating cost estimates supported by vendor quotations and engineering take-offs. Perform discounted cash flow (DCF) modeling, sensitivity and risk analyses, and financial evaluations to determine project economics under various market conditions.
- **NI 43-101 Feasibility-Level Report Update:** Prepare an updated NI 43-101 Technical Report reflecting feasibility-level data, including updated mineral reserve estimates, finalized mine plans, detailed process design, cost estimates, and economic analyses. Ensure all work complies with NI 43-101 and CIM standards and is supported by Qualified Person certifications.

Expected Outcome: Phase II work will strengthen the geological and engineering understanding of the Green River Project, significantly enhance the confidence of potash and lithium resource estimates, and support the conversion of Mineral Resources to Mineral Reserves. The new data will refine wellfield and cavern design, optimize process and infrastructure planning, and reduce technical and permitting uncertainties. Results from this phase will form the foundation for completion of a full Feasibility Study and support financing and development decisions.

Estimated Cost: USD $20,000,000 (subject to refinement following completion of Phase I results and detailed work planning)

Progression beyond Phase II will depend on verification of adequate tonnage, grade, and continuity to warrant completion of the final Feasibility Study, detailed mine design, and readiness for project financing and construction.

27 REFERENCES

43 CFR Part 3500 (1999), "Leasing of Solid Minerals Other than Coal and Oil Shale; Final Rule," Federal Register, Part III, Department of the Interior, Bureau of Land Management, October 1.

Allen, Gordon J. (2009), "Report on the Potash Potential of the Green River Potash Project Area, Grand County, Utah," Technical Report for American Potash LLC.

Arestad, John (2011), "Green River Potash Project, Northwest Project Area, Grand County, Utah Seismic Reflection Reprocessing and Interpretation Summary Report," ExplorTech LLC, December.

Baars, D. L. (1966), "Pre-Pennsylvanian Paleotectonics Key to Basin Evolution and Petroleum Occurrences in Paradox Basin," American Association of Petroleum Geologists Bulletin, 50:2082–2111.

Baars, D. L. (1976), "The Colorado Plateau Aulacogen: Key to Continental-Scale Basement Rifting," *Proceedings of the Second International Conference on Basement Tectonics*, pp. 157–164.

Baars, D. L. and H. H. Doelling (1987), "Moab Salt-Intruded Anticline, East-Central Utah, *Centennial Field Guide*, Rocky Mountain Section of the Geological Society of America.

Baars, D. L. and G. M. Stevenson (1981), "Tectonic Evolution of the Paradox Basin, Utah and Colorado," *Geology of the Paradox Basin*, Wiegand, D. L., editor, Rocky Mountain Association of Geologists Guidebook, pp. 23–31.

Baars, D. L. and P. D. See (1968), "Pre-Pennsylvanian Stratigraphy and Paleotectonics of the San Juan Mountains, Southwestern Colorado," Geological Society of America Bulletin, **79**:333–350.

Bartosh, B. (2021), "An Update to the History of Solution mining at the Cane Creek Mine, Moab, Utah – 2006 to 2021," presented at SMRI Fall 2021 Technical Conference, Galveston, TX, 14 pp.

Brown, A. L. (2002), "Outcrop to Subsurface Stratigraphy of the Pennsylvanian Hermosa Group, Southern Paradox Basin, U.S.A.," PhD dissertation, Louisiana State University and Agricultural and Mechanical College.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2014), "CIM Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum," <https://mrmr.cim.org/media/1128/cim-definition-standards_2014.pdf>.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2019), "Estimation of Mineral Resources and Mineral Reserves, Best Practice Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum," 29 November, <https://mrmr.cim.org/media/1129/cim-mrmr-bp-guidelines_2019.pdf >.

Carlson Mining 2022 Software© (2022), web site <http://www.carlsonsw.com>.

Condon, S. M. (1997), "Geology of the Pennsylvanian and Permian Cutler Group and Permian Kaibab Limestone in the Paradox Basin, Southeastern Utah and Southwestern Colorado," *Evolution of Sedimentary Basins-Paradox Basin*, A.C. Huffman, ed., USGS Bulletin 2000-P.

Doelling, H. H. (2000), "Geology of Arches National Park, Grand County, Utah," *Geology of Utah's Parks and Monuments*, Sprinkel, D.A., T. C. Chidsey, Jr. and P. B. Anderson, editors, Utah Geological Association Publication 28, pp. 11–36.

Durgin, Dana C. (2011), "Technical Report, Geology and Mineral Resources, Utah Potash Project-White Cloud, Salt Wash and Whipsaw Areas, Grand County, Utah, USA," report for Mesa Exploration Corporation.

Fouret, K. L. (1996), "Depositional and Diagenetic Environment of the Mississippian Leadville Limestone at Lisbon Field, Utah," *Geology and Resources of the Paradox Basin*, Huffman, A. C., Jr., W. R. Lund, and L. H. Godwin, editors, Utah Geological Association Publication 25, pp. 129–138.

Garrett, D. E. (1995), *Potash Deposits, Processing, Properties and Uses*, Springer, 752 pp.

Graham, J. (2004), "Arches National Park Geologic Resource Evaluation Report," Natural Resource Report NPS/NRPC/GRD/NRR—2004/005, National Park Service, Denver, Colorado.

Harry, D. L. and K. L. Mickus (1998), "Gravity Constraints on Lithosphere Flexure and the Structure of the Late Paleozoic Ouachita Orogen in Arkansas and Oklahoma, South Central North America," *Tectonics*, **17**(2):187–202, doi:10.1029/97TC03786.

Hildenbrand, T.G. and Kucks, R.P. (1983), *Regional Magnetic and Gravity Features of the Gibson Dome Area and Surrounding Region, Paradox Basin, Utah: A Preliminary Report*, USGS OFR 83-359.

Hintze, L. F. (1993), "Geologic History of Utah," Brigham Young University Studies Special Publication 7, 202 pp.

Hite, R. J. (1960), "Stratigraphy of the Saline Facies of the Paradox Member of the Paradox Formation of Southeastern Utah and Southwestern Colorado," *Geology of the Paradox Fold and Fault Belt, Third Field Conference Guidebook: Four Corners Geological Society*, Smith, K.G., ed., pp. 86–89.

Hite, R. J. (1961), "Potash-Bearing Evaporite Cycles in the Salt Anticlines of the Paradox Basin, Colorado and Utah," *Short Papers in the Geologic and Hydrogeologic Sciences*, USGS Professional Paper 424D, pp. D135–D138.

Hite, R. J. (1970), "Shelf Carbonate Sedimentation Controlled by Salinity in the Paradox Basin, Southeast Utah," *Third Symposium on Salt*, Rau, J. L. and L. F. Dellwig, editors, Northern Ohio Geological Society, **1**:48–66.

Hite, R. J. (1976), "A Potential Target for Potash Solution Mining in Cycle 13, Paradox Member, Near Moab, Utah," USGS Open-File Report 76-755, U.S. Department of the Interior, Geological Survey.

Hite, R. J. (1982), "Potash Deposits in the Gibson Dome Area, Southeast Utah," USGS OFR-82-1067.

Hite, R. J. (1983), "Preliminary Mineralogy and Geochemical Data from the DOE Gibson Dome Corehole No.1, San Juan County, Utah," USGS OFR 83-780.

Hite, R. J., D. E. Anders, and T. G. Ging (1984), "Organic-Rich Source Rocks of Pennsylvanian Age in the Paradox Basin of Utah and Colorado, in *Hydrocarbon Source Rocks of the Greater Rocky Mountain Region: Rocky Mountain Association of Geologists Field Conference Guidebook*, J. Woodward, F. F. Meissner and J. L. Clayton, eds., pp. 255–274.

Kelley, V. C. (1958), "Tectonics of the Region of the Paradox Basin," *Guidebook to the Geology of the Paradox Basin*, Sanborn, A. F., editor, Intermountain Association of Petroleum Geologists, pp. 31–38.

Kluth, C. F. (1986), "Plate Tectonics of the Ancestral Rocky Mountains," *Paleotectonics and Sedimentation in the Rocky Mountain Region, U.S.*, Peterson, J.A., ed., American Association of Petroleum Geologists, Memoir 41, pp. 353–369.

Kluth, C. F. and P. J. Coney (1981), "Plate Tectonics of the Ancestral Rocky Mountains," *Geology*, **9**(1):10–15.

Massoth, T. W. and B. T. Tripp (2011), "Consulting Geologist, Well database of Salt Cycles of the Paradox Basin, Utah," Utah Geological Survey Open-File Report 581.

Nuccio, V. F. and S. M. Condon (1996), "Burial and Thermal History of the Paradox Basin, Utah and Colorado, and Petroleum Potential of the Middle Pennsylvanian Paradox Formation," USGS Bulletin 2000.

Peterson, J. A. (1966), "Genesis and Diagenesis of Paradox Basin Carbonate Mound Reservoirs," *Symposium on Recently Developed Geologic Principles and Sedimentation of the Permo-Pennsylvanian of the Rocky Mountains*, Wyoming Geological Association, 20th Annual Field Conference, pp. 67–86.

Peterson, J. A. (1989), "Geology and Petroleum Resources, Paradox Basin Province," Open-File 88-450 U.

Raup, O. B. and R. J. Hite (1992), "Lithology of Evaporite Cycles and Cycle Boundaries in the Upper Part of the Paradox Formation of the Hermosa Group of Pennsylvanian Age in the Paradox Basin, Utah and Colorado," USGS OFR91-373.

Schlumberger (1968), "Fundamentals of Quantitative Log Interpretation-Schlumberger Log Interpretation Principles," Oberto Serra.

Schlumberger (1991), "Log Interpretations Principles/Applications," in O. Serra (1994) "Evaporites and Well Logs," in *Evaporite Sequences in Petroleum Exploration; 1. Geological Methods*, Editions Technip, French Oil and Gas Industry Association, Technical Committee, GRECO 52 (CNRS), PA8.

Stevenson, G. M. and D. L. Baars (1986), "The Paradox: A Pull-Apart Basin of Pennsylvanian Age," *Paleotectonics and Sedimentation in the Rocky Mountain Region, United States*, Peterson, J.A., editor, American Association of Petroleum Geologists Memoir 41, pp. 513–539.

Stewart, F. H. (1963), "Marine Evaporites," *Data of Geochemistry*, chapter Y, 6th edition, Michael Fleischer, editor, USGS Professional Paper 440-Y.

Trudgill, B. D. and W. C. Arbuckle (2009), "Reservoir Characterization of Clastic Cycle Sequences in the Paradox Formation of the Hermosa Group, Paradox Basin, Utah," Open-File Report 543, Utah Geological Survey.

Utah Division of Oil, Gas and Mining (UDOGM) (2012), Data Research Center, Utah Oil and Gas, Division of Oil, Gas and Mining, Department of Natural Resources, <http://www.oilgas.ogm.utah.gov/Data_Center /DataCenter.cfm>.

Utah Geological and Mineralogical Survey (1965), "Concentrated Subsurface Brines in the Moab Region, Utah," Special Studies 13, by E. Jay Mayhew and Edgar B. Heylman, pp. 28, June.

Utah State Geographic Information Database (USGID), Utah GIS Portal, <http://agrc.utah.gov/ gisresources>.

Warner, L. A. (1978), "The Colorado Lineament: a Middle Pre-Cambrian Wrench Fault System," Geological Society of America Bulletin 89, pp. 161–171.

Welsh, J. E. and H. J. Bissell (1979), "The Mississippian and Pennsylvanian (Carboniferous) Systems in the United States—Utah," USGS Professional Paper 1110-Y, 35 pp.

Williams-Stroud, S. C. (1994), "Solution to the Paradox? Results of Some Chemical Equilibrium and Mass Balance Calculations Applied to the Paradox Basin Evaporite Deposit," *American Journal of Science*, 294:1189–1228.

Other Reviewed Sources

Alger, R. P., and E. R. Crain (1966), "Defining Evaporite Deposits with Electrical Well Logs," in Trans Northern Ohio Geological Society's *Second Symposium on Salt*, Cleveland, Ohio quoted in Schlumberger (1972) *Log Interpretation Principles Vol 2—Applications.*

Baars, D. L. (1958), "Cambrian Stratigraphy of the Paradox Basin Region," *Guidebook to the Geology of the Paradox Basin,* Sanborn, A. P., editor, Intermountain Association of Petroleum Geologists, pp. 93–101.

Baars, D. L. (1975), "The Permian System of Canyonlands Country," *Canyonlands Country*, Fassett, J. E., editor, Four Corners Geological Society Eighth Field Conference, pp. 123–127.

Bambach, R. K., C. R. Scotese and A. M. Ziegler (1980), "Before Pangea the Geographies of the Paleozoic World," *American Scientist*, 68:26–38.

Berghorn, C. and F. S. (1981), "Facies Recognition and Hydrocarbon Potential of the Pennsylvanian Paradox Formation," *Geology of the Paradox Basin*, Wiegand, D. L., editor, Rocky Mountain Association of Geologists, pp. 111–117.

Bradley, D., Munk, L., Jochens, H., Hynek, S. and Labay, K (2006): A Preliminary Deposit Model for Lithium Brines; USGS Open-File Report 2013 1006, 9 p.

Bradley, D.C., Stillings, L.L., Jaskulka, B.W., Munk, L. and McCauley, A.D. (2017): Lithium; In: Chapter K of Critical Mineral Resources of the United States Economic and Environmental Geology and Prospects for Future Supply, K.J. Schulz, J.H. DeYoung, Jr., R.R. Seal II, and D.C. Bradley (Eds.), USGS Professional Paper 1802-K, 21 p.

Burchfield, B. C. and J. H. Stewart (1966), "Pull-Apart Origin of the Central Segment of Death Valley, California," *Geological Society of America Bulletin*, 77:439–442.

Bureau of Land Management, Moab Field Office (2008), "Proposed Resource Management Plan and Final Environmental Impact Statement," August.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2019), "Estimation of Mineral Resources and Mineral Reserves, Best Practice Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum," 29 November 2019, < https://mrmr.cim.org/media/1129/cim-mrmr-bp-guidelines_2019.pdf >.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM) (2014), "CIM Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum," 2014, < https://mrmr.cim.org/media/1128/cim-definition-standards_2014.pdf>.

Carlson Mining 2022 Software© (2022), web site <http://www.carlsonsw.com>.

Campbell, J. A. (1969), "Upper Valley Oil Field, Garfield County, Utah," *Geology and Natural History of the Grand Canyon Region: Fifth Field Conference*, Four Corners Geological Society, pp. 195–201.

Carter, K. E. (1958), "Stratigraphy of Desert Creek and Ismay Zones and Relationship to Oil, Paradox Basin, Utah," *Guidebook to the Geology of the Paradox Basin*, Sanborn, A.F., editor, Intermountain Association of Petroleum Geologists, pp. 138–145.

Cater, F. W., Jr. (1955), "The Salt Anticlines of Southwestern Colorado and Southeastern Utah," *Guidebook to Geology of parts of Paradox, Black Mesa, and San Juan Basins*, Four Corners Geological Society, pp. 125–131.

Cater, F. W., Jr. and D. P. Elston (1963), "Structural Development of Salt Anticlines of Colorado and Utah," *Backbone of the Americas*, American Association of Petroleum Geologists, Memoir 2, pp. 152–159.

Chapin, C. E. and S. M. Gather (1983), "Eocene Tectonics and Sedimentation in the Colorado Plateau—Rocky Mountain Area," *Rocky Mountain Foreland Basins and Uplifts*, Lowell, J. D., editor, Rocky Mountain Association of Geologists, pp. 33–56.

Doelling, H. H. (2001), "Geologic Map of the Moab and Eastern Part of the San Rafael Desert 30″ × 60″ Quadrangles, Grand and Emery Counties, Utah and Mesa County, Colorado," Utah Geologic Survey Map #180, scale 1:100,000.

Doelling, H. H., C. G. Oviatt and P. W. Huntoon (1988), "Salt Deformation in the Paradox Basin," Bulletin 122, Utah Geological and Mineral Survey, a division of the Utah Department of Natural Resources.

Doelling, H. H., T. C. Chidsey and B. J. Benson (2010), "Geology of Dead Horse Point State Park, Utah," *Geology of Utah's Parks and Monuments*, Utah Geological Association Publication 28 (Third Edition), Sprinkel, Chidsey and Anderson, editors, p. 413.

Elston, D. P. and E. M. Shoemaker (1960), "Late Paleozoic and Early Mesozoic Structural History of the Uncompahgre Front," *Geology of the Paradox Basin Fold and Fault Belt*, Smith, K.G., editor, Four Corners Geological Society, 3rd Field Conference Guidebook, pp. 47–55.

Elston, D. P., E. M. Shoemaker and E. R. Landis (1962), "Uncompahgre Front and Salt Anticline Region of Paradox Basin, Colorado and Utah," American Association of Petroleum Geologists Bulletin, 46:1857–1858.

Fetzner, R. W. (1960), "Pennsylvanian Paleotectonics of the Colorado Plateau," American Association of Petroleum Geologists Bulletin, 44:1371–1413.

Fontes, J.-C., & Matray, J.-M. (1993). Geochemistry and origin of formation brines from the Paris Basin, France: Part 1. Brines associated with Triassic salts. Chemical Geology, 109(1–3), 149–175.

Frahme, C. W. and E. B. Vaughan (1983), "Paleozoic Geology and Seismic Stratigraphy of the Northern Uncompahgre Front, Grande County, Utah," *Rocky Mountain Foreland Basins and Uplifts*, Lowell, J. D., editor, Rocky Mountain Association of Geologists, pp. 201–211.

Friedman, J. D., J. E. Case and S. L. Simpson (1994), "Tectonic Trends of the Northern Part of the Paradox Basin, Southeastern Utah and Southwestern Colorado, as derived from Landsat Multispectral Scanner Imaging and Geophysical and Geologic Mapping," *Evolution of Sedimentary Basins-Paradox Basin*, Huffman, A. C., editor, USGS Bulletin 2000-C.

Garrett, D.E. (2004): Handbook of Lithium and Natural Calcium Chloride: Their Deposits, Processing, Uses and Properties. Elsevier. 476 p.

Gorham, F. D., Jr. (1975), "Tectogenesis of the Central Colorado Plateau Aulacogen," *Canyonlands Country,* Fassett, J. E., editor, Four Corners Geological Society Eighth Field Conference Guidebook, pp. 211–216.

Hansen, G. H. (1956), "History of Exploration in Southeastern Utah," *Geology and Economic Deposits of East-Central Utah,* Peterson, J. A., editor, Intermountain Association of Petroleum Geologists, Seventh Annual Field Conference, pp. 23–25.

Hite, R. J. (1968), "Salt Deposits of the Paradox Basin, Southeastern Utah and Southwestern Colorado," *Saline Deposits,* Mattox, R. B., editor, GSA Special Paper 88, pp. 319–330.

Hite, R. J. and D. H. Buckner (1981), "Stratigraphic Correlations, Facies Concepts, and Cyclicity in Pennsylvanian Rocks of the Paradox Basin," *Geology of the Paradox Basin*, Wiegand, D. L., editor, Rocky Mountain Association of Geologists, pp. 147–159.

Houston, J. and Gunn, M. (2011): Technical report on the Salar De Olaroz Lithium potash project, Jujuy Province, Argentina; National Instrument 43-101 report prepared for Orocobre Ltd.

Huffman, A. C., W. R. Lund, and L. H. Godwin, editors (1996), *Geology and Resources of the Paradox Basin*, Utah Geological Association Guidebook 25.

Jones, R.W. (1959), "Origin of Salt Anticlines of Paradox Basins," American Association of Petroleum Geologists Bulletin, 43:1869–1895.

Katich, P. J. (1954), "Cretaceous and Early Tertiary Stratigraphy of Central and South-Central Utah, with Emphasis on the Wasatch Plateau Area," *Fifth Annual Field Conference Guidebook,* Intermountain Association of Petroleum Geologists, pp. 42–54.

Katich, P. J. (1958), "Cretaceous of Southeastern Utah and Adjacent Areas," *Guidebook to the Geology of the Paradox Basin,* Intermountain Association of Petroleum Geologists, pp. 193–196.

Linscott, R.O. (1958), "Petrography and Petrology of Ismay and Desert Creek Zones, Four Corners Region," *Guidebook to the Geology of the Paradox Basin*, Sanborn, A. F., editor, Intermountain Association of Petroleum Geologists, pp. 146–152.

Magna Resources Ltd. (2009), "Magna Resources Ltd. Announces Joint Venture with Confederation Minerals Ltd. and Otion of US Potash Prospects," <http://www.marketwire.com/press-release/Confederation-Minerals-Ltd-TSX-VENTURE-CFM 998877.html >, news release, June 3.

Malin, W. J. (1958), "A Preliminary Informal System of Nomenclature for a Part of the Pennsylvanian of the Paradox Basin," *Guidebook to the Geology of the Paradox Basin*, Sanborn, A. F., editor, Intermountain Association of Petroleum Geologists, pp. 135–137.

Matheny, M. L. (1978), "A History of the Petroleum Industry in the Four Corners Area," *Oil and Gas Fields of the Four Corners Area*, Fassett, J. E., editor, Four Corners Geological Society, pp. 17–24.

Meridian International Research (2008), The Trouble with Lithium 2: Under the Microscope, section covering Salar de Hombre Muerto.

Moldovanyi, E. P., & Walter, L. M. (1992). Regional trends in water chemistry, Smackover Formation, southwest Arkansas: Geochemical and physical controls. AAPG Bulletin, 76(6), 864–894.

Molenaar, C. M. (1975), "Some Notes on Upper Cretaceous Stratigraphy of the Paradox Basin," *Guidebook 8th Field Conference, Canyonlands Country,* Fassett, J. E., editor, Four Corners Geological Society, pp. 191–192.

Molenaar, C. M. (1981), "Mesozoic Stratigraphy of the Paradox Basin—An Overview," *Geology of the Paradox Basin*, Weigand, D. L., editor, Rocky Mountain Association of Geologists, pp. 119–127.

Molenaar, C. M. and D. L. Baars, editors (1985), "Field and River Trip Guide to Canyonlands Country, Utah," *Guidebook for Field Trip No. 7*, SEPM midyear meeting, Rocky Mountain Section, Society of Economic Paleotologists and Mineralogists, 74 pp.

Nelson, P. H. (2007), "Evaluation of Potash Grade with Gamma Ray Logs," USGS Open-File Report 20071292.

Ohlen, H. R. and L. B. Mclntyre (1965), "Stratigraphy and Tectonic Features of Paradox Basin, Four Corners Area," American Association of Petroleum Geologists Bulletin, 49:2020–2040.

Parker, J. W. and F. W. Roberts (1963), "Devonian and Mississippian Stratigraphy of the Central Part of the Colorado Plateau," *Shelf Carbonates of the Paradox Basin*, Bass, R.O. and S. L. Sharps, editors, Four Corners Geological Society, pp. 31–60.

Pavlovic, P. and Fowler, J. (2004): Evaluation of the potential of Salar de Ricon brine deposits as a source of Lithium, potash, Boron and other mineral resources; Final report prepared for Admiralty Resources NL and Argentina Diamonds Ltd., 15 December 2004.

Peterson, F. and C. Turner-Peterson (1989), *Geology of the Colorado Plateau,* 28th International Geological Congress, Field Trip Guidebook T-130, 65 pp.

Peterson, J. A. (1959), *Petroleum Geology of the Four Corners Area*, Fifth World Petroleum Congress, Proceedings, Section 1, pp. 499–523.

Peterson, J. A. and H. R. Ohlen (1963), "Pennsylvanian Shelf Carbonates, Paradox Basin," *Shelf Carbonates of the Paradox Basin*, Bass, R. O. and S. L. Sharps, editors, Four Corners Geological Society, pp. 65–79.

Peterson, J. A. and D. L. Smith (1986), "Rocky Mountain Paleogeography through Geologic Time," *Paleotectonics and Sedimentation*, Peterson, J. A., editor, American Association of Petroleum Geologists, Memoir 41, pp. 3–19.

Peterson, J. A. and R. J. Kite (1969), "Pennsylvanian Evaporite-Carbonate Cycles and Their Relation to Petroleum Occurrence, Southern Rocky Mountains," American Association of Petroleum Geologists Bulletin, 53:884–908.

Rygel, M. C., C. R. Fielding, T. D. Frank and L. P. Birgenheier (2008), "The Magnitude of Late Paleozoic Glacioeustatic Fluctuations: A Synthesis," *Journal of Sedimentary Research*, August 78(8):500–511.

Shengsong, Y. (1986): the hydrochemical features of salt lakes in Qaidam Basin; Chinese Journal of Oceanology and Limnology, v. 4, no. 3, p. 383-403.

Shoemaker, E. M., J. E. Case and D. P. Elston (1958), "Salt Anticlines of the Paradox Basin," *Guidebook to the Geology of the Paradox Basin*, Sanborn, A. P., editor, Intermountain Association of Petroleum Geologists, pp. 39–59.

Shouakar-Stash, O., Drimmie, R. J., Frape, S. K., & Gurbanov, A. G. (2007). Geochemistry and stable isotopic signatures, including chlorine and bromine isotopes, of the deep groundwaters of the Siberian Platform, Russia. Applied Geochemistry, 22(3), 589–605.

Spoelhof, R.W. (1976), "Pennsylvanian Stratigraphy and Paleotectonics of the Western San Juan Mountains, Southwestern Colorado," *Studies in Colorado Field Geology*, Epis, R. C. and R. W. Weimer, editors, Professional Contributions of the Colorado School of Mines, (8):159–179.

Stokes, W. L. (1948), "Geology of the Utah-Colorado Salt Dome Region, with Emphasis on Gypsum Valley," *Guidebook to the Geology of Utah, 2*, Utah Geological Society, 50 pp.

Stokes, W. L. (1956), "Nature and Origin of Paradox Basin Salt Structures," *Geology and Economic Deposits of Eastern Utah*, Peterson, J. A., editor, Intermountain Association of Petroleum Geologists, 7th Annual Field Conference, pp. 42–47.

Stone, D. S. (1977), "Tectonic History of the Uncompahgre Uplift," *Exploration Frontiers of the Central and Southern Rockies*, Veal, H. K., editors, Rocky Mountain Association of Geologists, Guidebook, pp. 23–30.

Stueber, A. M., Pushkar, P. and Hetherington, E.A. (1984): A Strontium Isotopic Study of Smackover Brines and Associated Solids, Southern Arkansas; Geochimica et Cosmochimica Acta, v. 48, p. 1637-1649.

Szabo, E. and S. A. Wengerd (1975), "Stratigraphy and Tectogenesis of the Paradox Basin," *8th Field Conference Guidebook, Canyonland Country*, Fassett, J. E., editor, Four Corners Geological Society, pp. 193–210.

Tabet, David E. (2005), "Mineral Potential Report for the Moab Planning Area," Moab Field Office, U.S. Department of the Interior, Bureau of Land Management, 83 pp.

U.S. Department of the Interior, Bureau of Land Management, Utah Lands Records (2012), Source for potash plats (maps of potash prospecting permit application areas), <http://www.ut.blm.gov/LandRecords/mtps his ut.cfm>.

Utah Geological and Mineralogical Survey (1965), "Concentrated Subsurface Brines in the Moab Region, Utah," Special Studies 13, by E. Jay Mayhew and Edgar B. Heylman, pp. 28, June.

Wengerd, S. A. (1951), "Reef Limestones of Hermosa Formation, San Juan Canyon, Utah," American Association of Petroleum Geologists Bulletin, 35:1038–1051.

Wengerd, S. A. (1958), "Pennsylvanian Stratigraphy, Southwest Shelf, Paradox Basin," *Shelf Carbonates of the Paradox Basin*, Bass, R. O. and S. L. Sharps, editors, Four Corners Geological Society, pp. 109–134.

Wengerd, S. A. (1962), "Pennsylvanian Sedimentation in Paradox Basin, Four Corners Region," *Pennsylvanian System in United States, a Symposium,* American Association of Petroleum Geologists, pp. 264–330.

Wengerd, S. A. and J. W. Strickland (1954), "Pennsylvanian Stratigraphy of Paradox Salt Basin, Four Corners Region, Colorado and Utah," American Association of Petroleum Geologists Bulletin, 38:2157–2199.

White, M. A. and M. I. Jacobson (1983), "Structures Associated with the Southwest Margin of the Ancestral Uncompahgre Uplift," *Northern Paradox Basin-Uncompahgre Uplift*, Averett, W. R., editor, Grand Junction Geological Society Guidebook, pp. 33–39.

Wiegand, D. E., editor (1981), *Geology of the Paradox Basin: Rocky Mountain Association of Geologists Guidebook*, 285 pp.

Williams-Stroud, S. C., J. P. Searls and R. J. Hite (1994), "Potash Resources," *Industrial Minerals and Rocks*, 6th Edition, Donald C. Carr, Senior Editor, Society for Mining, Metallurgy, and Exploration, Inc.

Wilson, T. P., & Long, D. T. (1993). Geochemistry and isotope chemistry of Ca-Na-Cl brines in Silurian strata, Michigan Basin, U.S.A. Applied Geochemistry, 8(5), 507–524.

Zheng, M., Yuan, H., Liu, J., Li, Y., Ma, Z. and Sun, Q. (2007): Sedimentary characteristics and paleoenvironmental records of Zabuye Salt Lake, Tibetan Plateay, since 128 ka BP; Acta Geological Sinica, v. 81, no. 5, p. 681-879.

28 DATE AND SIGNATURE

The effective date of this technical report is 30 September 2025. This technical report has been dated, signed, and sealed by the undersigned this 27th day of October 2025.

Respectfully submitted,

PROFESSIONAL SEAL

Dr. Biao Qiu, P.E. (CO), P.Eng. (SK & AB)

PROFESSIONAL SEAL

Dr. Deliang Han, P.Geo. (SK)

28.1 Statement of Certification by Author, Biao Qiu

I, Dr. Biao Qiu, P.E., P.Eng., do hereby certify that:

1. I am a consulting mining engineer and Principal of Agapito Associates, LLC at its office located at 715 Horizon Drive, Suite 340, in Grand Junction, Colorado, USA and senior author of the report "NI 43-101 Technical Report Green River Potash and Lithium Project Grand County, Utah USA" dated 27 October 2025 and effective as of 30 September 2025 (the "Technical Report"). I am solely responsible for Sections 6, 14 through 22, and jointly responsible for Sections 1 through 5, and 23 through 26 of this Technical Report and I have reviewed and jointly edited all sections of this Technical Report.

2. I have been registered as a Professional Engineer in Colorado (No. 50658) since December 2015.

3. I am a Professional Member of the Association of Professional Engineers and Geoscientists of Saskatchewan. I have been registered as a Professional Engineer in Saskatchewan (No. 35995) since July 2021, and as a Professional Licensee in Alberta (No. 291909) since March 2022.

4. I have practiced my profession as a mining engineer since 2013 and have over 10 years experience. I have provided services to several solution mining projects in industrial minerals such as salt (halite), potash, trona, borate, and nahcolite. These services have ranged from scoping to feasibility studies, geologic characterization, pilot test design and interpretation, resource and reserve estimation, cavern layouts, well completion design, and subsidence estimation and monitoring.

5. I am a graduate of the College of Energy Engineering at Xi'an University of Science and Technology at Shaanxi Province, China, and earned a Bachelor of Science degree in July 2006 and Master of Science degree in Mining Engineering in July 2009. I earned a Doctor of Philosophy (PhD) in Mining Engineering from West Virginia University in May 2013. My PhD dissertation concerned the subsurface subsidence prediction and its application in ground control problems.

6. As a result of my experience and qualifications, I am a *Qualified Person* as defined in Canadian National Instrument 43-101.

7. I have no involvement with American Critical Minerals beyond my involvement on writing of this Technical Report.

8. I am independent of the issuer, its directors, senior management, and its other advisors according to the definition of independence presented in Section 1.5 of Canadian National Instrument 43-101.

9. I have no economic or beneficial interest (present or contingent) in American Critical Minerals or in any of the mineral assets being evaluated and am not remunerated by way of a fee that is linked to the admission or value of American Critical Minerals.

10. As of the effective date of this Technical Report, to the best of my knowledge, information, and belief, those sections or parts of the Technical Report for which I was responsible contain all scientific and technical information that is required to be disclosed to make those sections or parts of the Technical Report not misleading.

11. I have read Canadian National Instrument 43-101 and Form 43-101 F1. This report has been prepared in compliance with these documents to the best of my understanding.

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

Dated this 27th day of October 2025.

COLORADO LICENSED PROFESSIONAL ENGINEER
BIAO QIU
50658

PROFESSIONAL SEAL

Dr. Biao Qiu, P.E. (CO), P.Eng. **(SK & AB)**

28.2 Statement of Certification by Author, Deliang Han

I, Dr. Deliang Han, P.Geo., do hereby certify that:

1. I am a Senior Consultant at Agapito Associates, LLC at its office located at 715 Horizon Drive, Suite 340, in Grand Junction, Colorado, USA and co-author of the report "NI 43-101 Technical Report Green River Potash and Lithium Project Grand County, Utah USA" dated 27 October 2025 and effective as of 30 September 2025 (the "Technical Report"). I am solely responsible for Sections 7 through 12, and jointly responsible for Sections 1 through 5, and 23 through 26 of this Technical Report and I have reviewed and jointly edited all sections of this Technical Report.

2. I graduated with a Bachelor of Science degree in Geology from Jilin University in China in 1986. I owned a Master of Science degree in Marine Geology and Geology from Ocean University of China in 1989 and University of Regina, in 2011, respectively. I completed my Doctor of Philosophy (PhD) in Marine Geology at the Institute of Oceanography, Chinese Academy of Sciences in 1999.

3. I am a professional geoscientist and have been practicing this capacity since 1998.

4. I am a registered Professional Geoscientist with Association of Professional Engineers and Geoscientists of Saskatchewan since 2012 (No. 23270).

5. As a consulting geologist, I have worked on gold, potash, and other industrial minerals such as salt, trona, and have been involved in various exploration and development projects globally, including Canada, the United States, Asia, Africa, and Europe, since 2007. These tasks have included exploration plan and drillhole program supervision, detailed geological data analysis and review, QAQC, geological modeling and mineral resource/reserve estimate, due diligence, and NI 43-101 technical report.

6. As a result of my experience and qualifications, I am a *Qualified Person* as defined in Canadian National Instrument 43-101.

7. I have no involvement with American Critical Minerals, beyond my involvement with the preparation and writing of this Technical Report.

8. I am independent of the issuer, its directors, senior management, and its other advisors according to the definition of independence presented in Section 1.5 of Canadian National Instrument 43-101.

9. I have no economic or beneficial interest (present or contingent) in American Critical Minerals or in any of the mineral assets being evaluated and am not remunerated by way of a fee that is linked to the admission or value of American Critical Minerals.

10. I have not visited the site.

11. As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, those sections or parts of the Technical Report for which I was responsible contain

all scientific and technical information that is required to be disclosed to make those sections or parts of the Technical Report not misleading.

12. I have read Canadian National Instrument 43-101 and Form 43-101 F1. This report has been prepared in compliance with these documents to the best of my understanding.

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

Dated this 27th day of October 2025.

Dr. Deliang Han, P.Geo. (SK)

PROFESSIONAL SEAL

APPENDIX A

AMERICAN CRITICAL MINERALS FEDERAL PLACER CLAIMS

Table A-1. American Critical Minerals Federal Place Claims

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT105278494	AP-25	11/1/21	UT	UT	Grand	8.1	200
UT105278495	AP-26	11/1/21	UT	UT	Grand	8.1	200
UT105278496	AP-27	11/1/21	UT	UT	Grand	8.1	200
UT105278497	AP-28	11/1/21	UT	UT	Grand	8.1	200
UT105278498	AP-29	11/1/21	UT	UT	Grand	8.1	200
UT105278499	AP-30	11/1/21	UT	UT	Grand	8.1	200
UT105278500	AP-31	11/1/21	UT	UT	Grand	8.1	200
UT105278501	AP-32	11/1/21	UT	UT	Grand	8.1	200
UT105278502	AP-33	11/1/21	UT	UT	Grand	8.1	200
UT105278503	AP-34	11/1/21	UT	UT	Grand	8.1	200
UT105278504	AP-35	11/1/21	UT	UT	Grand	8.1	200
UT105278505	AP-36	11/1/21	UT	UT	Grand	8.1	200
UT105278506	AP-37	11/1/21	UT	UT	Grand	8.1	200
UT105278507	AP-38	11/1/21	UT	UT	Grand	8.1	200
UT105278508	AP-156	11/1/21	UT	UT	Grand	8.1	200
UT105278509	AP-161	11/1/21	UT	UT	Grand	8.1	200
UT105278510	AP-209	11/1/21	UT	UT	Grand	8.1	200
UT105278511	AP-210	11/1/21	UT	UT	Grand	8.1	200
UT105278512	AP-211	11/1/21	UT	UT	Grand	8.1	200
UT105278513	AP-212	11/1/21	UT	UT	Grand	8.1	200
UT105278514	AP-213	11/1/21	UT	UT	Grand	8.1	200
UT105278515	AP-214	11/1/21	UT	UT	Grand	8.1	200
UT105278516	AP-215	11/1/21	UT	UT	Grand	8.1	200
UT105278517	AP-216	11/1/21	UT	UT	Grand	8.1	200
UT105278518	AP-217	11/1/21	UT	UT	Grand	8.1	200
UT105278519	AP-218	11/1/21	UT	UT	Grand	8.1	200
UT105278520	AP-219	11/1/21	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT105278521	AP-220	11/1/21	UT	UT	Grand	8.1	200
UT105278522	AP-221	11/1/21	UT	UT	Grand	8.1	200
UT105278523	AP-222	11/1/21	UT	UT	Grand	8.1	200
UT105278524	AP-223	11/1/21	UT	UT	Grand	8.1	200
UT105278525	AP-224	11/1/21	UT	UT	Grand	8.1	200
UT105278526	AP-225	11/1/21	UT	UT	Grand	8.1	200
UT105278527	AP-226	11/1/21	UT	UT	Grand	8.1	200
UT105278528	AP-227	11/1/21	UT	UT	Grand	8.1	200
UT105278529	AP-228	11/1/21	UT	UT	Grand	8.1	200
UT105278530	AP-229	11/1/21	UT	UT	Grand	8.1	200
UT105278531	AP-230	11/1/21	UT	UT	Grand	8.1	200
UT105278532	AP-231	11/1/21	UT	UT	Grand	8.1	200
UT105278533	AP-232	11/1/21	UT	UT	Grand	8.1	200
UT105278534	AP-233	11/1/21	UT	UT	Grand	8.1	200
UT105278535	AP-234	11/1/21	UT	UT	Grand	8.1	200
UT105278536	AP-235	11/1/21	UT	UT	Grand	8.1	200
UT105278537	AP-236	11/1/21	UT	UT	Grand	8.1	200
UT105278538	AP-237	11/1/21	UT	UT	Grand	8.1	200
UT105278539	AP-238	11/1/21	UT	UT	Grand	8.1	200
UT105278540	AP-239	11/1/21	UT	UT	Grand	8.1	200
UT105278541	AP-240	11/1/21	UT	UT	Grand	8.1	200
UT105278542	AP 1-1	11/1/21	UT	UT	Grand	8.1	200
UT105278543	AP 1-2	11/1/21	UT	UT	Grand	8.1	200
UT105278544	AP 1-3	11/1/21	UT	UT	Grand	8.1	200
UT105278545	AP 1-4	11/1/21	UT	UT	Grand	8.1	200
UT105278546	AP 1-5	11/1/21	UT	UT	Grand	8.1	200
UT105278547	AP 1-6	11/1/21	UT	UT	Grand	8.1	200
UT105278548	AP 1-7	11/1/21	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT105278549	AP 1-8	11/1/21	UT	UT	Grand	8.1	200
UT105278550	AP 1-9	11/1/21	UT	UT	Grand	8.1	200
UT105278551	AP 1-10	11/1/21	UT	UT	Grand	8.1	200
UT105278552	AP 1-11	11/1/21	UT	UT	Grand	8.1	200
UT105278553	AP 1-12	11/1/21	UT	UT	Grand	8.1	200
UT105278554	AP 1-13	11/1/21	UT	UT	Grand	8.1	200
UT105278555	AP 1-14	11/1/21	UT	UT	Grand	8.1	200
UT105278556	AP 1-15	11/1/21	UT	UT	Grand	8.1	200
UT105278557	AP 1-16	11/1/21	UT	UT	Grand	8.1	200
UT105278558	AP 1-17	11/1/21	UT	UT	Grand	8.1	200
UT105278559	AP 1-18	11/1/21	UT	UT	Grand	8.1	200
UT105278560	AP 1-19	11/1/21	UT	UT	Grand	8.1	200
UT105278561	AP 1-20	11/1/21	UT	UT	Grand	8.1	200
UT105278562	AP 1-21	11/1/21	UT	UT	Grand	8.1	200
UT105278563	AP 1-22	11/1/21	UT	UT	Grand	8.1	200
UT105278564	AP 1-23	11/1/21	UT	UT	Grand	8.1	200
UT105278565	AP 1-24	11/1/21	UT	UT	Grand	8.1	200
UT105278566	AP 1-25	11/1/21	UT	UT	Grand	8.1	200
UT105278567	AP 1-26	11/1/21	UT	UT	Grand	8.1	200
UT105278568	AP 1-27	11/1/21	UT	UT	Grand	8.1	200
UT105278569	AP 1-28	11/1/21	UT	UT	Grand	8.1	200
UT105278570	AP 1-29	11/1/21	UT	UT	Grand	8.1	200
UT105278571	AP 1-30	11/1/21	UT	UT	Grand	8.1	200
UT105278572	AP 1-31	11/1/21	UT	UT	Grand	8.1	200
UT105278573	AP 1-32	11/1/21	UT	UT	Grand	8.1	200
UT105278574	AP 1-33	11/1/21	UT	UT	Grand	8.1	200
UT105278575	AP 1-34	11/1/21	UT	UT	Grand	8.1	200
UT105278576	AP 1-35	11/1/21	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT105278577	AP 1-36	11/1/21	UT	UT	Grand	8.1	200
UT105278578	AP 1-37	11/1/21	UT	UT	Grand	8.1	200
UT105278579	AP 1-38	11/1/21	UT	UT	Grand	8.1	200
UT105278580	AP 1-39	11/1/21	UT	UT	Grand	8.1	200
UT105278581	AP 1-40	11/1/21	UT	UT	Grand	8.1	200
UT105278582	AP 1-41	11/1/21	UT	UT	Grand	8.1	200
UT105278583	AP 1-42	11/1/21	UT	UT	Grand	8.1	200
UT105278584	AP 1-43	11/1/21	UT	UT	Grand	8.1	200
UT105278585	AP 1-44	11/1/21	UT	UT	Grand	8.1	200
UT105278586	AP 1-45	11/1/21	UT	UT	Grand	8.1	200
UT105278587	AP 1-46	11/1/21	UT	UT	Grand	8.1	200
UT105278588	AP 1-47	11/1/21	UT	UT	Grand	8.1	200
UT105278589	AP 1-48	11/1/21	UT	UT	Grand	8.1	200
UT105278590	AP 3-1	11/1/21	UT	UT	Grand	8.1	200
UT105278591	AP 3-2	11/1/21	UT	UT	Grand	8.1	200
UT105278592	AP 3-3	11/1/21	UT	UT	Grand	8.1	200
UT105278593	AP 3-4	11/1/21	UT	UT	Grand	8.1	200
UT105278594	AP 3-5	11/1/21	UT	UT	Grand	8.1	200
UT105278595	AP 3-6	11/1/21	UT	UT	Grand	8.1	200
UT105278596	AP 3-7	11/1/21	UT	UT	Grand	8.1	200
UT105278597	AP 3-8	11/1/21	UT	UT	Grand	8.1	200
UT105278598	AP 3-9	11/1/21	UT	UT	Grand	8.1	200
UT105278599	AP 3-10	11/1/21	UT	UT	Grand	8.1	200
UT105278600	AP 3-11	11/1/21	UT	UT	Grand	8.1	200
UT105278601	AP 3-12	11/1/21	UT	UT	Grand	8.1	200
UT105278602	AP 3-13	11/1/21	UT	UT	Grand	8.1	200
UT105278603	AP 3-14	11/1/21	UT	UT	Grand	8.1	200
UT105278604	AP 3-15	11/1/21	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT105278605	AP 3-16	11/1/21	UT	UT	Grand	8.1	200
UT105278606	AP 3-17	11/1/21	UT	UT	Grand	8.1	200
UT105278607	AP 3-18	11/1/21	UT	UT	Grand	8.1	200
UT105278608	AP 3-19	11/1/21	UT	UT	Grand	8.1	200
UT105278609	AP 3-20	11/1/21	UT	UT	Grand	8.1	200
UT105278610	AP 3-21	11/1/21	UT	UT	Grand	8.1	200
UT105278611	AP 3-22	11/1/21	UT	UT	Grand	8.1	200
UT105278612	AP 3-23	11/1/21	UT	UT	Grand	8.1	200
UT105278613	AP 3-24	11/1/21	UT	UT	Grand	8.1	200
UT105278614	AP 3-25	11/1/21	UT	UT	Grand	8.1	200
UT105278615	AP 3-26	11/1/21	UT	UT	Grand	8.1	200
UT105278616	AP 3-27	11/1/21	UT	UT	Grand	8.1	200
UT105278617	AP 3-28	11/1/21	UT	UT	Grand	8.1	200
UT105278618	AP 3-29	11/1/21	UT	UT	Grand	8.1	200
UT105278619	AP 3-30	11/1/21	UT	UT	Grand	8.1	200
UT105278620	AP 3-31	11/1/21	UT	UT	Grand	8.1	200
UT105278621	AP 3-32	11/1/21	UT	UT	Grand	8.1	200
UT106335510	APC 001	9/7/23	UT	UT	Grand	8.1	200
UT106335511	APC 002	9/7/23	UT	UT	Grand	8.0	200
UT106335512	APC 003	9/7/23	UT	UT	Grand	8.0	200
UT106335513	APC 004	9/7/23	UT	UT	Grand	8.0	200
UT106335514	APC 005	9/8/23	UT	UT	Grand	8.0	200
UT106335515	APC 006	9/8/23	UT	UT	Grand	8.1	200
UT106335516	APC 007	9/8/23	UT	UT	Grand	8.1	200
UT106335517	APC 008	9/8/23	UT	UT	Grand	8.1	200
UT106335518	APC 009	9/8/23	UT	UT	Grand	8.1	200
UT106335519	APC 010	9/8/23	UT	UT	Grand	4.1	200
UT106335520	APC 011	9/8/23	UT	UT	Grand	4.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335521	APC 012	9/8/23	UT	UT	Grand	4.1	200
UT106335522	APC 013	9/8/23	UT	UT	Grand	4.1	200
UT106335523	APC 014	9/8/23	UT	UT	Grand	4.1	200
UT106335524	APC 015	9/8/23	UT	UT	Grand	4.1	200
UT106335525	APC 016	9/8/23	UT	UT	Grand	4.1	200
UT106335526	APC 017	9/8/23	UT	UT	Grand	4.1	200
UT106335527	APC 018	9/8/23	UT	UT	Grand	4.1	200
UT106335528	APC 019	9/8/23	UT	UT	Grand	4.1	200
UT106335529	APC 020	9/8/23	UT	UT	Grand	4.1	200
UT106335530	APC 021	9/8/23	UT	UT	Grand	4.1	200
UT106335531	APC 022	9/8/23	UT	UT	Grand	8.1	200
UT106335532	APC 023	9/8/23	UT	UT	Grand	8.1	200
UT106335533	APC 024	9/8/23	UT	UT	Grand	8.0	200
UT106335534	APC 025	9/8/23	UT	UT	Grand	8.0	200
UT106335535	APC 026	9/8/23	UT	UT	Grand	8.0	200
UT106335536	APC 027	9/8/23	UT	UT	Grand	8.1	200
UT106335537	APC 028	9/8/23	UT	UT	Grand	8.1	200
UT106335538	APC 029	9/8/23	UT	UT	Grand	8.0	200
UT106335539	APC 030	9/8/23	UT	UT	Grand	4.0	200
UT106335540	APC 031	9/8/23	UT	UT	Grand	4.0	200
UT106335541	APC 032	9/8/23	UT	UT	Grand	4.0	200
UT106335542	APC 033	9/7/23	UT	UT	Grand	4.0	200
UT106335543	APC 034	9/7/23	UT	UT	Grand	8.1	200
UT106335544	APC 035	9/7/23	UT	UT	Grand	8.1	200
UT106335545	APC 036	9/7/23	UT	UT	Grand	8.1	200
UT106335546	APC 037	9/8/23	UT	UT	Grand	8.1	200
UT106335547	APC 038	9/8/23	UT	UT	Grand	8.1	200
UT106335548	APC 039	9/8/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335549	APC 040	9/8/23	UT	UT	Grand	8.1	200
UT106335550	APC 041	9/8/23	UT	UT	Grand	8.1	200
UT106335551	APC 042	9/8/23	UT	UT	Grand	8.1	200
UT106335552	APC 043	9/8/23	UT	UT	Grand	8.1	200
UT106335553	APC 044	9/8/23	UT	UT	Grand	8.1	200
UT106335554	APC 045	9/8/23	UT	UT	Grand	8.1	200
UT106335555	APC 046	9/8/23	UT	UT	Grand	8.1	200
UT106335556	APC 047	9/8/23	UT	UT	Grand	8.1	200
UT106335557	APC 048	9/8/23	UT	UT	Grand	8.1	200
UT106335558	APC 049	9/8/23	UT	UT	Grand	8.1	200
UT106335559	APC 050	9/8/23	UT	UT	Grand	8.1	200
UT106335560	APC 051	9/8/23	UT	UT	Grand	8.1	200
UT106335561	APC 052	9/8/23	UT	UT	Grand	8.1	200
UT106335562	APC 053	9/8/23	UT	UT	Grand	8.1	200
UT106335563	APC 054	9/8/23	UT	UT	Grand	8.1	200
UT106335564	APC 055	9/8/23	UT	UT	Grand	8.1	200
UT106335565	APC 056	9/8/23	UT	UT	Grand	8.1	200
UT106335566	APC 057	9/7/23	UT	UT	Grand	8.1	200
UT106335567	APC 058	9/7/23	UT	UT	Grand	8.1	200
UT106335568	APC 059	9/7/23	UT	UT	Grand	8.1	200
UT106335569	APC 060	9/7/23	UT	UT	Grand	8.1	200
UT106335570	APC 061	9/7/23	UT	UT	Grand	8.1	200
UT106335571	APC 062	9/7/23	UT	UT	Grand	8.1	200
UT106335572	APC 063	9/7/23	UT	UT	Grand	8.1	200
UT106335573	APC 064	9/7/23	UT	UT	Grand	8.1	200
UT106335574	APC 065	9/7/23	UT	UT	Grand	8.1	200
UT106335575	APC 066	9/7/23	UT	UT	Grand	8.1	200
UT106335576	APC 067	9/7/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335577	APC 068	9/7/23	UT	UT	Grand	8.1	200
UT106335578	APC 069	9/8/23	UT	UT	Grand	8.1	200
UT106335579	APC 070	9/8/23	UT	UT	Grand	8.1	200
UT106335580	APC 071	9/8/23	UT	UT	Grand	8.1	200
UT106335581	APC 072	9/8/23	UT	UT	Grand	8.1	200
UT106335582	APC 073	9/8/23	UT	UT	Grand	8.1	200
UT106335583	APC 074	9/8/23	UT	UT	Grand	8.1	200
UT106335584	APC 075	9/5/23	UT	UT	Grand	8.1	200
UT106335585	APC 076	9/5/23	UT	UT	Grand	8.1	200
UT106335586	APC 077	9/5/23	UT	UT	Grand	8.1	200
UT106335587	APC 078	9/5/23	UT	UT	Grand	8.1	200
UT106335588	APC 079	9/7/23	UT	UT	Grand	8.1	200
UT106335589	APC 080	9/7/23	UT	UT	Grand	8.1	200
UT106335590	APC 081	9/6/23	UT	UT	Grand	8.1	200
UT106335591	APC 082	9/6/23	UT	UT	Grand	8.1	200
UT106335592	APC 083	9/6/23	UT	UT	Grand	8.1	200
UT106335593	APC 084	9/6/23	UT	UT	Grand	8.1	200
UT106335594	APC 085	9/6/23	UT	UT	Grand	8.1	200
UT106335595	APC 086	9/6/23	UT	UT	Grand	8.1	200
UT106335596	APC 087	9/6/23	UT	UT	Grand	8.1	200
UT106335597	APC 088	9/6/23	UT	UT	Grand	8.1	200
UT106335598	APC 089	9/6/23	UT	UT	Grand	8.1	200
UT106335599	APC 090	9/6/23	UT	UT	Grand	8.1	200
UT106335600	APC 091	9/6/23	UT	UT	Grand	8.1	200
UT106335601	APC 092	9/6/23	UT	UT	Grand	8.1	200
UT106335602	APC 093	9/6/23	UT	UT	Grand	8.1	200
UT106335603	APC 094	9/6/23	UT	UT	Grand	8.1	200
UT106335604	APC 095	9/6/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335605	APC 096	9/6/23	UT	UT	Grand	8.1	200
UT106335606	APC 097	9/6/23	UT	UT	Grand	8.1	200
UT106335607	APC 098	9/6/23	UT	UT	Grand	8.1	200
UT106335608	APC 099	9/5/23	UT	UT	Grand	8.1	200
UT106335609	APC 100	9/5/23	UT	UT	Grand	8.1	200
UT106335610	APC 101	9/5/23	UT	UT	Grand	8.1	200
UT106335611	APC 102	9/5/23	UT	UT	Grand	8.1	200
UT106335612	APC 103	9/7/23	UT	UT	Grand	8.1	200
UT106335613	APC 104	9/7/23	UT	UT	Grand	8.1	200
UT106335614	APC 105	9/7/23	UT	UT	Grand	8.1	200
UT106335615	APC 106	9/7/23	UT	UT	Grand	8.1	200
UT106335616	APC 107	9/7/23	UT	UT	Grand	7.7	200
UT106335617	APC 108	9/7/23	UT	UT	Grand	8.1	200
UT106335618	APC 109	9/7/23	UT	UT	Grand	8.1	200
UT106335619	APC 110	9/7/23	UT	UT	Grand	8.1	200
UT106335620	APC 111	9/7/23	UT	UT	Grand	8.1	200
UT106335621	APC 112	9/7/23	UT	UT	Grand	8.1	200
UT106335622	APC 113	9/6/23	UT	UT	Grand	8.1	200
UT106335623	APC 114	9/6/23	UT	UT	Grand	8.1	200
UT106335624	APC 115	9/6/23	UT	UT	Grand	8.1	200
UT106335625	APC 116	9/6/23	UT	UT	Grand	8.1	200
UT106335626	APC 117	9/6/23	UT	UT	Grand	8.1	200
UT106335627	APC 118	9/6/23	UT	UT	Grand	8.1	200
UT106335628	APC 119	9/6/23	UT	UT	Grand	8.1	200
UT106335629	APC 120	9/6/23	UT	UT	Grand	8.1	200
UT106335630	APC 121	9/6/23	UT	UT	Grand	8.1	200
UT106335631	APC 122	9/6/23	UT	UT	Grand	8.1	200
UT106335632	APC 123	9/6/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335633	APC 124	9/6/23	UT	UT	Grand	8.1	200
UT106335634	APC 125	9/6/23	UT	UT	Grand	8.1	200
UT106335635	APC 126	9/6/23	UT	UT	Grand	8.1	200
UT106335636	APC 127	9/6/23	UT	UT	Grand	8.1	200
UT106335637	APC 128	9/6/23	UT	UT	Grand	8.1	200
UT106335638	APC 129	9/5/23	UT	UT	Grand	8.1	200
UT106335639	APC 130	9/5/23	UT	UT	Grand	8.1	200
UT106335640	APC 131	9/5/23	UT	UT	Grand	8.1	200
UT106335641	APC 132	11/29/23	UT	UT	Grand	8.1	200
UT106335642	APC 133	9/5/23	UT	UT	Grand	8.1	200
UT106335643	APC 134	9/5/23	UT	UT	Grand	8.1	200
UT106335644	APC 135	9/5/23	UT	UT	Grand	8.1	200
UT106335645	APC 136	9/5/23	UT	UT	Grand	8.1	200
UT106335646	APC 137	9/5/23	UT	UT	Grand	8.1	200
UT106335647	APC 138	9/5/23	UT	UT	Grand	8.1	200
UT106335648	APC 139	9/5/23	UT	UT	Grand	8.1	200
UT106335649	APC 140	9/5/23	UT	UT	Grand	8.1	200
UT106335650	APC 141	9/5/23	UT	UT	Grand	8.1	200
UT106335651	APC 142	9/5/23	UT	UT	Grand	8.1	200
UT106335652	APC 143	9/5/23	UT	UT	Grand	8.1	200
UT106335653	APC 144	9/5/23	UT	UT	Grand	8.1	200
UT106335654	APC 145	9/7/23	UT	UT	Grand	8.1	200
UT106335655	APC 146	9/7/23	UT	UT	Grand	7.7	200
UT106335656	APC 147	9/7/23	UT	UT	Grand	7.7	200
UT106335657	APC 148	9/7/23	UT	UT	Grand	8.1	200
UT106335658	APC 149	9/7/23	UT	UT	Grand	8.1	200
UT106335659	APC 150	9/7/23	UT	UT	Grand	8.1	200
UT106335660	APC 151	9/7/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335661	APC 152	9/7/23	UT	UT	Grand	8.1	200
UT106335662	APC 153	9/6/23	UT	UT	Grand	8.1	200
UT106335663	APC 154	9/6/23	UT	UT	Grand	8.1	200
UT106335664	APC 155	9/6/23	UT	UT	Grand	8.1	200
UT106335665	APC 156	9/6/23	UT	UT	Grand	8.1	200
UT106335666	APC 157	9/6/23	UT	UT	Grand	8.1	200
UT106335667	APC 158	9/6/23	UT	UT	Grand	8.1	200
UT106335668	APC 159	9/6/23	UT	UT	Grand	8.1	200
UT106335669	APC 160	9/6/23	UT	UT	Grand	8.1	200
UT106335670	APC 161	9/6/23	UT	UT	Grand	8.1	200
UT106335671	APC 162	9/6/23	UT	UT	Grand	8.1	200
UT106335672	APC 163	9/6/23	UT	UT	Grand	8.1	200
UT106335673	APC 164	9/6/23	UT	UT	Grand	8.1	200
UT106335674	APC 165	9/6/23	UT	UT	Grand	8.1	200
UT106335675	APC 166	9/6/23	UT	UT	Grand	8.1	200
UT106335676	APC 167	9/5/23	UT	UT	Grand	8.1	200
UT106335677	APC 168	9/5/23	UT	UT	Grand	8.1	200
UT106335678	APC 169	9/5/23	UT	UT	Grand	8.1	200
UT106335679	APC 170	9/5/23	UT	UT	Grand	8.1	200
UT106335680	APC 171	9/5/23	UT	UT	Grand	8.1	200
UT106335681	APC 172	9/5/23	UT	UT	Grand	8.1	200
UT106335682	APC 173	9/5/23	UT	UT	Grand	8.1	200
UT106335683	APC 174	9/5/23	UT	UT	Grand	8.1	200
UT106335684	APC 175	9/5/23	UT	UT	Grand	8.1	200
UT106335685	APC 176	9/5/23	UT	UT	Grand	8.1	200
UT106335686	APC 177	9/5/23	UT	UT	Grand	8.1	200
UT106335687	APC 178	9/5/23	UT	UT	Grand	8.1	200
UT106335688	APC 179	9/5/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335689	APC 180	9/5/23	UT	UT	Grand	8.1	200
UT106335690	APC 181	9/5/23	UT	UT	Grand	8.1	200
UT106335691	APC 182	9/5/23	UT	UT	Grand	8.1	200
UT106335692	APC 183	9/5/23	UT	UT	Grand	8.1	200
UT106335693	APC 184	9/5/23	UT	UT	Grand	8.1	200
UT106335694	APC 185	9/7/23	UT	UT	Grand	8.1	200
UT106335695	APC 186	9/7/23	UT	UT	Grand	7.7	200
UT106335696	APC 187	9/7/23	UT	UT	Grand	7.7	200
UT106335697	APC 188	9/7/23	UT	UT	Grand	8.1	200
UT106335698	APC 189	9/7/23	UT	UT	Grand	8.1	200
UT106335699	APC 190	9/7/23	UT	UT	Grand	8.1	200
UT106335700	APC 191	9/7/23	UT	UT	Grand	8.1	200
UT106335701	APC 192	9/7/23	UT	UT	Grand	8.1	200
UT106335702	APC 193	9/6/23	UT	UT	Grand	8.1	200
UT106335703	APC 194	9/6/23	UT	UT	Grand	8.1	200
UT106335704	APC 195	9/6/23	UT	UT	Grand	8.1	200
UT106335705	APC 196	9/6/23	UT	UT	Grand	8.1	200
UT106335706	APC 197	9/6/23	UT	UT	Grand	8.1	200
UT106335707	APC 198	9/6/23	UT	UT	Grand	8.1	200
UT106335708	APC 199	9/6/23	UT	UT	Grand	8.1	200
UT106335709	APC 200	9/6/23	UT	UT	Grand	8.1	200
UT106336473	APC 201	9/6/23	UT	UT	Grand	8.1	200
UT106335710	APC 202	9/6/23	UT	UT	Grand	8.1	200
UT106335711	APC 203	9/6/23	UT	UT	Grand	8.1	200
UT106335712	APC 204	9/6/23	UT	UT	Grand	8.1	200
UT106335713	APC 205	9/5/23	UT	UT	Grand	8.1	200
UT106335714	APC 206	9/5/23	UT	UT	Grand	8.1	200
UT106335715	APC 207	9/5/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335716	APC 208	9/5/23	UT	UT	Grand	8.1	200
UT106335717	APC 209	9/5/23	UT	UT	Grand	8.1	200
UT106335718	APC 210	9/5/23	UT	UT	Grand	8.1	200
UT106335719	APC 211	9/5/23	UT	UT	Grand	8.1	200
UT106335720	APC 212	9/5/23	UT	UT	Grand	8.1	200
UT106335721	APC 213	9/5/23	UT	UT	Grand	8.1	200
UT106335722	APC 214	9/5/23	UT	UT	Grand	8.1	200
UT106335723	APC 215	9/5/23	UT	UT	Grand	8.1	200
UT106335724	APC 216	9/5/23	UT	UT	Grand	8.1	200
UT106335725	APC 217	9/5/23	UT	UT	Grand	8.1	200
UT106335726	APC 218	9/5/23	UT	UT	Grand	8.1	200
UT106335727	APC 219	9/5/23	UT	UT	Grand	8.1	200
UT106335728	APC 220	9/5/23	UT	UT	Grand	8.1	200
UT106335729	APC 221	9/5/23	UT	UT	Grand	8.1	200
UT106335730	APC 222	9/5/23	UT	UT	Grand	8.1	200
UT106335731	APC 223	9/5/23	UT	UT	Grand	8.1	200
UT106335732	APC 224	9/5/23	UT	UT	Grand	8.1	200
UT106335733	APC 225	9/5/23	UT	UT	Grand	8.1	200
UT106335734	APC 226	9/5/23	UT	UT	Grand	8.1	200
UT106335735	APC 227	9/5/23	UT	UT	Grand	8.1	200
UT106335736	APC 228	9/5/23	UT	UT	Grand	8.1	200
UT106335737	APC 229	9/7/23	UT	UT	Grand	8.1	200
UT106335738	APC 230	9/7/23	UT	UT	Grand	7.7	200
UT106335739	APC 231	9/7/23	UT	UT	Grand	7.7	200
UT106335740	APC 232	9/7/23	UT	UT	Grand	8.1	200
UT106335741	APC 233	9/7/23	UT	UT	Grand	8.1	200
UT106335742	APC 234	9/7/23	UT	UT	Grand	8.1	200
UT106335743	APC 235	9/7/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335744	APC 236	9/7/23	UT	UT	Grand	8.1	200
UT106335745	APC 237	9/6/23	UT	UT	Grand	8.1	200
UT106335746	APC 238	9/6/23	UT	UT	Grand	8.1	200
UT106335747	APC 239	9/6/23	UT	UT	Grand	8.1	200
UT106335748	APC 240	9/6/23	UT	UT	Grand	8.1	200
UT106335749	APC 241	9/6/23	UT	UT	Grand	8.1	200
UT106335750	APC 242	9/6/23	UT	UT	Grand	8.1	200
UT106335751	APC 243	9/6/23	UT	UT	Grand	8.1	200
UT106335752	APC 244	9/6/23	UT	UT	Grand	8.1	200
UT106335753	APC 245	9/6/23	UT	UT	Grand	8.1	200
UT106335754	APC 246	9/6/23	UT	UT	Grand	8.1	200
UT106335755	APC 247	9/6/23	UT	UT	Grand	8.1	200
UT106335756	APC 248	9/6/23	UT	UT	Grand	8.1	200
UT106335757	APC 249	9/5/23	UT	UT	Grand	8.1	200
UT106335758	APC 250	9/5/23	UT	UT	Grand	8.1	200
UT106335759	APC 251	9/5/23	UT	UT	Grand	8.1	200
UT106335760	APC 252	9/5/23	UT	UT	Grand	8.1	200
UT106335761	APC 253	9/5/23	UT	UT	Grand	8.1	200
UT106335762	APC 254	9/5/23	UT	UT	Grand	8.1	200
UT106335763	APC 255	9/5/23	UT	UT	Grand	8.1	200
UT106335764	APC 256	9/5/23	UT	UT	Grand	8.1	200
UT106335765	APC 257	9/5/23	UT	UT	Grand	8.1	200
UT106335766	APC 258	9/5/23	UT	UT	Grand	8.1	200
UT106335767	APC 259	9/5/23	UT	UT	Grand	8.1	200
UT106335768	APC 260	9/5/23	UT	UT	Grand	8.1	200
UT106335769	APC 261	9/5/23	UT	UT	Grand	8.1	200
UT106335770	APC 262	9/5/23	UT	UT	Grand	8.1	200
UT106335771	APC 263	9/5/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335772	APC 264	9/5/23	UT	UT	Grand	8.1	200
UT106335773	APC 265	9/5/23	UT	UT	Grand	8.1	200
UT106335774	APC 266	9/5/23	UT	UT	Grand	8.1	200
UT106335775	APC 267	9/5/23	UT	UT	Grand	8.1	200
UT106335776	APC 268	9/5/23	UT	UT	Grand	8.1	200
UT106335777	APC 269	9/5/23	UT	UT	Grand	8.1	200
UT106335778	APC 270	9/5/23	UT	UT	Grand	8.1	200
UT106335779	APC 271	9/5/23	UT	UT	Grand	8.1	200
UT106335780	APC 272	9/5/23	UT	UT	Grand	8.1	200
UT106335781	APC 273	9/7/23	UT	UT	Grand	8.1	200
UT106335782	APC 274	9/7/23	UT	UT	Grand	7.7	200
UT106335783	APC 275	9/7/23	UT	UT	Grand	7.7	200
UT106335784	APC 276	9/7/23	UT	UT	Grand	8.1	200
UT106335785	APC 277	9/5/23	UT	UT	Grand	8.1	200
UT106335786	APC 278	9/5/23	UT	UT	Grand	8.1	200
UT106335787	APC 279	9/5/23	UT	UT	Grand	8.1	200
UT106335788	APC 280	9/5/23	UT	UT	Grand	8.1	200
UT106335789	APC 281	9/5/23	UT	UT	Grand	8.1	200
UT106335790	APC 282	9/5/23	UT	UT	Grand	8.1	200
UT106336474	APC 283	9/5/23	UT	UT	Grand	8.1	200
UT106335791	APC 284	9/5/23	UT	UT	Grand	8.1	200
UT106335792	APC 285	9/5/23	UT	UT	Grand	8.1	200
UT106335793	APC 286	9/5/23	UT	UT	Grand	8.1	200
UT106335794	APC 287	9/5/23	UT	UT	Grand	8.1	200
UT106335795	APC 288	9/5/23	UT	UT	Grand	8.1	200
UT106335796	APC 289	9/5/23	UT	UT	Grand	8.1	200
UT106335797	APC 290	9/5/23	UT	UT	Grand	8.1	200
UT106335798	APC 291	9/5/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335799	APC 292	9/5/23	UT	UT	Grand	8.1	200
UT106335800	APC 293	9/5/23	UT	UT	Grand	8.1	200
UT106335801	APC 294	9/5/23	UT	UT	Grand	8.1	200
UT106335802	APC 295	9/5/23	UT	UT	Grand	8.1	200
UT106335803	APC 296	9/5/23	UT	UT	Grand	8.1	200
UT106335804	APC 297		UT	UT	Grand	8.1	200
UT106335805	APC 298	9/7/23	UT	UT	Grand	7.7	200
UT106335806	APC 299	9/7/23	UT	UT	Grand	7.7	200
UT106335807	APC 300	9/7/23	UT	UT	Grand	8.1	200
UT106335808	APC 301	9/5/23	UT	UT	Grand	8.1	200
UT106335809	APC 302	9/5/23	UT	UT	Grand	8.1	200
UT106335810	APC 303	9/5/23	UT	UT	Grand	8.1	200
UT106335811	APC 304	9/5/23	UT	UT	Grand	8.1	200
UT106335812	APC 305	9/5/23	UT	UT	Grand	8.1	200
UT106335813	APC 306	9/5/23	UT	UT	Grand	8.1	200
UT106335814	APC 307	9/5/23	UT	UT	Grand	8.1	200
UT106335815	APC 308	9/5/23	UT	UT	Grand	8.1	200
UT106335816	APC 309	9/5/23	UT	UT	Grand	8.1	200
UT106335817	APC 310	9/5/23	UT	UT	Grand	8.1	200
UT106335818	APC 311	9/5/23	UT	UT	Grand	8.1	200
UT106335819	APC 312	9/5/23	UT	UT	Grand	8.1	200
UT106335820	APC 313	9/5/23	UT	UT	Grand	8.1	200
UT106335821	APC 314	9/5/23	UT	UT	Grand	8.1	200
UT106335822	APC 315	9/5/23	UT	UT	Grand	8.1	200
UT106335823	APC 316	9/5/23	UT	UT	Grand	8.1	200
UT106335824	APC 317	9/5/23	UT	UT	Grand	8.1	200
UT106335825	APC 318	9/5/23	UT	UT	Grand	8.1	200
UT106335826	APC 319	9/5/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335827	APC 320	9/5/23	UT	UT	Grand	8.1	200
UT106335828	APC 321	9/5/23	UT	UT	Grand	8.1	200
UT106335829	APC 322	9/5/23	UT	UT	Grand	8.1	200
UT106335830	APC 323	9/5/23	UT	UT	Grand	8.1	200
UT106335831	APC 324	9/5/23	UT	UT	Grand	8.1	200
UT106335832	APC 325	9/5/23	UT	UT	Grand	8.1	200
UT106335833	APC 326	9/5/23	UT	UT	Grand	8.1	200
UT106335834	APC 327	9/5/23	UT	UT	Grand	8.1	200
UT106335835	APC 328	9/5/23	UT	UT	Grand	8.1	200
UT106335836	APC 329	9/5/23	UT	UT	Grand	8.1	200
UT106335837	APC 330	9/5/23	UT	UT	Grand	8.1	200
UT106335838	APC 331	9/5/23	UT	UT	Grand	8.1	200
UT106335839	APC 332	9/5/23	UT	UT	Grand	8.1	200
UT106335840	APC 333	9/5/23	UT	UT	Grand	8.1	200
UT106335841	APC 334	9/5/23	UT	UT	Grand	8.1	200
UT106335842	APC 335	9/5/23	UT	UT	Grand	8.1	200
UT106335843	APC 336	9/5/23	UT	UT	Grand	8.1	200
UT106335844	APC 337	9/5/23	UT	UT	Grand	8.1	200
UT106335845	APC 338	9/5/23	UT	UT	Grand	8.1	200
UT106335846	APC 339	9/5/23	UT	UT	Grand	8.1	200
UT106335847	APC 340	9/5/23	UT	UT	Grand	8.1	200
UT106335848	APC 341	9/5/23	UT	UT	Grand	8.1	200
UT106335849	APC 342	9/5/23	UT	UT	Grand	8.1	200
UT106335850	APC 343	9/5/23	UT	UT	Grand	8.1	200
UT106335851	APC 344	9/5/23	UT	UT	Grand	8.1	200
UT106335852	APC 345	9/5/23	UT	UT	Grand	8.1	200
UT106335853	APC 346	9/5/23	UT	UT	Grand	8.1	200
UT106335854	APC 347	9/6/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335855	APC 348	9/6/23	UT	UT	Grand	8.1	200
UT106335856	APC 349	9/6/23	UT	UT	Grand	8.1	200
UT106335857	APC 350	9/6/23	UT	UT	Grand	8.1	200
UT106335858	APC 351	9/6/23	UT	UT	Grand	8.1	200
UT106335859	APC 352	9/6/23	UT	UT	Grand	8.1	200
UT106335860	APC 353	9/5/23	UT	UT	Grand	8.1	200
UT106335861	APC 354	9/5/23	UT	UT	Grand	8.1	200
UT106335862	APC 355	9/5/23	UT	UT	Grand	8.1	200
UT106335863	APC 356	9/5/23	UT	UT	Grand	8.1	200
UT106335864	APC 357	9/5/23	UT	UT	Grand	8.1	200
UT106335865	APC 358	9/5/23	UT	UT	Grand	8.1	200
UT106335866	APC 359	9/5/23	UT	UT	Grand	8.1	200
UT106335867	APC 360	9/5/23	UT	UT	Grand	8.1	200
UT106335868	APC 361	9/6/23	UT	UT	Grand	8.1	200
UT106335869	APC 362	9/6/23	UT	UT	Grand	8.1	200
UT106335870	APC 363	9/6/23	UT	UT	Grand	8.1	200
UT106335871	APC 364	9/6/23	UT	UT	Grand	8.1	200
UT106335872	APC 365	9/6/23	UT	UT	Grand	8.1	200
UT106335873	APC 366	9/6/23	UT	UT	Grand	8.1	200
UT106335874	APC 367	9/5/23	UT	UT	Grand	8.1	200
UT106335875	APC 368	9/5/23	UT	UT	Grand	8.1	200
UT106335876	APC 369	9/5/23	UT	UT	Grand	8.1	200
UT106335877	APC 370	9/5/23	UT	UT	Grand	8.1	200
UT106335878	APC 371	9/5/23	UT	UT	Grand	8.1	200
UT106335879	APC 372	9/5/23	UT	UT	Grand	8.1	200
UT106335880	APC 373	9/5/23	UT	UT	Grand	8.1	200
UT106335881	APC 374	9/5/23	UT	UT	Grand	8.1	200
UT106335882	APC 375	9/6/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335883	APC 376	9/6/23	UT	UT	Grand	8.1	200
UT106335884	APC 377	9/6/23	UT	UT	Grand	8.1	200
UT106335885	APC 378	9/6/23	UT	UT	Grand	8.1	200
UT106335886	APC 379	9/6/23	UT	UT	Grand	8.1	200
UT106335887	APC 380	9/6/23	UT	UT	Grand	8.1	200
UT106335888	APC 381	9/6/23	UT	UT	Grand	8.1	200
UT106335889	APC 382	9/6/23	UT	UT	Grand	8.1	200
UT106335890	APC 383	9/6/23	UT	UT	Grand	8.1	200
UT106335891	APC 384	9/6/23	UT	UT	Grand	8.1	200
UT106335892	APC 385	9/6/23	UT	UT	Grand	8.1	200
UT106335893	APC 386	9/6/23	UT	UT	Grand	8.1	200
UT106335894	APC 387	9/6/23	UT	UT	Grand	8.1	200
UT106335895	APC 388	9/6/23	UT	UT	Grand	8.1	200
UT106335896	APC 389	9/6/23	UT	UT	Grand	8.1	200
UT106335897	APC 390	9/6/23	UT	UT	Grand	8.1	200
UT106335898	APC 391	9/6/23	UT	UT	Grand	8.1	200
UT106335899	APC 392	9/6/23	UT	UT	Grand	8.1	200
UT106335900	APC 393	9/6/23	UT	UT	Grand	8.1	200
UT106335901	APC 394	9/6/23	UT	UT	Grand	8.1	200
UT106335902	APC 395	9/6/23	UT	UT	Grand	8.1	200
UT106335903	APC 396	9/6/23	UT	UT	Grand	8.1	200
UT106335904	APC 397	9/6/23	UT	UT	Grand	8.1	200
UT106335905	APC 398	9/6/23	UT	UT	Grand	8.1	200
UT106335906	APC 399	9/7/23	UT	UT	Grand	8.1	200
UT106335907	APC 400	9/7/23	UT	UT	Grand	8.1	200
UT106335908	APC 401	9/7/23	UT	UT	Grand	8.1	200
UT106335909	APC 402	9/7/23	UT	UT	Grand	8.1	200
UT106335910	APC 403	9/6/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335911	APC 404	9/6/23	UT	UT	Grand	8.1	200
UT106335912	APC 405	9/6/23	UT	UT	Grand	8.1	200
UT106335913	APC 406	9/6/23	UT	UT	Grand	8.1	200
UT106335914	APC 407	9/6/23	UT	UT	Grand	8.1	200
UT106335915	APC 408	9/6/23	UT	UT	Grand	8.1	200
UT106335916	APC 409	9/7/23	UT	UT	Grand	8.1	200
UT106335917	APC 410	9/7/23	UT	UT	Grand	8.1	200
UT106335918	APC 411	9/7/23	UT	UT	Grand	8.1	200
UT106335919	APC 412	9/7/23	UT	UT	Grand	8.1	200
UT106335920	APC 413	9/6/23	UT	UT	Grand	8.1	200
UT106335921	APC 414	9/6/23	UT	UT	Grand	8.1	200
UT106335922	APC 415	9/6/23	UT	UT	Grand	8.1	200
UT106335923	APC 416	9/6/23	UT	UT	Grand	8.1	200
UT106335924	APC 417	9/6/23	UT	UT	Grand	8.1	200
UT106335925	APC 418	9/6/23	UT	UT	Grand	8.1	200
UT106335926	APC 419	9/6/23	UT	UT	Grand	8.1	200
UT106335927	APC 420	9/6/23	UT	UT	Grand	8.1	200
UT106335928	APC 421	9/6/23	UT	UT	Grand	8.1	200
UT106335929	APC 422	9/6/23	UT	UT	Grand	8.1	200
UT106335930	APC 423	9/6/23	UT	UT	Grand	8.1	200
UT106335931	APC 424	9/6/23	UT	UT	Grand	8.1	200
UT106335932	APC 425	9/6/23	UT	UT	Grand	8.1	200
UT106335933	APC 426	9/6/23	UT	UT	Grand	8.1	200
UT106335934	APC 427	9/6/23	UT	UT	Grand	8.1	200
UT106335935	APC 428	9/6/23	UT	UT	Grand	8.1	200
UT106335936	APC 429	9/6/23	UT	UT	Grand	8.1	200
UT106335937	APC 430	9/6/23	UT	UT	Grand	8.1	200
UT106335938	APC 431	9/6/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335939	APC 432	9/6/23	UT	UT	Grand	8.1	200
UT106335940	APC 433	9/6/23	UT	UT	Grand	8.1	200
UT106335941	APC 434	9/6/23	UT	UT	Grand	8.1	200
UT106335942	APC 435	9/9/23	UT	UT	Grand	8.1	200
UT106335943	APC 436	9/9/23	UT	UT	Grand	8.1	200
UT106335944	APC 437	9/8/23	UT	UT	Grand	8.1	200
UT106335945	APC 438	9/8/23	UT	UT	Grand	8.1	200
UT106335946	APC 439	9/4/23	UT	UT	Grand	8.1	200
UT106335947	APC 440	9/4/23	UT	UT	Grand	4.1	200
UT106335948	APC 441	9/4/23	UT	UT	Grand	4.1	200
UT106335949	APC 442	9/4/23	UT	UT	Grand	4.1	200
UT106335950	APC 443	9/4/23	UT	UT	Grand	4.1	200
UT106335951	APC 444	9/4/23	UT	UT	Grand	8.1	200
UT106335952	APC 445	9/9/23	UT	UT	Grand	8.1	200
UT106335953	APC 446	9/9/23	UT	UT	Grand	8.1	200
UT106335954	APC 447	9/8/23	UT	UT	Grand	8.1	200
UT106335955	APC 448	9/8/23	UT	UT	Grand	8.1	200
UT106335956	APC 449	9/4/23	UT	UT	Grand	8.1	200
UT106335957	APC 450	9/4/23	UT	UT	Grand	4.1	200
UT106335958	APC 451	9/4/23	UT	UT	Grand	4.1	200
UT106335959	APC 452	9/4/23	UT	UT	Grand	4.1	200
UT106335960	APC 453	9/4/23	UT	UT	Grand	4.1	200
UT106335961	APC 454	9/4/23	UT	UT	Grand	8.1	200
UT106335962	APC 455	9/4/23	UT	UT	Grand	8.1	200
UT106335963	APC 456	9/4/23	UT	UT	Grand	8.1	200
UT106335964	APC 457	9/4/23	UT	UT	Grand	8.1	200
UT106335965	APC 458	9/4/23	UT	UT	Grand	8.1	200
UT106335966	APC 459	9/9/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335967	APC 460	9/9/23	UT	UT	Grand	8.1	200
UT106335968	APC 461	9/8/23	UT	UT	Grand	8.1	200
UT106335969	APC 462	9/8/23	UT	UT	Grand	8.1	200
UT106335970	APC 463	9/4/23	UT	UT	Grand	8.1	200
UT106335971	APC 464	9/4/23	UT	UT	Grand	8.1	200
UT106335972	APC 465	9/4/23	UT	UT	Grand	4.1	200
UT106335973	APC 466	9/4/23	UT	UT	Grand	4.1	200
UT106335974	APC 467	9/1/23	UT	UT	Grand	4.1	200
UT106335975	APC 468	9/1/23	UT	UT	Grand	8.1	200
UT106335976	APC 469	9/1/23	UT	UT	Grand	8.1	200
UT106335977	APC 470	9/1/23	UT	UT	Grand	8.1	200
UT106335978	APC 471	9/1/23	UT	UT	Grand	8.1	200
UT106335979	APC 472	9/1/23	UT	UT	Grand	8.1	200
UT106335980	APC 473	9/1/23	UT	UT	Grand	8.1	200
UT106335981	APC 474	9/1/23	UT	UT	Grand	8.1	200
UT106335982	APC 475	9/1/23	UT	UT	Grand	8.1	200
UT106335983	APC 476	9/1/23	UT	UT	Grand	8.1	200
UT106335984	APC 477	9/1/23	UT	UT	Grand	8.1	200
UT106335985	APC 478	9/1/23	UT	UT	Grand	8.1	200
UT106335986	APC 479	9/1/23	UT	UT	Grand	8.1	200
UT106335987	APC 480	9/1/23	UT	UT	Grand	8.1	200
UT106335988	APC 481	9/1/23	UT	UT	Grand	8.1	200
UT106335989	APC 482	9/1/23	UT	UT	Grand	8.1	200
UT106335990	APC 483	9/1/23	UT	UT	Grand	8.1	200
UT106335991	APC 484	9/1/23	UT	UT	Grand	8.1	200
UT106335992	APC 485	9/1/23	UT	UT	Grand	8.1	200
UT106335993	APC 486	9/1/23	UT	UT	Grand	8.1	200
UT106335994	APC 487	9/1/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106335995	APC 488	9/1/23	UT	UT	Grand	8.1	200
UT106335996	APC 489	9/1/23	UT	UT	Grand	8.1	200
UT106335997	APC 490	9/1/23	UT	UT	Grand	8.1	200
UT106335998	APC 491	9/1/23	UT	UT	Grand	8.1	200
UT106335999	APC 492	9/1/23	UT	UT	Grand	8.1	200
UT106336000	APC 493	9/8/23	UT	UT	Grand	8.1	200
UT106336001	APC 494	9/8/23	UT	UT	Grand	8.1	200
UT106336002	APC 495	9/4/23	UT	UT	Grand	8.1	200
UT106336003	APC 496	9/4/23	UT	UT	Grand	8.1	200
UT106336004	APC 497	9/8/23	UT	UT	Grand	8.1	200
UT106336005	APC 498	9/8/23	UT	UT	Grand	8.1	200
UT106336006	APC 499	9/8/23	UT	UT	Grand	8.1	200
UT106336007	APC 500	9/8/23	UT	UT	Grand	8.1	200
UT106336475	APC 501	9/4/23	UT	UT	Grand	8.1	200
UT106336008	APC 502	9/4/23	UT	UT	Grand	4.1	200
UT106336009	APC 503	9/4/23	UT	UT	Grand	8.1	200
UT106336010	APC 504	9/4/23	UT	UT	Grand	4.1	200
UT106336011	APC 505	9/1/23	UT	UT	Grand	4.1	200
UT106336012	APC 506	9/1/23	UT	UT	Grand	8.1	200
UT106336013	APC 507	9/1/23	UT	UT	Grand	8.1	200
UT106336014	APC 508	9/1/23	UT	UT	Grand	8.1	200
UT106336015	APC 509	9/1/23	UT	UT	Grand	8.1	200
UT106336016	APC 510	9/1/23	UT	UT	Grand	8.1	200
UT106336017	APC 511	9/1/23	UT	UT	Grand	8.1	200
UT106336018	APC 512	9/1/23	UT	UT	Grand	8.1	200
UT106336019	APC 513	9/1/23	UT	UT	Grand	8.1	200
UT106336020	APC 514	9/1/23	UT	UT	Grand	8.1	200
UT106336021	APC 515	9/1/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336022	APC 516	9/1/23	UT	UT	Grand	8.1	200
UT106336023	APC 517	9/1/23	UT	UT	Grand	8.1	200
UT106336024	APC 518	9/1/23	UT	UT	Grand	8.1	200
UT106336025	APC 519	9/1/23	UT	UT	Grand	8.1	200
UT106336026	APC 520	9/1/23	UT	UT	Grand	8.1	200
UT106336027	APC 521	9/1/23	UT	UT	Grand	8.1	200
UT106336028	APC 522	9/1/23	UT	UT	Grand	8.1	200
UT106336029	APC 523	9/1/23	UT	UT	Grand	8.1	200
UT106336030	APC 524	9/1/23	UT	UT	Grand	8.1	200
UT106336031	APC 525	9/1/23	UT	UT	Grand	8.1	200
UT106336032	APC 526	9/1/23	UT	UT	Grand	8.1	200
UT106336033	APC 527	9/1/23	UT	UT	Grand	8.1	200
UT106336034	APC 528	9/1/23	UT	UT	Grand	8.1	200
UT106336035	APC 529	9/3/23	UT	UT	Grand	8.1	200
UT106336036	APC 530	9/3/23	UT	UT	Grand	8.1	200
UT106336037	APC 531	9/8/23	UT	UT	Grand	8.1	200
UT106336038	APC 532	9/8/23	UT	UT	Grand	8.1	200
UT106336039	APC 533	9/4/23	UT	UT	Grand	8.1	200
UT106336040	APC 534	9/4/23	UT	UT	Grand	8.1	200
UT106336041	APC 535	9/4/23	UT	UT	Grand	8.1	200
UT106336042	APC 536	9/4/23	UT	UT	Grand	8.1	200
UT106336043	APC 537	9/4/23	UT	UT	Grand	8.1	200
UT106336044	APC 538	9/4/23	UT	UT	Grand	8.1	200
UT106336045	APC 539	9/4/23	UT	UT	Grand	8.1	200
UT106336046	APC 540	9/4/23	UT	UT	Grand	4.1	200
UT106336047	APC 541	9/4/23	UT	UT	Grand	4.1	200
UT106336048	APC 542	9/4/23	UT	UT	Grand	4.1	200
UT106336049	APC 543	9/2/23	UT	UT	Grand	4.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336050	APC 544	9/2/23	UT	UT	Grand	8.1	200
UT106336051	APC 545	9/2/23	UT	UT	Grand	8.1	200
UT106336052	APC 546	9/2/23	UT	UT	Grand	8.1	200
UT106336053	APC 547	9/2/23	UT	UT	Grand	8.1	200
UT106336054	APC 548	9/2/23	UT	UT	Grand	8.1	200
UT106336055	APC 549	9/1/23	UT	UT	Grand	8.1	200
UT106336056	APC 550	9/1/23	UT	UT	Grand	8.1	200
UT106336057	APC 551	9/1/23	UT	UT	Grand	8.1	200
UT106336058	APC 552	9/1/23	UT	UT	Grand	8.1	200
UT106336059	APC 553	9/1/23	UT	UT	Grand	8.1	200
UT106336060	APC 554	9/1/23	UT	UT	Grand	8.1	200
UT106336061	APC 555	9/1/23	UT	UT	Grand	8.1	200
UT106336062	APC 556	9/1/23	UT	UT	Grand	0.0	200
UT106336063	APC 557	9/1/23	UT	UT	Grand	8.1	200
UT106336064	APC 558	9/1/23	UT	UT	Grand	8.1	200
UT106336065	APC 559	9/1/23	UT	UT	Grand	8.1	200
UT106336066	APC 560	9/1/23	UT	UT	Grand	8.1	200
UT106336067	APC 561	9/1/23	UT	UT	Grand	8.1	200
UT106336068	APC 562	9/1/23	UT	UT	Grand	8.1	200
UT106336069	APC 563	9/1/23	UT	UT	Grand	8.1	200
UT106336070	APC 564	9/1/23	UT	UT	Grand	8.1	200
UT106336071	APC 565	9/3/23	UT	UT	Grand	8.1	200
UT106336072	APC 566	9/3/23	UT	UT	Grand	8.1	200
UT106336073	APC 567	9/3/23	UT	UT	Grand	8.1	200
UT106336074	APC 568	9/3/23	UT	UT	Grand	8.1	200
UT106336075	APC 569	9/3/23	UT	UT	Grand	8.1	200
UT106336076	APC 570	9/3/23	UT	UT	Grand	8.1	200
UT106336077	APC 571	9/3/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336078	APC 572	9/3/23	UT	UT	Grand	8.1	200
UT106336079	APC 573	9/4/23	UT	UT	Grand	8.1	200
UT106336080	APC 574	9/4/23	UT	UT	Grand	8.1	200
UT106336081	APC 575	9/4/23	UT	UT	Grand	8.1	200
UT106336082	APC 576	9/4/23	UT	UT	Grand	8.1	200
UT106336083	APC 577	9/4/23	UT	UT	Grand	8.1	200
UT106336084	APC 578	9/4/23	UT	UT	Grand	8.1	200
UT106336085	APC 579	9/4/23	UT	UT	Grand	8.1	200
UT106336086	APC 580	9/4/23	UT	UT	Grand	8.1	200
UT106336087	APC 581	9/4/23	UT	UT	Grand	8.1	200
UT106336088	APC 582	9/4/23	UT	UT	Grand	4.1	200
UT106336089	APC 583	9/4/23	UT	UT	Grand	4.1	200
UT106336090	APC 584	9/4/23	UT	UT	Grand	4.1	200
UT106336091	APC 585	9/2/23	UT	UT	Grand	4.1	200
UT106336092	APC 586	9/2/23	UT	UT	Grand	8.1	200
UT106336093	APC 587	9/2/23	UT	UT	Grand	8.1	200
UT106336094	APC 588	9/2/23	UT	UT	Grand	8.1	200
UT106336095	APC 589	9/2/23	UT	UT	Grand	8.1	200
UT106336096	APC 590	9/2/23	UT	UT	Grand	8.1	200
UT106336097	APC 591	9/1/23	UT	UT	Grand	8.1	200
UT106336098	APC 592	9/1/23	UT	UT	Grand	8.1	200
UT106336099	APC 593	9/1/23	UT	UT	Grand	8.1	200
UT106336100	APC 594	9/1/23	UT	UT	Grand	8.1	200
UT106336101	APC 595	9/1/23	UT	UT	Grand	8.1	200
UT106336102	APC 596	9/1/23	UT	UT	Grand	8.1	200
UT106336103	APC 597	9/1/23	UT	UT	Grand	8.1	200
UT106336104	APC 598	9/1/23	UT	UT	Grand	8.1	200
UT106336105	APC 599	9/1/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336106	APC 600	9/1/23	UT	UT	Grand	8.1	200
UT106336107	APC 601	9/1/23	UT	UT	Grand	8.1	200
UT106336108	APC 602	9/1/23	UT	UT	Grand	8.1	200
UT106336109	APC 603	9/1/23	UT	UT	Grand	8.1	200
UT106336110	APC 604	9/1/23	UT	UT	Grand	8.1	200
UT106336111	APC 605	9/1/23	UT	UT	Grand	8.1	200
UT106336112	APC 606	9/1/23	UT	UT	Grand	8.1	200
UT106336113	APC 607	9/3/23	UT	UT	Grand	8.1	200
UT106336114	APC 608	9/3/23	UT	UT	Grand	8.1	200
UT106336115	APC 609	9/3/23	UT	UT	Grand	8.1	200
UT106336116	APC 610	9/3/23	UT	UT	Grand	8.1	200
UT106336117	APC 611	9/3/23	UT	UT	Grand	8.1	200
UT106336118	APC 612	9/3/23	UT	UT	Grand	8.1	200
UT106336119	APC 613	9/3/23	UT	UT	Grand	8.1	200
UT106336120	APC 614	9/3/23	UT	UT	Grand	8.1	200
UT106336121	APC 615	9/4/23	UT	UT	Grand	8.1	200
UT106336122	APC 616	9/4/23	UT	UT	Grand	8.1	200
UT106336123	APC 617	9/4/23	UT	UT	Grand	8.1	200
UT106336124	APC 618	9/4/23	UT	UT	Grand	8.1	200
UT106336125	APC 619	9/4/23	UT	UT	Grand	8.1	200
UT106336126	APC 620	9/4/23	UT	UT	Grand	8.1	200
UT106336127	APC 621	9/4/23	UT	UT	Grand	8.1	200
UT106336128	APC 622	9/4/23	UT	UT	Grand	8.1	200
UT106336129	APC 623	9/4/23	UT	UT	Grand	8.1	200
UT106336130	APC 624	9/4/23	UT	UT	Grand	8.1	200
UT106336131	APC 625	9/4/23	UT	UT	Grand	8.1	200
UT106336132	APC 626	9/4/23	UT	UT	Grand	8.1	200
UT106336133	APC 627	9/4/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336134	APC 628	9/4/23	UT	UT	Grand	8.1	200
UT106336135	APC 629	9/4/23	UT	UT	Grand	8.1	200
UT106336136	APC 630	9/4/23	UT	UT	Grand	8.1	200
UT106336137	APC 631	9/4/23	UT	UT	Grand	8.1	200
UT106336138	APC 632	9/4/23	UT	UT	Grand	4.1	200
UT106336139	APC 633	9/4/23	UT	UT	Grand	4.1	200
UT106336140	APC 634	9/4/23	UT	UT	Grand	4.1	200
UT106336141	APC 635	9/2/23	UT	UT	Grand	4.1	200
UT106336142	APC 636	9/2/23	UT	UT	Grand	8.1	200
UT106336143	APC 637	9/2/23	UT	UT	Grand	8.1	200
UT106336144	APC 638	9/2/23	UT	UT	Grand	8.1	200
UT106336145	APC 639	9/2/23	UT	UT	Grand	8.1	200
UT106336146	APC 640	9/2/23	UT	UT	Grand	8.1	200
UT106336147	APC 641	9/1/23	UT	UT	Grand	8.1	200
UT106336148	APC 642	9/1/23	UT	UT	Grand	8.1	200
UT106336149	APC 643	9/1/23	UT	UT	Grand	8.1	200
UT106336150	APC 644	9/1/23	UT	UT	Grand	8.1	200
UT106336151	APC 645	9/1/23	UT	UT	Grand	8.1	200
UT106336152	APC 646	9/1/23	UT	UT	Grand	8.1	200
UT106336153	APC 647	9/1/23	UT	UT	Grand	8.1	200
UT106336154	APC 648	9/1/23	UT	UT	Grand	8.1	200
UT106336155	APC 649	9/2/23	UT	UT	Grand	8.1	200
UT106336156	APC 650	9/2/23	UT	UT	Grand	8.1	200
UT106336157	APC 651	9/2/23	UT	UT	Grand	8.1	200
UT106336158	APC 652	9/2/23	UT	UT	Grand	8.1	200
UT106336159	APC 653	9/2/23	UT	UT	Grand	8.1	200
UT106336160	APC 654	9/2/23	UT	UT	Grand	8.1	200
UT106336161	APC 655	9/2/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336162	APC 656	9/2/23	UT	UT	Grand	8.1	200
UT106336163	APC 657	9/3/23	UT	UT	Grand	8.1	200
UT106336164	APC 658	9/3/23	UT	UT	Grand	8.1	200
UT106336165	APC 659	9/3/23	UT	UT	Grand	8.1	200
UT106336166	APC 660	9/3/23	UT	UT	Grand	8.1	200
UT106336167	APC 661	9/3/23	UT	UT	Grand	8.1	200
UT106336168	APC 662	9/3/23	UT	UT	Grand	8.1	200
UT106336169	APC 663	9/3/23	UT	UT	Grand	8.1	200
UT106336170	APC 664	9/3/23	UT	UT	Grand	8.1	200
UT106336171	APC 665	9/4/23	UT	UT	Grand	8.1	200
UT106336172	APC 666	9/4/23	UT	UT	Grand	8.1	200
UT106336173	APC 667	9/4/23	UT	UT	Grand	8.1	200
UT106336174	APC 668	9/4/23	UT	UT	Grand	8.1	200
UT106336175	APC 669	9/4/23	UT	UT	Grand	8.1	200
UT106336176	APC 670	9/4/23	UT	UT	Grand	8.1	200
UT106336177	APC 671	9/4/23	UT	UT	Grand	8.1	200
UT106336178	APC 672	9/4/23	UT	UT	Grand	8.1	200
UT106336179	APC 673	9/4/23	UT	UT	Grand	8.1	200
UT106336180	APC 674	9/4/23	UT	UT	Grand	8.1	200
UT106336181	APC 675	9/4/23	UT	UT	Grand	8.1	200
UT106336182	APC 676	9/4/23	UT	UT	Grand	8.1	200
UT106336183	APC 677	9/4/23	UT	UT	Grand	8.1	200
UT106336184	APC 678	9/4/23	UT	UT	Grand	8.1	200
UT106336185	APC 679	9/4/23	UT	UT	Grand	8.1	200
UT106336186	APC 680	9/4/23	UT	UT	Grand	8.1	200
UT106336187	APC 681	9/4/23	UT	UT	Grand	8.1	200
UT106336188	APC 682	9/4/23	UT	UT	Grand	4.1	200
UT106336189	APC 683	9/4/23	UT	UT	Grand	4.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336190	APC 684	9/4/23	UT	UT	Grand	4.1	200
UT106336191	APC 685	9/2/23	UT	UT	Grand	4.1	200
UT106336192	APC 686	9/2/23	UT	UT	Grand	8.1	200
UT106336193	APC 687	9/2/23	UT	UT	Grand	8.1	200
UT106336194	APC 688	9/2/23	UT	UT	Grand	8.1	200
UT106336195	APC 689	9/2/23	UT	UT	Grand	8.1	200
UT106336196	APC 690	9/2/23	UT	UT	Grand	8.1	200
UT106336197	APC 691	9/2/23	UT	UT	Grand	8.1	200
UT106336198	APC 692	9/2/23	UT	UT	Grand	8.1	200
UT106336199	APC 693	9/2/23	UT	UT	Grand	8.1	200
UT106336200	APC 694	9/2/23	UT	UT	Grand	8.1	200
UT106336201	APC 695	9/2/23	UT	UT	Grand	8.1	200
UT106336202	APC 696	9/2/23	UT	UT	Grand	8.1	200
UT106336203	APC 697	9/2/23	UT	UT	Grand	8.1	200
UT106336204	APC 698	9/2/23	UT	UT	Grand	8.1	200
UT106336205	APC 699	9/1/23	UT	UT	Grand	8.1	200
UT106336206	APC 700	9/1/23	UT	UT	Grand	8.1	200
UT106336207	APC 701	9/1/23	UT	UT	Grand	8.1	200
UT106336208	APC 702	9/1/23	UT	UT	Grand	8.1	200
UT106336209	APC 703	9/1/23	UT	UT	Grand	8.1	200
UT106336210	APC 704	9/1/23	UT	UT	Grand	8.1	200
UT106336211	APC 705	9/1/23	UT	UT	Grand	8.1	200
UT106336212	APC 706	9/1/23	UT	UT	Grand	8.1	200
UT106336213	APC 707	9/3/23	UT	UT	Grand	8.1	200
UT106336214	APC 708	9/3/23	UT	UT	Grand	8.1	200
UT106336215	APC 709	9/3/23	UT	UT	Grand	8.1	200
UT106336216	APC 710	9/3/23	UT	UT	Grand	8.1	200
UT106336217	APC 711	9/3/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336218	APC 712	9/3/23	UT	UT	Grand	8.1	200
UT106336219	APC 713	9/3/23	UT	UT	Grand	8.1	200
UT106336220	APC 714	9/3/23	UT	UT	Grand	8.1	200
UT106336221	APC 715	9/9/23	UT	UT	Grand	8.1	200
UT106336222	APC 716	9/9/23	UT	UT	Grand	8.1	200
UT106336223	APC 717	9/4/23	UT	UT	Grand	8.1	200
UT106336224	APC 718	9/4/23	UT	UT	Grand	8.1	200
UT106336225	APC 719	9/4/23	UT	UT	Grand	8.1	200
UT106336226	APC 720	9/4/23	UT	UT	Grand	8.1	200
UT106336227	APC 721	9/4/23	UT	UT	Grand	8.1	200
UT106336228	APC 722	9/4/23	UT	UT	Grand	8.1	200
UT106336229	APC 723	9/4/23	UT	UT	Grand	8.1	200
UT106336230	APC 724	9/4/23	UT	UT	Grand	4.1	200
UT106336231	APC 725	9/4/23	UT	UT	Grand	4.1	200
UT106336232	APC 726	9/4/23	UT	UT	Grand	4.1	200
UT106336233	APC 727	9/2/23	UT	UT	Grand	4.1	200
UT106336234	APC 728	9/2/23	UT	UT	Grand	8.1	200
UT106336235	APC 729	9/2/23	UT	UT	Grand	8.1	200
UT106336236	APC 730	9/2/23	UT	UT	Grand	8.1	200
UT106336237	APC 731	9/2/23	UT	UT	Grand	8.1	200
UT106336238	APC 732	9/2/23	UT	UT	Grand	8.1	200
UT106336239	APC 733	9/2/23	UT	UT	Grand	8.1	200
UT106336240	APC 734	9/2/23	UT	UT	Grand	8.1	200
UT106336241	APC 735	9/2/23	UT	UT	Grand	8.1	200
UT106336242	APC 736	9/2/23	UT	UT	Grand	8.1	200
UT106336243	APC 737	9/2/23	UT	UT	Grand	8.1	200
UT106336244	APC 738	9/2/23	UT	UT	Grand	8.1	200
UT106336245	APC 739	9/2/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336246	APC 740	9/2/23	UT	UT	Grand	8.1	200
UT106336247	APC 741	9/2/23	UT	UT	Grand	8.1	200
UT106336248	APC 742	9/2/23	UT	UT	Grand	8.1	200
UT106336249	APC 743	9/2/23	UT	UT	Grand	8.1	200
UT106336250	APC 744	9/2/23	UT	UT	Grand	8.1	200
UT106336251	APC 745	9/2/23	UT	UT	Grand	8.1	200
UT106336252	APC 746	9/2/23	UT	UT	Grand	8.1	200
UT106336253	APC 747	9/2/23	UT	UT	Grand	8.1	200
UT106336254	APC 748	9/2/23	UT	UT	Grand	8.1	200
UT106336255	APC 749	9/2/23	UT	UT	Grand	8.1	200
UT106336256	APC 750	9/2/23	UT	UT	Grand	8.1	200
UT106336257	APC 751	9/2/23	UT	UT	Grand	8.1	200
UT106336258	APC 752	9/2/23	UT	UT	Grand	8.1	200
UT106336259	APC 753	9/4/23	UT	UT	Grand	8.1	200
UT106336260	APC 754	9/4/23	UT	UT	Grand	8.1	200
UT106336261	APC 755	9/2/23	UT	UT	Grand	8.1	200
UT106336262	APC 756	9/2/23	UT	UT	Grand	8.1	200
UT106336263	APC 757	9/9/23	UT	UT	Grand	8.1	200
UT106336264	APC 758	9/9/23	UT	UT	Grand	8.1	200
UT106336265	APC 759	9/4/23	UT	UT	Grand	8.1	200
UT106336266	APC 760	9/4/23	UT	UT	Grand	8.1	200
UT106336267	APC 761	9/4/23	UT	UT	Grand	8.1	200
UT106336268	APC 762	9/4/23	UT	UT	Grand	8.1	200
UT106336269	APC 763	9/4/23	UT	UT	Grand	8.1	200
UT106336270	APC 764	9/4/23	UT	UT	Grand	8.1	200
UT106336271	APC 765	9/4/23	UT	UT	Grand	8.1	200
UT106336272	APC 766	9/4/23	UT	UT	Grand	4.1	200
UT106336273	APC 767	9/4/23	UT	UT	Grand	4.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336274	APC 768	9/4/23	UT	UT	Grand	4.1	200
UT106336275	APC 769	9/3/23	UT	UT	Grand	4.1	200
UT106336276	APC 770	9/3/23	UT	UT	Grand	8.1	200
UT106336277	APC 771	9/3/23	UT	UT	Grand	8.1	200
UT106336278	APC 772	9/3/23	UT	UT	Grand	8.1	200
UT106336279	APC 773	9/3/23	UT	UT	Grand	8.1	200
UT106336280	APC 774	9/3/23	UT	UT	Grand	8.1	200
UT106336281	APC 775	9/3/23	UT	UT	Grand	8.1	200
UT106336282	APC 776	9/3/23	UT	UT	Grand	8.1	200
UT106336283	APC 777	9/3/23	UT	UT	Grand	8.1	200
UT106336284	APC 778	9/3/23	UT	UT	Grand	8.1	200
UT106336285	APC 779	9/3/23	UT	UT	Grand	8.1	200
UT106336286	APC 780	9/3/23	UT	UT	Grand	8.1	200
UT106336287	APC 781	9/3/23	UT	UT	Grand	8.1	200
UT106336288	APC 782	9/3/23	UT	UT	Grand	8.1	200
UT106336289	APC 783	9/2/23	UT	UT	Grand	8.1	200
UT106336290	APC 784	9/2/23	UT	UT	Grand	8.1	200
UT106336291	APC 785	9/2/23	UT	UT	Grand	8.1	200
UT106336292	APC 786	9/2/23	UT	UT	Grand	8.1	200
UT106336293	APC 787	9/2/23	UT	UT	Grand	8.1	200
UT106336294	APC 788	9/2/23	UT	UT	Grand	8.1	200
UT106336295	APC 789	9/2/23	UT	UT	Grand	8.1	200
UT106336296	APC 790	9/2/23	UT	UT	Grand	8.1	200
UT106336297	APC 791	9/2/23	UT	UT	Grand	8.1	200
UT106336298	APC 792	9/2/23	UT	UT	Grand	8.1	200
UT106336299	APC 793	9/2/23	UT	UT	Grand	8.1	200
UT106336300	APC 794	9/2/23	UT	UT	Grand	8.1	200
UT106336301	APC 795	9/2/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336302	APC 796	9/2/23	UT	UT	Grand	8.1	200
UT106336303	APC 797	9/2/23	UT	UT	Grand	8.1	200
UT106336304	APC 798	9/2/23	UT	UT	Grand	8.1	200
UT106336305	APC 799	9/9/23	UT	UT	Grand	8.1	200
UT106336306	APC 800	9/9/23	UT	UT	Grand	4.1	200
UT106336307	APC 801	9/9/23	UT	UT	Grand	4.1	200
UT106336308	APC 802	9/9/23	UT	UT	Grand	4.1	200
UT106336309	APC 803	9/3/23	UT	UT	Grand	8.1	200
UT106336310	APC 804	9/3/23	UT	UT	Grand	8.1	200
UT106336311	APC 805	9/3/23	UT	UT	Grand	8.1	200
UT106336312	APC 806	9/3/23	UT	UT	Grand	8.1	200
UT106336313	APC 807	9/3/23	UT	UT	Grand	8.1	200
UT106336314	APC 808	9/3/23	UT	UT	Grand	8.1	200
UT106336315	APC 809	9/2/23	UT	UT	Grand	8.1	200
UT106336316	APC 810	9/2/23	UT	UT	Grand	8.1	200
UT106336317	APC 811	9/2/23	UT	UT	Grand	8.1	200
UT106336318	APC 812	9/2/23	UT	UT	Grand	8.1	200
UT106336319	APC 813	9/2/23	UT	UT	Grand	8.1	200
UT106336320	APC 814	9/2/23	UT	UT	Grand	8.1	200
UT106336321	APC 815	9/2/23	UT	UT	Grand	8.1	200
UT106336322	APC 816	9/2/23	UT	UT	Grand	8.1	200
UT106336323	APC 817	9/2/23	UT	UT	Grand	8.1	200
UT106336324	APC 818	9/2/23	UT	UT	Grand	8.1	200
UT106336325	APC 819	9/2/23	UT	UT	Grand	8.1	200
UT106336326	APC 820	9/2/23	UT	UT	Grand	8.1	200
UT106336327	APC 821	9/2/23	UT	UT	Grand	8.1	200
UT106336328	APC 822	9/2/23	UT	UT	Grand	8.1	200
UT106336329	APC 823	9/2/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336330	APC 824	9/2/23	UT	UT	Grand	8.1	200
UT106336331	APC 825	9/3/23	UT	UT	Grand	4.1	200
UT106336332	APC 826	9/3/23	UT	UT	Grand	4.1	200
UT106336333	APC 827	9/3/23	UT	UT	Grand	4.1	200
UT106336334	APC 828	9/3/23	UT	UT	Grand	4.1	200
UT106336335	APC 829	9/3/23	UT	UT	Grand	8.1	200
UT106336336	APC 830	9/3/23	UT	UT	Grand	8.1	200
UT106336337	APC 831	9/3/23	UT	UT	Grand	8.1	200
UT106336338	APC 832	9/3/23	UT	UT	Grand	8.1	200
UT106336339	APC 833	9/3/23	UT	UT	Grand	8.1	200
UT106336340	APC 834	9/3/23	UT	UT	Grand	8.1	200
UT106336341	APC 835	9/2/23	UT	UT	Grand	8.1	200
UT106336342	APC 836	9/2/23	UT	UT	Grand	8.1	200
UT106336343	APC 837	9/2/23	UT	UT	Grand	8.1	200
UT106336344	APC 838	9/2/23	UT	UT	Grand	8.1	200
UT106336345	APC 839	9/2/23	UT	UT	Grand	8.1	200
UT106336346	APC 840	9/2/23	UT	UT	Grand	8.1	200
UT106336347	APC 841	9/2/23	UT	UT	Grand	8.1	200
UT106336348	APC 842	9/2/23	UT	UT	Grand	8.1	200
UT106336349	APC 843	9/2/23	UT	UT	Grand	8.1	200
UT106336350	APC 844	9/2/23	UT	UT	Grand	8.1	200
UT106336351	APC 845	9/2/23	UT	UT	Grand	8.1	200
UT106336352	APC 846	9/2/23	UT	UT	Grand	8.1	200
UT106336353	APC 847	9/2/23	UT	UT	Grand	8.1	200
UT106336354	APC 848	9/2/23	UT	UT	Grand	8.1	200
UT106336355	APC 849	9/2/23	UT	UT	Grand	8.1	200
UT106336356	APC 850	9/2/23	UT	UT	Grand	8.1	200
UT106336357	APC 851	9/3/23	UT	UT	Grand	4.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336358	APC 852	9/3/23	UT	UT	Grand	4.1	200
UT106336359	APC 853	9/3/23	UT	UT	Grand	4.1	200
UT106336360	APC 854	9/3/23	UT	UT	Grand	4.1	200
UT106336361	APC 855	9/3/23	UT	UT	Grand	8.1	200
UT106336362	APC 856	9/3/23	UT	UT	Grand	8.1	200
UT106336363	APC 857	9/3/23	UT	UT	Grand	8.1	200
UT106336364	APC 858	9/3/23	UT	UT	Grand	8.1	200
UT106336365	APC 859	9/3/23	UT	UT	Grand	8.1	200
UT106336366	APC 860	9/3/23	UT	UT	Grand	8.1	200
UT106336367	APC 861	9/3/23	UT	UT	Grand	4.1	200
UT106336368	APC 862	9/3/23	UT	UT	Grand	4.1	200
UT106336369	APC 863	9/3/23	UT	UT	Grand	4.1	200
UT106336370	APC 864	9/3/23	UT	UT	Grand	4.1	200
UT106336371	APC 865	9/3/23	UT	UT	Grand	8.1	200
UT106336372	APC 866	9/3/23	UT	UT	Grand	8.1	200
UT106336373	APC 867	9/3/23	UT	UT	Grand	8.1	200
UT106336374	APC 868	9/3/23	UT	UT	Grand	8.1	200
UT106336375	APC 869	9/3/23	UT	UT	Grand	8.1	200
UT106336376	APC 870	9/3/23	UT	UT	Grand	8.1	200
UT106336377	APC 871	9/4/23	UT	UT	Grand	6.2	200
UT106336378	APC 872	9/4/23	UT	UT	Grand	4.2	200
UT106336379	APC 873	9/4/23	UT	UT	Grand	6.2	200
UT106336380	APC 874	9/4/23	UT	UT	Grand	6.2	200
UT106336381	APC 875	9/4/23	UT	UT	Grand	6.2	200
UT106336382	APC 876	9/4/23	UT	UT	Grand	6.2	200
UT106336383	APC 877	9/4/23	UT	UT	Grand	6.2	200
UT106336384	APC 878	9/4/23	UT	UT	Grand	6.2	200
UT106336385	APC 879	9/9/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336386	APC 880	9/9/23	UT	UT	Grand	8.1	200
UT106336387	APC 881	9/4/23	UT	UT	Grand	8.1	200
UT106336388	APC 882	9/4/23	UT	UT	Grand	8.1	200
UT106336389	APC 883	9/4/23	UT	UT	Grand	8.1	200
UT106336390	APC 884	9/4/23	UT	UT	Grand	8.1	200
UT106336391	APC 885	9/4/23	UT	UT	Grand	8.1	200
UT106336392	APC 886	9/4/23	UT	UT	Grand	8.1	200
UT106336393	APC 887	9/4/23	UT	UT	Grand	8.1	200
UT106336394	APC 888	9/4/23	UT	UT	Grand	8.1	200
UT106336395	APC 889	9/4/23	UT	UT	Grand	8.1	200
UT106336396	APC 890	9/4/23	UT	UT	Grand	8.1	200
UT106336397	APC 891	9/4/23	UT	UT	Grand	8.1	200
UT106336398	APC 892	9/4/23	UT	UT	Grand	8.1	200
UT106336399	APC 893	9/4/23	UT	UT	Grand	8.1	200
UT106336400	APC 894	9/4/23	UT	UT	Grand	8.1	200
UT106336401	APC 895	9/3/23	UT	UT	Grand	8.1	200
UT106336402	APC 896	9/3/23	UT	UT	Grand	8.1	200
UT106336403	APC 897	9/3/23	UT	UT	Grand	8.1	200
UT106336404	APC 898	9/3/23	UT	UT	Grand	8.1	200
UT106336405	APC 899	9/3/23	UT	UT	Grand	8.1	200
UT106336406	APC 900	9/3/23	UT	UT	Grand	8.1	200
UT106336407	APC 901	9/3/23	UT	UT	Grand	8.1	200
UT106336408	APC 902	9/3/23	UT	UT	Grand	8.1	200
UT106336409	APC 903	9/3/23	UT	UT	Grand	8.1	200
UT106336410	APC 904	9/3/23	UT	UT	Grand	8.1	200
UT106336411	APC 905	9/3/23	UT	UT	Grand	8.1	200
UT106336412	APC 906	9/3/23	UT	UT	Grand	8.1	200
UT106336413	APC 907	9/3/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336414	APC 908	9/3/23	UT	UT	Grand	8.1	200
UT106336415	APC 909	9/3/23	UT	UT	Grand	8.1	200
UT106336416	APC 910	9/3/23	UT	UT	Grand	8.1	200
UT106336417	APC 911	9/3/23	UT	UT	Grand	8.1	200
UT106336418	APC 912	9/3/23	UT	UT	Grand	8.1	200
UT106336419	APC 913	9/3/23	UT	UT	Grand	8.1	200
UT106336420	APC 914	9/3/23	UT	UT	Grand	8.1	200
UT106336421	APC 915	9/3/23	UT	UT	Grand	8.1	200
UT106336422	APC 916	9/3/23	UT	UT	Grand	8.1	200
UT106336423	APC 917	9/3/23	UT	UT	Grand	8.1	200
UT106336424	APC 918	9/3/23	UT	UT	Grand	8.1	200
UT106336425	APC 919	9/3/23	UT	UT	Grand	8.1	200
UT106336426	APC 920	9/3/23	UT	UT	Grand	8.1	200
UT106336427	APC 921	9/3/23	UT	UT	Grand	8.1	200
UT106336428	APC 922	9/3/23	UT	UT	Grand	8.1	200
UT106336429	APC 923	9/3/23	UT	UT	Grand	8.1	200
UT106336430	APC 924	9/3/23	UT	UT	Grand	8.1	200
UT106336431	APC 925	9/3/23	UT	UT	Grand	8.1	200
UT106336432	APC 926	9/3/23	UT	UT	Grand	8.1	200
UT106336433	APC 927	9/3/23	UT	UT	Grand	8.1	200
UT106336434	APC 928	9/3/23	UT	UT	Grand	8.1	200
UT106336435	APC 929	9/3/23	UT	UT	Grand	8.1	200
UT106336436	APC 930	9/3/23	UT	UT	Grand	8.1	200
UT106336437	APC 931	9/3/23	UT	UT	Grand	8.1	200
UT106336438	APC 932	9/3/23	UT	UT	Grand	8.1	200
UT106336439	APC 933	9/3/23	UT	UT	Grand	8.1	200
UT106336440	APC 934	9/3/23	UT	UT	Grand	8.1	200
UT106336441	APC 935	9/3/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336442	APC 936	9/3/23	UT	UT	Grand	8.1	200
UT106336443	APC 937	9/3/23	UT	UT	Grand	8.1	200
UT106336444	APC 938	9/3/23	UT	UT	Grand	8.1	200
UT106336445	APC 939	9/3/23	UT	UT	Grand	8.1	200
UT106336446	APC 940	9/3/23	UT	UT	Grand	8.1	200
UT106336447	APC 941	9/3/23	UT	UT	Grand	8.1	200
UT106336448	APC 942	9/3/23	UT	UT	Grand	8.1	200
UT106336449	APC 943	9/9/23	UT	UT	Grand	8.1	200
UT106336450	APC 944	9/9/23	UT	UT	Grand	8.1	200
UT106336451	APC 945	9/9/23	UT	UT	Grand	8.1	200
UT106336452	APC 946	9/9/23	UT	UT	Grand	8.1	200
UT106336453	APC 947	9/3/23	UT	UT	Grand	8.1	200
UT106336454	APC 948	9/3/23	UT	UT	Grand	8.1	200
UT106336455	APC 949	9/3/23	UT	UT	Grand	8.1	200
UT106336456	APC 950	9/3/23	UT	UT	Grand	8.1	200
UT106336457	APC 951	9/3/23	UT	UT	Grand	8.1	200
UT106336458	APC 952	9/3/23	UT	UT	Grand	8.1	200
UT106336459	APC 953	9/3/23	UT	UT	Grand	8.1	200
UT106336460	APC 954	9/3/23	UT	UT	Grand	8.1	200
UT106336461	APC 955	9/9/23	UT	UT	Grand	8.1	200
UT106336462	APC 956	9/9/23	UT	UT	Grand	8.1	200
UT106336463	APC 957	9/9/23	UT	UT	Grand	8.1	200
UT106336464	APC 958	9/9/23	UT	UT	Grand	8.1	200
UT106336465	APC 959	9/3/23	UT	UT	Grand	8.1	200
UT106336466	APC 960	9/3/23	UT	UT	Grand	8.1	200
UT106336467	APC 961	9/3/23	UT	UT	Grand	8.1	200
UT106336468	APC 962	9/3/23	UT	UT	Grand	8.1	200
UT106336469	APC 963	9/3/23	UT	UT	Grand	8.1	200

Serial Number	Claim Name	Location Date	Administrative State	Geographic State	County	Hectares	Annual Maintenance Fee
UT106336470	APC 964	9/3/23	UT	UT	Grand	8.1	200
UT106336471	APC 965	9/9/23	UT	UT	Grand	8.1	200
UT106336472	APC 966	9/9/23	UT	UT	Grand	8.1	200