18 July 2024
ASX Announcement

Anson Records Elevated Lithium Values in Brine Samples for Koch DLE Test Work at Green River

ASX: **ASN** Announcement

Highlights:

- **Lithium grades are elevated up to 236ppm from the thick Mississippian Unit after bulk samples were collected and tested,**
  - **Average lithium grade of 171ppm,**
  - **23% increase compared to brine tested during drilling**
- **Results are higher than the Mississippian grades obtained at the Paradox Lithium Project,**
  - **Mississippian Units is more than 790 feet in thickness at Green River, significantly thicker relative to the Paradox Project,**
- **Lower salt concentrations at Green River are beneficial to proposed lithium extraction process,**
- **Bosydaba#1 well will remain open for further sampling for testing of the Koch direct lithium extraction pilot units and the Sample Demonstration Plant.**

Anson Resources Limited (ASX: ASN) ("Anson Resources" or "the Company") is pleased to announce that assay results from the supersaturated brines from the 790 feet thick Mississippian units showed an increased in lithium content of up to 236ppm with an average grade of 171 which is a 23% increase compared to the brine previous assay results. Testing was undertaken while collecting bulk brine samples for processing in the Koch Technology Services (KTS) Direct Lithium Extraction (DLE) pilot unit and the Sample Demonstration Plant (SDP) from the recently completed Bosydaba#1 well, *see ASX Announcement 22 April 2024*, at its Green River Lithium Project, Utah, USA.

Significantly, the grades of lithium are higher than results assayed in the Paradox Lithium Project brines, 50km to the southwest of Green River. Iron, magnesium, calcium, potassium and boron particles are also significantly lower which is beneficial in the DLE processes, see Table 1.

Cations		Green River Drilling Sample	Green River Bulk Sample (Average)	Paradox Drilling Sample (Average)
	Li	139	171	141
	B	13.8	66	952
	Ca	18,639	20,260	46,342
	Mg	14,324	3,360	31,974
	Fe	115	164	278
	K	19,253	9,102	31,217

Table 1: The assay results of the various ions from the Green River and Paradox Projects.

The average lithium value is 23% higher than the original samples assayed and is **23**% higher than the assay used as the maximum value in the lithium grade range in the initial Exploration Target estimate for the Green River Lithium Project (*see ASX Announcement 15 February 2023*). In addition, the thickness of the Mississippian Units is **95**% higher than what was used in the previous Exploration Target estimate, see Table 2. These two factors, grade and thickness are important in the estimation of a JORC mineral resource.

Lithological Unit	Range	Brine Tonnes (Mt)	Li Grade (ppm)	Br Grade (ppm)	Li (kt)	Li_2O_3 (kt)1	Br (kt)
Mississippian & Clastic Zones	Minimum	2,000	100	2,000	200	1,065	3,200
	Maximum	2,600	150	3,000	390	2,076	7,800

Table 2: Exploration Target estimation for the Green River Lithium Project – for the combined Leadville and Paradox units.

The Exploration Target figure is conceptual in nature as there has been insufficient exploration undertaken on the Project to define a mineral resource for Leadville. It is uncertain that future exploration will result in mineral resources.

The Bosydaba#1 well which is located 200 meters from the Koch DLE pilot unit and the SDP will remain open to enable the extraction of additional fresh brine for on-going processing. The SDP flow sheet is based on that used in the Definitive Feasibility Study in 2022, see *ASX Announcement 7 September 2022,* is fully commissioned and consists of both the Direct Lithium Extraction (DLE) and the downstream purification processes. The Company has recently announced that it is concurrently testing a Koch Technology Services (KTS) DLE pilot unit, see *ASX Announcement 24 June 2024.* Fresh brine was extracted from the Bosydaba#1 well for processing through both DLE technologies using a swabbing truck, see Figure 1.

Figure 1: The "swabbing" truck collecting brine samples to be taken to the Koch DLE Extraction Pilot Unit

The drilling program, conducted in April 2024, was designed to confirm the presence of lithium rich brines and deliver a maiden lithium JORC Mineral Resource at the Project, which would increase the Company's existing JORC Mineral Resource inventory in the Paradox Basin; Anson's flagship Paradox Lithium Project, located 50km to the south-east, has a current JORC Mineral Resources of 1.50Mt of Lithium Carbonate and 5.27Mt of Bromine, (*ASX announcement, 2 November 2022)*.

The Mississippian units intersected in the Bosydaba#1 well consists of limestone, dolomite with minor sandstone, shale and anhydrite. These lithological units are the same as those at the Paradox Lithium Project 50km to the south-east indicating that the horizons are continuous between the two projects.

Based upon the research Anson has conducted of drilling logs and other data bases, the geological characteristics of the Green River Lithium Project area indicate higher recorded thickness of brine bearing rock units, higher porosity and permeability, and higher recorded pressure in the Mississippian Units which has resulted in brine flowing almost to the surface in the drillholes completed. These key indicators confirmed in Anson's recent drilling of the Bosydaba#1 well, suggest that the regional geology at its Green River Lithium Project is equal to or better than Anson's core asset, the Paradox Lithium Project 50km to the south-east, in south-eastern Utah, USA.

The Bosydaba#1 well has been left open to allow for the extraction of additional brine that is required for testing of the Koch DLE pilot and the SDP DLE units. The swabbing of the brine is a simple, quick and relatively inexpensive method to enable fresh brine to be delivered to the DLE extraction units, in conditions like that of a full-scale plant. It is expected that this will assist in a successful design of a fully operational 10,000tpa production plant.

About the Green River Lithium Project Geology

The Green River Project exhibits all the positive geological characteristics of the Paradox Project including rock units and stratigraphy. The limestones and dolomites of the Mississippian units in south-eastern Utah are noted for vuggy and intracrystalline porosity, especially in areas that contain suitable geological structures. At both the Paradox and Green River projects these geological structures have resulted in high porosity and permeability.

Saturated brines have been encountered in the Mississippian rocks in almost every well that penetrated these units in the project areas. Brines like the Pennsylvanian clastic zones have also been found in the porous dolomites and limestones of Mississippian age in numerous wells in the project area. From the standpoint of reservoirs for brine accumulation, the Mississippian rocks have potential to hold as much promise as the Pennsylvanian clastic units. These limestone and dolomite units range from 100 to 250 meters thick and are noted for vuggy and inter-crystalline porosity.

At the Green River project there are many large geological structures such as the Ten Mile Graben, Little Grand Wash Fault, Green River Anticline and the Salt Wash Anticline which have resulted in advantageous attributes for the extraction of brines, *see ASX Announcement 21 September 2023*. These structures, along with the lithological units within the targeted zones, are geologically like the Paradox Lithium Project which are beneficial factors for the project in the extraction zones including:

- High pressure,
- Increased porosity,
- Increased permeability.

These conditions provide strong indicators of low extraction costs and positive implications for ESG factors, *see ASX Announcement, 30 May 2022*.

From the 3D model created by Anson covering both lithium project areas, see Figure 2, it can be seen that the Mississippian units at Green River are much thicker than that intersected at Paradox. This will result in less drillholes being required to build a suitable resource, especially with similar or higher grades.

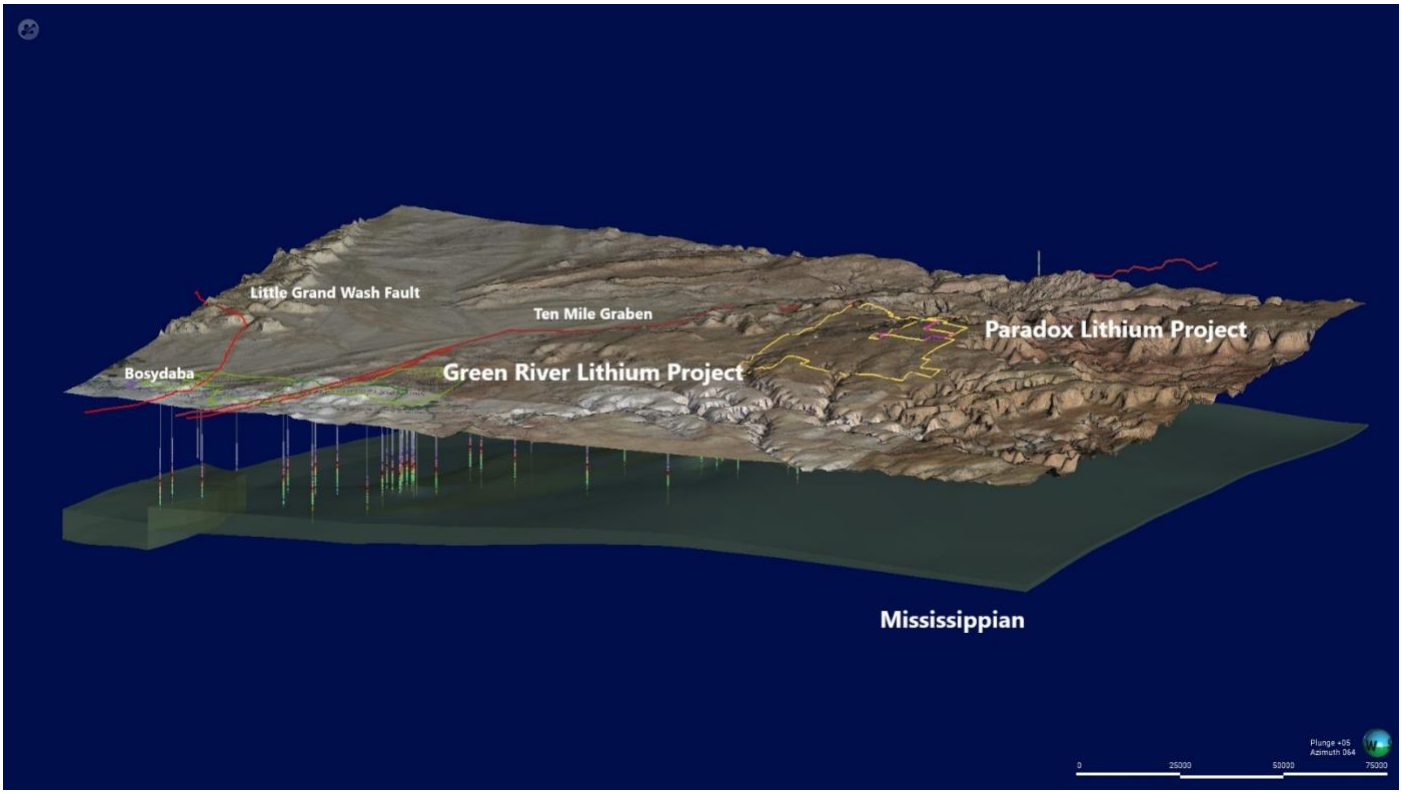

Figure 2: The 3D geological model showing a comparison of the thickness of the Mississippian Units at both lithium projects.

Conservation of Water Aquifers

The exploration drilling program has been designed to ensure that there is no interaction between the surface waters and the supersaturated lithium brines with the well-being steel cased and cemented in place.

The majority of the water-yielding rock units in the area are part of either an upper or lower hydrologic system. The two systems are separated by the impermeable salt beds of the Pennsylvanian Paradox Formation, which underlies the counties in the region (Weir, Maxwell & Zimmerman, 1983) which is further supported by the salinity values intersected in this “surface” drilling recently completed by Anson.

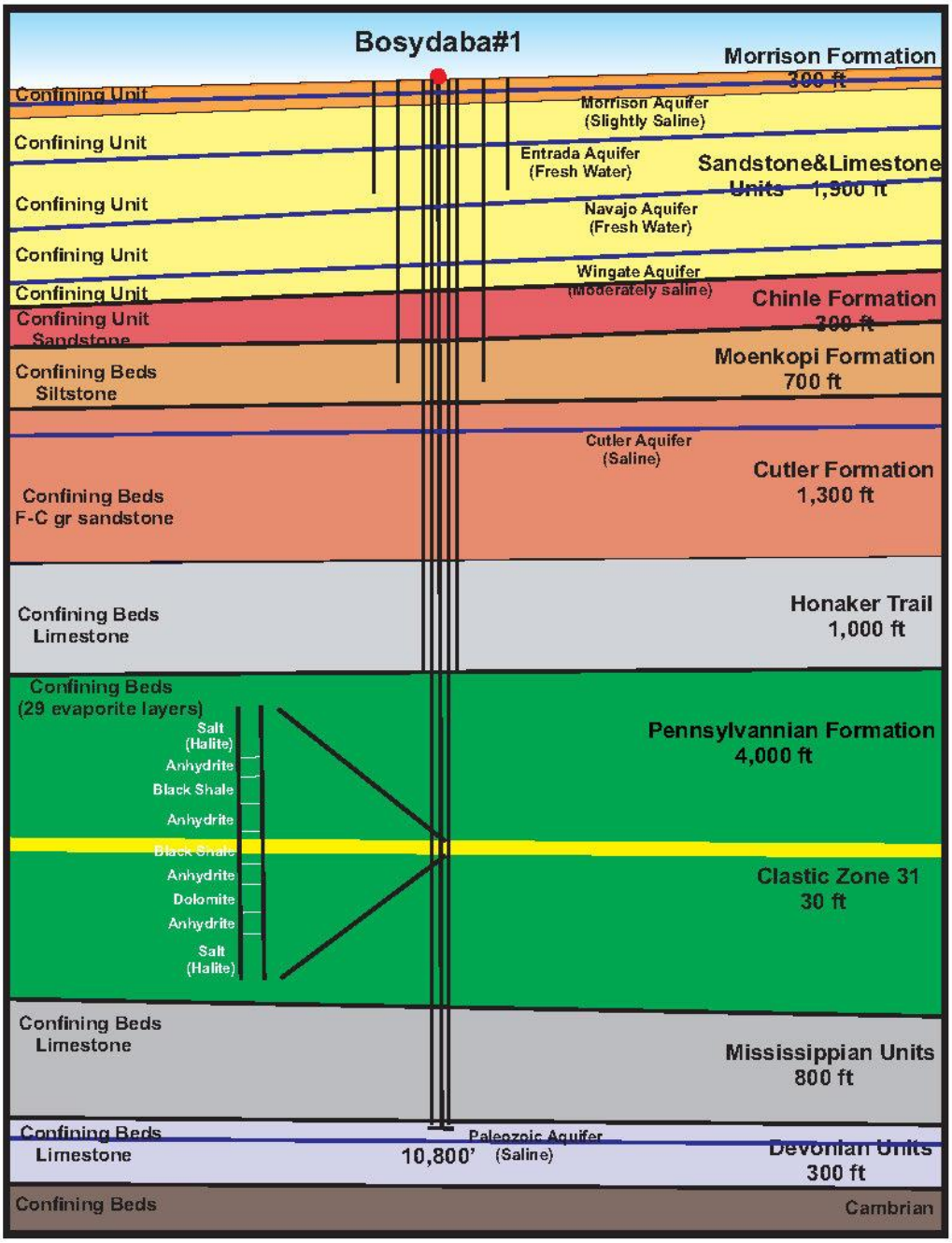

Figure 3: Section showing the proposed well and the formations that will intersected and the impermeable layers

This announcement has been authorized for release by the Executive Chairman and CEO.

ENDS

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About Anson Resources Ltd

Anson Resources (ASX: ASN) is an ASX-listed mineral resources company with a portfolio of minerals projects in key demand-driven commodities. Its core asset is the Paradox Lithium Project in Utah, in the USA. Anson is focused on developing the Paradox Project into a significantlithium producing operation. The Company's goal is to create long-term shareholder value through the discovery, acquisition and development of natural resources that meet the demand of tomorrow's new energy and technology markets.

Forward Looking Statements: Statements regarding plans with respect to Anson's mineral projects are forward-looking statements. There can be no assurance that Anson's plans for development of its projects will proceed as expected and there can be no assurance that Anson will be able to confirm the presence of mineral deposits, that mineralisation may prove to be economic or that a project will be developed.

Competent Person's Statement: The information in this announcement that relates to exploration results and geology is based on information compiled and/or reviewed by Mr Greg Knox, a member in good standing of the Australasian Institute of Mining and Metallurgy. Mr Knox is a geologist who has sufficient experience which is relevant to the style of mineralisation under consideration and to the activity being undertaken to qualify as a "Competent Person", as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in this report of the matters based on information in the form and context in which they appear. Mr Knox is a director of Anson.

JORC Code 2012 "Table 1" Report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralization that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Sampling will follow the protocols produced by SRK for lithium brine sampling. • Samples will be collected in 1,000 litre IBC containers and samples taken from them to provide representative samples of the complete volume of brine collected. • The brine samples to be assayed will be collected in clean plastic bottles. Each bottle will be marked with the location and sample interval. • Duplicate samples will also be collected and securely stored. • Bulk samples will also be collected for future use. • Sample sizes will be appropriate for the program being completed.
Drilling Techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Air drilling and oil-based mud drilling.
Drill Sample Recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Chips will be recovered over the shaker table and collected by mudloggers.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All samples were geologically logged in the field by a qualified geologist. • Geological logging is qualitative in nature.

Criteria	JORC Code Explanation	Commentary
Sub-sampling Techniques and Preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Samples will be submitted to Laboratories in Texas, USA that are certified and experienced with oilfield brines. • Sample preparation techniques represent industry good practice. • The sample sizes are considered to be appropriate for the material being sampled. • Sampling will follow the protocols produced by SRK for lithium brine sampling. • Samples will be collected in IBC containers and samples taken from them. • Duplicate samples kept Storage samples will also be collected and securely stored. • Bulk samples will also be collected for future use. • Sample sizes will be appropriate for the program being completed.
Quality of Assay Data and Laboratory Tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Analysis will be carried out by a certified laboratory.
Verification of Sampling and Assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.* •	• The results are considered acceptable and reviewed by geologists. • No adjustments to assay data has been undertaken.
Location of Data Points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The grid system used is UTM Zone 12 (NAD83). • Location of drillhole was positioned by a qualified land surveyor.
Data Spacing and Distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The grid system used is UTM Zone 12 (NAD83). • Data spacing is considered acceptable for a brine sample but has not been used in any Resource calculations. • There has been no compositing of brine samples.

Criteria	JORC Code Explanation	Commentary
Orientation of Data in Relation to Geological Structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* •	• The Paradox Basin hosts bromine and lithium bearing brines within a sub-horizontal sequence of salts, anhydrite, shale and dolomite. • The Bosydaba#1 well has a vertical (dip -90), perpendicular to the target brine hosting sedimentary rocks.
Sample Security	• *The measures taken to ensure sample security.*	• N/A
Audits or Reviews	• *The results of any audits or reviews of sampling techniques and data*	• No audits or reviews have been conducted at this point in time.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Mineral Tenement and Land Tenure Status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Green River Lithium Project is located in southeastern Utah, USA, consisting of 1,251 placer claims that encompasses a land position of 10,620 hectares. • Purchased private property consists of a 55 hectare land parcel • All claims are held 100% by Anson's U.S. based subsidiary, Blackstone Minerals NV LLC. • The claims/leases are in good standing, with payment current to the relevant governmental agencies.
Exploration Done by Other Parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical exploration for brines within the Paradox Basin includes only limited work in the 1960s. No brine resource estimates had been completed in the area, nor has there been any historical economic production of bromine or lithium from these fluids. • The historical data generated through oil and gas development in the Paradox Formation has supplied some information on brine chemistry.
Geology	• *Deposit type, geological setting and style of mineralization.*	• The geology of the Paradox Formation indicates a restricted marine basin, marked by 29 evaporite sequences. Brines that host bromine and lithium mineralization occur within the saline facies of the Paradox Formation and are generally hosted in the more permeable dolomite sediments. • Controls on the spatial distribution of certain salts (boron, bromine, lithium, magnesium, etc.) within the clastic aquifers of the Paradox Basin is poorly understood but believed to be in part dictated by the geochemistry of the

Criteria	JORC Code Explanation	Commentary
Drill Hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* – *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drillhole collar LAT : $38^0$58'56.85510" LON : $110^0$08'35.14421" • EL : 4070.1'
Data Aggregation Methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade* • *Brine samples taken in holes were averaged (arithmetic average) without 14 Criteria JORC Code explanation Commentary truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• N/A
Relationship Between Mineralization Widths and Intercept Lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The sediments hosting the brine aquifer are interpreted to be essentially perpendicular to the vertical oil wells. Therefore, all reported thicknesses are believed to be accurate. • Brines are collected and sampled over the entire perforated width of the zone. • The Mississippian Units are assumed to be porous and permeable over its entire vertical width based on drilling records.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate diagrams are shown in the text.
Balanced Reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• N/A

Criteria	JORC Code Explanation	Commentary
Other Substantive Exploration Data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All available current exploration data has been presented.
Further Work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The wells and sampling planned will cover the Paradox Formation and Leadville Limestone. • Future wells will focus on wells surrounding the proposed locations to upgrade future JORC resources.