

2 November 2022

ASX ANNOUNCEMENT ASX: ASN, ASNOC, ASNOD OTC: ANSNF

# Anson Delivers 1Mt LCE Mineral Resource at

# **Paradox Lithium Project**

# Highlights:

- Major Mineral Resource upgrade confirmed at Paradox Lithium Project;
  - o 1,037,900t of Lithium Carbonate Equivalent (LCE) and 5.27Mt of Bromine, including;
    - Indicated Resource of 346,109t of LCE and 1.84Mt of Bromine; and
    - Inferred Resource of 691,800t of LCE and 3.43Mt of Bromine
- The upgraded Mineral Resource represents;
  - o 24% increase on previously reported Lithium Resource\*; including
  - o 31% increase in Indicated Resource on previously reported Resource\*; and
  - o 33% increase on the previously reported Bromine Resource\*.
- Project hosts substantial further Mineral Resource expansion potential;
  - 'Western Expansion' strategy due to commence, including newly discovered Mississippian units – results to be included in future Resource upgrade
  - Approval granted by the BLM to re-enter the 'Western Expansion' wells

\*The Previous Mineral Resource was published on 22 August 2022.

Anson Resources Limited (ASX: ASN, ASNOC, ASNOD) (Anson or the Company) is pleased to announce a major upgrade to its JORC Code 2012 Mineral Resource estimate (Mineral Resource) at its Paradox Lithium Project (Project) in Utah, USA.

The delivery of the Mineral Resource upgrade represents another significant achievement in the development pathway of the Project. It will be incorporated into the Detailed Feasibility Study (DFS) completed by global engineering group, Worley, and released to the market (see ASX Announcement 8 September 2022).

# The new, upgraded Mineral Resource is;

- 1,037,900 tonnes of lithium carbonate equivalent (LCE) and 5,274,900 tonnes of bromine, including;
  - o Indicated Resource of 346,109 tonnes of LCE and 1,840,000 tonnes of bromine; and
  - Inferred Resource of 691,800 tonnes of LCE and 3,434,900 tonnes of bromine

The new, upgraded Mineral Resource was estimated from Anson's recently completed drilling and sampling at the Cane Creek 32-1 well, and has been added to its recent Mineral Resource upgrade confirmed from drilling and sampling at the Long Canyon Unit 2 well (see ASX announcement 22 August 2022).



The new, upgraded Mineral Resource represents a;

- 24% increase on the previously reported Lithium Mineral Resource; including
- 31% increase in the Indicated Resource on the previously reported Lithium Mineral Resource; and
- 33% increase on the previously reported Bromine Mineral Resource.

A summary of the JORC 2012 Mineral Resource Estimate is presented in Table 1. Significant amounts of other minerals including Bromine (Br2), Boron (Boric Acid, H3BO3) and Iodine (I2) have also been estimated. A breakdown of the Mineral Resources by aquifer is shown in Table 2. The Resource does not take into account potential replenishment of the brine zones.

Category	Brine Volume	Brine	Li	Br (ppm)	Containe	d ('000t) <sup>1</sup>
	(MI <sup>3</sup> )	Tonnes (Mt)	(ppm)		LCE	Br <sub>2</sub>
Indicated	4,350	530	123	3,474	346	1,840
Inferred	8,108	1,038	125	3,308	692	3,434
Resource	12,458	1,568	124	3,364	1,038	5,275

Table 1: Paradox Lithium Project Total JORC Mineral Resource upgraded estimation.

90	Horizon	Clastic Zone	Category	Brine (Mt)	Li (ppm)	Br (ppm)	Conta ('000	
							LCE	Br <sub>2</sub>
Ē	CZ31	31	Indicated	47	173	3,054	44	144
21	CZ31	31	Inferred	77	182	2,543	74	195
	CZ31 Resource			124	178	2,736	118	339
	Other Clastics	17, 19, 29, 33, 43, 45, 47, 49	Indicated	179	83	3,378	79	604
Ć	Other Clastics	17, 19, 29, 33, 43, 45, 47, 49	Inferred	453	98	3,102	236	1,406
$\mathcal{L}$	Other Clastics Resource			632	94	3,181	315	2,010
Ē	Mississippian		Indicated	304	138	3,596	224	1,092
	Mississippian		Inferred	508	141	3,606	381	1,834
	Mississippian Resource			812	141	3,371	605	2,926
	TOTAL RESOURCE			1,568			1,038	5,275

Table 2: Paradox Lithium Project Mineral Resource Estimate for Clastic Zone 31, additional Clastic Zones and Mississippian Units.

<sup>1</sup> Lithium is converted to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) using a conversion factor of 5.32 and boron is converted to boric acid (H<sub>3</sub>BO<sub>3</sub>) using a conversion factor of 5.72. Rounding errors may occur.



The combined Total Indicated Resource for Clastic Zone 31 and the Mississippian is 367,100 tonnes of lithium carbonate at an average grade of 144ppm, see Table 2. The additional tonnages from these two zones - without any future upgrades - would be used to support future mine life extension. Lithium extraction test work on the Project's lithium brine has previously been completed successfully at these lithium grades.

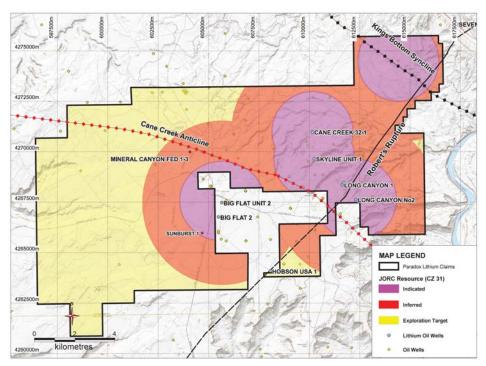


Figure 1: Plan shows the Mineral Resource classification for the Clastic Zone 31 horizon.

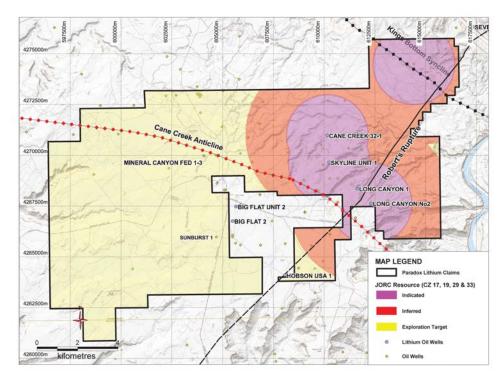


Figure2: Plan shows the Mineral Resource for the Clastic Zones 17, 19, 29 and 33 horizons which all have the same Area of Influence (AOI).



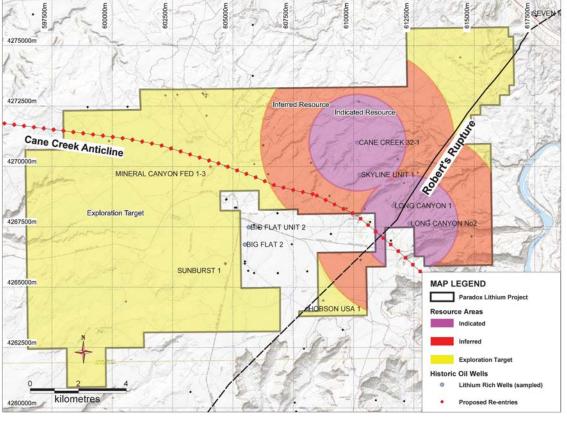


Figure 3: Plan shows the upgraded Mineral Resource classification for the Mississippian Units.

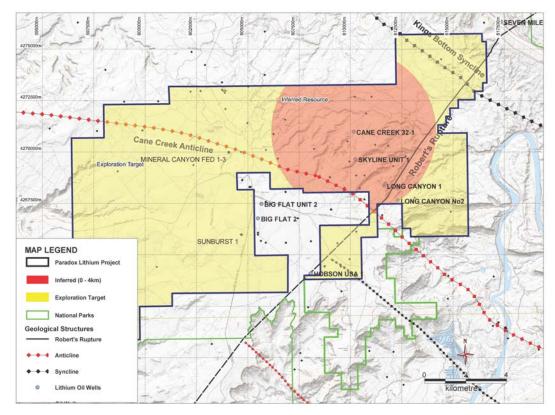


Figure 4: Plan shows the Mineral Resource for the additional Clastic Zones (43, 45, 47,49) sampled.



#### **Background to Mineral Resource Upgrade**

The previous Paradox Mineral Resource was estimated from just the brine aquifers of Clastic Zones 17, 19, 29, 31 and 33 of the four wells previously re-entered by Anson and the Mississippian Units in the Long Canyon Unit 2 well. The Indicated and Inferred Resource for Clastic Zone 31 is shown in Figure 1 and the JORC Resource for Clastic Zones 17, 19, 29 and 33 are shown in Figure 2 (note the resource categories Area of Interest for these Clastic Zones is the same in each horizon).

The new, upgraded Mineral Resource was estimated from the Company's recent drilling and sampling at the Cane Creek 32-1 well (the resource areas for the Mississippian units for both the recently drilled wells are shown in Figure 3). Anson's resource expansion drilling campaign also included the drilling and sampling of additional Clastic Zones at the **Cane Creek 32-1 well** which were classified as an Inferred Resource, see Figure 4, as there is little historical data relating to these horizons.

#### 'Western Expansion' strategy

The Company also plans to commence its 'Western Expansion' strategy by re-entering historic drillholes in the western areas of the Project, recently approved by the Department of the Interior, Bureau of Land Management (BLM), *see ASX Announcement 5 October 2022*. This may result in a significant increase in the block model grades and ultimately the product tonnages for the clastic zones, and also the new Mississippian units where there are little previous recorded assays. The Mississippian units in the western strategy have an average thickness of 142 metres, previously recorded in historical oil well drilling. Figure 5 shows the oil wells that were drilled into the Mississippian.

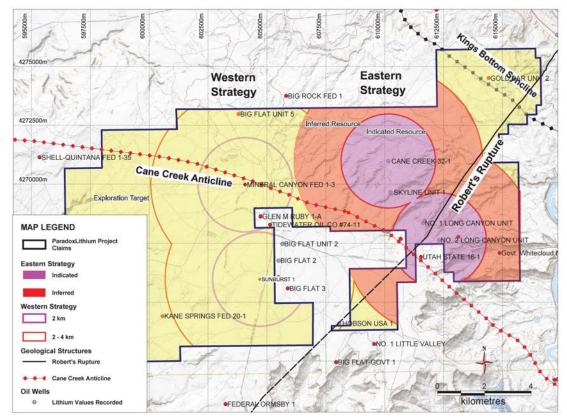


Figure 5: Plan showing the Mississippian Resource from the eastern strategy and the wells drilled into the Mississippian units in the western area of the project.



# It is expected that the results of drilling in both these target areas will be included in future Mineral Resource upgrades at the Project.

Further drilling programs in the 'Western Expansion' Strategy will seek to define additional Indicated Resources, and significantly increase the Indicated-to-Inferred Resource ratio - as existing Inferred Resources are converted to the Indicated category, see Figures 1, 2 3, 4 and 5.

#### **New Discovery**

The new Mississippian units in the western extent of the Project area represent a new discovery by Anson. This presents the opportunity to drill and sample these new zones, beyond the Company's core strategy of re-entering existing wells in the Project area to sample and define Mineral Resources. The proposed drilling and sampling of the new discovery area has the potential to deliver further new Mineral Resources at the Project.

# Project Background:

The Project is located within a mature oil and gas district with brines that historically contain high published concentrations of lithium. The Paradox Formation, host to these brines, is a Pennsylvanian aged evaporite sequence deposited during multiple transgressive/regressive cycles. Following deposition, the basin was subject to structural alteration due to the further basin development. Deep structures which developed in this time, such as the Roberts Rupture which strikes to the north-east through the claims, potentially create a conduit for rising heated fluids. The Paradox Formation presents the factors required for genesis of a brine hosted lithium deposit.

The Paradox Basin brine aquifers geologic model has similarities to brine concentrations in Tertiary aged closed evaporative basins, as well as those associated with brine aquifer hosted in older Carboniferous and Palaeozoic sediments which can be associated with hydrocarbon deposits.

However, the formation of lithium rich bearing saline brines have several common primary characteristics (Bradley et al., 2013):

- An arid climate;
- A closed basin with an evaporative centre (playa/salar);
- Tectonically driven subsidence;
- Heat flow, generally associated with igneous or geothermal activity;
- Contact with lithium source rocks;
- Presence of one or more groundwater aquifers through which fluid can circulate; and
- Sufficient time to concentrate salt minerals within the groundwater for creation of a brine fluid.

Anson has re-entered 4 historic oil wells to depths of up to 8,300 feet in the Project area. The wells have an average spacing of 1.6km (ranging between 1.3km and 3.0km). The bores have delineated an aquifer containing hyper-saline brine with total dissolved salts (TDS) ranging between 350,000 mg/L and 410,000 mg/L; the brine is enriched with respect to lithium. The sampling of the supersaturated brines from the clastic zones of the Paradox Formation have yielded concentrations up to 253 ppm lithium and 5,041 ppm bromine.

Pumping tests have allowed determination of the hydraulic properties of this aquifer. Four separate flow tests have been completed at rates ranging between 3L/s and 12L/s, for periods of 4 to 12 hours. No pumping was required due to the artesian flow. Flow tests allowed determination of the aquifer permeability and associated potential parameters for brine-abstraction.



The following information and tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Exploration Results and Mineral Resources for the Project. Please also refer to JORC Tables 1, 2 and 3 below.

### Geology and geological interpretation

The brine bearing units, clastic zones, have been interpreted from more than 100 oil and gas wells drilled throughout the Anson claims and the greater Paradox Basin. The lithological units have been correlated within the basin based on the drilling and are predictable over the whole basin. Twenty-eight wells (refer table 5) were used to interpret the depth and thickness of these horizons within the Anson claims.

The reason for the presence of the supersaturated brines in the clastic breaks is that the clastic beds overlie rich potash and magnesium zones. In the geological concept of the evaporite cycle, the most soluble compounds are the last to precipitate. Therefore, the clastic units overlie end products of the preceding evaporite cycle. Potassium and magnesium chlorides and certain complex evaporite minerals can be found among the end products of evaporation.

The main brine zones in the project area have not been cored, but it has been adequately sampled and logged. There are four inter-bedded hydrogeological units within the clastic horizon from top to bottom:

- Anhydite;
- Black Shale;
- Dolomite; and
- Anhydrite.

The dolomite is quite porous and permeable, whereas the anhydrite and black shale is crushed and broken. When the zones containing brine are intersected during drilling, artesian flow begins which indicates vertical porosity, permeability and that communication exists between the layers. The fractured clastic zones form an excellent reservoir for supersaturated brines. At the extraction point, when brine is removed salt will flow into the voids from where the brine has been removed, due to these parameters. This would help maintain high reservoir pressure and assist in a high ultimate recovery of brine.

The three factors; high pressure, porosity (both horizontal and vertical) and shallow depth are key attributes of the Project and are not present anywhere else in the area. In combination, they provide strong indicators of low extraction costs and beneficial ESG outcomes.

The high flow rates from the four tested wells confirms this theory.

In the White Cloud No. 2 well, which offsets the Long Canyon No. 1 well, brine started to flow when the top anhydrite was penetrated, and rapidly increased by the time the underlying black shale was penetrated, so that no further drilling was done. The dolomite zone was not drilled. Vertical porosity, permeability, and communication are indicated. Brine flows have been encountered in Clastic Zone 31 over a distance of six miles north-south and eight miles east-west.

Previously the brine aquifer had been interpreted/limited to the dolomitic sands with known porosity and excluded the potential for brine fluids within the anhydrite and shale lithologies. Spinnerflowmeter logging completed in Long Canyon Unit 2 and Skyline Unit 1 suggests that these units produce brine fluids from secondary porosity, and that the brine aquifer within Clastic Zone 31 has dual porosity based on both lithology and secondary porosity from fracture flow. Therefore, the extent of the brine aquifer has been extended to include the entirety of the clastic zone for the purposes of exploration targeting and resource estimation.



Figures 6 and 7 illustrate the stratigraphy in the area of interest. Of importance is the correlation of the various sedimentary units between the wells. This correlation enables the clastic units of interest to be modelled over an extensive areal extent.

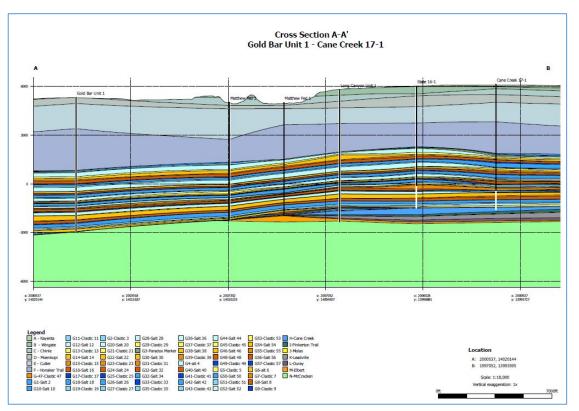


Figure 6: Section line AA showing lithology of Paradox basin in area of interest.

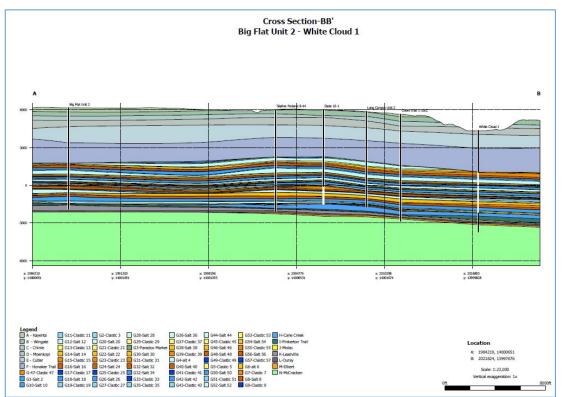


Figure 7: Section line BB showing lithology of Paradox basin in area of interest.



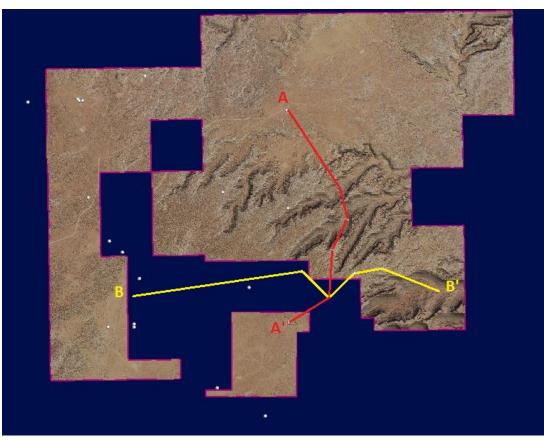


Figure 8: Plan view showing claim area, topography and section lines.

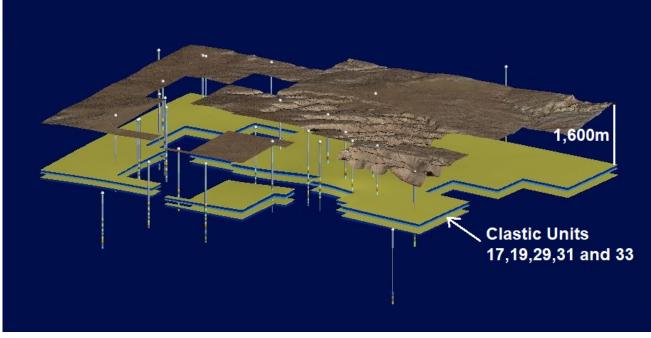


Figure 9: View showing surface topography, wells and modelled clastic zones.

# Brine Aquifer Hydraulic Properties

Porosity (or total porosity) is the amount of open space between mineral grains and/or fractures. Certain geophysical logs can be utilized to estimate total porosity with significant accuracy. Anson had previously analysed a small subset of these logs from wells within the project area to estimate



porosity of the dolomite in Clastic Zone 31. Utilizing a combination of neutron density logs and sonic logs total porosity was estimated for three wells as shown in Table 3.

Hole Id	Clastic Zone	Depth	Depth To	Thickness	Porosity	Log
		From		m		
Big Flat Unit 1	31	1813.6	1819.7	6.1	26.0%	GR Neutron
Big Flat 2	31	1914.1	1917.2	3.0	21.0%	Neuton Density
Big Flat 3	31	1871.5	1874.5	3.0	31.0%	GR Neutron
Big Flat Unit 6	31	1896.5	1899.5	3.0	30.0%	Gr Neuton
Skyline	31	1895.9	1906.2	10.4	20.1%	Neuton Density
Long Canyon 1	31	1833.7	1839.8	6.1	24.2%	Sonic
Utah State 16	31	1854.7	1862.3	7.6	27.0%	Neutron Density
Matthew Fed 1	31	1716.0	1722.1	6.1	20.0%	Sonic
Mathew Fed 2	31	1837.9	1844.0	6.1	18.5%	Neutron Density
Gold Bar 1	31	2089.7	2094.0	4.3	20.0%	Sonic & Neutron Density
Gold Bar 2	31	2158.0	2164.7	6.7	17.5%	Sonic & Neutron Density
Coors	31	1926.3	1929.4	3.0	25.0%	Sonic
Cane Creek 32-1	29	1873.9	1880.6	6.7	21.0%	Neutron Density
Skyline	17	1642.3	1652.0	9.8	19.3%	Neutron Density
Skyline	19	1695.0	1706.0	11.0	20.8%	Neutron Density
Skyline	29	1878.0	1884.0	6.0	16.0%	Neutron Density

Table 3: The interpreted maximum porosities from down hole logs for Clastic Zone 31 within the Project area.

Spinner-flowmeter logging completed in Skyline Unit 1 and Long Canyon Unit 2 suggest that these units also produce brine fluids from a secondary porosity, and that the brine aquifer within Clastic Zone 31 has dual porosity based on both lithology and secondary porosity from fracture flow. Figure 10 shows the interpretation of a spinner flowmeter test completed across Clastic Zone 31 in Long Canyon Unit 2.

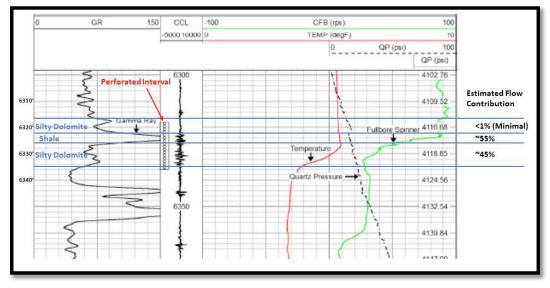


Figure 10: Spinner flowmeter log across perforated CZ 31 in Long Canyon Unit 2, with interpretations

The spinner-flowmeter log indicates there is significant brine production from both the silty dolomite and shale lithologies in Clastic Zone 31 of Long Canyon Unit 2. Lithological thickness vs. flow contribution suggests that the shale has a higher transmissivity than the silty dolomite, which based on known textural differences, suggests significant secondary porosity (fracturing) within the shale.



Without secondary porosity from fracturing, the common range of effective porosity for shale ranges from 0.5 to 5% (Driscoll 1986), which would have a corresponding limit on the transmissivity of the lithology. The lack of brine production contribution in the upper silty dolomite is likely due to poorly developed perforations or backpressure on the system limiting the brine flow discharge rate within upper zones of lower transmissivity.

During the re-entry and the development of the perforated intervals within Skyline Unit 1 and Long Canyon Unit 2 wells, Anson completed build-up tests to estimate production interval permeability. Build-up tests consisted of a short period of measured flow, followed by an immediate shut-in of flow at the well head and measurement of the pressure recovery. See Table 4. The data was analysed to determine the permeability of the formation (Horner plot, see Figure 11).

Well ID	Initial Bottom Hole Pressure (psi)	Period of Flow (min)	Flow Rate (BWPD)	Flow Rate (gpm)	Permeability (md)
Long Canyon Unit 2	5,209.5	70	2,201	64.2	1,698
Skyline Unit 2	5,240.0	45	4,096	119.5	6,543

#### Table 4: Build-up test results

In general, permeability increases with increasing effective porosity and decreases with increasing pressure. However, secondary porosity in the form of fracturing increases the bulk permeability of a geologic unit, as well as increasing its sensitivity to effective pressure.

The locations of the historical oil wells from which the geophysical logs were obtained to calculate the volume of the Clastic Zone 31 brine horizons are shown in Figure 13 and the co-ordinates of the wells located within the project area are shown in Table 5.

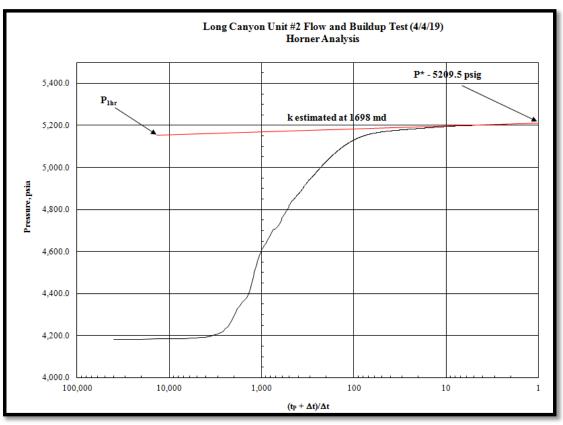


Figure 11: A plot of the Horner Analysis of the flow and build up test for Long Canyon No 2 well.

	Co-Ordinates (UTM)		Depth	CZ31 from (m)	CZ31 to (m)
	Northing	Easting	(m)		
SKYLINE UNIT 1	4269654	610245	2,339	1,897	1,905
LONG CANYON UNIT 2	4267637	612308	2,253	1,927	1,932
Cane Creek 32-1-25-20	4270986	610154	3,479	1,874	1,881
GOLD BAR UNIT 2	4274508	614414	2,953	2,159	2,166
LONG CANYON No 1	4268364	611636	2,480	1,835	1,841
Big Flat No 2	4267478	605659	2,459	1,886	1,894
Big Flat No 2 (Pure Oil)	4266772	605490	2,382	1,915	1,918
Hobson USA 1	4264099	608069	2,036	1,831	1,836
UTAH 2	4276336	617325	2,874	1,551	1,554
MATTHEW FED 1	4269310	612087	2,119	1,717	1,723
MATTHEW FED 2	4270303	611836	2,212	1,839	1,850
COORS USA 1-10LC	4267776	613129	2,584	1,928	1,931
BIG FLAT UNIT 7	4270148	608230	2,376	1,931	1,938
Mineral Canyon Fed 1-3	4269985	604073	2,498	1,909	1,918
Big Rock Fed 1	4273747	605821	2,707	2,001	2,007
Fed Bartlett Flat 10-27	4273027	603745	2,356	1,902	1,906
Big Flat Unit 5	4272980	603792	2,208	1,896	1,903
Big Flat Unit 6	4272980	603893	2,231	1,898	1,901
WHITE CLOUD 1	4267097	614879	1,845	1,835	1,841
GOLD BAR UNIT 1	4272680	610212	2,527	2,091	2,095

Table 5: Historic drill holes within or close to the Paradox Brine Project area.

The super-saturated brines, typically with a high density (1.25 - 1.30 g/cm3) have been intersected throughout the clastic zones of the Paradox Basin. Analytical results for lithium to date have been highest (up to 253ppm lithium) in the central to southern area of the project.

# Effective Porosity

Effective porosity was measured from core in one well, Big Flat 2 by mercury injection. Test-work was carried out by Core Laboratories, Petroleum Services Division in Houston, Texas. During the mercury injection test, each clean dry sample was immersed in mercury in a pressure-sealed chamber. The pressure of the surrounding mercury was gradually increased from 0 psia up to 55,000 psia. The increasing pressure gradually forced the mercury to intrude into the sample pore spaces and the amount of mercury injected, expressed as a fraction of the sample pore volume,



was determined. The relationship of injection pressure to mercury saturation was used to calculate several parameters, including pore throat size distribution, capillary pressure for various fluid systems, and Swanson permeability. The results for the effective porosity test-work are contained in Table 6.

Well	Sample No.	Depth fro	om to (m)	Sample Material	Test / Analysis	thick (m)	Effective Porosity %	Geology description
Big Flat No2	277209	1914.1	1914.4	Chunk	MICP	0.30	8.2	Anhydrite and Dolomite
Big Flat No2	277210	1914.4	1914.8	Chunk	MICP	0.30	14.5	Silty Dolomite
Big Flat No2	277211	1914.8	1915.4	Chunk	MICP	0.61	19.1	Sugary dolomite, crumbly
Big Flat No2	277212	1915.4	1916.0	Chunk	MICP	0.61	6	Dolomite
Big Flat No2	277213	1916.0	1916.6	Chunk	MICP	0.61	4.1	Dolomite
	no sample	1916.6	1917.2		mean of either side	0.61	12.35	
Big Flat No2	277215	1917.2	1917.8	Chunk	MICP	0.61	20.6	Shale
	no sample	1917.8	1918.4		mean of either side	0.61	20.95	
Big Flat No2	277217	1918.4	1919.0	Chunk	MICP	0.61	21.3	Shaly dolomite
Big Flat No2	277218	1919.0	1919.6	Chunk	MICP	0.61	4.8	Silty Anhydrite
		1914.4	1919.0			4.6	14.9	

Table 6: Effective Porosity test-work Big Flat 2.

Clastic Zone 31 (CZ31) has been previously logged to extend from 1914.1m to 1917.2m. CZ31 is located between two halite/anhydrite units (salt cycles 15 and 16)<sup>1</sup> so the examination of the chips here indicated that CZ31 may extend further to at least 1919 based on the geological description of shaly dolomite. The data within this zone is incomplete but the effective porosity for the missing interval has been estimated by averaging the results from either side of the non-sampled intervals. Clastic Zone 31 is considered to extend between zones where anhydrite has been logged and this corresponds to the interval 1914.4m to 1919.0m (highlighted in yellow in table). By estimating the missing intervals, the weighted average of effective porosity over a 4.6m width of CZ31 is 14.9%.

The neutron density log indicated a total porosity for CZ31 in the Big Flat 2 well of 21%. The ratio of total porosity to effective porosity in Big Flat 2 was applied to other data within CZ31 to estimate effective porosity in this clastic zone. Other clastic zones used an estimate of 14%. The other clastic zones are repeat sedimentary sequences with the Paradox Basin so hydraulic properties are assumed to be similar. Results of this can be found in Table 7.

<sup>&</sup>lt;sup>1</sup> Massouth (2012)



Effective porosity in this case is essentially the same as drainable porosity as the re-entered wells at Cane Creek 32-1, Skyline and Long Canyon No2 all had high pressure flow to the surface with no pumping required.

Hole Id	Clastic Zone	Depth	Depth	Thickness	Total	Effective
		From	То	m	Porosity	Porosity
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%
Cane Creek 32-1	29	1873.9	1880.6	6.7	21.0%	14.9%
Skyline	17	1642.3	1652.0	9.8	19.3%	13.7%
Skyline	19	1695.0	1706.0	11.0	20.8%	14.7%
Skyline	29	1878.0	1884.0	6.0	16.0%	11.4%

Table 7: Effective porosity used in resource estimation.

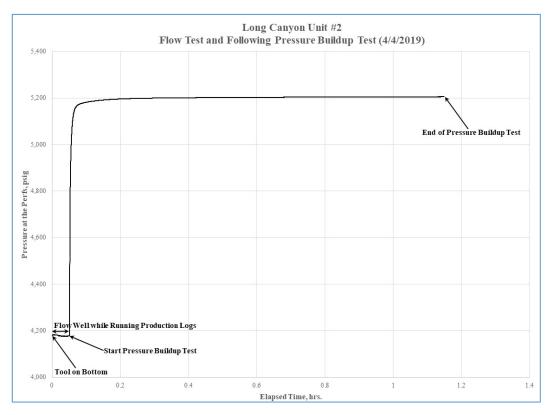


Figure 12: Pressure build up test Long Canyon No 2 Well.



Figure 12 shows the pressure build up test on the Long Canyon No 2 well during re-entry. Once the flow was stopped the pressure build-up occurred quickly.

#### Sampling and sub-sampling techniques

Anson has re-entered and sampled four wells within the claim area. Table 8 summarises the assay results from the brine analysis. The brine is under pressure so flows to the surface naturally. The Clastic Zone intervals were located through previous hole geophysical logs. Following perforation of the interval to be sampled, a mechanical packer was set below the interval to isolate the brine produced and prevent comingling of a sample. The open intervals were then developed by swabbing. Fluid produced from the swabbing process was collected in approximately 1,000 litre (L) clean, high density polyethylene (HDP) totes. Separation of oil and water occurred within the totes, allowing for decanted samples of the produced brine fluid to be collected from the totes. Samples were collected into clean polyethylene bottles, labelled and packaged on site for shipment analytical laboratories.

#### Drilling techniques

No drilling was conducted as part of the sample collection. Previously drilled holes targeting different oil and gas producing horizons were utilised to access the clastic zones.

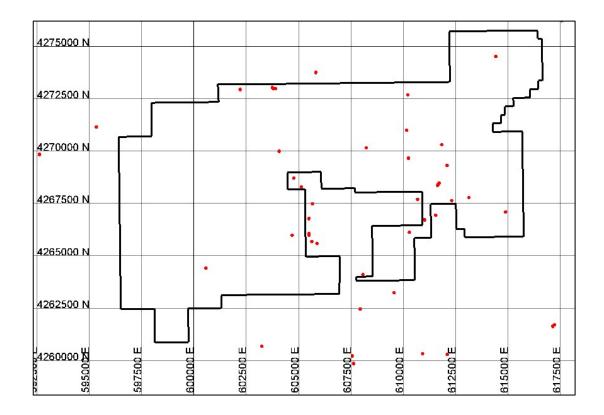


Figure 13: Anson Claim outlines showing wells used to delineate Clastic Zones.

#### Criteria used for classification

Anson has re-entered four holes (table 8, highlighted in brown) and collected samples for analytical test-work. These holes were used as the basis for indicated resources. The wells have produced free flowing brine and the samples have been analysed for elements of interest. Resources have been classified as Indicated within 2 km of a sampled clastic zone. Inferred resources are within 4



km of a sampled horizon. This has been increased from the previous 1km and 3km respectively based on the increased amount of samples and the continuity grade and effective porosity of overlapping zones around sampled holes. Historic data has now also been included in Indicated resources whereas previously is was only classified as Inferred. Recent sampling conducted by Anson has verified the historic sampling so this is now considered valid for inclusion on the higher confidence classification. Other holes sampled by previous explorers are also included in Table 8.

Well Name	from_ m	to_m	Clastic Zone	Li_pp m	Br_pp m	l_pp m	B_pp m	Effectiv e Porosity	Brine Densit y
BIG FLAT 1	1,814	1,820	31					18.4%	
BIG FLAT 2	1,914	1,917	31					14.9%	
BIG FLAT 3	1,871	1,875	31					22.0%	
BIG FLAT UNIT 6	1,896	1,900	31					21.3%	
UTAH STATE 16-1	1,855	1,862	31					19.2%	
GOLD BAR UNIT 1	2,090	2,094	31					14.2%	
COORS USA 1-10LC	1,926	1,929	31					17.7%	
BIG FLAT UNIT 2	1,885	1,893	31	173	1,150				
CANE CREEK 32-1	1,667	1,678	17	60	4,166	31	60		1.27
CANE CREEK 32-1	1,728	1,738	19	68	3,345	0	114		1.27
CANE CREEK 32-1	1,874	1,881	29	107	3,932	183	120		1.27
CANE CREEK 32-1	1,922	1,926	31	56	4,145	96	35		1.25
CANE CREEK 32-1	1,938	1,951	33	31	4,968	74	2	14.0%	1.16
Cane Creek No. 2	1,550	1,553	31	66	3,080	42	660		
GOLD BAR UNIT 2	1,891	1,897	17	6	2,550	0	7		1.31
GOLD BAR UNIT 2	2,140	2,145	29	24	1,825	211	51		1.25
GOLD BAR UNIT 2	2,158	2,165	31	17	680	0	66	12.4%	1.25
NO. 1 LONG CANYON UNIT	1,834	1,840	31	500	6,100	300		17.2%	1.37
NO. 1 USA HOBSON	-	-	31 19	134	-	300	1 260	17.2%	1.37
NO. 2 LONG CANYON	1,659	1,668			1,612		1,260		1.07
UNIT NO. 2 LONG CANYON	1,665	1,679	17	102	4,292		1,184		1.27
UNIT	1,725	1,737	19	111	4,022		1,207		1.29
NO. 2 LONG CANYON UNIT	1,909	1,914	29	111	4,112		1,243		1.29
NO. 2 LONG CANYON UNIT NO. 2 LONG CANYON	1,926	1,931	31	216	3,038	119	687		1.29
UNIT NO. 2 LONG CANYON	1,970	1,974	33	96	882		1,039		1.29
UNIT	2,238	2,380	Mississippian	187	3,793		1,265	7.6%	1.29
SKYLINE UNIT 1	1,642	1,652	17	61	2,595	28	70		1.23
SKYLINE UNIT 1	1,695	1,706	19	146	3,462	0	143		1.28
SKYLINE UNIT 1	1,878	1,884	29	164	3,508	38	178		1.28
SKYLINE UNIT 1	1,896	1,903	31	183	3,652	156	160	14.2%	1.27
MATTHEW FED 1	1,716	1,722	31					14.2%	
MATTHEW FED 2	1,838	1,849	31					13.1%	
WHITE CLOUD 2	1,835	1,841	31						1.28

Table 8: Assay results of the samples used in the Resource Estimation.



#### Sample analysis method

Samples taken by Anson from the four re-entry wells were assayed for a series of elements utilising different methodologies at different laboratories. SGS utilized EPA 6010B (ICP-AES) for analysis of cations, and a variety of standard methods for analysis of anions. WETLAB completed density analysis and anions by ion chromatography (EPA Method 300.0) for bromide, chloride, fluoride, and sulphate. WETLAB then subcontracted out the analysis for bromine (via Schoniger Combustion) to Midwest Microlab of Indianapolis, Indiana, and total metals by inductively coupled plasma – atomic emission spectrometry (ICP-AES) (EPA Method 200.7) for lithium, boron, and magnesium were subcontracted to Asset Laboratories of Las Vegas, Nevada.

The analysis of brines associated with oil and gas can be complex due to the interference of hydrocarbon organics when not properly prepared. Brines present challenges for analysis due the very high concentrations of anions such as calcium, chloride, and magnesium. The high concentrations of these elements drive the need for sample dilution in order to analyse for elements such as boron and lithium which can be anomalously high, yet significantly lower than calcium, chloride and magnesium. The dilution process inherently adds some level of uncertainty to the analysis and can create different analysis results between laboratories. Additionally, further work is required to characterize the in-situ parameters of the brine fluids so that the chemistry effects of changing temperature and pressure can be better understood.

Assaying methods from historic holes have not been documented. The historic assay results have been sourced from the 1965 publication by Mayhew and Heylman.

#### Estimation methodology

Grades were estimated by inverse distance squared grade interpolation. A minimum of one and maximum of three wells were used for the estimation. No top cuts were applied to the estimation. A maximum search distance of 11km was used to ensure all blocks in the model were informed with grades, porosity and brine density. A search box was used to eliminate the edge effects of using a search ellipse.

# Cut-off grade

No cut-off grades have been applied to the resource reporting.

# Mining and metallurgical methods

No mining of metallurgical assumptions or factors have been used in estimating the resource. The resource is reported as an in-situ, contained metal resource. Assumptions have been made regarding effective porosity. Effective porosity values of between 11.4% and 21.3% have been estimated for Clastic Zone 31 and 14% has been assumed for Clastic Zones 17,19,29 and 33 based on test-work applied to Clastic Zone 31. The Mississippian has been sampled with an effective porosity of 7.6% measured. The four wells re-entered and sampled by Anson have all recorded high pressure, free flowing, brine fluids at surface. To date test-work has not required pumping. While high permeabilities were recorded during well testing additional test-work is required to establish effective yield of the CZ31 unit.

#### Classification

The model has been classified by radius around sampled wells. Indicated resources have been classified within 2 km of a sampled well and inferred resourced within 4 km of a sampled well. The following figures show the resource classification for Clastic Zones 17, 19, 29, 31 and 33, see Figures 14 and 15. The JORC Resource interpretation for the Mississippian Units is shown in



Figure 16. The new clastic zones samples have only been classified as Inferred due to the limited drillhole data collected to date, see Figure 17.

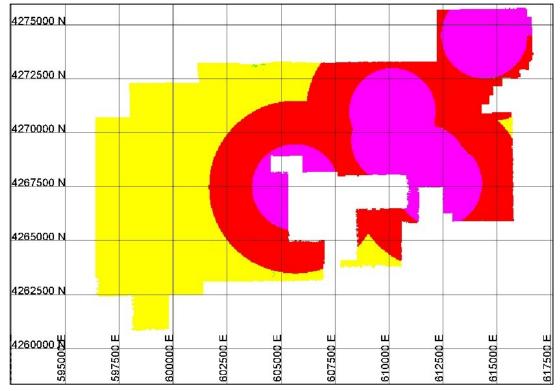


Figure 14: Clastic Zone 31 Resource Classification.

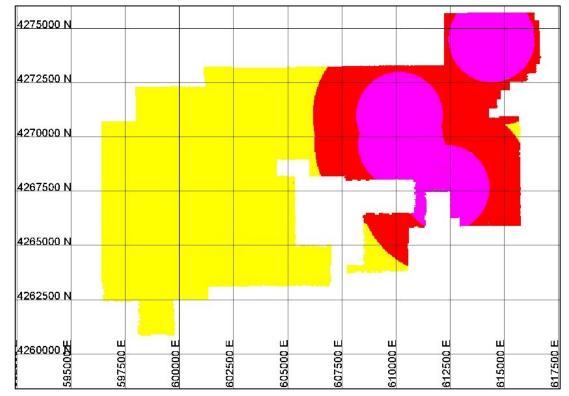


Figure 15: Clastic Zone 29 Resource Classification.



It can be seen that Clastic Zone 31 has the highest level of resource confidence due to greater levels of sampling and the effective porosity test-work conducted on the Big Flat 2 well.

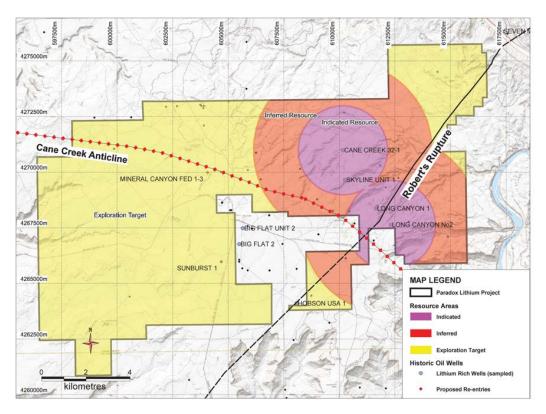


Figure 16: The Mississippian Resource Classification.

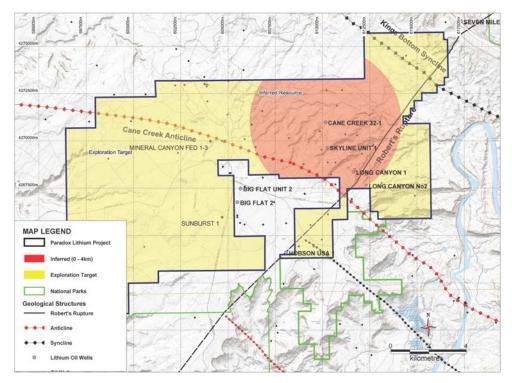


Figure 17: Plan showing the 0 to 4km Inferred Area of Influence for the newly assayed Clastic Zones (43, 45 & 47).



# Block Model Details

The clastic zones were modelled using stratigraphic data from Massouth (2012). Each of the clastic zones, 17, 19, 29, 31, 33, 43, 45, 47 and the Mississippian were constructed in three dimensions using the top and bottom depths from the drillhole logs in the claim area. Block size was selected to maintain the stratigraphic delineation of each of the clastic units. The well logs extend beyond the claim boundaries, so the vertical positioning of the clastic units was delineated over the entire claim area. A point was placed at the top and bottom of each clastic unit for each well. These points were then used to construct a top and bottom surface for each clastic unit.

Estimation was done with inverse distance squared interpolation.

# **References**

Mayhew, E., Heylman, E., <u>Concentrated Sub-surface Brines in the Moab Region</u>, Utah Geol. and Min. Survey, Special Study no. 13, 1965

Fetter, C.W., <u>Applied Hydrogeology</u> (4th Edition); Prentice-Hall Inc., Upper Saddle River, New Jersey, 592 p, 1988.

Massoth, T., <u>Well Database and Maps of Salt Cycles and Potash Zones of the Paradox Basin,</u> <u>Utah</u>, Utah Geological Survey, Open File Report 600, 2012

Manger, G.E., Porosity and Bulk Density of Sedimentary Rocks, USGC Bulletin 1144-E, 1963

This announcement has been authorised 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 junior mineral resources company, with a portfolio of minerals projects in key demand-driven commodities. Its core asset is the Paradox Lithium-Brine Project in Utah, in the USA. Anson is focused on developing the Paradox Project into a significant lithium 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 1:** 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 and a consultant to Anson.

**Competent Person's Statement 2:** The information contained in this ASX release relating to Exploration Results and Mineral Resource Estimates has been prepared by Mr Richard Maddocks, MSc in Mineral Economics, BSc in Geology and Grad Dip in Applied Finance. Mr Maddocks is a Fellow of the Australasian Institute of Mining and Metallurgy (111714) with over 30 years of experience. Mr Maddocks has sufficient experience that is relevant to the style of mineralisation and type of deposit 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.

Mr Maddocks is an independent consultant to Anson Resources Ltd. Mr Maddocks consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from exploration at the Paradox Brine Project.

Information is extracted from reports entitled 'Anson Obtains a Lithium Grade of 235ppm at Long Canyon No 2' created on 1 April 2019, 'Anson Estimates Exploration Target For Additional Zones' created on 12 June 2019, 'Anson Estimates Maiden JORC Mineral Resource' created on 17 June 2019, 'Anson Re-enters Skyline Well to Increase Br-Li Resource' created on 19 September 2019, 'Anson Confirms Li, Br for Additional Clastic Zones' created on 23 October 2019 and all are available to view on the ASX website under the ticker code ASN. Anson confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Anson confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Historical oil wells (Gold Bar Unit #2, Cane Creek #32-1-25-20, Skyline Unit 1, and Long Canyon Unit 2) were utilized to access brine bearing horizons for sampling. Geophysical logging was completed to determine geologic relationships and guide casing perforation. Once perforated, a downhole packer system was utilized to isolate individual clastic zones (production intervals) for sampling. Perforation and packer isolated sampling moved from bottom to top to allow for the use of a single element packer.</li> <li>Brine fluid samples were discharged from each sample interval to large 1,000 L plastic totes. Samples were drawn from these totes to provide representative samples of the complete volume sampled at each production interval.</li> <li>The brine samples were collected in clean plastic bottles. Each bottle was marked with the location, sample interval, date and time of collection.</li> </ul>
Drilling Techniques	<ul> <li>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, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul> <li>Standard mud rotary drilling was utilized to re-enter historical oil wells. The wells had been previously plugged and abandoned in some cases, requiring drill out of cement abandonment plugs. All drilling fluids were flushed from the well casing prior to perforation and sampling activities.</li> <li>Historical drilling techniques into the Mississippian are not known but the wells were deep exploratory wells accessing oil and gas.</li> <li>Long Canyon Unit 2 and Cane Creek 32-1 were deepened using a workover rig drilling a 4 5/8" diameter hole.</li> </ul>
Drill Sample Recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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</li> </ul>	<ul> <li>Long Canyon Unit 2 was re-entered and deepened to 7,385'.</li> <li>Drilling of the new units resulted in cuttings being collected at the same time as the brine sampling was carried out.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>No new drill holes were completed.</li> <li>Not all wells were cored, but cuttings were collected.</li> <li>Cuttings were recovered from mud returns.</li> <li>Sampling of the targeted horizons was carried out at the depths interpreted from the newly completed geophysical logs.</li> <li>The Clastic Zones 17, 19, 29, 31, 33, 43, 45, 47, 49 and Mississippian were sampled.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Sub-sampling Techniques and Preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Bulk brine samples were stored for potential further analysis.</li> <li>Core samples were collected from the Big Flat Unit 1, 2 and 3 wells for some clastic zone horizons and the Mississippian Units.</li> <li>Cuttings and core samples retrieved from UGS and USGS core libraries.</li> <li>Core samples were collected in the Long Canyon No 1, Big Flat Unit 1, Big Flat Unit and Big Flat Unit 3 wells from the Mississippian Units.</li> </ul>
Quality of Assay Data and Laboratory Tests	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</li> <li>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.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Historic Wells <ul> <li>Sample size and quality were considered appropriate by operators/labs.</li> </ul> </li> <li>Re-Entries <ul> <li>Sampling followed the protocols produced by SRK for lithium brine sampling.</li> <li>Samples were collected in IBC containers and samples taken from them.</li> <li>Duplicate samples kept Storage samples were also collected and securely stored.</li> <li>Bulk samples were also collected for future use.</li> <li>Sample sizes were appropriate for the program being completed.</li> </ul> </li> <li>Analysis of brine fluids was completed at several laboratories including SGS (Applie Technology and Innovative Centre), Empact Laboratories and Enviro-Chem Analytica Inc. All labs followed a standard QA/QC program that included duplicates, standards and blind control samples.</li> <li>The quality control and analytical procedures used by the three analytical laboratories are considered to be of high quality.</li> <li>The assaying technique for the Big Flat No 2 well in the Mississippian is not known. Th sample was assayed by the Ethyl Corporation.</li> <li>Duplicate and standard analyses are considered to be of acceptable quality.</li> </ul>
Verification of Sampling and Assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Limited downhole geophysical tools were utilized for orientation within the cased oil weiprior to perforation. These are believed to be calibrated periodically to provide consister results.</li> <li>Accuracy, the closeness of measurements to the "true" or accepted value, was monitored by the insertion of laboratory certified standards.</li> <li>Duplicate samples in the analysis chain were submitted as part of the laboratory batch and results are considered acceptable.</li> <li>Laboratory data reports were verified by the independent CP.</li> <li>Historical assays are recorded in Concentrated Subsurface Brines, UGS Speci-Publication 13, printed in 1965</li> </ul>



Criteria	JORC Code Explanation	Commentary
Location of Data Points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The location of historical oil wells within the Paradox Basin is well documented.</li> </ul>
Data Spacing and Distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing is considered acceptable for a brine sample but has not been used in any Resource estimations.</li> <li>There has been no compositing of brine samples.</li> </ul>
Orientation of Data in Relation to Geological Structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The Paradox Basin hosts bromine and lithium bearing brines within a sub-horizontal sequence of salts, anhydrite, shale and dolomite. The historical oil wells are vertical (dip -90), perpendicular to the target brine hosting sedimentary rocks.</li> <li>Sampling records did not indicate any form of sampling bias for brine samples.</li> </ul>
Sample Security	The measures taken to ensure sample security.	<ul> <li>Brine samples were moved from the drill pad as necessary and secured.</li> <li>All samples were marked with unique identifiers upon collection</li> </ul>
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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Paradox Basin Brine Project is located approximately 12 km west of Moab, Utah, USA, and encompasses a land position of 16,631 hectares.</li> <li>The land position is constructed from 1,846 Federal placer mineral claims, and three mineral leases from the State of Utah.</li> <li>A1 Lithium has 50% ownership of 87 of the 1,846 mineral claims through a earn-in joint venture with Voyageur Mineral Ltd. All other claims and leases are held 100% by Anson's U.S. based subsidiary, A1 Lithium Inc and Blackstone Resources Ltd.</li> <li>The claims/leases are in good standing, with payment current to the relevant governmental agencies.</li> </ul>
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historical exploration for brines within the Paradox Basin includes only limited work in the 1960s. No brine resource estimates have been completed in the area, nor has there been any historical economic production of bromine or lithium from these fluids.</li> <li>The historical data generated through oil and gas development in the Paradox Formation has supplied some information on brine chemistry.</li> </ul>



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Criteria	JORC Code Explanation	Commentary
Geology	• Deposit type, geological setting and style of mineralization.	<ul> <li>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.</li> <li>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 surrounding depositional cycles, with each likely associated with a unique geochemical signature.</li> <li>The source and age of the brine requires further investigation.</li> </ul>
Drill Hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>Four existing oil wells were re-entered and worked over in 2018 and 2019 to collected brine samples. Although these wells may be directional, all wells are vertical (dip -90, azimuth 0 degrees) through the stratigraphy of interest.</li> <li>Detailed historical files on these oil wells were reviewed to plan the re-entry, workover and sampling activities.</li> <li>Following geophysical logging to confirm orientation within the cased well, potential production intervals were perforated, isolated and sampled.</li> <li>The target horizons in the Paradox Formation are approximately 1,800 meters below ground surface.</li> <li>Data on hundreds of historic wells is contained with a database published by the Utah Geological Survey. Open File Report 600 'WELL DATABASE AND MAPS OF SALT CYCLES AND POTASH ZONES OF THE PARADOX BASIN, UTAH', published in 2012.</li> </ul>
Data Aggregation Methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade</li> <li>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.</li> <li>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 used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No weighting or cut-off grades have been applied.
Relationship Between Mineralization Widths and Intercept Lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>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.</li> <li>Brines are collected and sampled over the entire perforated width of the zone.</li> <li>The Mississippian Units are assumed to be porous and permeable over its entire vertical width.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Diagrams	<ul> <li>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.</li> </ul>	A diagram is presented in the text showing the location of the properties and re-entered oil wells.
Balanced Reporting	<ul> <li>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.</li> </ul>	All data generated by A1 Lithium through re-entry, workover, and sampling of historical oil wells is presented. No newly generated data has been withheld or summarized.
Other Substantive Exploration Data	<ul> <li>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.</li> </ul>	All available current exploration data has been presented.
Further Work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Additional well re-entries and sampling planned following acceptance of Plan of Operations with BLM and completion of an Environmental Assessment. This will cover the Paradox Formation and Leadville Limestone.</li> <li>Future well re-entries will focus on wells located on western portion of claims.</li> </ul>

#### Section 3 Reporting of Mineral Resource Estimates

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used</li> </ul>	<ul> <li>Data has been verified by company personnel.</li> <li>Historic data used in the estimation has been sourced from Utah Geological Survey publications.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>The competent person has not visited site.</li> <li>Other CP's and consultants who have provided data and information for the estimate were on-site to supervise the well re-entry, sampling and assaying procedures</li> </ul>
Criteria	JORC Code explanation	Commentary



Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geological interpretation, location and depth of the brine bearing units is very well known and documented through the drilling of hundreds of oil and gas wells over the past century.</li> <li>The Paradox Basin is a large, deep basin containing thousands of metres of sediments containing various levels of oil, gas and brine. The sedimentary layers have been correlated over most, if not all, of the basin. This enables an accurate assessment of the position of the brine unit Clastic Zones 17, 19, 29, 31, 33 and Mississippian.</li> </ul>
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The brine bearing units are encountered at depth over the entire Anson claim area.</li> <li>Available data indicates that the units contains brine throughout its extent within the Anson claims.</li> <li>The Anson claims cover an area of about 10km x 10km and this entire area has been covered by the estimation.</li> <li>Within the claim area the brine unit (Clastic Zones 17, 19, 29, 31,33 and Mississippian) are found at vertical depths up to 1500m to 2500m below surface.</li> <li>The producing unit averages 6m in thickness.</li> </ul>
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	<ul> <li>The brine grades were modelled using inverse distance squared grade interpolation.</li> <li>A single composite for the producing unit in each well was used to estimate grades.</li> <li>Lithium, Bromine, Iodine, Boron, porosity and brine density were all modelled where there was data present.</li> <li>A search box was used to eliminate the edge effect of using a search ellipse. The search box was 8000m x 8000m to ensure all the project area was covered.</li> <li>Minimum samples used in the estimation was 1 and the maximum was 3.</li> <li>A total of 202 wells were used to determine the depth and thickness of the brine producing unit. Lithium grades are available for a total of 8 wells, some of which are outside the Anson claims; their grades were interpolated into the Anson claims.</li> <li>Bromine data was from 7 wells and lodine from 4. There were 20 density and 20 porosity measurements.</li> <li>The parent block size used was 500m x 500m with sub blocks to 20m x 20m to enable adequate definition of the brine unit.</li> <li>There is correlation between variables based on the total dissolved solid (TDS) content</li> <li>of the brine.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Cutting of assays was not appropriate as grade is based on the TDS levels. Mapping of brine saturation levels indicates that the Paradox Basin does contain higher levels of saturation at its deeper centre.</li> <li>Effective porosity was used Clastic Zone – 14% Mississippian – 7.6%</li> <li>The brine is contained within the producing units (Clastic Zones 17, 19, 29, 31, 33, 43, 45, 45, 47 and Mississippian). The contained brine is estimated by multiplying the volume by the effective porosity and then by the brine density.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>Lithium brine is a liquid resource, moisture content is not relevant.</li> <li>Density of the brine is approximately 1.2t/m<sup>3</sup>. Actual measurements of sampled material been used in the estimation.</li> <li>Tonnages of product equivalent eg lithium carbonate are reported as dry tonnes.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>No cut-off grades were applied.</li> <li>Based on field observations, the brine density and chemistry is relatively consistent.</li> </ul>
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>Testwork on re-entering historic wells has indicated that brine can be recovered from the producing unit.</li> <li>To date four drill wells have been re-entered successfully with pumping tests producing mineral bearing brine.</li> <li>Two holes, Long Canyon Unit 2 and Cane Creek 32-1 were deepened to provide a brine sample from the Mississippian zone.</li> </ul>
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>No assumptions regarding the metallurgical or recoverability characteristics of the brine have been assumed in the estimation.</li> <li>However, lithium carbonate and lithium hydroxide has been produced from bench top test-work from recently collected brine samples.</li> </ul>



Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>The brine was produced from historic wells with no new drilling taking place except for the Mississippian in No 2 Long Canyon Unit which was deepened to intersect this unit.</li> <li>No waste products are left on site.</li> <li>No environmental assumptions were used in this estimation.</li> <li>Environmental reports are being carried out for future pilot plant processing.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the</li> <li>frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Brine density measurements were based on samples from the pump tests carried out by Anson in 2018 and 2019.</li> <li>Data was measured in commercial laboratories.</li> <li>Total Porosity measurements were taken utilising a combination of neutron density logs and sonic logs for the three re-entry holes. Effective porosity was measured using high pressure mercury injection.</li> <li>Permeability was measured during the well re-entry. Skyline returned 6,543 md (milli darcys) and Long Canyon 1,698 md. These indicate high levels of permeability.</li> <li>Additional testwork is required to enable accurate estimates of effective or drainable porosity.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The resource was classified as an Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity.</li> <li>The recent pump tests carried out by Anson have provided samples with a known provenance and assaying technique.</li> <li>These assays were used as the basis for the indicated resources.</li> <li>Indicated Resources are within 1km of the well.</li> <li>From 1 to 3km the resource is categorised as Inferred.</li> <li>Outside 3km the brine mineralisation is encompassed in the Exploration Target.</li> <li>The classification appropriately represents the level of confidence in the contained mineralisation and it reflects the competent persons view of the deposit.</li> </ul>



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Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or review of the Mineral Resource estimate has been conducted.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The geology and stratigraphy of the Paradox Basin is very well known.</li> <li>The brine unit the subject of this resource estimation is known to contain super saturated brine at pressure from the drilling of many oil and gas wells.</li> <li>The resource is reported as in-situ tonnes of mineralisation.</li> <li>Further testwork is required to enable recoverable volumes of brine to be estimated.</li> </ul>