

## Anson Achieves Exceptional PEA Results for Paradox Project

### Highlights:

- Independent 3<sup>rd</sup> party PEA indicates outstanding economics of the project
- Stage 1 production of 15,000tpa of sodium bromide (NaBr):
  - Pre-tax NPV of US\$575m (~A\$893m) and IRR of 40%, (over 25 years)
  - Project development cost US\$121m (~A\$188m) payback 2.16 years
  - Average annual pre-tax EBITDA of US\$70m (~A\$108m)
  - EBITDA margin for NaBr 88.1%
  - Direct cash costs of production NaBr US\$1,096/t
- Stage 2 includes the addition of a 24tpa lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) pilot plant
- Stage 3 expansion to 60,000tpa of NaBr & 15,000tpa Li<sub>2</sub>CO<sub>3</sub>
  - Pre-tax NPV of US\$2.67b (~A\$4.1b) and IRR of 43%
  - Project development cost of US\$483m (~A\$750m), payback 1.47 years
  - Average annual pre-tax EBITDA of US\$420m (~A\$652m)
  - EBITDA margin of 75.7%
  - Direct cash cost of production NaBr US\$1,096 & Li<sub>2</sub>CO<sub>3</sub> US\$3,673
- Confirms potential for long-life, sustainable commercial scale operation
- Upcoming milestones include: commencement of PFS; offtake arrangements

Anson Resources Limited (“Anson”) is pleased to announce that the independent 3<sup>rd</sup> party engineering company conducting the Preliminary Economic Assessment (“PEA”) for its Paradox Brine Project, located Utah, USA has completed the study. The PEA indicates a high economic viability and return on investment due to the unique nature of the brine which flows to surface under its own pressure with high concentration of a number of minerals; including world class Br grades.

Anson’s strategy of taking advantage of the existing wells, utilities and other infrastructure as well as the use of proven technology and processes; has resulted in not only decreasing the risk of the project but also lowering capital and operating costs as shown by the PEA results. The PEA also confirms the advantage of first extracting bromine to fast-track the project to cashflow, that can then fund the development of plants to extract lithium and other minerals, validating Anson’s multi-mineral/multi-revenue strategy.

The PEA, equivalent to a JORC Scoping Study, provides outcomes that are considered outstanding. Key financial highlights by phase are presented in Table 1:

PHASE	PRE-TAX		POST-TAX	
	NPV (7%)	IRR	NPV (7%)	IRR
Phase 1	\$576m	40%	\$416m	33%
Phase 2	\$566m	39%	\$409m	32%
Phases 1, 2 and 3 (Combined)	\$2,673m	43%	\$1,934m	36%
Phase 3 (Stand Alone)	\$3,358m	55%	\$2,413m	43%

Table 1: Paradox Brine Project key financial highlights

## Summary of Key PEA Parameters and Outcomes

Consistent with Anson's plan to use cashflow from initial NaBr production to progress the project to full production, three phases have been considered in the PEA, being:

- stage 1 production of 15,000tpa of NaBr;
- stage 2 addition of a 24tpa lithium pilot plant, to finalise the design of the lithium processing plant; and
- stage 3 expansion of production to 60,000tpa of NaBr and 15,000tpa of Li<sub>2</sub>CO<sub>3</sub>.

Key outcomes and parameters of the PEA for each phase are presented in Table 2 below.

Production Parameters	Units	Stage 1	Stage 2	Stage 3
Construction Period <sup>1</sup>	Years	2	1	2
Production Rate - NaBr	Tonnes per annum	15,000	15,000	60,000
Production Rate – Li <sub>2</sub> CO <sub>3</sub>	Tonnes per annum	-	24	15,000
Mineral Resource – Bromine	Contained ('000t)	1,176	1,176	1,176
Mineral Resource – Lithium	Contained ('000t)	192	192	192
Production Rate – Brine Extr'	Litres per minute	7,000	7,000	28,000
Recovery – NaBr	%	90	90	90
Recovery – Li <sub>2</sub> CO <sub>3</sub>	%	-	75	75
<b>Key Financial Parameters</b>				
Capital Cost <sup>1</sup>	\$US Million	121	10	483
Operating Cost – Per annum	\$US Million	16.5	n/a <sup>2</sup>	134
Price – NaBr	\$US/tonne	5,280	5,280	5,280
Price – Li <sub>2</sub> CO <sub>3</sub>	\$US/tonne	13,000	13,000	13,000
Cash Cost (AISC)	\$US/tonne NaBr	1,096	1,096	1,096
Cash Cost (AISC)	\$US/tonne Li <sub>2</sub> CO <sub>3</sub>	n/a	n/a <sup>2</sup>	3,673
EBITDA Margin NaBr	%	88.1	88.1	75.7
EBITDA Margin Li <sub>2</sub> CO <sub>3</sub>	%	n/a	n/a	
IRR Pre Tax	%	40	39	43
IRR Post Tax	%	33	32	36
NPV (7%-disc rate) pre tax	\$US Million	576	566	2,673
NPV (7%-disc rate) post tax	\$US Million	415	408	1,934
Payback period	Years	2.16	n/a <sup>2</sup>	1.47 <sup>4</sup>
Sales – Annual <sup>3</sup>	\$US Million	91	91	556
Sales – 25 years assumed	\$US Million	2,251	2,251	11,932
EBITDA – Annual <sup>3</sup>	\$US Million	69.8	69.8	420.9
EBITDA – 25 years assumed	\$US Million	1,728	1,728	8,987

**Table 2: Paradox Brine Project key parameters and outcomes**

Notes: 1. The construction period and capital cost are incremental to each stage

Notes: 2. Phase 2 is a pilot plant and accordingly annual operating cost, cost per tonne for Li<sub>2</sub>CO<sub>3</sub>, and payback period are not applicable

Notes: 3. At steady state post ramp up.

Notes: 4 Based on incremental cashflows for stage 3

## CAUTIONARY STATEMENTS

The PEA is a preliminary technical and economic study of the potential viability of the Paradox Brine Project required to reach a decision to proceed with more definitive studies (equivalent to a JORC Scoping Study). It is based on preliminary/low-level technical and economic assessments that are not sufficient to support the estimation of Ore Reserves or provide certainty that the conclusions/results of the PEA will be realised. Further exploration and evaluation work and appropriate studies are required before Anson will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case.

The economic analysis results should be treated as preliminary in nature and caution should be exercised in their use as a basis for assessing project feasibility. The PEA was based on material assumptions including assumptions about the availability of funding. While Anson considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove be correct or that the range of outcome indicated by the PEA will be achieved.

To achieve the range of proposed feasibility studies and potential project development outcomes indicated in the PEA, additional funding will be required. Investors should note that there is no certainty that Anson will be able to raise funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Anson's existing shares. It is also possible that Anson could pursue other "value realisation" strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Anson's proportionate ownership of the project.

100% of the material included in the PEA proposed mining schedules for all cases is included within Indicated Mineral Resources for Phase 1 & 2 of the project and 100% of the material included in the PEA proposed mining schedules for all cases is included within Indicated and Inferred Mineral Resources for Sodium Bromide and 50% are included within the Exploration Target for Lithium Carbonate for Phase 3 of the Project.

Process and engineering works for the PEA were developed to support capital and operating estimates (and following AUSIMM Guidelines for this study level), and given the preliminary and confidential nature of the plant information the capital cost includes a margin of error of +/- 50%. Key assumptions that the PEA is based on are outlined in the body of this announcement. Anson has concluded it has a reasonable basis for providing the forward-looking statements in this announcement.

The Mineral Resources information in this report is consistent with that in the announcement entitled *Anson Further De-Risks Paradox Brine Project* released on 11 May 2020. 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 the 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 which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Given the uncertainties involved, all figures, costs, estimates quoted are approximate values and within the margin of error range expressed in the relevant sections throughout this announcement. Investors should not make any investment decisions based solely on the results of the PEA.

## Relevant Information Concerning PEA Preparation

The PEA was prepared by independent and globally recognised engineering firm Millcreek Mining Group. Processing and engineering works for the PEA were developed to support capital and operating estimates (and following AUSIMM Guidelines for this study level), and given the preliminary and confidential nature of the plant information, the capital cost has a margin of error of +/- 50%.

The PEA referred to in this announcement is based on the Indicated and Inferred Mineral Resource (see announcement titled '*Anson further de-risks Paradox Brine Project*' of 11 May 2020), which provides the total tonnage underpinning the forecast production target and financial projections. The estimated Indicated and Inferred Mineral Resource underpinning the production target has been prepared by a Competent Person in accordance with the requirements of the JORC Code. Accordingly, Anson has concluded that it has reasonable grounds for disclosing the production targets.

The pricing for commodities used in the PEA was based on independent market research and the economic analysis results should be treated as preliminary in nature and caution should be exercised in their use as a basis for assessing project feasibility.

**Forward Looking Statements:** Statements regarding plans with respect to Anson's mineral properties are forward looking statements. These can be no assurance that Anson's plans for development of its mineral properties will proceed as expected. There can be no assurance that Anson will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will be successfully developed on any of Anson's mineral properties.

Unless otherwise stated, all cashflows are in US Dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years.

### Details of the PEA

The PEA was prepared for Anson's Paradox Brine Project, located in Utah, USA, based on 3 stages beginning with 15,000tpa of NaBr production and culminating in 60,000tpa of NaBr and 15,000tpa of lithium carbonate (referred to as "LCE" or  $\text{Li}_2\text{CO}_3$ ) production.

The cost data basis used for the compilation of the indicative Paradox Brine Project capital expenditure and operating expenditure require further detail/development in order to improve the confidence level and accuracy of the estimates.

Potential by-product revenue from production of boron (Boric Acid,  $\text{H}_3\text{BO}_3$ ) and iodine ( $\text{I}_2$ ) from the Paradox Brine Project were excluded from the economic analysis for the PEA.

### Key Risks

#### *Permitting*

Before additional abandoned oil & gas wells can be re-entered for testing and/or development into brine production wells, a Plan of Operation ("**PoO**") will need to be submitted to the United States, Bureau of Land Management ("**BLM**"). The PoO will need to address the main pipeline that will transport brine from the well field to the processing plant and the gathering line system necessary, as well as the proposed corridors for power, natural gas, rail spur, and other potential inputs to the processing plant that cross federal lands.

Anson has initiated preparation of a PoO. Once the PoO has been submitted and accepted by the BLM, an Environmental Assessment (EA) will be carried out on the project. Current BLM policy dictates a timeline of six months for completion of the EA.

Several permits require longer timelines, either for application preparation or for agency processing and approval.

### General *Environmental Risks*

The project's proposed location near Moab and other environmental sensitive receptors results in some general environmental risks associated with permitting. The overall Moab area is highly prized for its scenery and varied recreational activities. The area is known for two National Parks, a certified Dark Skies State Park, and numerous yearly rallies attracting many visitors. The project borders the Labyrinth Rims/Gemini Bridges Special Recreational Management Area (SRMA). Additionally, the project is within Class II and III Visual Resource Management Areas.

### Economic Analysis

Separate economic models have been prepared for the various phases of the project:

- Phase 1 – 15,000tpa sodium bromide production;
- Phase 2 (combined with Phase 1) – 15,000 tpa sodium bromide production with an addition of a 24 tpa lithium pilot plant; and
- Phase 3 (combined with Phase 1 and after lithium carbonate piloting in Phase 2) – 60,000 tpa sodium bromide and 15,000 tpa lithium carbonate production.

### *Assumptions*

- The project is expressed in constant (2020) US\$.
- Project economics (revenues and costs) are un-inflated and un-escalated.
- Economic evaluation metrics are reported including net present value (NPV), and internal rate-of-return (IRR).
- The NPV is estimated at discount rates of 7%.
- The analysis does not include any costs for interest on debt, nor does the model assume any advantages from debt financing.

### *Production Criteria*

- The economic model assumes the following pre-production (construction) period for each project phase:
  - Phase 1 – Two years pre-production for construction (Year -2 and Year -1);
  - Phase 2 – One-year additional construction of pilot plant (Year 2); and
  - Phase 3 – Two years additional construction (Year 3 and Year 4).
- The analysis considers the pre-production (initial construction) years and the following 25 years of project life. It can be assumed that the resource life can continue beyond Year 25.
- Estimated permitting costs and drilling costs are brought forward to the beginning of the pre-production construction period of the economic model.
- Preproduction, exploration, and other sunk costs spent to date are not included in the model. The capital portion of these costs has been included in the depreciation.

### *Pricing*

- Sodium bromide \$5,280/t.
- Lithium carbonate \$13,000/t.
- NaOH (bi-product) \$650/t.

### *Taxes and Fees*

- A federal tax rate of 21% on taxable income has been applied.
- A Utah state tax of 4.95% has been applied to taxable income.
- A disposal fee of \$0.15/barrel (159 L) is assessed for all spent brines returned through underground injection control (UIC) wells located on state land. This fee may be negotiated lower.

### Discounted Cash Flow (DCF)

A discounted cash flow (DCF) was derived by estimating net revenues, subtracting the operating costs to yield the EBITDA, and then subtracting capital costs to arrive at a pre-tax DCF. Taxes were calculated accounting for deductions, and then applied to yield a post-tax DCF. The project cash flows for each phase are summarized in Table 3 below.

PHASE	PRE-TAX		POST-TAX	
	NPV (7%)	IRR	NPV (7%)	IRR
Phase 1	\$576m	40%	\$416m	33%
Phase 2	\$566m	39%	\$409m	32%
Phases 1, 2 and 3 (Combined)	\$2,673m	43%	\$1,934m	36%
Phase 3 (Stand Alone)	\$3,358m	55%	\$2,413m	43%

**Table 3: Paradox Brine Project Results of Economic Analysis**

### Mineral Resource Estimate

The Mineral Resource estimate was calculated only for the brine aquifers of Clastic Zones 17, 19, 29, 31 and 33 within the Project area and indicates 192,000 tonnes of contained lithium carbonate equivalent (LCE) and 1,176,000 tonnes of bromine. A summary table of JORC Compliant Mineral Resource Estimate is presented below in Table 4. Significant amounts of other minerals including Boron (Boric Acid, H<sub>3</sub>BO<sub>3</sub>) and Iodine (I<sub>2</sub>) have also been estimated.

The Mineral Resource could be further increased by re-entering historic holes in the western and southern areas of the Project area which are only classified as an Exploration Target due to the lack of data to date. This would result in a significant increase in the block model tonnages and grades for the additional Clastic Zones as there has been no recorded assays in those locations.

The average mean lithium concentrations range from 11ppm to 196ppm with a maximum recorded concentration of 253ppm. The bromine concentrations range from 2,240ppm to 3,705ppm with a maximum recorded concentration of 5,041ppm.

Category	Clastic Zone	Brine Tonnes (Mt)	Effective Porosity (%)	Li (ppm)	Br (ppm)	B (ppm)	I (ppm)	Contained ('000t) <sup>1</sup>	
								LCE	Br <sub>2</sub>
Indicated	31	37	14.4	175	3,909	3,867	150	34	143
Inferred	31	74	16.4	172	2,987	3,056	154	68	221
Resource		111		173	3,292	3,324	153	102	364
Indicated	17,19,29,33	39	14	76	3,664	3,227	54	16	142
Inferred	17,19,29,33	191	14	73	3,510	3,113	51	74	670
Resource		230		74	3,537	3,132	44	90	812
<b>TOTAL</b>		<b>341</b>						<b>192</b>	<b>1,176</b>

**Table 4: Paradox Brine Project Mineral Resource Estimate.**

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



It should be noted that the Mineral Resource is a static estimate; it represents the volume of potentially recoverable brine that is contained within the defined aquifer. It does not take into account the modifying factors such as the design of a pumping program, which will affect both the proportion of the Mineral Resource that is ultimately recovered and changes in grade associated with mixing between each aquifer unit and the surrounding geology that will occur once pumping starts. The Mineral Resource also takes no account of recharge to the aquifers within the clastic zones, which is a modifying factor that may increase brine-recovery from the units and may affect long-term grade. Pumping tests completed to date are of relatively short duration and provide data on aquifer hydraulic properties; they do not indicate the operational pumping rates that may be sustained from individual bores or the response of the brine aquifer to long-term operational pumping.

### Production Scenarios

#### *Phase 1*

Installation of a 15,000tpa NaBr production facility including all necessary equipment to produce a product plus primary reagents such as chlorine, hydrogen, and hydrochloric acid.

#### *Phase 2*

In Phase 2 operations will include the installation of a lithium extraction pilot plant to further progress the initial study and test work performed on the Paradox Basin brines to facilitate the extraction and purification of lithium. The in-field pilot will utilise industrial-scale, continuous processing equipment to verify Anson's ability to achieve high lithium recoveries from brine to produce high quality lithium carbonate and potential conversion to lithium hydroxide.

The pilot utilises a dedicated and advanced ion exchange (IX) system operated using accelerated parameters to produce eluate for the lithium carbonate process with a single pass of IX. A standard industrial process will be utilised to convert the lithium eluate from LiCl to Li<sub>2</sub>CO<sub>3</sub>.

#### *Phase 3*

Expansion of NaBr production to 60,000tpa with the installation of three additional 15,000-tonne parallel NaBr and chlorine production facilities. An additional hydrochloric acid (HCl) production module will be installed to produce the additional HCl required for the increased production of the additional modules. Phase 3 will also include installation of a production circuit to produce 15,000tpa of lithium carbonate.

### Process Design and Description

#### *Bromine Recovery*

The bromine recovery plant will utilise the Kubierschky process.

In the Reaction Columns bromide is oxidized to elementary bromine with chlorine and stripped off from the brine. The oxidation occurs under acidic conditions (pH 2-3).

The feed brine is split into two streams. The main part of the brine is pumped to feed preheater/effluent cooler. The other part of the brine is utilised in the Vent Scrubber to wash the vent gas from the plant.

The cold brine from the Vent Scrubber and the preheated feed are fed to the top of the Reaction Columns. There, the bromide is oxidized to bromine utilising chlorine. The efficiency of the reaction is estimated to reach 90%. Bromine and any excess chlorine are stripped out by live steam fed into the bottom of the column.

### *Bromine Purification*

The bromine still contains dissolved chlorine and water as well as high boiling impurities. In the Purification Column bromine is rectified under reflux. It is separated into pure bromine at the bottom of the column and a bromine/water azeotrope at the top of the column. Leaving the top of Purification Column, the vapor is condensed in the Bromine Condenser. Chlorine as a non-condensable component is stripped off and transferred to the Vent Scrubber. The condensate flows into Bromine Separator where it is separated into a heavy bromine phase which is fed back to the top of Purification Column and a lighter aqueous phase which is fed back to Reaction Column. The bromine leaving the Purification Column at the bottom is condensed and cooled down in a Condenser. To create NaBr, sodium hydroxide (NaOH) is added to the solution which is then passed through a bromide reactor.

### *Reverse Osmosis Water Treatment*

Reverse osmosis (RO) is a water purification process that uses a partially permeable membrane to remove ions, unwanted molecules and larger particles from water. A RO unit will be installed to treat spent brine for water recovery for the process. The RO units will remove dissolved and suspended chemical species as well as biological ones from the spent brine water. The result is that the solute is retained on the pressurised side of the membrane and the pure solvent is allowed to pass to the other side. The purified and filtered water will be returned to the process water feed tank for use in the production of steam and for cooling water make-up.

### *Exhaust Air Treatment*

All exhaust air streams from the plant, containing chlorine and bromine are collected and fed to the bottom of a vent scrubber. Passing the column in counter-current flow with a part of the feed brine, bromine is absorbed, and chlorine oxidizes bromide to bromine. The solution leaving the scrubber is fed to the top of the Reaction Columns. Residual bromine and chlorine in the exhaust air from vent scrubber is fed to a caustic scrubber for final scrubbing before venting to the atmosphere.

### *Chlorine Production*

The chlorine synthesis unit will be designed to produce 32 wt% caustic soda, chlorine gas as wet condition, and hydrogen gas as wet condition utilising an ion exchange membrane process.

Purified salt will be utilised to provide the brine for the chlorine synthesis process.

Super purified brine is sent to the electrolyser. Super purified brine is then evenly distributed within the Feed Brine Manifold and fed to each element of the electrolyser. In the reaction area of the element, super purified brine is decomposed with sodium chloride splitting into chlorine and sodium ions due to the electrolysis reaction. The strength of the sodium chloride is weakened and discharged as a depleted brine.

HCl will be produced utilising a slip stream from the chlorine gas in a bottom fired HCl synthesis unit. Hydrogen and chlorine gas react to produce HCl gas at temperatures above 2,000 degrees C. The HCl gas is absorbed in water in a falling film absorber. The Wet Cl<sub>2</sub> gas and HCl will be transferred to the bromine process module.

### *Lithium Pilot Plant*

Initial engineering for a lithium extraction system sized to support production of 24tpa of lithium carbonate has been completed. The lithium extraction system will process pre-treated brine and produce a lithium chloride eluate.

The lithium extraction system is comprised of six lithium extraction modules each sized to process 1,000 litres per hour of pre-treated brine. The system will operate with five of these modules in production and one of the modules held in reserve. This will allow for minor maintenance to be



completed on one of the modules, or for contingencies to be addressed, while the system continues to operate at capacity.

The eluate will then be converted into a lithium carbonate product.

### Capital Costs

The capital cost estimate is accurate to within +/- 50% and includes costs for mechanical equipment and installation, electrical and instrumentation, structural steel materials and installation, platework materials and installation, and foundation materials and installation.

#### *Phase 1*

Phase 1 includes a 15,000tpa NaBr production facility, which includes all necessary equipment to produce NaBr plus primary reagents such as chlorine, hydrogen and hydrochloric acid (HCl). This is detailed in Table 5 below.

<b>INFRASTRUCTURE</b>	<b>COST (\$US)</b>
Plant	\$91,649,635
Pipeline	\$11,710,000
Rail	N/A
Gas Line Main	\$ 6,837,600
Power (ELC)	\$ 5,300,000
UIC Well	\$6,000,000
<b>Total Installed Cost</b>	<b>\$121,497,235</b>

**Table 5: Paradox Brine Project Phase 1 Capital Cost**

#### *Phase 2*

Phase 2 includes the installation of a lithium extraction pilot plant. The in-field pilot plant will utilise industrial-scale, continuous processing equipment.

Total Pilot Plant Project Cost - \$9,690,855

#### *Phase 3*

Phase 3 includes the expansion of the NaBr production to 60,000tpa with the installation of parallel NaBr and chlorine production facilities and 15,000tpa of lithium carbonate production facilities. An additional HCl production module will be installed to produce the additional HCl required for the increased production of the additional modules. Estimated capital costs for the expansion are shown in Table 6.

<b>INFRASTRUCTURE</b>	<b>COST (\$US)</b>
Plant	\$428,563,436
Pipeline	\$16,000,000
Rail	\$7,950,500
Utilities Upgrades	\$12,137,600
New Spent Brine Wells	\$18,000,000
<b>Total Installed Cost</b>	<b>\$482,651,536</b>

**Table 6: Paradox Brine Project Phase 3 Capital Cost**

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## Operating Costs

The process design of the NaBr facility includes the equipment and process required to produce the primary reagents required for the production of Bromine and Sodium Bromide. The primary reagents of Chlorine (Cl) wet gas, Sodium Hydroxide (NaOH), and Hydrochloric Acid (HCl) will be produced in sufficient quantities to feed the Phase 1 and Phase 3 projects. Costs are summarized below.

- Phase 1
  - Raw Materials Cost - \$4,772,861 per year
  - Utilities Cost - \$7,087,910 per year
  - Operating Labour Cost - \$4,586,625 per year
  
- Phase 3
  - Raw Materials Cost - \$51,091,042 per year
  - Utilities Cost - \$69,177,728 per year
  - Operating Labour Cost - \$13,741,000 per year.

## Product Pricing

### *Bromine*

The global bromine market was valued at US\$ 3.3 billion in 2019 and is projected to grow at a compound annual growth rate (CAGR) of 5.8% to reach US\$4.4 billion by 2024. In terms of volume, approximately 740 kilotons were produced in 2019 and is expected to rise to an estimated 880 kilotons in 2024.

The largest application for bromine-based compounds is in the production of brominated flame retardants (BFRs), accounting for 44% (100% bromine content) of total global consumption. The flame-retardant market is affected by regulations in two countervailing ways. First, there are international, regional, and national fire safety regulations and flammability standards for flame retardants that are used in the construction, transportation, and electrical and electronics industries. Second, government regulations also affect individual chemical types that are deemed to have deleterious effects on the environment and human health.

Clear brine fluids (CBFs) constitute the second-largest end-use market, accounting for 17% of global consumption of bromine-based compounds, a majority of which is used in North America. CBFs are used to enhance drilling fluids used for the production of crude oil in deep, high-pressure wells where conventional drilling muds can plug the formations. There is also increased use for the development of nonconventional sources such as deep-water wells and oil sands.

Water treatment accounts for approximately 8% of the global consumption of bromine-based compounds. The majority is consumed in China and the United States, with a smaller amount consumed in Western Europe. Products used in this segment are brominated hydantoins and sodium/ammonium bromides. Consumption is broken down nearly equally between hydantoins and bromides.

Consumption of hydrogen bromide (HBr) used as a catalyst in the production of purified terephthalic acid (TPA) accounts for nearly 12% of global consumption of bromine-based compounds. TPA is used in polyethylene terephthalate (PET) production; PET is ultimately used in packaging and fibres. HBr is also being used in flow batteries in the electricity and electronics industry.

Other applications include use in pharmaceuticals, agricultural/pesticides, dyes, and lithium bromide for use in absorption chillers.

The average price for purified, bulk 99.95% bromine in 2017 on an ex-works U.S. basis, as reported by Markets and Markets, was US\$4,830/t. Prices have steadily increased 4.5% through 2019 to an average price of US\$5,050/t. Markets and Markets projects bromine prices will be US\$5,280/t in 2024. Actual prices for bromine are negotiated on long- and short-term contracts between buyers and sellers.

### *Lithium*

Global end-use markets for Lithium are estimated as follows: batteries, 65%; ceramics and glass, 18%; lubricating greases, 5%; polymer production, 3%; continuous casting mold flux powders, 3%; air treatment, 1%; and other uses, 5%. Lithium consumption significantly increased between 2014 and 2017 due to a strong demand for rechargeable lithium batteries used extensively in portable electronic devices, electric tools, electric vehicles, and grid storage applications. Lithium minerals were used directly as ore concentrates in ceramics and glass applications.

In 2017, prices had been propelled through successive multi year highs by strong demand from the lithium-ion battery industry set against a backdrop of uncertainty over future supply. This attracted significant attention on the lithium sector and incentivised investment into both mining and processing capacity. Prices for all lithium products subsequently fell as production at operations in China, Australia, Canada and Chile ramped-up, and as a swath of greenfield projects mitigated fears of future supply shortages.

Average annual lithium carbonate prices in 2016 were US\$8,650/t. Lithium carbonate prices peaked in November 2017 at US\$25,800/t and at the start of 2020 were at US\$8,750. As reported in Seeking Alpha, Benchmark Mineral Intelligence believes oversupply in lithium carbonate is expected to peak in 2020 and predicted to be at US\$12,000 by the end of the year. The price is expected to grow at a CAGR of 2% reaching a price of US\$13,000 by 2025.

### Sensitivity Analysis

The sensitivity of project economics has been estimated for Phase 3 based on + / - 20% variations in capex and opex, as well as + / - 20% pricing for the selling price of the bromine and lithium products. The Post-Tax NPV results of the sensitivity analyses are shown in Table 7 below.

<b>PHASE</b>	<b>POST TAX</b>	<b>PHASE</b>	<b>POST TAX</b>
<b>PHASE 3 (COMBINED)</b>	<b>NPV (7%)</b>	<b>PHASE 3 (COMBINED)</b>	<b>NPV (7%)</b>
Base Case	\$1,934m	Base Case	\$1,934m
CAPEX -20%	\$2,027m	Br +20%	\$2,304m
OPEX -20%	\$2,093m	Li +20%	\$2,141m
CAPEX +20%	\$1,845m	Br -20%	\$1,568m
OPEX +20%	\$1,779m	Li-20%	\$1,731m

**Table 7: Paradox Brine Project Phase 3 Sensitivity Analysis**

### Project development funding

Anson believes that there are “reasonable grounds” to assume that future funding will be available for commencing the next stages of development.

Anson is confident on the following basis:

- Anson’s Board has a financing track record which includes raising approx. A\$10 million over the last 3 years to advance the Paradox Brine Project. In addition, Bruce Richardson, Executive Chairman and CEO has a proven track record of over ten years in exploration, mining and production in public and private companies, and over 30 years of international business experience. He has raised over \$170 million of investment in mining projects.
- Anson is confident that it can continue the development strategy at the Paradox Brine Project based on its current progress to date and exceptional results obtained from the PEA. Anson is based in Australia, with significant sources of equity and debt capital and very active resource focused capital markets.
- The current bromine price is US\$5,033 (Source: Markets and Markets) with the long term forecast average price expected to be \$5,280/t (Source: *Markets and Markets Bromine Market Global Forecast to 2024*). The bromine market is a mature stable market which is expected to grow at a CAGR of 5.8% and this growth supports the anticipated increase in prices going forward. This has informed Anson’s view of being able to secure the necessary funding for the project.
- The current  $\text{Li}_2\text{CO}_3$  price is \$8,000/t (Source: *London Metals Exchange*) however Benchmark Mineral Intelligence has provided a long-term forecast average price of US\$13,000/t for lithium carbonate. The expected improvement to the lithium price and market conditions as well as encouraging future outlook for demand for lithium related products enhances Anson’s view of securing successful funding for the project.
- Anson is also able to consider other methods of value realisation to assist funding the project, such as a partial sale of the asset, long term offtake and joint venture agreements.
- The strong production and economic outcomes delivered by the PEA are considered by the Board to be sufficiently robust to provide confidence in Anson’s ability to fund pre-production capital through conventional debt and equity financing. Anson plans to engage with various international groups for strategic investments and off-take arrangements.

To achieve the range of proposed feasibility studies and potential mine development outcomes indicated in the PEA, additional funding will be required. Investors should note that there is no certainty that Anson will be able to raise funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Anson’s existing shares, or include debt funding (and consequent gearing). It is also possible that Anson could pursue other value realisation strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Anson’s proportionate ownership of the project.

### Project timetable

The project will require approximately 2.5 years of permitting, detailed engineering, and construction prior to the commissioning and operations of Phase 1.

Permitting, detailed engineering, and construction for Phase 2 occurs in the 2<sup>nd</sup> year after 1<sup>st</sup> production of Bromine, with the pilot plant's operations lasting 6 months before being taken offline.

Permitting and well drilling for Phase 3 occurs during Phase 2's detailed engineering, allowing Phase 3's detailed engineering and construction to benefit from the results and lessons learned in Phase 2. Detailed engineering and construction for Phase 3 occurs in the 3<sup>rd</sup> and 4<sup>th</sup> after 1<sup>st</sup> production of bromine with the Phase 3 plant coming online beginning early in 5<sup>th</sup> year after 1<sup>st</sup> production.

### *Assumptions*

The following assumptions were built into the project's timeline:

The PFS will build from the PEA to further refine resources, engineering, and design of the processing facility

- Multiple drilling rigs will be used for the well drilling to accelerate the completion of the necessary drilling programs.
- The lithium pilot plant (Phase 2) will run for a maximum of 6 months.
- The PoO work will not trigger the requirements for an Environmental Impact Statement.
- Baseline data necessary for the PoO process can be collected during one survey cycle and will not carry over into multiple years
- The project will not trigger the requirements for a major source air permit until Phase 3.

**ENDS**

### **For further information please contact:**

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**Executive Chairman and CEO**

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**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.



## 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	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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> </ul>
Drill Sample Recovery	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No new drill holes were completed. Therefore, no drill chips, cuttings, or core was available for review.</li> <li>Drilling procedures for well re-entry only produced cuttings from cement plugs.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
Logging	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No new drill holes were completed.</li> <li>Cuttings and core samples retrieved fro UGS and USGS core libraries</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>Clastic Zones 17, 19, 29, 31 and 33 sampled.</li> </ul>
Sub-sampling Techniques and Preparation	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Bulk brine samples were stored for potential further analysis.</li> </ul>
	<ul style="list-style-type: none"> <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>	<p>Historic Wells</p> <ul style="list-style-type: none"> <li>Sample size and quality were considered appropriate by operators/labs.</li> </ul> <p>Re-Entries</p> <ul style="list-style-type: none"> <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>
Quality of Assay Data and Laboratory Tests	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Analysis of brine fluids was completed at several laboratories including, Western Environmental Testing Laboratory (WETLAB), Asset Laboratories, Oilfield Environmental Compliance (OEC), and Enviro-Chem Analytical, 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 four analytical laboratories are considered to be of high quality.</li> <li>Duplicate and standard analyses are considered to be of acceptable quality.</li> <li>Limited downhole geophysical tools were utilized for orientation within the cased oil wells prior to perforation. These are believed to be calibrated periodically to provide consistent results.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
Verification of Sampling and Assaying	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 Special Publication 13, printed in 1965</li> </ul>
Location of Data Points	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The location of historical oil wells within the Paradox Basin is well documented.</li> <li>Coordinates of historical oil wells utilized for accessing clastic zones for sampling is provided in Table 9-1 of the report.</li> <li>Re-entries re-surveyed by licensed surveyor.</li> </ul>
Data Spacing and Distribution	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Data spacing is considered acceptable for a brine sample but has not been used in any Resource calculations.</li> <li>There has been no compositing of brine samples.</li> </ul>
Orientation of Data in Relation to Geological Structure	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted at this point in time.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
<i>Mineral Tenement and Land Tenure Status</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Paradox Basin Brine Project is located approximately 12 km west of Moab, Utah, USA, and encompasses a land position of 10,573 hectares.</li> <li>The land position is constructed from 1,313 Federal placer mineral claims, and one mineral lease from the State of Utah.</li> <li>A1 Lithium has 50% ownership of 87 of the 1,313 mineral claims through a earn-in joint venture with Voyageur Mineral Ltd. All other claims and leases are held 100% by A1 Lithium’s U.S. based subsidiary, A1 Lithium Inc.</li> <li>The claims/leases are believed to be in good standing, with payment current to the relevant governmental agencies.</li> </ul>
<i>Exploration Done by Other Parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <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, however none of this work is considered complete for inclusion in a formal resource estimate.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralization.</li> </ul>	<ul style="list-style-type: none"> <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>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
Drill Hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>Four existing oil wells were re-entered and worked over in 2018 and 2019 to collect 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> </ul>
Data Aggregation Methods	<ul style="list-style-type: none"> <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 should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No weighting or cut-off grades have been applied.</li> </ul>
Relationship Between Mineralization Widths and Intercept Lengths	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 CZ31.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
Diagrams	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>A diagram is presented in the text showing the location of the properties and re-entered oil wells. A table is also included in the text which provides the location of these oil wells.</li> </ul>
Balanced Reporting	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Other Substantive Exploration Data	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>All available current exploration data has been presented.</li> </ul>
Further Work	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Additional well re-entries and sampling planned following acceptance of Plan of Operations with BLM and completion of an Environmental Assessment.</li> <li>Future well re-entries will focus on wells located on southern portion of claims.</li> <li>Future well re-entries will include further hydrogeological investigations.</li> </ul>



## JORC CODE 2012 “TABLE 1” REPORT

### Section 3 Estimation and Reporting of Mineral Resource

(Criteria listed in section 1 and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>The competent person has not visited site.</li> <li>Other 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>
Geological interpretation	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The geological interpretation, location and depth of the brine bearing unit 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 units, CZ17, CZ19, CZ29, CZ31 and CZ33.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 units are found at vertical depths of between 1450m to 2250m below surface.</li> <li>The producing units averages 2m-6m in thickness.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

### Estimation and modelling techniques

- *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.*
  - *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
  - *The assumptions made regarding recovery of by-products.*
  - *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*
  - *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
  - *Any assumptions behind modelling of selective mining units.*
  - *Any assumptions about correlation between variables.*
  - *Description of how the geological interpretation was used to control the resource estimates.*
  - *Discussion of basis for using or not using grade cutting or capping.*
  - *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
- The brine grades were modelled using inverse distance squared grade interpolation.
  - A single composite for the producing unit in each well was used to estimate grades.
  - Lithium, Bromine, Iodine, porosity and brine density were all modelled.
  - 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.
  - Minimum samples used in the estimation was 1 and the maximum was 3.
  - A total of 202 wells were used to determine the depth and thickness of the brine producing units. Lithium grades are available for a total of 8 wells, some of which are outside the Anson claim; their grades were interpolated into the Anson claims.
  - Bromine data was from 7 wells and Iodine from 4. There were 4 density and 3 porosity measurements.
  - The parent block size used was 500m x 500m with sub blocks to 20m x 20m to enable adequate definition of the brine unit.
  - There is correlation between variables based on the total dissolved solid (TDS) content of the brine.
  - 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 center.
  - One well with a high historic lithium grade of 1,700ppm was not included in the estimation as it is considered a potential outlier.
  - The brine is contained within the producing units (Clastic Zones 17,19, 31,33). The contained brine is estimated by multiplying the volume by the effective porosity and then by the brine density. Test-work within clastic zone 31 was conducted to measure effective porosity. This was used to estimate effective porosity in CZ31. The effective porosity in Big Flat 2 was estimated at 14.9%. The ratio of this to the total porosity of 21% of Big Flat 2, measured on neutron logs, was applied to other total porosity measurements in CZ31. All other clastic zones were assumed to have an effective porosity of 14%.

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are reported as in-situ, super saturated brine in liquid form.</li> <li>Density of the brine is approximately 1.2t/m<sup>3</sup>.</li> <li>Tonnages of product equivalent eg lithium carbonate are reported as dry tonnes.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>No cut-off grades were applied.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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>This resource estimate represents a contained brine figure.</li> <li>Brine production will have a yield factor applied as not all of the brine will be able to be extracted from the clastic zone.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No assumptions regarding the metallurgical or recoverability characteristics of the brine have been assumed in the estimation.</li> <li>However, lithium carbonate has been produced from bench top test-work from recently collected brine samples.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Spent brines following processing and recovery of bromine and lithium will be injected back into receptive brine horizons in the lower Paradox Formation using Class V-1c Underground Injection Control (UIC) wells located near the processing facility. Spent brine will have similar characteristics to fresh brine minus concentrations of bromine, lithium and other transition metals captured through filtration.</li> <li>No waste products are left on site.</li> <li>No environmental assumptions were used in this estimation.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>• 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 style="list-style-type: none"> <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.</li> <li>• Permiability 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> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• No audits or review of the Mineral Resource estimate has been conducted.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
<p><i>Discussion of relative accuracy/confidence</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</i></li> </ul>	<ul style="list-style-type: none"> <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>