

## ASX Release



### Maiden Inferred Resource reported for the Lake Purdilla gypsum deposit

#### Highlights

- Maiden Inferred Resource (JORC 2012) of 87 million tonnes at 91% gypsum;
- Eminently suitable for plasterboard, cement and agricultural applications;
- South Australia's largest undeveloped gypsum deposit;
- Shallow occurrence with surface expression;
- Located 130 km from existing bulk handling port;
- Immediately adjacent to a potential bulk handling port development site.

#### Lake Purdilla inferred gypsum resource estimate

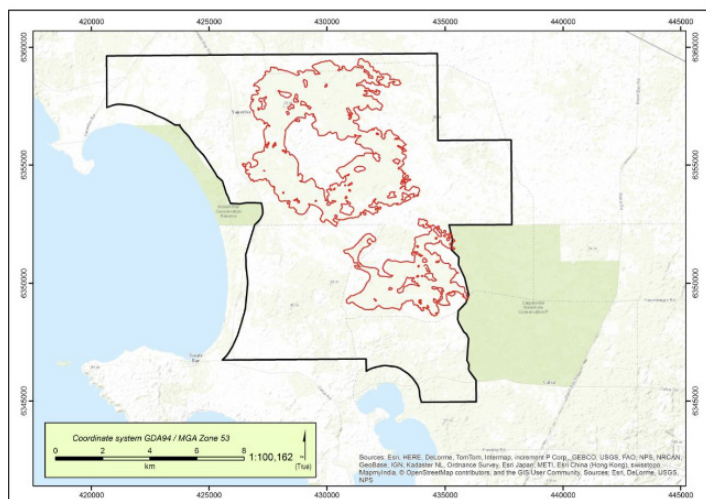
The Lake Purdilla gypsum deposits<sup>1</sup> occur in western South Australia on tenement EL 5398 held 100% by a subsidiary of Minotaur Exploration (ASX: MEP). The deposits are sited approximately 130 km southeast of the bulk handling facility at Port Thevenard (Ceduna) and within 15 km of a potential deepwater port development location.

**An Inferred Resource (JORC 2012) for the Lake Purdilla deposits of 87 million tonnes at purity of 91% gypsum (gypsarenite and selenite  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) has been estimated** (refer to JORC Table 1 in Appendix for details).

The average gypsum thickness is 2m with localised basins up to 7m thick from surface level. The lake deposits, which extend across 35 km<sup>2</sup>, formed by marine flooding of coastal depressions and subsequent infill through precipitation of gypsum.

In addition to the infilling deposits of crystalline lake gypsum (selenite), an extensive system of wind-blown gypsum dunes (gypsarenite) occurs on or adjacent to the lake surface. The dunes represent an economic advantage as the gypsum is unconsolidated and likely to be easily excavated for immediate transport to the market.

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Location of gypsum lakes (red) within EL 5398 east of Seale Bay in western South Australia.

Material	Density (t/m <sup>3</sup> )	Inferred Tonnes (Mt)	Gypsum Grade (%)
Consolidated crystalline gypsum (lake infill)	1.3	71.5	91
Unconsolidated crystalline gypsum (dunes)	1.2	15.3	90
<b>TOTAL</b>		<b>86.8</b>	<b>91</b>

Lake Purdilla<sup>2</sup> Inferred Gypsum Resource

An Exploration Target of 50-60 million tonnes at 85-90% gypsum, supported by historic drilling data pre-dating 1970, was announced in 2012<sup>2</sup>. Recent acquisition of additional historic data collected during extensive drilling programmes across the Lake Purdilla<sup>3</sup> lake and dune gypsum deposits in 1988, 1996 and 1997 supports the upgrade to Inferred Resource category.

510 holes of the total utilised dataset tested the extensive system of wind-blown lunette dunes of gypsum which extend across Lakes Purdilla and Toorna. The dunes across Lake Purdilla were sampled by 358 holes in 1988, 37 holes in 1996 and 6 holes in 1997. The central dune system on Lake Toorna was sampled by regularly spaced traverses of 109 auger holes in 1988.

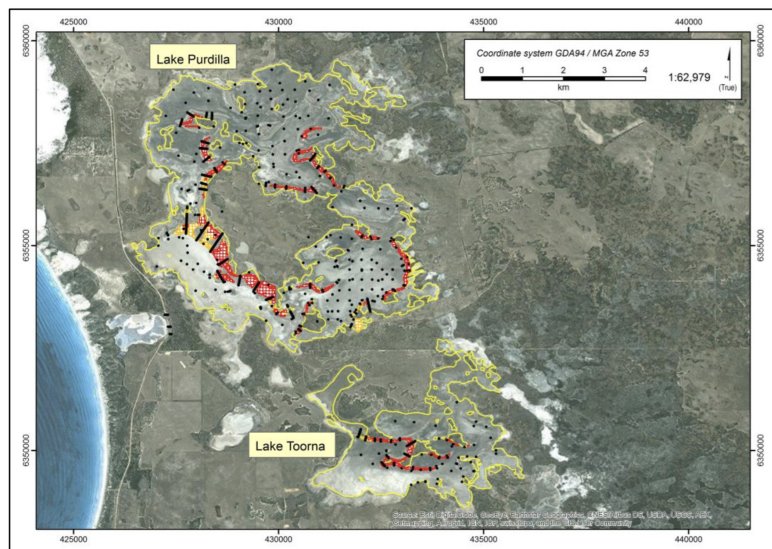
The inclusion of the 1988-1997 dune traverse drilling data into Minotaur's dataset, further supported by a dune elevation survey conducted by Minotaur in 2015, has increased confidence in dune volumes and contained gypsum grades.

A total of 185 drillholes have tested the gypsiferous sediments infilling Lake Purdilla. The northeastern and southeastern quadrants of the lake were grid-drilled (250-400m spacing) in 1996-1997. Drillholes across the western side of the lake surface were irregularly spaced. Lake Toorna was sampled in 1959 by 17 drillholes; no further drill testing of the lake gypsum has subsequently occurred.

<sup>2</sup> Exploration Target determined for Lake Purdilla gypsum deposit, ASX release 2 March 2012  
<sup>3</sup> Adjacent Lake Toorna deposit included under Lake Purdilla, for convenience



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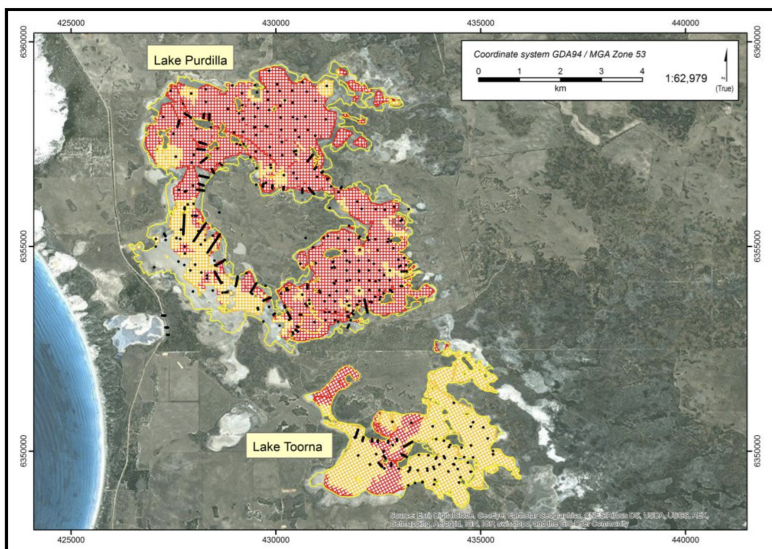


Lake Purdilla block model showing extent of dune gypsum blocks at 0mRL (orange blocks >80% gypsum, red blocks >90% gypsum) relative to drillhole collars and satellite imagery

The inclusion of 1996-1997 drilling data has increased Minotaur's confidence in the extent and continuity of the Lake Purdilla gypsum deposits. Costean-scale lake gypsum sampling undertaken in late 2014 on Lake Purdilla confirmed gypsum quality, provided bulk density measurements used to estimate tonnage, and provided a 5 tonne gypsum sample for independent processing test work by a raw gypsum consumer.

Gypsum grade (%) of the Lake Purdilla deposits was estimated by Minotaur using Inverse Distance Squared methodology. A review of the block model by H&S Consultants Pty Ltd included a check model using Ordinary Kriging on 1m composites for a 2.5D model of gypsum grade and mineral thickness for the lake and dune deposits at Lake Purdilla. H&S Consultants' results are reasonable and comparable to the Minotaur model and support classification of resource estimates as Inferred. Extensive detail of the historic dataset, the resource modelling and any assumptions are included in the JORC Table 1 (see Appendix).

Minotaur is of the opinion that a small amount of infill drilling, including hole twinning, would support upgrade of a substantial part of the deposit to Indicated Resource classification.



Lake Purdilla block model showing lake gypsum blocks at -1 to -2mRL (orange blocks >80% gypsum, red blocks >90% gypsum) relative to drillhole collars and satellite imagery



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*Lake Purdilla gypsum – coarse selenite crystals to 25 mm width – excavated from 2014 costean*

### Gypsum market and transport

Lake Purdilla is the largest known undeveloped gypsum resource in South Australia. It is envisaged that a mining rate of 1 million tonnes per year could support an export operation for more than 50 years. Current gypsum production in South Australia is approximately 4 million tonnes per year, accounting for about 80% of Australia's production and supplying most of the country's domestic requirements (73% plasterboard manufacture, 20% cement manufacture, 7% agricultural use). The gypsum at Lake Purdilla is suitable for all these purposes. Beyond the domestic market, gypsum consumption in Southeast Asia - particularly in Indonesia, Vietnam, Malaysia and India, is expanding strongly - driven by burgeoning cement and plasterboard production.

A 2015 port trans-shipment study<sup>4</sup> indicates that a cost effective logistics solution could be built adjacent to the Lake Purdilla site, potentially providing economies of operation to shipping of gypsum, Minotaur's nearby kaolin and halloysite assets, and grain produced regionally.

### Next Steps

Minotaur considers the publication of the Maiden Inferred Resource (JORC 2012) for Lake Purdilla will clarify its economic value for various raw gypsum consumers. Accordingly, Minotaur intends to divest the asset and work with the new owner to progress the port solution to the benefit of the diverse user base envisaged.

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MEP terminates gypsum sale agreement, ASX release 7 May 2015

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## Competent Person's Statement

The information in the report to which this statement is attached that relates to Exploration Results for the Lake Purdilla deposits is based on information compiled by Tony Belperio, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Belperio is a full-time employee of Minotaur. Dr Belperio 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'. Dr Belperio consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in the report to which this statement is attached that relates to Mineral Resources for the Lake Purdilla deposits is based on information compiled by Simon Tear, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Tear is a Director of H&S Consultants Pty Ltd. Mr Tear 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 Tear consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in the report to which this statement is attached that relates to Historic Drilling Results and Gypsum Quality for the Lake Purdilla Deposits is based on information compiled by Lew Barnes, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr Barnes is a part-time employee of Minotaur. Mr Barnes 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 Barnes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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## APPENDIX

### JORC Code, 2012 Edition, Table 1

#### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised 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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised 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 mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>Gypsum deposits at Lake Purdilla and Lake Toorna were sampled between 1959-1997 during several drilling campaigns. Drilling methods utilized were auger drilling (677 holes, 1280m), combination push tube-diamond drilling (32 holes, 88m) and air core drilling (3 holes, 21m)</p> <p>510 holes of the total utilised dataset tested the extensive system of wind-blown lunette dunes of gypsum which extend across Lakes Purdilla and Toorna. The remaining 202 holes tested the gypsiferous lake sediments of Lakes Purdilla and Toorna.</p> <p>185 drillholes have tested the gypsiferous sediments of Lake Purdilla. The northeastern and southeastern quadrants of the lake were grid-drilled (250-400m spacing) in 1997. Drillcollars across the western side of the lake surface are irregularly spaced. The dune gypsum across Lake Purdilla was sampled by 358 holes in 1988, 37 holes in 1996 and 6 holes in 1997.</p> <p>Lake Toorna was sampled in 1959 by 17 drillholes distributed over a very limited area of the lake surface. No further drill testing of the lake gypsum has subsequently occurred. The central dune system on Lake Toorna was sampled by regularly spaced traverses of 109 auger holes in 1988. The control on the basal contact of the lake gypsum is limited due to the limited drilling data.</p> <p>Historic drilling data were digitised by Minotaur personnel in 2009 from publicly available hard copy reports. Additional drilling data obtained by Minotaur from Olliver Geological Services in 2013 included a digital dataset produced in 1997 and hard copy geological reports from 1996 and 1997. Minotaur personnel digitised the 1996-1997 data in 2015. The various datasets have been critically appraised by Minotaur geologists and merged into a single dataset for use in assessment of the gypsum</p>



		<p>into a single dataset for use in assessment of the gypsum resource. Confirmatory trenching and augering were undertaken in 2014 (see below).</p> <p>Accuracy of the historic drillhole collar locations is uncertain. Eastings and Northings of drillholes pre-dating 1997 were approximated from geographically registered plans or aerial photographs. Eastings and Northings of drillholes from 1997 were extracted from a Micromine dataset created in 1997.</p> <p>The relative levels (RLs) of all collars across Lakes Purdilla and Toorna were adjusted to coincide with a topographical surface generated from DGPS dune elevation measurements collected by Minotaur in February 2015. The dynamic setting of the evaporitic lakes and aeolian dune system prevents ground truthing of historic collars.</p> <p>It is assumed that the historical sampling and assaying was conducted to industry standard practice contemporary to that time.</p> <p>Sampling and assaying techniques are assumed to have been appropriate for deposit type.</p> <p><b>Details of the quality of samples from the historical drilling dataset are included in Table A.</b></p>
Drilling techniques	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>Various drill types have been used drilling programs conducted between 1959 and 1997, including Proline machine auger (unspecified diameter, 235.22m total), Edson CP10 machine auger (11.4cm diameter, 192.2m total), push-tube coring with drilled diamond tails as required (NX diameter, 87.65m total), hand auger (2 ½ inch diameter, 713.99m total), hand auger (diameter unspecified, 161.45m total), aircore drilled with tungsten coring bit or hammer as required (diameter unspecified, 20.7m total).</p> <p>Hand augering typically creates a 50mm drillhole and returns a 200-300mm long core of sample drawn out within the tube of the auger. Entire cored sample would typically be bagged for assay, according to determined intervals, and another rod added to the auger to extend</p>



		<p>the depth of the hole.</p> <p>Machine augering typically winds loose sample to the surface on the outside of the auger flights, bringing sample into contact with the exposed sides of the drillhole. The sample is deposited on the ground around the collar and scooped into sample bags, according to determined intervals.</p> <p>Drilling techniques are considered appropriate for the deposit type.</p> <p><b>Drilling details from the historical programs are summarised in Table A.</b></p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>Position of water table and depths where no sample was able to be obtained noted in Department of Mines logs from 1959 programme testing lake gypsum.</p> <p>Qualitative drill sample recoveries recorded in logging for Elcor programme (1969) and Sceale Bay Development Corporation 1997 programme, both testing lake gypsum. In addition, the water table position was noted in Sceale Bay Development Corporation logs from 1997.</p> <p>Presence of wet lithologies and any negative impact on sample quantity documented in Sceale Bay Development Corporation dune drilling logs from 1996.</p> <p>Auger drilling report from the 1988 program (Bay Gypsum) noted that the gypsum was frequently damp and stuck to the auger with auger advance averaging 10cm before cleaning. Presence of wet lithologies documented in detail in Bay Gypsum dune drilling logs from 1988. No quantitative recovery data available.</p> <p>Drill logs from a limited programme in 1995 recorded 'pasty' gypsum in drillholes SB15-16 whereas hole SB17 was noted to be dry (limestone, no gypsum). No samples submitted for assay.</p>
Logging	<p><i>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.</i></p>	<p>Detailed qualitative geological logging available for drilling undertaken in 1959, 1969, 1988, 1995, 1996 and 1997. 100% of the relevant intersections have been logged geologically.</p> <p>No geotechnical logging undertaken.</p>



	<p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	No photography of core or sludge samples available.
<p><i>Sub-sampling techniques and sample preparation</i></p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>1959: no data available on sub-sampling methodology or quality control procedures; dominant sample sizes are 1.5m (34) and 2.2m (26);</p> <p>1969: no data available on sub-sampling methodology or quality control procedures; dominant sample sizes are 0.9m (7), 0.6m (6) and 0.4m (6);</p> <p>1988: 1 metre downhole dune gypsum samples were homogenized by hand and reduced to an approximately 750g subsample. Minor colour and texture variations within each metre generally enabled a good estimate of homogenization to be made. No data available on quality control procedures;</p> <p>1995: no samples submitted for assay; no data available on sub-sampling methodology, quality control procedures or sample size.</p> <p>1996: no data available on sub-sampling methodology or quality control procedures; dominant sample size is 1 metre (114);</p> <p>1997: no data available on sub-sampling methodology or quality control procedures; dominant sample size is 1 metre (141).</p> <p>Where encountered, wet samples were noted in 1988 and 1996 dune drilling.</p> <p>It is assumed that any wet lithologies were sampled as to maximize the sample representativeness; however, there is unknown amount of loss of fine material from these samples.</p> <p>It is assumed that all samples sizes and sample preparation methods are appropriate to the deposit type according to historical industry best practice.</p>
<p><i>Quality of assay data and laboratory</i></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory</i></p>	Lake gypsum:

*tests*

*procedures used and whether the technique is considered partial or total.*

*For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*

*Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*

M1-95, M104-110 (drilled 1959) samples analysed for gypsum, sodium chloride, calcium carbonate and insolubles within variable length intervals geologically logged as gypsum. Laboratory and assay technique unspecified in historical report.

E1-9, E11-26B, E61-62 (drilled 1969) samples analysed by Amdel (Adelaide) for gypsum, sodium chloride, calcium carbonate and insolubles within variable length intervals geologically logged as gypsum. Assay technique unspecified in historical report.

K1-95 (drilled 1997) generally sampled over 1 metre downhole intervals and submitted for analysis by ALS in Stafford, Queensland by method M290 (acid digest with ICP finish; currently known as ME-ICP05) for  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ,  $\text{CaCO}_3$ ,  $\text{MgCO}_3$ , NaCl, KCl,  $\text{Fe}_2\text{O}_3$  and  $\text{Al}_2\text{O}_3$ .

Dune gypsum:

Traverses 1-96 (drilled 1988) samples were collected on 1 metre intervals, homogenized by hand and reduced to approximately 750g samples. Analyses were carried out by Classic Comlabs for sulphate (equated to gypsum) (method GRAV2, absolute method for determining sulphate sulphur by gravimetric analysis: sample digested in 50% HCl, filtered then clear filtrate mixed with barium chloride, resultant barium sulphate precipitate weighed and calculated as sulphate; lower detection limit  $\text{SO}_4$  0.05%;  $\pm 0.5\%$  accuracy), insolubles (method GRAV1, absolute method for determining acid insolubles by gravimetric analysis: sample digested in 50% HCl then filtered and weight of residue calculated as 'insoluble matter'; lower detection limit 0.02%;  $\pm 5\%$  accuracy), salt or NaCl (method SIE1, selective ion electrode method of measuring the solid Cl concentration in soils and rocks; lower detection limit 0.01% Cl;  $\pm 5\%$  accuracy), and calcium carbonate (method GRAV4, absolute method for determining carbon dioxide by gravimetric analysis; lower detection limit 0.05%;  $\pm 0.5\%$  accuracy).

Traverses 101-117 (drilled 1996) composite samples, typically one metre downhole length, were submitted for analysis by ALS in Stafford, Queensland by method

		<p>M290 (acid digest with ICP finish; currently known as ME-ICP05) for <math>\text{CaSO}_4 \cdot 2\text{H}_2\text{O}</math>, <math>\text{CaCO}_3</math>, <math>\text{MgCO}_3</math>, <math>\text{NaCl}</math>, <math>\text{KCl}</math>, <math>\text{Fe}_2\text{O}_3</math> and <math>\text{Al}_2\text{O}_3</math>.</p> <p>Traverses 119-125 (drilled 1997) samples composited entire hole length (2, 2.3, 2.5 or 3m composites) analysed by ALS in Stafford, Queensland by method M290 (acid digest with ICP finish; currently known as ME-ICP05) for <math>\text{CaSO}_4 \cdot 2\text{H}_2\text{O}</math>, <math>\text{CaCO}_3</math>, <math>\text{MgCO}_3</math>, <math>\text{NaCl}</math>, <math>\text{KCl}</math>, <math>\text{Fe}_2\text{O}_3</math> and <math>\text{Al}_2\text{O}_3</math>.</p> <p>No comment within historical reports as to whether analytical techniques used were partial or total analyses.</p> <p>ALS acid digest method M290 utilised in 1996-1997 sample analyses (no longer in use) could be considered partial digest, however the gypsum values should have been accurate based on the solubilized calcium.</p> <p>No mention in historical reports of submission of blanks, reference standards or field duplicate in laboratory batches with field alpha samples.</p> <p>In absence of historic QAQC data and absence of Minotaur-drilled twin hole data, the levels of accuracy and precision for the historic laboratory results referred to herein are uncertain.</p> <p>It is assumed that all analytical methods used historically were appropriate to the deposit type according to historical industry best practice.</p> <p>All laboratories utilized from 1988 onwards were certified commercial laboratories working to best practices. It is undocumented which laboratories were used in analysis of the 1959 and 1969 drilling samples.</p>
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic)</i></p>	<p>No independent verification has been conducted at this stage.</p> <p>Drilling across the surface of Lakes Purdilla undertaken in a number of campaigns (1959, 1969, 1997) has intersected comparable thicknesses of gypsiferous sediment at comparable gypsum grades. Minotaur has not undertaken any twinning of drillholes.</p>



	<p><i>protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>A 5-tonne bulk sample was extracted from Lake Purdilla on 1-2 December 2014 for processing test work in Germany. The sample was collected from a backhoe-constructed costean (1 metre across × 4 metres long × 2 metres deep) at location 428287E, 63558840N (GDA 94), adjacent to historic drillhole M67. The gypsum profile mapped in the 2014 costean is comparable to the lithological sequence logged in historic drillhole M67, which correlates with the geological sequence exposed in trenches dug in 1997.</p> <p>Historic data collected 1959-1988 located in hard copy reports was either scanned by text-recognition software (then manually checked by Minotaur personnel) or manually entered into Excel spreadsheets by Minotaur personnel (then manually checked).</p> <p>Drilling data from 1996-1997 was either scanned by text-recognition software (then manually checked by Minotaur personnel) or manually entered into Excel spreadsheets by Minotaur personnel (then checked) and subsequently compared to a digital drilling dataset digital dataset produced in 1997 by Olliver Geological Services.</p> <p>The collar, lithology and assay data collected over multiple historic drilling programs were imported as comma delimited (.csv) files into a Vulcan .isis database and validated on import. All drillholes were assumed to be vertical in orientation and assigned -90° dip. Further validation of data was subsequently undertaken by Simon Tear (H&amp;S Consultants) creating an Access database and then using the Surpac Audit module to identify discrepancies. All discrepancies were checked back to hard copy data and corrected in the comma delimited (.csv) files used by Simon Tear to audit the resource estimation. The corrected files were used by Minotaur to re-run the final resource estimation.</p> <p>No adjustments to assay data were undertaken.</p>
<p><i>Location of data points</i></p>	<p><i>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</i></p>	<p>The accuracy of the historic drillhole collar locations is uncertain. Eastings and Northings of lakebed drillholes pre-dating 1997 were determined or approximated by Minotaur personnel from geographically registered plans or aerial photographs. Eastings and Northings of lakebed</p>



	<p><i>estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>drillholes from 1997 were extracted from a Micromine dataset created in 1997 by Olliver Geological Services.</p> <p>The dynamic setting of the evaporitic lakes and aeolian dune system prevents contemporary ground truthing of historic collars.</p> <p>The bulk trenching location (December 2014) was determined using handheld GPS with an accuracy of +/- 3m (MGA94) which is considered to be an appropriate level of accuracy.</p> <p>In 1988, Bay Gypsum commissioned production of 31 photogrammetrically controlled topographic sheets covering the Streaky Bay gypsum deposits at 1:5000 scale. The contour data on the 1988 plans have not been included the current resource review.</p> <p>In February 2015 dune elevation traverses were conducted by Minotaur to obtain accurate height profiles for the 1988, 1996 and 1997 dune gypsum sampling traverses. From the start and end points of traverses marked on aerial photographs, and the number of holes and spacings recorded for each traverse, collar positions have been estimated. The necessity for approximation of collar locations reduces the level of confidence in the dune drilling data.</p> <p>The relative levels (RLs) of all collars across Lakes Purdilla and Toorna were adjusted to coincide with a topographical surface generated using DGPS dune elevation measurements collected by Minotaur in February 2015.</p> <p>All drillholes were assumed to be vertical in orientation and assigned -90° dip. No downhole survey data have been collected.</p>
<i>Data spacing and distribution</i>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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</i></p>	<p>Information reported in the body of this Report pertains entirely to historic data collected across Lake Purdilla and Lake Toorna between 1959 and 1997.</p> <p>The earliest (1959) drillholes were sampled by one composite sample through the gypsiferous sediments per drillhole.</p> <p>The 1969 Elcor drillholes were sampled at various</p>

	<p><i>classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>intervals, based on geological variation, and measured in feet (imperial).</p> <p>Drillholes completed 1988-1997 were sampled by 1 metre downhole intervals.</p> <p>The intervals sampled in all the historic drillholes are assumed to adequately represent the distribution of gypsiferous sediments within the sampled lake beds and dunes.</p> <p>The southeastern and northeastern sectors of Lake Purdilla have been grid drilled (250-400m spacing) however the western side of Lake Purdilla is more sparsely drilled.</p> <p>Lake Toorna was sampled in 1959 by 17 drillholes distributed over a very limited area of the lake surface. No further drill testing of the lake gypsum has subsequently occurred. The central dune system on Lake Toorna was sampled by regularly spaced traverses of 109 auger holes in 1988. The control on the basal contact of the lake gypsum is restricted by the limited drilling data.</p> <p>The data spacing is appropriate to establish a geological model and allow for grade interpolation to generate Mineral Resources.</p>
<p><i>Orientation of data in relation to geological structure</i></p>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>No orientation-based sampling bias has been identified. Horizontal variation is typical in these flat-lying deposits therefore vertical drillholes are appropriate.</p>
<p><i>Sample security</i></p>	<p><i>The measures taken to ensure sample security.</i></p>	<p>It is unknown what measures were taken historically to ensure sample security.</p>
<p><i>Audits or reviews</i></p>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>No independent audit or review of sampling techniques and data undertaken.</p>



## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<p>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.</p> <p>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</p>	<p>The historic drilling supporting the gypsum resource reported herein was conducted on ground now included in EL5398 (Sceales). EL5398 was granted to Minotaur Operations Pty Ltd on 17<sup>th</sup> November 2013 as a subsequent licence to EL4203.</p> <p>EL 5398 covers approximately 148 km<sup>2</sup> located 14 km south of Streaky Bay, South Australia, over privately-owned (freehold) cleared agricultural land to the west of Calpatanna Waterhole Conservation Park</p> <p>Exploration activities have been undertaken under appropriate approvals by landowners and the Department of State Development (DSD). Aboriginal heritage surveys undertaken at Lake Purdilla in May 1997 by Biringa Incorporated specifically for gypsum drilling, trenching and mining reported no sites of significance. Non-freehold portions of the tenement are covered by a Native Title claim by Wirangu No 2 (SC97/6).</p> <p>Tenement EL5398 is in good standing and there are no known impediments to exploration.</p>
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Historical exploration across EL 5398 includes extensive drilling by Department of Mines (SA), Elcor (Australia) Pty Ltd, Bay Gypsum Pty Ltd and Sceale Bay Development Corporation Pty Ltd. The data collected by these entities have been used to support the Mineral Resource reported herein.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Lakes Purdilla and Toorna are coastal salinas occurring in depressions in laterally extensive Pleistocene limestone. Brine lakes interpreted to have formed by seawater inundation underwent rapid changes in salinity and laminated gypsarenite deposited. Recrystallisation of gypsum has occurred. Aeolian movement and concentration of fine-grained loose gypsum 'flour' has generated an extensive dune system across the lakes.
<i>Drill hole</i>	<i>A summary of all information material to</i>	Exploration results not being reported.

<p><i>Information</i></p>	<p><i>the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>▪ <i>easting and northing of the drill hole collar</i></li> <li>▪ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>▪ <i>down hole length and interception depth</i></li> <li>▪ <i>hole length.</i></li> </ul> <p><i>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.</i></p>	
<p><i>Data aggregation methods</i></p>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Exploration results not being reported.</p>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a</i></p>	<p>Exploration results not being reported.</p>

	<i>clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<i>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.</i>	Exploration results not being reported.
<i>Balanced reporting</i>	<i>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.</i>	Exploration results not being reported.
<i>Other substantive exploration data</i>	<i>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.</i>	Exploration results not being reported.
<i>Further work</i>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	Future work is likely to include twinning of drillholes to upgrade resource categorization and further drilling of as yet untested gypsarenite dunes.



### Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<p><i>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.</i></p> <p><i>Data validation procedures used.</i></p>	<p>Historic data collected 1959-1997 has been used to estimate the gypsum Mineral Resource at Lakes Purdilla and Toorna as documented in the Body of this Report.</p> <p>It is assumed that due care was taken historically with the process of transcribing data from field notes and laboratory reports into hard copy reports.</p> <p>The collar, lithology and assay data collected over multiple historic drilling programs were collated into a Vulcan .isis database. All drillholes were assumed to be vertical in orientation and assigned - 90° dip.</p> <p>The historic drill collars were registered to the surface topography triangulation; the collar locations have therefore been approximated in 3 dimensions.</p> <p>Further validation of the Vulcan digital drillhole dataset was subsequently undertaken by Simon Tear (H&amp;S Consultants) creating an Access database and then using the Surpac Audit module to identify any discrepancies.</p> <p>All discrepancies were checked back to hard copy data and corrected in the comma delimited (.csv) files used to review the Mineral Resource.</p>
<i>Site visits</i>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>Lew Barnes has made numerous geological field trips to Lakes Purdilla and Toorna. In 2014 Lew Barnes supervised the digging of a 1 metre × 4 metres × 2 metres deep costean at location 428287E, 63558840N (GDA 94) in December 2014. The gypsum profile mapped in the costean by Lew Barnes is comparable to the lithological sequence logged in adjacent historic drillhole M67, and also correlates with the sediment profile exposed in trenches dug in 1997.</p> <p>Tony Belperio has made numerous visits to Lakes Purdilla and Toorna and has conducted extensive discussions regarding the Streaky Bay gypsum</p>

		<p>deposits with Jeffrey Olliver of Olliver Geological Services who was supervising geologist of the 1996-1997 drilling programmes described herein.</p> <p>No site visit was completed by Simon Tear due to time and budget constraints.</p>
<p><i>Geological interpretation</i></p>	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<p>Minotaur has a high degree of confidence in the geological interpretation of the Lakes Purdilla and Toorna gypsum mineral deposits. The deposit style demonstrates lateral continuity of gypsum grade and geology, and an absence of structural complications. All drilling data is historic and derived from multiple drilling programmes (1959-1997). The geological interpretation is dependent on the assumed accuracy of the historic logging and the geographical positioning of historic drill collars.</p> <p>Satellite imagery, in conjunction with drilling data, was used to interpret the lateral bounding edges of the gypsum deposits. A number of islands of Bridgewater Formation calcarenite occur within the lacustrine gypsum; the lateral boundaries of these islands have been interpreted from satellite imagery and excised from the interpretation of the gypsum bodies.</p> <p>Historical geological drillhole logging was used to triangulate a surface representing the base of the lacustrine gypsum deposits. Elliptical sub-basins within the gypsum lakes have been defined by drilling data. Additional basement detail, not yet defined by drilling, may impact on the sub-basin interpretation within Lakes Purdilla and Toorna.</p> <p>The lake boundaries interpreted from satellite imagery were used to form edges to the gypsum base triangulation. The true upward slope between the base of gypsum defined by the most peripheral drillholes and the lake margin is unknown.</p> <p>DGPS elevation data across multiple dunes was used to triangulate a surface representing the upper surface of the lake deposits plus significant surrounding dunes.</p>

		<p>Dune boundary polygons interpreted from aerial photographs were registered onto the lake surface. Contours along the length of the curving crests and troughs were interpreted and tielines created to connect the dune profiles surveyed perpendicular to the dunes. Each interpreted control line started and finished on points snapped to the base lake surface, forcing the dune shapes to tail out onto the lake surface. The dune survey point data and the control lines were individually triangulated within each dune boundary. The individual dunes and the extrapolated lake surface data were merged together into a single detailed upper dune surface. The collars for historic dune drillholes were registered to the undulating upper dune triangulation and therefore have been approximated in 3 dimensions, incorporating uncertainty.</p> <p>Drilling data and DGPS elevation data were extrapolated to cover the entire lateral extents of Lakes Purdilla and Toorna; the inherent inaccuracy of extrapolation therefore applies to the geological interpretation of Lakes Purdilla and Toorna and associated dune systems.</p>
<i>Dimensions</i>	<p><i>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.</i></p>	<p>Lake Purdilla is approximately 7km long NNW-SSE and approximately 5.5km across WSW-ENE. The shallow basin-shaped lake gypsum deposit is flat-topped with an undulating base and varies between 0.1-7.2m thick. The significant gypsum dunes associated with Lake Purdilla vary in thickness 0.1-6.9m high above the lake surface. There is no cover/ overburden.</p> <p>Lake Toorna is approximately 4km long and approximately 2km across. The shallow basin-shaped lake gypsum deposit is flat-topped with an undulating base and varies between 0.1-5m thick. The significant gypsum dunes associated with Lake Toorna vary in thickness 0.1-4.8m high above the lake surface. There is no cover/ overburden.</p> <p>The gypsum deposits are effectively closed off at depth and the lateral extents are known.</p>



*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 (eg 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 drillhole data, and the use of reconciliation data if available.*

Maptek Vulcan software was used for all geological modelling, block modelling, grade interpolation and reporting for gypsum lakes Purdilla and Toorna.

All drilling data (collars, downhole surveys, lithologies and assays) are held in a Maptek Vulcan .isis database. 1219 composites, averaging 0.7m, up to 3m length, most frequent length 1 metre (310 composites).

Wireframes were used to select composites and control the block grade interpolation. Summary statistics for the composites generally show that element populations are not strongly skewed with moderately low coefficients of variation. Economic elements for modelling comprise gypsum only.

No domaining was undertaken.

Parent block size of 75m(X) x 75m(Y) by 1m(Z) was used with sub-blocking to 25m(X) x 25m(Y) by 0.5m(Z) allowed. Parent block dimensions were based on drillhole spacing, sample/composite interval and possible bench heights.

The maximum extrapolation distance is 2km. The average composite length is 0.7m (1219 composites).

Gypsum grade (%) was estimated by Inverse Distance Squared methodology.

Basic statistics for the composites show a low coefficient of variation that justifies the use of the ID<sup>2</sup> method of grade interpolation.

Blocks estimated in 4 passes with increasing search ellipse sizes: 125mx125mx0.5m to 2km x 2km x 1m.

The orientations of the search ellipses were tabular to suit the horizontal evaporitic layering. Blocks were estimated using a minimum of 1 and a maximum of 20 samples.

No top cuts were applied. Examination of the higher grades show that they are generally well structured, i.e. there is a gradation from low to high grades, suggesting that grade cutting was not necessary.

		<p>Visual validation by creating slices of the block model and comparing to drill holes grades on the same slice showed block grades to have estimated as expected when compared to downhole assay data.</p> <p>Validation confirmed the modelling strategy as acceptable with no significant issues.</p> <p>Several entities historically calculated resources contained in the lakes and dunes at Lakes Purdilla and Toorna.</p> <p>The 2015 <b>lake</b> gypsum resource estimated by Minotaur closely approximates the grade and tonnes of the 1997 resource estimated by Sceale Bay Gypsum.</p> <p>The 2015 <b>dune</b> gypsum resource calculated by Minotaur is significantly higher than the previous dune resource estimate calculated by Bay Gypsum in 1989. The increase is interpreted to be partly due to the addition of 1996-1997 drilling data. In addition dune traverse elevations measured in 1996 and 2015 showed Bay Gypsum's data to have underestimated dune heights.</p> <p>No mining has occurred and hence no reconciliation data exist to test the model.</p>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the determination of the moisture contents.	<p>Lake gypsum tonnages are estimated using a density of 1.3t/m<sup>3</sup>.</p> <p>Bulk density 1.32 t/m<sup>3</sup> was determined by Amdel in 1997 for a trenched sample of crystalline gypsum which had been dried at 110°C.</p> <p>In 2014 six samples were taken at 0.4m intervals down the gypsum profile in a costean dug by Minotaur. Density values ranged from 1.25 to 1.42t/m<sup>3</sup>, averaging 1.33 t/m<sup>3</sup>. Samples were drained but not dried.</p> <p>Dune gypsum tonnages are estimated using density 1.2 t/m<sup>3</sup> as applied by Warren (1980)<sup>1</sup> to</p>

<sup>1</sup> Warren, J.K., 1980, A review of gypsum resources at Lake Macdonnell, Eyre Peninsula, In: Mineral Resources Review No. 152 for the year ended 31 December 1980, S.A. Department of Mines and Energy, p.12-18.

		unconsolidated gypsarenite at Lake Macdonnell. Applying 1.2 t/m <sup>3</sup> density to the dune gypsum resource at Lakes Purdilla and Toorna is therefore deemed to be reasonable.
<i>Cut-off parameters</i>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<p>The adopted cut-off of 0% gypsum is defined by the mineral wireframes and the interpreted topographic surfaces.</p> <p>No quality parameters have been applied to the reported Mineral Resource.</p>
<i>Mining factors or assumptions</i>	<i>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.</i>	<p>It has been assumed that gypsiferous material mined at Lake Purdilla and/or Lake Toorna will be excavated from the lake bed and stacked for 1-2 years for natural drainage and washing by rainfall. It is expected that the majority of the contained salt and other soluble impurities will be washed out of the gypsiferous material and, therefore, the salt content of the gypsum has not been a considered factor in the Resource reported herein.</p> <p>It is anticipated that mining of the gypsum would occur in a shallow open pit utilising excavators. Otherwise, no assumptions regarding possible mining methods have been made.</p>
<i>Metallurgical factors or assumptions</i>	<i>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.</i>	Assay results from drilling, confirmed by replicate results from trenching, indicate high purity selenite and gypsarenite with deleterious elements largely confined to high salt content. As practiced elsewhere in Australian gypsum mining operations, the salt content is expected to be significantly reduced by stockpiling for 1-2 years.
<i>Environmental factors or</i>	<i>Assumptions made regarding possible waste and process residue disposal</i>	EL 5398 is located on flat to undulating terrain featuring a series of sparsely vegetated coastal

<p><i>assumptions</i></p>	<p><i>options.</i></p> <p><i>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.</i></p>	<p>salinas. The salinas are located behind coastal dunes partially vegetated by low scrub. The area has been subject to grazing and cereal-cropping for many years.</p> <p>No environmental studies have been completed by Minotaur.</p>
<p><i>Bulk density</i></p>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<p>Determined lake gypsum density of <math>1.3\text{t/m}^3</math> is derived from measurement of 6 samples taken from a trench dug December 2014 (GDA 94: 428287E, 63558840N). Samples were taken at approximately 0.4m intervals down the 2.2m trench wall from the surface. Samples were drained but not dried, and weighed in a container of known volume. Density values ranged <math>1.25\text{-}1.42\text{t/m}^3</math> (average <math>1.33\text{ t/m}^3</math>).</p> <p>Bulk density <math>1.32\text{t/m}^3</math> was determined by Amdel in 1997 for a trenched sample of crystalline gypsum which had been dried at <math>110^\circ\text{C}</math>, then weighed in a cylinder of 700ml volume.</p> <p>Using <math>1.3\text{ t/m}^3</math> for insitu density of the lake gypsum is considered to be reasonable and representative of the deposits.</p> <p>The unconsolidated gypsarenite in the dunes at Lakes Purdilla and Toorna is very similar to the unconsolidated gypsarenite at Lake Macdonnell (near Ceduna, South Australia). Dune gypsum tonnages herein are therefore estimated using density <math>1.2\text{ t/m}^3</math> as applied by Warren (1980)<sup>2</sup> at</p>

<sup>2</sup> Warren, J.K., 1983, A review of gypsum resources at Lake Macdonnell, Eyre Peninsula, In: Mineral Resources Review No. 152 for the year ended 31 December 1980, S.A. Department of Mines and Energy, p.12-18.



		Lake Macdonnell; considered to be reasonable and representative of the dune gypsum deposits at Lakes Purdilla and Toorna.
<i>Classification</i>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>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).</i></p>	<p>The gypsum Mineral Resource reported herein is classified as Inferred due to the irregular distribution of drillholes and inherent uncertainties in the historic dataset related to collar locations, subsampling methodology, QAQC practices employed, and precision of analytical methods.</p> <p>The classification appropriately reflects the Competent Person's view of the deposit.</p>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	A review of the data has been completed by Simon Tear of H&S Consultants Pty Ltd. This has included a check model using Ordinary Kriging on 1m composites for a 2.5D model of gypsum grade and mineral thickness for Purdilla dune and lake deposits. The results are reasonable and comparable to the Minotaur model and its classification of resource estimates as Inferred.
<i>Discussion of relative accuracy/confidence</i>	<p><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></p> <p><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</i></p>	<p>The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource category (Inferred). This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits.</p> <p>The geological nature of the deposit, composite/block grade comparison and the modest coefficients of variation lend themselves to a reasonable level of confidence in the resource estimates.</p> <p>The Mineral Resources have been classified using a qualitative assessment of a number of factors including the data quality and distribution, complexity of mineralisation/geology, density, QAQC data, historical data and sampling methods.</p>



*the procedures used.*

*These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*

The Mineral Resource estimates are considered to be reasonably accurate globally, but there is some uncertainty in the local estimates due to the widespaced drilling and the modelling method utilised.

The Mineral Resources are believed to be an improvement on previous resource models mainly due to improved geology with the use of interpreted mineral wireframes and the use of satellite data to constrain the mineralisation.

The Mineral Resources are sensitive to the geological interpretation.

No production data are available.



Table A. Direct quotes from reports *italicized*.

HoleID	Hole type	Count	Metres	Year	Assay Lab	Company	Report QAQC	Data Source
<b>M1-95*</b> <b>M104-110*</b>  *stored as 1960F01-95, 1960F104-110 in Company database	Proline machine auger	102	235.22	1959	unknown	Department of Mines, South Australia	<p>One composite sample per drillhole, variable lengths, analysed for gypsum, sodium chloride, calcium carbonate and insolubles for intervals geologically logged as gypsum.</p> <p><i>A Land Rover-mounted Proline boring plant was used. A chisel-shaped bit was found to penetrate the wet sediments fairly readily but failed to pass through hard "bedrock" limestone.</i></p> <p><i>Inability to recover samples below about 7 feet [2.14m] because of the thin consistency of the gypsum mud at this depth.</i></p> <p><i>Many deep recordings of limestone must thus be suspect.</i></p> <p>Geological logs and analytical data presented by Forbes (1959).</p>	Forbes, B.G., 1959, Gypsum deposits near Streaky Bay, and some other gypsum localities of Eyre Peninsula, Department of Mines South Australia report 48/148.



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## ASX RELEASE

<b>E1-9</b> <b>E11-26B</b> <b>E61-62</b>	Cored by pushing NX-casing with a small diamond coring rig until too hard, then diamond drilled to end of hole.	32	87.65	1969	unknown	Elcor (Australia) Pty Ltd	<p>Variable length samples analysed for gypsum, sodium chloride, calcium carbonate and insolubles for intervals geologically logged as gypsum. Intervals determined based on geological variations.</p> <p><i>Moderate to good core recoveries were generally obtained through “pushing” NX-casing. Many holes were completed without using the diamond drill. In cases where diamond drilling was necessary recoveries were lower, particularly in the deeper boreholes in the southeast.</i></p> <p><i>Total depths ranged from 1.9 feet [0.53m] at E13 to 17 feet [5.18m] at E17.</i></p> <p><i>Recovery percentages are recorded on individual log sheets. Sludge samples were collected in those instances where it was considered that core recovery would be suspect.</i></p> <p>Geological logs and analytical data presented by Hall et al (1970).</p>	Hall, Relph and Associates Pty Ltd, 1970, Geological report on gypsum in Sceale Bay district, South Australia, S.M.L. 251, <i>DMITRE open file envelope 1057.</i>
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## ASX RELEASE

Traverses 1-96	2 ½ inch hand auger	467	713.99	1988	Classic Comlabs, Adelaide SA;	Bay Gypsum Pty Ltd	Auger programme designed to test gypsum quality across the aeolian dune resource area of Lakes Purdilla and Toorna.	Mason, M.G., and Compston, D.M., 1990, Progress and final reports on EL1442, Streaky Bay, for the period 02/11/87 to 01/08/90 for Bay Gypsum Pty Ltd, DMITRE open file envelope 6944.
					ALS, Stafford Qld		<i>Samples were collected on 1 metre intervals, homogenized by hand and reduced to approximately 750g samples. Initially a riffle splitter was used, but vehicular access within the dunes was not possible, and carrying the samples to the splitter or vice versa was too time-consuming. Minor colour and texture variations within each metre generally enabled a good estimate of homogenization to be made.</i>	
							<i>As the dunes were considered to be relatively homogenous along strike, traverses across strike were made at intervals of either 200m or 400m on the larger dunes. Auger holes were sited every 20m along each travers, measured from the lake shore. Where the dunes were narrow, the sample was taken from the highest point on the traverse.</i>	
							<i>The gypsum was frequently damp and floury and stuck to the auger. Auger advance averaged only 10cm between pulling out and cleaning. Deeper holes had hard packed gypsum sand below 2-3m and thereafter</i>	



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						<p><i>samples took up to 30 minutes to take.</i></p> <p>100 samples were submitted in 1988 for analysis by Classic Comlabs of Adelaide, SA. Samples were dried and split down to 50 grams. Analysis was carried out for sulphate (equated to gypsum), insoluble, salt and carbonate.</p> <p>An additional 149 samples were submitted in 1996 for analysis by ALS in Stafford, Queensland: assay by acid digest, samples dried at 250°C and gypsum content recalculated to allow for water of hydration (.2H<sub>2</sub>O).</p> <p>Geological logs and analytical data presented by Olliver (1996).</p>	
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## ASX RELEASE

<b>SB15-17</b>	Air Core: tungsten coring bit or hammer drilled as required; samples lifted to surface inside drill stem by compressed air	3	20.7	1995	Not assayed	Sceale Bay Development Corporation Pty Ltd	<p><i>Holes were drilled to test for the nature of the bedrock beneath the gypsum deposits.</i></p> <p><i>Limestone of the Bridgewater Formation was intersected in all cases and crystalline gypsum was not present. This test program was limited due to access problems.</i></p> <p>Drillholes SB15 and SB16 intersected 'sandy' or 'pasty' gypsum 0-3m downhole; SB17 was collared in limestone.</p> <p>Samples were collected from unspecified depths in SB15-16 for possible later testing. No assay results located.</p> <p>Geological logs presented by Randell (1995).</p>	Randell, M., 1995, Report of drilling, May 1995, EL1821 Streaky Bay, South Australia for Sceale Bay Development Corporation Pty Ltd, <i>DMITRE open file envelope 9502</i> .
<b>Traverses 101-117</b>	Hand auger, diameter unspecified	37	120.9	1996	ALS, Stafford Qld	Sceale Bay Development Corporation Pty Ltd	<p>Large windblown lunette dunes of low-salt gypsum extend across lakes Purdilla and Toorna: a reappraisal of previous investigations was supplemented by further hand auger drilling in the south eastern sector of Lake Purdilla.</p> <p>136 typically one metre length composite samples were submitted for analysis by ALS in Stafford, Queensland: assay by acid digest, samples dried at 250°C and gypsum content</p>	Olliver, J.G., 1996, Streaky Bay gypsum deposits – geological investigations of gypsum dunes, EL1821, <i>Sceale Bay Development Corporation Pty Ltd (unpublished)</i> .



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							<p>recalculated to allow for water of hydration (.2H<sub>2</sub>O).</p> <p>Geological logs and analytical data presented by Olliver (1996).</p>	
<b>Traverses 119-125</b>	Hand auger, diameter unspecified	6	17.6	1997	ALS, Stafford Qld	Sceale Bay Development Corporation Pty Ltd	<p>Holes T119-125 were drilled in 1997 in the northern dunes of Lake Purdilla to supplement data collected previously in the gypsum dunes marginal to the 'South Drilled Area' of Lake Purdilla.</p> <p><i>Most of the composite sample from holes T119-125 ranges from 0.2-1.0mm grain size.</i></p> <p>7 samples were submitted for analysis by ALS in Stafford, Queensland for CaSO<sub>4</sub>.2H<sub>2</sub>O, CaCO<sub>3</sub>, MgCO<sub>3</sub>, NaCl, KCl, Fe<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub>.</p> <p>Analytical data presented by Olliver (1997) but no geological logs included in report.</p>	Olliver, J.G., 1997, Streaky Bay gypsum deposits – 1997 reappraisal of gypsum resources, EL1821, <i>Sceale Bay Development Corporation Pty Ltd (unpublished).</i>
<b>K1-65</b>	Edson CP10 machine auger 2m long auger flights 11.4cm diameter	65	192.2	1997	ALS, Stafford Qld	Sceale Bay Development Corporation Pty Ltd	<p>K1-65 grid-drilled two separate areas within Lake Purdilla referred to as 'South Mine Site' (K1-K30) and 'North Mine Site' (K31-K65). No mining has occurred to date.</p> <p><i>All holes reached the base of gypsum except K14 and K16 which were stopped marginally higher.</i></p>	Olliver, J.G., 1997, Streaky Bay gypsum deposits – 1997 reappraisal of gypsum resources, EL1821, <i>Sceale Bay Development Corporation Pty Ltd</i>





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							<p><i>An upper white friable gypsarenite overlies grey banded slightly cemented coarser gypsarenite which grades downwards into basal crystalline gypsum. The basal gypsum varies from a loose mass of crystals in brine to semi-cemented aggregates to completely cemented layers of rock gypsum. The basal unit is absent near the lake margins but is up to 2.7m thick in the deeper parts of the basin. The gypsum sequence is underlain by a thin white calcareous clay which was deposited on a hard calcrete surface.</i></p> <p><i>In general, drill samples were collected over 1m intervals. Care was taken to scrape all material adhering to the flights in the deeper, wetter sections. Occasionally, very little sample was obtained.</i></p> <p>205 samples were submitted for analysis by ALS in Stafford, Queensland: assay by acid digest, samples dried at 250°C and gypsum content recalculated to allow for water of hydration (.2H<sub>2</sub>O).</p> <p>Geological logs and analytical data presented by Olliver (1997).</p>	(unpublished).
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