10 March 2015

Companies Announcement Office
ASX Limited
Level 10, 20 Bridge Street
SYDNEY NSW 2000

# LAKE WELLS POTASH PROJECT

## HIGH GRADE BRINE EXPLORATION PROJECT IN THE EASTERN GOLDFIELDS

**HIGHLIGHTS**

- **Brine pit sampling program across the Lake Wells playa lake system returns elevated to very high potassium (K) and potash (Sulphate of Potash, SOP)**
- **Results include a maximum value of**
  - **7.36 kg/m$^3$ K equivalent to 16.41 kg/m$^3$ SOP***
- **Average across 11 pit samples of 4.84 kg/m$^3$ K, equivalent to 10.79 kg/m$^3$ SOP**
- **Significant lake area outlined by + 8 kg/m$^3$ SOP contour**
- **Historic and Goldphyre drilling records show strong groundwater inflow and presence of a deep (+60m) palaeochannel in the central part of the project area**
- **Goldphyre is working to identify the best possible options to continue to progress this Sulphate of Potash project**

**LAKE WELLS PROJECT – 100% Goldphyre Resources Limited**

Goldphyre Resources Limited (ASX: GPH, Goldphyre or the Company) is pleased to announce results from a recent reconnaissance brine potash pit sampling program on the Lake Wells Project, located 160 kilometres north of Laverton (Figure 1).

Preliminary pit sampling and historic drill-hole sampling for brine potash potential in the Lake Wells playa lake areas was reported previously (GPH Quarterly report, September 2014). The 2014 results were encouraging with a best potassium (K) result of 5790 mg/l (**5.79** kg/m$^3$) and a calculated **12.91** kg/m$^3$ Sulphate of Potash (SOP) concentration.

The latest results strongly reinforce the preliminary sampling and confirm the high grade nature of the Project. Hand dug pit samples returned an average SOP across the 11 pit samples of **10.79 kg/m³ SOP**, with the Company's best value recorded to date: Sample LGW041 – **16.41 kg/m³ SOP** (Figure 2, Appendix 1).

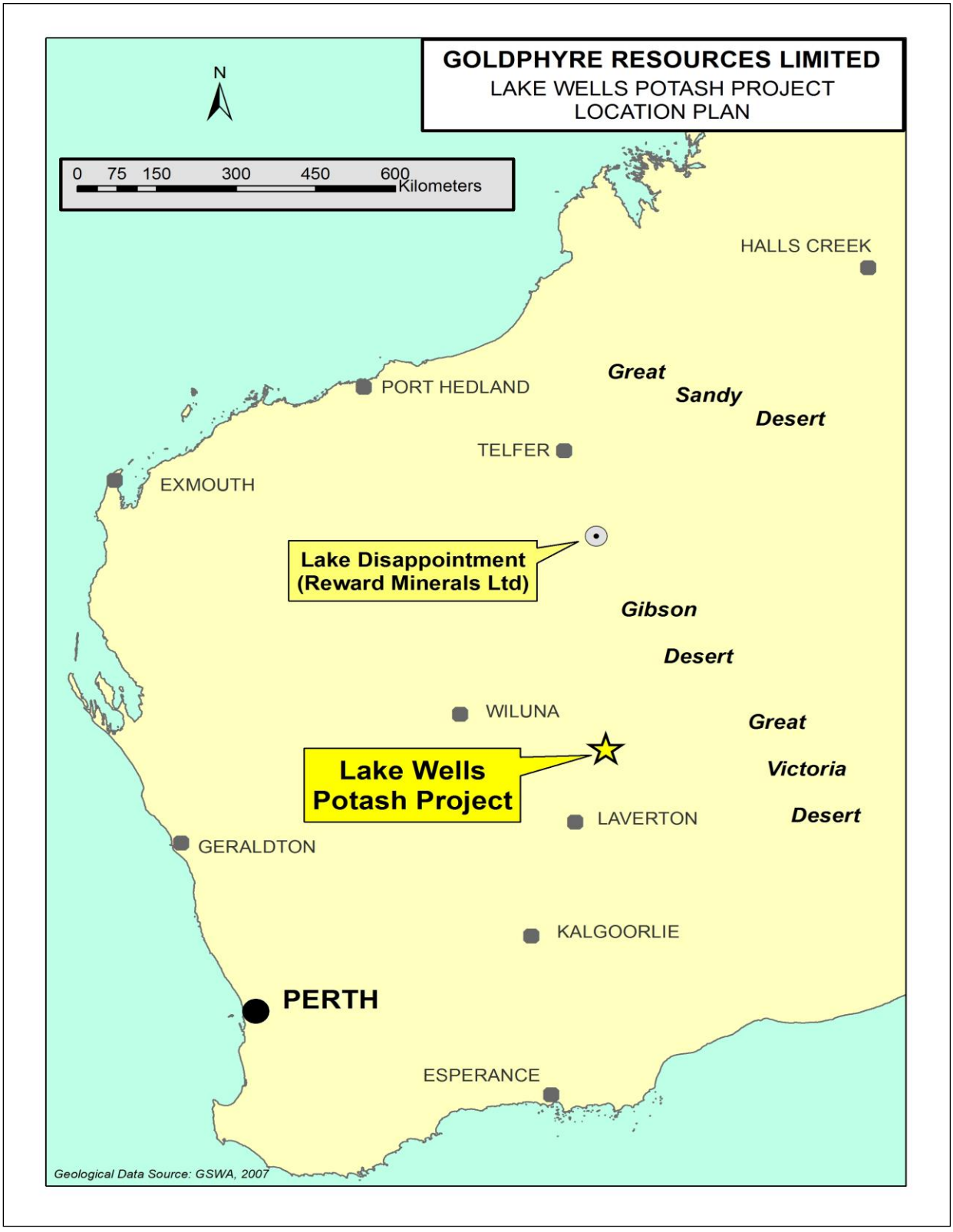


*Figure 1. Lake Wells Potash Project Location Plan*

The Lake Wells Potash Project is understood to be unique in that it is the only Australian potash project with extensive gold-base metals drill coverage over the central portion of the target area. Detailed logs, including the drill area around the high grade Axford gold prospect on the northern margin of the +8 kg/$m^3$ SOP contour, has water inflow and detailed lithological information which will assist the design of future potash drilling campaigns.

A deep paleochannel (>60m deep) has been interpreted from drill data in the central part of E38/1903. This interpreted paleochannel may play a critical role in recharge of the near surface brine volumes.

Parts of the Lake Wells playa lake system are located on adjacent tenure not held by Goldphyre and strategic partnerships to secure relevant tenure are progressing. Potash exploration at Lake Wells is at an early stage and contouring pit samples at +8 kg/$m^3$ indicates an approximate lake surface area on both Goldphyre and adjacent holder's tenure (granted and application) of over 80 $km^2$.

The Company is engaging with hydrological and hydrochemical consultants to assist with the interpretation of analytical brine data, and to assist in planning future exploration programs to advance the Project.

Potash brine exploration in Australia is growing strongly. Australia imports 100% of its annual SOP requirements, estimated at circa. 500,000 tonnes per annum, leaving Australian end users exposed to exchange rate fluctuations. In addition, the relatively slow development progress of high CAPEX hard rock overseas potash projects, and global macro-economic circumstances more generally, provide strong incentives for the development of domestic potash supplies.

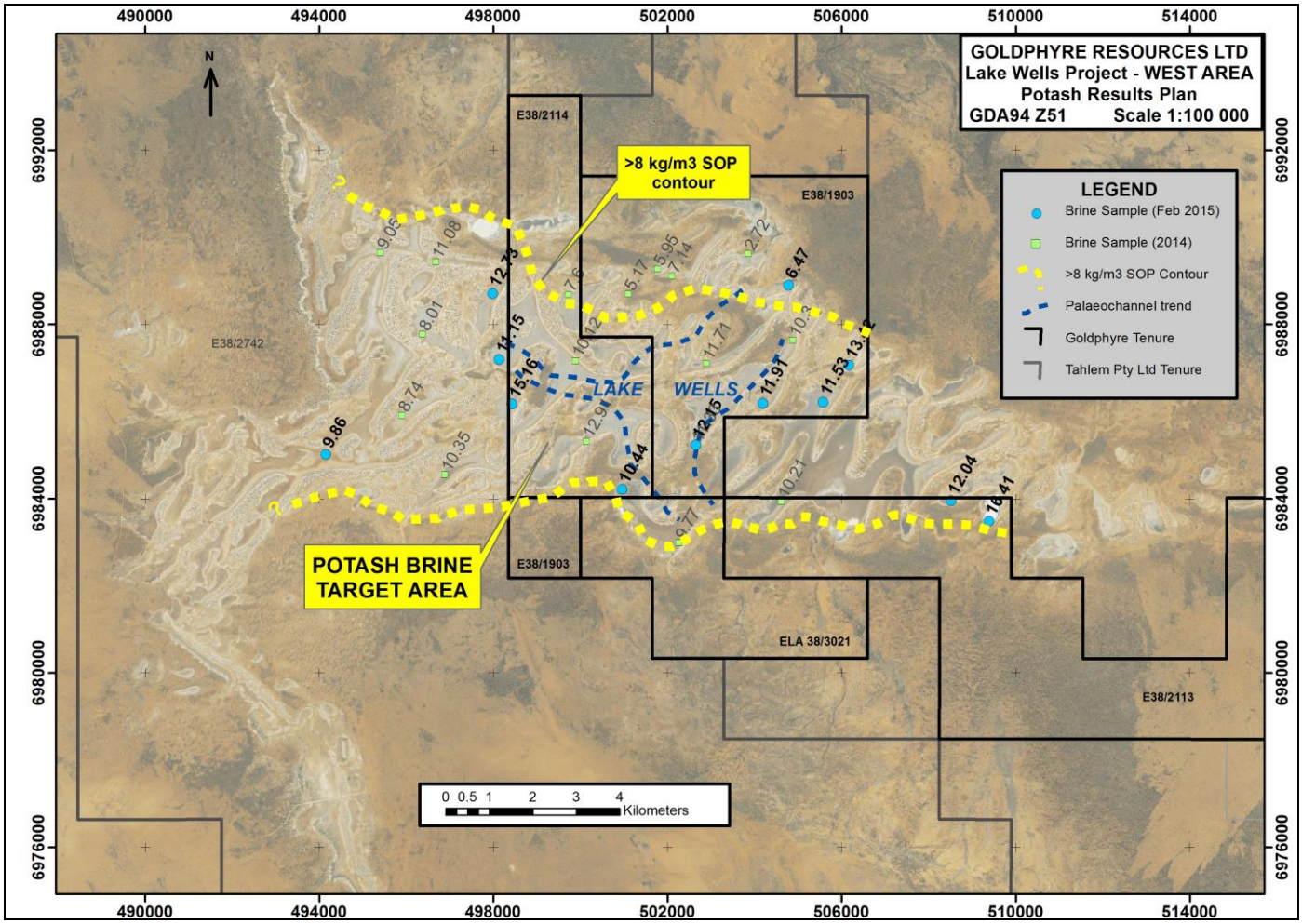


*Figure 2. Lake Wells Potash Project – Sample Locations*

*Potassium Sulphate value = K x 2.23

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**COMPETENT PERSON'S STATEMENT**

The information in this report that relates to Exploration results, Mineral Resources or Ore Reserves is based on information compiled by Mr Brenton Siggs who is a member of the Australasian Institute of Geoscientists. Mr Siggs is contracted to the Company through Reefus Geology Services and is a Non-Executive Director (Exploration Manager) of Goldphyre Resources Limited. Mr Siggs has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Siggs consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Mr Siggs is a shareholder and director of Goldphyre WA Pty Ltd, a company that holds ordinary shares and options in the capital of Goldphyre Resources Limited (Goldphyre Resources Limited, Annual Financial Report 2014).

**FORWARD LOOKING STATEMENT DISCLAIMER**

This announcement contains forward-looking statements which involve a number of risks and uncertainties. These forward looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

## Appendix 1: Lake Wells Potash Brine Results Table

| SampleID | E | N | RL | Ca | K | K | SOP | SO4 | Na | Cl | Mg | TDS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mg/l | mg/l | kg/m3 | kg/m3 | mg/l | mg/l | mg/l | mg/l | mg/l |
| LGW027 | 528854 | 6983607 | 440 | 880 | 4230 | 4.23 | 9.43 | 15200 | 69800 | 126000 | 6760 | 220000 |
| LGW028 | 527636 | 6984176 | 444 | 788 | 2720 | 2.72 | 6.07 | 17100 | 50400 | 97400 | 5450 | 178000 |
| LGW029 | 526288 | 6984010 | 443 | 480 | 6100 | 6.1 | 13.60 | 21400 | 111000 | 166000 | 9140 | 296000 |
| LGW030 | 525044 | 6984810 | 447 | 932 | 3470 | 3.47 | 7.74 | 15600 | 65300 | 102000 | 5900 | 192000 |
| LGW031 | 524176 | 6983712 | 444 | 550 | 4390 | 4.39 | 9.79 | 17900 | 78800 | 146000 | 9600 | 275000 |
| LGW032 | 524196 | 6985312 | 440 | 385 | 5290 | 5.29 | 11.80 | 19800 | 84400 | 161000 | 8890 | 291000 |
| LGW040 | 508511 | 6983949 | 447 | 488 | 5400 | 5.4 | 12.04 | 19600 | 91800 | 146000 | 9360 | 283000 |
| LGW041 | 509378 | 6983480 | 448 | 479 | 7360 | 7.36 | 16.41 | 21200 | 97600 | 171000 | 9530 | 318000 |
| LGW043 | 505573 | 6986212 | 448 | 650 | 5170 | 5.17 | 11.53 | 16600 | 74600 | 131000 | 8610 | 236000 |
| LGW051 | 500949 | 6984208 | 451 | 535 | 4680 | 4.68 | 10.44 | 26600 | 70000 | 124000 | 10900 | 210000 |
| LGW054 | 494145 | 6985011 | 453 | 833 | 4420 | 4.42 | 9.86 | 18800 | 56800 | 107000 | 9550 | 209000 |
| **AVERAGE** | | | | **143** | **4839** | **4.84** | **10.79** | **19073** | **77318** | **134309** | **8517** | **246182** |

GOLDPHYRE RESOURCES LIMITED

## Appendix 2: Reporting of exploration results *JORC (2012) Requirements*

### Section 1: Sampling Techniques and Data – LAKE WELLS PROJECT - WEST AREA

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report. 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.* | • LAKE WELLS PROJECT – WEST AREA. Brine water samples were collected on salar areas (salt pans) of the Lake Wells playa lake system. High resolution orthoimagery purchased from Landgate (Perth) was used for access and sample selection. Pit sampling involved hand dug holes by pick/shovel on the salt pan, allowing inflow of brine, then left to settle for several minutes prior to dipping 500ml plastic bottle to carefully collect brine in pit. Bottle with brine sample transferred to Fridge/esky to maintain sample temperature at 4-8 C. Depths of pits varied from 0.35-1.10m.<br>• Pit sampling was of a simplistic, broad-spaced and reconnaissance nature to investigate first pass potential of elevated potassium levels in the shallow salar brine with followup sampling and drilling dependent on results received. |
| ***Drilling techniques*** | • *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).* | • Not applicable |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Not applicable |
| ***Logging*** | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Brine sample data including brief colour and lithology of host sediment and also basic qualitative rate of inflow of brine into pit. |
| ***Sub-sampling techniques and sample*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled,* | • Not applicable |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| ***preparation*** | *rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *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.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | • The LAKE WELLS brine samples were collected for the following analyses at ALS Laboratory (Perth). Code EAO15 – TDS, Code EAO50 – SG (selective samples), Code ED037P – Alkalinity, Code ED041G – Sulphate, Code ED045G Chloride, Code ED093F- Major Cations, Code EN055 – Ionic balance. The above analytical codes included: Ca,Mg, Na, K, $SO_4$, chloride, sulphate and Total Alkalinity as $CaCO_3$. ALS conducted random QA/QC checks which confirmed acceptable levels of accuracy for the elements/compounds analysed.<br>• Reconnaissance pit sampling only and no field duplicates were taken. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • See above section. No field duplicate samples were submitted to the Assay Laboratory.<br>• Twinned holes - NA<br>• Sample data was captured in the field and data entry completed in the Company's Perth office. Sample data was then loaded into the Company's database and validation checks completed to ensure data accuracy. |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Sample points were surveyed by handheld Garmin 60 GPS with horizontal accuracy (Easting and Northing values) of +-5m. RL (Z values) were also recorded.<br>• Grid System – MGA94 Zone 51.<br>• Topographic elevation using published GSWA geological maps and hand held GPS with Z range +-15m suitable for relatively flat sand plain and dune terrain at this project area. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • First pass reconnaissance style wide spaced pit sampling with followup pit sampling/reconnaissance shallow drilling required to advance project area.<br>• No sample compositing applied. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *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.* | • NA for brine aquifer potential.<br>• NA |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Samples collected from the field delivered by field team direct to laboratory in Perth. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • No audits or reviews completed on this batch of samples. |

## Section 2: Reporting of Exploration Results

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *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.* | • The LAKE WELLS PROJECT, located 140 km northeast of Laverton, Western Australia consists of granted tenements: E38/1903, E38/2113, E38/2114, E38/2505, and E38/2901. Tenements sampled included E38/1903, E38/2113 and E38/2114. These tenements held 100% by Goldphyre Resources Limited. There is no Native Title Claim registered in respect of the project tenure. Accordingly, there is no requirement for a Regional Standard Heritage Agreement to be signed.<br>• At time of writing, the tenements have expiry dates ranging between 30/6/2016 and 16/6/2019. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Previous and recent RAB/AC/RC drilling and soil (including enzyme leach) sampling has been completed on and to the north and south of the project area exploring for gold and basemetals.<br>Companies that have completed previous exploration in the region include WMC Ltd, Kilkenny Gold NL, Anglogold Ashanti Australia Ltd and Croesus Mining NL. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • Target is salar brine hosted potash associated with the Lake Wells playa lake system and underlying palaeochannel(s). |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>• *easting and northing of the drill hole collar*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.*<br>• *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.* | • Sample data from reconnaissance pit sampling included in Appendix 1. |
| ***Data aggregation methods*** | • *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • Not applicable |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • Not applicable |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | • Appropriate summary diagrams with Scale and North Point shown is/are included in the accompanying report above. |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • All K and extrapolated Sulphate of Potash (SOP) values (SOP=K x 2.23) for samples collected shown in Appendix 1. Elevated to high K and SOP values (relative to Australian potash exploration projects) support further exploration followup. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • Reprocessed geophysical data (TMI, FVD, Gravity) by Southern Geoscience Consultants, Perth, in 2009-2011 along with previous explorers' drill data has contributed to understanding of interpreted palaeochannel/aquifer zones in the project area. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Based on results returned **and *Other Substantive Exploration data*** summarised above, the design of further pit/trench sampling with possible followup reconnaissance drill programs (if justified) will be completed.<br>• Target area for future and followup exploration includes the lake area shown in Figure 1. |