May 31, 2016

Final assays highlight Lake Wells Potash Project's quality and scale

Maiden Resource set for release next month

KEY POINTS

- **Final assays from the Lake Wells Potash Project reveal continued strong grades and wide intersections of the premium-priced sulphate of potash**
- **Further intersections of both upper and lower basal sands reinforce potential for potash-bearing aquifers in both sand layers**
- **Test production bores to be installed into the upper and lower aquifers at two sites: test pumping planned for Q3**

	Hole ID	Sample interval		SOP grade	
		Basal sand	Upper sand	Basal sand	Upper sand
New results	PLAC025	12m	12m	8,351 mg/l	9,367 mg/
	PLAC026	^	6m	^	8,117 mg/l
	PLAC027	6m	6m	6,824 mg/l	6,177 mg/l
Previous results	PLAC020	18m	12m	9,046 mg/l	5,921 mg/l
	PLAC019	12m	18m	8,363 mg/l	6,571 mg/
	PLWDD002	18m	*	9,745 mg/l	*
	PLWDD003	24m	*	9,277 mg/l	*
	PLAC018*	7m	18m	9,585 mg/l	10,243 mg/l
	PLWDD005	^	4.25m	^	8,496 mg/l

** Hole cased through the upper sand with no sample taken* REFER TO WEST LONG SECTION BELOW
^ Hole stopped in the upper sand and not drilled to basal layer REFER TO CROSS SECTION BELOW

- **2 further holes were drilled slightly north of the interpreted palaeochannel sand trend confirming very high SOP grades**

	Hole ID	Sample interval		SOP grade
		From	To	
New results	PLAC022	17m	29m	10,213 mg/l
	PLAC023	0m	77m	10,423 mg/l
	and	125m	131m	7,983 mg/l

Goldphyre Resources (ASX: GPH) is pleased to announce strong final assays from the key basal and upper sands at its Lake Wells Potash Project, 500km north-east of Kalgoorlie.

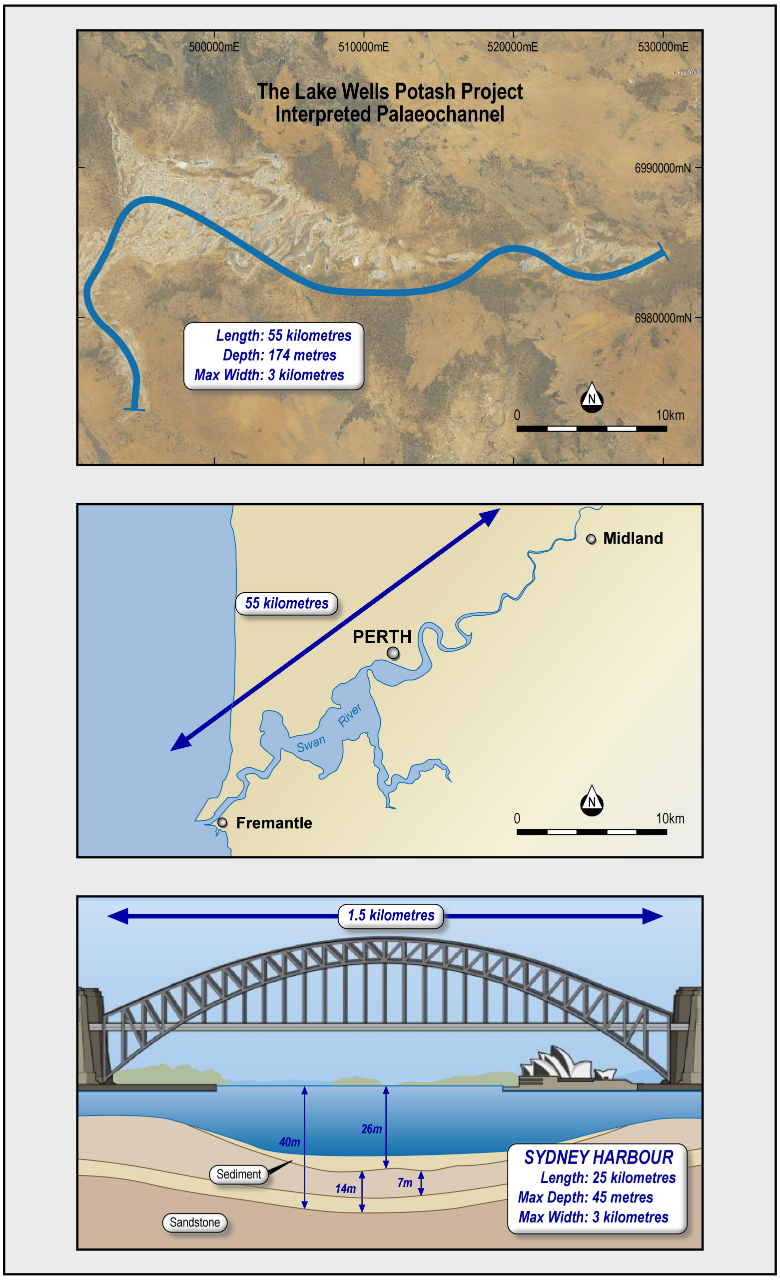

Figure 1: The scale of the Lake Wells Potash Project's palaeochannel system, the length of the Swan River in Western Australia and the Sydney Harbour

The assays stem from the seven remaining air-core holes from the May drilling program (Figure 2). The Company is on track to release the Lake Wells Potash Project's Maiden JORC Mineral Resource estimate in June 2016.

The average SOP grades of assays from the March and May drilling program are within the range estimated in the Lake Wells Potash Project Exploration Target[i].

The potential quantity and grade of the Exploration Target is conceptual in nature. There has not yet been sufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Goldphyre Executive Chairman Matt Shackleton said the latest assays further strengthened the Company's confidence in the project's ability to be a significant producer of sulphate of potash for the Australian market.

"The results are particularly strong as we move west. We have more than 55km of palaeochannel, which as Figure 1 below demonstrates, leads to the significant brine volume as detailed in our exploration target" Mr Shackleton said.

"With depths to basement of up to 174 metres, significant widths of sand layers in the palaeochannel sediments, high grades of SOP from surface to basement and our existing logistical advantage, we are firmly of the view that the Lake Wells Potash Project will deliver value for Goldphyre shareholders.

"We are now planning the installation of test production bores in the September 2016 quarter, which will provide further key information about the economic potential of Lake Wells."

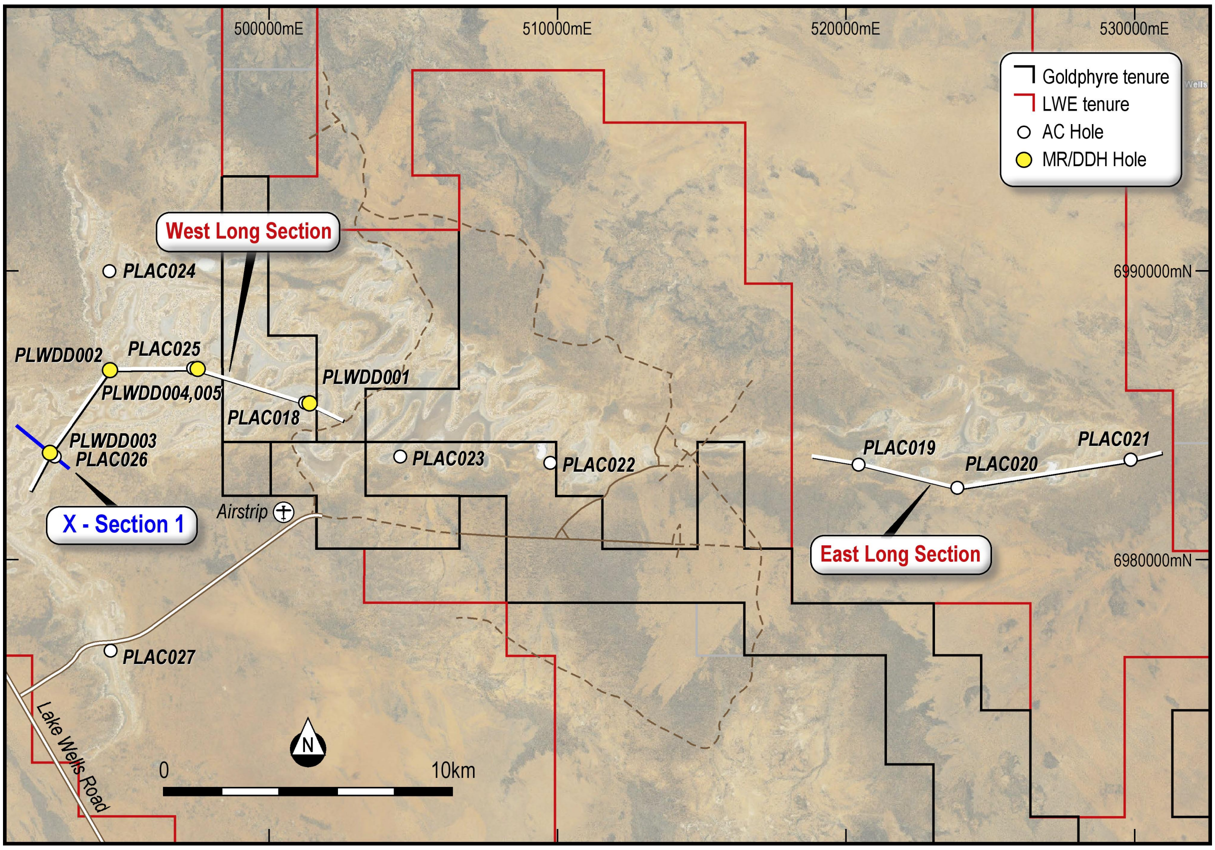

Figure 2: Drill hole location

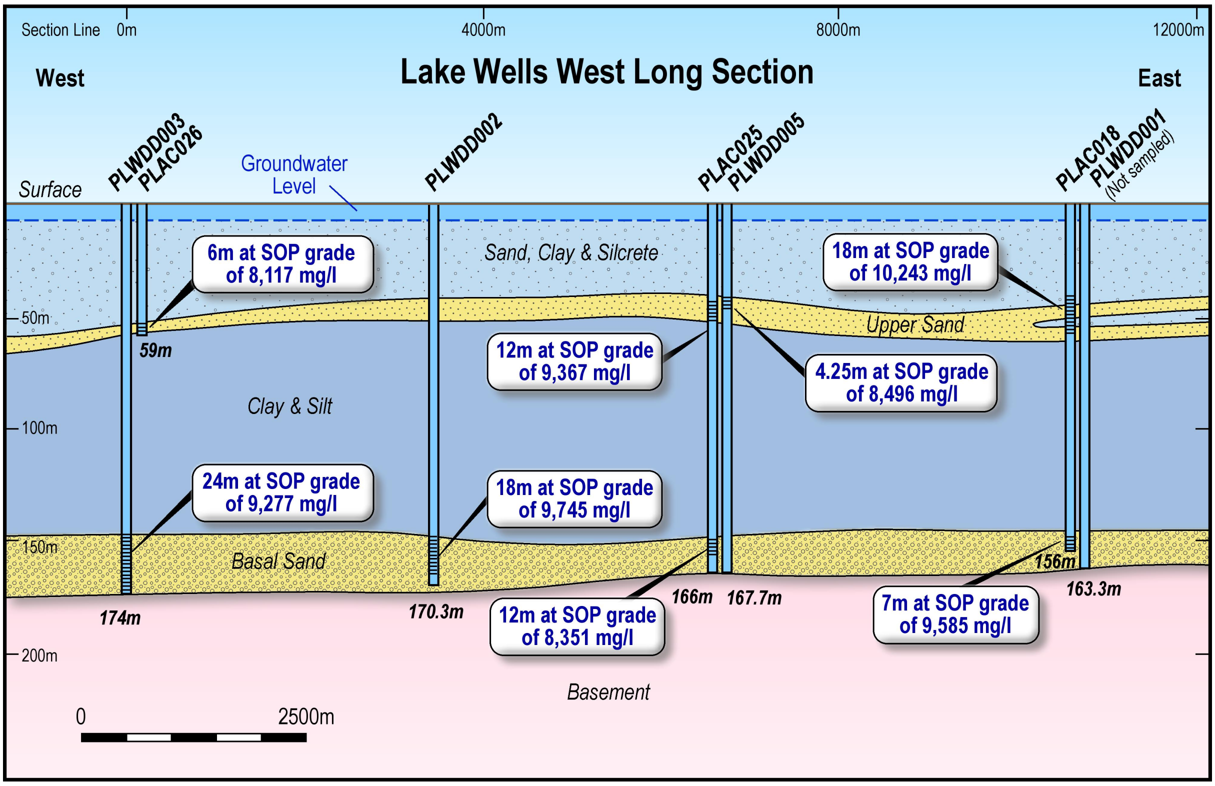

Figure 3: Long section of the western section of the project, showing basal and upper sand intersections

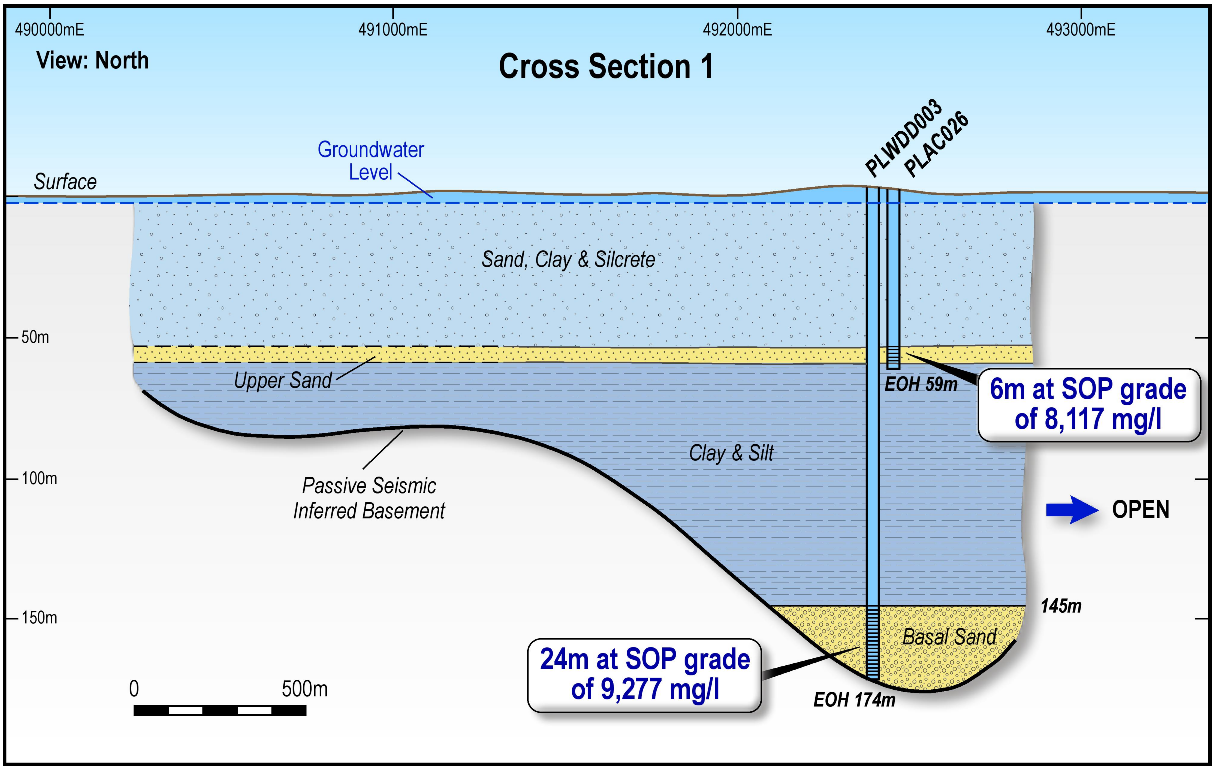

Figure 4: Cross section 1 showing drill holes PLWDD003 and PLAC026, western end of the Project

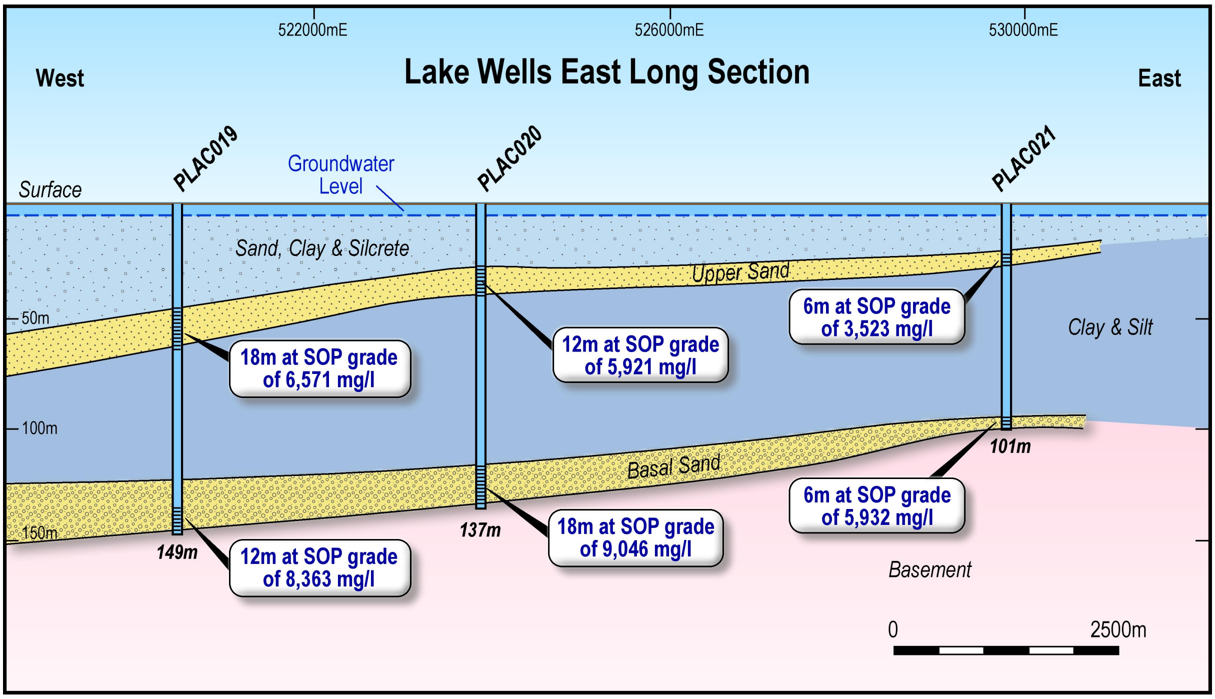

Figure 5: Long section of the eastern section of the project, showing basal and upper sand intersections

Technical discussion

Following the successful mud-rotary program in March[ii], where thick intersections of the high-yielding basal sand layer were recorded, further air-core drilling has been undertaken. The main aim of the air-core program was to assess the brine chemistry of the basal sand layer.

The basal sand intersections are considered highly significant because it is from this layer of the palaeochannel sediments that Goldphyre is proposing to abstract the largest volumes of the high-grade potash brines confirmed in previous drilling[iii].

In addition to confirming the significant and consistent potash grades at depth, this recent air-core campaign again intersected significant widths of the upper sand unit, previously not considered in the Exploration Target the Company published in March[i]. This upper aquifer has returned consistent brine concentrations with the potential to improve the yield possible from the palaeochannel system.

The sand units have been interpreted to comprise:

i. upper sand - typically medium to coarse-grained (0.5mm - 2mm) quartz sand with sub-angular to sub-rounded grains, and;

ii. basal sand - typically medium to coarse-grained (0.5mm - 2mm) quartz sand +/- minor well rounded quartz and lithic pebbles at the base.

Other potential aquifer units encountered in recent drilling include near surface coarse-grained evaporite and sand/silt, overlying friable and fragmental silcrete +/- laterite. Strong brine flows were commonly recorded in these lithology types.

Several drill-holes also returned a minor but persistent sand component to the clay/silt dominated inter-beds lying between the upper and basal sand units that exhibited strong brine flows.

The Exploration Target at the Lake Wells Potash Project is 6 - 37 million tonnes of contained sulphate of potash at a grade range of 8,900mg/l – 13,900mg/l. This estimate is based on the specific yield of the sand aquifer units. Goldphyre considers this the more relevant calculation because it represents the readily recoverable amount of potash. This in turn is the key figure used to calculate potential production rates and economic returns.

Goldphyre has also estimated a total in-situ brine of 79 - 123 million tonnes of contained sulphate of potash at a grade range of 11,400mg/l – 13,900mg/l' based on the porosity of the entire regolith profile. This calculation is disclosed for industry comparison purposes only and, while a percentage of brine is likely to drain from the non-sand regolith materials, does not represent the amount of potash the Company believes it can abstract at the Project.

Figures 3 – 5 depict the lithology and sand aquifer units encountered at the various drill sites reported here. The palaeochannel clays typically have a specific yield of 2% - 3%, meaning that only a small fraction of the brines held within them can be extracted. In contrast, the upper and basal sands typically have a specific yield of 23% - 28%[iv], meaning that nearly ten times the brine held in the sand layers can be extracted compared to the clay layers. The higher permeability and specific yield material present in the palaeochannel, the more brine can be recovered.

The Lake Wells Potash Project

A drilling program conducted at Lake Wells in July 2015[v] identified high-grade potash mineralisation both beneath the lake and the low dune areas surrounding the lake. That drilling program generated wide intercepts of high-grade potash to depths of 135m (down-hole), which was the depth capacity of the drill rig used.

Passive seismic survey programs have been conducted at the Project[vi] [vii]. This data permits the clear targeting of drill holes into the deepest parts of the palaeochannel. Unconsolidated sand-grit material often resides in the basal section of these palaeovalleys and the sand/grit material has a high permeability, which facilitates drainage of the overlying hydrogeological units.

Goldphyre has completed successfully mud rotary/diamond and air-core drilling programs aimed at understanding the basal sand layer and to confirm deep brine chemistry. The Company plans to release a Maiden JORC Resource Estimate in June 2016.

Contact

Matt Shackleton

Executive Chairman

e: m.shackleton@goldphyre.com.au

m: +61 (0)438 319 841

Media:

Paul Armstrong/Nicholas Read

Read Corporate

t: +61 (8) 9388 1474

Competent Person's Statement

The information in the announcement that relates to Exploration Targets is based on information that was compiled by Mr Jeffery Lennox Jolly. Mr Jolly is a principal hydrogeologist with AQ2, a firm that provides consulting services to the Company. Neither Mr Jolly nor AQ2 own either directly or indirectly any securities in the issued capital of the Company. Mr Jolly has over 30 years of international experience. He is a member of the AusIMM and the International Association of Hydrogeologists. Mr Jolly has experience in the assessment and development of palaeochannel groundwater resources, including the development of water supplies in hypersaline palaeochannels in Western Australia. His experience and expertise is such that he qualifies 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 Jolly consents to the inclusion in this report on the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration results is based on information compiled by Mr Brenton Siggs. Mr Siggs is the principal geologist of Reefus Geology Services, a firm that provides geological consulting services to the Company. Mr Siggs is a director and shareholder of Goldphyre WA Pty Ltd, a company that holds ordinary shares and options in the capital of Goldphyre Resources Limited (Goldphyre Resources Limited, Annual Report 2015). Mr Siggs is a Non-Executive Director of Goldphyre Resources Limited. He is a member of the Australasian Institute of Geoscientists. 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 "Australasian 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.

Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that 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 Collar table

Hole	Hole Type	Northing (m)	Easting (m)	RL	Dip	Azimuth	Hole Depth (m)
PLWDD001	MR/DDH	6985400	501330	449	-90	0	163.3
PLWDD002	MR	6986505	494440	453	-90	0	170.3
PLWDD003	MR	6983715	492410	449	-90	0	174
PLWDD004	MR	6986592	497518	452	-90	0	59.1
PLWDD005	MR	6986645	497517	451	-90	0	167.7
PLAC018	AC	6985429	501345	449	-90	0	156
PLAC019	AC	6983282	520417	452	-90	0	149
PLAC020	AC	6982466	523824	446	-90	0	137
PLAC021	AC	6983435	529841	450	-90	0	101
PLAC022	AC	6983325	509759	456	-90	0	29
PLAC023	AC	6983556	504517	452	-90	0	131
PLAC024	AC	6989993	494462	449	-90	0	10
PLAC025	AC	6986621	497503	455	-90	0	166
PLAC026	AC	6983714	492431	449	-90	0	59
PLAC027	AC	6976879	494504	448	-90	0	101.9

Appendix 2 Results table

				Mg	Na	Cl	TDS	HCO3 (Alk)	K	SO4	SOP
				mg/L	mg/L	mg/L	g/kg	mg/L	mg/L	mg/L	mg/L
SampleID	**HoleID**	**From**	**To**								
LPD7001	PLWDD005	42	46.25	9900	67900	118550	206	60	3810	27900	**8496.3**
LPD7003	PLWDD002	146	164	11900	76200	124550	235	70	4370	31200	**9745.1**
LPD7004	PLWDD003	147.5	171.5	11100	70400	124550	217	100	4160	29000	**9276.8**
LPD7007	PLAC018	5	11	10700	75000	132600	227	30	4480	28800	**9990.4**
LPD7008	PLAC018	11	17	11100	78300	137200	234	30	4730	29100	**10547.9**
LPD7009	PLAC018	17	23	11000	77900	139300	236	30	4740	28600	**10570.2**
LPD7010	PLAC018	23	29	11100	79700	139650	237	30	4810	29300	**10726.3**
LPD7011	PLAC018	29	35	11200	80500	139300	238	30	4800	29000	**10704**
LPD7012	PLAC018	35	41	11100	80000	140000	236	30	4780	28500	**10659.4**
LPD7013	PLAC018	41	47	10900	79200	138750	237	30	4710	28700	**10503.3**
LPD7014	PLAC018	47	53	10800	77700	138600	235	30	4620	28700	**10302.6**
LPD7015	PLAC018	53	59	10700	78000	138250	236	20	4450	29300	**9923.5**
LPD7016	PLAC018	143	149	5580	43300	72700	134	820	3350	15300	**7470.5**
LPD7017	PLAC018	149	155	11000	81900	141200	239	40	4470	30000	**9968.1**
LPD7021	PLAC018	155	156	5350	40500	69550	127	860	3270	14900	**7292.1**
LPD7023	PLAC019	5	11	5720	42800	71150	130	100	1800	17500	**4014**
LPD7024	PLAC019	11	17	6090	47800	79200	145	90	2040	18300	**4549.2**
LPD7025	PLAC019	17	23	6600	53600	90100	159	70	2310	19600	**5151.3**
LPD7026	PLAC019	23	29	7920	64600	110500	IS	50	2910	22700	**6489.3**
LPD7027	PLAC019	35	41	6710	60300	104850	178	30	2770	19000	**6177.1**
LPD7028	PLAC019	41	47	6620	59000	102400	176	40	2700	19200	**6021**
LPD7029	PLAC019	47	53	6750	64000	108550	187	30	2890	19100	**6444.7**
LPD7030	PLAC019	53	59	6760	63900	108200	186	40	2890	19400	**6444.7**
LPD7031	PLAC019	59	65	7040	67700	114000	195	20	3060	19700	**6823.8**
LPD7032	PLAC019	65	71	6960	65400	112400	192	30	3020	19600	**6734.6**
LPD7034	PLAC019	71	77	6780	64100	106950	186	40	2880	19500	**6422.4**

				Mg	Na	Cl	TDS	HCO3 (Alk)	K	SO4	SOP
				mg/L	mg/L	mg/L	g/kg	mg/L	mg/L	mg/L	mg/L
SampleID	**HoleID**	**From**	**To**								
LPD7035	PLAC019	77	83	6770	63800	108550	186	40	2910	19200	**6489.3**
LPD7036	PLAC019	83	89	6690	64500	108200	186	40	2920	19100	**6511.6**
LPD7038	PLAC019	89	95	6780	64400	109250	188	30	2940	19200	**6556.2**
LPD7039	PLAC019	95	101	6790	65400	109950	189	30	2970	19400	**6623.1**
LPD7040	PLAC019	101	107	6800	65800	111000	189	20	2970	19800	**6623.1**
LPD7041	PLAC019	107	113	350	3420	5600	12	370	340	1050	**758.2**
LPD7042	PLAC019	113	119	1260	12900	21450	42	360	770	3570	**1717.1**
LPD7043	PLAC019	119	125	575	5730	10100	19	330	450	1590	**1003.5**
LPD7045	PLAC019	125	131	2390	24300	37300	76	210	1300	6510	**2899**
LPD7046	PLAC019	131	137	1810	17900	28800	59	270	1030	4980	**2296.9**
LPD7047	PLAC019	137	143	7250	73800	126700	212	30	3590	20100	**8005.7**
LPD7048	PLAC019	143	149	7850	77800	135750	226	30	3910	21300	**8719.3**
LPD7050	PLAC020	0	5	3480	33900	57800	106	100	1710	10100	**3813.3**
LPD7051	PLAC020	5	11	3410	33300	57550	104	90	1670	10100	**3724.1**
LPD7052	PLAC020	11	17	3460	33300	57550	106	90	1680	10800	**3746.4**
LPD7053	PLAC020	17	23	4940	43800	74550	136	70	2130	15500	**4749.9**
LPD7054	PLAC020	23	29	4740	44300	73400	133	70	2090	14900	**4660.7**
LPD7055	PLAC020	29	35	6320	58300	95500	170	60	2620	19100	**5842.6**
LPD7057	PLAC020	35	41	6430	59000	96450	170	60	2690	19500	**5998.7**
LPD7058	PLAC020	41	47	5960	55800	91200	162	70	2540	18200	**5664.2**
LPD7059	PLAC020	47	53	5660	53100	88550	158	50	2410	17300	**5374.3**
LPD7060	PLAC020	53	59	5720	51900	87550	157	60	2400	17100	**5352**
LPD7061	PLAC020	59	65	5670	51900	85850	154	60	2410	17100	**5374.3**
LPD7062	PLAC020	65	71	6050	55400	92650	164	50	2540	18200	**5664.2**
LPD7063	PLAC020	71	77	6060	54900	91900	163	50	2560	17900	**5708.8**
LPD7064	PLAC020	77	83	5940	54000	91600	163	50	2500	17600	**5575**
LPD7065	PLAC020	83	89	6070	55600	93750	166	40	2560	18300	**5708.8**
LPD7066	PLAC020	89	95	6080	55600	95600	170	40	2580	18200	**5753.4**
LPD7067	PLAC020	95	101	6030	56100	93500	167	40	2580	17800	**5753.4**
LPD7068	PLAC020	101	107	6340	59000	98200	174	30	2670	19100	**5954.1**
LPD7069	PLAC020	107	113	7620	73200	127300	211	40	3680	20200	**8206.4**
LPD7070	PLAC020	113	119	7720	74800	124550	211	40	3720	20600	**8295.6**
LPD7072	PLAC020	119	125	8220	79400	132450	222	10	3970	22100	**8853.1**
LPD7073	PLAC020	125	131	8270	80800	134550	226	20	3970	22100	**8853.1**
LPD7074	PLAC020	131	137	8800	84500	143450	239	<10	4230	23600	**9432.9**
LPD7075	PLAC021	11	17	4230	33800	56500	106	70	1350	14100	**3010.5**
LPD7076	PLAC021	17	23	4320	39900	65300	118	60	1610	13800	**3590.3**
LPD7077	PLAC021	23	29	4190	38900	64600	117	60	1580	13200	**3523.4**
LPD7078	PLAC021	29	35	3750	35300	57750	105	50	1460	11900	**3255.8**
LPD7079	PLAC021	35	41	3910	36600	55450	110	50	1520	12600	**3389.6**
LPD7080	PLAC021	41	47	4740	42000	69350	126	50	1720	15500	**3835.6**
LPD7081	PLAC021	47	53	4180	37700	69700	114	50	1540	13400	**3434.2**
LPD7082	PLAC021	53	59	3890	35000	61950	107	40	1460	12600	**3255.8**
LPD7083	PLAC021	59	65	3830	34400	57900	107	30	1460	12300	**3255.8**
LPD7084	PLAC021	65	71	3620	33200	54750	102	40	1410	11600	**3144.3**
LPD7085	PLAC021	71	77	4010	36200	58800	110	30	1520	12900	**3389.6**
LPD7086	PLAC021	77	83	4200	38800	63900	118	20	1610	13700	**3590.3**

				Mg	Na	Cl	TDS	HCO3 (Alk)	K	SO4	SOP
				mg/L	mg/L	mg/L	g/kg	mg/L	mg/L	mg/L	mg/L
SampleID	**HoleID**	**From**	**To**								
LPD7087	PLAC021	83	89	3930	36500	60200	112	20	1540	12800	**3434.2**
LPD7089	PLAC021	89	95	5360	56100	91200	159	20	2440	15900	**5441.2**
LPD7090	PLAC021	95	101	5820	58200	100000	169	30	2660	17100	**5931.8**
LPD7093	PLAC022	5	11	3570	37500	61950	110	180	2150	9690	**4794.5**
LPD7094	PLAC022	11	17	5800	56900	98250	170	110	3310	16400	**7381.3**
LPD7095	PLAC022	17	23	7480	76900	133650	219	50	4530	20300	**10101.9**
LPD7097	PLAC022	23	29	7530	78500	135900	222	50	4630	19600	**10324.9**
LPD7099	PLAC023	0	5	10100	75200	129400	226	40	4450	27900	**9923.5**
LPD7100	PLAC023	5	11	10600	77000	135550	231	40	4780	28800	**10659.4**
LPD7101	PLAC023	11	17	10700	77200	136450	233	40	4730	29400	**10547.9**
LPD7103	PLAC023	17	23	10900	77300	137700	233	40	4730	30300	**10547.9**
LPD7104	PLAC023	23	29	11000	80200	140850	240	40	4870	30300	**10860.1**
LPD7106	PLAC023	29	35	10800	80200	140650	241	40	4840	29900	**10793.2**
LPD7108	PLAC023	35	41	10800	81200	141200	242	40	4860	30000	**10837.8**
LPD7109	PLAC023	41	47	10500	78400	135900	232	40	4700	29700	**10481**
LPD7110	PLAC023	47	53	10100	78700	137500	235	40	4600	29400	**10258**
LPD7111	PLAC023	53	59	9500	81000	139950	238	30	4400	29400	**9812**
LPD7112	PLAC023	59	65	9590	77400	134000	229	<10	4240	28100	**9455.2**
LPD7113	PLAC023	65	71	10600	78900	139250	236	30	4710	29900	**10503.3**
LPD7114	PLAC023	71	77	10000	78300	137300	231	40	4560	28500	**10168.8**
LPD7116	PLAC023	77	83	475	4970	7700	15	140	290	1530	**646.7**
LPD7117	PLAC023	83	89	480	6600	9950	19	220	360	1770	**802.8**
LPD7118	PLAC023	89	95	440	5620	8650	17	IS	320	1800	**713.6**
LPD7119	PLAC023	95	101	265	1980	3250	7	140	120	900	**267.6**
LPD7120	PLAC023	101	107	565	8590	13200	25	160	450	2340	**1003.5**
LPD7121	PLAC023	107	113	330	2840	4700	9	140	170	1050	**379.1**
LPD7122	PLAC023	113	119	375	5160	8150	15	160	260	1680	**579.8**
LPD7123	PLAC023	119	125	5730	53300	88050	157	120	2500	18600	**5575**
LPD7125	PLAC023	125	131	8120	74900	128150	218	30	3580	26300	**7983.4**
LPD7129	PLAC024	0	5	2990	19500	32350	68	80	1220	10100	**2720.6**
LPD7130	PLAC024	5	10	4170	23900	42950	86	160	1430	13100	**3188.9**
LPD7131	PLAC025	5	11	5990	41700	73600	136	90	2950	15400	**6578.5**
LPD7132	PLAC025	11	17	6570	44400	79050	144	40	3140	16900	**7002.2**
LPD7133	PLAC025	17	23	6960	47300	83650	150	270	3310	18000	**7381.3**
LPD7134	PLAC025	23	29	6610	44900	78000	142	50	3150	16700	**7024.5**
LPD7135	PLAC025	29	35	7160	47200	84500	152	40	3340	18100	**7448.2**
LPD7136	PLAC025	35	41	6390	44500	76750	140	40	3050	16400	**6801.5**
LPD7137	PLAC025	41	47	10200	73300	125900	219	10	4250	28600	**9477.5**
LPD7139	PLAC025	47	53	10500	73600	126950	222	<10	4150	28700	**9254.5**
LPD7140	PLAC025	53	59	10400	73000	125700	219	10	4100	29600	**9143**
LPD7141	PLAC025	59	65	9610	68300	115500	204	20	3950	27200	**8808.5**
LPD7142	PLAC025	65	71	9290	64100	111800	198	30	3880	25500	**8652.4**
LPD7143	PLAC025	71	77	9180	65100	112500	197	30	3840	25700	**8563.2**
LPD7144	PLAC025	77	83	9670	68000	118850	210	10	4000	27500	**8920**
LPD7145	PLAC025	83	89	9710	68200	119200	210	20	3960	27700	**8830.8**
LPD7146	PLAC025	89	95	10000	69300	119900	215	10	4070	28500	**9076.1**
LPD7147	PLAC025	95	101	10400	73000	125900	222	<10	4110	29900	**9165.3**

SampleID	HoleID	From	To	Mg	Na	Cl	TDS	HCO3 (Alk)	K	SO4	SOP
				mg/L	mg/L	mg/L	g/kg	mg/L	mg/L	mg/L	mg/L
LPD7149	PLAC025	101	107	10100	70800	124650	IS	20	3960	29300	**8830.8**
LPD7150	PLAC025	107	113	7700	55400	95750	175	20	3000	22200	**6690**
LPD7151	PLAC025	137	143	5510	44400	73400	137	150	2120	17500	**4727.6**
LPD7152	PLAC025	143	149	9680	76600	128000	226	20	3710	30600	**8273.3**
LPD7153	PLAC025	149	155	9650	75600	126950	223	20	3740	30600	**8340.2**
LPD7155	PLAC025	155	161	9590	77000	127100	224	20	3750	30900	**8362.5**
LPD7158	PLAC026	11	17	5690	43800	73950	137	50	3110	15900	**6935.3**
LPD7159	PLAC026	17	23	6550	49500	83450	150	40	3410	18100	**7604.3**
LPD7160	PLAC026	23	29	6490	48500	83800	153	40	3410	18200	**7604.3**
LPD7161	PLAC026	29	35	6480	48200	85050	153	40	3390	18500	**7559.7**
LPD7163	PLAC026	35	41	6770	50000	86450	156	50	3460	19100	**7715.8**
LPD7165	PLAC026	41	47	7450	52400	89800	180	70	3480	20800	**7760.4**
LPD7166	PLAC026	47	53	8860	56600	100350	173	10	3640	24700	**8117.2**
LPD7168	PLAC027	11	17	3630	29700	51600	97	70	2230	11900	**4972.9**
LPD7173	PLAC027	29	35	4750	34000	60400	115	50	2540	13800	**5664.2**
LPD7174	PLAC027	35	41	5020	35500	62850	117	40	2590	13600	**5775.7**
LPD7175	PLAC027	47	53	4720	34400	59500	111	50	2410	12800	**5374.3**
LPD7177	PLAC027	53	59	5460	40600	70250	131	20	2770	14700	**6177.1**
LPD7178	PLAC027	59	65	3820	29400	50000	95	20	1900	10700	**4237**
LPD7179	PLAC027	71	77	6070	46700	79400	145	40	3050	17000	**6801.5**
LPD7180	PLAC027	83	89	6000	46000	79950	148	30	3040	17000	**6779.2**
LPD7181	PLAC027	89	95	6090	48200	80800	148	30	3120	17100	**6957.6**
LPD7182	PLAC027	95	101	5920	47100	80800	148	30	3060	16900	**6823.8**

Appendix 3 Reporting of Exploration Results – JORC (2012) Requirements

Section 1: Sampling Techniques and Data

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of 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.*	• Brine sampling was completed via Mud Rotary-Diamond (MR-DDH) cased with PVC and Air core (AC) drilling technique. • AC Drilling - Groundwater (brine) and selective mineral (lithological) samples collected. Brine sample recovery procedure included collecting brine sample through the cyclone in a clean 9l bucket at the start of drilling each 6m rod. Where possible, flow rate data was logged via air lifting using a stop watch and 9l bucket beneath the cyclone. Not every rod may produce a brine sample depending upon formation characteristics. Flow rate information collected using compressed air drill technique is considered indicative. Regolith samples from AC drilling were collected from the cyclone and laid out in rows of 10 or 20 for geological logging and (where applicable) mineral sampling. Particle size distribution (PSD) samples (weight 1-2 kg) were collected over representative sample intervals in the majority of drill holes. Results for the PSD samples are pending. Mud Rotary Drilling - 50mm PVC cased Mud Rotary drill holes were airlifted for 1-2 hours using a 180cfm trailer-mounted compressor to remove remnant drilling fluids introduced at time of drilling. A pressure transducer was then placed in the borehole to measure water levels, while a small 40mm submersible pump pumped brine to the surface. After 30 minutes, the brine was sampled and the transducer data downloaded to allow estimation of hydraulic parameters. • Selective triple tube PQ core was logged on site, sealed in plastic and transported in plastic trays to Perth office for further processing.
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*	• Mud Rotary-Diamond Drilling (MR-DDH) (5 holes, Appendix 1) was completed by Terra Drilling, Kalgoorlie, using a Hanjin Powerstar 7000 track-mounted diamond rig. Selective PQ Triple tube Core (diameter

Criteria	JORC Code Explanation	Commentary
	oriented and if so, by what method, etc).	85mm, no orientation) used to penetrate hard regolith zones and basement was collected with core recovery generally over 90%. • Air core (AC) drilling using Schramm 685 with 125mm vacuum blade bit (10 holes, Appendix 1) was completed by Austral Drilling, Perth. • All holes vertical.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• See Sampling Techniques. • AC Drilling - Drilling with care (eg. clearing hole at start of rod, regular cyclone cleaning) but majority of lithological samples moist/wet due to primary aim of targeting brine samples. Mud Rotary Drilling – Lithological sample recovery and quality was generally low due to poor development of wall cake and mixing with drill cuttings from entire hole column. • Sample recovery/grade relationship not applicable to groundwater brine sampling. All brine samples collected in 80ml bottles.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• AC Drilling - Qualitative lithological logging completed by inspection of washed Air–core drill cuttings at time of drilling with end-of-hole (EOH) samples and 1m chip samples collected in plastic chip trays for future reference. Flow rate data was collected where possible along with Magnetic Susceptibility data (Fugro RT-1 unit). Mud Rotary-Diamond Core drilling - Triple tube PQ core lithologically logged. Logging is qualitative in nature.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• PQ Triple tube core awaiting core cutting for processing. • AC Drilling - Brine water samples were collected with a clean bucket from the rig cyclone. 80ml plastic sterile sample bottles were used to collect sample. At the end of each rod, air turned on and brine (if present) flows through cyclone and sample collected after initial discharge flow of brine. Mud Rotary Drilling – Brine samples collected from small submersible pump in 50mm PVC cased holes after sufficient airlifting to remove traces of drilling fluids. • Reference brine solution provided by independent laboratory used for QA/QC analysis with a sample ratio of approx. 1:10. Duplicate samples (approx. 1:20) were also collected for QA/QC analysis and despatched to laboratory for brine analysis. Archive brine sample collected for each

Criteria	JORC Code Explanation	Commentary
		laboratory sample. A small sample batch (~10%) despatched to umpire lab for comparison purposes. • Once collected, brine samples were kept in cool, dark storage and delivered to laboratory within 7 days of field collection. Major cations were analysed using either ICP-AES or ICP-MS techniques. Analysis of Cations in brine solution by Mohr Titration. Sulphate was calculated from ICP-AES Determination. Specific Gravity (SG) calculated using Pycnometric method. Total Dissolved Solids (TDS) calculated by Gravimetric method. • Sample size (80 ml bottle) appropriate for brine 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.*
	• *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 (ie lack of bias) and precision have been established.*
		• The samples were collected for major cation (Ca, K, Na, Mg) and anions (Cl, sulphate), alkalinity, Specific Gravity, Total Dissolved Solids (TDS) and selective multi-element (dissolved metals) analysis (Appendix 2). This work was completed at Bureau Veritas Laboratory, Perth. Samples were analysed with Lab Codes GC006, GC026, GC033, GC004, and SO101 and SO102 methods. Reference brine solution samples dispatched to laboratory reported an average error of <10%. Umpire samples were sent to ALS Metallurgy Laboratory in Perth.
		• Potash brine results calculated with primary potassium (K) values and K_2SO_4 equivalent. No upper and lower cuts applied. For multi-element suite - (Lab Code SO101 and SO102) elements included (but not limited to): Al, As, Cr, Co, Fe, Pb, Ni, U, Th, Zn, V). No anomalous or significant multi-element results recorded in brine samples.
		• Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy.
		• Further Data QA/QC checks undertaken include:
		  ○ Database QA/QC reporting including box and whisker plots
		  ○ Primary laboratory (Bureau Veritas) duplicate comparison and interlaboratory (Bureau Veritas and ALS Metallurgy) duplicate comparison
		• These checks demonstrate acceptable levels of accuracy and consistency in the dataset.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• QA/QC procedures included reference solution and duplicate samples collected and analysed at both the primary and independent umpire laboratory to evaluate analytical consistency. Internal laboratory standards and instrument calibration are completed as a matter of course. • Sample data was captured in the field and digital data entry completed both in the field and in the Company's Perth office. All drill and sample data was then loaded into the Company's DATASHED database and validation checks completed to ensure data accuracy. Analytical results as csv and pdf files were received from the laboratory.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill collars were surveyed by handheld Garmin 60 GPS with horizontal accuracy (Easting and Northing values) of +-5m. • Grid System – MGA94 Zone 51. • Topographic elevation using published GSWA geological maps and hand held GPS with Z range +-15m suitable for relatively flat salt lake/dune terrain.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Hole spacing on approximate 3-6 km drill pattern targeted upper and basal sand paleochannel zones with 6m sample intervals (where possible) across the targeted salt lake system and meets SEG and Bench mark standards for Inferred Brine Resource classification (Houston, Butcher, Ehren, Evans, Godfrey (2012) The Evaluation of Brine Prospects and the Requirement for Modification to Filing Standards. Economic Geology v106, pp1225-1239. The data spacing is considered sufficient to establish the degree of geological and grade continuity appropriate for mineral resource estimation procedures. • Samples taken from intervals downhole are considered indicative due to groundwater seepage below the static water table level (SWL) and it is difficult to estimate the degree of down-hole brine 'mixing' using the Air-core drilling technique. Brine samples collected every 6m where possible, are to some extent, naturally composited due to the nature of the sample medium and compressed air drill technique.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures*	• Vertical drill holes targeted the deepest sections of the palaeovalley system within interpreted flat lying transported sedimentary profile and weathered-transitional basement rocks.

Criteria	JORC Code Explanation	Commentary
	is considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	• *The measures taken to ensure sample security.*	• Samples collected from the field airfreighted to Perth laboratory with sealed eskies or delivered by Company personnel to laboratory direct.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Data reviews are summarised under QA/QC of data above.

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.* • *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 POTASH PROJECT, located 140 km northeast of Laverton, Western Australia consists of tenements: E38/1903, E38/2113, E38/2114, E38/3021, E38/3039, E38/2742 and E38/2744. All tenements held 100% by Goldphyre Resources Limited (GPH) except E38/2742 and E38/2744 held by Lake Wells Exploration Pty. Ltd (LWE). GPH has entered into a Sale and Split Commodity Agreement (dated on or about 11th December, 2015) with LWE. All tenements are in good standing. 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. • At time of writing, the tenements have expiry dates ranging between 1/5/2017 and 9/8/2020.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous reconnaissance AC and Goldphyre AC/RC drilling has been completed in the Lake Wells – WEST Area. Companies that have completed previous exploration in the region include WMC Ltd, Gold Partners Ltd, Kilkenny Gold NL, Anglogold Ashanti Australia Ltd, Croesus Mining NL and Terra Gold Mining Ltd.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Targets include: Brine hosted potash mineralisation associated with the Lake Wells playa lake system.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *•easting and northing of the drill hole collar* *•elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *•dip and azimuth of the hole* *•down hole length and interception depth* *•hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the*	• Air-core drilling and Mud Rotary-Diamond drill data completed by Goldphyre Resources Limited included in report and collar information for drill holes is included in Appendix 1.

Criteria	JORC Code Explanation	Commentary
	Competent Person should clearly explain why this is the case.	
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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Composite significant intercepts are reported as down-hole length and no minimum and maximum cut-off grades have been applied. • Average Sulphate of Potash (SOP) values reported in the table(s) above from brine samples collected in a particular interval although several drill holes returned sample intervals in which groundwater was present but insufficient brine sample was available for sampling and analysis. No metal equivalent values or formulas used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The brine deposit is understood to be essentially a flat resource hosted within a sedimentary aquifer and the underlying weathered basement. Vertical drillhole intercepts are interpreted to represent the true thickness of the deposit.
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 along with cross and long section figures are included in the accompanying report.
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, SO4, and Mg results for the samples collected are displayed in tables and/or appendices in the accompanying report above.
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.*	• AC drilling in 2015 provided encouragement for further potash brine exploration. Geophysical data (TMI, FVD, Gravity) processing along with extensive previous explorers' drill data has contributed further to the understanding of the salt lake system and palaeotopography on 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).* • *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 follow up drilling program(s) (including test bore drilling) are under preparation. • Extension and infill areas around current drilling as shown in diagram(s) included in the accompanying report will be assessed.

i Refer to ASX announcement 8 March 2016 'Major Sulphate of Potash Exploration Target at Lake Wells'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 8 March 2016 announcement.

ii Refer to ASX announcement 7 April 2016 'Drilling intersects substantial widths of key basal sands'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 7 April 2016 announcement.

iii Refer to ASX announcement 26 August 2015 'Lake Wells Potash Drilling Results'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, and in the ASX announcement 15 October 2015 'Quarterly Activities Report', Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 26 August 2015 announcement.

iv Johnson, D.J. 1967. Specific Yield. Compilation of specific yields for various materials. U.S. Geol.Survey. Water Supply Paper 1662-D, 74 pp.

v Refer to ASX announcement 26 August 2015 'Lake Wells Potash Drilling Results'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, and in the ASX announcement 15 October 2015 'Quarterly Activities Report', Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 26 August 2015 announcement.

vi Refer to ASX announcement 15 December 2015 'Seismic Survey Defines Extensive, Deep Palaeovalley'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 15 December 2015 announcement.

vii Refer to ASX announcement 8 February 2016 'Second Seismic Survey Doubles Size of Deep Palaeovalley'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, Goldphyre Resources Limited, its directors, officers and agents, are not aware of any new information that materially affects the information contained in the 8 February 2016 announcement.