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LD DRILLING RESULTS

Excellent Data Received for Drillholes LDDH1501-1507

Highlights

- **7 core holes (LDDH1501-1507) completed at the LD SOP Project to an average depth of 118m.**
- **High brine content (40+%) sediment averaged 83m in thickness in completed holes.**
- **SOP grade of high porosity sediment averaged 6.9kg/m^3 in-situ.**
- **SOP content of extracted brines averaged approximately 12.7kg/m^3.**
- **LDDH1508 nearing completion – currently at 126m.**
- **Substantial (10+m) thickness of intercalated friable sandstone/running sands encountered in LDDH1507 & 1508 at 68-80m depth.**
- **Equipment acquired for on lake borehole drilling and pilot pond construction.**

Reward Minerals Limited ("**Reward**" or "**the Company**") is pleased to advise of significant progress in its Resource definition activities at the LD Sulfate of Potash ("SOP") Project.

The LD SOP Project is located in the north of Western Australia. The Project currently contains a 24.4Mt JORC Indicated SOP Resource grading 12.37kg/m^3 SOP in brine, from surface down to 4m depth. The Company is currently drilling to expand the existing Resource at depth aimed at providing a substantially greater in-situ SOP Resource.

To date the Company has completed seven core holes on the surface of LD to establish the lake stratigraphy and brine parameters over a substantial portion of the lake.

The holes drilled to date cover over 26 kilometres of LD in a north-south direction and approximately 6 kilometres east-west. Analytical data has been received for holes LDDH1501-1507. The eighth hole, LDDH1508, is still in progress (126 metres) at the time of reporting.

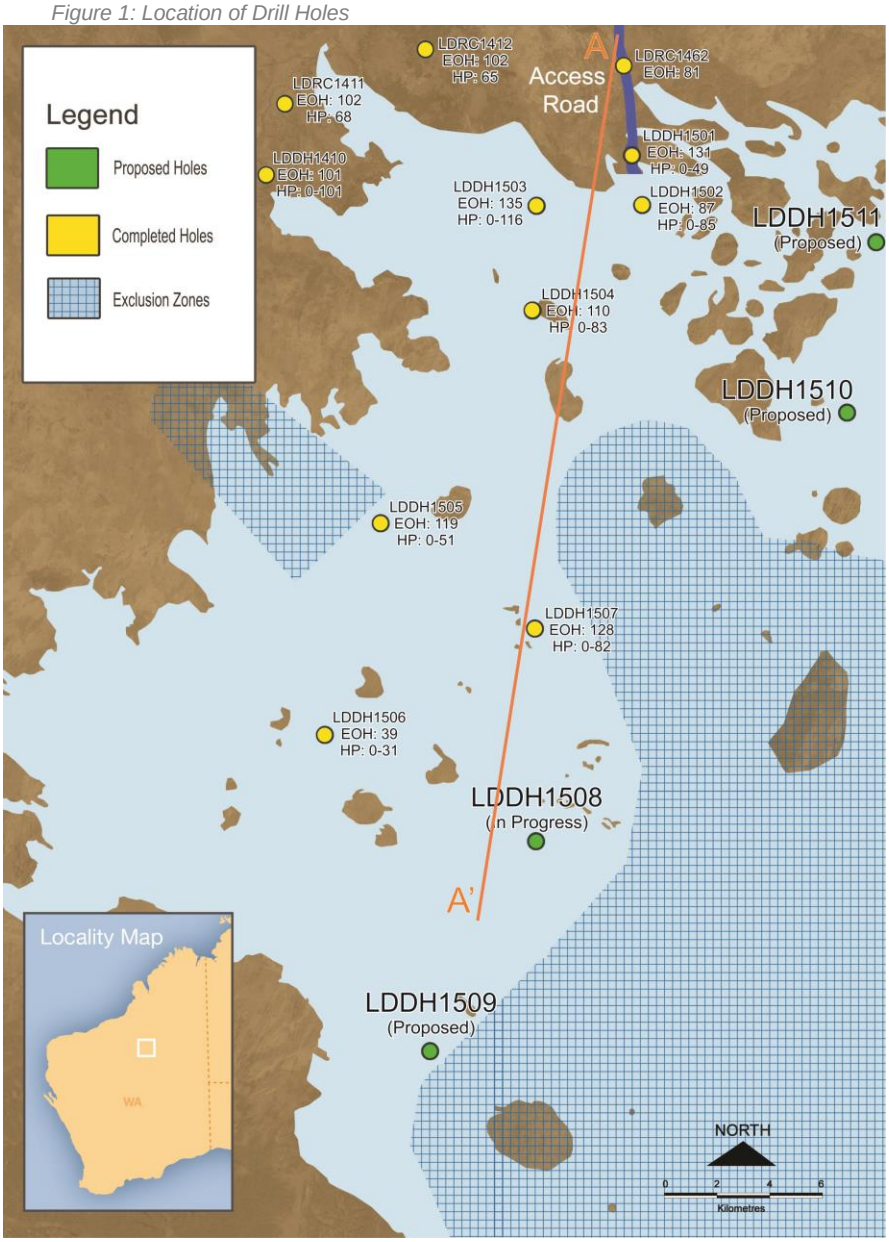
Collar positions and depth details for the holes are shown in Figure 1 (hole co-ordinate details are provided in Appendix 1).

Despite extremely difficult drilling conditions with considerable broken ground the coring program continues to progress satisfactorily. Core drilling will continue as necessary to define a JORC compliant in-situ SOP Resource and will be followed up by mud rotary drilling of appropriately sized holes for determining brine pumping rates and extraction parameters.

Summary of Results

Results of the drilling program at LD to date have been excellent, particularly from the more recent core drilling. Results obtained are summarised in Table 1. Detailed analytical data for the core samples taken from LDDH1502, 1505-1507 are provided in Appendices 2 & 3 (data for LDDH1501, 1503 & 1504 have been previously reported).

Figure 1: Location of Drill Holes



Important results from the drilling and analyses are as follows.

1) The average depth of holes LDDH1501-1507 was 88 metres. LDDH1506 was terminated at 39 metres when it entered cavernous ground and further core recovery was not possible. Average depth of the other six holes was 118 metres. Core recovery was generally good (80+%) except where holes entered voids (LDDH1506) or friable sandstone/running sand zones, particularly in holes LDDH1507-1508 (see Photos 4 & 5).

   While the heliportable coring rig is somewhat underpowered, performance is regarded as very good under the conditions and a tribute to the drilling crew on site.

2) The average thickness of +40% brine content (i.e. 40+% porosity) sediments for the core holes was 75 metres. Excluding abandoned hole LDDH1506 the average was 83 metres.

3) The in-situ SOP content of the high porosity sediments was remarkably consistent averaging 6.88kg of SOP per m^3 of sediment. This includes noticeably higher grades in the near surface layer (0-10 metres). This effect has been reported earlier and is consistent with the previously reported LD Resource data (0-4 metres). The Magnesium Sulfate ("**SOM**") content of the same sediment profiles averaged 6.95kg/m^3 (excluding LDDH1506 data). The SOP and SOM figures and are non-weighted averages.

   Magnesium and Sulfate in the brines are at levels which will result in crystallisation of Potash in the form of Shoenite/Leonite upon the evaporation of brines.

4) The SOP content of the brines extracted from the cores likewise have been quite consistent and of excellent grade. The brine SOP grade averaged 12.74kg SOP per m^3 of brine, which is close to the average grade of the current shallow LD Resource (24.4Mt at 12.37kg/m^3 SOP).

Table 1: Summary of In-situ Sediment & Brine SOP Results

Hole ID	LDDH1501	LDDH1502	LDDH1503	LDDH1504	LDDH1505	LDDH1506	LDDH1507
Total Hole Depth	131m	87m	135m	110m	119m	39m(2)	128m
High Porosity Section of Hole (40+%)	0-49m	0-85m	0-116m	0-83m	0-51m	0-31m	0-82m
Moisture % (H_2O)(1)	-	26.4%	26.7%	25.4%	22.2%	27.4%	21.8%
Mass Leached % (w/w)1	-	35.0%	37.3%	34.7%	30.1%	39.8%	30.4%
In-Situ SOP Grade (kg/m^3)1,3	**-**	**6.94**	**7.40**	**6.80**	**6.48**	**9.54**	**6.78**
In-Situ SOM Grade (kg/m^3)1,6	-	5.89	7.66	7.60	7.04	13.93	6.54
Core SG1	-	1.86	1.86	1.93	1.97	1.78	1.94
Porosity 1,4	47.1%	54.5%	60.2%	57.7%	48.8%	61.5%	49.4%
Brine SOP Grade (kg/m^3)1,5	**-**	**13.0**	**12.3**	**12.0**	**13.0**	**15.6**	**13.6**
Brine SOM Grade (kg/m^3)1,5,6	-	10.8	13.2	13.4	13.4	22.3	12.5

Explanatory Notes:
1: Data reported in the table refers to the high brine content (Porosity) core section only. Numbers provided are non-weighted averages (approximates only). Additional data is provided for the deeper horizons in the Appendices.
2: Terminated in cavity at 39 metres.
3: SOP (K_2SO_4) content of in-situ sediment in kilograms of SOP per cubic metre of sediment.
4: The 'Porosity' figure is the (calculated) volume of brine leached from a sample of core versus the volume of the same core sample. Values calculated in this method correlate well with Porosities determined independently by SGS Laboratories.
5. Estimate of the SOP content in the brine entrained in the section of core being reported. The brine SOP figure is estimated assuming a certain brine SG based on the soluble salts leached from the core and the moisture content of the core.
6. SOM refers to Sulfate of Magnesium, $MgSO_4$.

In respect of the brine SOP data it is important to note that the values quoted are non-weighted averages over the high porosity sections of the cores and are based on estimated in-situ brine SG values (see JORC information in Appendix 4 for more information). In practice it is difficult to accurately assess the brine content of the core received due to seepage and evaporation losses during transit. While indicative only, the data presented are regarded as a very useful guide as to brine grades likely to result from pump testing of bore holes to be drilled in the same locations.

Of particular significance in relation to the brine data is that notwithstanding the brine content of the sediments decreases (lower porosity) with depth, the SOP grade of the brine entrained in sediments remains reasonably high grade. This is encouraging in relation to brines recoverable from potentially high permeability sandstone/running sand horizons encountered at depth in several holes (see below).

5) **The key parameter from the drilling and testwork to date is the figure of soluble SOP content per m^3 of sediment: 6.88kg/m^3.** This figure can be used directly to estimate in-situ SOP Resources within the area drilled when acceptable drilling density and grade parameters become available. Preliminary assessment suggests substantial SOP Resource potential exists for the LD playa system, but additional work is required to define the Resource parameters for JORC compliance.

6) As mentioned in 5 above, the data now available for LD is encouraging in terms of substantial in-situ SOP Resource potential. Follow up work is in progress to establish the extractability of the brine from the in-situ mineralisation (i.e. the percentage of brine recoverable versus time).

   In this context, an extremely encouraging feature of recent drilling has been the discovery of substantial widths of high permeability friable sandstone and running sands at depth in several of the latest holes drilled.

   For example, in LDDH1507 the friable sandstone layer ran from approximately 67-83 metres while in LDDH1508 the horizon was from approximately 70-80 metres (see Photos 4 & 5). It appears that LDDH1507 & 1508 may have encountered significant Palaeochannel or deltaic sediments in the central south-eastern sector of LD.

   Considerable additional drilling is required to define the aquifer volume parameters but the discovery is extremely encouraging in terms of potential brine flows and Resource recovery from the system.

   Importantly the SOP grade of the brine extracted from the high permeability zone of LDDH507 (69.4m depth) was excellent at approximately 10.6kg SOP/m^3 of brine. Data for the high permeability zone in LDDH1508 will be available shortly.

Resource Implications

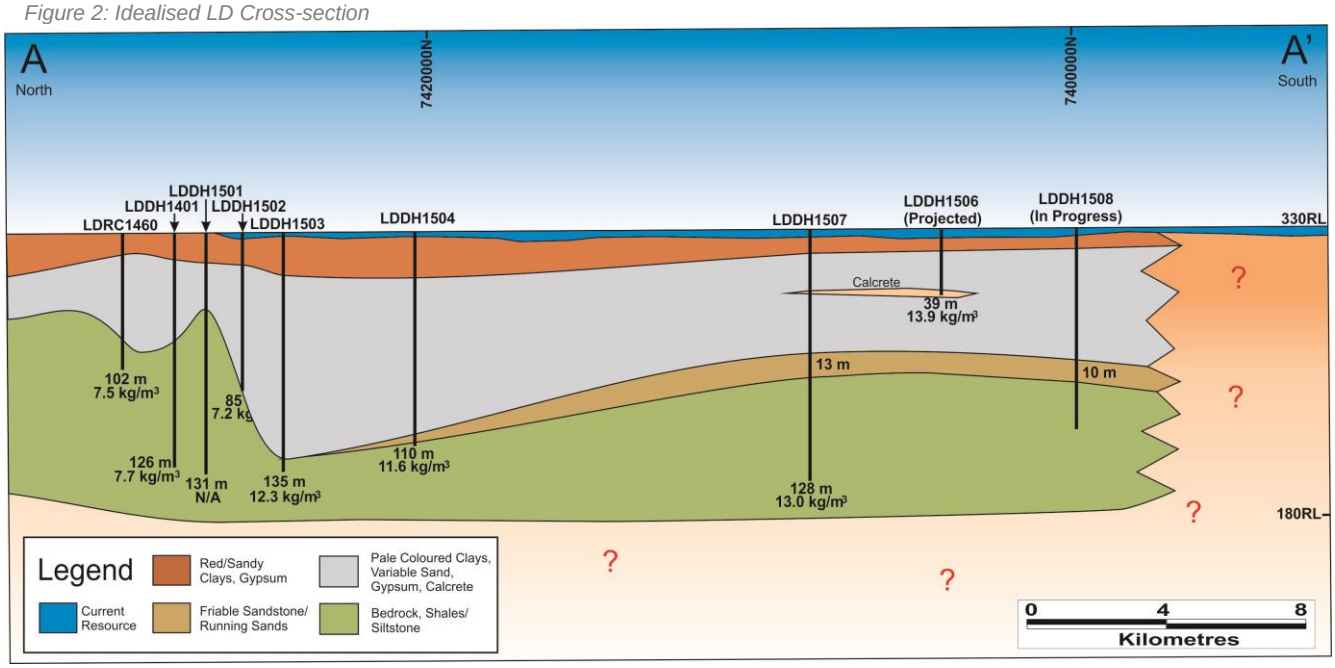
While considerable additional drilling and testwork remains to accurately define the SOP Resource potential of the LD playa, results to date indicate a conceptually large system.

LD is an internal sub basin exceeding 1,200km^2 in area. **With a brine rich sediment profile over 70 metres in thickness grading in the vicinity of 6-7kg SOP per m^3 the in-situ Resource potential is large.** Furthermore the presence of a large near surface gypsum field in the south eastern sector of the lake suggests significant brine inflow to the lake from that direction. This directional inflow may also have been responsible for a deltaic depositional environment comprising well rounded coarse quartz-rich sands in this area of the lake as postulated above. Importantly it suggests potential for significant annual recharge of brine and SOP into LD from a major Palaeochannel system south of LD.

Lake Stratigraphy

A regolith profile of the lakebed sediments encountered in core holes LDDH1501-1508 is provided in Figure 2, below.

Figure 2: Idealised LD Cross-section



Important features of the profile include:

a) Near surface (1-1.5m) of slushy gypsum/sand/clay.

b) Red brown sandy clays cemented by gypsum up to 15 metres thick in the northern sector of the lake thinning to the south (2-3m in LDDH1508). It is assumed this layer is derived from wind-blown sand and topsoil subsequently flooded and cemented together by crystalline gypsum.

Photo 1: Core – LDDH1507 (0.0 - 6.7m); High-grade near surface zone

Hole ID	LDDH1507
Sample Point	0.0-6.7m
In-Situ SOP Grade	8.25kg/m^3
In-Situ SOM Grade	13.51kg/m^3
Porosity	65.0%
Brine SOP Grade	12.5kg/m^3

c) Variable thicknesses of heavy clay interspersed with layers of gypsum and occasional calcrete. Significant brine flows occur from the gypsum and calcrete layers. However, the brine flows from these gypsiferous clay zones remains to be tested to establish their significance as an SOP Resource.

Photo 2: Core – LDDH1507 (30.8 – 34.2m)

Hole ID	LDDH1507
Sample Point	30.3 – 34.2
In-Situ SOP Grade	9.24kg/m^3
In-Situ SOM Grade	5.79kg/m^3
Porosity	53.7%
Brine SOP Grade	17.29kg/m^3

d) The gypsiferous clay zone thins to the south and gives way to a substantial layer (10-13 metres) of friable sandstone and course grained running sands. As mentioned earlier it appears that major inflow to LD comes from the southeast. This flow may have deposited coarse sandy material in a delta environment as it entered LD with the finer clayey solids transported further into the northerly sector of the lake.

Further evidence of substantial brine flow into LD from the southeast is the presence of a large (surface) gypsum field extending from the eastern shoreline of LD almost to the centre of the lake.

Photo 3: Core – LDDH1507 (50.5 – 54.1m)

Hole ID	LDDH1507
Sample Point (m)	49.0 – 54.1
In-Situ SOP Grade	5.10kg/m^3
In-Situ SOM Grade	3.02kg/m^3
Porosity	47.4%
Brine SOP Grade	10.73kg/m^3

Photo 4: Core – LDDH1507 (65.5 – 71.3m); Friable Sandstone/Running Sands

Hole ID	LDDH1507
Sample Point (m)	65.5 – 71.4
In-Situ SOP Grade	4.18kg/m^3
In-Situ SOM Grade	4.27kg/m^3
Porosity	37.9%
Brine SOP Grade	11.13kg/m^3

Photo 5: Core – LDDH1508 (74.7 – 79.6m); Friable Sandstone/Running Sands

Hole ID	LDDH1508
Sample Point (m)	74.7 – 79.6
In-Situ SOP Grade	Unknown
In-Situ SOM Grade	Unknown
Porosity	Unknown
Brine SOP Grade	Unknown

e) A new hydrogeological model is being prepared for the LD system to assess the recharge input and its implications for brine extraction associated with various SOP production levels.

Photo 6: Core – LDDH1507 (83.4 – 87.5m); Lower porosity deeper and fresher sandstone horizon

Hole ID	LDDH1507
Sample Point (m)	83.0 – 87.5
In-Situ SOP Grade	3.50kg/m^3
In-Situ SOM Grade	6.00kg/m^3
Porosity	30.8%
Brine SOP Grade	11.10kg/m^3

Detailed results for LDDH1508 are expected to be available shortly. Core drilling will continue with the aim of establishing a JORC (2012) compliant SOP Resource for LD as soon as possible.

Yours faithfully,

Michael Ruane
Director
on behalf of the Board

Competent Persons Statement

The information in this report that relates to Brine and Sediment Assays and Analyses is based on information compiled by Dr Geoff Browne, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Browne is a consultant to Reward Minerals Ltd. Dr Browne 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 Browne 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 this report that relates to Exploration Results, other than Brine and Sediment Assays and Analyses, is based on information compiled by Mr David O'Farrell, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Farrell is a consultant to Reward Minerals Ltd. Mr O'Farrell 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 O'Farrell 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 this report that relates to Mineral Resources or Ore Reserves is based on information compiled by Mr Simon Coxhell, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Mr Coxhell is a consultant to Reward Minerals Ltd. Mr Coxhell 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Coxhell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX 1: LD Drill Hole Location

Hole ID	East (51)	North (51)	Depth (m)	Dip
LDDH1501	481267	7426549	131	-90
LDDH1502	481565	7425422	87	-90
LDDH1503	477902	7424581	135	-90
LDDH1504	477755	7420600	110	-90
LDDH1505	471900	7412600	119	-90
LDDH1506	469900	7404600	39	-90
LDDH1507	477900	7408599	128	-90
LDDH1508	478044	7400513	~126 (In Progress)	-90

Appendix 2: In-Situ Assay Results

Sample ID	Depth	In-Situ Grade (kg/m³)							
	(m)	Ca	K	Mg	Na	SO_4	Cl	SOP	SOM
LDDH1502-01	2.6	0.41	3.27	1.96	48.38	13.51	75.18	7.29	9.73
LDDH1502-02	4.9	11.88	2.95	2.00	44.18	45.36	69.80	6.56	9.92
LDDH1502-03	7.2	11.92	2.80	2.00	44.15	45.68	68.84	6.25	9.92
LDDH1502-04	8.1	10.44	3.07	2.18	49.46	41.95	77.18	6.83	10.81
LDDH1502-05	9.6	5.12	3.23	2.28	53.20	27.89	83.18	7.18	11.27
LDDH1502-06	11.8	11.90	2.62	1.98	43.01	44.18	68.14	5.84	9.79
LDDH1502-07	14.0	12.73	2.26	1.64	33.33	44.33	55.94	5.03	8.13
LDDH1502-08	16.2	11.91	2.73	1.87	44.54	45.09	70.54	6.09	9.28
LDDH1502-09	18.8	5.32	3.54	1.83	53.45	29.65	81.77	7.89	9.05
LDDH1502-10	20.4	0.96	4.20	2.07	65.89	18.38	103.72	9.36	10.23
LDDH1502-11	21.4	1.70	3.40	1.28	46.68	18.11	69.32	7.57	6.35
LDDH1502-12	23.0	1.24	3.80	1.48	53.22	17.11	83.34	8.47	7.34
LDDH1502-13	26.2	0.48	3.84	1.11	50.35	13.81	77.26	8.54	5.51
LDDH1502-14	28.0	0.21	2.93	0.71	44.75	11.31	67.03	6.53	3.53
LDDH1502-15	30.2	0.20	3.15	0.75	46.18	11.83	70.10	7.03	3.71
LDDH1502-16	32.8	0.55	3.65	1.06	54.42	14.80	82.29	8.14	5.25
LDDH1502-17	36.4	0.27	3.57	0.86	55.75	13.93	84.65	7.96	4.24
LDDH1502-18	40.2	0.18	3.25	0.83	50.75	12.46	77.04	7.24	4.11
LDDH1502-19	44.0	0.18	3.69	0.96	59.45	14.37	89.53	8.21	4.74
LDDH1502-20	46.9	0.18	3.29	0.77	52.14	13.16	78.00	7.33	3.80
LDDH1502-21	48.8	0.18	3.02	1.07	55.46	13.86	84.20	6.73	5.28
LDDH1502-22	50.2	0.34	2.05	0.68	35.20	9.55	59.29	4.56	3.38
LDDH1502-23	52.8	0.27	2.91	1.02	52.33	13.07	79.61	6.47	5.03
LDDH1502-24	54.8	0.27	2.84	0.92	49.54	12.78	75.70	6.32	4.57
LDDH1502-25	56.4	0.35	3.17	1.27	54.84	13.74	81.38	7.06	6.28
LDDH1502-26	57.8	0.43	3.66	1.46	66.47	16.13	101.96	8.15	7.24
LDDH1502-27	59.4	0.37	2.74	0.95	51.46	12.63	78.07	6.11	4.71
LDDH1502-28	60.6	0.35	2.09	0.60	33.50	9.07	52.37	4.66	2.99
LDDH1502-29	62.2	0.44	3.33	1.54	58.89	14.72	95.54	7.42	7.64
LDDH1502-30	63.5	1.50	3.17	1.48	55.01	18.50	81.44	7.07	7.33
LDDH1502-31	64.9	1.46	1.06	0.42	12.89	7.96	22.00	2.36	2.10
LDDH1502-32	66.5	0.51	3.04	0.69	49.80	13.39	72.15	6.78	3.42
LDDH1502-33	68.5	0.20	3.17	0.51	48.99	11.88	72.74	7.06	2.55
LDDH1502-34	71.1	2.94	3.98	0.99	57.34	28.46	80.94	8.88	4.88
LDDH1502-35	72.7	1.54	3.26	0.65	52.62	20.73	75.05	7.27	3.23
LDDH1502-36	74.5	4.07	3.29	0.81	48.37	31.37	66.54	7.33	4.03
LDDH1502-37	75.7	3.13	3.32	0.78	50.88	26.97	69.47	7.40	3.87
LDDH1502-38	77.3	0.20	2.43	0.24	42.84	9.72	57.58	5.41	1.20
LDDH1502-39	78.8	3.97	3.05	0.65	43.92	31.14	60.30	6.80	3.22
LDDH1502-40	81.7	10.77	3.69	1.56	49.77	49.23	75.36	8.23	7.72
LDDH1502-41	85.7	7.38	3.19	0.80	45.01	40.70	59.10	7.11	3.95
LDDH1505-01	3.3	11.51	4.24	4.48	73.09	86.62	92.68	9.45	22.19
LDDH1505-02	4.2	14.92	5.13	5.74	65.55	62.13	105.58	11.43	28.41
LDDH1505-03	6.8	15.32	3.16	2.45	41.04	54.57	66.87	7.05	12.14
LDDH1505-04	8.4	15.89	3.64	2.68	51.45	57.99	83.23	8.10	13.27
LDDH1505-05	9.8	10.31	4.30	3.08	63.56	51.62	121.26	9.58	15.26
LDDH1505-06	11.2	1.11	3.15	1.37	56.64	13.34	64.93	7.02	6.79
LDDH1505-07	14.8	0.87	3.99	1.53	60.92	13.00	98.43	8.88	7.55
LDDH1505-08	16.8	1.42	3.99	1.41	58.19	15.38	91.77	8.88	6.96
LDDH1505-09	18.4	1.44	3.83	1.26	56.04	16.66	90.24	8.53	6.26
LDDH1505-10	20.1	0.49	3.71	0.94	52.62	12.31	77.87	8.27	4.64
LDDH1505-11	22.8	9.98	4.78	2.08	61.15	49.89	87.88	10.65	10.29

Sample ID	Depth	In-Situ Grade (kg/m³)							
	(m)	Ca	K	Mg	Na	SO_4	Cl	SOP	SOM
LDDH1505-12	24.7	0.56	5.15	0.94	78.72	18.12	121.63	11.46	4.65
LDDH1505-13	26.3	0.10	3.07	0.65	46.21	11.67	71.70	6.84	3.24
LDDH1505-14	28.8	0.31	2.45	0.57	39.78	11.03	56.73	5.46	2.83
LDDH1505-15	30.3	0.05	2.14	0.39	39.34	7.71	62.06	4.77	1.91
LDDH1505-16	31.9	0.21	2.27	0.62	40.77	8.68	62.44	5.07	3.07
LDDH1505-17	33.6	0.22	2.17	0.56	36.77	7.80	57.56	4.82	2.79
LDDH1505-18	35.6	0.25	2.74	0.80	49.96	10.46	78.22	6.10	3.95
LDDH1505-19	36.7	0.14	1.43	0.51	27.18	6.00	41.39	3.18	2.54
LDDH1505-20	38.1	0.44	2.41	0.66	40.13	9.22	63.65	5.38	3.26
LDDH1505-21	39.6	6.08	1.99	1.06	34.78	27.84	37.37	4.43	5.25
LDDH1505-22	41.3	0.46	1.83	0.82	32.25	7.56	63.65	4.08	4.08
LDDH1505-23	42.6	0.55	1.98	0.92	33.46	8.57	55.77	4.41	4.57
LDDH1505-24	45.3	0.59	1.41	0.94	27.66	7.03	42.47	3.13	4.64
LDDH1505-25	47.5	2.14	1.03	0.58	17.67	10.76	30.96	2.28	2.88
LDDH1505-26	48.6	4.13	1.65	1.04	29.33	19.10	51.27	3.68	5.14
LDDH1505-27	49.7	0.72	2.00	0.69	30.95	8.58	44.93	4.46	3.40
LDDH1505-28	51.2	13.27	1.80	1.03	28.93	44.54	46.20	4.01	5.12
LDDH1505-29	52.4	2.33	1.29	0.62	19.86	11.64	31.24	2.88	3.07
LDDH1505-30	53.3	6.24	0.75	0.70	17.82	20.22	30.15	1.67	3.46
LDDH1505-31	54.6	14.44	0.29	0.51	6.01	39.47	10.17	0.64	2.55
LDDH1505-32	55.9	8.36	0.30	0.54	5.85	23.29	10.61	0.67	2.66
LDDH1505-33	57.5	2.29	0.86	0.51	12.91	9.43	20.31	1.91	2.55
LDDH1505-34	60.3	14.06	0.82	0.82	10.76	39.31	19.41	1.82	4.05
LDDH1505-35	61.9	6.87	1.27	0.92	22.08	22.89	24.12	2.83	4.53
LDDH1505-36	63.9	13.58	0.83	0.72	14.19	39.92	26.28	1.85	3.57
LDDH1505-37	65.5	11.71	0.86	0.86	12.28	34.28	20.31	1.91	4.24
LDDH1505-38	67.5	9.62	1.17	0.70	16.32	28.85	31.08	2.60	3.46
LDDH1505-39	69.0	15.50	0.27	0.44	5.11	42.42	12.89	0.61	2.15
LDDH1505-40	69.9	15.10	0.54	0.54	7.66	42.06	15.97	1.20	2.67
LDDH1505-41	72.0	0.90	1.29	0.57	17.87	6.97	30.60	2.88	2.81
LDDH1505-42	74.2	13.57	0.75	0.65	13.77	42.23	26.81	1.68	3.24
LDDH1505-43	76.1	4.74	1.48	1.07	24.18	18.67	38.63	3.30	5.28
LDDH1505-44	77.9	12.54	0.57	0.86	11.69	35.91	20.27	1.27	4.23
LDDH1505-45	81.3	7.37	1.09	0.60	14.63	23.75	25.88	2.43	2.97
LDDH1505-46	83.0	3.08	1.48	0.74	21.18	14.78	35.03	3.29	3.66
LDDH1505-47	85.0	5.75	2.17	1.78	35.90	25.39	30.86	4.83	8.81
LDDH1505-48	87.5	3.76	1.25	0.65	19.06	15.05	59.44	2.79	3.23
LDDH1505-49	90.4	8.23	1.33	0.74	18.25	26.27	28.30	2.96	3.68
LDDH1505-50	92.2	3.09	1.42	0.71	21.55	13.53	36.56	3.17	3.52
LDDH1505-51	94.3	8.27	1.70	0.97	25.53	29.18	40.34	3.79	4.82
LDDH1505-52	96.5	11.59	0.83	0.77	14.07	33.93	26.15	1.84	3.82
LDDH1505-53	98.9	3.28	1.70	0.83	24.06	16.77	40.32	3.79	4.09
LDDH1505-54	100.9	0.89	1.78	0.98	25.82	10.03	39.63	3.97	4.86
LDDH1505-55	103.1	8.12	1.07	0.64	14.38	27.96	25.24	2.37	3.16
LDDH1505-56	105.2	3.50	1.30	0.47	16.61	14.79	27.68	2.89	2.31
LDDH1505-57	106.9	2.05	1.28	0.72	19.78	11.53	30.36	2.85	3.55
LDDH1505-58	109	13.75	0.83	0.61	6.78	39.17	13.17	1.86	3.03
LDDH1505-59	110.1	10.28	1.03	0.98	17.94	31.61	30.46	2.29	4.84
LDDH1505-60	112.1	14.69	0.53	0.48	8.87	40.87	15.83	1.19	2.38
LDDH1505-61	114	14.38	0.55	0.38	7.01	40.27	12.98	1.22	1.90
LDDH1505-62	114.4	14.44	0.53	0.26	5.72	43.33	12.45	1.17	1.30
LDDH1505-63	115.8	12.89	0.80	0.37	8.56	37.46	15.74	1.78	1.84
LDDH1505-64	116.3	13.29	0.48	0.24	4.69	36.98	5.73	1.08	1.20
LDDH1505-65	117.4	11.96	0.24	0.14	3.48	31.89	8.59	0.54	0.72
LDDH1505-66	118.8	14.31	0.53	0.37	6.57	40.18	9.34	1.17	1.82
LDDH1506-01	1.8	4.27	3.90	3.72	55.61	25.65	89.76	8.69	18.40
LDDH1506-02	3.6	0.61	4.19	4.29	69.51	19.37	114.37	9.33	21.25
LDDH1506-03	4.8	13.85	2.24	2.48	34.04	42.76	60.88	4.99	12.30

Sample ID	Depth	In-Situ Grade (kg/m³)							
	(m)	Ca	K	Mg	Na	SO_4	Cl	SOP	SOM
LDDH1506-04	6.7	8.18	4.35	4.32	67.15	39.16	112.10	9.69	21.37
LDDH1506-05	7.9	5.58	4.29	3.84	64.16	32.94	104.57	9.55	19.03
LDDH1506-06	9.7	0.54	4.33	3.65	65.29	18.96	107.97	9.65	18.06
LDDH1506-07	11.4	0.67	5.22	4.08	68.37	20.21	112.32	11.63	20.17
LDDH1506-08	13.2	11.20	5.18	3.63	60.51	48.30	97.89	11.54	17.96
LDDH1506-09	14.7	6.71	4.72	3.25	57.11	35.15	89.11	10.53	16.09
LDDH1506-10	16.3	0.27	4.49	1.97	59.61	17.24	88.78	10.00	9.78
LDDH1506-11	17.1	2.94	5.15	3.64	64.07	25.91	101.45	11.46	18.02
LDDH1506-12	19.5	0.55	4.76	2.60	55.66	17.04	111.67	10.61	12.88
LDDH1506-13	21.6	0.21	4.20	2.18	55.63	15.11	62.76	9.35	10.81
LDDH1506-14	23.5	0.20	4.33	1.77	50.65	13.57	81.40	9.64	8.76
LDDH1506-15	25.3	0.19	4.46	1.97	52.75	14.51	79.15	9.94	9.76
LDDH1506-16	27.6	0.19	3.61	0.91	46.12	12.55	76.52	8.05	4.52
LDDH1506-17	29.5	0.28	3.95	1.13	47.46	12.98	75.74	8.80	5.59
LDDH1506-18	30.7	0.39	3.67	1.20	46.85	12.77	75.63	8.19	5.94
LDDH1506-19	32.7	0.06	1.56	0.18	23.76	6.03	41.09	3.48	0.88
LDDH1506-20	36.4	0.09	3.09	0.82	39.80	10.31	63.25	6.89	4.08
LDDH1506-21	37.8	0.36	0.96	0.86	18.90	5.04	27.58	2.14	4.27
LDDH1506-22	38.4	0.23	1.64	1.12	24.54	6.31	34.94	3.64	5.55
LDDH1506-23	42.5	0.13	1.76	0.90	24.38	6.79	37.58	3.92	4.48
LDDH1507-01	1.5	12.07	2.41	2.01	36.39	44.00	51.25	5.38	9.93
LDDH1507-02	3.0	12.18	3.71	2.86	53.75	50.33	87.32	8.26	14.16
LDDH1507-03	4.9	1.78	4.08	2.89	61.01	25.48	95.72	9.08	14.30
LDDH1507-04	6.7	2.47	4.61	3.16	66.16	28.62	105.94	10.26	15.64
LDDH1507-05	8.3	8.65	3.76	2.48	53.36	42.33	84.38	8.38	12.29
LDDH1507-06	10.5	13.04	3.45	2.03	44.08	48.91	63.97	7.69	10.07
LDDH1507-07	12	11.34	6.28	3.44	76.44	55.87	109.41	13.98	17.04
LDDH1507-08	14.5	0.16	1.94	0.69	23.88	7.74	35.25	4.31	3.43
LDDH1507-09	16.9	1.01	5.35	2.88	71.80	23.80	112.45	11.92	14.25
LDDH1507-10	18.3	4.66	4.39	1.90	52.64	31.82	79.93	9.78	9.42
LDDH1507-11	20.2	9.58	4.30	2.33	55.30	44.03	84.39	9.57	11.52
LDDH1507-12	22.1	0.20	3.82	1.37	48.68	16.27	76.22	8.50	6.76
LDDH1507-13	24.3	0.20	3.45	1.34	48.24	15.24	77.12	7.70	6.64
LDDH1507-14	26.5	1.07	4.29	1.60	52.68	19.89	76.23	9.55	7.91
LDDH1507-15	28.5	0.67	3.12	1.16	43.64	14.04	64.07	6.95	5.74
LDDH1507-16	30.3	7.16	4.45	1.43	47.47	43.56	66.79	9.92	7.09
LDDH1507-17	32.5	0.05	3.59	0.60	45.78	13.15	68.73	7.99	2.96
LDDH1507-18	34.2	6.91	4.40	1.48	48.57	41.44	66.77	9.81	7.33
LDDH1507-19	34.9	0.28	3.59	0.87	48.51	14.17	71.69	8.00	4.30
LDDH1507-20	36.4	8.98	3.48	1.12	36.32	42.88	51.09	7.75	5.55
LDDH1507-21	37.9	9.10	4.07	1.28	42.58	46.49	60.15	9.06	6.33
LDDH1507-22	39.6	10.47	3.68	1.40	38.59	45.38	53.52	8.21	6.91
LDDH1507-23	41.3	9.87	4.36	1.59	46.38	44.40	67.65	9.72	7.89
LDDH1507-24	42.5	12.83	2.76	1.02	28.55	47.72	34.15	6.14	5.04
LDDH1507-25	43.9	11.16	2.38	0.91	25.49	41.61	69.79	5.31	4.51
LDDH1507-26	45.7	0.90	3.21	0.76	42.84	16.26	34.63	7.16	3.78
LDDH1507-27	46.9	1.65	2.91	0.74	36.76	16.89	53.57	6.49	3.65
LDDH1507-28	49	7.20	1.65	0.66	17.82	26.54	26.03	3.67	3.26
LDDH1507-29	51.4	5.18	2.33	0.68	25.75	26.00	34.04	5.18	3.35
LDDH1507-30	52.9	0.31	2.90	0.50	36.94	10.56	54.77	6.46	2.46
LDDH1507-31	55.2	9.64	1.08	0.43	12.14	30.56	14.95	2.41	2.15
LDDH1507-32	56.9	1.38	2.54	0.59	34.29	16.53	51.18	5.67	2.94
LDDH1507-33	58.8	0.12	1.61	0.28	24.10	6.91	37.10	3.59	1.37
LDDH1507-34	60.6	7.24	1.87	0.56	19.71	30.12	26.85	4.16	2.77
LDDH1507-35	61.9	0.06	1.37	0.09	17.87	5.50	26.34	3.06	0.45
LDDH1507-36	63.4	0.49	1.46	0.19	20.03	9.50	28.02	3.26	0.96
LDDH1507-37	65.5	0.64	1.71	0.68	27.78	9.63	41.83	3.81	3.39
LDDH1507-38	68	7.97	1.77	1.11	29.65	31.20	45.81	3.94	5.48

Sample ID	Depth	In-Situ Grade (kg/m³)							
	(m)	Ca	K	Mg	Na	SO_4	Cl	SOP	SOM
LDDH1507-39	69.4	0.23	2.03	0.90	36.03	8.80	51.92	4.53	4.47
LDDH1507-40	71.4	0.11	1.99	0.75	31.88	7.97	50.92	4.44	3.73
LDDH1507-41	73	0.44	2.22	1.51	39.33	11.33	63.88	4.95	7.48
LDDH1507-42	75.4	0.06	1.80	0.63	28.01	6.73	46.46	4.00	3.11
LDDH1507-43	77	0.45	2.00	1.51	35.87	11.35	56.30	4.46	7.49
LDDH1507-44	83	2.27	1.81	1.72	34.62	15.63	54.71	4.04	8.52
LDDH1507-45	84	0.69	2.07	1.10	31.06	9.66	47.62	4.61	5.47
LDDH1507-46	86.2	14.38	0.78	0.83	13.84	39.64	23.84	1.73	4.10
LDDH1507-47	87.4	4.19	1.63	1.16	26.56	16.77	40.19	3.63	5.77
LDDH1507-48	90.2	6.02	1.23	0.93	21.85	20.63	36.71	2.73	4.62
LDDH1507-49	92.2	12.73	0.98	0.64	14.35	34.53	22.53	2.18	3.15
LDDH1507-50	93.3	12.59	1.63	1.07	26.44	39.16	40.21	3.64	5.31
LDDH1507-51	94.9	1.35	1.47	0.83	26.11	9.55	39.44	3.27	4.12
LDDH1507-52	96.5	0.71	1.42	0.90	24.92	7.08	40.71	3.15	4.44
LDDH1507-53	97.9	2.11	1.64	0.89	29.45	12.66	43.14	3.66	4.41
LDDH1507-54	99.4	10.61	1.45	0.87	23.88	33.29	38.84	3.22	4.30
LDDH1507-55	101.2	3.99	1.37	0.96	26.52	16.40	39.30	3.05	4.74
LDDH1507-56	102.5	16.90	0.79	0.63	12.52	45.58	18.07	1.75	3.11
LDDH1507-57	104.4	12.98	0.77	0.46	14.81	34.70	26.61	1.72	2.29
LDDH1507-58	105.7	6.35	1.65	0.56	26.79	21.15	40.54	3.66	2.79
LDDH1507-59	107.7	11.75	0.76	0.45	14.60	32.59	23.25	1.69	2.25
LDDH1507-60	109.5	3.89	1.94	0.49	29.72	14.57	41.89	4.33	2.40
LDDH1507-61	112.9	2.21	1.23	0.49	20.01	9.56	33.84	2.73	2.43
LDDH1507-62	111	1.07	1.07	0.43	15.46	7.20	24.52	2.37	2.11
LDDH1507-63	114.9	10.62	1.06	0.42	15.30	29.48	21.38	2.37	2.10
LDDH1507-64	118.5	2.34	1.23	0.30	21.25	9.59	33.94	2.74	1.46
LDDH1507-65	116.6	4.24	1.69	0.34	20.43	15.98	30.63	3.78	1.68
LDDH1507-66	119.9	9.25	0.28	0.50	6.24	24.84	9.52	0.61	2.46
LDDH1507-67	121.8	10.85	0.28	0.39	6.95	28.37	9.60	0.62	1.93
LDDH1507-68	123.1	10.48	0.28	0.39	4.86	27.67	6.43	0.62	1.94
LDDH1507-69	124.6	1.18	1.05	0.37	12.76	6.28	18.05	2.33	1.81
LDDH1507-70	126	14.49	1.60	0.91	25.37	43.81	36.73	3.56	4.52
LDDH1507-71	127.2	12.28	1.23	0.79	20.68	36.84	33.90	2.74	3.89

Notes:
1) The SOP values are quoted in the context of the brines containing high levels of Sulfate, well in excess of the level required to produce SOP from the brines recovered
2) SO_4 values are obtained by multiplying the total Sulfur (S) analysis by a factor of three

Appendix 3: Brine SOP Grade and Specific Gravity

Sample I	Depth	Wet Core SG	Moisture (H_2O)	Porosity	Brine SG^3	Brine SOP Grade	Brine $MgSO_4$ Grade
	(m)		%	%		kg/m^3	kg/m^3
LDDH1502-01	2.6	1.98	20.8	47.7	1.19	15.30	20.41
LDDH1502-02	4.9	1.90	26.8	60.5	1.16	10.85	16.39
LDDH1502-03	7.2	1.94	24.4	58.0	1.19	10.77	17.10
LDDH1502-04	8.1	1.85	25.8	56.8	1.16	12.02	19.03
LDDH1502-05	9.6	1.84	26.0	58.6	1.11	12.27	19.25
LDDH1502-06	11.8	1.93	26.0	66.9	1.08	8.73	14.62
LDDH1502-07	14.0	1.96	23.8	59.2	1.09	8.49	13.72
LDDH1502-08	16.2	1.88	25.6	61.0	1.11	9.98	15.21
LDDH1502-09	18.8	1.80	28.4	56.7	1.18	13.92	15.95
LDDH1502-10	20.4	1.67	33.6	69.3	1.10	13.51	14.76
LDDH1502-11	21.4	1.80	28.0	68.5	1.11	11.05	9.28
LDDH1502-12	23.0	1.81	28.2	62.8	1.08	13.48	11.68
LDDH1502-13	26.2	1.83	27.4	49.4	1.34	17.30	11.15
LDDH1502-14	28.0	2.01	18.6	42.3	1.18	15.44	8.33
LDDH1502-15	30.2	1.90	23.6	51.4	1.16	13.68	7.22
LDDH1502-16	32.8	1.75	28.8	59.4	1.16	13.71	8.83
LDDH1502-17	36.4	1.72	32.8	61.6	1.16	12.91	6.88
LDDH1502-18	40.2	1.73	30.8	58.1	1.16	12.46	7.08
LDDH1502-19	44.0	1.78	29.0	57.4	1.16	14.31	8.27
LDDH1502-20	46.9	1.76	30.0	58.6	1.15	12.51	6.49
LDDH1502-21	48.8	1.70	33.4	64.6	1.14	10.41	8.16
LDDH1502-22	50.2	2.20	16.8	41.2	1.14	11.06	8.19
LDDH1502-23	52.8	1.75	30.6	61.9	1.13	10.45	8.13
LDDH1502-24	54.8	1.71	31.4	55.3	1.15	11.43	8.26
LDDH1502-25	56.4	1.67	35.0	65.1	1.13	10.85	9.65
LDDH1502-26	57.8	1.69	33.6	64.7	1.14	12.59	11.19
LDDH1502-27	59.4	1.75	30.8	59.1	1.16	10.34	7.97
LDDH1502-28	60.6	2.28	14.8	40.2	1.09	11.59	7.44
LDDH1502-29	62.2	1.67	30.2	65.2	1.14	11.37	11.71
LDDH1502-30	63.5	1.69	28.4	55.0	1.13	12.84	13.32
LDDH1502-31	64.9	2.56	5.6	12.2	1.13	19.34	17.19
LDDH1502-32	66.5	1.91	26.4	55.1	1.12	12.31	6.20
LDDH1502-33	68.5	1.87	25.8	52.8	1.14	13.37	4.83
LDDH1502-34	71.1	1.78	31.6	61.1	1.14	14.52	7.99
LDDH1502-35	72.7	1.80	27.2	57.7	1.16	12.59	5.59
LDDH1502-36	74.5	1.82	27.4	54.6	1.15	13.43	7.37
LDDH1502-37	75.7	1.84	22.8	52.7	1.16	14.05	7.35
LDDH1502-38	77.3	1.91	24.2	47.6	1.15	11.37	2.53
LDDH1502-39	78.8	1.92	22.2	48.9	1.16	13.92	6.60
LDDH1502-40	81.7	1.93	24.0	59.0	1.16	13.95	13.09
LDDH1502-41	85.7	1.88	21.8	48.3	1.16	14.73	8.19
LDDH1505-01	3.3	1.88	27.20	61.0	1.24	15.50	36.41
LDDH1505-02	4.2	1.67	36.20	71.6	1.19	15.96	39.67
LDDH1505-03	6.8	1.87	26.00	65.5	1.14	10.76	18.52
LDDH1505-04	8.4	1.81	32.00	67.8	1.16	11.94	19.56
LDDH1505-05	9.8	1.69	31.60	65.1	1.22	14.72	23.45
LDDH1505-06	11.2	1.76	31.60	63.9	1.15	10.98	10.62
LDDH1505-07	14.8	1.63	33.20	69.8	1.17	12.73	10.82
LDDH1505-08	16.8	1.69	33.60	64.3	1.17	13.82	10.83
LDDH1505-09	18.4	1.83	28.40	59.8	1.18	14.27	10.47
LDDH1505-10	20.1	1.83	25.60	54.0	1.18	15.30	8.59
LDDH1505-11	22.8	2.00	31.00	72.7	1.17	14.65	14.15
LDDH1505-12	24.7	2.16	32.20	69.8	1.21	16.42	6.66
LDDH1505-13	26.3	2.00	21.60	44.1	1.20	15.50	7.35
LDDH1505-14	28.8	2.00	19.00	40.7	1.18	13.40	6.95

Sample ID	Depth	Wet Core SG	Moisture (H_2O)	Porosity	Brine SG[3]	Brine SOP Grade	Brine $MgSO_4$ Grade
	(m)		%	%		kg/m³	kg/m³
LDDH1505-15	30.3	2.10	17.20	39.7	1.18	12.01	4.80
LDDH1505-16	31.9	2.03	18.00	36.4	1.20	13.90	8.43
LDDH1505-17	33.6	2.13	16.00	35.4	1.19	13.64	7.88
LDDH1505-18	35.6	2.44	17.80	48.8	1.19	12.50	8.08
LDDH1505-19	36.7	1.40	17.40	26.9	1.19	11.81	9.45
LDDH1505-20	38.1	2.16	14.80	34.5	1.21	15.58	9.44
LDDH1505-21	39.6	2.13	16.40	41.3	1.14	10.72	12.71
LDDH1505-22	41.3	2.20	13.80	33.7	1.20	12.12	12.12
LDDH1505-23	42.6	2.13	16.40	37.7	1.17	11.69	12.12
LDDH1505-24	45.3	2.23	12.40	31.8	1.16	9.85	14.60
LDDH1505-25	47.5	1.67	11.20	23.0	1.16	9.93	12.51
LDDH1505-26	48.6	2.30	12.60	34.4	1.18	10.69	14.94
LDDH1505-27	49.7	2.31	12.20	30.4	1.18	14.66	11.17
LDDH1505-28	51.2	2.18	15.40	41.4	1.15	9.67	12.36
LDDH1505-29	52.4	2.45	8.00	22.1	1.18	13.05	13.92
LDDH1505-30	53.3	2.45	7.00	22.3	1.16	7.47	15.48
LDDH1505-31	54.6	2.73	3.20	10.9	1.12	5.22	20.87
LDDH1505-32	55.9	2.75	1.20	8.4	1.15	7.31	29.22
LDDH1505-33	57.5	2.63	4.20	11.3	1.22	17.01	22.69
LDDH1505-34	60.3	2.60	3.80	16.6	1.14	10.55	23.45
LDDH1505-35	61.9	2.44	9.00	24.8	1.15	11.97	19.15
LDDH1505-36	63.9	2.55	4.60	20.1	1.16	9.39	18.09
LDDH1505-37	65.5	2.64	4.00	14.5	1.17	12.46	27.69
LDDH1505-38	67.5	2.49	5.80	19.3	1.18	13.10	17.46
LDDH1505-39	69.0	2.56	5.60	19.7	1.09	3.30	11.74
LDDH1505-40	69.9	2.60	3.20	15.5	1.13	7.67	17.05
LDDH1505-41	72.0	2.49	6.20	17.6	1.21	16.57	16.20
LDDH1505-42	74.2	2.42	8.80	24.4	1.14	6.82	13.14
LDDH1505-43	76.1	2.75	8.00	19.6	1.19	13.22	21.15
LDDH1505-44	77.9	2.57	6.20	14.9	1.16	7.97	26.55
LDDH1505-45	81.3	2.52	5.80	17.5	1.18	13.51	16.51
LDDH1505-46	83.0	2.40	8.20	20.5	1.20	15.89	17.66
LDDH1505-47	85.0	2.16	14.40	41.4	1.14	12.15	22.15
LDDH1505-48	87.5	2.41	6.80	20.8	1.27	14.13	16.33
LDDH1505-49	90.4	2.45	5.80	19.5	1.17	14.15	17.61
LDDH1505-50	92.2	2.38	8.80	21.4	1.19	14.20	15.78
LDDH1505-51	94.3	2.25	11.20	31.8	1.18	13.44	17.07
LDDH1505-52	96.5	2.53	6.00	19.4	1.16	9.17	19.01
LDDH1505-53	98.9	2.29	10.80	27.9	1.19	14.23	15.36
LDDH1505-54	100.9	2.28	10.00	28.4	1.20	16.08	19.66
LDDH1505-55	103.1	2.54	5.80	18.4	1.18	12.76	17.02
LDDH1505-56	105.2	2.44	7.80	21.0	1.17	14.48	11.58
LDDH1505-57	106.9	2.40	7.80	21.5	1.19	14.15	17.61
LDDH1505-58	109	2.62	5.00	13.8	1.13	12.88	20.98
LDDH1505-59	110.1	2.52	6.20	17.3	1.21	13.45	28.39
LDDH1505-60	112.1	2.57	7.60	20.0	1.10	5.53	11.06
LDDH1505-61	114	2.56	7.20	20.1	1.08	5.62	8.74
LDDH1505-62	114.4	2.50	9.00	27.4	1.07	4.32	4.80
LDDH1505-63	115.8	2.56	6.80	15.1	1.11	9.18	9.52
LDDH1505-64	116.3	2.39	13.40	36.6	1.03	3.02	3.35
LDDH1505-65	117.4	2.37	13.80	22.9	1.03	1.39	1.85
LDDH1505-66	118.8	2.53	7.20	18.1	1.07	5.15	8.01
LDDH1506-01	1.8	1.87	24.20	52.5	1.21	16.56	35.04
LDDH1506-02	3.6	1.67	34.80	64.9	1.21	14.38	32.75
LDDH1506-03	4.8	1.95	26.80	65.4	1.05	7.62	18.79
LDDH1506-04	6.7	1.67	36.20	69.6	1.19	13.92	30.69
LDDH1506-05	7.9	1.67	33.60	65.9	1.19	14.49	28.86

Sample ID	Depth	Wet Core SG	Moisture (H_2O)	Porosity	Brine SG^3	Brine SOP Grade	Brine $MgSO_4$ Grade
	(m)		%	%		kg/m^3	kg/m^3
LDDH1506-06	9.7	1.68	33.80	61.2	1.21	15.77	29.50
LDDH1506-07	11.4	1.60	36.40	63.5	1.21	18.32	31.78
LDDH1506-08	13.2	1.80	27.00	61.1	1.20	18.89	29.39
LDDH1506-09	14.7	1.79	25.80	62.2	1.18	16.91	25.85
LDDH1506-10	16.3	1.77	21.80	55.1	1.20	18.15	17.75
LDDH1506-11	17.1	1.75	18.00	61.7	1.20	18.58	29.20
LDDH1506-12	19.5	1.79	21.80	56.3	1.22	18.86	22.89
LDDH1506-13	21.6	1.92	19.00	51.2	1.18	18.28	21.12
LDDH1506-14	23.5	1.88	24.00	53.5	1.19	18.03	16.39
LDDH1506-15	25.3	1.80	25.20	58.8	1.17	16.90	16.59
LDDH1506-16	27.6	1.79	28.00	55.9	1.17	14.40	8.09
LDDH1506-17	29.5	1.79	28.40	56.5	1.17	15.57	9.88
LDDH1506-18	30.7	1.88	28.80	55.9	1.17	14.66	10.63
LDDH1506-19	32.7	2.18	10.20	25.8	1.18	13.49	3.43
LDDH1506-20	36.4	2.20	12.20	34.0	1.22	20.29	12.02
LDDH1506-21	37.8	2.30	6.20	19.1	1.18	11.21	22.41
LDDH1506-22	38.4	2.29	8.40	23.1	1.19	15.79	24.06
LDDH1506-23	42.5	2.36	6.40	17.8	1.25	22.06	25.21
LDDH1507-01	1.5	1.80	24.40	51.4	1.14	10.45	19.30
LDDH1507-02	3.0	1.66	34.40	69.6	1.16	11.87	20.35
LDDH1507-03	4.9	1.60	37.80	67.5	1.18	13.46	21.18
LDDH1507-04	6.7	1.56	39.80	71.4	1.19	14.36	21.88
LDDH1507-05	8.3	1.79	28.00	61.7	1.18	13.58	19.92
LDDH1507-06	10.5	1.86	25.00	55.2	1.16	13.95	18.25
LDDH1507-07	12	1.92	30.80	82.2	1.18	17.00	20.72
LDDH1507-08	14.5	1.80	27.60	61.3	1.08	7.04	5.60
LDDH1507-09	16.9	1.73	27.20	72.9	1.19	16.35	19.55
LDDH1507-10	18.3	1.73	27.60	54.6	1.19	17.90	17.24
LDDH1507-11	20.2	1.66	24.20	61.6	1.18	15.55	18.71
LDDH1507-12	22.1	1.92	16.80	51.7	1.19	16.44	13.07
LDDH1507-13	24.3	1.93	15.80	43.8	1.21	17.56	15.15
LDDH1507-14	26.5	1.87	22.20	56.9	1.18	16.78	13.90
LDDH1507-15	28.5	2.12	13.80	44.4	1.18	15.65	12.92
LDDH1507-16	30.3	1.87	24.20	49.8	1.19	19.92	14.24
LDDH1507-17	32.5	1.82	27.00	54.7	1.16	14.60	5.41
LDDH1507-18	34.2	1.81	27.00	56.6	1.17	17.34	12.96
LDDH1507-19	34.9	1.76	28.20	57.7	0.44	5.31	2.86
LDDH1507-20	36.4	1.89	24.60	47.6	1.16	16.28	11.66
LDDH1507-21	37.9	1.83	27.00	55.6	1.16	16.29	11.37
LDDH1507-22	39.6	1.88	29.00	59.2	1.14	13.87	11.68
LDDH1507-23	41.3	1.80	29.60	59.4	1.16	16.37	13.29
LDDH1507-24	42.5	2.02	23.80	50.5	1.11	12.17	9.99
LDDH1507-25	43.9	2.06	23.60	52.6	1.15	10.10	8.57
LDDH1507-26	45.7	1.84	26.00	54.9	1.12	13.03	6.88
LDDH1507-27	46.9	1.89	22.80	49.1	1.15	13.22	7.44
LDDH1507-28	49.0	1.96	21.80	46.3	1.08	7.93	7.05
LDDH1507-29	51.4	2.02	17.60	48.3	1.11	10.71	6.93
LDDH1507-30	52.9	1.91	22.00	47.7	1.15	13.55	5.16
LDDH1507-31	55.2	2.12	19.80	44.6	1.06	5.42	4.81
LDDH1507-32	56.9	1.99	19.20	41.8	1.16	13.55	7.03
LDDH1507-33	58.8	2.15	12.60	29.8	1.16	12.06	4.60
LDDH1507-34	60.6	2.22	10.00	25.7	1.16	16.19	10.79
LDDH1507-35	61.9	2.22	8.60	21.0	1.16	14.61	2.16
LDDH1507-36	63.4	2.23	8.80	21.2	1.18	15.38	4.56
LDDH1507-37	65.5	2.10	14.20	32.9	1.16	11.59	10.30
LDDH1507-38	68.0	2.17	11.20	32.7	1.18	12.06	16.75
LDDH1507-39	69.4	2.17	14.60	42.8	1.16	10.57	10.44

Sample ID	Depth	Wet Core SG	Moisture (H_2O)	Porosity	Brine SG[3]	Brine SOP Grade	Brine $MgSO_4$ Grade
	(m)		%	%		kg/m³	kg/m³
LDDH1507-40	71.4	2.17	13.80	43.1	1.15	10.29	8.64
LDDH1507-41	73.0	2.17	15.20	41.8	1.18	11.85	17.91
LDDH1507-42	75.4	2.12	12.80	30.1	1.18	13.31	10.35
LDDH1507-43	77.0	2.16	13.80	33.7	1.20	13.25	22.25
LDDH1507-44	83.0	2.17	15.20	36.6	1.18	11.02	23.27
LDDH1507-45	84.0	2.19	13.80	35.2	1.17	13.09	15.51
LDDH1507-46	86.2	2.50	5.40	21.1	1.14	8.21	19.46
LDDH1507-47	87.4	2.27	10.40	30.4	1.17	11.95	18.97
LDDH1507-48	90.2	2.32	9.00	25.8	1.17	10.60	17.90
LDDH1507-49	92.2	2.39	7.40	24.8	1.12	8.78	12.69
LDDH1507-50	93.3	2.24	12.60	35.5	1.15	10.23	14.93
LDDH1507-51	94.9	2.30	10.00	28.1	1.17	11.63	14.65
LDDH1507-52	96.5	2.30	10.40	27.4	1.18	11.51	16.20
LDDH1507-53	97.9	2.23	12.40	35.1	1.16	10.41	12.56
LDDH1507-54	99.4	2.31	10.20	32.5	1.15	9.92	13.22
LDDH1507-55	101.2	2.22	11.80	27.9	1.18	10.93	17.00
LDDH1507-56	102.5	2.51	6.00	25.6	1.10	6.85	12.17
LDDH1507-57	104.4	2.49	6.80	21.8	1.14	7.88	10.51
LDDH1507-58	105.7	2.27	11.40	37.1	1.14	9.87	7.52
LDDH1507-59	107.7	2.49	6.20	16.1	1.17	10.48	13.97
LDDH1507-60	109.5	2.22	12.40	35.5	1.15	12.18	6.77
LDDH1507-61	112.9	2.40	7.40	19.2	1.20	14.23	12.65
LDDH1507-62	111.0	2.50	5.20	15.0	1.20	15.83	14.07
LDDH1507-63	114.9	2.49	6.00	21.1	1.13	11.21	9.97
LDDH1507-64	118.5	2.32	8.60	22.9	1.18	11.98	6.39
LDDH1507-65	116.6	2.37	7.80	22.7	1.17	16.66	7.40
LDDH1507-66	119.9	2.69	2.00	11.1	1.12	5.55	22.20
LDDH1507-67	121.8	2.68	2.40	10.0	1.13	6.20	19.30
LDDH1507-68	123.1	2.72	2.00	10.4	1.09	5.96	18.54
LDDH1507-69	124.6	2.56	4.20	14.0	1.17	16.62	12.92
LDDH1507-70	126.0	2.22	14.20	35.8	1.14	9.93	12.61
LDDH1507-71	127.2	2.37	9.40	29.8	1.14	9.17	13.05

Notes:

1) The SOP values are quoted in the context of the brines containing high levels of Sulfate, well in excess of the level required to produce SOP from the brines recovered
2) SO_4 values are obtained by multiplying the total Sulfur (S) analysis by a factor of three
3) Brine SG was determined using Baseggio estimations applied to analytical results

Appendix 4 – JORC Table

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.*	The holes were drilled by an experienced in-house team using a heliportable coring rig recently acquired by the Company. Holes are nominally ϕ96mm (HQ) with core recovered being ϕ60-63mm. Core recovery varied significantly but was generally over 80%. Poor core recovery occurred in course grained/sandy horizons and in cavernous zones where mud circulation was lost. The core was logged for stratigraphic and geological interpretation by a professional contract geologist. On site sampling was limited to SG measurement of brine solutions recovered during drilling. Cores were delivered to Perth for all subsequent analytical procedures.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Cores from the drilling were photographed and then wrapped in a plastic film sleeve prior to packing into core trays of appropriate size for transport. The aim of the plastic wrapping was to minimize the water loss from the core material during transit to Perth.
	Aspects of the determination of mineralisation that are Material to the Public Report.	The essence of the recent sampling is to establish the quantity of soluble salts entrained in the core at different levels (depths). Due to difficulties involved in cutting very wet core longitudinally (conventional procedure) cross sectional samples were selected at regular (1.5-2m) intervals downhole for analysis. Samples were generally 500-800 grams wet weight and 100-150mm in length. Initially the core SG was determined by the conventional wax-covering/water immersion procedure. Wet core sections were then cut longitudinally and disaggregated. A sample of the wet material (50-100g) was washed with a known mass (ca.500g) of water at 80ºC. The water leach test work was conducted by experienced metallurgist consultant Dr Geoff Browne with analysis of the leach brines by ALS/Ammtec Laboratories.

Criteria	JORC Code explanation	Commentary
		Combination of the analysis of the leach solutions and the wet core SG provides a reasonable estimate of the mass of soluble Potassium (K) and other ions per unit weight (tonnes) of core. From this figure and the SG of the wet core sample the value for the mass of soluble K, Mg, Na, Cl and SO_4 per m^3 of lake sediment can be calculated and used as the basis for estimation of the in-situ SOP Resource. An approximate composition of the brine entrained in the core samples can be obtained from the mass of the soluble ions extracted (g/kg of core) divided by the total mass loss which occurs during the washing procedure – i.e. kg of K or SOP per tonne of brine. To convert to kg K per m^3 of brine the SG of the entrained brine must be known. Currently Reward does not have definitive data for the brine SG values. Approximate values will become available from sampling of the brine at different levels in the core holes drilled but pumping trials will be required to provide accurate assessment of brine composition parameters. The data for SOP and $MgSO_4$ content in the (core) brine are approximations based on brine SG values versus Total Dissolved Solids in concentrated sea water brines provided in Baseggio – 4th Symposium on Salt (*The Composition of Sea Water and Its Concentrates; Gino Baseggio, Morton Salt Company; www.salt-partners.com*). The washing procedure used overestimates Calcium (Ca) and Sulfate values in the entrained brine. This results from dissolution of much more gypsum from the core than would occur in the high density brine entrained naturally in the cores sampled to date. The Total Dissolved Ion concentrations for the (core) entrained brines have generally exceeded 180g/litre hence the $CaSO_4$ solubility in these brines (in-situ) should not exceed 3g/l. To address this the Ca and SO_4 figures quoted for the brine analyses have been corrected using the Baseggio data comparison. A further complication in estimating entrained brine

Criteria	JORC Code explanation	Commentary
		compositions relates to water losses from core samples to evaporation and handling (sample preparation) between the time of drilling and analysis. In general terms, Resource estimations should be made on the basis of kg SOP, SOM, etc, per m^3 of lakebed sediment rather than estimates of volume/analysis of brine entrained in lakebed sediments. The Company has quoted K as SOP and SOM on the basis that the brines extracted contain more than sufficient sulfate for these salts to crystallise as sulfates, more specifically Shoenite, upon evaporation of the brines.
	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.	See "drilling techniques" below.
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).*	Core Drilling was done with a Heliportable diesel drive rig – depth capacity 150 metres (HQ – NQ Core).
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	See above.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Samples collected were of a reconnaissance nature only.
	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 above.

Criteria	JORC Code explanation	Commentary
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.*	See above.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The logging is qualitative in nature.
	The total length and percentage of the relevant intersections logged.	Total Core logged and photographed.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	See above.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Core. See above.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Core sections were collected at 1.5-2.0m intervals and analysed separately. Solid samples recovered have been retained for future analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	As above.
	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.	As above.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Core samples collected regarded as representative of a particular section but see above notes.
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.*	The brine samples collected from leaching of the core sections were analysed at a reputable independent laboratory (Australian Laboratory Services Ltd). Internal standards are used to calibrate equipment and analytical procedures. The program is regarded as of an indicative nature only.

Criteria	JORC Code explanation	Commentary
		No field analyses were involved and no internal standards or blanks were included in samples submitted for analysis at this stage.
	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.	No field analyses undertaken. Samples sent to ALS after Company labelling for security purposes. Chloride analysis conducted in house.
	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.	Reconnaissance work only. No standards or blanks included for this stage. Internal standards and blanks also used in the Chloride determinations conducted in house.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	In progress.
	The use of twinned holes.	Individual holes only.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data storage as PDF/Excel files on Company PCs in Perth.
	Discuss any adjustment to assay data.	See Material Aspects above.
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.*	Collar of the hole was located by GPS (± 5M). Reduced level (RLs) was noted but is not regarded as of sufficient accuracy to formally record at this time.
	Specification of the grid system used.	UTM grid – GDA 94 Z51
	Quality and adequacy of topographic control.	See above regarding RLs.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	See Figure 1 and Table 1.
	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.	Drilling is of a reconnaissance nature only. No definite resource implications at this time.
	Whether sample compositing has been applied.	No.
Orientation of	*Whether the orientation of sampling achieves*	See above.

Criteria	JORC Code explanation	Commentary
data in relation to geological structure	*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 is considered to have introduced a sampling bias, this should be assessed and reported if material.	No sample bias.
Sample security	*The measures taken to ensure sample security.*	Samples were submitted to the independent laboratory (ALS) labelled with Company identification only.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	In view of the reconnaissance nature of the sampling program no audit of the sampling technique or analytical techniques is warranted at this stage.

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.*	Tenements drilled were E45/2803, E69/2156 and E69/2158 and are registered 100% in the name of Holocene Pty Ltd (Reward Minerals Ltd). Drilling and sampling was conducted in conjunction with Martu monitors within the Martu Determination Area.
	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.	Granted tenement subject to State Deed and Indigenous Land Use Agreement with the Martu Traditional Owners.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	No known previous exploration performed by other parties on the exploration area.
Geology	*Deposit type, geological setting and style of mineralisation.*	The area drilled comprises the surface of a playa lake believed to contain buried Palaeovalleys or basins with saline water.
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:*	See Appendix 1 above.

Criteria	JORC Code explanation	Commentary
	easting and northing of the drill hole collar	
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	RLs not available.
	dip and azimuth of the hole	
	down hole length and interception depth	See Appendix 1.
	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 Competent Person should clearly explain why this is the case.	See 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.*	Reconnaissance drilling only. No attempt to relate to resources hence no cut-off grades or aggregation of results.
	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.	No aggregation of results.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Only direct assay/analytical results reported. SOP value quoted was calculated as K x 2.23 (K to K_2SO_4).
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.*	Stratigraphic drill holes for identification of palaeovalley sediment profile. See text of announcement.
	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').	See Table 1 above.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be*	See Figure 1 above.

Criteria	JORC Code explanation	Commentary
	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.	
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.*	Reconnaissance work. Brine and core data obtained are regarded as indicative but significant warranting follow up. All analytical results available are provided in this release.
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.*	All available data provided herein.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Follow up drilling and Pump Trials will be undertaken when relevant Permitting approvals are received.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Not applicable – commercially sensitive.