

## DRILLING INTERSECTS LITHIUM AND CAESIUM ALONG STRIKE OF THE SINCLAIR CAESIUM MINE STAGE 1 PIT

Perth Western Australia, 15 August 2019: Pioneer Resources Limited (the "Company" or "Pioneer", ASX: PIO) is pleased to provide the following results from the June drilling programme at its 100%-held Pioneer Dome Project, located approximately 130km south of Kalgoorlie and 200km north of the port of Esperance, in the Eastern Goldfields of Western Australia.

The drilling programme (see ASX announcement 27 May 2019) was designed to further test lithium and caesium extensions north and south of the recently completed Sinclair Caesium Mine Stage 1 Pit.

### Drilling Highlights included:

#### Lithium

- PDRC235: 11m at 1.94% Li<sub>2</sub>O from 40m (petalite)
- PDRC236: 8m at 3.10% Li<sub>2</sub>O from 42m (petalite)
- PDRC252: 14m at 1.68% Li<sub>2</sub>O from 38m (petalite)
- PDRC241: 21m at 1.96% Li<sub>2</sub>O from 38m (petalite and lepidolite)
- PDD258: 11.2m at 1.77% Li<sub>2</sub>O from 50m (petalite and lepidolite)
- PDRC255: 10m at 2.13% Li<sub>2</sub>O from 40m (lepidolite)
- PDD259: 11.2m at 2.17% Li<sub>2</sub>O from 52.5m (lepidolite)

#### Caesium

- PDD262: 2.8m at 14.58% Cs<sub>2</sub>O from 51.9m (pollucite)
- PDD261: 1.9m at 23.92% Cs<sub>2</sub>O from 54.5m (pollucite)
- PDD259: 0.8m at 14.01% Cs<sub>2</sub>O from 54.7m (pollucite)

### SUMMARY OF THE PROGRAMME

The drilling programme was undertaken during late May and June 2019, with 24 RC drill holes (PDRC233-PDRC256 for 2,160m) and 6 diamond drill holes (PDD257 – PDD262 for 400.3m of core) completed.

Drilling intersected some of the thickest and highest-grade lenses of lithium (petalite and lepidolite) mineralisation to date (including a high-grade petalite intersection of 8m of 3.1% Li<sub>2</sub>O), as well as potash (K) feldspar and quartz, being continuations of zones encountered in the stage 1 Sinclair Caesium Mine.

The caesium mineral pollucite was intersected where targeted in three drill holes. The extremely differentiated pegmatite core, where pollucite may occur, extends both north and south of the Sinclair Mine, albeit in this programme pollucite was intersected only as small pods north of the stage 1 pit.

### DRILLING FOR SPODUMENE AT SPOD1 AND SPOD2 TARGETS ABOUT TO START

Drilling is on track for a start next week. This follows the identification of significant outcrops of spodumene at the Dome North Prospect (ASX releases, 17<sup>th</sup> July and 30 July 2019). The programme will

initially consist of 5,000m of orientation RC drilling, with further drilling scheduled as the mineralised system becomes better understood.

**STOCKPILES AND SHIPMENTS - POLLUCITE**

As a result of productive discussions in July with the pollucite offtaker, Sinomine Specialty Fluids Limited, sale and shipping terms have been varied to expedite the shipping of pollucite stocks. A shipment of approximately 2,000t of pollucite has been containerised ahead of a shipping date of 27 August 2019. The Company received a pre-shipment payment of US\$700,000 (A\$1.029 million) on 12 August 2019, with a second pre-shipment payment of US\$650,000 (~A\$0.956 million) due before containers are loaded onto the ship.

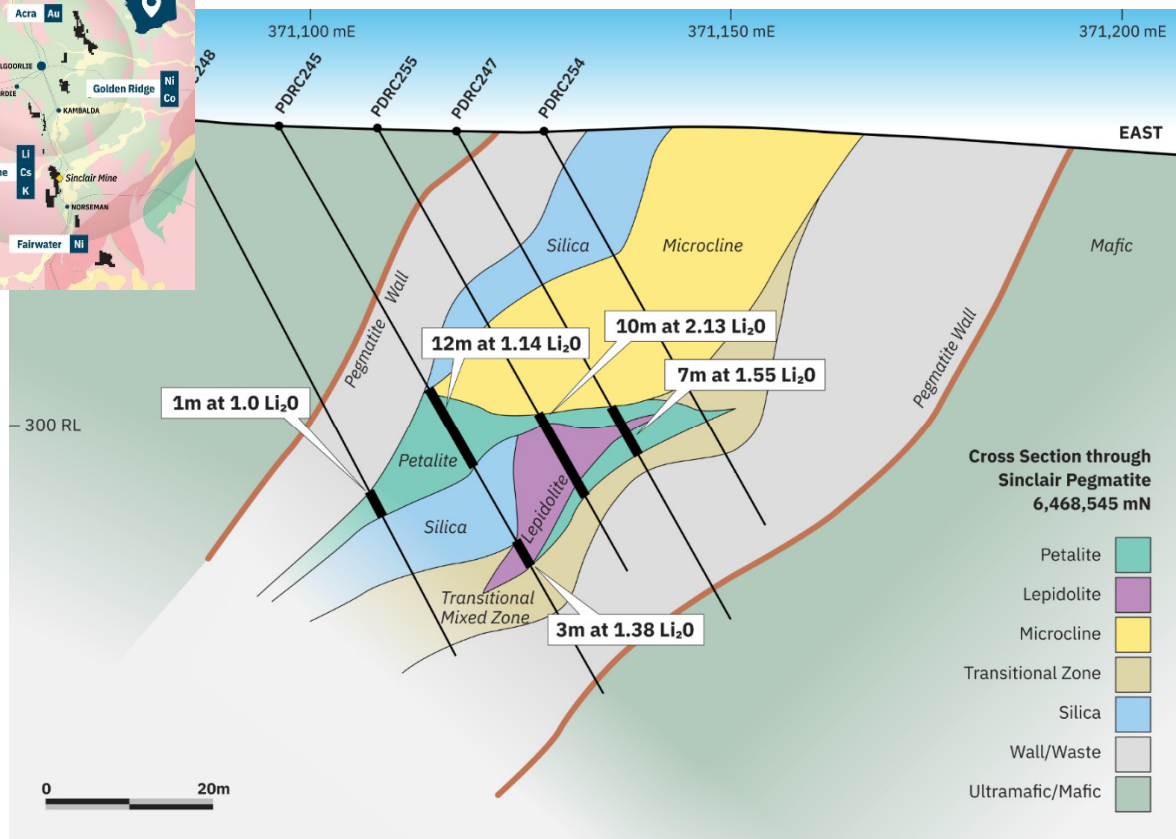
**STOCKPILES OF OTHER MINERALS**

Discussions are continuing with potential offtake parties interested in minerals other than pollucite that were stockpiled during excavation of the Sinclair Caesium Mine Stage 1 open pit. Several parties have, or are, undertaking test work on samples of the stockpiled materials, with most interest received for petalite to date.

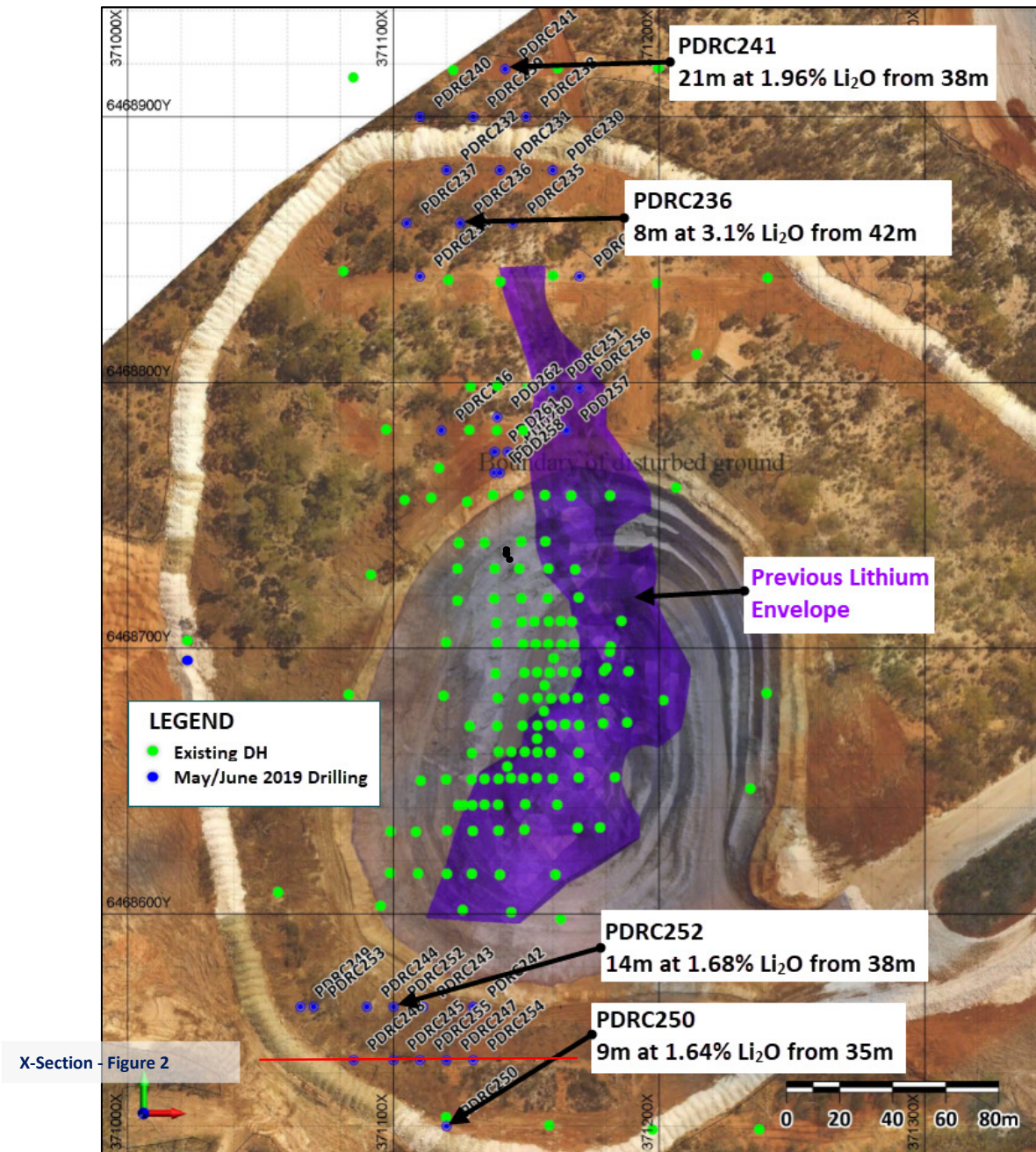
Market feedback indicates that each of the stockpiled materials in its current form (i.e. run-of-mine) will require beneficiation to increase saleability and margins. Ore sorting test work is in train, and the results of this drilling programme will contribute to the study of the viability of a future pit expansion.



**Figure 1: Pioneer Dome Project Location**



**Figure 2: Cross Section at 6,468,545mN, immediately south of the Sinclair Stage 1 Pit. Drill holes have intersected monomineralic phases that comprise the Sinclair Pegmatite Core Zone. A well- formed zone of K Feldspar (microcline - yellow) overlies the lithium zones: petalite (green) and lepidolite (purple).**



**Figure 3:** Drill hole location plan over air photo showing the Sinclair Caesium Mine Stage 1 Pit

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## About Pioneer Resources Limited

Pioneer successfully completed its first mining operation returns to being a well-funded, active explorer focused on key global demand-driven commodities, looking for its next mining opportunity. The Company operates a portfolio of strategically located lithium, caesium, potassium (“alkali metals”), nickel, cobalt and gold projects in mining regions in Western Australia, plus a high-quality lithium asset in Canada.

**Pioneer Dome Project:** The Company’s flagship Project. In late 2016 Pioneer reported the discovery of Australia’s first caesium (in the mineral ‘pollucite’) deposit, which it brought into production within 2 years. Pollucite is being delivered to Sinomine Specialty Fluids’ China facility where it is converted into Caesium Formate brine, used in high temperature/high pressure oil and gas drilling.

In June 2019, the Company reported that spodumene, a major lithium ore, has been discovered at the Dome North Prospect. Drilling is scheduled for August this year.

**Lithium: Mavis Lake Project, Canada; Pioneer Dome Project, WA:** Lithium has been classed as a ‘critical metal’ meaning it has a number of important uses across various parts of the modern, globalised economy including communication, electronic, digital, mobile and battery technologies; and transportation, particularly aerospace and automotive emissions reduction. Critical metals seem likely to play an important role in the nascent green economy, particularly solar and wind power; electric vehicle and rechargeable batteries; and energy-efficient lighting.

**Nickel: Blair Dome/Golden Ridge Project:** The price for nickel is steadily improving. The Company owns the closed Blair Nickel Sulphide Mine located between Kalgoorlie and Kambalda, WA, where near-mine target generation is continuing. The Company recently announced a significant new nickel sulphide drilling intersection at the Leo’s Dam Prospect, highlighting the prospectivity of the greater project area.

**Gold: Acra JV Project, Kangan JV Project:** The Company has attracted well credentialled earn-in joint venture partners: Northern Star Resources limited for the Acra Gold Project near Kalgoorlie W.A., and Novo Resources Corp and Sumitomo corporation for the Kangan Gold Project in the West Pilbara W.A. The incoming parties will fully fund gold exploration programmes until a decision to mine is made, with Pioneer retaining a significant free-carried position.

## REFERENCES

Pioneer Dome: Refer Company’s announcements to ASX dated 19 May 2016, 27 July 2016, 28 August 2016, 1 September 2016, 4 October 2016, 17 October 2016, 14 November 2016, 2 December 2016, 13 December 2016, 13 January 2017, 24 January 2017, 23 February 2017, 20 March 2017, 22 March 2017, 20 May 2017, 21 February 2018, 19 April 2018, 20 May 2018, 25 July 2018, 26 July 2018, 30 July 2018, 30 August 2018, 8 November 2018 (Mineral Resource update), 28 November 2018, 12 December 2018, 22 January 2019, 1 February 2019, 26 March 2019, 17 April 2019, 27 May 2019, 25 June 2019, 17 July 2019 30, July 2019, 30 July 2019.

The Company is not aware of any new information or data that materially affects the information included in this Report.

## COMPETENT PERSON

The information in this report that relates to Exploration Results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a full-time employee of Pioneer Resources Limited. Mr Crook is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the exploration processes undertaken to qualify as a Competent Person as defined in the 2012 Editions of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’.

The reports listed in the References are available to review on the ASX website and on the Company’s website at [www.PIOresources.com.au](http://www.PIOresources.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and, in the case of estimates of Mineral Resources, that all market assumptions and technical assumptions underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

## **CAUTION REGARDING FORWARD LOOKING INFORMATION**

This Announcement may contain forward looking statements concerning the projects owned or being earned in by the Company. Statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions.

Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the Company's beliefs, opinions and estimates of the Company as of the dates the forward looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

There can be no assurance that the Company's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that the Company will be able to confirm the presence of additional mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties. Circumstances or management's estimates or opinions could change. The reader is cautioned not to place undue reliance on forward-looking statements.

## APPENDIX 1. Drill Hole Information and Results Summary

Table 1 Drill Hole Collar Locations							
Hole ID	Hole Type	East (m)	North (m)	RL (m)	Depth (m)	Dip (°)	Azimuth (°)
PDRC230	RC	371,161.1	6,468,880.3	327.1	90	-61	93
PDRC231	RC	371,141.1	6,468,880.9	327.9	72	-61	92
PDRC232	RC	371,120.9	6,468,881.3	328.1	72	-60	88
PDRC233	RC	371,168.9	6,468,839.8	328.3	60	-61	92
PDRC234	RC	371,109.7	6,468,839.7	329.7	72	-61	93
PDRC235	RC	371,143.0	6,468,860.0	328.7	66	-60	89
PDRC236	RC	371,125.3	6,468,860.0	329.0	66	-61	91
PDRC237	RC	371,102.3	6,468,860.0	329.0	72	-61	92
PDRC238	RC	371,149.0	6,468,900.8	327.1	66	-60	90
PDRC239	RC	371,130.7	6,468,901.5	327.5	66	-60	88
PDRC240	RC	371,142.4	6,468,918.2	326.8	78	-60	90
PDRC241	RC	371,110.4	6,468,900.8	327.7	66	-60	90
PDRC242	RC	371,130.3	6,468,564.6	333.6	66	-61	90
PDRC243	RC	371,109.2	6,468,564.7	334.1	60	-61	88
PDRC244	RC	371,088.6	6,468,564.4	335.7	72	-60	90
PDRC245	RC	371,097.2	6,468,545.1	335.9	78	-61	89
PDRC246	RC	371,116.9	6,468,784.3	332.1	210	-61	89
PDRC247	RC	371,118.8	6,468,545.7	334.7	66	-60	89
PDRC248	RC	371,084.9	6,468,546.4	336.7	72	-61	88
PDRC249	RC	371,063.1	6,468,566.9	336.4	204	-61	270
PDRC250	RC	371,121.4	6,468,521.0	336.6	60	-90	360
PDRC251	RC	371,163.0	6,468,798.2	331.6	66	-61	89
PDRC252	RC	371,101.3	6,468,565.2	334.7	84	-61	89
PDRC253	RC	371,071.3	6,468,564.9	336.4	102	-61	90
PDRC254	RC	371,129.0	6,468,546.0	335.0	54	-60	88
PDRC255	RC	371,109.4	6,468,545.7	334.9	60	-61	90
PDRC256	RC	371,172.1	6,468,798.4	330.7	60	-61	89
PDD257	DD	371,165.5	6,468,781.9	332.2	71.7	-51	158
PDD258	DD	371,140.0	6,468,766.0	333.7	70.3	-56	87
PDD259	DD	371,138.3	6,468,766.0	333.6	69	-59	89
PDD260	DD	371,143.3	6,468,773.8	333.5	62.8	-62	89
PDD261	DD	371,138.4	6,468,774.0	333.2	63.6	-60	89
PDD262	DD	371,139.1	6,468,787.0	332.8	62.9	-60	88

### Notes:

- Hole locations were measured by a licenced surveyor in MGA 94 zone 51 using a DGPS.
- The azimuth is in true north degrees and measured using a north seeking AXIS gyro instrument.

Table 2 Selected Li <sub>2</sub> O Intervals						
Hole ID	East (m)	North (m)	From (m)	To (m)	Intersection (m)	Li <sub>2</sub> O (%)
PDD257	371,165.5	6,468,781.9	55	61.05	6.05	2.15
PDD258	371,140.0	6,468,766.0	50	61.22	11.22	1.77
PDD259	371,138.3	6,468,766.0	52.47	63.7	11.23	2.17
PDD260	371,143.3	6,468,773.8	52.45	58	5.55	2.28
PDD261	371,138.4	6,468,774.0	56.38	60.6	4.22	1.59
PDD262	371,139.1	6,468,787.0	43.45	48.1	4.65	1.16
PDD262	371,139.1	6,468,787.0	52.9	60	7.1	1.46
PDRC235	371,143.0	6,468,860.0	40	51	11	1.94
PDRC236	371,125.3	6,468,860.0	42	50	8	3.10
PDRC238	371,149.0	6,468,900.8	48	56	8	2.07
PDRC239	371,130.7	6,468,901.5	51	56	5	1.08
PDRC239	371,130.7	6,468,901.5	37	41	4	1.74
PDRC241	371,110.4	6,468,900.8	38	59	21	1.96
PDRC242	371,130.3	6,468,564.6	37	44	7	2.50
PDRC245	371,097.2	6,468,545.1	36	48	12	1.14
PDRC247	371,118.8	6,468,545.7	36	43	7	1.55
PDRC250	371,121.4	6,468,521.0	35	44	9	1.64
PDRC251	371,163.0	6,468,798.2	42	48	6	1.14
PDRC252	371,101.3	6,468,565.2	38	52	14	1.68
PDRC255	371,109.4	6,468,545.7	40	50	10	2.13

Notes:

- Selected Assay results as received from chemical analysis by Intertek-Genalysis.
- The elemental oxide concentrations are calculated by multiplying Li by 2.1527 to derive Li<sub>2</sub>O.
- Intersections are calculated using a 0.8% Li<sub>2</sub>O cut-off, maximum 2m internal dilution and no external dilution.
- Intersections noted are 'down-hole' and do not necessarily represent a true width.

Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li2O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDD257	52.85	54	396	4.55	0.12	561	1973	0.1	9.22
PDD257	54	55	511	8.12	0.1	470	2814	1.9	10.81
PDD257	55	56	5933	8.15	2.15	9997	17384	157	14.56
PDD257	56	57	5262	7.68	2.05	9567	16070	120	14.24
PDD257	57	58	5305	7.77	3.75	17452	16433	122	14.34
PDD257	58	59	4907	7.04	1.96	9136	15779	113	11.32
PDD257	59	60	3876	6.68	1.89	8813	14239	92	11.77
PDD257	60	61.05	2435	4.37	1.15	5375	8841	100	7.65
PDD257	61.05	62	609	2.43	0.39	1846	1231	18	7.59
PDD257	62	63	1643	2.77	0.65	3037	5187	41	4.69
PDD258	48.85	50	195	0.72	0.36	1681	131	0.3	6.51
PDD258	50	51	1175	1.45	0.8	3725	343	0.7	7.78
PDD258	51	52	2247	1.27	0.86	4008	307	0.2	7.72
PDD258	52	53	1418	1.41	1.36	6321	313	0.1	8.8
PDD258	53	54	776	1.27	0.42	1997	506	48	7.25
PDD258	54	54.5	1635	2.59	0.44	2063	5075	134	5.81
PDD258	54.5	55	5500	8.13	1.94	9044	16592	131	13.24
PDD258	55	56	5268	7.72	2.04	9507	16142	131	13.16
PDD258	56	57	5443	8.04	4.09	19043	17414	137	13.38
PDD258	57	58	5461	8.29	4.2	19516	17851	135	12.73
PDD258	58	59	4590	7.49	2.13	9900	15874	120	11.81
PDD258	59	60	2966	5.04	1.33	6210	10625	193	7.86
PDD258	60	61.22	2520	4.48	1.15	5373	9093	171	7.23
PDD258	61.22	62	1429	2.48	0.51	2410	4387	74	3.5
PDD259	52.3	52.47	1269	9.92	0.24	1151	4018	10	11.61
PDD259	52.47	53	4249	6.45	2.76	12849	12516	218	9.8
PDD259	53	54.4	4231	6.68	3.07	14287	12040	250	11.93
PDD259	54.4	54.6	2880	2.32	1	4687	4991	36	12.5
PDD259	54.6	54.7	5692	7.58	3.53	16420	16176	196	11.77
PDD259	54.7	55.45	140079	0.91	0.32	1512	3627	17	7.22
PDD259	55.45	56	5578	6.3	2.96	13764	13602	139	11.34
PDD259	56	57	6582	7.29	3.46	16089	15297	160	11.84
PDD259	57	58	4957	6.33	3.15	14645	13514	118	8.7
PDD259	58	58.8	3071	3.41	1.67	7796	7286	62	4.5
PDD259	58.8	59	854	9.93	0.37	1730	3659	9	11.13
PDD259	59	60	3039	4.46	2.35	10924	9581	222	6.93
PDD259	60	61	2726	3.66	1.86	8669	7914	175	5.08
PDD259	61	62	3664	3.86	1.97	9186	8528	213	5.87
PDD259	62	63	812	1.28	0.8	3753	1625	84	3.52
PDD259	63	63.7	1403	2.96	1.63	7610	5705	64	4.04
PDD259	63.7	63.93	241	2.25	0.1	501	1130	6	6.14
PDD260	52.2	52.45	600	1.77	0.2	941	2474	3	5.82



Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li2O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDD260	52.45	53	5094	6.43	3.11	14484	13369	112	9.22
PDD260	53	54	5183	7.12	3.34	15550	13981	122	12.57
PDD260	54	55	4041	5.25	2.91	13525	11530	85	8.51
PDD260	55	56.05	1828	3.08	1.52	7101	6450	68	4.73
PDD260	56.05	56.5	115	0.49	1.51	7046	410	3	6.97
PDD260	56.5	57.8	1507	2.54	1.63	7592	5264	99	5.64
PDD260	57.8	58	1429	2.83	1.57	7300	5047	77	5.39
PDD260	58	59	584	2.61	0.71	3312	2862	39	5.91
PDD260	59	60	265	0.59	0.51	2414	462	77	4.33
PDD260	60	61	145	0.8	0.46	2155	559	26	4.99
PDD261	45.9	47	561	0.75	1.38	6424	436	6	5.92
PDD261	47	48	1520	0.62	1.91	8888	225	5	7.83
PDD261	48	48.53	969	0.88	0.87	4087	667	12	4
PDD261	48.53	49	60	0	0.02	118	8	0.2	0.14
PDD261	49	50	17	0.01	0.02	108	7	0.7	0.1
PDD261	53.75	54.2	32763	0.53	0.04	227	1760	0.6	14.31
PDD261	54.2	54.5	12274	0.85	0.21	1022	1906	5	14.89
PDD261	54.5	55	184505	0.5	0.06	304	4653	1	6.73
PDD261	55	56	254283	0.75	0.21	981	5343	7	5.56
PDD261	56	56.38	204384	1.02	0.54	2518	3690	28	7.02
PDD261	56.38	57	5214	4.22	1.51	7034	7945	558	9.66
PDD261	57	58	3396	3.63	1.29	6013	7651	273	8.76
PDD261	58	59	3877	4.45	1.86	8672	8928	159	9.1
PDD261	59	60	4280	4.73	2.02	9430	9666	281	9.49
PDD261	60	60.6	822	1.72	0.95	4438	3169	75	6.53
PDD261	60.6	61.4	507	1.4	0.55	2586	1382	11	8.09
PDD261	61.4	62	319	0.9	0.43	2025	686	82	7.41
PDD262	42	43	32	0.06	0.03	164	58	0.2	0.2
PDD262	43	43.45	13	0	0.03	141	5	0.1	0.12
PDD262	43.45	44	73	0.2	0.99	4632	122	0.6	7.88
PDD262	44	45	192	0.29	1.87	8720	127	0.9	10.35
PDD262	45	45.7	230	0.32	2.12	9861	160	1	9.79
PDD262	45.7	46.5	18	0.01	0.02	131	8	0.1	0.17
PDD262	46.5	47.25	892	1.33	0.71	3300	2274	27	2.72
PDD262	47.25	48.1	14709	0.08	1.06	4970	477	8	9.23
PDD262	48.1	49	27	0	0.02	123	8	0.1	0.12
PDD262	49	50	30	0.02	0.01	82	16	0.2	0.3
PDD262	50	51	12	0	0.02	99	4	0.1	0.1
PDD262	51	51.85	18	0.01	0.01	88	30	0.1	0.12
PDD262	51.85	52.4	240542	0.57	0.14	685	5227	2	4.39
PDD262	52.4	52.9	215965	0.87	0.44	2080	4873	18	5.92
PDD262	52.9	53.5	76341	3.59	1.49	6952	8593	74	7.51

Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li2O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDD262	53.5	54	125772	2.97	1.73	8060	7222	53	7.83
PDD262	54	54.65	55624	4.66	1.84	8583	6849	57	6.12
PDD262	54.65	55	3650	3.56	1.69	7860	5779	47	9.22
PDD262	55	56	4133	3.7	1.56	7287	7148	84	5.78
PDD262	56	57	3299	4.87	2.11	9834	9656	264	8.02
PDD262	57	58	1129	1.76	1.01	4734	2796	108	5.39
PDD262	58	59	1060	2.57	1.1	5138	3635	41	5.95
PDD262	59	60	1708	1.97	1.03	4795	2634	60	5.75
PDD262	60	61	553	1.99	0.77	3583	1525	17	7.36
PDD262	61	62	364	1.03	0.21	1017	985	11	6.32
PDRC230	42	45	77	0.85	0.08	397	408	10	2.74
PDRC230	45	46	378	1.09	0.32	1508	982	26	2.17
PDRC230	46	47	932	3.91	1.32	6133	3751	34	9.48
PDRC230	47	48	430	2.33	2.16	10050	1646	22	8.99
PDRC231	44	45	551	2.53	0.57	2662	1701	22	6.89
PDRC235	39	40	317	4.35	0.51	2383	2190	6	7.55
PDRC235	40	41	208	0.88	0.95	4418	339	7	7.17
PDRC235	41	42	350	0.78	1.85	8611	139	0.5	4.31
PDRC235	42	43	423	9.16	0.08	414	5010	2.5	9.52
PDRC235	43	44	376	1.41	1.17	5478	1146	13	7.15
PDRC235	44	45	227	0.66	1.7	7901	290	11	4.99
PDRC235	45	46	286	0.63	2.56	11902	581	17	5.2
PDRC235	46	47	466	1.14	2.7	12578	1540	25	5.83
PDRC235	47	48	486	0.54	2.47	11514	359	6	4.75
PDRC235	48	49	198	0.22	4.09	19043	211	5	6.78
PDRC235	49	50	183	0.19	2.87	13373	54	5	4.39
PDRC235	50	51	405	0.98	0.9	4183	625	35	4.96
PDRC235	51	52	97	1.13	0.34	1602	565	42	8.22
PDRC235	52	54	224	1.95	0.23	1083	1283	14	5.22
PDRC236	40	41	257	1.4	0.46	2168	474	2	9.08
PDRC236	41	42	470	1.21	0.49	2315	723	4	8.77
PDRC236	42	43	354	0.2	3.22	15004	46	0.4	5.8
PDRC236	43	44	289	0.24	3.96	18426	233	1	8.37
PDRC236	44	45	49	0.03	4.69	21799	10	0.1	8.68
PDRC236	45	46	222	0.16	3.24	15055	93	3	6.64
PDRC236	46	47	969	0.55	2.37	11010	443	5	6.14
PDRC236	47	48	2354	1.45	2.22	10335	2391	25	6.44
PDRC236	48	49	652	0.9	1.98	9236	367	68	5.98
PDRC236	49	50	312	0.3	3.14	14628	68	6	6.76
PDRC236	50	51	198	1.25	0.16	764	409	71	8.32
PDRC236	54	55	594	1.3	0.6	2790	1553	72	2.91
PDRC236	55	56	1123	2.39	1.22	5694	4167	49	4.66

Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li2O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDRC236	56	57	1046	2.23	1.2	5621	4004	97	4.37
PDRC236	57	58	1072	2.23	1.11	5182	4079	58	3.99
PDRC236	58	59	284	0.84	0.3	1397	821	78	7.68
PDRC236	59	60	316	0.69	0.2	934	587	78	8.05
PDRC238	46	47	456	3.7	0.33	1561	2267	21	8.8
PDRC238	47	48	617	4.2	0.78	3644	2006	98	10.64
PDRC238	48	49	813	2.93	0.92	4314	1936	39	8.55
PDRC238	49	50	524	0.89	1.89	8784	668	24	5.9
PDRC238	50	51	513	0.7	1.62	7550	446	19	7.01
PDRC238	51	52	257	0.32	2.6	12087	214	9	4.8
PDRC238	52	53	358	0.38	2.42	11276	255	8.3	5.95
PDRC238	53	54	296	0.43	2.16	10044	334	12	5.64
PDRC238	54	55	248	0.28	3.17	14745	166	8	7.16
PDRC238	55	56	482	0.55	1.77	8229	277	10	5.03
PDRC238	56	57	376	1.83	0.44	2074	1575	22	5.72
PDRC239	36	37	189	3.28	0.63	2967	1333	3	8.96
PDRC239	37	38	150	1.69	1.06	4942	675	5	8.35
PDRC239	38	39	135	0.39	3.06	14220	131	3	5.81
PDRC239	39	40	191	0.64	1.59	7397	257	12	6.3
PDRC239	40	41	290	1.62	1.21	5651	1239	20	7.04
PDRC239	41	42	185	1.06	0.34	1589	918	22	8.46
PDRC239	50	51	228	0.75	0.23	1071	770	11	6.01
PDRC239	51	52	356	0.83	0.84	3918	706	14	3.16
PDRC239	52	53	1091	1.21	1.05	4909	1216	30	5.9
PDRC239	53	54	791	0.91	0.74	3469	855	78	3.7
PDRC239	54	55	860	0.92	1.45	6762	1090	48	4.91
PDRC239	55	56	839	1.03	1.24	5775	930	30	4.5
PDRC239	56	57	732	1.6	0.67	3126	2739	54	4.39
PDRC241	37	38	523	6.42	0.39	1844	3723	12	9.36
PDRC241	38	39	315	1.2	2.31	10750	622	7	6.16
PDRC241	39	40	511	2.62	0.4	1894	1990	100	8.04
PDRC241	40	41	859	2.59	2.63	12233	2442	97	8.61
PDRC241	41	42	392	0.86	1.82	8495	793	53	7.45
PDRC241	42	43	266	0.86	0.31	1448	1185	387	8.25
PDRC241	43	44	585	1.18	1.19	5548	1456	39	3.63
PDRC241	44	45	517	0.81	3.11	14453	1162	17	7.42
PDRC241	45	46	197	0.33	3.58	16652	413	12	7.2
PDRC241	46	47	207	0.38	3.7	17227	464	21	8.68
PDRC241	47	48	372	0.45	2.85	13258	585	38	5.76
PDRC241	48	49	625	0.88	2.69	12506	1342	41	6.49
PDRC241	49	50	1220	2.12	2.99	13917	3245	38	8.37
PDRC241	50	51	250	0.57	3.29	15301	608	14	8.5

Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li2O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDRC241	51	52	902	1.7	2.28	10599	2140	53	5.46
PDRC241	52	53	1391	2.3	1.15	5366	4357	118	3.51
PDRC241	53	54	798	0.88	0.7	3254	932	24	9.2
PDRC241	54	55	1293	0.31	1.44	6694	162	8	6.21
PDRC241	55	56	948	0.45	1.54	7177	354	15	6.6
PDRC241	56	57	443	0.74	0.89	4161	731	28	5.69
PDRC241	57	58	1298	1.64	0.96	4485	2635	53	6.39
PDRC241	58	59	1507	2.1	1.44	6711	3688	40	5.16
PDRC241	59	60	412	1.26	0.75	3491	1294	17	7.51
PDRC241	60	61	421	1.15	0.53	2463	1445	37	8.89
PDRC242	37	38	1639	6.87	1.75	8140	9867	68	13.63
PDRC242	38	39	1715	7.2	1.9	8836	10711	56	14.33
PDRC242	39	40	1440	6.07	1.73	8051	8923	298	12.7
PDRC242	40	41	1757	7.25	1.96	9132	10557	765	14.38
PDRC242	41	42	559	2.13	2.72	12652	3003	77	8.69
PDRC242	42	43	343	0.73	4.01	18633	1100	28	9.02
PDRC242	43	44	124	0.31	3.36	15628	383	26	7.68
PDRC242	44	45	183	0.91	0.48	2255	690	25	3.94
PDRC244	51	52	654	1.74	0.65	3053	2973	28	3.7
PDRC244	52	53	186	0.71	1.37	6373	422	43	5.03
PDRC244	53	54	111	0.14	1.02	4779	97	3	5.36
PDRC245	30	33	79	1.54	0.13	611	633	12	6.48
PDRC245	33	36	78	1.2	0.13	647	503	19	5.84
PDRC245	36	37	133	0.77	1.78	8308	469	10	7.88
PDRC245	37	38	57	0.11	0.7	3277	128	2	2.61
PDRC245	38	39	94	0.43	2.9	13500	163	4	8.03
PDRC245	39	40	4917	0.28	0.89	4172	389	5	8.6
PDRC245	40	41	6422	0.03	0.96	4488	182	5	8.22
PDRC245	41	42	7169	0.07	1.09	5088	208	25	7.71
PDRC245	42	43	108	1.21	0.89	4156	635	7	6.58
PDRC245	43	44	142	1.48	0.73	3429	643	9	6.34
PDRC245	44	45	94	0.45	0.9	4191	301	28	8.52
PDRC245	45	46	474	0.16	0.51	2384	108	19	4.84
PDRC245	46	47	67	0.12	1.22	5668	49	5	4.61
PDRC245	47	48	564	0.21	1.16	5403	79	1	5.73
PDRC245	48	49	579	0	0.06	286	15	0.4	0.43
PDRC245	55	56	469	1.24	0.42	1991	1508	54	1.85
PDRC245	56	57	2292	3.93	1.78	8280	7304	265	8.11
PDRC245	57	58	1721	3.07	1.39	6484	6356	132	5.18
PDRC245	58	59	1152	2.33	0.97	4526	4555	83	3.05
PDRC245	59	60	585	0.99	0.39	1839	1277	57	4.62
PDRC246	64	65	473	1.26	0.35	1650	1617	153	10.68

Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li2O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDRC246	65	66	887	1.57	0.6	2830	2741	66	7.26
PDRC246	66	67	888	2.11	0.81	3771	3706	36	5.26
PDRC246	67	68	681	1.67	0.52	2440	2627	47	6.07
PDRC246	68	69	2315	3.21	1.48	6920	6337	186	6.21
PDRC246	69	70	1838	3.16	1.33	6180	5817	163	7.46
PDRC246	70	71	988	2.14	0.73	3427	3487	114	7.29
PDRC246	71	72	314	1.16	0.23	1097	1101	54	7.34
PDRC247	36	37	97	1.39	0.87	4069	983	1	8.4
PDRC247	37	38	110	1.15	1.23	5718	633	2	7.4
PDRC247	38	39	37	0.29	1.15	5380	80	2	7.45
PDRC247	39	40	1506	5.77	1.53	7129	8564	97	11.01
PDRC247	40	41	178	0.68	1.48	6902	1000	44	5.33
PDRC247	41	42	83	0.62	2.43	11328	319	11	5.94
PDRC247	42	43	120	0.62	2.08	9687	278	21	5.74
PDRC250	34	35	231	0.75	0.51	2383	874	17	5.16
PDRC250	35	36	1399	3.15	1.59	7404	6281	38	5.17
PDRC250	36	37	316	1.02	2.39	11110	1195	32	6.53
PDRC250	37	38	395	0.42	2.13	9913	615	20	5.83
PDRC250	38	39	898	1.51	2.06	9595	2653	82	6.42
PDRC250	39	40	257	0.78	1.89	8796	992	36	6.93
PDRC250	40	41	209	0.56	1.19	5567	240	53	6.57
PDRC250	41	42	200	0.54	1.13	5250	312	86	5.33
PDRC250	42	43	273	1.25	0.86	4002	1067	28	5.57
PDRC250	43	44	181	0.57	1.52	7083	634	20	8.2
PDRC250	44	45	523	1.26	0.59	2770	1632	78	5.21
PDRC250	45	46	202	1.08	0.17	817	598	54	5.42
PDRC251	41	42	562	7.38	0.58	2725	4133	7	9.83
PDRC251	42	43	451	1.5	1.16	5391	1077	9	6.69
PDRC251	43	44	289	0.67	1.54	7183	486	26	6.72
PDRC251	44	45	277	0.49	1.51	7039	285	90	6.81
PDRC251	45	46	104	0.45	0.84	3930	314	20	7.95
PDRC251	46	47	137	0.74	0.71	3310	498	13	8.51
PDRC251	47	48	126	1.24	1.03	4788	535	11	7.5
PDRC251	48	49	307	2.31	0.53	2480	1155	6	8.64
PDRC252	37	38	779	1.93	0.66	3071	2632	48	3.09
PDRC252	38	39	1008	3.21	1.42	6629	4196	31	8.54
PDRC252	39	40	767	0.91	0.77	3600	1060	14	3.96
PDRC252	40	41	61	0.29	3.28	15253	164	3	6.97
PDRC252	41	42	113	0.56	3.77	17559	295	4	7.18
PDRC252	42	43	265	0.63	3.58	16656	515	9	7.36
PDRC252	43	44	128	0.82	0.87	4047	353	5	5.77
PDRC252	44	45	68	0.14	1.25	5842	22	0.6	8.58

Table 3 Selected Assay Results									
Hole ID	From (m)	To (m)	Cs (ppm)	K (%)	Li <sub>2</sub> O_calc (%)	Li (ppm)	Rb (ppm)	Ta (ppm)	Al (%)
PDRC252	45	46	102	0.2	1.27	5908	46	0.6	9.16
PDRC252	46	47	206	0.25	2.06	9602	35	0.7	12.73
PDRC252	47	48	165	0.17	1.54	7181	42	1	7.28
PDRC252	48	49	144	0.1	1.96	9120	13	0.3	6.19
PDRC252	49	50	30	0.02	0.3	1437	9	0.2	1.2
PDRC252	50	51	510	1.26	0.23	1100	1504	181	3.21
PDRC252	51	52	1760	4.14	0.99	4619	4980	1090	6.63
PDRC252	52	53	116	0.33	0.06	284	333	54	0.59
PDRC255	39	40	27	0.12	0.02	114	103	4	1.3
PDRC255	40	41	2649	6.51	2.77	12881	11010	107	10.66
PDRC255	41	42	3080	8.26	3.17	14759	13313	150	14.16
PDRC255	42	43	3229	8.03	3.2	14891	13563	102	12.77
PDRC255	43	44	3211	7.73	3.16	14701	13288	133	12.34
PDRC255	44	45	678	1.39	0.35	1669	1800	20	3.7
PDRC255	45	46	839	1.63	0.69	3235	2814	24	3.66
PDRC255	46	47	1682	3	2.42	11257	5340	114	7.56
PDRC255	47	48	993	2.31	1.32	6133	3529	34	6.72
PDRC255	48	49	849	1.68	2.13	9937	2798	48	6.42
PDRC255	49	50	348	0.97	2.08	9689	896	24	5.73
PDRC255	50	51	442	0.83	0.54	2513	959	48	5.93
PDRC255	51	52	458	0.95	0.46	2141	810	111	4.76

Notes:

- Selected Assay results derived from chemical analysis by Intertek-Genalysis.
- The element assays were determined by 4 acid digest and ICP analysis.
- Calculated oxide fields comprise the actual element oxide value when determined, or the oxide value calculated from the elemental value using the following formula: Li \* 2.153 to derive Li<sub>2</sub>O.
- Intersections noted are 'down-hole' and do not necessarily represent a true width.

## Section 1 - Sampling Techniques and Data

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

### Pioneer Dome Project, Sinclair Deposit.

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut Faces, 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.	Reverse circulation (RC) samples and HQ3 (triple tube) core samples from holes drilled from surface reported. Single metre samples were collected in calico bags via a cone splitter directly from the cyclone on the RC drill rig. Three-metre composite samples for intervals that were considered to have low LCT element concentrations from the pXRF data were collected from the sample piles via an aluminium scoop. HQ3 core was measured and marked up for every metre. pXRF analysis was undertaken on each 1m sample using a Bruker S1 Titan 800 hand held portable XRF analyser for internal use, and not reported herein.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Industry-standard reverse circulation drilling, using a face-sampling hammer with a booster and auxiliary compressors used to ensure dry samples. RC: Individual one metre samples were collected using a cyclone and a cone splitter into sub samples of approximately 3.5kg weight, the cyclone was regularly cleaned to minimise contamination. Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide assay quality checks. The standards and duplicates reported within acceptable limits. Industry-standard diamond core drilling, using HQ diamond-set cutting tools. Samples are considered 'fit for purpose', being to detect anomalous metal element occurrences.
	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.	Reverse circulation drilling was used to obtain 1 m samples from which approximately 3.5 kg sampled. 3.5kg samples were crushed and pulverised by pulp mill to nominal P80/75um to produce a 50 gram charge for analysis. Diamond core - Half core samples of lengths determined by geology vary in weight but maximum 1m in length. Lithium exploration package of elements were analysed by a four acid digestion with a Mass Spectrometer (MS) determination (Intertek analysis code 4A Li48-MS). The quoted detection limits for this method are a lower detection limit of 0.1ppm and an upper detection of 5000ppm Li. Most other elements have a similar analytical range. Any over range samples were re analysed by a sodium peroxide zirconium crucible fusion with a detection range of 1ppm to 20% Li. High Cs-containing samples analysed using lithium borate fusion XRF analysis.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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).	Reverse Circulation Drilling. <ul style="list-style-type: none"> <li>• 4.5 inch drill string.</li> <li>• Face-sampling hammer.</li> <li>• Auxiliary and Booster compressors used to exclude ground water.</li> </ul>

Criteria	JORC Code explanation	Commentary
		Diamond Drilling. HQ standard drill string. HQ3 triple tube oriented core.
<b>Drill sample recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	During RC drilling the geologist recorded occasions when sample quality is poor, sample return was low, when the sample was wet or compromised in another way. Drill core is measured and compared with the core blocks and length of drill rods in use to ascertain recovery and core loss.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Sample recovery is good for RC drilling at the Sinclair Pegmatite using the equipment described. RC Sample recovery is mostly under the control of the drill operator and is generally influenced by the experience and knowledge of the operator. Sample recovery was maximised using HQ3 triple tube during diamond drilling, any core loss was noted during geological logging. Sample recovery for core drilling is usually very high. Core measurements enable core recoveries to be calculated and form part of the QA/QC record.
	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.	Because the sample recoveries are assumed to be high, any possible relationship between sample recovery and grade has not been investigated.
<b>Logging</b>	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.	Lithological logs exist for these holes in a database. Fields captured include lithology, mineralogy, sulphide abundance and type, alteration, texture, recovery, weathering and colour. The detail captured is considered high and fit for purpose.
	Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.	Logging has primarily been qualitative but includes quantitative estimates on mineral abundance. Qualitative litho-geochemistry based on pXRF analyses is used to confirm rock types. A representative sample of each RC drill metre is sieved and retained in chip trays for future reference. Half core is retained in trays for future reference.
	The total length and percentage of the relevant intersections logged.	The entire length of the drill holes were geologically logged.
<b>Sub-sampling techniques and sample preparation</b>	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.	RC drilling - Individual one metre samples were collected via a cone splitter directly attached to the cyclone when dry. All samples were dry. Individual samples were approximate 3.5kg. The bulk residue was collected via green plastic bags and laid out in order on the drill pad. Diamond core intervals between 0.1m and 1.4m (geology dependent) are sawn along orientation marks and one side of the core is consistently sampled leaving the half with the oriented line in the box for future reference. Individual RC drilling metre samples of the pegmatite that were enriched in elements typically associated with lithium in LCT pegmatites, as determined by a portable XRF (S1 Titan 600 Bruker pXRF) were submitted to the laboratory. Three metre composites were collected for the remainder of the drill holes in areas where the pXRF analysis indicated low associated element concentrations. In some drill holes the sampling (on a three metre composite basis) was undertaken prior to the pXRF analysis. Any three metre composite samples that returned anomalous LCT elements will be re sampled using the original single metre samples. The sample collection, splitting and sampling for the types of drilling used is considered standard industry practise.



Criteria	JORC Code explanation	Commentary
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Cyclones are routinely cleaned after each 6m rod. Geologist looks for evidence of sample contamination, which was recorded where present. The use of booster and auxiliary compressors ensures samples are dry, which best ensures a quality sample. The cut core was sampled with the right-hand side of the core always collected for chemical analysis, the orientation line was retained.
	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.	Standard Reference Material is included at a rate of 1 per 30 samples. Duplicate field samples are routinely inserted at a 1 per 30 samples for RC drilling. Duplicate samples for diamond core are not applicable or needed for this type of mineralisation. Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size is considered appropriate for the style of deposit being sampled.
<b>Quality of assay data and laboratory tests</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The sample preparation and assay method used is considered standard industry practice and is appropriate for the deposit.
	For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Pioneer owns a Bruker S1 Titan 600 handheld XRF instrument which it used to provide the geologist with basic, qualitative litho-geochemistry data and assist with selecting zones for sampling. Zones have been selected due to elevated caesium, niobium, tantalum, gallium, rubidium, thallium or tin. Intervals during RC drilling not identified as elevated from the pXRF have been sampled with three metre composites. Standards, blanks and duplicates have been analysed with the Bruker to ensure the instrument is operating as expected and correctly calibrated.
	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.	Standards and laboratory checks have been assessed. Most of the standards show results within acceptable limits of accuracy, with good precision in most cases. Internal laboratory checks indicate very high levels of precision.
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	Significant intersections are calculated by experienced staff with these intersections checked by other staff. No holes have been twinned
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Pioneer has a digital SQL drilling database where information is stored. The Company uses a range of consultants to load and validate data and appraise quality control samples.
	Discuss any adjustment to assay data.	Pioneer has adjusted the lithium (Li), tantalum (Ta) and caesium (Cs) assay results to determine Li <sub>2</sub> O, Ta <sub>2</sub> O <sub>5</sub> and Cs <sub>2</sub> O grades. This adjustment is a multiplication of the elemental Li, Ta and Cs assay results by 2.153, 1.221 and 1.06 to determine Li <sub>2</sub> O, Ta <sub>2</sub> O <sub>5</sub> and Cs <sub>2</sub> O grades respectively.
<b>Location of data points</b>	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.	The collar locations of the holes have been surveyed by a licenced surveyor using a differential GPS. The collar surveys provide very accurate positions for all holes including the RL of each drill collar.
	Specification of the grid system used.	MGA94 (Zone 51)
	Quality and adequacy of topographic control.	Topographic control is by DGPS, carried out by a licensed surveyor. A high-resolution DEM exists over the entire M63/665 lease.

Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results.	Drill spacing for lithium extensions was drilled on 20m-40m spaced panels with drill holes 10-20m apart. Drill spacing for caesium extensions was drilled on 10m spaced panels with drill holes 5m apart.
	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.	The data is sufficient and dense enough to conduct the estimation of a mineral resource however the results may not warrant an updated mineral resource.
	Whether sample compositing has been applied.	All reported assays are of 1m samples for RC drilling and between 0.1m -1.4m for diamond core.
<b>Orientation of data in relation to geological structure</b>	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 is considered to have introduced a sampling bias, this should be assessed and reported if material.	The strike of the mineralisation is estimated at to be broadly north – south, dipping west, therefore angled drill holes at -60° have been drilled at 090°. A single drillhole angled at 157° was needed to target under the pit due to access difficulty. The pegmatite dips toward the west in the Sinclair Zone. Cross sections were drawn as the holes progressed to ensure the drilling was optimal to the interpreted orientation of the intrusions. Down hole intercept widths are estimated to closely approximately true widths based on the interpretation of the pegmatite bodies and the orientation of the drilling.
<b>Sample security</b>	The measures taken to ensure sample security.	Pioneer uses standard industry practices when collecting, transporting and storing samples for analysis. Drilling pulps are retained by Pioneer off site.
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	Sampling techniques for assays have not been specifically audited but follow common practice in the Western Australian exploration industry. The assay data and quality control samples are periodically audited by an independent consultant.

## Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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	The Pioneer Dome drilling reported herein is entirely within M63/665 which is a granted Mining Lease. The tenement is located approximately 40km N of Norseman WA. Pioneer Resources Limited is the registered holder of the tenement and holds a 100% unencumbered interest in all minerals within the tenement. The tenement is on vacant crown land. The Ngadju Native Title Claimant Group has a determined Native Title Claim which covers the Pioneer Dome project.
	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.	At the time of this Statement M63/665 is in Good Standing. To the best of the Company's knowledge, other than industry standard permits to operate there are no impediments to Pioneer's operations within the tenement.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There has been no previous lithium exploration drilling or sampling on the Pioneer Dome project outside of Pioneer Resources Ltd. Previous mapping by the Western Australian Geological Survey and Western Mining Corporation (WMC) in the 1970's identified several pegmatite intrusions however these were not systematically explored for Lithium or associated elements.
Geology	Deposit type, geological setting and style of mineralisation.	The Project pegmatites are consistent with records of highly differentiated Lithium Caesium Tantalum (LCT) pegmatite intrusion. This type of pegmatite intrusions are the target intrusions of hard rock lithium deposits. The Sinclair Deposit is classified as a Petalite/Lepidolite sub type.
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, including 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 plus 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.	Refer to Appendix 1 of this announcement.
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.	Weighted average Cs2O assays on page 1 of this release are for generally adjacent samples above 5% Cs2O. Weighted average Li2O assays on page 1 of this release are for generally adjacent samples above 0.8% Li2O. Assays in Table 2 are as per the intervals sampled. There are no metal equivalent values reported.
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').	Downhole lengths are reported in Appendix 1. The current geological interpretation, based on drilling and mapping, suggests that the true widths approximate the down hole widths.

Criteria	JORC Code explanation	Commentary
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.	Refer to figures in this 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.	Comprehensive reporting of drill details has been provided in Appendix 1 of this announcement.
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 meaningful and material exploration data has been reported.
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.	Planned further work includes geological modelling – 3DM update. It's unclear at this stage whether results warrant an updated resource estimation.