

### **ASX Announcement**

# First Drilling results from the Cade Spodumene Discovery include 33m at 1.63% Li<sub>2</sub>O

**Perth, Western Australia: 26 September 2019:** Pioneer Resources Limited ("Company" or "Pioneer") (ASX: PIO) is pleased to advise that most of the assay results from the recently completed drilling programme, which tested two lithium-caesium-tantalum ("LCT") pegmatite targets, have been received, confirming the discovery of dominantly spodumene-rich deposits.

Assays have been received for drill holes PDRC263 to PDRC277, while those for holes PDRC278-PDRC288 are still awaited.

PDRC263, the discovery drill hole for the Cade Spodumene Deposit, intersected:

- PDRC263: 113\*m at 1.04 Li<sub>2</sub>O
- \* Not true width. The mineralised pegmatite was intersected at an angle near-parallel to the plunge orientation, so while not being representative of width, this hole does give an indication of mineralisation continuity with depth.

Results from holes drilled at right angles to the Cade Spodumene Deposit, meaning that the reported intersections are close to 'true width', included:

PDRC265: 25m at 1.61 Li<sub>2</sub>O

PDRC267: 33m at 1.63 Li<sub>2</sub>O

PDRC268: 18m at 1.47 Li<sub>2</sub>O

PDRC270: 23m at 1.36 Li<sub>2</sub>O

PDRC277: 10m at 1.60 Li<sub>2</sub>O

Results from the **Spodumene 1 Target** included:

PDRC275: 10m at 1.08 Li<sub>2</sub>O and 129ppm Ta<sub>2</sub>O<sub>5</sub>

A list of selected intersections is included as Table 1. The remaining assays are expected before the end of September 2019.

### **Board-Management Contact Details**

Craig McGown

Non-Executive Chairman

David Crook

Wayne Spilsbury

Managing Director

Non-Executive Director

Allan Trench

Non-Executive Director

**Timothy Spencer** 

#### **David Crook**

T: +61 8 9322 6974

E:dcrook@pioresources.com.au

### **James Moses**

Media and Investor Relations Mandate Corporate

T: +61 420 991 574

james@mandatecorporate.com.au





### Pioneer Dome Lithium-Caesium-Tantalum Project

### 100% owned and is the Company's priority exploration project.

The Pioneer Dome Project is located approximately 130km south of Kalgoorlie and 200km north of the Port of Esperance, close to the Goldfields-Esperance Highway and other relevant infrastructure including rail, gas and water.

The Company has a clearly stated strategy, to grow further value at the Pioneer Dome by building on the success of the Sinclair Caesium Mine.



Figure 1: Pioneer's Tenement Holdings with Key Projects

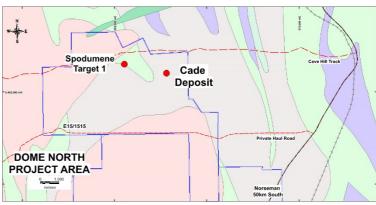


Figure 2: Dome North Project Area Showing Drilling Locations

#### **August 2019 Drilling Programme**

In July this year the Company reported that spodumene-bearing LCT pegmatites had been discovered by its geologists at two locations within the Dome North Area.

The reported programme saw 29 reverse circulation ("RC") drill holes (PDRC263-PDRC288) completed for a total of 4,919m at two targets: the Cade Pegmatite and Spodumene Target 1. Twenty-one (21) of these holes intersected pegmatite.

Drilling tested the targets beneath the previously reported discovery outcrops, (see ASX announcements 30 July, 23 August 2019) on panels of holes spaced on a nominal 160m x 80m grid.

- The Cade Spodumene Deposit (previously Spodumene Target 2) had 24 holes completed, with 16 intersecting the tabular pegmatite dyke over a strike length of 700m, and up to 35m thick. The dyke extends down plunge to at least 311m (Refer to Figures 2-5);
- 2 holes intersected a separate, previously unrecognised pegmatite (CNE Pegmatite) (Refer to Figure 5);
- Spodumene Target 1 had 5 holes completed, all of which intersected pegmatite, with a maximum thickness of 15m.



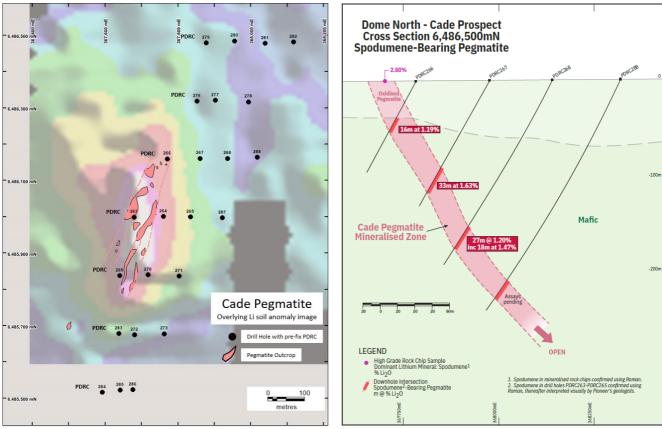


Figure 3: Drill Hole Collar Plan

Figure 4: Cross Section of the Cade Pegmatite

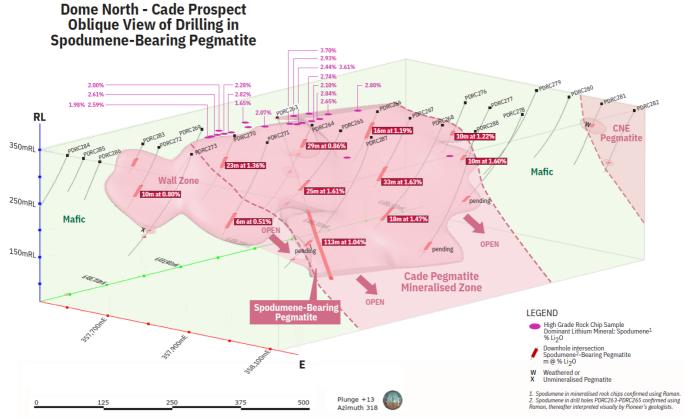


Figure 5: Oblique Section looking NW of the Cade Pegmatite showing Drill Hole Traces and Lithium (Li₂O %) Intersections.



Table 1												
	Selected	d High Grade	Results									
Hole ID	From (m)	To (m)	Interval (m)	Li <sub>2</sub> O (%)								
Cade Spodumene	Cade Spodumene Deposit											
PDRC263	180	293	113*	1.04								
including	180	186	6	1.59								
including	211	215	4	2.48								
including	235	255	20	1.21								
including	258	272	14	1.48								
including	278	283	5	1.47								
including	288	293	5	1.87								
PDRC264	47	112	29	0.86								
including	47	53	6	1.16								
including	67	70	3	1.79								
including	108	112	4	1.55								
PDRC265	122	147	25	1.61								
including	134	142	8	1.95								
PDRC266	48	64	16	1.19								
including	56	64	8	1.41								
PDRC267	116	149	33	1.63								
including	120	128	8	1.95								
PDRC268	207	225	18	1.47								
including	212	218	6	1.94								
PDRC270	50	73	23	1.36								
including	50	69	19	1.46								
PDRC272	95	105	10	0.80								
including	105	110	5	1.40								
PDRC276	69	79	10	1.22								
including	72	79	7	1.42								
PDRC277	116	126	10	1.60								
including	119	124	5	1.97								
Spodumene Targe	et 1											
PDRC274	53	59	6	0.93								
PDRC275	101	110	10	1.08								

<sup>\*</sup> Not true width



#### **About Pioneer Resources Limited**

Having successfully completed its first mining operation at the Sinclair Caesium Mine, and now well-funded through the sale of pollucite, Pioneer returns to being an 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.

**Lithium**: In addition to the Pioneer Dome LCT Project, the Company holds a 51% Project interest in the Mavis Lake Lithium Project, Canada where Company drilling has intersected spodumene.

**Nickel**: The Company owns the Golden Ridge Project which includes the suspended Blair Nickel Sulphide Mine, located between Kalgoorlie and Kambalda, WA. Near-mine target generation is continuing, with the Company announcing a new disseminated nickel sulphide drilling discovery at the Leo's Dam Prospect in 2018, highlighting the prospectivity of the greater project area.

**Gold**: Pioneer's key gold projects are free-carried with well credentialed JV partners:

- Acra JV Project near Kalgoorlie W.A.: Northern Star Resources limited has earned a 75% Project Interest and continues to fully fund exploration programmes until a decision to mine.
- Kangan JV Project in the West Pilbara W.A: Novo Resources Corp and Sumitomo Corporation will fully fund gold exploration programmes until a decision to mine is made, with Pioneer retaining a significant free-carried position.
- Balagundi JV Project which is a new joint venture where Black Cat Syndicate Limited may earn a 75% interest in the Project located at Bulong, near Kalgoorlie, W.A.

#### **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, 15 August 2019, 22 August 2019, 23 August 2019, 11 September 2019, 16 September 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. The Company confirms that it is not aware of any new information or data that materially effects 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 2  Drill Hole Collar Locations										
Hole ID	Prospect	Type	Drill Ho East	ole Collar Locati North	ons RL	Depth	Dip	Azimuth			
noie ib	Prospect	Туре	(m)	(m)	(m)	(m)	(°)	(°)			
PDRC263	CADE	RC	367,679	6,485,999	334.0	311	-60	90			
PDRC264	CADE	RC	367,760	6,486,001	335.2	204	-60	270			
PDRC265	CADE	RC	367,834	6,485,999	335.4	204	-60	270			
PDRC266	CADE	RC	367,771	6,486,160	332.7	120	-60	270			
PDRC267	CADE	RC	367,860	6,486,161	333.5	168	-60	270			
PDRC268	CADE	RC	367,935	6,486,161	333.8	258	-60	270			
PDRC269	CADE	RC	367,640	6,485,838	334.4	156	-60	270			
PDRC270	CADE	RC	367,717	6,485,840	335.5	156	-60	270			
PDRC271	CADE	RC	367,803	6,485,837	336.1	204	-60	270			
PDRC272	CADE	RC	367,680	6,485,674	335.4	150	-60	270			
PDRC273	CADE	RC	367,762	6,485,678	336.4	246	-60	270			
PDRC274	SPOD 1	RC	365,621	6,486,600	359.4	150	-60	270			
PDRC275	SPOD 1	RC	365,657	6,486,602	356.9	126	-60	270			
PDRC276	CADE	RC	367,852	6,486,318	331.3	126	-60	270			
PDRC277	CADE	RC	367,902	6,486,321	331.8	138	-60	270			
PDRC278	CADE	RC	367,993	6,486,317	332.7	234	-60	270			
PDRC279	CADE	RC	367,877	6,486,479	331.0	210	-60	270			
PDRC280	CADE	RC	367,956	6,486,485	332.4	150	-60	270			
PDRC281	CADE	RC	368,038	6,486,478	334.0	150	-60	270			
PDRC282	CADE	RC	368,117	6,486,482	335.7	150	-60	270			
PDRC283	CADE	RC	367,637	6,485,679	334.8	72	-60	270			
PDRC284	CADE	RC	367,592	6,485,516	336.7	126	-60	270			
PDRC285	CADE	RC	367,641	6,485,522	336.6	78	-60	270			
PDRC286	CADE	RC	367,676	6,485,524	336.8	90	-60	270			
PDRC287	CADE	RC	367,922	6,485,997	335.6	318	-60	270			
PDRC288	CADE	RC	368,017	6,486,164	333.4	312	-60	270			
PDRC289	SPOD 1	RC	365,437	6,486,519	351.2	96	-60	270			
PDRC290	SPOD 1	RC	365,511	6,486,444	351.0	150	-60	270			
PDRC291	SPOD 1	RC	365,523	6,486,502	352.7	66	-60	270			

### 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 3 Selected Li₂O Intervals										
Hole ID	From	То	Li₂O (%)	Al <sub>2</sub> O <sub>3</sub> (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	K <sub>2</sub> O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC263	177	178	0.51	14.53	0.61	2.03	5.38	790	14	30
PDRC263	178	179	0.51	14.36	0.69	2.36	5.08	921	15	28
PDRC263	179	180	0.71	14.73	0.60	2.63	4.58	1,179	18	36
PDRC263	180	181	1.21	14.11	0.90	1.50	4.53	652	15	52
PDRC263	181	182	1.23	14.41	0.86	3.74	3.17	1,557	14	26
PDRC263	182	183	1.91	10.70	0.69	3.07	2.59	1,120	17	26
PDRC263	183	184	1.71	6.26	0.60	2.91	2.77	1,033	17	24
PDRC263	184	185	1.78	9.14	0.66	3.24	3.20	1,144	17	51
PDRC263	185	186	1.70	9.70	0.76	1.22	4.06	364	15	46
PDRC263	186	187	0.83	14.90	0.84	2.16	4.75	1,011	19	36
PDRC263	187	188	0.92	14.75	0.97	1.95	4.82	896	17	28
PDRC263	188	189	0.85	14.80	0.79	2.40	4.60	1,121	19	42
PDRC263	189	190	1.23	13.13	0.80	2.08	4.00	893	19	43
PDRC263	190	191	0.36	14.05	0.74	3.55	4.26	1,540	18	32
PDRC263	206	207	0.37	13.33	0.77	2.67	4.18	1,155	22	41
PDRC263	207	208	1.45	15.14	0.61	3.30	3.43	1,326	11	27
PDRC263	208	209	1.42	15.30	0.61	2.82	3.92	1,103	11	23
PDRC263	209	210	1.22	14.45	0.69	2.40	4.13	978	14	31
PDRC263	210	211	1.28	14.84	0.69	2.29	4.28	982	15	32
PDRC263	211	212	1.75	14.87	0.64	2.18	3.82	940	14	37
PDRC263	212	213	2.56	10.71	0.64	1.69	2.59	615	14	27
PDRC263	213	214	2.82	11.98	0.69	1.85	2.23	666	13	29
PDRC263	214	215	2.78	13.07	0.59	1.89	2.13	717	12	31
PDRC263	215	216	0.94	15.38	0.69	3.72	3.94	1,616	22	29
PDRC263	216	217	0.75	15.62	0.60	4.44	4.34	1,774	15	34
PDRC263	217	218	1.68	13.57	0.63	2.09	3.63	863	15	33
PDRC263	218	219	0.73	15.03	0.54	3.54	4.56	1,459	15	35
PDRC263	219	220	0.64	14.62	0.66	2.93	4.88	1,246	15	32
PDRC263	234	235	0.46	14.62	0.74	4.38	4.13	1,706	15	31
PDRC263	235	236	1.32	14.08	0.71	4.20	3.91	1,604	15	28
PDRC263	236	237	1.89	15.18	0.63	4.53	3.87	1,678	18	26
PDRC263	237	238	1.49	15.09	0.70	2.51	3.79	985	18	34
PDRC263	238	239	0.73	15.33	0.63	4.50	3.89	1,703	18	27
PDRC263	239	240	0.24	14.70	0.60	4.35	4.50	1,643	19	24
PDRC263	240	241	1.24	13.04	0.50	2.22	4.65	858	12	27
PDRC263	241	242	1.84	13.07	0.60	2.53	3.59	984	13	28
PDRC263	242	243	1.47	12.80	0.63	2.69	3.81	1,046	14	27
PDRC263	243	244	1.66	13.64	0.67	2.29	3.78	893	13	32
PDRC263	244	245	0.89	15.16	0.69	3.57	4.17	1,413	16	28
PDRC263	245	246	0.29	14.25	0.67	3.34	3.95	1,328	15	25
PDRC263	246	247	1.27	16.25	0.81	3.10	4.17	1,185	15	33



	Table 3									
	Selected Li <sub>2</sub> O Intervals									
Hole ID	From	То	Li₂O (%)	Al₂O₃ (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC263	247	248	1.27	15.07	0.77	2.91	3.94	1,102	14	30
PDRC263	248	249	1.17	14.79	0.80	2.60	4.00	1,048	16	26
PDRC263	249	250	0.39	14.37	0.46	5.94	3.40	2,432	11	33
PDRC263	250	251	1.20	8.08	0.79	1.00	2.19	370	12	37
PDRC263	251	252	1.27	15.15	0.84	2.22	4.14	950	19	53
PDRC263	252	253	0.92	14.70	0.66	3.05	4.63	1,207	17	34
PDRC263	253	254	1.29	15.18	0.60	3.53	3.82	1,426	12	30
PDRC263	254	255	2.25	16.32	0.59	2.21	3.33	937	19	38
PDRC263	255	256	0.87	15.21	0.63	3.08	4.53	1,314	19	32
PDRC263	256	257	0.82	14.71	0.61	3.35	4.29	1,401	19	33
PDRC263	257	258	1.11	14.49	0.64	2.81	3.88	1,140	18	22
PDRC263	258	259	1.31	15.37	0.77	3.13	3.80	1,303	17	28
PDRC263	259	260	1.49	14.17	1.10	2.27	3.25	974	16	45
PDRC263	260	261	1.68	15.01	0.96	3.54	2.71	1,461	14	58
PDRC263	261	262	1.93	14.95	1.07	2.74	2.79	1,126	15	48
PDRC263	262	263	1.22	15.92	0.86	4.24	3.58	1,621	14	20
PDRC263	263	264	1.48	14.50	0.93	3.58	3.12	1,359	14	21
PDRC263	264	265	1.35	13.99	0.76	2.96	3.65	1,171	15	29
PDRC263	265	266	1.23	14.92	0.61	3.21	3.85	1,284	14	29
PDRC263	266	267	1.52	15.59	0.80	2.76	3.68	1,093	15	27
PDRC263	267	268	1.37	16.49	0.84	2.93	3.90	1,152	16	29
PDRC263	268	269	1.25	15.34	0.70	3.31	3.72	1,308	16	32
PDRC263	269	270	1.63	7.44	0.47	2.75	3.48	974	16	31
PDRC263	270	271	1.48	15.65	0.63	3.47	3.68	1,414	15	46
PDRC263	271	272	1.80	14.34	0.71	2.62	3.32	1,078	18	37
PDRC263	272	273	0.82	15.20	0.83	2.39	4.77	1,041	19	39
PDRC263	277	278	0.44	15.66	0.49	6.19	3.60	2,410	10	19
PDRC263	278	279	1.17	14.98	0.64	3.03	3.92	1,201	14	22
PDRC263	279	280	1.41	15.31	0.67	3.30	3.48	1,287	12	15
PDRC263	280	281	1.41	15.50	0.67	3.36	3.40	1,322	13	20
PDRC263	281	282	2.55	16.16	0.77	1.57	3.01	650	15	19
PDRC263	282	283	0.82	14.96	0.79	1.96	4.89	888	15	38
PDRC263	283	284	0.23	14.13	0.46	5.15	3.52	2,488	12	35
PDRC263	287	288	0.31	13.80	0.69	3.92	4.09	1,776	16	83
PDRC263	288	289	1.29	15.37	0.74	2.66	4.22	1,017	14	31
PDRC263	289	290	1.32	15.65	0.74	2.19	4.35	842	15	24
PDRC263	290	291	2.45	10.26	0.69	1.17	3.24	360	16	27
PDRC263	291	292	2.78	9.38	0.61	1.27	2.77	420	16	24
PDRC263	292	293	1.53	14.35	0.81	1.77	3.65	702	18	29
PDRC263	293	294	0.69	15.72	0.80	2.52	4.92	1,061	21	25
PDRC263	306	307	0.15	16.25	0.43	9.02	3.48	3,384	6	10
PDRC263	307	308	1.45	15.48	0.69	4.54	3.09	1,642	12	20
PDRC263	308	309	2.13	11.89	0.71	3.58	2.35	1,176	14	21



Table 3										
11-1-15	l =		1:0		d Li₂O Inter	1	N- O	DI.	6	
Hole ID	From	То	Li₂O (%)	Al₂O₃ (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC263	309	310	0.67	15.49	0.64	5.11	3.45	1,781	13	60
PDRC263	310	311	0.27	14.62	0.84	1.86	5.72	792	18	39
PDRC264	46	47	0.25	16.06	0.63	2.49	4.44	1,264	27	50
PDRC264	47	48	0.90	7.81	0.43	1.88	4.18	671	25	48
PDRC264	48	49	0.55	11.14	0.50	3.28	3.77	1,320	24	55
PDRC264	49	50	1.06	8.14	0.41	2.46	4.05	946	21	37
PDRC264	50	51	1.45	5.89	0.29	2.23	3.86	883	21	28
PDRC264	51	52	1.87	5.85	0.31	2.09	3.62	774	19	27
PDRC264	52	53	1.12	7.13	0.37	2.88	4.43	1,140	22	43
PDRC264	53	54	0.30	14.99	0.49	2.58	5.52	1,166	26	53
PDRC264	54	55	0.64	17.31	7.03	2.51	1.87	612	8	12
PDRC264	55	56	0.46	16.04	7.68	2.07	1.51	198	3	8
PDRC264	56	57	0.34	15.08	8.38	1.82	1.55	101	2	1
PDRC264	57	60	0.25	14.07	8.02	1.53	1.57	73	1	1
PDRC264	60	63	0.28	14.28	7.88	1.73	1.75	88	2	1
PDRC264	63	64	0.36	14.24	7.82	1.54	1.48	78	2	1
PDRC264	64	65	0.36	13.40	7.59	1.71	1.58	97	2	1
PDRC264	65	66	0.49	15.72	7.86	2.77	1.51	1,497	22	3
PDRC264	54	55	0.64	17.31	7.03	2.51	1.87	612	8	12
PDRC264	55	56	0.46	16.04	7.68	2.07	1.51	198	3	8
PDRC264	56	57	0.34	15.08	8.38	1.82	1.55	101	2	1
PDRC264	57	60	0.25	14.07	8.02	1.53	1.57	73	1	1
PDRC264	60	63	0.28	14.28	7.88	1.73	1.75	88	2	1
PDRC264	66	67	0.64	12.74	0.60	3.75	4.36	1,573	20	38
PDRC264	67	68	1.54	8.88	0.67	2.15	3.59	736	21	47
PDRC264	68	69	2.04	5.74	0.34	2.27	2.97	885	17	38
PDRC264	69	70	1.78	7.93	0.36	2.53	3.48	919	15	27
PDRC264	70	71	0.96	9.59	0.39	2.66	4.50	950	15	28
PDRC264	71	72	0.43	16.96	6.48	2.54	2.35	530	8	11
PDRC264	72	73	0.33	15.52	8.01	2.04	1.66	153	3	2
PDRC264	73	74	0.22	14.57	7.63	1.85	1.49	85	2	1
PDRC264	74	75	0.14	11.94	6.29	1.52	1.40	63	5	1
PDRC264	107	108	0.31	15.56	3.16	3.10	3.19	1,510	25	45
PDRC264	108	109	1.47	13.37	2.49	2.37	2.84	769	16	34
PDRC264	109	110	1.72	4.07	0.34	2.32	3.42	855	14	29
PDRC264	110	111	1.78	8.46	0.49	2.68	3.10	1,016	14	49
PDRC264	111	112	1.21	6.86	0.41	2.85	3.87	1,037	14	39
PDRC264	112	113	0.51	8.83	0.46	2.44	5.41	988	22	102
PDRC265	121	122	0.18	13.40	1.06	2.34	4.60	520	20	35
PDRC265	122	123	0.99	9.93	0.60	3.22	3.66	930	17	39
PDRC265	123	124	1.61	5.27	0.51	1.78	3.54	590	20	34
PDRC265	124	125	1.15	7.27	0.49	2.73	3.86	1,020	19	37
PDRC265	125	126	1.60	4.66	0.34	2.35	3.49	862	20	38



Table 3										
11-1-15	T =	T	1:0		d Li <sub>2</sub> O Inter	1	N- 0	DI.		
Hole ID	From	То	Li₂O (%)	Al <sub>2</sub> O <sub>3</sub> (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC265	126	127	1.57	6.20	0.41	2.25	3.58	925	19	41
PDRC265	127	128	1.21	5.39	0.36	2.44	3.89	924	20	34
PDRC265	128	129	1.29	10.20	0.59	2.38	3.79	1,034	21	47
PDRC265	129	130	1.52	6.48	0.46	2.00	3.76	700	20	45
PDRC265	130	131	1.61	6.57	0.50	2.06	3.50	781	20	52
PDRC265	131	132	1.41	9.74	0.93	2.09	3.60	631	19	48
PDRC265	132	133	1.29	6.96	0.50	2.00	4.38	734	21	37
PDRC265	133	134	1.54	4.35	0.36	2.35	3.56	1,043	24	36
PDRC265	134	135	2.40	9.93	0.47	1.95	2.79	862	22	45
PDRC265	135	136	1.94	4.98	0.33	1.96	3.31	827	23	47
PDRC265	136	137	2.58	7.36	0.47	2.00	3.03	809	22	53
PDRC265	137	138	1.45	6.27	0.40	2.38	3.73	1,003	22	57
PDRC265	138	139	1.41	7.72	0.51	2.52	3.87	926	21	52
PDRC265	139	140	1.74	4.92	0.44	2.26	3.49	842	19	30
PDRC265	140	141	2.01	6.88	0.53	1.96	3.26	803	20	33
PDRC265	141	142	2.09	4.46	0.46	1.98	3.01	719	20	35
PDRC265	142	143	1.39	7.93	0.57	2.18	4.02	787	18	38
PDRC265	143	144	1.88	6.49	0.51	2.37	3.10	936	20	44
PDRC265	144	145	1.76	11.51	0.74	1.90	3.86	824	19	47
PDRC265	145	146	1.40	6.93	0.50	2.24	3.89	857	22	44
PDRC265	146	147	1.47	5.40	0.39	2.36	3.69	958	21	43
PDRC265	147	148	0.14	9.78	0.54	2.85	5.88	1,019	19	30
PDRC266	46	47	0.08	14.12	0.63	2.42	3.86	967	20	31
PDRC266	47	48	0.55	13.59	0.67	1.92	3.60	822	25	30
PDRC266	48	49	1.97	14.38	0.49	1.20	2.73	638	24	46
PDRC266	49	50	1.04	9.42	0.46	2.19	4.04	811	25	39
PDRC266	50	51	1.80	13.81	0.61	2.59	2.79	992	25	38
PDRC266	51	52	0.55	13.03	0.56	2.06	3.10	769	27	54
PDRC266	52	53	0.35	15.50	0.43	2.15	4.89	988	20	40
PDRC266	53	54	0.53	11.62	0.53	2.57	3.50	845	21	37
PDRC266	54	55	0.58	15.48	0.41	4.28	4.12	1,746	15	26
PDRC266	55	56	0.98	14.47	0.57	3.07	3.97	1,186	18	30
PDRC266	56	57	1.68	8.13	0.49	2.21	3.55	695	18	38
PDRC266	57	58	1.04	11.88	2.03	1.77	3.31	306	19	32
PDRC266	58	59	1.33	13.95	0.83	2.68	3.55	801	26	41
PDRC266	59	60	1.85	12.13	0.57	2.83	3.15	1,005	19	39
PDRC266	60	61	1.43	14.87	0.53	3.81	3.33	1,568	19	39
PDRC266	61	62	1.81	11.10	0.56	2.49	2.94	803	20	34
PDRC266	62	63	1.09	15.36	0.57	2.69	4.05	1,111	20	56
PDRC266	63	64	1.04	14.37	2.60	2.79	2.86	850	18	29
PDRC266	64	65	0.49	14.17	5.09	2.60	2.64	663	11	15
PDRC266	65	66	0.98	15.60	0.76	2.46	4.46	1,074	24	66
PDRC266	66	67	0.19	12.87	6.19	2.51	1.33	291	5	5



Table 3										
	1 _	_			d Li <sub>2</sub> O Inter	1				_
Hole ID	From	То	Li₂O (%)	Al₂O₃ (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC266	67	68	0.37	17.38	7.58	3.44	1.05	218	3	1
PDRC266	68	69	0.26	15.81	7.66	2.74	1.61	117	2	1
PDRC267	115	116	0.07	15.35	0.63	2.63	5.44	1,010	20	45
PDRC267	116	117	1.51	13.37	0.51	1.53	3.51	490	13	28
PDRC267	117	118	1.04	9.66	0.50	2.66	4.23	1,018	20	33
PDRC267	118	119	1.43	11.10	0.49	2.36	4.06	1,054	24	43
PDRC267	119	120	1.55	14.01	0.56	2.55	3.60	1,259	26	41
PDRC267	120	121	1.77	10.78	0.59	2.27	3.42	935	23	36
PDRC267	121	122	1.89	6.79	0.43	2.35	3.16	968	18	35
PDRC267	122	123	2.14	6.82	0.41	1.87	3.27	771	18	29
PDRC267	123	124	2.08	4.11	0.37	1.58	2.94	681	20	38
PDRC267	124	125	1.60	14.69	0.63	1.44	4.12	775	24	41
PDRC267	125	126	2.03	6.07	0.41	1.75	2.83	740	21	50
PDRC267	126	127	1.76	7.98	0.41	2.32	3.33	966	19	39
PDRC267	127	128	2.31	15.56	0.61	2.18	3.17	1,016	22	45
PDRC267	128	129	1.54	10.65	0.47	2.45	3.53	1,041	20	40
PDRC267	129	130	1.37	15.35	0.61	2.86	3.70	1,317	20	47
PDRC267	130	131	2.00	11.19	0.60	1.97	3.24	775	23	42
PDRC267	131	132	1.42	14.93	0.60	2.94	3.65	1,289	19	40
PDRC267	132	133	1.72	10.59	0.50	2.66	3.37	1,097	22	36
PDRC267	133	134	1.61	15.94	0.64	2.95	3.60	1,254	20	31
PDRC267	134	135	1.59	15.60	0.64	3.10	3.44	1,368	20	44
PDRC267	135	136	1.86	9.40	0.53	1.97	3.21	757	20	39
PDRC267	136	137	1.55	6.24	0.50	2.41	3.30	834	22	32
PDRC267	137	138	1.91	5.54	0.53	1.54	3.14	504	23	42
PDRC267	138	139	1.64	6.11	0.53	2.07	3.41	646	22	39
PDRC267	139	140	1.68	8.87	0.73	2.31	3.03	843	21	26
PDRC267	140	141	1.72	8.85	0.54	2.63	3.10	936	21	27
PDRC267	141	142	1.27	11.20	0.59	2.76	3.41	1,090	24	36
PDRC267	142	143	1.28	14.98	0.73	2.48	3.64	1,076	25	38
PDRC267	143	144	0.96	13.93	0.67	2.35	3.95	1,055	27	44
PDRC267	144	145	1.95	9.67	0.64	2.06	2.94	739	26	47
PDRC267	145	146	2.12	6.10	0.59	1.74	2.84	582	24	31
PDRC267	146	147	1.67	8.69	0.54	1.98	3.55	650	21	35
PDRC267	147	148	0.96	14.54	0.61	3.41	3.81	1,464	24	41
PDRC267	148	149	0.87	14.39	0.67	2.37	4.16	1,095	26	59
PDRC267	149	150	0.46	15.51	0.71	3.18	4.83	1,296	23	51
PDRC267	150	151	0.16	15.37	4.23	2.55	2.75	520	13	23
PDRC267	151	152	0.27	16.54	7.46	3.62	1.32	390	4	3
PDRC267	152	153	0.11	11.40	6.05	1.64	1.76	114	2	1
PDRC268	205	206	0.18	16.76	0.77	5.35	3.63	1,872	20	39
PDRC268	206	207	0.45	15.98	0.64	4.18	4.08	1,687	19	55
PDRC268	207	208	0.97	12.00	0.57	2.94	3.98	1,041	18	31



Table 3										
	1 _	_			d Li <sub>2</sub> O Inter					_
Hole ID	From	То	Li₂O (%)	Al₂O₃ (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC268	208	209	0.81	16.04	0.59	3.71	4.12	1,531	25	33
PDRC268	209	210	1.82	15.39	0.66	2.53	3.42	1,022	21	40
PDRC268	210	211	0.44	14.89	0.71	3.59	4.15	1,423	18	33
PDRC268	211	212	1.13	14.23	0.70	2.82	3.78	1,046	16	25
PDRC268	212	213	2.06	7.13	0.47	2.79	2.66	972	16	31
PDRC268	213	214	1.83	14.18	0.60	1.91	3.41	819	21	39
PDRC268	214	215	1.78	15.45	0.73	2.10	3.64	1,017	22	59
PDRC268	215	216	2.44	4.50	0.47	1.28	2.92	532	21	38
PDRC268	216	217	1.72	15.81	0.83	2.02	3.58	872	17	32
PDRC268	217	218	1.83	15.31	0.76	2.16	3.34	899	17	32
PDRC268	218	219	1.41	16.32	0.64	3.88	3.47	1,548	15	19
PDRC268	219	220	1.24	15.47	0.69	2.51	3.91	1,122	19	32
PDRC268	220	221	1.66	16.15	0.66	2.84	3.67	1,159	15	29
PDRC268	221	222	1.67	14.09	0.71	2.12	3.68	827	16	27
PDRC268	222	223	0.96	13.96	0.80	4.12	3.72	1,529	16	33
PDRC268	223	224	1.29	15.16	0.76	3.13	3.49	1,313	18	36
PDRC268	224	225	1.38	15.21	0.86	2.85	3.68	1,173	20	37
PDRC268	225	226	0.63	14.95	0.92	3.96	3.78	1,691	22	41
PDRC270	49	50	0.07	11.92	1.20	1.84	4.58	498	17	31
PDRC270	50	51	1.36	9.86	0.87	2.85	3.55	883	15	28
PDRC270	51	52	1.65	15.92	0.60	2.85	3.55	1,168	17	27
PDRC270	52	53	1.44	15.86	0.54	3.73	3.32	1,490	18	30
PDRC270	53	54	1.52	16.23	0.57	3.55	3.29	1,442	19	49
PDRC270	54	55	1.45	15.68	0.67	3.22	3.52	1,212	17	38
PDRC270	55	56	1.36	15.71	0.66	3.17	3.72	1,207	16	34
PDRC270	56	57	1.36	15.43	0.60	3.02	3.68	1,215	17	30
PDRC270	57	58	1.89	15.52	0.64	2.28	3.42	908	17	26
PDRC270	58	59	1.54	15.46	0.56	3.11	3.55	1,275	20	27
PDRC270	59	60	1.55	12.85	0.53	1.87	4.01	779	21	32
PDRC270	60	61	1.39	12.44	0.59	2.93	3.52	1,098	16	30
PDRC270	61	62	1.43	13.16	0.59	2.97	3.20	1,149	18	27
PDRC270	62	63	1.35	15.44	0.54	3.10	3.68	1,313	22	28
PDRC270	63	64	1.09	15.08	0.57	2.77	3.88	1,161	23	35
PDRC270	64	65	1.49	15.80	0.67	2.47	3.88	1,041	23	40
PDRC270	65	66	1.59	16.15	0.71	2.16	3.97	914	23	41
PDRC270	66	67	1.73	15.71	0.77	1.90	3.74	785	24	38
PDRC270	67	68	1.20	16.16	0.61	3.02	4.16	1,258	23	42
PDRC270	68	69	1.32	16.05	0.60	2.22	4.36	961	25	57
PDRC270	69	70	0.88	15.00	0.70	3.24	3.90	1,369	24	51
PDRC270	70	71	0.87	15.85	0.64	3.31	4.20	1,411	27	50
PDRC270	71	72	1.01	14.95	0.56	2.51	4.20	1,016	20	45
PDRC270	72	73	0.88	14.32	0.61	3.10	3.92	1,209	22	42
PDRC270	73	74	0.41	15.93	0.60	3.46	5.07	1,346	18	39



Table 3										
11-1-15	T =	T	1:0		d Li₂O Inter		N- 0	DI.	6	
Hole ID	From	То	Li₂O (%)	Al <sub>2</sub> O <sub>3</sub> (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)
PDRC272	93	94	0.07	15.54	0.71	3.79	5.16	1,567	22	32
PDRC272	94	95	0.30	16.35	0.67	3.64	5.95	1,689	18	44
PDRC272	95	96	0.89	16.04	0.63	3.45	4.86	1,589	18	48
PDRC272	96	97	1.32	11.08	0.63	3.13	3.90	1,222	20	38
PDRC272	97	98	0.98	16.25	0.67	2.96	4.53	1,318	24	38
PDRC272	98	99	0.93	10.98	0.53	3.43	4.44	1,395	24	43
PDRC272	99	100	0.72	7.07	0.49	4.54	3.84	1,660	25	40
PDRC272	100	101	0.75	14.91	0.66	4.29	4.25	1,731	21	37
PDRC272	101	102	0.86	16.66	0.67	3.68	4.46	1,567	23	41
PDRC272	102	103	0.56	10.52	0.59	3.20	4.63	1,103	20	28
PDRC272	103	104	0.17	15.72	0.57	5.37	4.24	1,991	21	30
PDRC272	104	105	0.86	16.52	0.64	3.35	4.39	1,521	28	41
PDRC272	105	106	0.42	16.66	0.64	3.01	5.67	1,389	28	51
PDRC272	106	107	0.18	17.30	0.51	3.60	6.20	1,587	22	73
PDRC272	107	108	0.26	15.08	0.61	4.35	4.34	1,904	30	37
PDRC272	108	109	0.47	15.36	0.57	3.34	5.12	1,440	22	41
PDRC272	109	110	0.34	10.14	0.59	2.78	5.49	1,117	27	70
PDRC272	110	111	0.95	10.87	0.46	3.11	4.11	1,244	25	62
PDRC272	111	112	0.82	8.99	0.53	2.96	4.02	1,111	21	61
PDRC272	112	113	0.24	14.52	0.59	4.39	4.18	1,924	21	45
PDRC274	51	52	0.19	13.27	2.57	2.25	4.78	2,946	16	131
PDRC274	52	53	0.10	15.48	0.87	2.25	6.25	2,159	21	128
PDRC274	53	54	1.06	13.27	1.10	2.62	3.42	2,442	31	90
PDRC274	54	55	1.15	10.13	0.29	2.41	3.61	1,602	22	102
PDRC274	55	56	0.80	9.70	0.26	2.36	4.21	1,647	34	83
PDRC274	56	57	0.75	11.40	0.34	2.21	4.16	1,369	35	71
PDRC274	57	58	0.84	12.00	0.34	2.22	4.14	1,057	19	79
PDRC274	58	59	1.00	9.85	0.23	2.26	3.83	1,456	34	86
PDRC274	59	60	0.78	11.05	0.31	2.41	3.87	1,395	13	81
PDRC274	60	61	0.15	12.92	0.53	2.20	5.60	1,087	18	103
PDRC275	100	101	0.20	15.01	1.39	2.57	5.41	2,059	24	71
PDRC275	101	102	0.99	12.22	0.83	2.02	4.38	1,029	22	124
PDRC275	102	103	0.89	12.23	0.69	2.20	4.64	1,339	36	77
PDRC275	103	104	0.77	12.06	0.81	2.67	4.75	1,883	30	82
PDRC275	104	105	0.36	14.28	3.86	2.07	4.84	1,788	22	93
PDRC275	105	106	1.55	13.74	3.40	2.52	3.20	2,571	42	131
PDRC275	106	107	1.46	6.55	0.30	2.44	3.60	2,876	45	111
PDRC275	107	108	1.68	7.27	0.39	2.04	3.73	1,861	50	140
PDRC275	108	109	1.12	14.43	0.92	3.34	3.57	3,289	43	118
PDRC275	109	110	1.20	10.49	0.41	2.35	4.25	1,905	47	102
PDRC275	110	111	0.81	14.99	0.53	3.54	4.42	3,209	44	87
PDRC275	111	112	0.65	14.45	2.17	2.14	5.19	1,787	54	113
PDRC275	112	113	0.57	14.75	1.56	2.17	5.24	1,607	38	56



	Table 3										
					d Li₂O Inter	vals					
Hole ID	From	То	Li₂O (%)	Al₂O₃ (%)	Fe₂O₃ (%)	K₂O (%)	Na₂O (%)	Rb (ppm)	Sn (ppm)	Ta (ppm)	
PDRC275	113	114	0.18	16.11	7.96	0.32	2.19	219	16	4	
PDRC275	114	115	0.16	15.42	7.78	0.30	3.90	226	5	7	
PDRC275	115	116	0.70	11.65	11.24	0.16	1.56	141	14	1	
PDRC275	116	119	0.59	12.78	10.68	0.16	2.02	126	11	0	
PDRC275	119	122	0.10	14.88	8.48	0.43	4.93	412	24	81	
PDRC276	68	69	0.20	12.63	6.63	3.20	0.88	1,457	21	12	
PDRC276	69	70	0.91	12.00	0.71	3.07	3.48	1,330	24	50	
PDRC276	70	71	0.46	12.93	0.51	2.27	5.38	1,328	28	88	
PDRC276	71	72	0.93	6.03	0.43	2.41	3.73	1,199	30	54	
PDRC276	72	73	1.52	9.58	0.51	3.54	3.07	1,717	25	33	
PDRC276	73	74	1.03	8.59	0.41	2.33	4.27	1,131	21	70	
PDRC276	74	75	0.78	14.53	0.46	3.89	3.87	2,367	22	54	
PDRC276	75	76	1.57	5.01	0.31	2.83	2.88	1,166	19	37	
PDRC276	76	77	1.78	5.53	0.33	2.32	3.16	1,057	26	58	
PDRC276	77	78	1.69	6.61	0.39	1.58	3.61	724	22	39	
PDRC276	78	79	1.53	10.52	1.22	1.93	3.24	914	29	47	
PDRC276	79	80	0.09	11.46	0.46	1.61	6.18	786	20	68	
PDRC276	80	81	0.15	14.78	3.83	1.96	3.59	710	17	37	
PDRC277	114	115	0.40	15.62	7.92	2.40	1.47	781	10	1	
PDRC277	115	116	0.53	12.13	0.86	2.45	3.16	1,241	54	155	
PDRC277	116	117	1.13	6.02	0.26	2.58	4.06	1,523	33	78	
PDRC277	117	118	1.57	4.42	0.27	2.33	3.57	1,275	29	72	
PDRC277	118	119	1.41	7.25	0.33	2.82	3.62	1,257	19	38	
PDRC277	119	120	2.49	4.26	0.30	2.49	2.82	1,046	19	39	
PDRC277	120	121	1.18	14.43	0.53	2.73	4.29	1,301	18	45	
PDRC277	121	122	2.74	8.15	0.60	1.91	2.47	830	22	50	
PDRC277	122	123	1.35	6.66	0.43	1.91	3.67	776	19	50	
PDRC277	123	124	2.10	5.62	0.39	2.00	3.25	804	20	70	
PDRC277	124	125	0.42	14.41	0.43	3.80	4.35	2,071	16	50	
PDRC277	125	126	1.64	5.67	0.34	2.30	3.58	1,077	23	55	
PDRC277	126	127	0.46	15.45	0.53	1.82	5.82	899	27	41	
PDRC277	127	128	0.07	13.24	0.92	1.40	5.81	375	19	35	

#### Notes:

- Selected Assay results derived from chemical analysis reports from Intertek-Genalysis.
- The element assays were determined by 4 acid digest and ICP analysis.
- In this table oxide fields are calculated from the elemental value i.e. using the formula: Li \* 2.153 to derive Li<sub>2</sub>O.
- Intersections noted are 'down-hole' and do not necessarily represent a true width. Hole PDRC263 was drilled 'down-dip' so the intersection reported specifically does not represent a true width.
- RC drilling is known to introduce Fe contamination. Samples were generally prepared using a zirconium bowl to minimise additional Fe contamination.

# Section 1 - Sampling Techniques and Data

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

Pioneer Dome Project, Cade Deposit, RC Drilling.

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.	<ul> <li>Reverse circulation (RC) samples from holes drilled from surface reported.</li> <li>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.</li> <li>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.</li> </ul>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<ul> <li>Industry-standard reverse circulation drilling, using a face-sampling hammer with a booster and auxiliary compressors used to ensure dry samples.</li> <li>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.</li> <li>Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide assay quality checks. The standards and duplicates reported within acceptable limits.</li> <li>Samples are considered 'fit for purpose'.</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>RC drilling was used to obtain 1 m samples from which approximately 3.5 kg sampled.</li> <li>3.5kg samples were crushed then subsetted to produce a 100g sample which was pulverised by zirconium bowl pulp mill to nominal P80/75um to produce a standard charge for analysis.</li> <li>Lithium exploration package of elements: analysed by a four acid digestion with a Mass Spectrometer (MS) determination (Intertek analysis code ZR01 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.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Reverse Circulation Drilling.</li> <li>4.5 inch drill string.</li> <li>Face-sampling hammer.</li> <li>Auxiliary and Booster compressors used to exclude ground water.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul> <li>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.</li> </ul>

Criteria	JORC Code explanation	Commentary				
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Sample recovery is good for RC drilling using the equipment described.</li> <li>RC Sample recovery is mostly under the control of the drill operator and is generally influenced by the experience and knowledge of the operator.</li> </ul>				
	<ul> <li>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.</li> </ul>	<ul> <li>Because the sample recoveries are assumed to be high, any possible relationship between sample recovery and grade has not been investigated.</li> </ul>				
Logging	<ul> <li>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.</li> </ul>					
	Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.	<ul> <li>Logging is qualitative but includes quantitative estimates on mineral abundance.</li> <li>Qualitative litho-geochemistry based on pXRF analyses is used to confirm rock types.</li> <li>A representative sample of each RC drill metre is sieved and retained in chip trays for future reference.</li> </ul>				
	The total length and percentage of the relevant intersections logged.	The entire length of the drill holes were geologically logged.				
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>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 laid out in order on the drill pad.</li> <li>Individual RC drilling metre samples of the pegmatite were submitted to the laboratory. The sample collection, splitting and sampling for the types of drilling used is considered standard industry practise.</li> </ul>				
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul> <li>Cyclones are routinely cleaned after each 6m rod.</li> <li>Geologist looks for evidence of sample contamination, which was recorded if seen.</li> <li>The use of booster and auxiliary compressors ensures samples are dry, which best ensures a quality sample.</li> </ul>				
	<ul> <li>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.</li> </ul>	<ul> <li>Standard Reference Material is included at a rate of 1 per 30 samples.</li> <li>Duplicate field samples are routinely inserted at a 1 per 30 samples for RC drilling, and a specific programme of duplicate sampling is in progress.</li> <li>Laboratory quality control samples were inserted in accordance with the laboratory procedure with the performance of these control samples monitored by the laboratory and the company.</li> </ul>				
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	The sample size is considered industry-standard and appropriate for the style of deposit being sampled.				
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<ul> <li>The sample preparation and assay method used is considered standard industry practice and is appropriate for the deposit other than:</li> <li>A zirconium bowl is used to grind the sample to be analysed to minimise Fe contamination.</li> </ul>				
	<ul> <li>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.</li> </ul>	<ul> <li>Pioneer owns a Bruker S1 Titan 600 handheld XRF instrument which it used to provide the geologist with basic, qualitative litho-geochemistry data and may be used to assist with selecting zones for sampling. Zones have been selected due to elevated caesium, niobium, tantalum, gallium, rubidium, thallium or tin.</li> </ul>				

Criteria	JORC Code explanation	Commentary
		<ul> <li>Intervals during RC drilling identified as not obviously mineralised have been sampled with three metre composites.</li> <li>Standards, blanks and duplicates have been analysed with the Bruker to ensure the instrument is operating as expected and correctly calibrated.</li> </ul>
	<ul> <li>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.</li> </ul>	<ul> <li>Standards and laboratory checks have been assessed. The standards show results within acceptable limits of accuracy, with good precision. Internal laboratory checks indicate very high levels of precision.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul> <li>Significant intersections are calculated by experienced staff with these intersections checked by other staff.</li> <li>No holes have been twinned</li> </ul>
, ,	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>Pioneer has a digital SQL drilling database where information is stored.</li> <li>The Company uses a range of consultants to load and validate data and appraise quality control samples.</li> </ul>
	Discuss any adjustment to assay data.	<ul> <li>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.</li> </ul>
Location of data points	<ul> <li>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.</li> </ul>	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.	<ul> <li>Topographic control is by DGPS, carried out by a licensed surveyor.</li> <li>A high-resolution DEM exists over the entire M63/665 lease.</li> </ul>
Data spacing and	Data spacing for reporting of Exploration Results.	Drill spacing for lithium was drilled on 160m spaced panels with drill holes 80m apart.
distribution	<ul> <li>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.</li> </ul>	The data is being reviewed to ascertain whether it is sufficient and dense enough to conduct the estimation of an inferred mineral resource at a later date.
	Whether sample compositing has been applied.	All reported assays are of 1m samples for RC drilling.
Orientation of	Whether the orientation of sampling achieves unbiased sampling of possible	The strike of the mineralisation is estimated at to be broadly north-south, and  disciplinated the disciplination of the strike
data in relation to geological structure	<ul> <li>structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	dipping east, therefore (after the first hole which determined the dip) angled drill holes at -60° have been drilled towards 270°. Down hole intersection widths are estimated to closely approximately true widths based on the interpreted dip of the pegmatite bodies and the orientation of the drilling.
Sample security	The measures taken to ensure sample security.	<ul> <li>Pioneer uses standard industry practices when collecting, transporting and storing samples for analysis.</li> <li>Drilling pulps are retained by Pioneer off site.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Sampling techniques for assays have not been specifically audited but follow common practice in the Western Australian exploration industry.</li> <li>The assay data and quality control samples are periodically audited by an independent consultant.</li> </ul>

# 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	<ul> <li>The Pioneer Dome drilling reported herein is entirely within E15/1515 which is a granted Exploration Licence.</li> <li>The tenement is located approximately 60km N of Norseman WA.</li> <li>Pioneer Resources Limited is the registered holder of the tenement and holds a 100% unencumbered interest in all minerals within the tenement.</li> <li>The tenement is on vacant crown land.</li> <li>The Ngadju Native Title Claimant Group has a determined Native Title Claim which covers the Pioneer Dome project.</li> </ul>
	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 E15/1515 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 other than by 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	<ul> <li>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.</li> <li>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.</li> </ul>	Refer to Appendix 1 of this announcement.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Weighted average Li<sub>2</sub>O assays on page 1 and Table 1 of this release are for generally adjacent samples above 1% Li<sub>2</sub>O, with the intervals used in the calculations highlighted in colour in Table 3.</li> <li>Assays in Table 3 are of the interval sampled.</li> <li>There are no metal equivalent values reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	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. (See the cross section, Figure 4)
Diagrams	<ul> <li>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.</li> </ul>	Refer to figures in this report.
Balanced reporting	<ul> <li>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.</li> </ul>	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	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Planned further work includes geological modelling – 3DM update.</li> <li>It's unclear at this stage whether results warrant a resource estimation.</li> </ul>