

Further Drilling Results from the Cade Spodumene Discovery include 15m at 1.48% Li₂O

Perth, Western Australia: 10 October 2019: Pioneer Resources Limited ("Company" or "Pioneer") (ASX: PIO) is pleased to advise that the assay results from the final 11 holes of the recent drilling programme at the Company's 100%-owned Pioneer Dome Project have been received. Drilling recently tested two of four lithium-caesium-tantalum ("LCT") pegmatite targets, resulting in the discovery of the Cade Spodumene Deposit, and intersections of significant mineralisation at Spodumene Target 1. The target cluster is located 10km west of the Goldfields-Esperance Highway (refer to Figure1).

Assays reported herein are for holes PDRC278-PDRC288, and include:

From the Cade Deposit, intersections of low iron (<1% Fe₂O₃) spodumene:

- **PDRC278: 15m at 1.48 Li₂O**
- **PDRC287: 13m at 1.00 Li₂O**
- **PDRC288: 15m at 1.13 Li₂O**

From the CNE target, which was an unrecognised pegmatite located immediately northeast of the Cade Deposit:

- **PDRC282: 4m at 1.22 Li₂O**

From Spodumene Target 1, which outcrops approximately 2km west of the Cade Deposit;

- **PDRC291: 10m at 1.00 Li₂O**

All mineralised pegmatites remain open and drilling will resume in November to further determine their dimensions. It is noteworthy that the 4 targets identified to date have same apparent orientation and dip, suggestive of regional pegmatite stacking.

Results for holes PDRC263 to PDRC277 were reported to ASX on 26 September 2019.

David Crook, Managing Director, commented:

"The Cade Deposit is a significant low-iron spodumene discovery confirmed by our first pass of drilling. This is testament to the way Pioneer approaches exploration and provides us with an outstanding starting base from which we hope to build a substantial lithium project."

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DRILLING RESUMES IN NOVEMBER

The Company is scheduled to resume drilling in November 2019, initially targeting mineralisation at Spodumene Target 1 and the CNE pegmatite, as well as other substantiated geochemical and geophysical targets, including anomalies identified by deep ground penetrating radar ("DGPR"). The DGPR survey is currently in progress (refer to Figure 2).

In addition, six diamond core holes will be drilled into the Cade Spodumene Deposit to test the proposed plunge of the mineralisation (refer to Figure 3) and to produce samples for metallurgical testing.

Pioneer Dome Lithium-Caesium-Tantalum Project

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



Figure 1: Pioneer's Tenement Holdings with Key Projects

The **Pioneer Dome Project** is located approximately 130km south of Kalgoorlie and 200km north of the Port of Esperance, and 10km west of the Goldfields-Esperance Highway and other relevant infrastructure including rail, gas and water.

The Dome North Area and the Cade Spodumene Deposit

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

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

The programme saw 29 reverse circulation ("RC") drill holes (PDRC263-PDRC288) completed for a total of 4,919m. Twenty-one (21) of the drill holes intersected pegmatite.

Results confirm that the Cade Spodumene Deposit is a significant discovery, and that Spodumene Target 1 is also well mineralised. There is great potential to expand the extent of the known spodumene mineralisation for both deposits.

Results released on 26 September 2019 from the **Cade Spodumene Deposit** included:

- PDRC265: 25m at 1.61 Li₂O
- PDRC267: 33m at 1.63 Li₂O
- PDRC268: 18m at 1.47 Li₂O
- PDRC270: 23m at 1.36 Li₂O
- PDRC277: 10m at 1.60 Li₂O

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

- PDRC275: 10m at 1.08 Li₂O and 129ppm Ta₂O₅

Deep Ground Penetrating Radar Survey Underway

Ultramag Geophysics is currently undertaking a DGPR survey comprising 5 x 4-kilometre-long traverses across the Dome North Area. The technology has been used as a targeting tool to identify dykes (a type of geological intrusion that includes pegmatite) by another spodumene producer in areas where geochemistry may be ineffective.

The Company ran trials of DGPR at its Sinclair Mine where pegmatite was clearly identified and subsequently mined.

OUTLOOK

- DGPR survey, currently in progress, to provide pegmatite targets in areas where alluvial cover is thick;
- Drilling to resume in November. Primary targets include extensions to the Spodumene Target 1 pegmatite and the CNE pegmatite which are located parallel and west of the Cade Spodumene Deposit. Secondary targets include Spodumene Targets 3 and 4, plus substantiated targets that result from the DGPR survey;
- Diamond core drilling to provide samples for metallurgical testing; and
- Geological Target and Inferred Resource modelling.

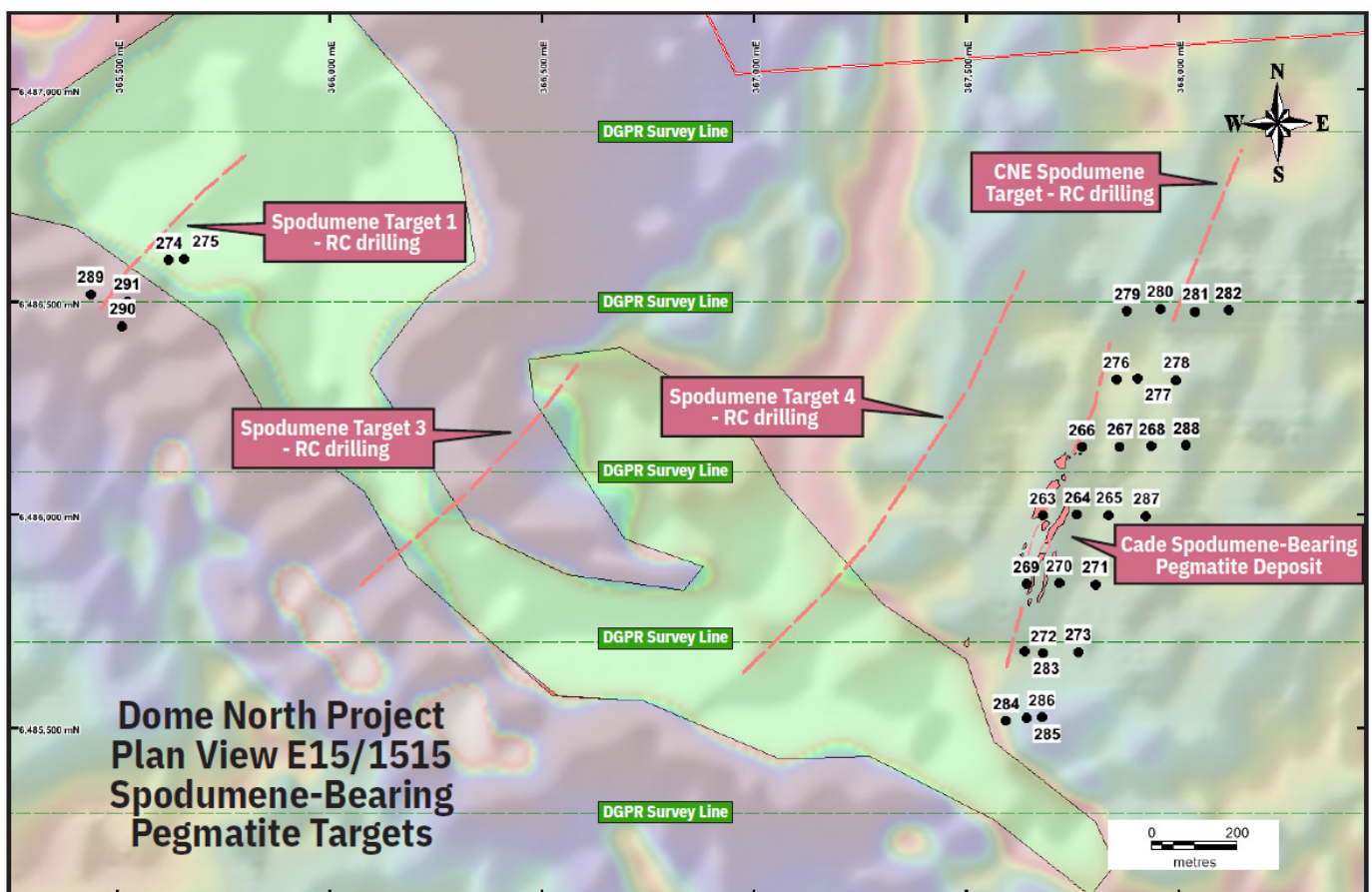


Figure 2: The Dome North Area showing Drill Hole Collar Locations, the Cade Deposit and other spodumene drill targets. Green dashed lines are the proposed DGPR survey traverses. Hole numbers are prefixed with PDRC.

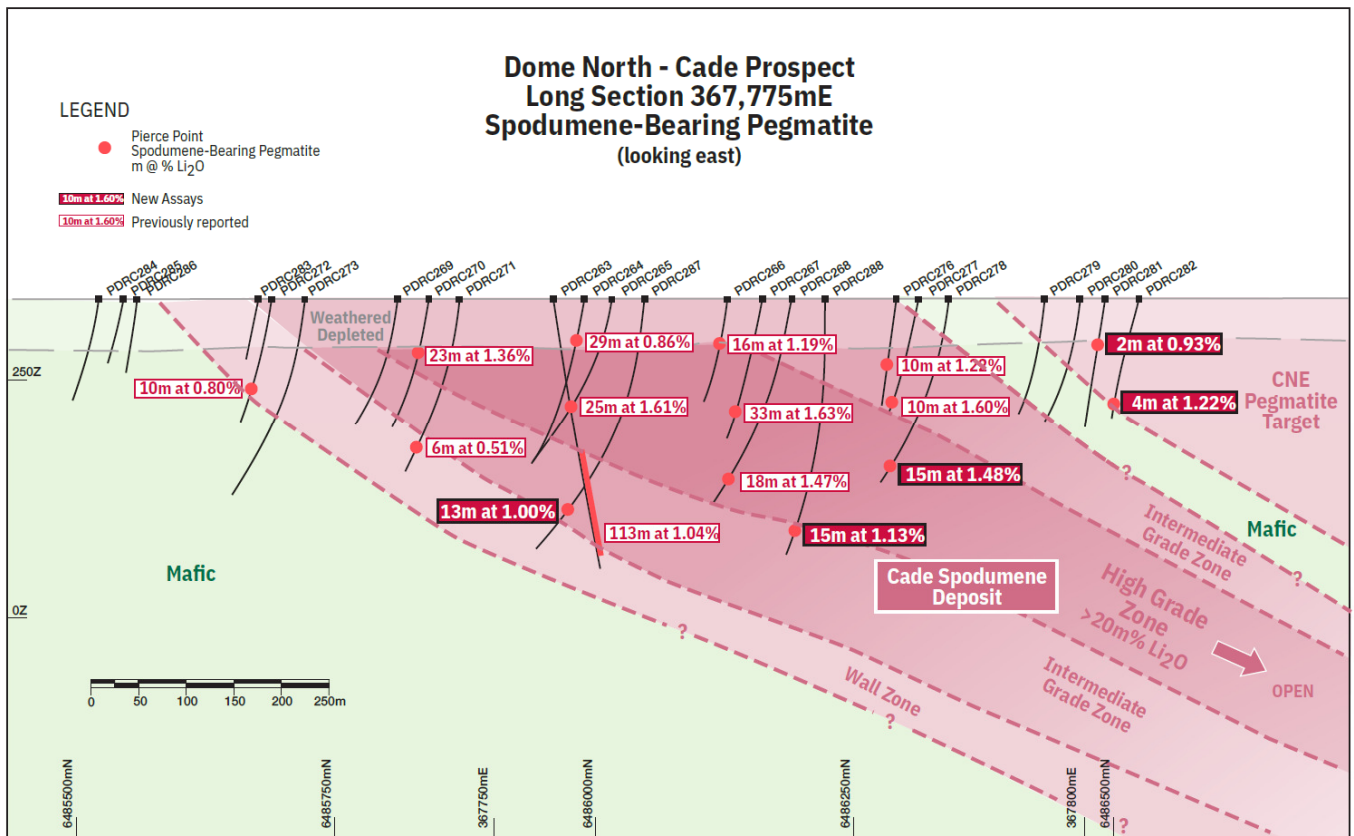


Figure 3: Long Section looking east of the Cade Spodumene Deposit showing a possible interpretation of mineralisation with a moderate plunge to the north. A high-grade zone is illustrated with lines containing intersections above 20m% Li₂O for mineralisation >0.80% Li₂O.

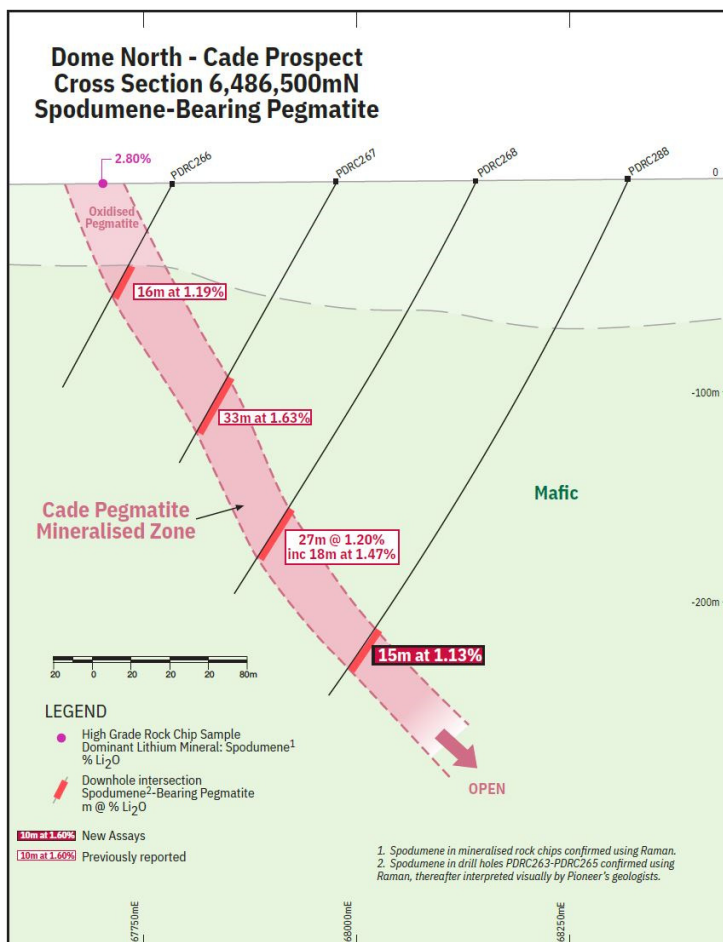


Figure 4: Cross Section of the Cade Spodumene Deposit. Shallow intersections show lithium-depletion due to weathering.

Table 1 Selected High Grade Results				
Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)
Cade Spodumene Deposit				
PDRC278	206	221	15	1.48
PDRC287	248	261	13	1.00
Includes	248	253	5	1.44
PDRC288	271	286	15	1.13
Includes	275	284	9	1.36
CNE Target				
PDRC281	53	55	2	0.93
PDRC282	125	129	4	1.22
Spodumene Target 1				
PDRC291	48	58	10	1.00

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 Project in the West Pilbara W.A: A farmin & JV agreement with Novo Resources Corp and Sumitomo Corporation will fully fund gold exploration programmes until a decision to mine is made, with Pioneer retaining a 30% free-carried position.
- Balagundi Project: A farmin & JV agreement with 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, 26 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

Hole ID	Prospect	Type	East (m)	North (m)	RL (m)	Depth (m)	Dip (°)	Azimuth (°)
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.

Hole ID	From	To	Li ₂ O (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	K ₂ O (%)	Na ₂ O (%)	Rb (ppm)	Sn (ppm)	Ta ₂ O ₅ (ppm)
PDRC278	206	207	1.36	13.62	0.74	2.78	4.05	1,146.40	24.70	28
PDRC278	207	208	1.70	11.96	0.67	2.69	3.52	1,105.34	21.40	36
PDRC278	208	209	1.91	10.79	0.49	2.28	3.36	1,190.79	34.00	52
PDRC278	209	210	1.89	12.47	0.49	3.09	3.15	1,636.18	28.60	26
PDRC278	210	211	1.61	9.34	0.47	2.30	3.73	1,137.86	30.50	26
PDRC278	211	212	1.33	13.66	0.64	3.38	3.48	1,716.59	25.90	24
PDRC278	212	213	1.56	8.51	0.49	2.50	3.63	1,075.57	23.20	51
PDRC278	213	214	1.47	14.80	0.70	2.81	3.63	1,274.22	20.40	46
PDRC278	214	215	1.10	7.84	0.36	3.45	3.76	1,549.66	21.20	36
PDRC278	215	216	0.67	11.90	0.83	3.40	4.13	1,339.15	20.90	28
PDRC278	216	217	2.15	4.86	0.39	2.21	2.88	832.68	25.90	42
PDRC278	217	218	1.47	8.55	0.60	2.35	3.36	922.27	24.70	43
PDRC278	218	219	1.10	16.73	4.02	2.98	3.17	1,611.25	24.00	32
PDRC278	219	220	1.96	12.93	0.73	1.80	3.22	671.99	23.70	41
PDRC278	220	221	0.93	9.99	0.46	2.52	4.83	859.96	19.20	27
PDRC278	221	222	0.32	15.38	1.60	1.60	5.02	594.45	15.50	23
PDRC281	52	53	0.36	14.62	1.49	1.80	4.73	503.44	24.50	31
PDRC281	53	54	0.98	10.22	0.46	2.35	4.01	894.63	30.60	32
PDRC281	54	55	0.89	4.20	0.23	3.13	3.63	1,231.59	22.80	37
PDRC281	55	56	0.12	14.52	0.57	1.69	5.71	831.29	29.30	27
PDRC282	124	125	0.18	15.50	2.24	2.39	4.65	361.16	7.90	29
PDRC282	125	126	1.52	10.71	0.56	1.98	4.09	645.37	26.70	31
PDRC282	126	127	0.56	14.39	0.53	5.25	4.08	1,698.23	18.00	29
PDRC282	127	128	1.76	9.31	0.44	2.03	3.57	798.98	30.50	34
PDRC282	128	129	1.03	10.79	0.51	2.80	4.31	1,031.17	39.50	33
PDRC282	129	130	0.10	14.94	1.83	2.66	4.96	462.29	15.80	35
PDRC283	44	45	0.55	11.84	0.40	2.92	4.20	1,213.34	23.80	32
PDRC283	45	46	0.95	11.07	0.53	1.62	3.60	689.55	27.00	31
PDRC283	46	47	0.51	10.33	0.44	3.62	3.94	1,472.14	23.40	28
PDRC283	47	48	0.56	12.71	0.47	4.24	3.90	1,714.41	23.10	26

Hole ID	From	To	Li ₂ O (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	K ₂ O (%)	Na ₂ O (%)	Rb (ppm)	Sn (ppm)	Ta ₂ O ₅ (ppm)
PDRC283	48	49	0.53	11.59	0.56	2.98	3.96	1,217.43	23.20	34
PDRC283	49	50	0.47	14.42	0.36	4.45	3.97	1,866.76	18.80	27
PDRC283	50	51	0.88	8.35	0.61	2.55	4.08	1,040.26	23.60	24
PDRC283	51	52	0.51	13.98	0.64	3.22	4.74	1,413.10	16.40	27
PDRC287	247	248	0.14	14.67	1.02	2.19	6.02	878.08	15.40	28
PDRC287	248	249	1.35	11.41	0.94	2.80	4.09	1,009.98	15.70	27
PDRC287	249	250	1.39	10.75	0.97	2.72	4.08	919.81	15.90	32
PDRC287	250	251	0.79	14.57	1.06	3.45	4.43	1,353.95	17.30	28
PDRC287	251	252	1.90	7.19	1.13	2.23	2.99	815.90	15.40	25
PDRC287	252	253	1.78	12.27	1.50	2.66	3.29	923.99	15.10	33
PDRC287	253	254	0.46	15.77	1.03	5.06	4.35	2,000.00	13.70	30
PDRC287	254	255	0.24	15.05	0.57	4.04	4.83	1,665.68	15.40	26
PDRC287	255	256	0.26	15.22	0.64	4.07	4.76	1,708.68	17.90	33
PDRC287	256	257	0.30	14.56	0.61	3.66	4.98	1,537.37	17.80	37
PDRC287	257	258	0.67	15.18	0.64	3.01	4.93	1,274.41	16.40	53
PDRC287	258	259	1.32	13.42	0.57	3.11	3.95	1,129.09	13.80	34
PDRC287	259	260	1.28	9.97	0.60	2.52	4.15	1,004.56	20.30	30
PDRC287	260	261	1.24	9.42	0.47	3.20	4.05	1,165.39	16.70	38
PDRC287	261	262	0.34	16.28	0.67	3.01	5.80	1,229.35	17.50	32
PDRC287	262	263	0.38	14.71	7.21	2.24	1.77	419.02	4.70	33
PDRC288	269	270	0.09	13.63	1.16	2.06	5.72	772.42	32.50	22
PDRC288	270	271	0.18	15.44	1.03	3.24	5.95	1,253.86	18.30	28
PDRC288	271	272	1.14	11.51	0.76	3.50	3.65	1,221.90	18.00	45
PDRC288	272	273	0.70	8.94	0.59	3.28	4.34	1,180.40	23.10	58
PDRC288	273	274	0.66	11.98	0.70	2.80	4.55	1,108.36	21.50	48
PDRC288	274	275	0.91	4.59	0.44	3.85	3.54	1,397.38	14.40	20
PDRC288	275	276	1.66	4.34	0.51	2.27	3.10	815.53	14.30	21
PDRC288	276	277	1.75	6.55	0.71	2.78	3.09	928.92	16.20	29
PDRC288	277	278	0.96	8.80	0.53	3.46	3.99	1,245.29	15.40	29
PDRC288	278	279	1.59	8.36	0.56	3.07	3.38	1,084.62	14.90	27
PDRC288	279	280	1.45	12.85	0.69	3.16	3.71	1,201.42	15.10	29
PDRC288	280	281	1.77	15.70	0.79	2.84	3.40	1,128.79	15.10	32
PDRC288	281	282	0.67	15.15	0.80	3.77	4.48	1,439.97	16.80	31
PDRC288	282	283	1.39	12.05	0.80	2.36	3.86	821.82	19.60	46
PDRC288	283	284	1.04	13.64	0.79	4.28	3.22	1,314.77	17.60	37
PDRC288	284	285	0.40	15.57	0.81	3.80	4.69	1,513.53	17.80	39
PDRC288	285	286	0.84	15.98	0.79	3.68	4.29	1,525.95	15.30	19
PDRC288	286	287	0.46	15.22	0.94	3.81	4.35	1,552.15	15.90	22
PDRC291	47	48	0.77	15.08	10.58	1.06	1.40	470.60	18.90	15
PDRC291	48	49	0.81	15.94	4.40	1.74	3.15	1,331.20	25.10	20
PDRC291	49	50	0.87	11.57	0.27	2.63	4.73	2,000.00	46.60	19
PDRC291	50	51	1.41	4.42	0.19	2.12	3.24	1,912.52	53.30	38
PDRC291	51	52	1.08	5.62	0.21	2.55	4.01	2,000.00	51.40	35
PDRC291	52	53	1.24	5.73	0.30	1.96	3.84	1,173.59	33.20	83
PDRC291	53	54	0.99	15.89	3.82	1.61	3.53	1,055.75	21.00	31
PDRC291	54	55	0.28	17.12	4.02	0.75	2.68	370.43	7.00	24
PDRC291	55	56	0.31	15.26	6.19	0.53	1.58	308.27	9.30	27
PDRC291	56	57	1.74	8.02	0.49	2.31	3.04	1,342.19	29.00	24
PDRC291	57	58	1.23	7.49	0.27	2.76	3.52	2,000.00	46.60	29

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 Li₂O.
- Intersections noted are 'down-hole' and do not necessarily 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	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Reverse circulation (RC) 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. 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.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> 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. Samples are considered 'fit for purpose'.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> RC drilling was used to obtain 1 m samples from which approximately 3.5 kg sampled. 3.5kg samples were crushed then subsetting to produce a 100g sample which was pulverised by zirconium bowl pulp mill to nominal P80/75um to produce a standard charge for analysis. 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.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Reverse Circulation Drilling. <ul style="list-style-type: none"> 4.5 inch drill string. Face-sampling hammer. Auxiliary and Booster compressors used to exclude ground water.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<ul style="list-style-type: none"> Sample recovery is good for RC drilling 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.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Because the sample recoveries are assumed to be high, any possible relationship between sample recovery and grade has not been investigated.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography. 	<ul style="list-style-type: none"> Logging is 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.
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The entire length of the drill holes were geologically logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 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.
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	<ul style="list-style-type: none"> Cyclones are routinely cleaned after each 6m rod. Geologist looks for evidence of sample contamination, which was recorded if seen. The use of booster and auxiliary compressors ensures samples are dry, which best ensures a quality sample.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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, and a specific programme of duplicate sampling is in progress. 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.
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The sample size is considered industry-standard and appropriate for the style of deposit being sampled.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> The sample preparation and assay method used is considered standard industry practice and is appropriate for the deposit other than: A zirconium bowl is used to grind the sample to be analysed to minimise Fe contamination.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. Intervals during RC drilling identified as not obviously mineralised have been sampled with three metre composites.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Standards, blanks and duplicates have been analysed with the Bruker to ensure the instrument is operating as expected and correctly calibrated.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> Significant intersections are calculated by experienced staff with these intersections checked by other staff. No holes have been twinned
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Pioneer has adjusted the lithium (Li), tantalum (Ta) and caesium (Cs) assay results to determine Li₂O, Ta₂O₅ and Cs₂O 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 Li₂O, Ta₂O₅ and Cs₂O grades respectively.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Specification of the grid system used. 	<ul style="list-style-type: none"> MGA94 (Zone 51)
	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Topographic control is by DGPS, carried out by a licensed surveyor. A high-resolution DEM exists over the entire M63/665 lease.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 	<ul style="list-style-type: none"> Drill spacing for lithium was drilled on 160m spaced panels with drill holes 80m apart.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	<ul style="list-style-type: none"> All reported assays are of 1m samples for RC drilling.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The strike of the mineralisation is estimated at to be broadly north-south, and 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 approximate true widths based on the interpreted dip of the pegmatite bodies and the orientation of the drilling.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Pioneer uses standard industry practices when collecting, transporting and storing samples for analysis. Drilling pulps are retained by Pioneer off site.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 style="list-style-type: none"> The Pioneer Dome drilling reported herein is entirely within E15/1515 which is a granted Exploration Licence. The tenement is located approximately 60km 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.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Appendix 1 of this announcement.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Weighted average Li₂O assays on page 1 and Table 1 of this release are for generally adjacent samples above 0.8% Li₂O, with the intervals used in the calculations highlighted in colour in Table 3. Assays in Table 3 are of the interval sampled. There are no metal equivalent values reported.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to figures in this report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Comprehensive reporting of drill details has been provided in Appendix 1 of this announcement.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All meaningful and material exploration data has been reported.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Planned further work includes geological modelling – 3DM update. It's unclear at this stage whether results warrant a resource estimation.