Initial Inferred Mineral Resource for the Cade Spodumene Deposit and Initial Exploration Target for the Dome North Area

Perth, Western Australia: 25 November 2019: Pioneer Resources Limited ("Company" or "Pioneer") (ASX: PIO) is pleased to announce the achievement of a significant milestone within the Company's 100% owned Pioneer Dome Project, relating to the Cade Spodumene Deposit and Dome North Area.

Sufficient exploration information now exists to estimate an initial Inferred Mineral Resource for the Cade Spodumene Deposit and an Exploration Target for the greater Dome North Area. We report;

- An initial Li_2O (spodumene) **Inferred Mineral Resource** for Cade Deposit only of **8.2 Mt at 1.23% Li_2O**:

Classification	Tonnes (Mt)	Li_2O (%)
Inferred	8.2	1.23
Total	**8.2**	**1.23**

Note: Appropriate rounding applied

- An initial **Exploration Target*** for the Dome North Area of between **17 and 27 million tonnes** at a grade between **1.0 and 1.4% Li_2O**, in addition to the Cade Deposit (thus a total of 25-35 million tonnes endowment inclusive of the Cade Deposit).

  * *The potential quantity and grade of the **Exploration Target** is conceptual in nature. There is insufficient exploration information generated to estimate a Mineral Resource and it is uncertain that further exploration will result in the estimation of a Mineral Resource.*

- Two drilling rigs are currently operating on site. Drilling is testing the Cade Spodumene Deposit and other recognised spodumene-pegmatite targets.

Pioneer's Managing Director David Crook said "The first Mineral Resource statement for the Cade Deposit, discovered as an outcrop just a few months ago in June, is a significant step-forward. This Resource Statement relates to only one of four mineralised pegmatites identified at the Dome North Area to date, and we look forward to presenting updates to the Mineral Resource base as our exploration and definition drilling continues."

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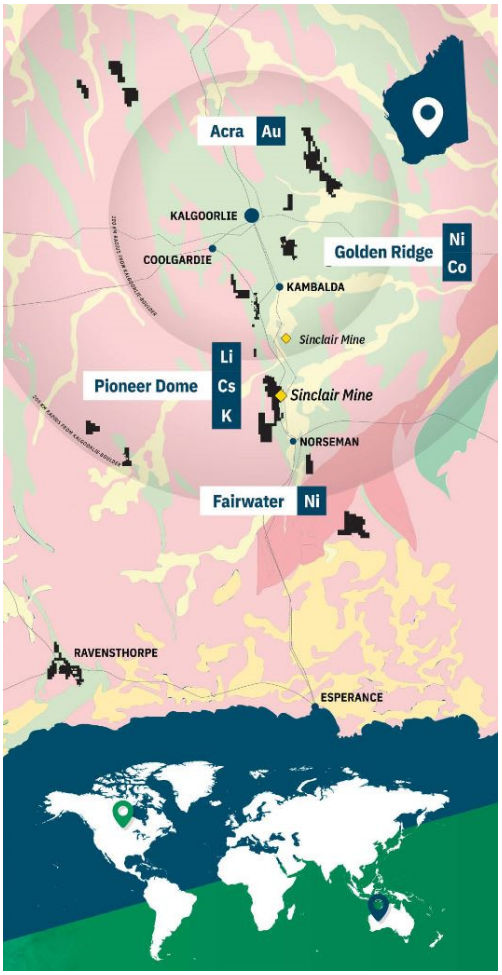
Pioneer Dome Lithium-Caesium-Tantalum (LCT) Project

The Pioneer Dome Project is 100% owned and is the Company's principal asset.

The Project is located ~130km south of Kalgoorlie and 200km north of the Port of Esperance, close to the Goldfields-Esperance Highway and key infrastructure, including rail, gas and water, pass through the Project. Pioneer has a clearly stated strategy, to grow value at the Pioneer Dome by building on the success of the recently completed Sinclair Caesium Mine.



DRILLING PROGRAMMES INTERSECTS SPODUMENE PEGMATITES AT CADE AND OTHER TARGETS

On 22 August 2019 the Company reported that the inaugural drilling programme for the Dome North Area had intersected spodumene-pegmatites at the Cade Prospect.

The first drilling programme amounted to 29 reverse circulation ("RC") drill holes (PDRC263-PDRC288) completed for a total of 4,919m. Twenty-one (21) of the drill holes intersected pegmatite. Spodumene-pegmatite was intersected at the Cade Deposit in 15 drill holes over a strike length of 850m. (*Figure 4 and Appendix 1*). The second round of drilling is advancing.

Significant lithium drill intersections (see ASX on 26 September, 10 October 2019) included:

- **PDRC265: 25m at 1.61 Li_2O**
- **PDRC267: 33m at 1.63 Li_2O**
- **PDRC268: 18m at 1.47 Li_2O**
- **PDRC270: 23m at 1.36 Li_2O**
- **PDRC277: 10m at 1.60 Li_2O**
- **PDRC278: 15m at 1.48 Li_2O**
- **PDRC287: 13m at 1.00 Li_2O**
- **PDRC288: 15m at 1.13 Li_2O**

Figure 1: *Pioneer's extensive Eastern Goldfields Tenement Portfolio*

MINERAL RESOURCE ESTIMATE

The estimation of a maiden 2012 JORC compliant Mineral Resource for the Project utilised all the recent drilling completed by the Company. The estimation was carried out by independent resource consultancy Trepanier Pty Ltd, resulting in an Inferred Mineral Resource of 8.2 Mt at 1.23% Li_2O, as summarised by category in Table 1 below:

Table 1. *Mineral Resource Summary by Category: Cade Spodumene Deposit*

Classification	Tonnes (Mt)	Li_2O (%)	Ta_2O_5 (ppm)	Contained Li_2O T)	Fe_2O_3 (%)
Measured	-	-	-	-	-
Indicated	-	-	-	-	-
Inferred	8.2	1.23	50	102,000	0.65
Total	**8.2**	**1.23**	**50**	**102,000**	**0.65**

Note: Appropriate rounding applied

It is noted the tantalum grade is low in the samples assayed to date. However, metallurgical testwork will ultimately determine any potential economic value to be gleaned from the tantalum as a possible by-product.

Oxide material has been reported as part of the resource (Table 2). In situ, reasonably fresh spodumene-bearing pegmatite rock chip samples have been collected at surface where the Cade pegmatite outcrops. However, drilling to date has only intersected the pegmatite at the boundary of and below the base of oxidation. Shallow drilling specifically targeting the oxide/transition zone is required to determine the surficial resource potential. Subsequent metallurgical test-work on the material to determine the ability to obtain economically viable recoveries from such near-surface material is also required.

Table 2. *Mineral Resource Summary by Category and Oxidation: Cade Spodumene Lithium Deposit*

Classification	Oxidation	Tonnes (Mt)	Li_2O (%)	Contained Li_2O T)	Fe_2O_3 (%)
Inferred	Oxide/Transition	0.8	1.18	10,000	0.56
	Fresh	7.4	1.24	92,000	0.66
Total	**Combined**	**8.2**	**1.23**	**102,000**	**0.65**

Note: Appropriate rounding applied

The grade tonnage curve for the Cade Mineral Resource is included as Figure 2 below.

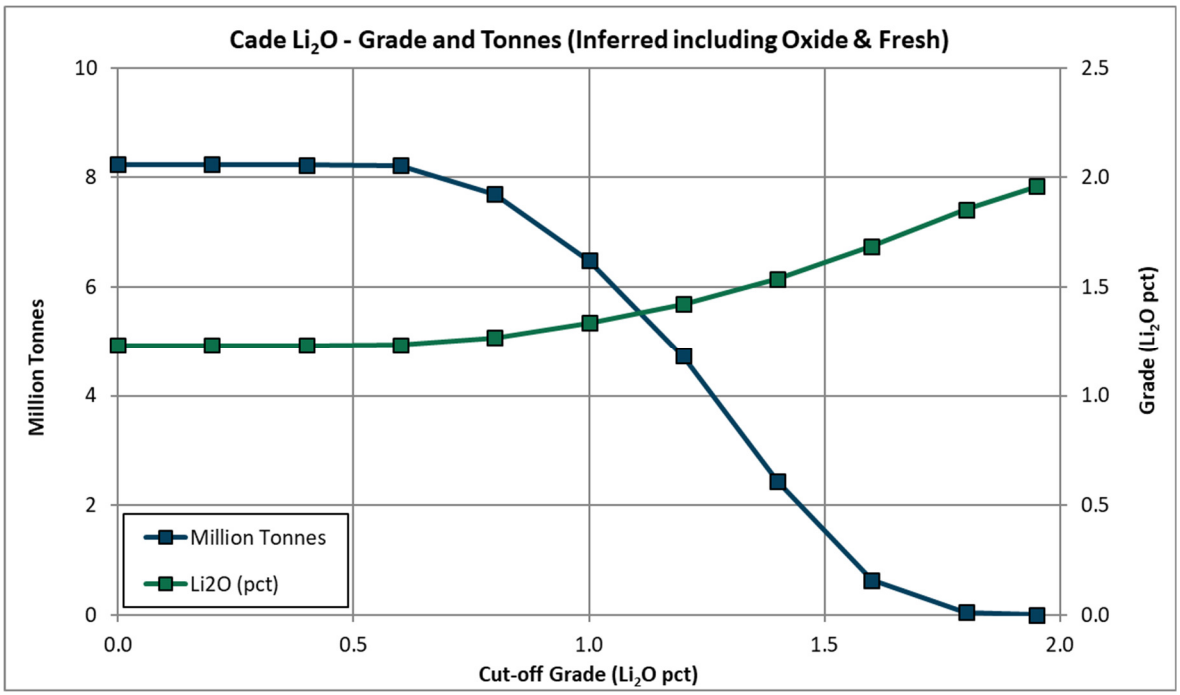


Figure 2: *Grade tonnage curve for the Cade Li_2O deposit*

BASIS FOR THE MINERAL RESOURCE ESTIMATE

The underlaying interpretation for the Mineral Resource models a single main body of pegmatite which contains spodumene (a lithium bearing pyroxene). Geologically, spodumene occurs within a class of pegmatites referred to as LCT (lithium, caesium, tantalum) pegmatite.

The deposit has been drilled on a 160m x 80m grid using industry-standard reverse circulation ("RC") drilling techniques, allowing the Mineral Resource to be classified as Inferred. To date, 5 of 6 planned diamond core drill holes have been completed, confirming modelled pegmatite intersections from earlier RC drilling.

There are no bulk density measurements within the deposit to date, so values have been selected and used based on information from comparable pegmatite hosted deposits. The six diamond core holes which will be drilled during the current drilling campaign will provide samples for bulk density measurements.

All holes have been surveyed down-hole with a north seeking gyroscope probe and the collar coordinates have been surveyed with an RTK DGPS by a licenced surveyor. Intervals of pegmatite drilled by RC were sampled on a 1m basis downhole with all samples were submitted to Intertek Genalysis for a 48-element geochemical analysis suite that utilised a four acid digestion and an ICP-MS determination.

The Company has not commenced metallurgical test work yet, however six diamond core holes have recently been drilled into the Cade Deposit specifically to provide samples for this work.

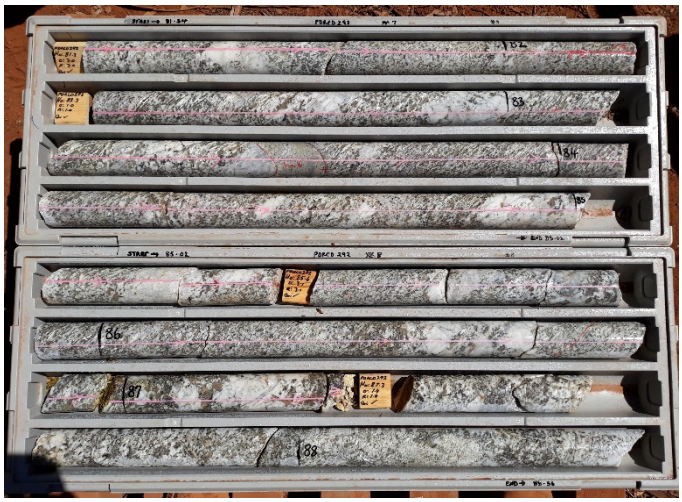
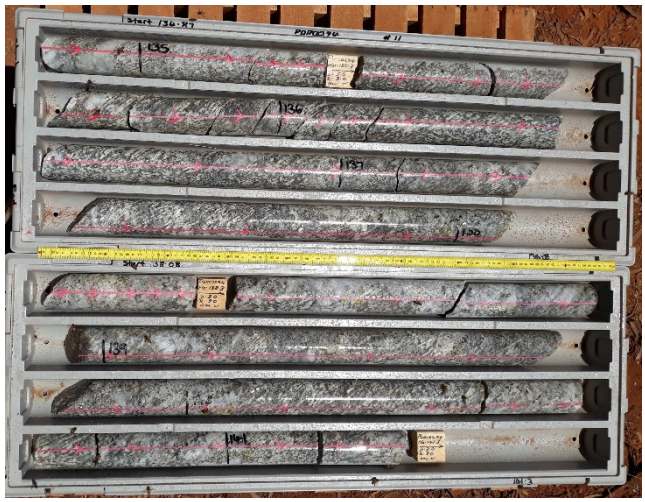
PDRCD292	*PDRCD294*
	

Figure 3: *Pioneer's geologists have identified spodumene-pegmatite in drill core from holes PDRCD292 and PDRCD294 drilled during the current programme.*

BASIS FOR THE EXPLORATION TARGET*

The Cade Deposit is one of 4 spodumene-bearing pegmatites discovered by Pioneer's geological team to date in the Pioneer Dome North Area. Other occurrences include:

- the Heller Prospect (previously Spodumene Target 1). Down-hole pegmatite intersections of between 8m and 15m have been intersected over a strike length of 460m by 10 holes to date. Spodumene has been observed in all holes by Pioneer's geologists, where fresh pegmatite has been intersected. The mineralisation remains 'down plunge';
- Spodumene Target 3 which has been tested by two holes to date, which intersected a pegmatite 26-28m thick. Pioneer's geologists have visually identified spodumene crystals in pegmatite in this drill hole; and
- A new 20m thick pegmatite target located 400m south of the Cade Deposit, tested to date by 3 holes.

In addition, other geochemical targets have been identified.

The **Exploration Target*** for the Dome North Area is between 17-27 million tonnes of spodumene-bearing pegmatite at a grade between 1.0 and 1.4% Li_2O, in addition to the Cade Deposit.

** The potential quantity and grade of the **Exploration Target** is conceptual in nature. There has been insufficient exploration information generated to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

Drilling rigs are currently providing samples from the Cade Deposit (diamond drilling) and other targets as shown on Figure 4. The current programme is planned to continue for another 3 weeks, winding up in mid-December. All results are expected to have been received by the end of January 2020.

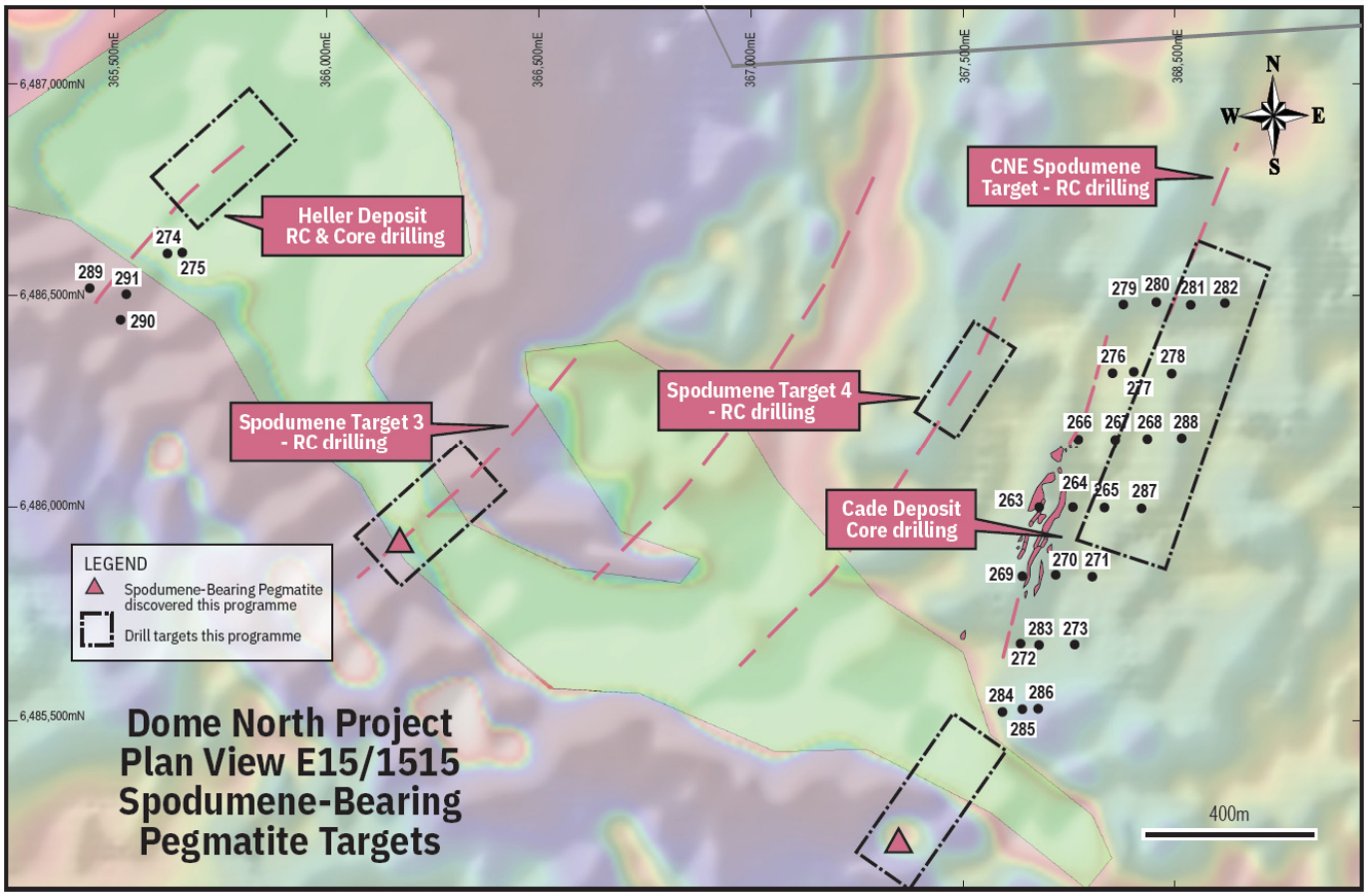


Figure 4: *Pioneer Dome North prospect showing drill hole collar points from the August drill programme (Abbreviated Collar ID's are prefixed with PDRC) and spodumene drill targets being tested during the current drilling programme.*

DEPOSIT NAMES.

John **Cade** AO was an Australian psychiatrist credited with discovering the effects of lithium carbonate as being the first effective medication available to treat a mental illness.

Adam **Heller** proposed the lithium thionyl chloride battery in 1973, still used in implanted medical devices and in defence systems where a greater than 20-year shelf life, high energy density, and/or tolerance for extreme operating temperatures are required

The southern Yilgarn area is recognised as very well endowed with spodumene deposits, with production facilities at Bald Hill Mine (Alita Resources Limited) located 60km northeast of the Pioneer Dome Project, the very large Mt Marion Mine (Mineral Resources Limited/Ganfeng Lithium) located 75km north and Liontown Resources Limited's Buldania spodumene deposit located 60km southeast of Pioneer's project.

Further west and south, the Earl Grey deposit (Covalent Lithium Pty Ltd) and the Mt Cattlin Mine (Galaxy Resources Limited) occur.

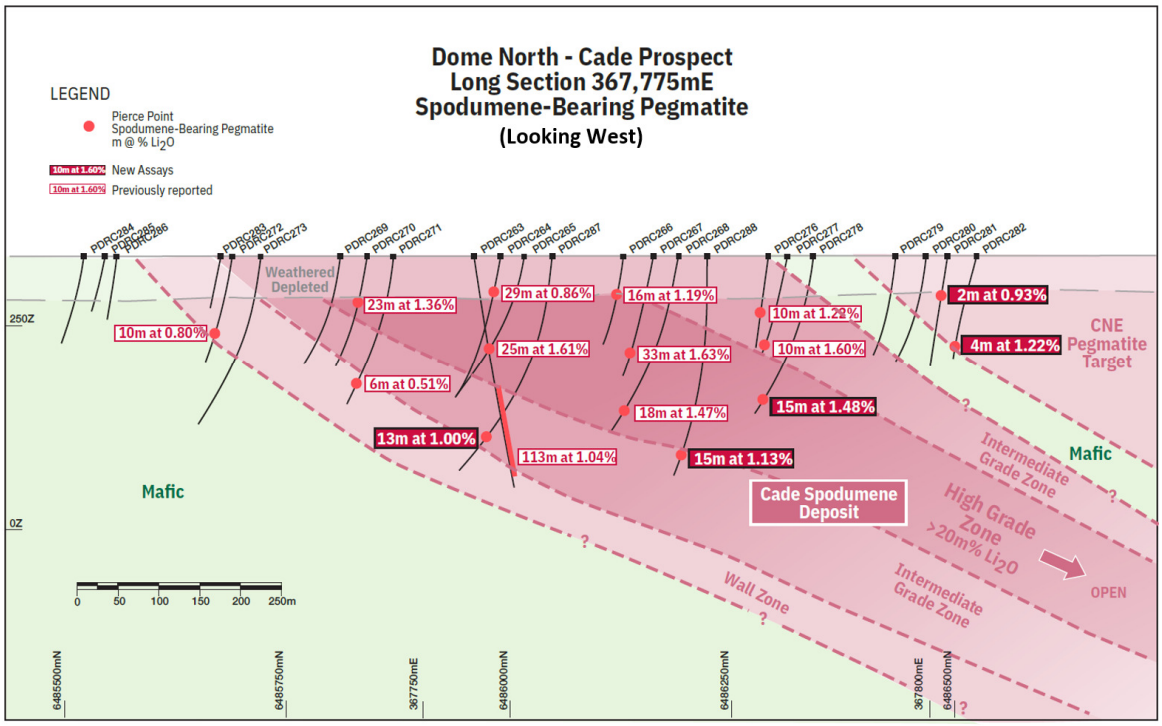


Figure 5: *Long section through the Cade Spodumene Deposit, showing holes that intersected lithium mineralisation.*

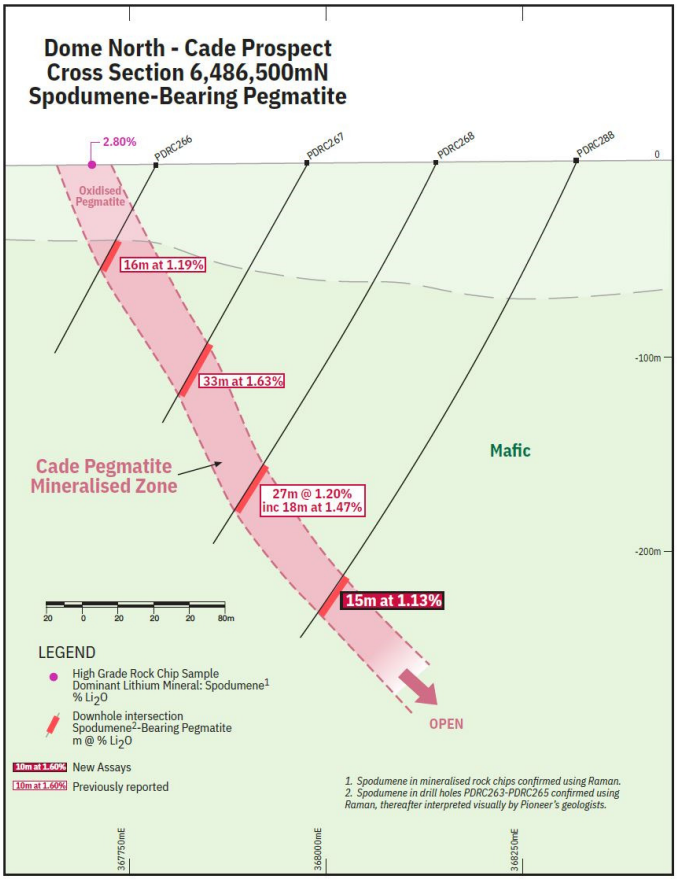


Figure 6: *Cross Section of the Cade Spodumene Deposit.*

Figure 7: *Reverse circulation drilling rig near the Cade Deposit.*

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 opportunity to create shareholder wealth through exploration.

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.

Cobalt: Also found as a wide-spread hydromorphic layer throughout the eastern Golden Ridge Project, cobalt is another commodity with demand expanding in response to its requirement in the manufacture of cobalt-based batteries in certain electric vehicles and electricity stabilisation systems (powerwalls). Other uses for cobalt include in the manufacture of super-alloys, including jet engine turbine blades, and for corrosion resistant metal applications.

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 quarterly reports and 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, 10 October 2019, 8 November 2019.

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

COMPETENT PERSONS STATEMENTS

The information in this report that relates to Exploration Results and Exploration Targets 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 information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr David Crook and Mr Lauritz Barnes. Mr Crook is a full time employee of Pioneer Resources Limited and Mr Barnes is a consultant to the Company. Mr Crook and Mr Barnes are members of both the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists, and have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Crook is the Competent Person for the database, geological model and completed the site inspections. Mr Barnes is the Competent Person for the 3-D geological and mineralisation interpretation plus the resource estimation. Mr Crook and Mr Barnes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

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.

NOVEMBER 2019 CADE LITHIUM RESOURCE ESTIMATE AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to JORC 2012, Table 1, Sections 1-3).

Location and Description

The Cade Lithium Deposit, owned 100% by Pioneer Resources Limited, is located 50km north of Norseman in the Eastern Goldfields Province of Western Australia. The Pioneer Dome project is well serviced by existing infrastructure including a sealed road, water pipeline, rail and a gas pipeline all are related to the modern mining history within the Pioneer tenement package and the proximity to other current and historic operations and the nearby regional centre of Kalgoorlie.

Geology and geological interpretation

The Pioneer Dome Project area occurs within the southern part of the Norseman-Wiluna greenstone belt of the Yilgarn craton. The dominant geological features are the late Archean Pioneer Dome and the older mafic and ultramafic units of the greenstone belt. Late stage pegmatite intrusive sills and dykes intrude the older stratigraphy.

Locally, the underlying geology comprises a series of N striking, westerly dipping belts of Archaean mafic, ultramafic and sedimentary rocks. The entire sequence is intruded by a series of pegmatite dykes and sills associated with the later stage Pioneer Dome granite intrusive. These pegmatite dykes form a swarm of intrusive bodies along a strike length of approximately 20km along the eastern and northern edge of the granite dome. The area has been extensively explored since the late 1960's for nickel sulphide mineralisation associated with the extensive ultramafic volcanic units in the area. Historical exploration consisted of geological mapping, trenching, geophysical surveys and minor drilling. No historical drilling or exploration was conducted targeting lithium, caesium or tantalum nor the abundant pegmatite bodies.

The Cade Lithium Deposit occurs within a spodumene bearing LCT pegmatite dyke, situated amongst other LCT pegmatites within the Dome North Area. The spodumene bearing dyke at Cade has been modelled as one main lode with two minor splay veins, striking N/S for approximately 850m and dipping steeply to the east.

Drilling techniques and hole spacing

The geological interpretation for the Cade Lithium deposit, is constrained by a total of twenty-four (24) drill holes which were completed from surface. Of these, 15 intersected spodumene mineralisation with a grade greater than 0.5% Li_2O.

RC drilling used a 4½" face sampling hammer. The sample recovery was generally good, with some exceptions when ground water was encountered. Sample recovery from the RC drilling was determined from the relative size of the bulk residue material collected. The RC sample recovery was consistent irrespective of the geological units being drilled.

Drilling commenced August 2019 on 160m spaced panels with drill holes 80m apart on section.

Sampling and sub-sampling techniques

Sampling information used in the resource estimation was derived from RC drilling. Samples were collected at 1m intervals from a cone splitter attached to the drill cyclone. Two (2) samples of approximately 3kg were taken per metre to provide sample duplicates or material for other purposes. All samples were dry.

Batches of sample duplicates have been assayed and compared with the original sample. These showed very good repeatability.

Sample Analysis Method

Sample preparation involved crushing each entire (approximately) 3kg sample. A 100g sub-sample was then pulverised in a zirconium bowl to minimise Fe contamination.

Samples were 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 reanalysed by a sodium peroxide zirconium crucible fusion with a detection range of 1ppm to 20% Li.

Bulk Density

No bulk densities have yet been determined as there are no core holes to date, so values have been selected and used based on information from comparable pegmatite hosted deposit. The following bulk densities were assigned according to oxidation state:

- Oxide: 1.9
- Transition: 2.4
- Fresh: 2.7

Geological Domaining

In additional to the detailed geological logging, internal pegmatite zonation boundaries typically coincide with anomalous or depleted spodumene zones and Li assays which assisted in confirming geological continuity of the mineralised zone. All pegmatite zonation (and grade) contact models were built in Leapfrog™ Geo software and exported for use as domain boundaries for the block model (Figure 8).

The weathering and oxidation has been coded into the model using lithological logging and observations. The resource is reported to include oxide material at this stage

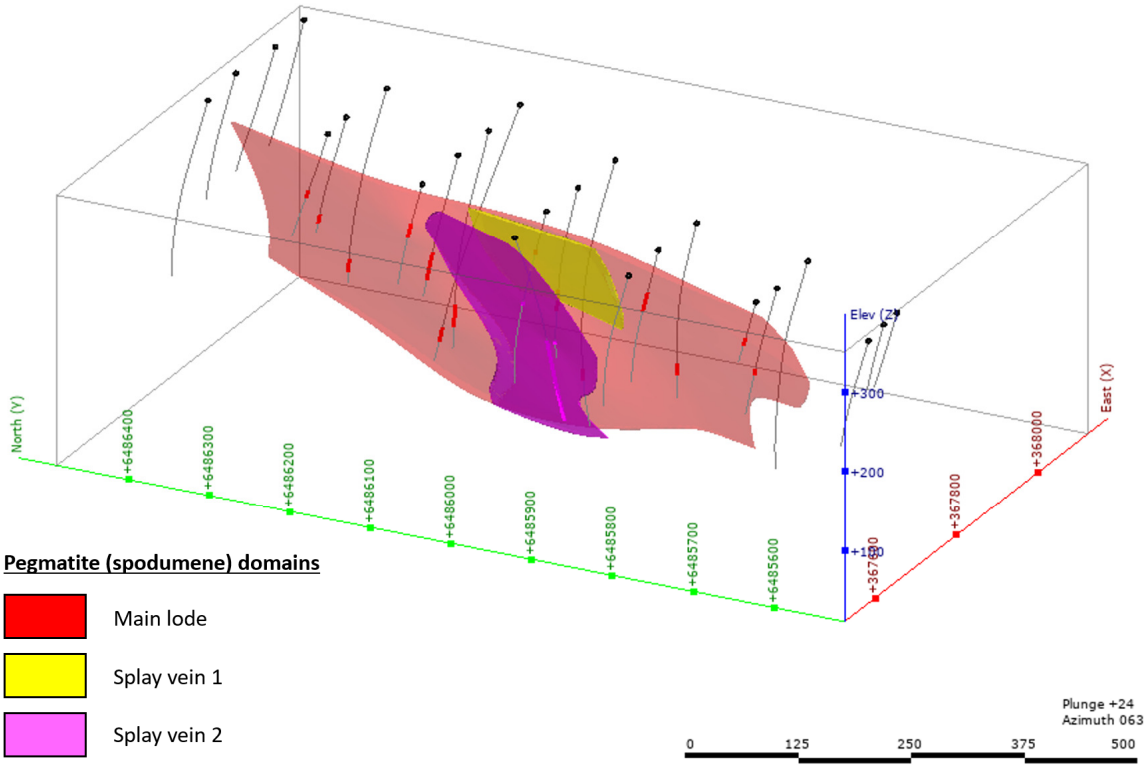


Figure 8: *Oblique view Showing Drillhole Traces and the Cade Lithium Geological Model.*

Estimation Methodology

Grade estimation used Ordinary Kriging for Li_2O %, Ta_2O_5 (ppm) and Fe_2O_3 (%) using GEOVIA Surpac™ software into the spodumene domains. The estimate was resolved into 4m (E) x 20m (N) x 10m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Potential top-cuts were analysed by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were not required for Li_2O %. Tonnes have been reported on a dry basis.

Classification Criteria

The Cade Lithium resource has been classified on the basis of confidence in the detailed geological understanding and defined continuity of the mineralised zone (drill spacing 160m x 80m), the requirement for drilling to intercept the pegmatite in the oxide/transition zone and the lack of bulk density data.

At this stage, the oxide material has been reported as part of the resource in situ, reasonably fresh spodumene-bearing pegmatite rock chip samples have been collected at surface where the Cade pegmatite outcrops. However, drilling to date has only intersected the pegmatite at the boundary of and below the base of oxidation. Shallower drilling targeting the oxide/transition zone is required with subsequent metallurgical testwork on the material to determine the ability to economically recover lithia from this material.

The classification boundaries for the resource classification for this deposit are largely based on drill density. This has been completed “manually” by creating a wireframe around the central area of closest spaced drilling.

All factors considered, the resource estimate has been classified as an Inferred Resource for Li_2O.

Previous Mining and Metallurgical Considerations

While there had been no previous mining of the Cade pegmatite, it is expected that any potential initial mining would be by open cut methods.

The Company has not commenced metallurgical test work yet, however six diamond core holes have been drilled into the Cade Deposit specifically to provide samples for this work.

APPENDIX 1. Drill Hole Information and Results Summary

Table 3. *Collar Coordinates for RC drilling completed in August and September 2019*

Drill Hole Collar Locations								
Hole ID	Prospect	Type	East (m)	North (m)	RL (m)	Depth (m)	Dip (°)	Azimuth (°)
PDRC263	CADE	RC	6485999	367679.3	334.02	311	-60.11	89.8
PDRC264	CADE	RC	6486001	367759.7	335.23	204	-59.91	270.83
PDRC265	CADE	RC	6485999	367834.5	335.39	204	-60.76	271.65
PDRC266	CADE	RC	6486160	367770.7	332.75	120	-60.98	275.65
PDRC267	CADE	RC	6486161	367859.8	333.53	168	-60.22	271.29
PDRC268	CADE	RC	6486161	367935.4	333.82	258	-60.69	271.93
PDRC269	CADE	RC	6485838	367640.2	334.4	156	-60.3	274.66
PDRC270	CADE	RC	6485840	367717.3	335.46	156	-62.4	273.47
PDRC271	CADE	RC	6485837	367803.5	336.06	204	-65.54	275.64
PDRC272	CADE	RC	6485674	367680.4	335.43	150	-61.87	276.45
PDRC273	CADE	RC	6485678	367762	336.39	246	-60.56	278.9
PDRC276	CADE	RC	6486318	367852.4	331.3	126	-59.34	273.59
PDRC277	CADE	RC	6486321	367902.1	331.77	138	-60.74	277.05
PDRC278	CADE	RC	367,993	6,486,317	332.7	234	-59.81	273.53
PDRC279	CADE	RC	367,877	6,486,479	331.0	210	-60.56	277.48
PDRC280	CADE	RC	367,956	6,486,485	332.4	150	-60.19	275.57
PDRC281	CADE	RC	368,038	6,486,478	334.0	150	-59.92	271.49
PDRC282	CADE	RC	368,117	6,486,482	335.7	150	-60.63	274.54
PDRC283	CADE	RC	367,637	6,485,679	334.8	72	-59.88	276.03
PDRC284	CADE	RC	367,592	6,485,516	336.7	126	-60.48	273.18
PDRC285	CADE	RC	367,641	6,485,522	336.6	78	-60.78	275.49
PDRC286	CADE	RC	367,676	6,485,524	336.8	90	-64.28	282.2
PDRC287	CADE	RC	367,922	6,485,997	335.6	318	-64.49	295.97
PDRC288	CADE	RC	368,017	6,486,164	333.4	312	-60.22	275.65
PDRCD292*	CADE	RC/DD	367770	6485920	335	150.3	-60	275
PDRCD294*	CADE	RC/DD	367840	6486080	335	201.3	-60	275

Notes:

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

Table 4. *Summary of Resource Intersections used in the Resource Estimate*

Summary of Resource Intersections used in the Resource Estimate											
HoleID	Hole Type	MGA Easting	MGA Northing	RL	Dip	MGA Azimuth	Hole Depth	Domain	Depth From	Interval Length	Li2Opct
PDRC263	RC	367679.31	6485999.11	334.02	-60.11	89.80	311.0	3	177.0	134.0	0.95
PDRC264	RC	367759.69	6486000.57	335.23	-59.91	270.83	204.0	1	47.0	6.0	1.16
PDRC264	RC	367759.69	6486000.57	335.23	-59.91	270.83	204.0	2	66.0	5.0	1.39
PDRC264	RC	367759.69	6486000.57	335.23	-59.91	270.83	204.0	3	108.0	5.0	1.34
PDRC265	RC	367834.46	6485999.45	335.39	-60.76	271.65	204.0	1	122.0	25.0	1.61
PDRC265	RC	367834.46	6485999.45	335.39	-60.76	271.65	204.0	3	183.0	4.0	0.78
PDRC266	RC	367770.71	6486159.74	332.75	-60.98	275.65	120.0	1	47.0	17.0	1.15
PDRC267	RC	367859.83	6486160.78	333.53	-60.22	271.29	168.0	1	116.0	33.0	1.63
PDRC268	RC	367935.44	6486160.99	333.82	-60.69	271.93	258.0	1	206.0	28.0	1.18
PDRC269	RC	6485837.99	367640.24	334.40	-60.30	274.66	156.0	na			
PDRC270	RC	367717.28	6485840.31	335.46	-62.40	273.47	156.0	1	50.0	23.0	1.36
PDRC271	RC	367803.48	6485836.61	336.06	-65.54	275.64	204.0	1	165.0	13.0	0.46
PDRC272	RC	367680.39	6485674.39	335.43	-61.87	276.45	150.0	1	95.0	8.0	0.87
PDRC276	RC	367852.41	6486318.41	331.30	-60.56	278.90	126.0	1	69.0	10.0	1.22
PDRC277	RC	367902.13	6486320.79	331.77	-59.34	273.59	138.0	1	115.0	12.0	1.42
PDRC278	RC	367993.39	6486316.84	332.67	-60.74	277.05	234.0	1	205.0	16.0	1.42
PDRC279	RC	6486479.36	367876.78	331.04	-59.81	273.53	210.0	na			
PDRC280	RC	6486484.73	367955.68	332.40	-60.56	277.48	150.0	na			
PDRC281	RC	6486477.73	368038.49	333.95	-60.19	275.57	150.0	na			
PDRC282	RC	6486481.86	368116.70	335.72	-59.92	271.49	150.0	na			
PDRC283	RC	367636.96	6485678.64	334.83	-60.63	274.54	72.0	1	43.0	9.0	0.60
PDRC284	RC	6485516.41	367592.28	336.66	-59.88	276.03	126.0	na			
PDRC285	RC	6485522.30	367640.84	336.63	-60.48	273.18	78.0	na			
PDRC286	RC	6485523.87	367676.24	336.80	-60.78	275.49	90.0	na			
PDRC287	RC	367922.09	6485997.40	335.61	-64.28	282.20	318.0	1	248.0	13.0	1.00
PDRC288	RC	368016.89	6486163.54	333.37	-64.49	295.97	312.0	1	271.0	18.0	1.02

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_2O.
- 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.
- Domain "na" denotes no spodumene intersected in the hole.

Section 1 - Sampling Techniques and Data

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

Pioneer Dome Project, Cade Deposit

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut Faces, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Reverse circulation (RC) samples 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 600 hand held portable XRF analyser for internal use, and not reported herein.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Industry-standard reverse circulation drilling, using a face-sampling hammer with a booster and auxiliary compressors used to ensure dry samples. • RC: Individual one metre samples were collected using a cyclone and a cone splitter into sub samples of approximately 3.5kg weight, the cyclone was regularly cleaned to minimise contamination. • Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide assay quality checks. The standards and duplicates reported within acceptable limits. • Samples are considered 'fit for purpose'.
	• *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.*	• RC drilling was used to obtain 1 m samples from which approximately 3.5 kg sampled. • 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. • 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	• *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).*	• Reverse Circulation Drilling.
		  ◦ 4.5 inch drill string.
		  ◦ Face-sampling hammer.
		  ◦ Auxiliary and Booster compressors used to exclude ground water.

Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• During RC drilling the geologist recorded occasions when sample quality is poor, sample return was low, when the sample was wet or compromised in another way.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Sample recovery is good for RC drilling using the equipment described.

Criteria	JORC Code explanation	Commentary
		• RC Sample recovery is mostly under the control of the drill operator and is generally influenced by the experience and knowledge of the operator.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Because the sample recoveries are assumed to be high, any possible relationship between sample recovery and grade has not been investigated.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Lithological logs exist for these holes in a database. Fields captured include lithology, mineralogy, sulphide abundance and type, alteration, texture, recovery, weathering and colour. • Mineral identification has been aided using a Bruker Bravo portable Raman. • The detail captured is considered high and fit for purpose.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.*	• Logging 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.
	• *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	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• RC drilling - Individual one metre samples were collected via a cone splitter directly attached to the cyclone when dry. All samples were dry. Individual samples were approximate 3.5kg. The bulk residue was 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.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Cyclones are routinely cleaned after each 6m rod. • Geologist looks for evidence of sample contamination, which was recorded if seen. • The use of booster and auxiliary compressors ensures samples are dry, which best ensures a quality sample.
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• Standard Reference Material is included at a rate of 1 per 30 samples. • Duplicate field samples are routinely inserted at a 1 per 30 samples for RC drilling, 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.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 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.*	• 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.
	• *For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• Pioneer owns a Bruker S1 Titan 600 handheld XRF instrument which it used to provide the geologist with basic, qualitative litho-geochemistry data and 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.

Criteria	JORC Code explanation	Commentary
		• Intervals during RC drilling identified as not obviously mineralised have been sampled with three metre composites. • Standards, blanks and duplicates have been analysed with the Bruker to ensure the instrument is operating as expected and correctly calibrated.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Standards and laboratory checks have been assessed. 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	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• Significant intersections are calculated by experienced staff with these intersections checked by other staff. • No holes have been twinned
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Pioneer has a digital SQL drilling database where information is stored. • The Company uses a range of consultants to load and validate data and appraise quality control samples.
	• *Discuss any adjustment to assay data.*	• Pioneer has adjusted the lithium (Li), tantalum (Ta) and caesium (Cs) assay results to determine Li_2O, Ta_2O_5 and Cs_2O 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_2O, Ta_2O_5 and Cs_2O grades respectively.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• The collar locations of the holes have been surveyed by a licenced surveyor using a differential GPS. The collar surveys provide very accurate positions for all holes including the RL of each drill collar.
	• *Specification of the grid system used.*	• MGA94 (Zone 51)
	• *Quality and adequacy of topographic control.*	• Topographic control is by DGPS, carried out by a licensed surveyor. • A high-resolution DEM exists over the entire M63/665 lease.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drill spacing for lithium was drilled on 160m spaced panels with drill holes 80m apart.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• The data is 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 data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The strike of the mineralisation is estimated at to be broadly north-south, and dipping east, therefore (after the first hole which determined the dip) angled drill holes at -60° have been drilled towards 270^0. 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.*	• Pioneer uses standard industry practices when collecting, transporting and storing samples for analysis. • Drilling pulps are retained by Pioneer off site.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sampling techniques for assays have not been specifically audited but follow common practice in the Western Australian exploration industry. • The assay data and quality control samples are periodically audited by an independent consultant.

Section 2 - Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites*	• The Pioneer Dome drilling reported herein is entirely within 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.
	• *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.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to Appendix 1 of this announcement.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Weighted average Li_2O assays on page 1 and Table 1 of this release are for generally adjacent samples above 0.8% Li_2O, 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	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Downhole lengths are reported in Appendix 1. The current geological interpretation, based on drilling and mapping, suggests that the true widths approximate the down hole widths. (See the cross section, Figure 4)
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to figures in this report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Comprehensive reporting of drill details has been provided in Appendix 1 of this announcement.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All meaningful and material exploration data has been reported.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned further work includes diamond core drilling to obtain metallurgical samples plus infill and extensional drilling.

Section 3 – Estimation and Reporting of Mineral Resources

(Criteria listed in the section1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• The drilling has been imported into a relational SQL server database using Datashed™ (Industry standard drill hole database management software). • All of the available drilling data has been imported into 3D mining and modelling software packages (Surpac™ and Leapfrog™), which allow visual interrogation of the data integrity and continuity. All of the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.
	• *Data validation procedures used.*	• Data validation checks were completed on import to the SQL database. • Data validation has been carried out by visually checking the positions and orientations of drill holes.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• CP, Mr David Crook, has visited the site numerous times.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation is considered robust as the continuity the pegmatite is consistent between drillholes. • No assumptions have been made regarding the geological interpretation. • There have been no alternative interpretations have been considered at this stage. • The key factors affecting continuity is the presence of spodumene within the pegmatite.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Mineral Resource estimate is based on a LCT pegmatite dyke, striking roughly north/south, dipping steeply to the east for a strike length of approx. 850m and downdip of 350m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.*	• Grade estimation used Ordinary Kriging for Li_2O % using GEOVIA Surpac™ version 6.8.1 • Drillhole samples were flagged with the wireframed domain code. • Sample data were composited to 1m which is the most frequent sampling interval. • Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, no top-cuts were applied. • Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate and grade ranges reasonably long (up to 270m) although this is influenced by the current wide drill spacing (160m along strike). • The Block Model was constructed with parent blocks of 4m (E) x 20m (N) x 10m (RL) parent cells that was sub-celled to 0.5 (E) x 2.5m (N) x 1.25m (RL) at the domain boundaries for accurate domain volume representation.

Criteria	JORC Code explanation	Commentary
	• *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Search ellipse sizes were based primarily on a combination of the variography and the trends of the wireframed mineralized zones. Hard boundaries were applied to the estimation domain. • Three estimation passes were used. The first pass had a limit of 200m, the second pass 400m and the third pass searching a large distance to fill and blocks within the wireframed zones. Passes used a minimum of 6 samples and a maximum of 12 samples and maximum samples per hole of 4 – based on the sample distribution and number of samples contained within each domain. • Validation of the block model included a volumetric comparison of the resource wireframe to the block model volume. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Grade envelopes have been wireframed to a 0.5% Li_2O cut-off which equates to the spodumene geological zone within the pegmatite.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Pioneer has not undertaken any mining studies to date, however it is assumed that any future mining methods would initially be by open pit method..
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No assumptions have been made.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Environmental studies including Flora studies have been completed. 'Wall rocks' have recognisable (but low) concentrations of sulphides (likely pyrite) and therefore have been analysed for elements that might indicate the presence potentially acid forming minerals for future study.

Criteria	JORC Code explanation	Commentary
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• No bulk density measurements have been carried out. • Densities were assumed, based on oxidation code:. Oxide: 1.9 Transition: 2.4 Fresh: 2.7
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Cade Lithium resource has been classified on the basis of confidence in the detailed geological understanding and defined continuity of the mineralised zone (drill spacing 160m x 80m), the requirement for drilling to intercept the pegmatite in the oxide/transition zone and the lack of bulk density data. • All factors considered; the resource estimate has been assigned to Inferred category. • At this stage, the oxide material has been reported as part of the resource In situ, reasonably fresh spodumene-bearing pegmatite rock chip samples have been collected at surface where the Cade pegmatite outcrops. However, drilling to date has only intersected the pegmatite at the boundary of and below the base of oxidation. Shallower drilling targeting the oxide/transition zone is required with subsequent metallurgical testwork on the material to determine the ability to economically recover lithia from this material.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No external audits of the resource have been carried out.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grade.