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DRILLING CONFIRMS 1 KM PRIORITY NICKEL SULPIDE TARGET AT LEO'S DAM

Perth, Western Australia, 14 May 2019: Pioneer Resources Limited ("Pioneer" or the "Company" (ASX: PIO)) advises that:

- **60 aircore holes for 4,142m were completed at the Leo's Dam Nickel Sulphide Target**
- **Compiled regolith geochemistry results now define a 1-kilometre long nickel sulphide target that includes the 2018 drill hole GRRC038, which intersected 22m at 1.02% Ni and 475ppm Cu in sulphides**
- **Target is drill-ready for deeper RC drilling and down-hole EM surveys**
- **In addition, near-surface cobalt laterite grades the highest ever at Leo's Dam**

Pioneer's nickel sulphide strategy is advancing concurrently with exploration programmes at the Company's flagship Pioneer Dome Pegmatite Project, where mining at the Sinclair Caesium Deposit was recently completed. Drilling is scheduled to resume at the Pioneer Dome during May2019.

Drilling at Golden Ridge Project: Leo's Dam Nickel Sulphide Target Advances.

On 25 March 2019 the Company announced that geochemistry drilling using an aircore rig had commenced at the Leo's Dam Target, approximately 2km NE of the Blair Nickel Mine.

The programme was designed to test the extent of ultramafic rocks showing evidence of fertility for nickel sulphide mineralisation, following on from the 2018 discovery hole, **GRRC038, which intersected nickel sulphides grading 1.02% Ni and 475ppm Cu over 22m**.

The programme comprised seven traverses of aircore holes drilled to sample a pervasive layer of weathered rock which overlays the project. Holes were commonly drilled to between 60 and 107m deep. In total, 60 aircore holes were drilled for 4,142m.

Litho-geochemical data is used to interpret the presence of, and the fertility of, ultramafic rocks as a potential host for nickel sulphide mineralisation. In particular, nickel, chromium, magnesium and copper can provide evidence of the correct geological environment and whether nickel sulphides may be present in unweathered rock. When holes that returned a positive 'nickel sulphide vector' from this programme are collated with earlier drilling, a multi-element geochemical anomaly is evident that exceeds 1 kilometre in length, which will be a priority area for further drilling.

Pioneer Managing Director David Crook said;

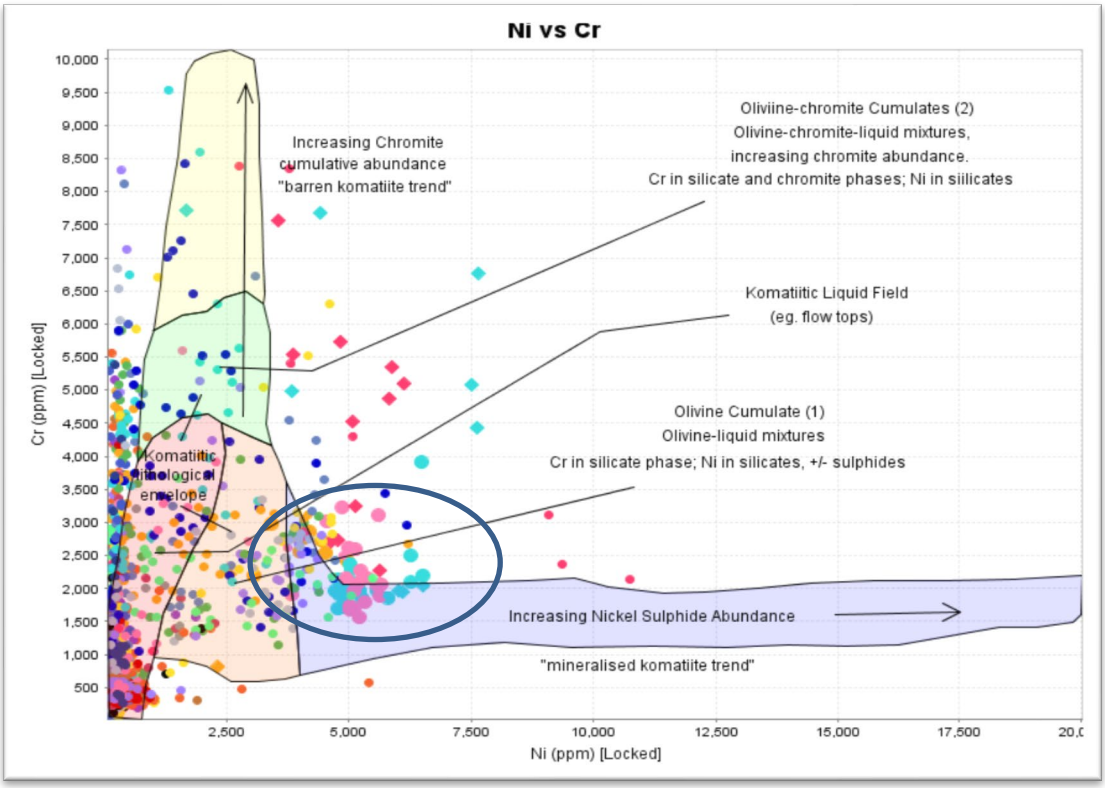
"when we intersected nickel sulphides at the Leo's Dam Target in 2018 we greatly increased our understanding of the prospectivity of the Golden Ridge Project and added validity to the Company's Blair Dome geological model. The results from April's drilling are consistent with the model with geochemical anomalies highlighting the Leo's Dam ultramafic unit as a valid target for future work."

While not yet scheduled, further drilling may be undertaken later in 2019.

Table 1 Selected Significant Assays: Nickel Sulphide Vector Geochemistry										
Hole ID	**North (m)**	**East (m)**	**RL (m)**	**Depth**	**From (m)**	**To (m)**	**Length (m)**	**Ni (ppm)**	**Cu (ppm)**	**Cr (ppm)**
GRA0305	**6,581,598**	**378,238**	**357.5**	**107**	**27**	**107**	**80**	**5638**	**146**	**2471**
includes					27	36	9	7587	369	5431
GRA0335	6,580,794	378,323	376.0	87	81	84	3	6211	106	2680
GRA0345	6,581,904	378,235	348.6	66	45	51	6	5261	91	2020
GRA0349	6,581,600	378,220	358.7	96	48	93	45	5274	15	2051
GRA0350	**6,581,597**	**378,258**	**355.3**	**73**	6	12	6	5444	561	4700
and					18	33	15	5509	418	3741
and					45	57	12	**8569**	**1201**	**2979**

Notes:

- All holes drilled using an aircore drilling system.
- Samples are generally 3m composites.
- Collar locations by hand-held GPS (GDA 94-51 grid) and considered fit for purpose.
- All holes drilled within weathered rock. Elevated Ni and Cr values likely to be enhanced due to lateritic processes.
- Intersection length is 'down hole'. No correction for dip made.



Graph 1: *Ni vs Cr assay plot coloured by drill hole ID. Notwithstanding samples are of weathered rock, samples that plot within the oval are considered to have a 'nickel sulphide vector' characteristic. Points that are enlarged have elevated Cu, another 'nickel sulphide vector' when associated with ultramafic rocks.*

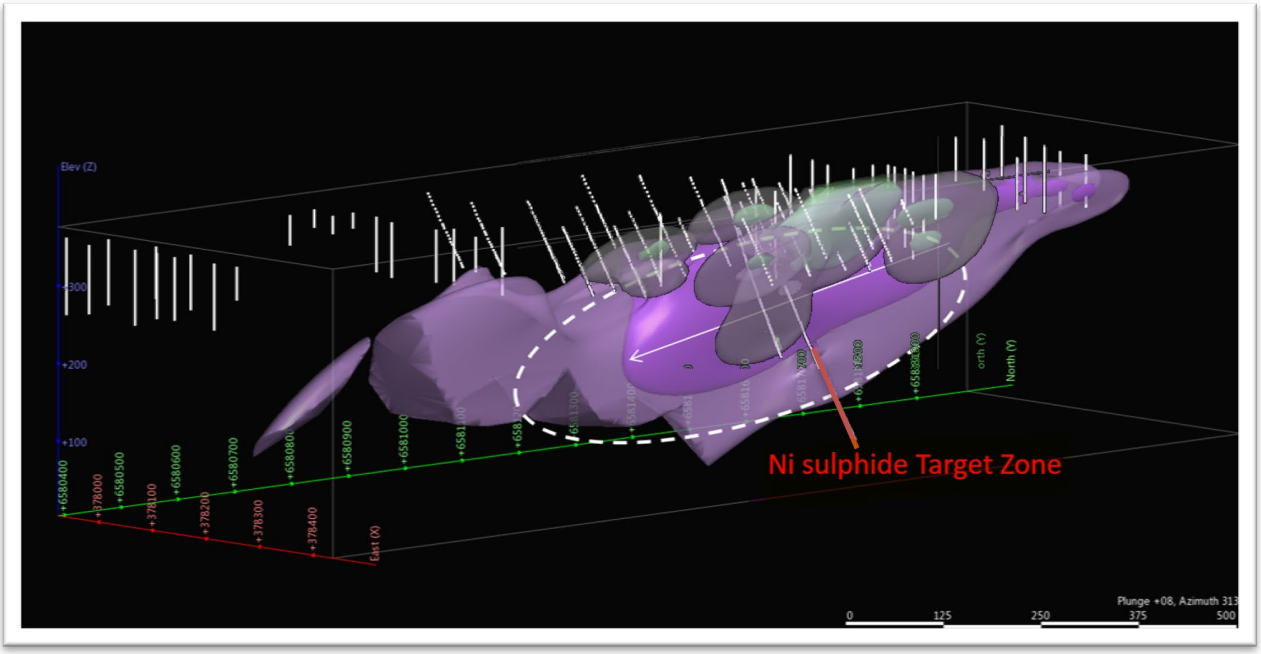


Figure 1: *Composite nickel (purple) and copper (grey, green) regolith geochemistry showing nickel sulphide target.*

Cobalt: Intersections Parallel the Nickel Sulphide Targets

The Company previously released information about the prospectivity of the Golden Ridge Project for cobalt mineralisation (See ASX release 24 January 2018). Cobalt mineralisation is associated with manganese in sub-horizontal layers at paleo-water table levels, about 30m below the current land surface.

While this drilling programme did not target cobalt specifically, the east-west drilling traverses extended into the cobalt-prospective zone at the eastern end of the traverses and returned several significant, high grade cobalt intersections.

Barra Resources Limited (ASX: BAR) recently provided information about advances in extractive metallurgy for its Mt Thirsty cobalt-nickel oxide deposit (BAR announcement to ASX, 9 May 2019). Pioneer considers that the Leo's Dam cobalt mineralisation has similarities to the Mt Thirsty Deposit.

Table 2
Selected Significant Assays: Cobalt Geochemistry

Hole ID	North (m)	East (m)	RL (m)	Depth	From (m)	To (m)	Length (m)	Co (%)	Ni (%)
GRA0328	6,580,005	378,039	365.66	69	27	51	24	0.11	0.30
includes					27	33	6	0.23	0.24
GRA0334	6,579,602	378,264	366.39	99	24	30	6	0.35	0.22
GRA0336	**6,580,792**	**378,276**	**358.94**	**44**	**33**	**36**	**3**	**0.62**	**0.44**
GRA0350	6,581,597	378,258	355.33	73	45	54	9	0.22	0.97

Notes:

- All holes drilled using an aircore drilling system.
- Samples are 3m composites.
- Collar locations by hand-held GPS (GDA 94-51 grid) and considered fit for purpose.
- All holes drilled within weathered rock. Elevated cobalt values likely to be due to hydromorphic processes.
- Intersection length is 'down hole'. No correction for dip made.

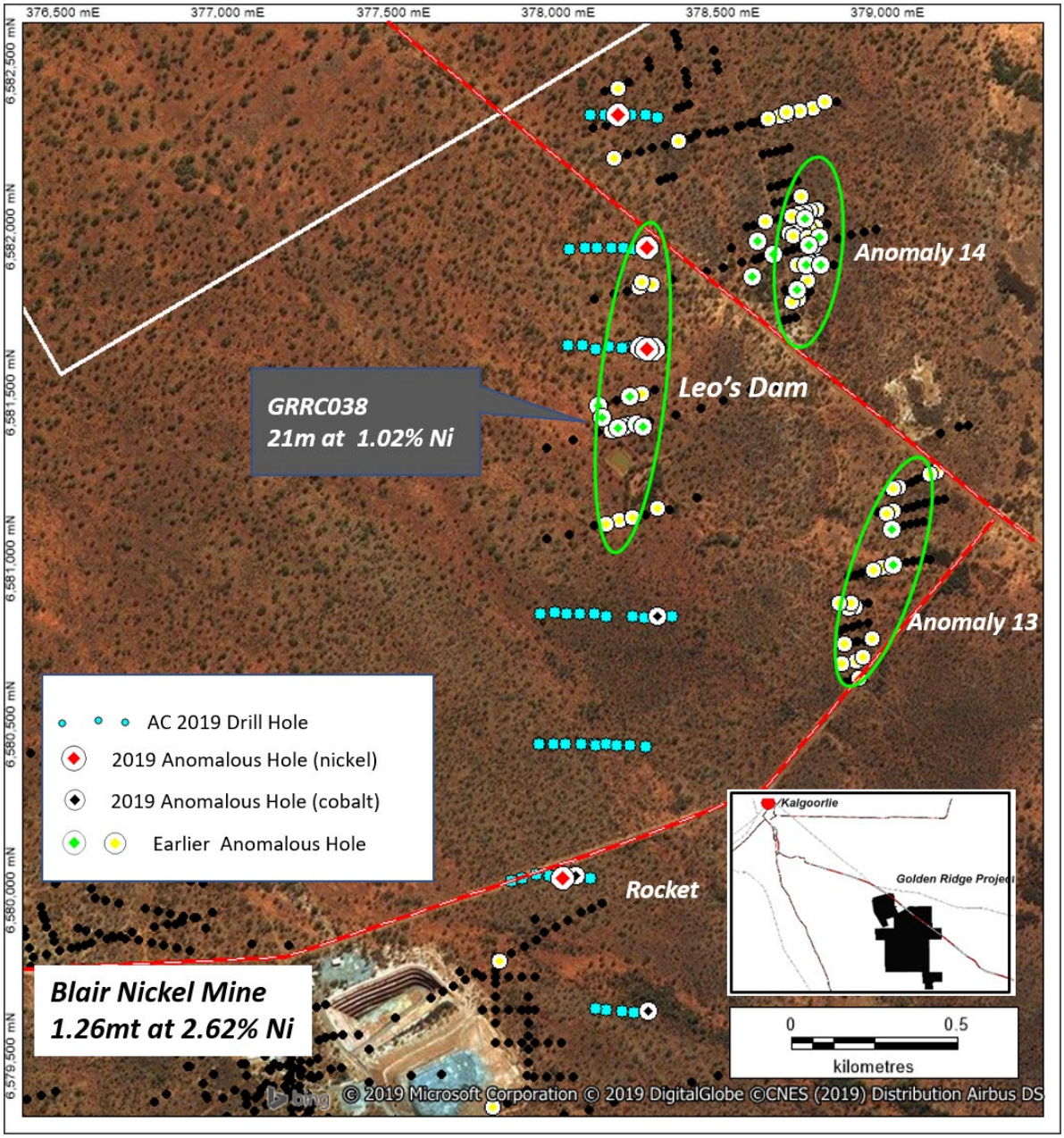


***Figure 2**: Plan view of the Golden Ridge Project and the Blair Dome, showing the location of the Blair Nickel Sulphide Mine box cut. Priority drill targets exist at Leo's Dam, Anomalies 13 and 14, and the Rocket Prospect*

Outlook

The Leo's Dam nickel sulphide target is now sufficiently defined, and the next phase of work will include RC drilling to establish platform holes for down-hole electromagnetic surveys to detect conductive rocks that may include massive nickel sulphide mineralisation.

Plans for a drilling programme later in 2019 are in place, although a date has not yet been scheduled.

Leo's Dam is one of 5 priority nickel sulphide targets within the Golden Ridge Project. Others include Anomalies 13 and 14, Blair South and Rocket. Other evaluation targets include Blair South and Duplex Hill.

About the Golden Ridge Nickel Sulphide Project

Hole GRRC038, which intersected fresh nickel sulphides, was a successful test of a drilled weathered rock geochemical target, in a location consistent with the generally held Kambalda nickel sulphide model.

Aircore drilling north and south of GRRC038 (light blue traverse lines on Figure 1) have provided additional geological and geochemical knowledge about targets ahead of future drilling,

The Company devised an innovative change to the geological model previously ascribed to the Golden Ridge Project (refer ASX release on 20 July 2015). This change proposed the existence of the Blair Dome with at least 12km of demonstrably prospective, basal ultramafic contact target zone outside of the immediate Blair Nickel Mine Deposit. The Blair Dome is analogous, both geologically and in size, with other ultramafic domes at Kambalda, Tramways and Widgiemooltha, which all host major nickel sulphide mines.

The Blair Nickel Mine

The Mineral Resource estimate for the Blair Nickel Mine is: 222,710t of nickel sulphide ore with a grade of 2.92% Ni, as summarised by category in Table 2 below:

Table 3. Mineral Resource Summary by Category: Blair Nickel Mine

Class	Tonnes	Ni	Ni Metal
	(t)	(%)	(t)
Indicated	75,560	4.37	3,300
Inferred	147,150	2.18	3,210
Total	222,710	2.92	6,510

Notes

- Appropriate rounding applied
- Announced to ASX 18 November 2013

Managing Director
Pioneer Resources Limited

About Pioneer Resources Limited

About Pioneer Resources Limited

Pioneer is a new miner and active explorer focused on key global demand-driven commodities. 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. Drilling is in progress, or has been recently completed, at each of these Projects.

Pioneer Dome Project and the Sinclair Caesium Deposit: In late 2016 Pioneer reported the discovery of Australia's first caesium (in the mineral 'pollucite') deposit, which was brought into production within 2 years. Pollucite is currently being delivered to Cabot Specialty Fluids' Tanco Mine facility where it is converted into Caesium Formate brine, used in high temperature/high pressure oil and gas drilling.

The Pioneer Dome is prospective for further pollucite discoveries, and drilling is scheduled for later this year. The Sinclair Mine sequence includes thicknesses of microcline, a potassium feldspar, and lithium minerals petalite and lepidolite.

Nickel: Golden Ridge Project: The price for nickel is steadily improving. The Company owns the closed Blair Nickel Sulphide Mine located between Kalgoorlie and Kambalda, WA, where near-mine target generation is continuing. The Company announced a significant new disseminated nickel sulphide drilling intersection at the Leo's Dam Prospect in 2018, highlighting the prospectivity of the greater project area. A programme of RAB drilling has been undertaken, with assay results pending.

Cobalt: Golden Ridge Project: Cobalt demand is expanding in response to its requirement in the manufacture of cobalt-based lithium batteries in certain electric vehicles and electricity stabilisation systems (power walls). Other uses include in super-alloys, including jet engine turbine blades, and for corrosion resistant metal applications.

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

Notes

1. Blair: Refer Company's announcements to ASX dated 18 November 2013 (Blair Resource Estimate), May 2014, 27 January 2015, 18 May 2015, 20 July 2015, 13April 2017, 23 January 2018, 25 January 2018, 25 March 2019.
2. Further information is included in quarterly activity reports commencing in September 2008.

COMPETENT PERSON

The information above that relates to the Company's Resources and Exploration Results is extracted from various ASX Announcements as listed in the References when Competent Persons consents were obtained. The Competent Persons' consents remain in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. The reports 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, Golden Ridge

Table 4: Aircore Drill hole Information for Holes Referred to Herein

Hole ID	Type	Depth	Grid	Northing	Easting	RL	Dip	Azi	Tenement
GRA0293	AC	64	MGA94_51	6,582,304	378,098	337	-90	360	M26/285
GRA0294	AC	86	MGA94_51	6,582,305	378,140	354	-90	360	M26/285
GRA0295	AC	60	MGA94_51	6,582,304	378,180	349	-90	360	M26/285
GRA0296	AC	63	MGA94_51	6,582,304	378,224	344	-90	360	M26/285
GRA0297	AC	68	MGA94_51	6,582,297	378,258	348	-90	360	M26/285
GRA0298	AC	58	MGA94_51	6,582,302	378,055	346	-90	360	M26/285
GRA0299	AC	86	MGA94_51	6,581,606	377,998	351	-90	360	M26/285
GRA0300	AC	87	MGA94_51	6,581,608	378,039	349	-90	360	M26/285
GRA0301	AC	82	MGA94_51	6,581,596	378,079	348	-90	360	M26/285
GRA0302	AC	81	MGA94_51	6,581,603	378,120	348	-90	360	M26/285
GRA0303	AC	96	MGA94_51	6,581,601	378,159	356	-90	360	M26/285
GRA0304	AC	63	MGA94_51	6,581,604	378,195	358	-90	360	M26/285
GRA0305	AC	107	MGA94_51	6,581,598	378,238	357	-90	360	M26/285
GRA0306	AC	57	MGA94_51	6,581,601	378,276	357	-90	360	M26/285
GRA0307	AC	37	MGA94_51	6,580,798	377,923	348	-90	360	E26/186
GRA0308	AC	22	MGA94_51	6,580,800	377,964	360	-90	360	E26/186
GRA0309	AC	24	MGA94_51	6,580,798	378,002	355	-90	360	E26/186
GRA0310	AC	20	MGA94_51	6,580,796	378,041	364	-90	360	E26/186

Hole ID	Type	Depth	Grid	Northing	Easting	RL	Dip	Azi	Tenement
GRA0311	AC	72	MGA94_51	6,580,797	378,085	363	-90	360	E26/186
GRA0312	AC	72	MGA94_51	6,580,791	378,120	360	-90	360	E26/186
GRA0313	AC	67	MGA94_51	6,580,791	378,202	360	-90	360	E26/186
GRA0314	AC	42	MGA94_51	6,580,790	378,277	357	-90	360	E26/186
GRA0315	AC	71	MGA94_51	6,580,790	378,237	365	-90	360	E26/186
GRA0316	AC	17	MGA94_51	6,580,402	377,925	354	-90	360	M26/220
GRA0317	AC	99	MGA94_51	6,580,404	377,923	359	-90	360	M26/220
GRA0318	AC	88	MGA94_51	6,580,404	377,966	354	-90	360	M26/220
GRA0319	AC	83	MGA94_51	6,580,402	378,002	365	-90	360	M26/220
GRA0320	AC	96	MGA94_51	6,580,404	378,051	356	-90	360	E26/186
GRA0321	AC	66	MGA94_51	6,580,401	378,092	366	-90	360	E26/186
GRA0322	AC	81	MGA94_51	6,580,404	378,124	355	-90	360	E26/186
GRA0323	AC	70	MGA94_51	6,580,402	378,157	362	-90	360	E26/186
GRA0324	AC	84	MGA94_51	6,580,403	378,199	354	-90	360	E26/186
GRA0325	AC	42	MGA94_51	6,580,399	378,246	356	-90	360	E26/186
GRA0326	AC	91	MGA94_51	6,580,005	377,958	367	-90	360	M26/220
GRA0327	AC	88	MGA94_51	6,579,998	377,999	363	-90	360	M26/220
GRA0328	AC	69	MGA94_51	6,580,005	378,038	365	-90	360	M26/220
GRA0329	AC	86	MGA94_51	6,579,999	378,081	355	-90	360	M26/220
GRA0330	AC	49	MGA94_51	6,579,605	378,102	366	-90	360	M26/220
GRA0331	AC	54	MGA94_51	6,579,602	378,136	361	-90	360	M26/220
GRA0332	AC	79	MGA94_51	6,579,601	378,182	369	-90	360	M26/220
GRA0333	AC	87	MGA94_51	6,579,597	378,217	363	-90	360	M26/220
GRA0334	AC	99	MGA94_51	6,579,602	378,263	366	-90	360	E26/186
GRA0335	AC	87	MGA94_51	6,580,794	378,323	376	-90	360	E26/186
GRA0336	AC	44	MGA94_51	6,580,792	378,275	358	-90	360	E26/186
GRA0337	AC	84	MGA94_51	6,580,404	378,091	357	-90	360	E26/186
GRA0338	AC	41	MGA94_51	6,580,011	377,918	355	-90	360	M26/220
GRA0339	AC	55	MGA94_51	6,581,899	377,998	345	-90	360	M26/285
GRA0340	AC	63	MGA94_51	6,581,903	378,045	346	-90	360	M26/285
GRA0341	AC	65	MGA94_51	6,581,902	378,080	370	-90	360	M26/285
GRA0342	AC	81	MGA94_51	6,581,901	378,125	359	-90	360	M26/285
GRA0343	AC	81	MGA94_51	6,581,902	378,159	350	-90	360	M26/285
GRA0344	AC	70	MGA94_51	6,581,898	378,192	348	-90	360	M26/285
GRA0345	AC	66	MGA94_51	6,581,904	378,234	348	-90	360	M26/285
GRA0346	AC	46	MGA94_51	6,579,997	377,877	354	-90	360	M26/220
GRA0347	AC	45	MGA94_51	6,579,988	377,842	357	-90	360	M26/220
GRA0348	AC	89	MGA94_51	6,581,605	378,182	358	-90	360	M26/285
GRA0349	AC	96	MGA94_51	6,581,600	378,219	358	-90	360	M26/285
GRA0350	AC	73	MGA94_51	6,581,597	378,257	355	-90	360	M26/285
GRA0351	AC	61	MGA94_51	6,582,294	378,121	340	-90	360	M26/285
GRA0352	AC	82	MGA94_51	6,582,301	378,159	353	-90	360	M26/285

Notes:

- Hole locations are in MGA 94 zone 51 by handheld GPS +/- 3m accuracy.
- The azimuth is in degrees magnetic.

Table 5: Selected Assay Results

Hole ID	From (m)	To (m)	Al (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm	Fe (%)	Mg (ppm)	Mn ppm	Ni ppm	S (%)	Zn (ppm)
GRA0305	27	30	53934	132	6770	331	37.65	2977	809	7641	0.28	166
GRA0305	30	33	69858	92	4439	379	35.18	4228	1591	7619	0.32	198
GRA0305	33	36	56677	138	5084	397	36.22	7876	1507	7501	0.27	153
GRA0305	36	39	34139	405	3910	275	23.29	45831	3714	6474	0.13	110
GRA0305	39	42	22641	447	2497	150	15.55	104084	2634	6258	0.08	167
GRA0328	27	30	105630	2521	5139	276	29.9	2191	12964	1940	0.09	243
GRA0328	30	33	84162	2015	5034	709	34.39	4203	12177	2770	0.05	458
GRA0334	24	27	82740	5377	579	624	20.02	317	148602	5411	0.19	5383
GRA0334	27	30	77978	1535	472	251	27.73	1479	73740	2809	0.10	2959
GRA0335	81	84	52718	380	2680	106	19.38	15661	6626	6211	0.03	446
GRA0335	84	86	57640	259	2752	115	17.14	15836	4738	3925	0.04	320
GRA0336	30	33	69614	259	2916	215	11.09	2626	3449	475	0.06	49
GRA0336	33	36	59639	6222	1942	883	13.26	932	91487	4388	0.03	295
GRA0345	45	48	16430	487	2149	155	10.21	144662	10331	5476	0.04	297
GRA0345	48	51	14931	325	1891	26	12.06	143743	6687	5045	0.03	241
GRA0345	51	54	11720	237	1558	21	12.57	119196	5476	4577	0.03	266
GRA0349	78	81	14716	142	2066	6	10.22	135971	606	5655	0.04	194
GRA0349	81	84	12949	145	1696	6	9.69	132043	907	5090	0.05	269
GRA0349	84	87	13344	135	1675	13	9.43	133053	531	5022	0.07	232
GRA0349	87	90	13230	138	1791	14	10.17	138966	359	5318	0.07	288
GRA0349	90	93	12782	138	2047	12	12.4	129094	416	5586	0.07	334
GRA0350	6	9	66822	117	4519	563	36.53	3717	875	5068	0.29	76
GRA0350	9	12	63350	119	4880	559	37.95	4771	830	5820	0.30	107
GRA0350	18	21	68962	115	5347	420	32.4	17834	890	5886	0.26	123
GRA0350	21	24	61059	116	5096	517	30.86	27567	597	6114	0.29	132
GRA0350	24	27	48601	182	3247	470	22.75	56576	474	5138	0.25	105
GRA0350	27	30	47921	147	2737	357	22.65	59555	460	4782	0.25	98
GRA0350	30	33	55902	280	2278	328	22.06	56793	2053	5627	0.29	108
GRA0350	45	48	54128	2071	3116	1416	26.97	8340	19819	9084	0.16	413
GRA0350	48	51	56176	2530	2132	2003	28.06	7412	25467	10748	0.18	318
GRA0350	51	54	34952	2020	2364	1011	22.78	32484	17866	9358	0.15	252
GRA0350	54	57	29672	679	4305	372	17.44	66687	6145	5086	0.07	149
GRA0350	57	60	40306	367	8346	251	18.31	73151	4209	3788	0.08	145

Appendix 2 - JORC Code, 2012 Edition – Table 1 Report

Section 1 - Sampling Techniques and Data

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

Golden Ridge Project Aircore Drilling.

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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.*	• Aircore (AC) samples from holes drilled from surface reported. • Three metre composite samples were collected in calico bags by sampling 3 consecutive sample piles laid out on the ground using an aluminium scoop.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Industry-standard aircore drilling, using a face-sampling blade bit. • Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide assay quality checks. The standards and duplicates reported within acceptable limits.
	• *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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Aircore drilling was used to obtain 1 m samples which were laid out in order directly onto the ground. 3 consecutive samples were aggregated to form a 3.5kg sample. • Samples crushed and pulverised by pulp mill to nominal P80/75um to produce a 50 gram charge for analysis. • Standard exploration package of elements were analysed by a four acid digestion with a Mass Spectrometer (MS) determination (Intertek analysis code 4A/OE33). The quoted detection limits for this method are a lower detection limit of 1ppm and an upper detection of 2% Co. Most other elements have a similar analytical range. Any over range samples were re analysed by a sodium peroxide zirconium crucible fusion analysed by inductively coupled plasma optical (atomic) emission spectrometry (Intertek analysis code FP1/OE).
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).*	• Air Core Drilling. ○ 90mm blade bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• During 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 generally good for AC drilling using the equipment described when dry. Sample quality can fall when the sample is wet, or if lacustrine clays are intersected. • Generally the sample is considered 'fit for purpose'

Criteria	JORC Code explanation	Commentary
	• *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 is used for geochemistry only, no study has been made.
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.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.*	• Logging has primarily been qualitative. • Litho-geochemistry analyses is used to confirm rock types. • A representative sample of each metre is sieved and retained in chip trays for future reference. • Petrology of chips from selected samples has not been undertaken.
	• *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.*	• 1 m samples which were laid out in order directly onto the ground. 3 consecutive samples were aggregated to form a 3.5kg sample. • Three metre composites were collected for the entire length of the drill holes. • The sample collection and sampling for this style of drilling is considered standard industry practise and fit for purpose.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Cyclones are routinely cleaned • Geologist looks for evidence of sample contamination, which was recorded where present.
	• *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. • Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The sample size is considered appropriate for the style of deposit being sampled.
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.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• Pioneer owns a Bruker S1 Titan 800 handheld XRF instrument which it used to assist the geologist with lithology and lithogeochemistry. Results are for Company use alone. • 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Standards and laboratory checks have been assessed. Most of the standards show results within acceptable limits of accuracy, with good precision in most cases. Internal laboratory checks indicate very high levels of precision.

Criteria	JORC Code explanation	Commentary
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.
	• *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 not applied any adjustment to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Collar surveys were completed using a hand-held GPS with an accuracy of +-3 metres.
	• *Specification of the grid system used.*	• MGA94 (Zone 51)
	• *Quality and adequacy of topographic control.*	• Topographic control is from a hand-held GPS, and is approximate, but fit for purpose. The Company owns a Digital Terrain Model (DTM) which can be used to supersede elevation data.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drill hole traverses were nominally 200m apart. Individual holes were nominally 40m-spaced.
	• *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.*	• There has been insufficient work conducted to allow the estimation of a mineral resource.
	• *Whether sample compositing has been applied.*	• In most cases reported assays are of 3m composite samples..
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.*	• There is insufficient information to make an assessment.
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 in a designated storage container.
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.

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 Golden Ridge drilling reported herein is within Mining Leases M26/220 and M26/285 and E26/0186 which is a granted Exploration Licence. • The tenements are located approximately 30km SE of Kalgoorlie, WA. • Pioneer Resources Limited is the registered holder of the tenements and holds a 100% unencumbered interest in all minerals within the tenements. • The tenements are on the Mount Monger Pastoral Lease. • The Marlinyu Ghoorlie Native Title Claimant Group has a registered Native Title Claim WC2017/007 that covers the Golden Ridge 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, Mining Leases M26/220 & M26/285 and Exploration Licence E26/0186 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 tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• There has been previous exploration drilling and sampling on the Golden Ridge project. Previous work by Western Mining Corporation (WMC) began in the 1960's Nickel boom and identified the project area as prospective for Ni-Sulphide systems, discovery of the Blair Ni-Sulphide Deposit lead to it's opening in 1990 and produced 32,900t of contained Ni treated in Kambalda before closure in 2008. Australian Mines acquired the Blair Ni Mine and surrounding tenure from WMC in 2005 prior to Pioneer. These Ni-sulphide targets were not systematically explored for Cobalt-Nickel laterite systems.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The work herein is for nickel sulphide mineralisation. At this time the model is unclear. Most Ni$ mines in the Kalgoorlie area are komatiite-hosted, however geochemical interpretations suggest that the rock that hosts the Leo's Dam mineralisation may be more mafic, such as a pyroxenite.
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.

Criteria	JORC Code explanation	Commentary
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.*	• Intersections noted are from 3m sample intervals unless stated. • Intersections are based on a 5000ppm (0. 5%) (lower) cut-off for Nickel, with supporting copper (nickel sulphide indicator) with a minimum width of 3m, a maximum of six metres internal dilution and no external dilution. • Intersections are based on a 850ppm (lower) cut-off for Cobalt, with supporting copper (nickel sulphide indicator) with a minimum width of 3m, a maximum of six metres internal dilution and no external dilution. • No metal equivalent values have been used.
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 current RC drilling and historic RAB and aircore drilling, suggests that the true widths are similar to the down hole widths.
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 maps, tables and 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 and other tables within 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.*	• Additional drilling will be undertaken but is not yet defined. 3D modelling of the geology and mineralisation will be carried out.