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Western Australia 6872

COBALT POTENTIAL CONFIRMED BY DRILLING AT GOLDEN RIDGE

Perth, Western Australia, 24 January 2018: Pioneer Resources Limited ("Pioneer" or the "Company" (ASX: PIO)) is pleased to provide a summary of results from drilling undertaken in December 2017 at its 100%-owned Golden Ridge Project.

GRRC34:GRRC37:	31m at 0.15% Co and 0.37% Ni from 43m 6m at 0.57% Co and 0.52% Ni from 22m
Leo's Dam	
• GRRC27:	22m at 0.18% Co and 0.53% Ni from 38m
• GRRC33:	19m at 0.22% Co and 0.23% Ni from 34m
Anomaly 13	
• GRRC30:	16m at 0.17% Co and 0.42% Ni from 42m
Anomaly 14	
• GRRC18:	8m at 0.17% Co and 0.17% Ni from 34m
• GRRC19:	17m at 0.11% Co and 0.17% Ni from 34m

• GRRC24: 11m at 0.21% Co and 0.53% Ni from 35m

Reverse Circulation Drilling Returns Strong Cobalt Mineralisation

The December 2017 drilling programme of 31 reverse circulation drill holes totalled 3,084 metres and focused on four cobalt targets: Rocket, Leo's Dam, Anomaly 13 and Anomaly 14 Prospects.

All prospects are located within granted mining leases and an exploration licence along the eastern flank of the Blair Dome, a geological structure within the Golden Ridge Project. 16 holes intersected significant cobalt mineralisation (see Table 1 below).

This drilling programme is a consequence of a detailed review of the Golden Ridge drilling database specifically looking for cobalt mineralisation (*refer to ASX Release dated 13 April 2017*). The database holds records for holes drilled between 1975 and 2008 by other explorers and 2008 to the present by Pioneer, predominantly for nickel sulphide mineralisation indicators. Many samples were assayed for a range of elements, including cobalt, in addition to nickel.

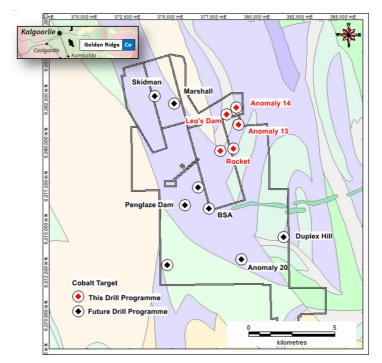
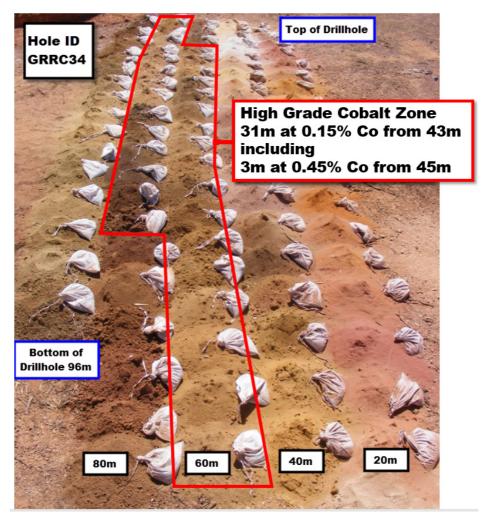


Figure 1: Golden Ridge Project Tenements and Prospect Map. The Project is located 26km southeast of Kalgoorlie, W.A.



Photograph 1: Drill samples from GRRC34 at the Rocket Prospect illustrating lateritic mineralisation development within weathered and deflated ultramafic rocks.

			Table 1	
	Signif	icant Cobal	t Result	ts from RC Drilling
Hole ID	Prospect	From	То	Intersection
		(m)	(m)	
GRRC34	Rocket	43	74	31m at 0.15% Co and 0.37% Ni from 43m
Including				29m at 0.16% Co and 0.33% Ni from 45m
GRRC37		22	28	6m at 0.57% Co and 0.52% Ni from 22m
Including				5m at 0.67% Co from 22m and 0.15% Ni
				(max 1m at 1.60% Co)
GRRC27	Leo's Dam	38	60	22m at 0.18% Co and 0.53% Ni
GRRC28		45	50	5m at 0.10% Co and 0.61% Ni
GRRC33		34	53	19m at 0.22% Co and 0.23% Ni
Including				16m at 0.25% Co and 0.30% Ni from 34m
GRRC30	Anomaly 13	42	58	16m at 0.17% Co and 0.42% Ni
Including				9m at 0.27% Co and 0.45% Ni from 42m
GRRC32	13	34	50	16m at 0.08% Co and 0.56% Ni
GRRC13	Anomaly 14	42	48	6m at 0.11% Co and 0.32% Ni
GRRC14		42	48	6m at 0.11% Co and 0.56% Ni
GRRC16		32	39	7m at 0.14% Co and 0.72% Ni
GRRC17		52	56	4m at 0.08% Co and 0.33% Ni
GRRC18		34	42	8m at 0.17% Co and 0.17% Ni
GRRC19		34	51	17m at 0.11% Co and 0.17% Ni
Including				11m at 0.15% Co and 0.34% Ni from 34m
GRRC21		34	49	15m at 0.08% Co and 0.43% Ni
GRRC22		30	38	8m at 0.08% Co and 0.08% Ni
GRRC24		35	46	11m at 0.21% Co and 0.53% Ni

Table 1: Significant Cobalt Results.Composites are of intersections of Co >0.05%, with highlighted intersections>0.08% Co.

At the conclusion of the 2017 drilling programme strong mineralisation is demonstrated and further drilling is warranted:

- The Rocket Prospect has returned the highest grade, up to 1.60% Co in GRRC37, and thickest intersection (GRRC34: 31m at 0.15% Co from 43m) of this programme. Drilling at the Rocket Prospect was designed to follow up an earlier diamond drill hole, BLD057: 12m at 0.27% Co from 106m, which demonstrated that mineralisation under extreme circumstances, can extend to depth.
- Leo's Dam is sparsely drilled, and is adjacent to the ultramafic basal contact. Widely spaced drill traverses, predominantly completed by Pioneer, have returned lateritic cobalt development over a strike length of 1.5 km, and GRRC27: 22m at 0.18% Co from 38m is one of the better results from the 2017 drilling programme.
- Anomaly 13 is less well defined by earlier drilling, but is over 600m long and open to extensions in both north and south directions. Results from the 2017 RC drilling indicate the potential for higher grades than the adjacent Anomaly 14.
- Anomaly 14 is the prospect best defined by shallow aircore and RAB drilling. The prospect is over 600m long with multiple mineralised trends apparent, which are open for extensions in both north and south directions.

Further Information about the Golden Ridge Project

The Golden Ridge Project covers an area of 115 km² of the Blair Dome and is located 30 kilometres south east of Kalgoorlie, WA. The Project is considered highly prospective for lateritic cobalt mineralisation hosted within a well-developed weathered-ultramafic rock mantle, as well as nickel sulphide mineralisation.

The Project is well serviced by existing infrastructure due to its proximity to the modern mining centre of Kalgoorlie. The Project also hosts the Company's Blair Nickel Mine, where mining ceased in 2008. Pioneer has updated the geological model, proposing the Blair Dome to explain geological observations.

OUTLOOK

Drilling has confirmed that the Project has well defined lateritic cobalt and nickel mineralisation at the four Prospects chosen for testing. Each Prospect is demonstrated to be strongly mineralised, and open for expansion.

Encouraged by the results, the Company is now determining the next steps to unlock the lateritic cobalt and nickel potential (and continue its nickel sulphide exploration programmes) with the aim to ensure appropriate focus, funding and expertise, both in the immediate and medium term, with the paramount objective being to enhance the value of the Project for the benefit of the Company's shareholders.

The next steps in the Projects exploration and evaluation will likely include:

- Further confirmation drilling to establish Exploration Targets for the quantity of mineralisation availably for the Project;
- Pattern infill Resource Definition drilling at the subsequent confirmed Prospects;
- Bulk sampling for bench-scale extractive metallurgy which will focus initially on an ore concentration technique.

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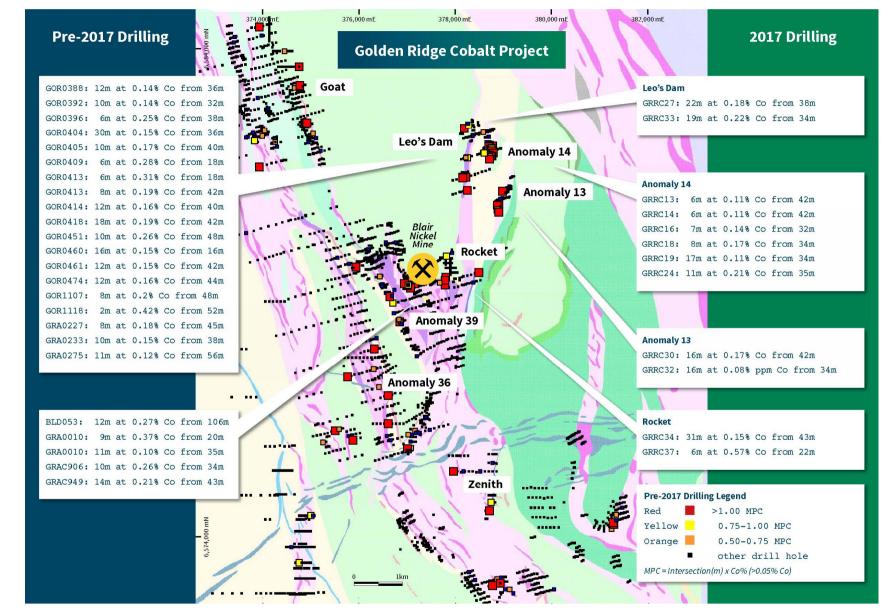


Figure 2: Golden Ridge Project Tenements and Prospects Map shows Prospects drill tested during November 2017 and a summary of drill results.

About Pioneer Resources Limited

Pioneer is an active exploration company focused on key global demand-driven commodities. The Company operates a portfolio of strategically located lithium, caesium, nickel, cobalt and gold projects in mining regions in Western Australia, plus a portfolio of high quality lithium assets in Canada.

Pioneer Dome Project, WA

Caesium occurs in the mineral pollucite, a rare mineral that forms in extremely differentiated LCT pegmatite systems. It is primarily used in the manufacture of Caesium Formate brine, a high value, high density fluid used in high temperature/high pressure oil and gas drilling.

Mavis Lake and Raleigh Projects, 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.

Golden Ridge Project, WA

Cobalt is a global demand-driven 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.

Blair Dome/Golden Ridge Project, WA

The Company also owns the closed Blair Nickel Sulphide Mine located between Kalgoorlie and Kambalda, WA, where near-mine target generation is continuing.

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.

Competent Person

The information in this report that relates to Exploration Results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a full time employee of Pioneer Resources Limited and a member of The Australasian Institute of Mining and Metallurgy (member 105893) and the Australian Institute of Geoscientists (member 6034). Mr Crook 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'.

Mr Crook consents to the inclusion of the matters presented in the announcement in the form and context in which they appear.

Appendix 1. Drill Hole Information and Results Summary, Golden Ridge

Prospect	Hole ID	Туре	Depth	Grid	Easting	Northing	RL	Dip	Azimuth	Date Completed
Anomaly 14	GRRC008	RC	132	MGA94_51	378675	6581750	363	-60	90	20/11/2017
Anomaly 14	GRRC009	RC	102	MGA94_51	378650	6581780	363	-90	360	20/11/2017
Anomaly 14	GRRC010	RC	126	MGA94_51	378690	6581780	363	-90	360	20/11/2017
Anomaly 14	GRRC011	RC	108	MGA94_51	378730	6581780	363	-90	360	21/11/2017
Anomaly 14	GRRC012	RC	72	MGA94_51	378680	6581860	363	-90	360	21/11/2017
Anomaly 14	GRRC013	RC	96	MGA94_51	378720	6581860	363	-90	360	21/11/2017
Anomaly 14	GRRC014	RC	96	MGA94_51	378760	6581860	363	-90	360	21/11/2017
Anomaly 14	GRRC015	RC	96	MGA94_51	378570	6581880	363	-60	90	21/11/2017
Anomaly 14	GRRC016	RC	84	MGA94_51	378680	6581940	363	-90	360	22/11/2017
Anomaly 14	GRRC017	RC	90	MGA94_51	378720	6581940	363	-90	360	22/11/2017
Anomaly 14	GRRC018	RC	126	MGA94_51	378760	6581940	363	-90	360	22/11/2017
Anomaly 14	GRRC019	RC	108	MGA94_51	378725	6581920	360	-60	90	22/11/2017
Anomaly 14	GRRC020	RC	84	MGA94_51	378670	6582000	359	-90	360	23/11/2017
Anomaly 14	GRRC021	RC	78	MGA94_51	378710	6582000	359	-90	360	23/11/2017
Anomaly 14	GRRC022	RC	84	MGA94_51	378755	6582040	359	-90	360	23/11/2017
Anomaly 14	GRRC023	RC	66	MGA94_51	378583	6582280	359	-90	360	23/11/2017
Anomaly 14	GRRC024	RC	78	MGA94_51	378170	6582400	351	-90	360	23/11/2017
Anomaly 14	GRRC025	RC	78	MGA94_51	378800	6581860	360	-90	360	23/11/2017
Leo Dam	GRRC026	RC	66	MGA94_51	378220	6581800	360	-90	360	23/11/2017
Leo Dam	GRRC027	RC	102	MGA94_51	378185	6581370	361	-90	360	24/11/2017
Leo Dam	GRRC028	RC	108	MGA94_51	378225	6581370	361	-90	360	24/11/2017
Anomaly 13	GRRC029	RC	66	MGA94_51	378940	6581120	369	-90	360	24/11/2017
Anomaly 13	GRRC030	RC	90	MGA94_51	378865	6580840	370	-60	90	24/11/2017
Anomaly 13	GRRC031	RC	114	MGA94_51	378830	6580840	370	-60	90	24/11/2017
Anomaly 13	GRRC032	RC	132	MGA94_51	378904	6580680	369	-90	360	24/11/2017
Leo Dam	GRRC033	RC	90	MGA94_51	378275	6581120	356	-90	360	25/11/2017
Rocket	GRRC034	RC	96	MGA94_51	377800	6579240	375	-65	270	25/11/2017
Rocket	GRRC035	RC	78	MGA94_51	378825	6579240	374	-90	360	25/11/2017
Rocket	GRRC036	RC	102	MGA94_51	377835	6579320	368	-80	310	25/11/2017
Rocket	GRRC037	RC	90	MGA94_51	378475	6579400	371	-60	90	25/11/2017
Leo Dam	GRRC038	RC	246	MGA94_51	378100	6581385	361	-60	90	26/11/2017

Table 2: RC Drillhole Information

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

Table 3: Selected Assay Results.

Hole ID	From	То	Со	Ni	Mn	Cu	Zn	Al	Cr	Fe	Mg	S
Hole ID	(m)	(m)	(pct)	(pct)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	pct)	(ppm)	s (pct)
GRRC10	73	74	0.04	0.60	2042	405	278	35174	4006	15.01	109899	0.05
GRRC10 GRRC10	74	75	0.04	0.00	1408	1100	192	29015	2944	8.74	145954	0.05
GRRC10	75	76	0.03	0.41	1977	963	213	27620	3196	9.87	139222	0.05
GRRC10	76	77	0.04	0.42	2768	783	185	30500	2843	8.32	139450	0.05
GRRC10	70	78	0.03	0.36	2646	694	141	35325	3387	8.75	131810	0.05
GRRC10	78	79	0.08	0.45	4296	529	173	33252	4052	19.78	98623	0.07
GRRC10	79	80	0.04	0.43	3657	565	207	27825	3432	30.56	62877	0.06
GRRC10	80	81	0.10	0.55	13638	978	210	37298	3313	24.75	70700	0.07
GRRC10	81	82	0.10	0.60	10581	1099	230	37510	3499	30.46	55108	0.07
GRRC10	82	83	0.04	0.62	4318	589	189	28028	3304	34.36	50400	0.06
GRRC10	83	84	0.07	0.63	8423	648	212	24959	2760	31.95	60254	0.06
GRRC10	84	85	0.05	0.52	4615	726	218	32599	3116	23.05	83653	0.06
GRRC10	85	86	0.12	0.72	18345	794	245	28864	2502	26.72	69605	0.07
GRRC10	86	87	0.05	0.50	5321	607	181	30783	3037	20.27	96423	0.06
GRRC10	87	88	0.03	0.40	2460	438	152	30188	3349	13.91	118577	0.06
GRRC10	88	89	0.04	0.42	2375	460	134	29459	2418	14.29	121861	0.06
GRRC10	89	90	0.03	0.37	1624	361	135	29942	2675	11.81	127683	0.06
GRRC10	90	91	0.04	0.44	3062	373	174	30474	2497	14.10	117275	0.06
GRRC10	91	92	0.05	0.70	2031	595	290	28178	3096	15.55	112880	0.06
GRRC10	92	93	0.05	1.18	395	1034	626	31878	5201	15.99	110231	0.05
GRRC10	93	94	0.05	1.13	823	1100	430	29055	3446	15.75	86228	0.06
GRRC10	94	95	0.04	0.92	1211	1089	368	29243	3389	17.12	62789	0.06
GRRC10	95	96	0.07	0.70	5504	694	344	29090	3219	18.83	65791	0.07
GRRC10	96	97	0.04	0.50	2906	417	241	32515	3493	14.57	95191	0.08
GRRC10	97	98	0.05	0.61	7942	548	186	26199	2755	24.09	78838	0.08
GRRC10	98	99	0.05	0.59	7363	534	183	26990	3043	23.19	81540	0.08
GRRC10	99	100	0.03	0.29	1488	289	107	38818	3244	9.20	124177	0.07
GRRC10	100	101	0.03	0.40	2424	358	148	29114	2874	21.75	90030	0.06
GRRC10	101	102	0.07	0.47	6911	730	185	30594	3119	15.99	108562	0.07
GRRC10	102	103	0.02	0.57	786	999	404	34934	4511	13.61	106123	0.07
GRRC10	103	104	0.04	0.76	3839	855	441	29628	3468	14.76	107888	0.06
GRRC10	104	105	0.09	0.89	7984	932	366	28056	2751	17.40	96533	0.06
GRRC10	105	106	0.06	0.73	4793	769	377	26138	2675	14.75	81978	0.06
GRRC10	106	107	0.07	0.81	5566	844	391	25966	2298	13.97	89430	0.05
GRRC10	107	108	0.03	0.73	1557	600	359	30438	2274	11.75	96810	0.07
GRRC10	108	109	0.07	0.91	14489	799	241	22203	1847	11.57	40427	0.07
GRRC10	109	110	0.05	0.74	17235	939	198	22745	2002	16.81	32562	0.07
GRRC10	110	111	0.04	0.97	10963	1174	184	30168	3142	12.67	82242	0.06
GRRC10	111	112	0.02	0.69	864	597	101	27258	2881	9.60	141841	0.04
GRRC10	112	113	0.02	0.53	489	512	85	22572	2451	7.24	150306	0.04
GRRC13	39	42	0.02	0.03	883	41	37	79590	897 1800	4.89	1761	0.03
GRRC13	42 43	43 44	0.06	0.11	13186	191 546	96 441	38098	1809	6.21	707	0.03
GRRC13 GRRC13	43 44	44	0.34	0.66	68759	540	441	36813	3188	36.11	1635	0.06
GRRC13 GRRC13	44	45	0.00	0.00	16278	318	326	52114	5510	34.00	3343	0.10
GRRC13 GRRC13	45 46	46	0.10	0.44	16278	199	326	52114	5346	34.00	3343 15251	0.10
GRRC13 GRRC13	40	47	0.09	0.40	15198	231	312	63644	5346	31.75	15251	0.11
GRRC13 GRRC13	47	48	0.09	0.00	10100	2.51	550	03044	5574	51.70	13321	5.15
GRRC13 GRRC13	48	49 50	0.00	0.00								
GRRC13 GRRC13	49 50	51	0.00	0.38	6774	73	340	38356	4042	27.13	56768	0.11
GRRC13	51	52	0.04	0.38	7648	51	291	38253	2974	18.57	90765	0.09
GRRC13	52	53	0.03	0.47	1841	65	410	36685	7277	12.94	114244	0.05
GRRC13	53	54	0.02	0.05	4977	46	410	33489	4018	16.04	113437	0.06
GRRC13	54	55	0.03	0.91	3312	77	404	32001	3895	12.18	130344	0.00
GRRC13	55	56	0.03	0.90	2168	104	398	31837	3401	10.51	133902	0.05
GRRC13	56	57	0.02	0.90	8517	99	395	38345	2435	13.23	137224	0.05
GRRC13	57	58	0.03	0.87	7948	119	311	36506	3152	12.80	130853	0.05
GRRC14	41	42	0.01	0.12	309	264	106	91483	9179	17.29	1392	0.03
0111014	71	74	0.01	0.12	505	204	100	51-105	5115	17.25	1332	0.12

Hole D From To Co Ni Mn Cu Zn Al Cr Fe Mg GRRC14 42 43 0.11 0.19 3060 277 147 83265 9283 17.42 1383 GRRC14 44 45 0.12 0.20 2884 199 138 76246 8839 17.46 13815 GRRC14 44 45 0.02 2884 199 138 76246 8839 17.44 1883 GRRC14 44 45 0.09 0.15 3815 16.1 177 47573 1971 19.49 1488 826 GRRC16 33 34 0.12 0.37 14809 128 185 32867 1426 10.70 109574 GRRC16 33 34 0.12 0.12 10.4 318 36279 3763 13.15 119033 GRRC16 38 39 0.11 0	S
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GRRC16 32 33 0.08 0.35 \$846 113 139 43387 1612 12.24 92822 GRRC16 33 34 0.12 0.37 14809 128 185 32867 1426 10.70 109574 GRRC16 35 36 0.18 0.54 12516 168 309 33310 2533 11.55 119003 GRRC16 37 38 0.13 0.38 6867 100 181 40289 2338 16.47 91295.99 GRRC16 38 39 0.01 0.36 6460 87 158 46725 2479 17.76 74791 GRRC16 40 41 0.03 0.57 3092 137 254 45061 6678 15.58 75473 GRRC18 32 33 0.02 0.24 4210 2276 114 67261 2716 31.06 2845 GRRC18 33 <td< td=""><td>0.06</td></td<>	0.06
GRRC16 33 34 0.12 0.37 14809 128 185 32867 1426 10.70 109574 GRRC16 34 35 0.19 0.48 24362 147 262 30497 1448 10.69 119020 GRRC16 35 36 0.18 0.52 9012 104 318 36279 3763 13.17 114799 GRRC16 37 38 0.13 0.36 6460 87 158 46725 2479 17.76 74791 GRRC16 39 40 0.04 0.41 3158 62 236 44422 5658 15.73 91917 GRRC18 33 34 0.02 0.24 8210 276 114 67261 2716 31.06 2845 GRRC18 33 34 0.02 0.24 8210 276 114 67261 2716 31.06 1052 GRRC18 34 35 0.1	0.06
GRRC16 34 35 0.19 0.48 24362 147 262 30497 1484 10.69 119202 GRRC16 35 36 0.18 0.54 12516 168 309 33310 2633 11.55 119033 GRRC16 37 38 0.13 0.38 6867 100 181 40289 2338 16.47 91295.99 GRRC16 38 39 0.11 0.36 6460 87 158 46725 2479 17.76 74791 GRRC16 40 41 0.03 0.57 3092 137 254 45061 6678 15.58 75473 GRRC18 33 34 0.02 0.24 8210 276 114 67261 2716 31.66 8153 GRRC18 33 34 0.02 0.24 8217 176 83 31642 1803 7.66 758 GRRC18 34 35 </td <td>0.10</td>	0.10
GRRC16 35 36 0.18 0.54 12516 168 309 33310 2633 11.55 119033 GRRC16 36 37 0.16 0.52 9012 104 318 36279 3763 13.17 114799 GRRC16 38 39 0.11 0.36 6640 87 158 46725 2479 17.76 74791 GRRC16 39 40 0.44 0.41 3188 62 236 44422 5658 15.58 75473 GRRC18 32 33 0.02 0.29 4707 244 123 77084 4347 34.93 4545 GRRC18 33 34 0.02 0.24 8210 276 114 67261 3164 180 7.66 758 GRRC18 36 37 0.21 0.28 12827 203 128 2879 417 8.32 1531 GRRC18 36	0.07
GRRC16 36 37 0.16 0.52 9012 104 318 36279 3763 13.17 114799 GRRC16 37 38 0.13 0.36 6467 100 181 40289 2338 16.47 91295.99 GRRC16 39 40 0.04 0.41 3158 62 236 44422 5658 15.73 91917 GRRC16 40 41 0.03 0.57 3092 137 254 45061 6678 15.58 75473 GRRC18 32 33 0.02 0.24 8210 276 114 67261 2716 31.06 2845 GRRC18 34 35 0.11 0.23 26171 176 83 31671 888 16.60 1052 GRRC18 34 35 0.11 0.23 26171 176 83 31671 888 16.60 1052 GRRC18 34 0.12 <td>0.06</td>	0.06
GRRC16 37 38 0.13 0.38 6867 100 181 40289 2338 16.47 91295.99 GRRC16 38 39 0.11 0.36 6460 87 158 46725 2479 17.76 74791 GRRC16 40 41 0.03 0.57 3092 137 254 45061 6678 15.58 75473 GRRC18 32 33 0.02 0.29 4707 244 123 77084 4347 34.93 4545 GRRC18 33 40 0.02 0.24 8210 276 114 67261 2716 31.06 12845 GRRC18 35 36 0.15 0.21 68527 196 83 31642 1803 7.66 788 GRRC18 36 37 0.21 0.28 1282 22879 417 3.32 1371 GRRC18 38 39 0.28 0.83	0.06
GRRC16 38 39 0.11 0.36 6460 87 158 46725 2479 17.76 74791 GRRC16 39 40 0.04 0.41 3158 62 236 44422 5558 15.73 91917 GRRC18 32 33 0.02 0.29 4707 244 123 77084 4347 34.93 4545 GRRC18 33 34 0.02 0.24 8210 276 114 67261 2716 81.06 1052 GRRC18 34 35 0.15 0.21 68227 196 83 31671 888 16.60 1052 GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 39 0.0 0.15 0.61 53813 239 357 38190 7633 42.81 3134 GRRC18 40 0.17	0.07
GRRC16 39 40 0.04 0.41 3158 62 236 44422 5658 15.73 91917 GRRC16 40 41 0.03 0.57 3092 137 254 45061 6678 15.58 75473 GRRC18 32 33 0.02 0.24 8210 276 114 67261 2716 31.06 2845 GRRC18 35 36 0.15 0.21 6827 196 83 31642 1803 7.66 758 GRRC18 36 37 0.21 0.28 1287 2203 303 39772 3283 27.41 3371 GRRC18 36 37 0.21 0.28 28278 203 39773 38190 7633 42.81 3314 GRRC18 36 39 0.28 0.88 8446 292 443 30537 38190 7633 42.81 3134 GRC18 42 40	0.10
GRRC16 40 41 0.03 0.57 3092 137 254 45061 6678 15.58 75473 GRRC18 32 33 0.02 0.29 4707 244 123 77084 4347 34.93 4545 GRRC18 34 35 0.11 0.23 26171 176 83 31671 888 16.60 1052 GRRC18 36 316 0.15 0.21 68527 196 83 31642 1803 7.66 758 GRRC18 36 37 38 0.18 0.66 81521 250 303 39772 3283 7.741 3371 GRRC18 40 0.17 0.61 53813 239 357 3810 763 42.81 314 GRRC18 40 0.17 0.75 6276 205 397 30710 4165 45.27 2284 GRRC18 41 42 0.11	0.11
GRRC18 32 33 0.02 0.29 4707 244 123 77084 4347 34.93 4545 GRRC18 33 34 0.02 0.24 8210 276 114 67261 2716 31.06 2845 GRRC18 34 35 0.11 0.23 26171 176 83 31671 888 16.60 1052 GRRC18 35 36 0.12 0.28 12878 203 128 22879 417 8.32 1531 GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 39 40 0.15 0.61 53813 239 357 38190 7633 42.81 3134 GRRC18 41 42 0.11 0.69 16213 203 314 5217 9672 42.26 4001 GRRC18 42 0.33	0.09
GRRC18 33 34 0.02 0.24 8210 276 114 67261 2716 31.06 2845 GRRC18 34 35 0.11 0.23 26171 176 83 31671 888 16.60 1052 GRRC18 35 36 0.15 0.21 68527 196 83 31642 1803 7.66 758 GRRC18 37 0.21 0.28 12277 203 128 22879 417 8.32 1531 GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 39 40 0.15 0.61 53813 239 357 3810 763 42.81 314 GRRC18 40 41 0.71 0.75 62766 205 397 30710 4158 42.81 1132 GRRC19 33 34 0.00	0.09
GRRC18 34 35 0.11 0.23 26171 176 83 31671 888 16.60 1052 GRRC18 35 36 0.15 0.21 68527 196 83 31671 888 16.60 1052 GRRC18 36 37 0.21 0.28 128278 203 128 22879 417 8.32 1531 GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 39 40 0.15 0.61 53813 239 357 38190 7633 42.81 3134 GRRC18 40 41 0.17 0.75 62766 205 397 30710 4165 45.27 2284 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 34 0.5	0.29
GRRC18 35 36 0.15 0.21 68527 196 83 31642 1803 7.66 758 GRRC18 36 37 0.21 0.28 128278 203 128 22879 417 8.32 1531 GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 39 0.20 0.83 84466 292 443 30537 3580 41.21 2316 GRRC18 40 0.11 0.69 16213 203 314 52176 9672 42.26 4001 GRRC18 42 43 0.04 0.50 5627 103 197 19795 5538 30.50 1251 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 33 34 0.03 0.07	0.51
GRRC18 36 37 0.21 0.28 128278 203 128 22879 417 8.32 1531 GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 38 39 0.28 0.83 84446 292 443 30537 3580 41.21 2316 GRRC18 40 0.15 0.61 58313 239 357 38190 7633 42.81 3134 GRRC18 40 41 0.17 0.75 62766 205 397 30710 4165 45.27 2284 GRRC18 42 43 0.04 0.50 5627 103 197 19795 2538 30.50 1251 GRRC19 33 34 0.03 0.07 9036 102 87 86953 1822 8.79 5284 GRRC19 34 35 0.048	0.11
GRRC18 37 38 0.18 0.66 81521 250 303 39772 3283 27.41 3371 GRRC18 38 39 0.28 0.83 84446 292 443 30537 3580 41.21 2316 GRRC18 39 40 0.15 0.61 53813 239 357 38190 7633 42.81 3134 GRRC18 40 41 0.17 0.75 62766 205 397 30710 4165 45.27 2284 GRRC18 41 42 0.11 0.69 16213 203 314 52176 9672 42.26 4001 GRRC19 30 0.30 0.00 902 163 55 79 52806 1335 4.48 1132 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 35 36	0.08
GRRC18 38 39 0.28 0.83 84446 292 443 30537 3580 41.21 2316 GRRC18 39 40 0.15 0.61 53813 239 357 38190 7633 42.81 3134 GRRC18 41 42 0.11 0.69 16213 203 314 52176 9672 42.26 4001 GRRC18 42 43 0.04 0.50 5627 103 197 19795 2538 30.50 1251 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 36 37 0.17 0.43 28345 374 216 42645 3133 18.37 75987 GRRC19 37 38	0.03
GRRC18 39 40 0.15 0.61 53813 239 357 38190 7633 42.81 3134 GRRC18 40 41 0.17 0.75 62766 205 397 30710 4165 45.27 2284 GRRC18 41 42 0.11 0.69 16213 203 314 52176 9672 42.26 4001 GRRC18 42 43 0.04 0.50 5627 103 197 19795 2538 30.50 1251 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 35 36 0.48 0.55 33860 478 241 38758 3528 12.37 91218.99 GRRC19 36 0.10 </td <td>0.17</td>	0.17
GRRC18 40 41 0.17 0.75 62766 205 397 30710 4165 45.27 2284 GRRC18 41 42 0.11 0.69 16213 203 314 52176 9672 42.26 4001 GRRC18 42 43 0.04 0.50 5627 103 197 19795 2538 30.50 1251 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 33 34 0.03 0.07 9036 102 87 86953 1822 8.79 5284 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 36 37 0.17 0.43 28345 374 216 42645 3133 18.37 75987 GRRC19 37 38	0.10
GRRC18 41 42 0.11 0.69 16213 203 314 52176 9672 42.26 4001 GRRC18 42 43 0.04 0.50 5627 103 197 19795 2538 30.50 1251 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 33 34 0.03 0.07 9036 102 87 86953 1822 8.79 5284 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 35 36 0.48 0.55 33860 478 241 38758 3528 12.37 91218.99 GRRC19 36 37 0.17 0.43 28345 374 216 42645 3133 18.37 75987 GRRC19 37 38	0.14
GRRC18 42 43 0.04 0.50 5627 103 197 19795 2538 30.50 1251 GRRC19 30 33 0.00 0.02 163 55 79 52806 1335 4.48 1132 GRRC19 33 34 0.03 0.07 9036 102 87 86953 1822 8.79 5284 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 35 36 0.48 0.55 33860 478 241 38758 3528 12.37 91218.99 GRRC19 36 37 0.17 0.43 28345 374 216 426455 3133 18.37 75987 GRRC19 38 39 0.22 0.38 29170 536 168 42267 4421 15.51 40812 GRRC19 40 0.26 </td <td>0.15</td>	0.15
GRRC19 33 34 0.03 0.07 9036 102 87 86953 1822 8.79 5284 GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 35 36 0.48 0.55 33860 478 241 38758 3528 12.37 91218.99 GRRC19 36 37 0.17 0.43 28345 374 216 42645 3133 18.37 75987 GRRC19 38 39 0.22 0.38 29170 536 168 42267 4421 15.51 40812 GRRC19 39 40 0.26 0.39 25027 515 296 66771 2749 27.84 3000 GRRC19 40 41 0.04 0.39 11516 234 267 37438 3762 33.35 3465 GRRC19 41 4	0.04
GRRC19 34 35 0.08 0.32 10703 305 336 51425 3920 26.00 38232 GRRC19 35 36 0.48 0.55 33860 478 241 38758 3528 12.37 91218.99 GRRC19 36 37 0.17 0.43 28345 374 216 42645 3133 18.37 75987 GRRC19 37 38 0.10 0.48 29280 750 294 27453 2699 35.04 35253 GRRC19 38 39 0.22 0.38 29170 536 168 42267 4421 15.51 40812 GRRC19 40 41 0.04 0.39 11516 234 267 37438 3762 33.35 3465 GRRC19 41 42 0.01 0.18 1194 116 131 23563 2096 27.27 1311 GRRC19 43 <t< td=""><td>0.07</td></t<>	0.07
GRRC1935360.480.553386047824138758352812.3791218.99GRRC1936370.170.432834537421642645313318.3775987GRRC1937380.100.482928075029427453269935.0435253GRRC1938390.220.382917053616842267442115.5140812GRRC1939400.260.392502751529666771274927.843000GRRC1940410.040.391151623426737438376233.353465GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1944450.100.35501720028734181520320.0441791GRRC1944450.000.6420959838829274361414.72114962GRRC1133340.020.11599121818769633175126.761043GRRC2133340.020.11599121818769633175126.761043GRRC2135360.100.26	0.08
GRRC1936370.170.432834537421642645313318.3775987GRRC1937380.100.482928075029427453269935.0435253GRRC1938390.220.382917053616842267442115.5140812GRRC1939400.260.392502751529666771274927.843000GRRC1940410.040.391151623426737438376233.353465GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2136370.140.35	0.12
GRRC1937380.100.482928075029427453269935.0435253GRRC1938390.220.382917053616842267442115.5140812GRRC1939400.260.392502751529666771274927.843000GRRC1940410.040.391151623426737438376233.353465GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1943440.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352	0.08
GRRC1938390.220.382917053616842267442115.5140812GRRC1939400.260.392502751529666771274927.843000GRRC1940410.040.391151623426737438376233.353465GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.47285	0.08
GRRC1939400.260.392502751529666771274927.843000GRRC1940410.040.391151623426737438376233.353465GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2137380.110.352339640925851922258442.67941GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592	0.09
GRRC1940410.040.391151623426737438376233.353465GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.5926	0.09
GRRC1941420.010.18119411613123563209627.271311GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2137380.110.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.10
GRRC1942430.050.15298713116025581358615.661553GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.10
GRRC1943440.100.18444813914725950374610.469035GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.07
GRRC1944450.100.35501720028734181520320.0441791GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.05
GRRC1945460.050.6420959838829274361414.72114962GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.04
GRRC2133340.020.11599121818769633175126.761043GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.06
GRRC2134350.070.241550246618572069308031.771018GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.04
GRRC2135360.100.261319165018169057323136.481029GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.21
GRRC2136370.140.351928838527340744198845.681077GRRC2137380.110.352339640925851922258442.67941GRRC2138390.150.4728592109517071275601337.241317GRRC2139400.130.4231814125116966809604837.092351GRRC2140410.160.592625075128338928453344.396206	0.21 0.19
GRRC21 37 38 0.11 0.35 23396 409 258 51922 2584 42.67 941 GRRC21 38 39 0.15 0.47 28592 1095 170 71275 6013 37.24 1317 GRRC21 39 40 0.13 0.42 31814 1251 169 66809 6048 37.09 2351 GRRC21 40 41 0.16 0.59 26250 751 283 38928 4533 44.39 6206	0.19
GRRC21 38 39 0.15 0.47 28592 1095 170 71275 6013 37.24 1317 GRRC21 39 40 0.13 0.42 31814 1251 169 66809 6048 37.09 2351 GRRC21 40 41 0.16 0.59 26250 751 283 38928 4533 44.39 6206	0.21
GRRC21 39 40 0.13 0.42 31814 1251 169 66809 6048 37.09 2351 GRRC21 40 41 0.16 0.59 26250 751 283 38928 4533 44.39 6206	0.10
GRRC21 40 41 0.16 0.59 26250 751 283 38928 4533 44.39 6206	0.17
	0.07
GRRC21 41 42 0.07 0.30 9203 532 231 42824 3932 26.47 2507	0.07
GRRC24 34 35 0.02 0.07 1321 55 50 36087 4453 13.84 1534	0.07
GRRC24 35 36 0.22 0.14 12364 76 62 53586 3101 11.05 1796	0.05
GRRC24 36 37 0.20 0.22 19404 81 106 53327 4308 13.99 2805	0.07
GRRC24 37 38 0.08 0.15 6135 69 65 38703 3784 19.67 1767	0.05
GRRC24 38 39 0.30 0.26 17948 76 83 39817 2934 9.57 1209	0.03
GRRC24 39 40 0.25 0.25 17237 80 125 34312 3089 8.19 1355	0.03
GRRC24 40 41 0.29 0.28 38587 66 129 37460 2791 15.21 1087	0.04
GRRC24 41 42 0.36 0.30 58779 52 123 32586 3060 9.48 941	0.04
GRRC24 42 43 0.25 0.34 34124 139 105 46658 4650 15.53 1820	0.06
GRRC24 43 44 0.21 0.37 34044 104 124 65835 2437 27.42 4778	0.08
GRRC24 44 45 0.09 0.30 11234 86 116 67847 1667 27.69 7840	0.09

Hole ID	From	То	Со	Ni	Mn	Cu	Zn	Al	Cr	Fe	Mg	S
noie ib	(m)	(m)	(pct)	(pct)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(pct)	(ppm)	(pct)
GRRC24	45	46	0.10	0.41	10931	105	167	61706	5214	31.93	12005	0.09
GRRC24	46	47	0.02	0.43	3222	83	133	68734	6325	30.74	22676	0.11
GRRC27	36	37	0.02	0.06	6407	166	58	91656	661	9.68	826	0.04
GRRC27	37	38	0.03	0.08	4551	299	67	89866	2094	10.11	833	0.04
GRRC27	38	39	0.26	0.20	18551	697	100	82348	2750	9.11	577	0.03
GRRC27	39	40	0.25	0.25	11715	859	152	108523	6292	14.87	819	0.03
GRRC27	40	41	0.15	0.31	5559	755	271	123412	9668	17.31	3945	0.02
GRRC27	41	42	0.18	0.21	9395	805	117	131774	7987	15.05	519	0.03
GRRC27	42	43	0.24	0.31	13657	602	185	121249	3887	16.65	2474	0.02
GRRC27	43	44	0.38	0.67	41370	900	361	112274	6992	14.92	8363	0.03
GRRC27	44	45	0.31	0.40	74679	734	234	52824	2968	12.20	61219	0.04
GRRC27	45	46	0.41	0.45	93029	959	284	60026	2962	14.17	47192	0.03
GRRC27	46	47	0.41	0.45	119994	851	238	45807	1762	13.49	55603	0.01
GRRC27	47	48	0.31	0.43	61645	582	185	36727	653	11.42	93548	0.02
GRRC27	48	49	0.05	0.34	9009	268	102	30683	1006	13.94	112333	0.03
GRRC27	49	50	0.08	0.39	6504	237	124	29816	699	11.97	119183	0.04
GRRC27	50	51	0.09	0.45	6071	320	189	29649	1052	11.96	120787	0.05
GRRC27	51	52	0.11	0.55	8046	291	271	26867	1950	9.86	133480	0.05
GRRC27	52	53	0.20	0.55	15382	292	313	23156	2524	10.54	128802	0.05
GRRC27	53	54	0.07	0.48	5311	165	206	20293	2700	12.81	137125	0.04
GRRC27	54	55	0.10	0.51	10752	140	210	19073	2478	10.15	142689	0.03
GRRC27 GRRC27	55 56	56 57	0.03	0.35	1422 1611	65 73	162 155	15194 14725	2707 2179	6.74 6.49	160221	0.03
	50		0.03	0.33							161916	
GRRC27	57	58 59			23426	188 99	273	17524	1953	7.60	146903	0.02
GRRC27 GRRC27	58 59	59 60	0.09	0.30 0.44	18470 15834	113	215 283	8164 17173	634 2434	6.04 7.28	157470 156047	0.03 0.02
GRRC27 GRRC27	60	61	0.03	0.44	2081	66	283	16933	2456	8.20	157895	0.02
GRRC28	42	43	0.03	0.40	608	488	171	84558	4621	29.16	7668	1.61
GRRC28	43	44	0.02	0.58	1129	660	201	56074	5625	31.11	29928	0.12
GRRC28	44	45	0.02	0.55	1018	599	174	55356	6203	29.43	35927	0.12
GRRC28	45	46	0.06	0.56	4465	683	175	54191	6358	28.07	36879	0.08
GRRC28	46	47	0.04	0.49	5082	824	173	70158	6618	26.40	29489	0.08
GRRC28	47	48	0.09	0.56	11408	698	173	62408	5044	25.61	35887	0.08
GRRC28	48	49	0.23	0.78	38671	938	302	58872	5752	26.30	40673	0.08
GRRC28	49	50	0.07	0.72	11229	822	219	59384	5029	28.55	24165	0.08
GRRC28	50	51	0.04	0.71	3911	916	208	64232	4825	31.89	15096	0.10
GRRC28	51	52	0.03	0.73	1650	915	215	72382	5247	30.81	11258	0.08
GRRC28	52	53	0.02	0.70	1842	736	212	55020	3744	31.11	22465	0.20
GRRC28	53	54	0.03	0.70	2437	757	221	56173	4090	31.75	23739	0.16
GRRC28	54	55	0.03	0.61	3997	744	213	57692	4231	30.81	21212	0.14
GRRC28	55	56	0.02	0.67	1736	783	229	53739	3811	33.56	20056	0.12
GRRC28	56	57	0.02	0.71	1582	769	241	50993	3650	33.84	19055	0.09
GRRC28	57	58	0.02	0.69	964	678	234	42850	3423	30.09	30559	0.08
GRRC28	58	59	0.02	0.65	983	645	247	36532	2812	28.51	48973	0.08
GRRC28	59	60	0.02	0.54	839	519	326	52525	2273	20.32	69269	0.07
GRRC28	60	61	0.02	0.65	1002	554	346	51583	2730	22.20	65151	0.13
GRRC28	61	62	0.02	0.60	679	455	342	37590	2908	18.99	91553	0.07
GRRC28	62	63	0.02	0.61	563	326	308	25557	2754	15.10	115150	0.06
GRRC28	63	64	0.02	0.65	565	238	293	21487	2545	12.79	121582	0.06
GRRC30	40	41	0.04	0.29	10173	331	217	53202	1959	27.69	8291	0.24
GRRC30	41	42	0.03	0.25	6447	248	198	30924	1256	18.65	12417	0.15
GRRC30	42	43	0.20	0.34	77241	617	377	17245	736	7.90	3568	0.07
GRRC30	43 44	44	0.11	0.26	41783	156	201	18398	1151 2812	11.98	23530	0.09
GRRC30 GRRC30	44	45 46	0.16	0.38	31876 44842	141 132	272 290	33435 24739	2813 2504	14.23 14.14	87343 82875.99	0.11 0.11
GRRC30 GRRC30	45 46	46	0.26	0.43	26928	59	290	13231	1510	14.14	130452	0.11
GRRC30 GRRC30	40	47	0.30	0.51	18759	40	371	13231	4713	11.93	130452	0.10
GRRC30 GRRC30	47	48 49	0.30	0.52	30135	38	296	17133	3108	14.98	119638	0.10
GRRC30 GRRC30	48 49	49 50	0.40	0.59	38582	38	296	8922	1148	12.30	119638	0.12
GRRC30	50	51	0.40	0.38	14170	60	243	12753	2859	12.18	112048	0.12
000	50	51	0.10	J.77	171/0		201	12/33	-055	12.10	112070	0.12

(m) (pct) (pct) (pcm) (ppm) (ppm) (ppm) (ppm) (ppm) GRRC30 51 52 53 0.08 0.15 4729 113 141 123733 2052 15.76 4775 GRRC32 35 36 0.05 0.29 4722 14 183 20758 10176 9.20 122569 GRRC32 37 38 0.08 0.35 8266 17 200 18729 8978 10.32 11615 134653 GRRC32 38 30 0.06 0.31 12797 9 203 18269 1106 1055 134525 GRRC32 44 40.06 0.31 12767 15 221 1737 1138 1126 10.55 134525 GRRC32 44 40.09 0.34 6155 10 221 18234 10.15 137112 GRRC32 444 40.09 0.34 5503	Hole ID	From	То	Со	Ni	Mn	Cu	Zn	Al	Cr	Fe	Mg	S
GRRC30 51 52 0.04 0.33 4083 146 312 29018 3742 1282 53163 GRRC30 52 53 0.08 0.15 4729 113 141 123733 2022 15.76 4775 GRRC32 35 36 0.05 0.29 4732 14 183 20758 10176 9.20 132569 GRRC32 38 39 0.08 0.37 5973 19 233 18452 9599 10.66 142353 GRRC32 39 40 0.06 0.34 1376 13 225 20050 12167 11.65 14175 GRRC32 40 41 0.06 0.34 1376 11 211 17397 8138 1288 1288 129902 GRRC32 44 0.02 0.33 5503 6 198 19636 9457 10.85 139212 GRRC32 45 46 0.07<												-	(pct)
GRRC30 52 53 0.08 0.15 4772 113 141 123733 2002 157.6 4775 GRRC32 35 36 0.05 0.29 4732 14 183 20758 10176 9.20 132569 GRRC32 36 30 0.08 0.35 8266 17 200 18729 8978 10.32 131615 GRRC32 39 40 0.06 0.34 1376 13 225 20050 12167 11.65 134525 GRRC32 40 0.06 0.31 2297 9 203 18269 11126 1055 14179 GRRC32 41 42 0.12 0.39 7676 15 231 17397 8138 12.88 129902 GRRC32 44 45 0.19 0.23 3503 6 198 19636 9457 10.85 137112 GRRC32 446 47 0.07 </td <td>GRRC30</td> <td></td> <td>0.09</td>	GRRC30												0.09
GRRC32 35 36 0.05 0.29 4732 14 183 20758 10176 9.20 132599 GRRC32 36 37 0.08 0.35 8266 17 200 18729 8978 10.32 131615 GRRC32 38 30 0.06 0.34 4939 18 231 19452 10059 9.66 14255 GRRC32 40 0.06 0.34 1376 13 225 20050 12167 11.65 134525 GRRC32 44 0.02 0.33 7676 15 231 17397 8138 12.88 14779 GRRC32 44 40 0.32 0.33 5503 6 198 10768 11.53 137112 GRRC32 44 45 0.08 0.33 5503 6 198 19636 9457 10.85 139228 GRRC32 47 48 0.07 0.34 3502 </td <td></td> <td></td> <td></td> <td>0.08</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.09</td>				0.08									0.09
GRRC32 36 37 0.08 0.37 5973 19 233 18452 9599 10.26 138663 GRRC32 38 0.0 0.36 4993 18 231 19452 11059 9.66 142353 GRRC32 39 0.0 0.36 4993 18 231 19452 11059 9.66 142353 GRRC32 40 0.06 0.34 1376 13 225 20050 12167 1.65 134252 GRRC32 41 42 0.12 0.37 7074 11 241 17721 9748 1.55 135764 GRRC32 43 44 0.09 0.34 6195 10 221 18243 100130 11.53 137112 GRRC32 46 47 0.07 0.34 3502 4 196 17046 100130 1.53 13222 GRRC33 32 33 0.02 0.24 312		35			0.29								0.04
GRRC32 38 39 0.10 0.36 4993 18 221 19452 11059 9.66 142353 GRRC32 39 40 0.06 0.34 1376 13 225 20050 12167 11.65 134525 GRRC32 41 42 0.06 0.34 12077 9 203 18269 11126 10.53 141779 GRRC32 43 44 0.09 0.34 6195 10 221 18234 10130 11.58 140105 GRRC32 43 44 0.09 0.34 6195 10 221 18234 10130 11.53 137112 GRRC32 44 45 0.19 0.38 503 6 198 19636 9457 10.85 139228 GRRC32 46 47 0.07 0.36 3881 3 189 14781 8801 9.72 147788 GRRC33 33 0.02<				0.08			17						0.04
GRRC32 39 40 0.06 0.34 1376 13 225 20050 12167 11.65 134525 GRRC32 40 41 0.06 0.31 2297 9 203 18269 11126 11055 141779 GRRC32 41 42 0.12 0.39 7676 15 231 17397 8138 12.88 129902 GRRC32 42 43 0.09 0.34 6195 10 221 18234 10130 11.58 135764 GRRC32 44 45 0.19 0.38 9460 10 220 18199 10780 11.53 137112 GRRC32 44 45 0.07 0.34 3502 4 196 10048 10018 10.59 14538 139228 GRRC33 33 0.02 0.23 2753 221 102 104272 6551 27.97 3453 GRRC33 33 34 <t< td=""><td>GRRC32</td><td>37</td><td>38</td><td>0.08</td><td>0.37</td><td>5973</td><td>19</td><td>233</td><td>18452</td><td>9599</td><td>10.26</td><td>138663</td><td>0.04</td></t<>	GRRC32	37	38	0.08	0.37	5973	19	233	18452	9599	10.26	138663	0.04
GRRC32 40 41 0.06 0.31 2297 9 203 18260 11126 10.55 141779 GRRC32 41 42 0.12 0.35 7076 15 231 17397 8138 12.88 129902 GRRC32 43 44 0.09 0.34 6195 10 221 18234 10130 11.58 140105 GRRC32 44 45 0.09 0.34 6195 10 221 18234 10130 11.58 139228 GRRC32 45 46 0.08 0.33 5503 6 198 19636 9457 10.85 139228 GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 32.75 1319 GRRC33 34 35 0.09 0.29 8278 288 139 9397 9395 1.42 2164 GRRC33 34 35	GRRC32	38	39	0.10	0.36	4993	18	231	19452	11059	9.66	142353	0.04
GRRC32 41 42 0.12 0.39 7676 15 231 17397 8138 12.88 129902 GRRC32 42 43 0.02 0.34 6195 10 221 18234 10130 11.58 135764 GRRC32 44 45 0.09 0.34 6195 10 220 18199 10780 11.58 137112 GRRC32 44 45 0.07 0.34 3502 4 196 10704 10.85 139228 GRRC32 47 48 0.07 0.34 3502 4 196 17044 10.159 145866 GRRC33 33 0.02 0.23 2753 221 102 104272 6551 27.97 3453 GRRC33 34 0.30 0.27 25194 456 137 10515 12232 27.53 1425 GRRC33 35 0.60 0.33 0.36 4266 <td< td=""><td>GRRC32</td><td>39</td><td>40</td><td>0.06</td><td>0.34</td><td>1376</td><td>13</td><td>225</td><td>20050</td><td>12167</td><td>11.65</td><td>134525</td><td>0.04</td></td<>	GRRC32	39	40	0.06	0.34	1376	13	225	20050	12167	11.65	134525	0.04
GRRC32 42 43 0.12 0.35 7074 11 241 17721 9748 11.55 133764 GRRC32 43 44 0.09 0.38 9460 10 221 18234 10130 11.58 13712 GRRC32 44 45 0.08 0.33 5503 6 198 19636 9457 10.85 139228 GRRC32 47 46 0.07 0.36 3881 3 189 14748 8001 9.72 147788 GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 3.77 1319 GRRC33 34 0.02 0.23 2753 221 10.01 104272 6551 27.79 3453 GRRC33 34 0.36 0.32 0.31 34668 641 370 89965 8626 32.3 2470 GRRC33 39 0.40 0.36<	GRRC32	40	41	0.06	0.31	2297	9	203	18269	11126	10.55	141779	0.03
GRRC32 43 44 0.09 0.34 6195 10 221 18234 10130 11.58 140105 GRRC32 44 45 0.19 0.38 9460 10 220 18199 10780 11.53 137112 GRRC32 45 46 0.08 0.33 5503 6 198 19636 9457 10.85 139228 GRRC32 44 47 48 0.07 0.34 3502 4 196 17046 10018 10.57 147788 GRRC33 32 33 0.02 0.23 2753 221 102 104272 6551 27.97 3453 GRRC33 35 6 0.33 0.27 2514 456 187 10515 12232 27.53 1425 GRRC33 36 0.37 0.37 0.38 3668 641 370 89955 8266 23.55 2470 GRRC33 39 </td <td>GRRC32</td> <td>41</td> <td>42</td> <td>0.12</td> <td>0.39</td> <td>7676</td> <td>15</td> <td>231</td> <td>17397</td> <td>8138</td> <td>12.88</td> <td>129902</td> <td>0.04</td>	GRRC32	41	42	0.12	0.39	7676	15	231	17397	8138	12.88	129902	0.04
GRRC32 44 45 0.19 0.38 9460 10 220 18199 10780 11.53 137112 GRRC32 45 46 0.08 0.33 5503 6 198 19636 9457 10.85 139228 GRRC32 47 48 0.07 0.36 3881 3 189 14781 8801 9.72 147788 GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 32.75 1319 GRRC33 33 34 0.02 0.24 3275 221 102 104272 6551 7.97 3453 GRRC33 36 0.3 0.47 0.31 4838 864 294 93944 8466 28.83 3564 GRRC33 39 0.40 0.36 40561 763 363 92269 7137 29.78 2121 GRRC33 39 0.40 0.36 <td>GRRC32</td> <td>42</td> <td>43</td> <td>0.12</td> <td>0.35</td> <td>7074</td> <td>11</td> <td>241</td> <td>17721</td> <td>9748</td> <td>11.55</td> <td>135764</td> <td>0.05</td>	GRRC32	42	43	0.12	0.35	7074	11	241	17721	9748	11.55	135764	0.05
GRRC32 45 46 0.08 0.33 5503 6 198 19636 9457 10.85 139228 GRRC32 46 47 0.07 0.34 3502 4 196 17046 10018 10.59 145886 GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 32.75 1319 GRRC33 33 34 0.02 0.23 2753 221 102 104272 6551 27.97 3453 GRRC33 34 0.35 0.09 2.28 288 139 9397 9395 31.42 2164 GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 3564 GRRC33 37 0.38 0.35 0.33 31668 641 370 8995 8202 3.23 1210 GRRC33 34 0.40 0.32 <td>GRRC32</td> <td>43</td> <td>44</td> <td>0.09</td> <td>0.34</td> <td>6195</td> <td>10</td> <td>221</td> <td>18234</td> <td>10130</td> <td>11.58</td> <td>140105</td> <td>0.05</td>	GRRC32	43	44	0.09	0.34	6195	10	221	18234	10130	11.58	140105	0.05
GRRC32 46 47 0.07 0.34 3502 4 196 17046 10018 10.59 145886 GRRC32 47 48 0.07 0.36 3881 3 189 14781 8801 9.72 147788 GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 32.7 319 GRRC33 35 36 0.33 0.27 2514 456 187 105155 1223 27.53 1425 GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 3564 GRRC33 38 0.35 0.33 31668 641 370 89955 7137 29.78 2121 GRRC33 40 0.32 0.31 30891 973 383 91257 10967 29.80 4029 GRRC33 41 42 0.27 15649 </td <td>GRRC32</td> <td>44</td> <td>45</td> <td>0.19</td> <td>0.38</td> <td>9460</td> <td>10</td> <td>220</td> <td>18199</td> <td>10780</td> <td>11.53</td> <td>137112</td> <td>0.04</td>	GRRC32	44	45	0.19	0.38	9460	10	220	18199	10780	11.53	137112	0.04
GRRC32 47 48 0.07 0.36 3881 3 189 14781 8801 9.72 147788 GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 32.75 1319 GRRC33 34 35 0.09 0.23 2753 221 102 10472 6551 27.97 3453 GRRC33 35 36 0.33 0.27 25194 456 187 105155 1223 27.53 1425 GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 3564 GRRC33 39 0.40 0.36 40561 763 363 92269 7137 29.78 2121 GRRC33 40 41 0.50 0.45 51849 1115 570 84432 9513 29.72 4251 GRRC33 41 42 0.27 <td>GRRC32</td> <td>45</td> <td>46</td> <td>0.08</td> <td>0.33</td> <td>5503</td> <td>6</td> <td>198</td> <td>19636</td> <td>9457</td> <td>10.85</td> <td>139228</td> <td>0.04</td>	GRRC32	45	46	0.08	0.33	5503	6	198	19636	9457	10.85	139228	0.04
GRRC33 32 33 0.02 0.24 3124 205 128 93794 5141 32.75 1319 GRRC33 33 34 0.02 0.23 2753 221 102 104272 6551 27.97 3453 GRRC33 35 36 0.03 0.27 25194 456 187 105155 12232 27.53 1425 GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 52470 GRRC33 37 38 0.32 0.31 30866 641 370 89965 8626 32.35 2470 GRRC33 39 40 0.32 0.31 30891 973 383 91257 10967 29.80 4029 GRRC33 41 42 0.27 1731 29.78 2121 GRRC33 44 0.14 0.25 15491 1115 570 84432 9513	GRRC32	46	47	0.07	0.34	3502	4	196	17046	10018	10.59	145886	0.04
GRRC33 33 34 0.02 0.23 2753 221 102 104272 6551 27.97 3453 GRRC33 34 35 0.09 0.29 8278 298 139 9397 9395 31.42 2164 GRRC33 35 36 0.37 0.47 0.31 48358 864 294 93944 8466 28.83 3564 GRRC33 37 38 0.35 0.33 30661 763 363 92269 7137 29.78 2121 GRRC33 39 40 0.32 0.31 30891 973 383 91257 10967 29.80 4029 GRRC33 41 42 0.27 0.35 26689 1082 533 85085 11942 29.52 10325 GRRC33 42 43 0.09 0.23 7810 472 269 555984 10299 18.15 85336 GRRC33 <td< td=""><td>GRRC32</td><td></td><td>48</td><td></td><td>0.36</td><td></td><td></td><td></td><td></td><td>8801</td><td></td><td>147788</td><td>0.04</td></td<>	GRRC32		48		0.36					8801		147788	0.04
GRRC33 34 35 0.09 0.29 8278 298 139 93977 9395 31.42 2164 GRRC33 35 36 0.33 0.27 25194 456 187 105155 12232 27.53 1425 GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 35564 GRRC33 37 38 0.32 0.31 30891 973 363 92269 7137 29.78 2121 GRRC33 40 41 0.50 0.45 51849 1115 570 84432 9513 29.72 4251 GRRC33 41 42 0.27 0.35 26689 1082 533 85085 11942 29.52 10325 GRRC33 42 43 0.09 0.23 7810 472 269 5594 1029 18.15 8536 GRRC33 44 0	GRRC33	32	33	0.02	0.24	3124	205	128	93794	5141	32.75	1319	0.13
GRRC33 35 36 0.33 0.27 25194 456 187 105155 12232 27.53 1425 GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 3564 GRRC33 37 38 0.35 0.33 31668 641 370 89965 8626 32.35 2470 GRRC33 39 0.40 0.36 40561 763 363 92269 7137 29.78 2121 GRRC33 40 41 0.50 0.45 51849 1115 570 84432 9513 29.72 4251 GRRC33 41 42 0.27 0.35 26689 1082 533 85085 11942 29.52 10325 GRRC33 43 44 0.14 0.25 10984 432 271 5040 8482 15.96 66344 GRRC33 45 46 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.12</td></td<>													0.12
GRRC33 36 37 0.47 0.31 48358 864 294 93944 8466 28.83 3564 GRRC33 37 38 0.35 0.33 31668 641 370 89965 8626 32.35 2470 GRRC33 39 0.40 0.36 40561 763 363 92269 7137 29.78 2121 GRRC33 40 41 0.50 0.45 51849 1115 570 84432 9513 29.72 4251 GRRC33 41 42 0.27 0.35 26689 1082 533 85085 11942 29.52 10325 GRRC33 42 43 0.09 0.23 7810 472 269 55984 10299 18.15 85336 GRRC33 44 0.16 0.25 15496 468 388 55207 7506 20.50 44283 GRRC33 46 47 0.22 <													0.11
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GRRC33 40 41 0.50 0.45 51849 1115 570 84432 9513 29.72 4251 GRRC33 41 42 0.27 0.35 26689 1082 533 85085 11942 29.52 10325 GRRC33 42 43 0.09 0.23 7810 472 269 55984 10299 18.15 85336 GRRC33 44 0.16 0.25 15496 468 388 55207 7506 20.50 44283 GRRC33 45 46 0.24 0.30 25768 545 639 52373 6699 24.37 27904 GRRC33 46 47 0.22 0.27 17387 540 589 47283 7217 20.59 19792 GRRC33 47 48 0.20 0.26 11702 524 574 49717 7914 21.41 25118 GRRC33 49 50													0.11
GRRC33 41 42 0.27 0.35 26689 1082 533 85085 11942 29.52 10325 GRRC33 42 43 0.09 0.23 7810 472 269 55984 10299 18.15 85336 GRRC33 43 44 0.14 0.25 10984 432 271 50420 8482 15.96 66344 GRRC33 44 45 0.16 0.25 15496 468 388 55207 7506 20.50 44283 GRRC33 46 47 0.22 0.27 17387 540 589 47283 7217 20.59 19792 GRRC33 47 48 0.20 0.26 15692 512 560 45333 7047 19.91 22421 GRRC33 49 50 0.08 0.25 5023 462 558 53240 822.83 38059 GRRC34 44 45 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.10</td></t<>													0.10
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GRRC33 48 49 0.15 0.26 11702 524 574 49717 7914 21.41 25118 GRRC33 49 50 0.08 0.25 5023 462 558 53240 8258 22.83 38059 GRRC33 50 51 0.07 0.27 4615 412 605 47540 6937 22.60 46748 GRRC34 44 45 0.07 0.11 6784 255 238 108812 3502 27.13 996.9999 GRRC34 45 46 0.50 0.21 39273 698 378 101417 3130 27.58 704 GRRC34 46 47 0.52 0.32 60030 588 622 55175 2778 39.35 643 GRRC34 47 48 0.33 0.28 4700 523 38669 1885 43.15 482 GRRC34 49 50 0.13 0.24 9652 334 369 62541 2547 40.10 745													0.06
GRRC33 49 50 0.08 0.25 5023 462 558 53240 8258 22.83 38059 GRRC33 50 51 0.07 0.27 4615 412 605 47540 6937 22.60 46748 GRRC34 44 45 0.07 0.11 6784 255 238 108812 3502 27.13 996.9999 GRRC34 45 46 0.50 0.21 39273 698 378 101417 3130 27.58 704 GRRC34 46 47 0.52 0.32 60030 588 622 55175 2778 39.35 643 GRRC34 47 48 0.33 0.28 47006 470 523 38669 1885 43.15 482 GRRC34 49 0.04 0.21 2734 223 445 24684 1385 50.00 482 GRRC34 50 51 0.21<													0.06
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GRRC3444450.070.116784255238108812350227.13996.9999GRRC3445460.500.2139273698378101417313027.58704GRRC3446470.520.326003058862255175277839.35643GRRC3447480.330.284700647052338669188543.15482GRRC3448490.040.21273422344524684138550.00482GRRC3449500.130.24965233436962541254740.10745GRRC3450510.210.272708845134276636615934.401157GRRC3451520.040.12266940628696076997829.302201GRRC3452530.180.311524040428367835528438.041592GRRC3453540.050.27334535226261575730139.901990GRRC3455560.140.291655438929971599648137.351828GRRC3455560.140.291655438929971599648137.351828GRRC3456570.040.16313													0.08
GRRC3445460.500.2139273698378101417313027.58704GRRC3446470.520.326003058862255175277839.35643GRRC3447480.330.284700647052338669188543.15482GRRC3448490.040.21273422344524684138550.00482GRRC3449500.130.24965233436962541254740.10745GRRC3450510.210.272708845134276636615934.401157GRRC3451520.040.12266940628696076997829.302201GRRC3452530.180.311524040428367835528438.041592GRRC3453540.050.27334535226261575730139.901990GRRC3455560.140.291655438929971599648137.351828GRRC3455560.140.291655438929971599648137.351828GRRC3455560.140.291655438929971599648137.351828GRRC3455560.140.2916554 </td <td></td> <td>0.08</td>													0.08
GRRC3446470.520.326003058862255175277839.35643GRRC3447480.330.284700647052338669188543.15482GRRC3448490.040.21273422344524684138550.00482GRRC3449500.130.24965233436962541254740.10745GRRC3450510.210.272708845134276636615934.401157GRRC3451520.040.12266940628696076997829.302201GRRC3452530.180.311524040428367835528438.041592GRRC3453540.050.27334535226261575730139.901990GRRC3454550.030.202562326231795781146036.651934GRRC3455560.140.291655438929971599648137.351828GRRC3457580.040.173479266170109861801525.761266GRRC3457580.090.259383422207103902831127.531467GRRC3459600.590.5376463 </td <td></td> <td>0.16</td>													0.16
GRRC34 47 48 0.33 0.28 47006 470 523 38669 1885 43.15 482 GRRC34 48 49 0.04 0.21 2734 223 445 24684 1385 50.00 482 GRRC34 49 50 0.13 0.24 9652 334 369 62541 2547 40.10 745 GRRC34 50 51 0.21 0.27 27088 451 342 76636 6159 34.40 1157 GRRC34 51 52 0.04 0.12 2669 406 286 96076 9978 29.30 2201 GRRC34 52 53 0.18 0.31 15240 404 283 67835 5284 38.04 1592 GRRC34 53 54 0.05 0.27 3345 352 262 61575 7301 39.90 1990 GRRC34 54 55 0.03 0.20 2562 326 231 79578 11460 36.65 <									-				0.16
GRRC3448490.040.21273422344524684138550.00482GRRC3449500.130.24965233436962541254740.10745GRRC3450510.210.272708845134276636615934.401157GRRC3451520.040.12266940628696076997829.302201GRRC3452530.180.311524040428367835528438.041592GRRC3453540.050.27334535226261575730139.901990GRRC3454550.030.202562326231795781146036.651934GRRC3455560.140.291655438929971599648137.351828GRRC3456570.040.163139249160122426715924.701221GRRC3457580.040.173479266170109861801525.761266GRRC3459600.590.537646324952284422582717.041516													0.10
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GRRC3450510.210.272708845134276636615934.401157GRRC3451520.040.12266940628696076997829.302201GRRC3452530.180.311524040428367835528438.041592GRRC3453540.050.27334535226261575730139.901990GRRC3454550.030.202562326231795781146036.651934GRRC3455560.140.291655438929971599648137.351828GRRC3456570.040.163139249160122426715924.701221GRRC3457580.040.173479266170109861801525.761266GRRC3459600.590.537646324952284422582717.041516													0.05
GRRC3451520.040.12266940628696076997829.302201GRRC3452530.180.311524040428367835528438.041592GRRC3453540.050.27334535226261575730139.901990GRRC3454550.030.202562326231795781146036.651934GRRC3455560.140.291655438929971599648137.351828GRRC3456570.040.163139249160122426715924.701221GRRC3457580.040.173479266170109861801525.761266GRRC3458590.090.259383422207103902831127.531467GRRC3459600.590.537646324952284422582717.041516													0.11
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GRRC34 53 54 0.05 0.27 3345 352 262 61575 7301 39.90 1990 GRRC34 54 55 0.03 0.20 2562 326 231 79578 11460 36.65 1934 GRRC34 55 56 0.14 0.29 16554 389 299 71599 6481 37.35 1828 GRRC34 56 57 0.04 0.16 3139 249 160 122426 7159 24.70 1221 GRRC34 57 58 0.04 0.17 3479 266 170 109861 8015 25.76 1266 GRRC34 58 59 0.09 0.25 9383 422 207 103902 8311 27.53 1467 GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516 <td></td> <td>0.10</td>													0.10
GRRC34 54 55 0.03 0.20 2562 326 231 79578 11460 36.65 1934 GRRC34 55 56 0.14 0.29 16554 389 299 71599 6481 37.35 1828 GRRC34 56 57 0.04 0.16 3139 249 160 122426 7159 24.70 1221 GRRC34 57 58 0.04 0.17 3479 266 170 109861 8015 25.76 1266 GRRC34 58 59 0.09 0.25 9383 422 207 103902 8311 27.53 1467 GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516													0.10
GRRC34 55 56 0.14 0.29 16554 389 299 71599 6481 37.35 1828 GRRC34 56 57 0.04 0.16 3139 249 160 122426 7159 24.70 1221 GRRC34 57 58 0.04 0.17 3479 266 170 109861 8015 25.76 1266 GRRC34 58 59 0.09 0.25 9383 422 207 103902 8311 27.53 1467 GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516													0.09
GRRC34 56 57 0.04 0.16 3139 249 160 122426 7159 24.70 1221 GRRC34 57 58 0.04 0.17 3479 266 170 109861 8015 25.76 1266 GRRC34 58 59 0.09 0.25 9383 422 207 103902 8311 27.53 1467 GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516													0.07
GRRC34 57 58 0.04 0.17 3479 266 170 109861 8015 25.76 1266 GRRC34 58 59 0.09 0.25 9383 422 207 103902 8311 27.53 1467 GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516				0.04									0.07
GRRC34 58 59 0.09 0.25 9383 422 207 103902 8311 27.53 1467 GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516				0.04					109861				0.07
GRRC34 59 60 0.59 0.53 76463 249 522 84422 5827 17.04 1516	GRRC34	58	59	0.09	0.25	9383	422	207	103902	8311		1467	0.08
		59	60	0.59			249	522				1516	0.05
<u>GKKC34 DU DI U.15 U.28 19437 175 374 84636 6518 23.89</u> 6930	GRRC34	60	61	0.15	0.28	19437	175	374	84636	6518	23.89	6930	0.06
GRRC34 61 62 0.07 0.25 5640 150 182 80841 5429 19.01 23619	GRRC34	61	62	0.07	0.25	5640	150	182	80841	5429	19.01	23619	0.06
GRRC34 62 63 0.09 0.48 5630 108 335 60405 4443 14.26 37966	GRRC34	62	63	0.09	0.48	5630	108	335	60405	4443	14.26	37966	0.05
GRRC34 63 64 0.10 0.59 4655 143 388 71399 5689 16.63 44163	GRRC34	63	64	0.10	0.59	4655	143	388	71399	5689	16.63	44163	0.05
GRRC34 64 65 0.04 0.63 460 137 410 55555 5361 15.50 38412	GRRC34	64	65	0.04	0.63	460	137	410	55555	5361	15.50	38412	0.05
GRRC34 65 66 0.04 0.53 736 110 358 63966 4642 15.12 46318	GRRC34	65	66	0.04	0.53	736	110	358	63966	4642	15.12	46318	0.05
GRRC34 66 67 0.05 0.66 814 92 433 67540 4739 15.99 55248	GRRC34	66	67	0.05	0.66	814	92	433	67540	4739	15.99	55248	0.05
GRRC34 67 68 0.09 0.61 11230 116 435 56110 3890 18.79 32612	GRRC34	67	68	0.09	0.61	11230	116	435	56110	3890	18.79	32612	0.04
	GRRC34	68		0.22	0.31	48585	139	232	51283	3488	15.24	5260	0.04
GRRC34 69 70 0.13 0.27 32915 113 190 33562 2939 29.71 4200	GRRC34	69	70	0.13	0.27	32915	113	190	33562	2939	29.71	4200	0.02

Hole ID	From	То	Со	Ni	Mn	Cu	Zn	Al	Cr	Fe	Mg	S
	(m)	(m)	(pct)	(pct)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(pct)	(ppm)	(pct)
GRRC34	70	71	0.17	0.34	34691	71	148	28439	2837	31.23	4179	0.02
GRRC34	71	72	0.18	0.38	29916	85	146	30860	2554	40.73	4353	0.02
GRRC34	72	73	0.16	0.24	80499	223	156	17331	1245	19.51	5266	0.04
GRRC34	73	74	0.16	0.22	84203	214	158	29094	1334	14.62	3696	0.05
GRRC34	74	75	0.05	0.18	17330	138	111	11534	1045	25.02	1951	0.03
GRRC34	75	78	0.02	0.11	16148	71	100	19182	495	15.44	14228	0.04
GRRC34	78	81	0.00	0.05	4093	29	48	13275	153	8.67	3779	0.09
GRRC37	20	21	0.01	0.01	925	34	196	52946	1716	49.80	401	0.12
GRRC37	21	22	0.03	0.02	2436	70	658	54891	1658	48.93	498	0.15
GRRC37	22	23	0.10	0.06	28030	144	1800	85031.01	1445	40.47	658.0001	0.16
GRRC37	23	24	0.54	0.15	92175	330	4244	77477	1212	35.52	926	0.15
GRRC37	24	25	1.61	0.25	211216	309	4010	66876	733	22.86	1179	0.15
GRRC37	25	26	0.52	0.14	76708	242	2628	78634	2489	29.61	641	0.23
GRRC37	26	27	0.58	0.16	43283	196	1974	76512	2179	32.67	462	0.20
GRRC37	27	28	0.07	0.04	6532	124	598	48041	3147	48.84	293	0.23
GRRC37	28	29	0.03	0.03	3078	127	557	80904	1336	15.33	772	0.15
GRRC37	29	30	0.04	0.05	4962	262	904	86608	2808	27.50	600	0.21
GRRC38	200	201	0.01	0.51	1300	329	47	10547	1557	5.13	204522	0.31
GRRC38	201	202	0.02	0.79	3725	485	38	9206	1237	6.27	90965.01	0.76
GRRC38	202	203	0.03	1.23	4503	451	36	10643	1515	8.90	51458	1.26
GRRC38	203	204	0.03	1.28	5765	560	39	9921	1720	9.51	30250	1.25
GRRC38	204	205	0.03	1.29	5953	568	39	10819	1624	8.70	20466	1.16
GRRC38	205	206	0.02	0.87	6151	530	37	9240	1506	10.28	20908	0.82
GRRC38	206	207	0.02	0.93	5731	583	41	9569	1578	9.61	20745	0.81
GRRC38	207	208	0.02	0.99	4716	499	39	10112	1441	9.25	21521	0.83
GRRC38	208	209	0.02	1.00	4287	452	38	12181	1541	8.13	26799	0.78
GRRC38	209	210	0.02	0.96	4659	408	36	11693	1513	8.23	25175	0.74
GRRC38	210	211	0.02	0.99	4376	398	54	11886	1792	8.38	32116	0.74
GRRC38	211	212	0.02	0.91	4521	370	51	12049	1991	9.21	35204	0.67
GRRC38	212	213	0.02	0.95	6243	379	51	11021	2258	13.38	42680	0.73
GRRC38	213	214	0.03	1.03	7498	384	55	10844	2335	15.83	31915	0.93
GRRC38	214	215	0.03	1.33	4356	492	37	15388	2644	8.82	35672	1.12
GRRC38	215	216	0.03	1.23	5303	421	61	13717	5627	10.99	31942	1.03
GRRC38	216	217	0.04	1.33	3809	715	66	20739	8938	9.56	32558	1.25
GRRC38	217	218	0.02	0.76	4641	229	38	12201	2933	7.46	25583	0.70
GRRC38	218	219	0.01	0.30	4616	97	34	14345	2554	7.34	24124	0.24
GRRC38	219	220	0.02	0.92	4288	460	31	18825	2165	7.57	28267	0.93
GRRC38	220	221	0.03	1.23	4285	607	49	16016	3339	8.56	30054	1.29
GRRC38	221	222	0.03	1.03	5023	424	43	18474	3634	7.84	23568	1.13
GRRC38	222	223	0.02	0.94	4055	565	56	18824	1974	6.87	28541	0.97
GRRC38	223	224	0.02	1.12	2433	869	68	16442	3193	8.22	55048	1.43
GRRC38	223	225	0.02	0.72	1765	473	39	12572	2130	6.80	55963	0.89
GRRC38	225	226	0.02	0.50	3062	304	33	12002	1604	7.41	31442	0.55
GRRC38	225	227	0.02	0.17	3372	59	30	15673	1288	7.19	43259	0.13
UNICSO	220	221	0.01	0.17	5572	55	50	13073	1200	1.15	43233	0.15

Note: Selected drill sample assays from the reported 2017 drilling at the Golden Ridge Project. Co and Ni assays, reported in 'percent' have been converted from 'parts per million' (10,000ppm = 1 percent).

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 – Rocket, Leo Dam, Anomaly 13 and Anomaly 14 Prospects.

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 Co and/or Ni element concentrations from the pXRF data were collected from the sample piles via an aluminium scoop. pXRF analysis was undertaken on each sample using a Bruker S1 Titan 800 hand held portable XRF analyser.
	• 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. 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.
	 Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Reverse circulation drilling was used to obtain 1 m samples from which approximately 3.5 kg sampled. 3.5kg samples were crushed and pulverised by pulp mill to nominal P80/75um to produce a 50 gram charge for analysis. 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 (eg core diametre, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 Reverse Circulation Drilling. 4.5 inch drill string. 5.25 - 5.75 inch Face-sampling hammer. Auxiliary and Booster compressors used to exclude ground water.

Criteria	JORC Code explanation	Commentary
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 RC drilling using the equipment described. 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.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.	 Logging has primarily been qualitative. Qualitative litho-geochemistry based on pXRF 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. XRD analysis of selected pulps retained from the chemical analysis may be undertaken once all chemical assays have been received.
	• 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. 	 Individual one metre samples were collected via a cone splitter directly attached to the cyclone when dry. Some samples were wet and noted on the sample sheets and lithological logs. Individual samples were approximate 3.5kg. The bulk residue was collected via plastic drums and laid out in order on the drill pad. Individual metre samples of the laterite zone that were enriched in elements typically associated with Co-Ni mineralisation, as determined by a portable XRF (Bruker pXRF) were submitted to the laboratory. Three metre composites were collected for the remainder of the drill holes in areas where the pXRF analysis indicated low associated element concentrations. Anomalous three metre composite samples will have single metre samples resubmitted for that interval if necessary. The sample collection, splitting and sampling for this style of drilling 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 where present. The use of booster and auxiliary compressors ensures samples are dry where possible, which best ensures a quality sample.

Criteria	JORC Code explanation	Commentary				
	• 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, 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 800 handheld XRF instrument which it used to assist with selecting zones for initial one metre sampling. Zones have been selected due to elevated manganese, nickel, and copper. Intervals not identified as elevated from the pXRF have been sampled with three metre composites. Standards, blanks and duplicates have been analysed with the Bruker to ensure the instrument is operating as expected and correctly calibrated. 				
	 Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	• Standards and laboratory checks have been assessed. Most of the standards show results within acceptable limits of accuracy, with good precision in most cases. Internal laboratory checks indicate very high levels of precision.				
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. Several holes were twinning historic drillholes to validate historic intersections. 				
	• 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. Collars will be picked up later using an RTK-DGPS. 				
	Specification of the grid system used.	• MGA94 (Zone 51)				
	• Quality and adequacy of topographic control.	 Topographic control is from a Digital Terrain Model (DTM). Once all exploration has been completed the RL of each drill collar will be assigned from this DTM. This is considered adequate for work at the early exploration stage. Once the RTK-DGPS has picked up all collars then this will take precedence in the database. 				

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	• As a first pass phase 1 drill program Individual drill hole traverses were drilled between 80m x 40m in some areas to very wide spaced up to 1km apart in others.
	• 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 1m samples. Where 3m composite samples are reported, samples are noted in table of results.
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 across multiple parallel zones and majority flat lying therefore RC drillholes were mostly vertical with some drilling 090 azi and -60 degrees where a steeper westerly dip was interpreted. Cross sections were drawn as the holes progressed to ensure the drilling was optimal to the interpreted orientation of the mineralisation. Down hole intercept widths are estimated to closely approximately true widths based on the interpretation of the cobalt-nickel zones 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 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. 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 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 35km 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 Maduwongga Native Title Claimant Group has a registered Native Title Claim 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 its 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 Golden Ridge Project is a Cobalt-Nickel Laterite deposit within an ultramafic dome, the Blair Dome. Lateritic Cobalt deposits are generally broad and shallow by nature, having been deposited in the weathered rock mantle, however mineralisation can thicken greatly along zones of permeability such as strike-parallel faults. The Golden Ridge Project is no different. The tenor of cobalt values are at least the equivalent of other cobalt-laterites in the Kalgoorlie mineral district.
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.	Refer to Appendix 1 of this announcement.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 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. 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. 	 Intercepts noted are from 1m sample intervals unless stated as three metre composite samples. Intersections are based on a 500ppm (lower) cut-off for cobalt, with a minimum
	 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. 	 width of 1m, a maximum of three 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 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 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.
<i>Further work</i>	 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. Additional work will include bench-scale metallurgical testing within the mineralised Co and Ni zones.