



**BUREAU
VERITAS**

Bureau Veritas Minerals Pty Ltd
MINERAL TESTING & LABORATORY SERVICES

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Reference: **aa055519.c**
Date Finished: 21/06/2022
Order: E0557
Project: Lake Mackay RC2
Date Received: 03/06/2022
Type of Sample: Pulps
Samples Analysed: **79**

FINAL ANALYSIS REPORT

Analysis of Mineral Samples

for

Prodigy Gold NL

PRX 100% Account

Level 1

141 Broadway Nedlands WA 6009

Attention: Edward Keys

Bureau Veritas Minerals Pty Ltd has carried out the preparation and analysis of samples to the best of its ability and with due regard to the importance of all samples submitted. However, in the event of default by Bureau Veritas Minerals Pty Ltd in providing services as defined by contracts, Bureau Veritas Minerals Pty Ltd shall have no other liability for any negligent act, default, omission or breach of such contract. The liability of our company is limited by our General Terms and Conditions of Service. At all times, the results of analysis must be interpreted as pertaining to the samples as they were received at the laboratory. Where applicable, information describing the submitted sample/s has been supplied by the client or associated third party.

Authorised By:

Vaughn Noble
Senior Chemist

Fabian Gregus
Chemist

Michael Grieger
Chemist

Jenet Hwende
Laboratory Manager



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Method	MA102	MA101	MA102	MA101	MA102	MA102	MA101	MA102
Result Name	Ag	Al	As	Ba	Be	Bi	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.2	100	1	2	0.5	0.1	100	0.5
BLANK 1	<0.2	<100	<1	<2	<0.5	<0.1	<100	<0.5
LM17006	<0.2	8.80%	4	600	4.5	0.3	2800	<0.5
LM17031	0.6	8.83%	4	600	3.5	1.5	1400	<0.5
LM17032	<0.2	9.82%	<1	658	5.5	0.7	1000	<0.5
LM17047	<0.2	5.17%	<1	364	3.0	0.3	5800	<0.5
LM17069	<0.2	9.45%	1	760	5.5	1.2	1000	<0.5
LM17071	<0.2	7.39%	1	506	3.5	1.2	2400	<0.5
LM17079	<0.2	4.74%	1	396	3.0	<0.1	6800	<0.5
LM17080	<0.2	5.03%	1	418	3.0	0.2	6100	<0.5
LM17087	<0.2	6.06%	1	536	3.5	0.2	3000	<0.5
LM17088	<0.2	5.25%	1	434	3.0	0.3	8100	<0.5
LM17119	<0.2	5.48%	1	632	3.0	0.2	4200	<0.5
LM17127	<0.2	5.99%	1	176	2.0	<0.1	6300	<0.5
LM17127 Rpt	<0.2	5.70%	1	168	2.5	<0.1	6200	<0.5
LM17128	<0.2	6.52%	1	112	1.5	<0.1	2.87%	<0.5
LM17129	<0.2	7.56%	1	54	0.5	0.3	7.08%	<0.5
LM17130	<0.2	7.51%	1	10	<0.5	0.4	8.15%	<0.5
LM17131	<0.2	7.57%	1	4	<0.5	0.2	8.52%	<0.5
LM17132	<0.2	6.62%	1	12	<0.5	0.3	7.10%	<0.5
LM17133	<0.2	7.18%	1	6	<0.5	0.3	8.01%	<0.5
Std Nominal	120	4.37%	649	5960	1.0	57.0	6200	24.5
Determined	132	4.49%	649	NR	1.0	62.0	6500	24.5
LM17153	<0.2	5.78%	3	590	3.0	0.4	6200	<0.5
LM17167	<0.2	6.75%	3	38	3.0	1.0	6.77%	<0.5
LM17168	<0.2	6.85%	1	30	3.5	0.3	6.66%	<0.5
LM17180	<0.2	6.87%	1	44	2.5	1.2	4.47%	<0.5
LM17181	<0.2	5.44%	1	90	1.5	1.3	3.53%	<0.5
LM17182	<0.2	5.68%	1	20	3.5	1.2	3.78%	<0.5
LM17183	0.4	5.67%	101	38	21.0	2.7	2.69%	<0.5
LM17184	<0.2	4.93%	4	10	2.0	0.9	3.68%	<0.5
LM17185	<0.2	5.66%	1	20	1.5	0.3	3.66%	<0.5
LM17186	<0.2	5.57%	1	32	3.0	1.1	3.68%	<0.5
LM17187	<0.2	5.46%	1	36	2.5	0.9	3.66%	<0.5
LM17188	<0.2	5.27%	1	20	2.0	0.4	3.81%	<0.5
LM17189	<0.2	5.71%	4	26	5.0	1.5	3.74%	<0.5
Std Nominal	6.0	6.83%	96	132		3.5	2.48%	8.0
Determined	5.4	6.64%	90	132	1.0	3.5	2.36%	8.5
LM17193	<0.2	5.03%	1	26	1.5	0.3	3.93%	<0.5
LM17203	<0.2	5.55%	1	30	5.5	1.0	3.62%	<0.5
LM17204	<0.2	5.59%	1	18	18.5	1.2	3.19%	<0.5
LM17205	<0.2	5.41%	1	30	3.5	5.0	3.56%	<0.5



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Method	MA102	MA101	MA102	MA101	MA102	MA102	MA101	MA102
Result Name	Ag	Al	As	Ba	Be	Bi	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.2	100	1	2	0.5	0.1	100	0.5
LM17206	<0.2	6.12%	1	18	85.0	2.1	1.83%	<0.5
LM17206 Rpt	<0.2	6.39%	1	18	85.0	2.3	1.92%	<0.5
LM17207	<0.2	6.25%	1	28	40.0	5.5	3.40%	<0.5
LM17208	<0.2	5.91%	2	60	4.0	2.2	2.51%	<0.5
LM17213	0.4	4.65%	<1	58	3.0	3.1	2.74%	<0.5
LM17214	0.6	5.14%	2	44	5.0	6.2	2.75%	<0.5
LM17215	2.8	5.16%	6	78	30.0	28.8	2.87%	<0.5
LM17216	0.8	5.55%	<1	52	30.0	23.2	2.41%	<0.5
LM17217	0.4	6.69%	34	8	105	8.2	1.27%	<0.5
LM17218	<0.2	8.03%	34	10	325	7.7	5900	<0.5
LM17221	<0.2	5.44%	<1	32	10.0	2.2	2.88%	<0.5
BLANK 2	<0.2	<100	<1	<2	<0.5	<0.1	<100	<0.5
LM17222	<0.2	4.97%	1	18	3.0	0.8	4.33%	<0.5
LM17232	<0.2	6.35%	1	18	4.5	0.6	5.20%	<0.5
LM17273	<0.2	7.29%	1	30	130	0.9	2.52%	<0.5
LM17312	<0.2	7.93%	1	26	298	7.0	1.00%	<0.5
LM17330	<0.2	6.83%	1	20	1.5	<0.1	6.39%	<0.5
LM17331	<0.2	6.98%	1	12	2.0	0.2	4.07%	<0.5
LM17332	<0.2	7.21%	1	26	1.5	<0.1	4.87%	<0.5
Std Nominal		4.63%	3	984	1.5	<0.1	600	<0.5
Determined	<0.2	4.55%	3	986	2.0	<0.1	700	<0.5
LM17333	<0.2	7.35%	1	36	1.0	0.7	4.97%	<0.5
LM17334	<0.2	7.87%	1	28	0.5	<0.1	6.88%	<0.5
LM17335	<0.2	7.48%	1	10	<0.5	<0.1	7.11%	<0.5
LM17353	<0.2	8.08%	1	26	1.0	<0.1	3.98%	<0.5
LM17378	<0.2	5.26%	1	526	2.0	<0.1	4000	<0.5
LM17391	<0.2	6.72%	1	10	<0.5	0.3	6.63%	<0.5
LM17399	<0.2	5.57%	1	354	3.0	<0.1	5000	<0.5
LM17406	<0.2	6.02%	1	28	1.0	<0.1	5.79%	<0.5
LM17417	<0.2	6.21%	1	28	1.0	<0.1	6.04%	<0.5
LM17423	<0.2	3.10%	3	50	0.5	<0.1	2.59%	<0.5
LM17427	<0.2	5.72%	1	22	1.0	<0.1	5.59%	<0.5
Std Nominal	1.8	7.90%	21	922	3.0	4.3	3.00%	1.0
Determined	2.0	7.80%	22	924	3.0	4.6	3.01%	1.0
LM17446	<0.2	5.98%	1	20	0.5	<0.1	5.95%	<0.5
PG044184	<0.2	5.88%	1	270	1.0	0.4	9.22%	<0.5
PG044185	<0.2	5100	3	206	1.5	0.7	500	<0.5
PG044185 Rpt	<0.2	5000	3	216	1.5	0.9	500	<0.5
PG044187	<0.2	6000	1	72	<0.5	<0.1	700	<0.5
PGO44186	<0.2	8400	93	528	37.0	0.7	600	<0.5
PGRCS22001	<0.2	6.99%	1	152	1.0	<0.1	7.20%	<0.5



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Method	MA102	MA101	MA102	MA101	MA102	MA102	MA101	MA102
Result Name	Ag	Al	As	Ba	Be	Bi	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.2	100	1	2	0.5	0.1	100	0.5
PGRCSS22002	<0.2	6.59%	1	258	2.0	<0.1	5.59%	<0.5
PGRCSS22003	<0.2	7.64%	4	<2	0.5	0.3	9.74%	<0.5
PGRCSS22004	<0.2	5.69%	6	36	1.5	<0.1	7.05%	<0.5
PGRCSS22006	<0.2	9.29%	5	16	<0.5	5.6	13.5%	<0.5
PGRCSS22007	<0.2	2400	1	10	<0.5	<0.1	2000	<0.5
PGRCSS22008	<0.2	7.31%	2	22	0.5	1.3	9.38%	<0.5
PGRCSS22009	<0.2	11.8%	80	968	5.5	<0.1	1500	<0.5
PGRCSS22010	<0.2	9.47%	1	32	0.5	9.4	12.1%	<0.5
PGRCSS22010 Rpt	<0.2	9.88%	1	30	<0.5	9.2	12.5%	<0.5
PGRCSS22011	<0.2	6.94%	1	34	1.5	9.3	9.13%	<0.5
PGRCSS22012	<0.2	11.3%	2	698	5.0	0.3	3800	<0.5
Std Nominal	0.8	7.68%	18	1010	3.0	1.5	2.71%	<0.5
Determined	0.8	7.92%	20	1010	3.5	1.6	2.70%	<0.5



Reference: aa055519.c Order Number: E0557 Page 4 of 24

Method	MA102	MA101	MA102	MA102	MA101	MA102	MA102	MA102
Result Name	Co	Cr	Cs	Cu	Fe	Ga	Hf	In
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	10	0.1	1	100	0.2	0.2	0.05
BLANK 1	<1	<10	<0.1	<1	<100	<0.2	<0.2	<0.05
LM17006	9	50	11.5	6	3.51%	21.8	4.4	0.10
LM17031	9	50	8.0	119	3.89%	22.6	3.8	0.15
LM17032	13	90	13.0	32	4.64%	25.0	4.2	0.10
LM17047	5	40	6.1	7	2.36%	13.4	4.6	<0.05
LM17069	14	90	13.6	50	4.40%	27.2	5.6	0.10
LM17071	9	50	7.8	79	3.23%	19.0	4.4	0.10
LM17079	4	20	5.1	7	1.96%	12.0	4.0	<0.05
LM17080	5	40	4.7	12	2.21%	15.2	4.2	<0.05
LM17087	6	40	6.6	12	2.48%	18.4	4.4	<0.05
LM17088	4	20	4.4	8	2.02%	14.6	4.2	<0.05
LM17119	4	20	7.2	6	2.04%	13.4	4.4	<0.05
LM17127	5	40	7.0	5	2.05%	10.4	4.4	<0.05
LM17127 Rpt	6	40	7.0	4	2.00%	10.4	4.4	<0.05
LM17128	18	70	9.1	37	4.67%	12.2	4.6	<0.05
LM17129	46	90	30.2	139	10.0%	16.6	3.0	0.10
LM17130	53	130	3.1	134	9.21%	16.6	1.2	0.10
LM17131	55	150	1.9	190	8.94%	16.2	1.6	0.10
LM17132	50	90	5.4	206	10.0%	15.0	1.2	0.10
LM17133	66	70	2.4	241	10.2%	19.4	1.2	0.10
Std Nominal	10	30	2.7	5150	2.24%	20.6	2.6	5.25
Determined	9	40	2.8	5150	2.24%	20.6	2.2	5.25
LM17153	6	40	7.7	18	2.39%	14.0	4.4	<0.05
LM17167	57	40	5.4	279	11.3%	18.8	2.4	0.10
LM17168	57	20	6.6	200	12.2%	18.6	1.6	0.10
LM17180	38	<10	18.7	222	12.2%	21.6	2.2	0.15
LM17181	25	<10	25.1	365	11.8%	17.8	2.4	0.15
LM17182	33	<10	12.0	172	14.3%	21.0	2.4	0.15
LM17183	102	<10	31.8	661	13.1%	20.0	2.4	0.25
LM17184	24	<10	2.9	281	11.9%	19.6	2.2	0.20
LM17185	16	<10	6.6	18	14.0%	22.2	2.2	0.15
LM17186	17	<10	3.4	163	12.0%	21.4	2.6	0.15
LM17187	17	<10	2.6	64	12.6%	21.8	2.4	0.20
LM17188	15	<10	3.4	18	12.0%	21.8	2.6	0.20
LM17189	19	<10	6.2	98	13.0%	23.2	2.2	0.20
Std Nominal	43	220		1520	8.65%			
Determined	43	220	16.0	1520	8.65%	17.6	3.0	0.55
LM17193	19	20	1.7	39	11.9%	21.2	2.8	0.15
LM17203	22	<10	60.4	54	12.5%	21.2	2.0	0.15
LM17204	18	<10	48.3	27	11.0%	21.2	3.0	0.15
LM17205	20	<10	9.9	277	12.6%	22.2	2.0	0.25



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Method	MA102	MA101	MA102	MA102	MA101	MA102	MA102	MA102
Result Name	Co	Cr	Cs	Cu	Fe	Ga	Hf	In
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	10	0.1	1	100	0.2	0.2	0.05
LM17206	11	<10	27.4	179	7.20%	19.8	1.6	0.10
LM17206 Rpt	12	<10	27.7	184	7.55%	19.2	1.8	0.10
LM17207	12	<10	14.3	225	8.72%	23.2	1.6	0.15
LM17208	20	<10	75.1	165	13.1%	24.8	3.0	0.25
LM17213	15	<10	32.8	557	10.4%	17.0	2.4	0.20
LM17214	24	<10	15.6	821	12.1%	21.2	1.8	0.20
LM17215	40	<10	36.3	3900	13.1%	17.2	2.0	0.15
LM17216	24	<10	74.6	902	11.0%	19.6	2.0	0.15
LM17217	3	<10	7.2	274	1.63%	16.8	2.0	<0.05
LM17218	2	<10	6.9	51	1.34%	18.6	2.2	<0.05
LM17221	14	<10	9.9	261	10.9%	19.2	2.4	0.15
BLANK 2	<1	<10	<0.1	<1	<100	<0.2	<0.2	<0.05
LM17222	11	<10	8.0	180	9.83%	24.6	4.4	0.15
LM17232	45	<10	1.7	56	14.1%	27.4	3.8	0.15
LM17273	23	<10	21.1	143	5.78%	21.2	1.6	<0.05
LM17312	3	<10	33.6	20	9400	24.4	2.0	<0.05
LM17330	55	20	2.7	154	8.65%	20.0	1.6	0.10
LM17331	50	40	4.6	110	8.96%	20.0	1.0	0.10
LM17332	47	40	4.1	108	9.31%	19.8	1.6	0.10
Std Nominal	4	30	0.7	3	1.57%	11.0	1.6	<0.05
Determined	4	40	0.7	4	1.59%	11.0	1.4	<0.05
LM17333	52	40	3.5	142	9.31%	20.4	1.6	0.10
LM17334	57	50	2.2	158	9.40%	20.8	1.6	0.10
LM17335	56	70	1.0	187	9.66%	20.0	1.6	<0.05
LM17353	45	120	3.1	81	9.40%	18.4	0.8	0.10
LM17378	4	20	7.5	10	2.48%	12.8	4.4	<0.05
LM17391	54	130	1.4	195	8.48%	18.4	1.4	0.10
LM17399	7	40	6.4	15	2.66%	15.0	3.6	<0.05
LM17406	63	<10	1.7	114	13.9%	25.0	2.4	0.10
LM17417	64	<10	1.2	146	13.7%	25.2	2.2	0.10
LM17423	23	<10	10.9	103	7.62%	13.0	1.2	0.10
LM17427	71	<10	1.8	66	15.1%	26.8	2.2	0.15
Std Nominal	16	90	9.6	7550	5.80%	23.0	2.0	0.60
Determined	18	110	9.7	7550	5.70%	23.0	2.8	0.60
LM17446	63	<10	0.6	146	14.0%	24.6	1.8	0.15
PG044184	37	<10	0.5	28	11.4%	35.6	2.6	0.15
PG044185	10	70	2.5	154	19.4%	10.0	<0.2	<0.05
PG044185 Rpt	11	70	2.5	154	19.7%	10.0	<0.2	<0.05
PG044187	3	40	<0.1	5	2.18%	1.4	<0.2	<0.05
PGO44186	9	40	15.8	115	21.6%	3.0	0.2	<0.05
PGRCSS22001	52	150	0.9	88	8.65%	20.6	1.2	0.10



Reference: aa055519.c Order Number: E0557 Page 6 of 24

Method	MA102	MA101	MA102	MA102	MA101	MA102	MA102	MA102
Result Name	Co	Cr	Cs	Cu	Fe	Ga	Hf	In
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	10	0.1	1	100	0.2	0.2	0.05
PGRCSS22002	10	20	1.0	8	9.75%	39.6	3.4	0.25
PGRCSS22003	3	20	<0.1	5	6.94%	44.4	4.6	0.10
PGRCSS22004	6	<10	0.7	19	5.96%	33.0	4.0	<0.05
PGRCSS22006	5	20	0.3	31	5.94%	40.4	1.0	0.10
PGRCSS22007	2	40	<0.1	11	4.38%	1.6	<0.2	<0.05
PGRCSS22008	31	110	0.3	96	6.54%	26.6	0.6	0.10
PGRCSS22009	17	70	8.8	15	5.12%	33.8	3.2	<0.05
PGRCSS22010	4	40	0.6	31	5.88%	31.6	0.8	0.25
PGRCSS22010 Rpt	4	40	0.5	31	5.83%	31.0	0.6	0.25
PGRCSS22011	4	20	0.3	13	4.61%	20.2	0.4	0.10
PGRCSS22012	15	70	20.4	12	5.30%	33.0	3.6	<0.05
Std Nominal	16	90	12.2	2600	4.54%	19.6	2.6	0.20
Determined	16	90	11.7	2620	4.55%	21.0	3.0	0.20



Reference: aa055519.c Order Number: E0557 Page 7 of 24

Method	MA101	MA101	MA101	MA101	MA102	MA101	MA102	MA101
Result Name	K	Li	Mg	Mn	Mo	Na	Nb	Ni
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	100	10	100	2	0.5	100	0.5	2
BLANK 1	<100	<10	<100	<2	<0.5	<100	<0.5	<2
LM17006	3.91%	30	8200	332	1.0	6800	13.0	28
LM17031	3.71%	30	9600	404	1.5	3000	9.0	28
LM17032	4.36%	30	1.15%	410	<0.5	3300	16.5	38
LM17047	2.22%	10	4500	250	1.0	9800	11.5	14
LM17069	4.49%	40	1.12%	348	<0.5	2900	24.0	42
LM17071	3.13%	30	8200	332	1.0	5100	13.5	26
LM17079	1.84%	20	4000	292	<0.5	1.10%	10.0	12
LM17080	1.84%	20	4900	252	1.0	1.04%	9.5	14
LM17087	2.79%	20	5300	238	<0.5	1.17%	10.0	18
LM17088	2.07%	20	4000	344	1.0	1.31%	8.5	14
LM17119	3.05%	30	4000	216	<0.5	1.18%	10.0	14
LM17127	7000	20	6100	250	1.0	3.40%	11.0	20
LM17127 Rpt	7000	20	6000	246	1.0	3.33%	11.5	18
LM17128	6200	20	1.77%	732	1.0	2.89%	11.0	44
LM17129	5500	30	3.91%	1610	1.0	1.33%	11.0	74
LM17130	2300	20	4.67%	1630	1.5	1.42%	4.5	98
LM17131	2100	20	4.73%	1530	1.5	1.39%	7.5	98
LM17132	3200	20	3.97%	1640	1.0	1.30%	4.5	78
LM17133	2300	20	4.32%	1730	1.5	1.32%	5.5	82
Std Nominal	6800	20	2000	224	4.5	4600	7.0	60
Determined	6800	20	2000	224	4.5	4600	7.0	62
LM17153	2.93%	40	5100	280	1.0	1.18%	10.0	16
LM17167	5700	40	3.18%	1900	1.0	1.45%	10.0	46
LM17168	5800	60	3.09%	1970	1.0	1.55%	7.5	44
LM17180	4300	70	1.29%	2050	1.5	2.02%	8.5	10
LM17181	4200	80	7300	2040	1.5	1.61%	8.5	<2
LM17182	3400	70	7500	2620	1.0	1.51%	10.0	<2
LM17183	3500	190	2.32%	1860	4.0	1.31%	10.0	4
LM17184	2500	60	5700	2060	1.5	1.47%	9.5	<2
LM17185	3000	50	2900	2390	1.0	1.91%	11.0	<2
LM17186	2500	60	2700	2000	1.0	1.87%	12.5	<2
LM17187	2500	50	2800	2110	1.5	1.77%	11.5	<2
LM17188	2700	50	2500	2210	1.5	1.61%	12.0	<2
LM17189	3300	80	7100	2190	1.5	1.50%	13.5	<2
Std Nominal	2.35%		1.77%	1180	54.0	1.30%		74
Determined	2.35%	<10	1.77%	1180	52.0	1.30%	5.5	74
LM17193	2600	60	3600	1900	1.0	1.30%	9.0	<2
LM17203	3200	80	4800	2190	1.5	1.73%	12.5	<2
LM17204	2900	60	3900	2010	1.5	2.04%	17.0	<2
LM17205	2700	60	6300	2070	1.5	1.69%	12.5	<2



Reference: aa055519.c Order Number: E0557 Page 8 of 24

Method	MA101	MA101	MA101	MA101	MA102	MA101	MA102	MA101
Result Name	K	Li	Mg	Mn	Mo	Na	Nb	Ni
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	100	10	100	2	0.5	100	0.5	2
LM17206	7700	60	3400	1480	1.0	2.70%	23.0	<2
LM17206 Rpt	7800	60	3500	1550	1.5	2.80%	23.0	4
LM17207	1.39%	50	3000	1780	1.5	1.67%	23.0	<2
LM17208	5900	170	1.22%	2220	1.0	1.64%	14.0	<2
LM17213	3100	50	5300	1710	1.5	1.64%	12.5	<2
LM17214	4200	90	5900	2120	1.5	1.54%	14.0	<2
LM17215	8100	100	3400	1790	1.0	1.75%	28.5	<2
LM17216	6200	80	2900	1910	3.0	2.01%	22.5	<2
LM17217	2600	20	600	450	1.0	4.38%	26.0	<2
LM17218	2800	<10	200	980	1.5	5.59%	47.0	<2
LM17221	2300	50	1700	1880	1.0	1.91%	17.0	<2
BLANK 2	<100	<10	<100	<2	<0.5	<100	<0.5	<2
LM17222	2200	40	1600	1830	1.5	1.81%	14.5	<2
LM17232	4000	50	1.07%	2270	1.5	1.24%	10.5	<2
LM17273	1.88%	30	1.11%	1040	1.0	2.89%	26.5	22
LM17312	1.98%	30	800	356	1.0	4.27%	62.5	4
LM17330	4900	20	3.56%	1530	1.5	1.61%	11.0	76
LM17331	4900	90	4.76%	1110	1.0	1.35%	5.0	78
LM17332	6300	60	4.33%	1310	1.0	1.50%	8.5	76
Std Nominal	2.59%	<10	2300	780	7.0	2300	7.5	8
Determined	2.58%	<10	2400	768	7.0	2300	8.0	10
LM17333	6700	60	4.44%	1480	1.5	1.76%	7.5	80
LM17334	5800	20	4.28%	1650	1.5	1.77%	8.0	90
LM17335	3900	10	4.00%	1700	2.0	1.78%	9.0	84
LM17353	7200	80	5.59%	1270	1.0	2.07%	4.5	110
LM17378	2.70%	40	3600	260	1.0	1.09%	8.5	16
LM17391	1300	20	3.64%	1470	1.5	1.43%	4.5	92
LM17399	1.94%	40	5700	316	<0.5	1.01%	9.0	22
LM17406	3500	10	2.53%	2110	1.0	1.68%	7.5	24
LM17417	4000	10	2.47%	2080	1.5	1.69%	8.0	28
LM17423	1900	10	8000	1260	1.5	8800	6.0	4
LM17427	3000	10	2.09%	2320	1.5	1.68%	7.5	6
Std Nominal	3.10%	30	1.70%	600	274		16.0	50
Determined	3.14%	30	1.64%	602	289	2.20%	16.0	50
LM17446	2800	20	2.53%	2260	1.5	1.74%	8.0	26
PG044184	1800	<10	1.24%	1680	2.0	1500	9.5	8
PG044185	2100	<10	700	158	1.5	<100	1.0	18
PG044185 Rpt	2100	<10	700	164	1.0	<100	0.5	18
PG044187	200	<10	1500	276	1.5	600	0.5	14
PGO44186	2200	<10	600	156	1.5	200	3.0	48
PGRCS22001	4600	20	3.66%	1500	<0.5	1.73%	5.5	90



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Method	MA101	MA101	MA101	MA101	MA102	MA101	MA102	MA101
Result Name	K	Li	Mg	Mn	Mo	Na	Nb	Ni
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	100	10	100	2	0.5	100	0.5	2
PGRCSS22002	8300	10	3000	1480	1.0	7400	16.5	8
PGRCSS22003	400	<10	300	840	1.5	<100	16.0	<2
PGRCSS22004	600	<10	1000	536	<0.5	700	13.5	6
PGRCSS22006	300	<10	2900	864	<0.5	200	5.5	10
PGRCSS22007	200	<10	<100	458	2.5	200	3.0	8
PGRCSS22008	900	<10	2.40%	1240	<0.5	1.13%	3.0	58
PGRCSS22009	4.83%	40	1.13%	570	<0.5	3600	12.5	56
PGRCSS22010	300	<10	600	716	<0.5	<100	1.5	4
PGRCSS22010 Rpt	200	<10	500	706	<0.5	<100	1.5	4
PGRCSS22011	400	<10	800	662	23.0	<100	1.5	4
PGRCSS22012	4.24%	60	1.07%	374	0.5	3800	26.5	50
Std Nominal	3.14%	30	1.48%	546	99.0	2.08%	18.0	42
Determined	3.11%	30	1.47%	572	95.0	2.05%	18.0	44



Reference: aa055519.c Order Number: E0557 Page 10 of 24

Method	MA101	MA102	MA102	MA102	MA101	MA102	MA101	MA102
Result Name	P	Pb	Rb	Re	S	Sb	Sc	Se
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	50	1	0.2	0.1	50	0.1	1	5
BLANK 1	<50	<1	<0.2	<0.1	100	<0.1	<1	<5
LM17006	500	15	298	<0.1	<50	0.3	11	<5
LM17031	550	125	286	<0.1	<50	0.3	12	<5
LM17032	550	67	344	<0.1	100	0.2	14	<5
LM17047	550	13	154	<0.1	100	0.2	5	<5
LM17069	500	25	364	<0.1	100	<0.1	15	<5
LM17071	600	26	243	<0.1	<50	<0.1	9	<5
LM17079	500	9	144	<0.1	400	0.2	5	<5
LM17080	500	5	142	<0.1	750	0.3	7	<5
LM17087	600	17	190	<0.1	550	0.3	7	<5
LM17088	700	18	132	<0.1	150	0.9	5	<5
LM17119	600	19	189	<0.1	<50	<0.1	5	<5
LM17127	500	6	34.8	<0.1	<50	0.2	8	<5
LM17127 Rpt	500	7	34.4	<0.1	<50	0.2	8	<5
LM17128	300	5	42.6	<0.1	300	0.4	22	<5
LM17129	250	3	87.8	<0.1	1500	2.8	47	<5
LM17130	100	3	16.0	<0.1	1100	1.0	48	<5
LM17131	<50	2	13.6	<0.1	1150	0.9	48	<5
LM17132	<50	2	31.0	<0.1	2450	1.0	46	<5
LM17133	<50	3	15.2	<0.1	1400	1.2	49	<5
Std Nominal	550	1020	27.6	<0.1	2.12%	79.0	4	30
Determined	600	1070	27.0	<0.1	2.12%	76.1	5	30
LM17153	600	19	206	<0.1	100	1.6	7	<5
LM17167	200	10	151	<0.1	250	1.4	48	<5
LM17168	300	5	143	<0.1	900	1.0	51	<5
LM17180	700	16	75.4	<0.1	6800	1.0	35	<5
LM17181	1100	13	46.0	<0.1	1.52%	0.5	28	5
LM17182	1150	15	34.2	<0.1	6600	0.5	37	<5
LM17183	1700	32	59.4	<0.1	5750	0.6	33	10
LM17184	1800	16	13.6	<0.1	9500	0.4	24	5
LM17185	1800	12	24.8	<0.1	650	0.4	25	<5
LM17186	1650	15	13.6	<0.1	5700	0.4	24	<5
LM17187	1800	13	11.0	<0.1	2200	0.4	23	<5
LM17188	1400	11	13.8	<0.1	550	0.4	25	<5
LM17189	1400	55	28.4	<0.1	4450	0.6	28	5
Std Nominal	600	521	561		2.01%	12.0	15	
Determined	600	494	561	<0.1	2.01%	12.5	16	<5
LM17193	1950	10	13.8	<0.1	1150	0.4	30	<5
LM17203	1400	12	99.8	<0.1	3100	0.3	30	<5
LM17204	1200	12	91.8	<0.1	1400	0.3	24	<5
LM17205	1300	15	27.0	<0.1	1.15%	0.3	29	<5



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Method	MA101	MA102	MA102	MA102	MA101	MA102	MA101	MA102
Result Name	P	Pb	Rb	Re	S	Sb	Sc	Se
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	50	1	0.2	0.1	50	0.1	1	5
LM17206	1450	30	323	<0.1	9000	0.2	15	<5
LM17206 Rpt	1500	32	332	<0.1	9400	0.3	16	<5
LM17207	2000	24	385	<0.1	8650	0.8	18	<5
LM17208	1350	12	146	<0.1	2550	0.3	27	<5
LM17213	1550	11	67.6	<0.1	1.45%	0.2	22	5
LM17214	2400	13	88.2	<0.1	2.27%	0.3	22	10
LM17215	4450	16	237	<0.1	4.63%	0.4	19	10
LM17216	2100	13	257	<0.1	2.69%	0.4	15	5
LM17217	750	13	102	<0.1	3100	0.2	<1	<5
LM17218	1000	5	108	<0.1	1200	0.2	<1	<5
LM17221	1050	14	31.8	<0.1	1.35%	0.2	14	5
BLANK 2	<50	<1	<0.2	<0.1	100	<0.1	<1	<5
LM17222	950	19	20.4	<0.1	8250	0.4	17	<5
LM17232	700	12	22.6	<0.1	2200	0.4	49	<5
LM17273	2150	13	659	<0.1	950	0.3	21	<5
LM17312	5100	7	832	<0.1	250	0.2	2	<5
LM17330	100	10	55.6	<0.1	1000	0.8	42	<5
LM17331	100	2	38.4	<0.1	1100	0.6	42	<5
LM17332	100	2	48.0	<0.1	1150	0.6	43	<5
Std Nominal	100	18	88.0	<0.1	<50	<0.1	3	<5
Determined	150	17	88.0	<0.1	50	<0.1	3	<5
LM17333	150	15	58.8	<0.1	1500	0.7	42	<5
LM17334	150	7	46.8	<0.1	1200	0.9	45	<5
LM17335	<50	7	23.6	<0.1	1100	0.8	46	<5
LM17353	<50	2	54.2	<0.1	950	0.4	44	<5
LM17378	600	18	137	<0.1	<50	0.2	5	<5
LM17391	<50	5	9.2	<0.1	1600	1.2	43	<5
LM17399	500	32	126	<0.1	<50	0.2	7	<5
LM17406	500	4	17.0	<0.1	1500	0.7	50	<5
LM17417	600	3	20.2	<0.1	2000	0.5	49	<5
LM17423	850	4	17.6	<0.1	2200	0.4	27	<5
LM17427	550	10	10.6	<0.1	2400	0.4	53	<5
Std Nominal	1000	29	145		9250	0.9	14	5
Determined	1000	29	155	<0.1	9300	1.1	15	10
LM17446	450	22	13.4	<0.1	2450	0.7	49	<5
PG044184	800	7	6.8	<0.1	200	2.2	34	<5
PG044185	200	7	27.0	<0.1	150	0.5	<1	<5
PG044185 Rpt	200	7	28.4	<0.1	150	0.5	1	<5
PG044187	<50	<1	1.2	<0.1	100	<0.1	<1	<5
PGO44186	4600	17	18.8	<0.1	300	0.2	<1	<5
PGRCS22001	150	1	36.8	<0.1	100	0.5	42	<5



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Method	MA101	MA102	MA102	MA102	MA101	MA102	MA101	MA102
Result Name	P	Pb	Rb	Re	S	Sb	Sc	Se
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	50	1	0.2	0.1	50	0.1	1	5
PGRCSS22002	800	5	55.8	<0.1	150	2.9	21	<5
PGRCSS22003	1150	5	1.8	<0.1	200	4.1	13	<5
PGRCSS22004	600	7	3.6	<0.1	100	1.1	8	<5
PGRCSS22006	200	14	2.2	<0.1	200	3.2	15	<5
PGRCSS22007	<50	<1	1.4	<0.1	<50	0.3	<1	<5
PGRCSS22008	200	5	4.6	<0.1	<50	1.8	33	<5
PGRCSS22009	250	35	244	<0.1	50	<0.1	18	<5
PGRCSS22010	<50	7	1.8	<0.1	<50	1.3	24	<5
PGRCSS22010 Rpt	<50	6	1.2	<0.1	100	1.2	24	<5
PGRCSS22011	<50	13	2.0	<0.1	<50	0.9	21	<5
PGRCSS22012	200	33	276	<0.1	150	<0.1	18	<5
Std Nominal	1000	23	184	<0.1	3550	0.9	13	<5
Determined	1000	23	179	<0.1	3550	0.9	14	<5



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Method	MA102	MA102	MA102	MA102	MA102	MA101	MA102	MA102
Result Name	Sn	Sr	Ta	Te	Th	Ti	Tl	U
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.5	0.1	0.2	0.1	50	0.1	0.1
BLANK 1	<0.1	<0.5	0.1	<0.2	0.1	<50	<0.1	<0.1
LM17006	8.7	29.5	1.2	<0.2	20.6	2850	1.1	5.1
LM17031	9.1	22.5	1.2	<0.2	21.5	2850	0.8	6.0
LM17032	8.3	22.5	1.3	<0.2	20.3	3050	1.3	4.4
LM17047	6.7	47.0	1.4	<0.2	14.7	2150	0.8	3.9
LM17069	8.7	19.0	2.3	<0.2	20.4	3150	2.0	3.8
LM17071	7.9	26.5	1.6	<0.2	18.4	2650	1.3	4.0
LM17079	6.5	49.0	1.2	<0.2	12.9	2000	0.8	3.8
LM17080	6.5	44.0	1.2	<0.2	14.5	2050	0.7	4.1
LM17087	6.7	44.0	1.2	<0.2	15.1	2550	0.9	4.8
LM17088	6.0	68.0	1.0	<0.2	10.0	1750	0.7	2.8
LM17119	7.2	89.5	1.2	<0.2	13.8	2250	1.0	3.9
LM17127	1.6	50.5	1.2	<0.2	14.3	2300	0.2	2.8
LM17127 Rpt	1.7	55.0	1.3	<0.2	15.2	2250	0.2	3.2
LM17128	1.5	111	1.2	<0.2	14.9	3950	0.3	1.9
LM17129	1.4	270	0.9	<0.2	5.8	6900	0.5	0.4
LM17130	0.9	125	0.4	<0.2	1.1	5550	0.1	<0.1
LM17131	0.9	117	0.7	<0.2	1.3	4900	0.1	<0.1
LM17132	0.9	91.0	0.4	<0.2	0.7	6950	0.2	<0.1
LM17133	0.9	130	0.6	<0.2	1.0	6750	0.1	<0.1
Std Nominal	5.8	464		37.6	6.9	2100	1.7	2.5
Determined	5.8	473	0.7	37.6	7.3	2100	1.8	2.6
LM17153	7.2	104	1.3	<0.2	13.9	2300	1.2	3.8
LM17167	1.6	161	1.0	<0.2	4.0	7150	0.8	0.9
LM17168	1.8	136	3.0	<0.2	0.9	8400	0.7	0.3
LM17180	2.0	186	0.8	<0.2	1.1	8000	0.6	0.3
LM17181	1.8	126	0.7	<0.2	1.5	7300	0.5	0.5
LM17182	2.6	105	1.2	<0.2	1.3	9750	0.4	0.3
LM17183	2.7	74.0	0.8	<0.2	1.1	8500	0.5	0.4
LM17184	1.8	109	0.8	<0.2	1.1	6250	0.2	0.3
LM17185	1.6	129	0.8	<0.2	1.3	6100	0.1	0.3
LM17186	2.4	146	0.9	<0.2	1.4	6350	0.1	0.4
LM17187	2.2	147	1.0	<0.2	1.2	6100	0.1	0.3
LM17188	1.6	143	0.9	<0.2	1.5	5150	0.1	0.4
LM17189	2.4	137	1.5	<0.2	1.2	5900	0.3	0.7
Std Nominal		104				5100		
Determined	2.6	102	0.5	<0.2	2.5	5100	6.4	0.8
LM17193	1.8	115	0.7	<0.2	1.2	6250	0.2	0.3
LM17203	3.6	128	4.4	<0.2	1.1	8050	0.7	0.6
LM17204	2.6	117	10.5	<0.2	1.2	6550	0.7	1.3
LM17205	2.8	123	1.3	0.4	1.1	7600	0.3	0.4



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Method	MA102	MA102	MA102	MA102	MA102	MA101	MA102	MA102
Result Name	Sn	Sr	Ta	Te	Th	Ti	Tl	U
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.5	0.1	0.2	0.1	50	0.1	0.1
LM17206	10.6	69.5	10.5	<0.2	0.6	4200	1.6	3.7
LM17206 Rpt	10.7	73.5	11.3	<0.2	0.8	4300	1.8	3.9
LM17207	12.6	163	5.2	<0.2	1.1	4100	1.8	2.4
LM17208	3.5	90.0	2.4	<0.2	1.4	7250	1.1	0.6
LM17213	2.6	86.0	3.4	<0.2	1.1	5350	0.5	0.3
LM17214	3.4	120	2.1	0.4	1.2	6250	0.6	0.4
LM17215	5.9	107	11.8	1.0	1.1	4700	2.7	1.5
LM17216	6.1	103	10.9	0.6	1.1	3750	2.1	1.7
LM17217	2.2	57.5	26.8	0.6	1.5	150	0.5	3.6
LM17218	3.3	33.5	40.2	0.6	1.7	<50	0.5	12.2
LM17221	2.7	133	3.9	<0.2	1.3	3750	0.3	0.8
BLANK 2	<0.1	<0.5	<0.1	<0.2	<0.1	<50	<0.1	<0.1
LM17222	2.0	105	1.6	<0.2	3.4	3950	0.3	0.6
LM17232	1.6	141	1.8	<0.2	2.5	1.19%	0.4	0.6
LM17273	17.0	46.5	8.0	<0.2	0.9	3800	4.4	3.9
LM17312	32.0	24.5	20.0	<0.2	0.7	350	5.1	11.7
LM17330	1.3	121	1.6	<0.2	0.8	5750	0.3	0.2
LM17331	1.3	76.0	1.4	<0.2	0.3	6150	0.2	0.2
LM17332	0.9	84.5	1.1	<0.2	0.7	6600	0.2	<0.1
Std Nominal	0.7	124	0.6	<0.2	5.6	2400	0.4	39.6
Determined	0.8	128	0.6	<0.2	5.2	2350	0.5	39.7
LM17333	1.0	101	0.8	<0.2	1.4	6650	0.2	0.3
LM17334	0.9	123	1.0	<0.2	0.7	6550	0.2	<0.1
LM17335	0.9	118	1.3	<0.2	0.7	6500	0.1	<0.1
LM17353	0.8	66.5	0.7	<0.2	0.4	6150	0.2	<0.1
LM17378	6.3	75.5	1.1	<0.2	13.0	2250	0.8	3.3
LM17391	1.0	117	0.5	<0.2	2.6	5900	0.1	<0.1
LM17399	5.0	77.0	1.2	<0.2	9.2	2250	0.8	3.3
LM17406	1.5	117	0.7	<0.2	2.9	1.27%	0.2	0.2
LM17417	1.4	117	0.8	<0.2	1.1	1.29%	0.2	0.2
LM17423	1.6	88.5	0.5	<0.2	0.5	8150	0.2	0.2
LM17427	1.7	116	0.6	<0.2	0.9	1.65%	0.1	0.2
Std Nominal	11.0	364	0.9		14.0	4700	0.8	3.8
Determined	10.9	360	0.9	<0.2	14.0	4650	0.9	3.9
LM17446	1.5	96.5	0.6	<0.2	1.4	1.41%	0.1	0.2
PG044184	2.2	774	0.8	<0.2	1.2	1.19%	<0.1	0.6
PG044185	3.6	7.0	0.1	<0.2	0.6	200	0.2	2.4
PG044185 Rpt	3.6	7.0	<0.1	<0.2	0.5	200	0.3	2.4
PG044187	0.3	9.0	<0.1	<0.2	<0.1	200	<0.1	<0.1
PGO44186	0.9	18.0	0.4	<0.2	1.0	550	0.3	3.4
PGRCSS22001	0.9	130	0.6	<0.2	0.9	6450	0.3	<0.1



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Method	MA102	MA102	MA102	MA102	MA102	MA101	MA102	MA102
Result Name	Sn	Sr	Ta	Te	Th	Ti	Tl	U
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.5	0.1	0.2	0.1	50	0.1	0.1
PGRCSS22002	5.9	849	1.4	<0.2	6.2	5100	0.3	1.3
PGRCSS22003	4.4	3230	1.3	<0.2	7.7	4900	<0.1	2.0
PGRCSS22004	2.5	500	1.2	<0.2	7.5	2500	<0.1	1.6
PGRCSS22006	1.4	754	0.6	<0.2	1.0	1550	<0.1	<0.1
PGRCSS22007	0.4	13.0	0.1	<0.2	0.5	150	<0.1	<0.1
PGRCSS22008	0.8	282	0.3	<0.2	0.4	4500	<0.1	<0.1
PGRCSS22009	7.2	39.0	1.3	<0.2	16.6	3600	1.2	2.7
PGRCSS22010	2.7	237	0.2	<0.2	1.1	1150	<0.1	<0.1
PGRCSS22010 Rpt	2.6	230	0.2	<0.2	1.1	1150	<0.1	<0.1
PGRCSS22011	6.1	151	0.2	<0.2	0.4	450	<0.1	<0.1
PGRCSS22012	3.3	58.5	2.2	<0.2	18.0	3500	1.5	2.8
Std Nominal	5.6	338	1.4	<0.2	18.0	4650	0.9	4.9
Determined	5.7	330	1.5	<0.2	18.3	4800	1.0	4.8



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Method	MA101	MA102	MA102	MA102	MA101	MA102	MA102	MA102
Result Name	V	W	Y	Zn	Zr	La	Ce	Pr
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.1	2	2	0.1	0.1	0.05
BLANK 1	<5	<0.5	<0.1	<2	<2	<0.1	<0.1	<0.05
LM17006	50	7.5	13.3	82	108	43.4	94.7	9.50
LM17031	65	7.5	12.2	96	108	53.1	103	10.1
LM17032	70	8.5	9.7	118	78	44.8	97.8	9.90
LM17047	25	5.0	14.9	36	126	37.1	83.8	8.15
LM17069	80	8.5	11.4	118	86	57.2	107	10.5
LM17071	45	6.0	13.8	76	112	46.2	98.8	10.1
LM17079	25	59.5	16.0	46	118	34.1	77.0	7.70
LM17080	25	4290	18.7	30	112	34.1	75.1	7.90
LM17087	30	11.5	16.0	72	134	35.7	79.8	8.25
LM17088	25	6.5	14.2	38	88	29.7	65.5	6.75
LM17119	25	5.0	15.2	32	132	32.5	73.6	7.25
LM17127	50	7.0	10.8	46	116	35.5	82.5	8.10
LM17127 Rpt	50	8.0	11.1	50	114	36.4	80.5	8.05
LM17128	155	5.0	15.2	58	90	25.4	57.3	6.00
LM17129	310	4.0	22.3	96	32	5.3	13.0	2.00
LM17130	360	4.5	16.7	96	18	2.6	6.9	1.15
LM17131	275	4.0	17.0	104	12	2.6	6.9	1.10
LM17132	425	5.5	16.2	94	16	2.5	6.7	1.10
LM17133	415	6.0	19.9	128	16	3.3	8.6	1.40
Std Nominal	35	12.0	6.2	4190	80	16.3	32.1	3.75
Determined	35	12.0	6.3	4190	80	16.3	32.1	3.75
LM17153	35	6.0	16.2	94	126	34.9	78.6	7.70
LM17167	395	6.5	26.0	152	24	3.7	10.1	1.60
LM17168	445	4.5	24.9	124	28	3.4	9.2	1.45
LM17180	205	5.0	52.1	186	46	7.2	19.3	3.20
LM17181	20	4.5	55.1	174	64	9.6	23.8	3.60
LM17182	20	6.5	66.3	356	62	10.5	27.6	4.40
LM17183	20	4.5	143	240	62	11.1	38.9	7.80
LM17184	<5	6.5	74.1	232	56	10.5	28.3	4.50
LM17185	<5	4.5	78.4	188	58	11.5	30.6	4.85
LM17186	<5	5.5	86.1	166	64	12.9	34.6	5.50
LM17187	<5	4.5	80.7	164	66	12.2	31.9	5.00
LM17188	<5	3.5	85.0	170	66	14.6	37.0	5.70
LM17189	<5	5.0	88.5	444	60	18.0	42.1	6.30
Std Nominal	115		16.0	5190				
Determined	115	3.5	15.8	5190	82	10.6	21.8	2.65
LM17193	<5	3.5	77.2	160	70	11.5	29.5	4.65
LM17203	<5	4.5	68.8	182	50	9.7	26.0	4.10
LM17204	<5	3.5	65.8	152	56	9.5	25.2	3.90
LM17205	<5	3.5	71.5	164	58	10.6	27.9	4.40



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Method	MA101	MA102	MA102	MA102	MA101	MA102	MA102	MA102
Result Name	V	W	Y	Zn	Zr	La	Ce	Pr
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.1	2	2	0.1	0.1	0.05
LM17206	<5	2.5	34.1	176	40	4.7	12.3	1.95
LM17206 Rpt	<5	2.5	34.7	190	40	4.9	12.8	2.00
LM17207	<5	17.5	54.8	142	42	7.7	20.5	3.25
LM17208	<5	3.5	81.7	172	78	12.2	31.5	5.00
LM17213	<5	2.0	66.3	136	66	9.2	24.6	3.85
LM17214	<5	2.5	77.7	146	48	12.6	32.9	5.10
LM17215	10	3.5	68.7	100	50	10.9	29.1	4.70
LM17216	10	2.0	58.4	120	50	9.3	24.6	3.85
LM17217	<5	1.0	3.2	24	8	0.5	1.3	0.20
LM17218	<5	2.0	1.9	16	18	0.3	0.8	0.10
LM17221	<5	2.0	73.5	142	50	11.5	30.5	4.70
BLANK 2	<5	<0.5	<0.1	<2	<2	<0.1	<0.1	<0.05
LM17222	<5	2.5	66.3	162	48	10.7	25.6	4.60
LM17232	35	3.5	45.9	194	40	5.5	14.1	2.55
LM17273	310	3.5	8.3	94	10	1.0	2.6	0.50
LM17312	25	4.5	2.2	48	14	0.5	1.0	0.15
LM17330	290	2.0	18.4	130	18	3.1	7.5	1.35
LM17331	315	1.5	21.4	84	18	18.4	34.6	4.70
LM17332	330	2.0	19.1	90	18	12.9	25.3	3.60
Std Nominal	20		10.1	14		20.3	44.5	5.20
Determined	25	0.5	9.8	14	48	19.4	45.8	5.00
LM17333	305	2.0	21.2	146	18	10.3	20.9	3.05
LM17334	310	5.0	19.6	136	22	5.2	10.7	1.80
LM17335	335	2.0	18.7	134	22	3.1	7.6	1.35
LM17353	305	1.0	20.8	88	16	13.8	23.0	3.25
LM17378	25	2.0	14.4	34	176	30.2	65.5	7.45
LM17391	290	1.5	18.6	124	16	2.8	7.1	1.35
LM17399	35	2.0	10.7	54	134	28.7	58.7	6.70
LM17406	545	1.0	39.7	162	44	5.4	14.0	2.60
LM17417	560	1.0	36.8	176	42	5.2	13.4	2.55
LM17423	120	1.0	37.5	92	36	6.3	16.0	3.00
LM17427	400	1.0	44.0	202	52	5.6	14.6	2.80
Std Nominal	135	3.5	21.0	120	82	28.0	54.0	7.20
Determined	130	3.5	21.7	120	78	28.0	54.0	7.05
LM17446	510	1.0	38.1	254	44	5.2	13.3	2.45
PG044184	140	1.5	44.1	118	50	11.1	21.1	3.75
PG044185	105	0.5	13.1	22	6	24.3	28.0	6.50
PG044185 Rpt	110	0.5	13.4	24	6	24.4	28.9	6.55
PG044187	25	<0.5	0.4	12	<2	0.5	1.1	0.15
PGO44186	20	55.0	20.3	270	10	4.9	9.2	1.65
PGRCS22001	300	4.5	20.6	100	12	3.4	8.5	1.55



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Method	MA101	MA102	MA102	MA102	MA101	MA102	MA102	MA102
Result Name	V	W	Y	Zn	Zr	La	Ce	Pr
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.1	2	2	0.1	0.1	0.05
PGRCSS22002	25	1.0	86.0	140	80	23.0	60.1	8.70
PGRCSS22003	35	1.0	53.0	14	136	22.0	42.9	6.35
PGRCSS22004	30	1.5	77.5	24	94	22.6	57.0	7.70
PGRCSS22006	315	3.5	11.3	12	10	2.3	4.1	0.70
PGRCSS22007	10	0.5	1.2	26	<2	0.8	1.5	0.25
PGRCSS22008	290	1.5	17.0	66	12	3.3	7.6	1.35
PGRCSS22009	105	3.5	14.3	92	94	55.7	106	11.7
PGRCSS22010	360	1.0	10.9	12	18	5.1	11.0	1.50
PGRCSS22010 Rpt	375	1.0	10.5	12	18	4.6	10.4	1.35
PGRCSS22011	250	6980	6.7	10	10	5.3	11.0	1.45
PGRCSS22012	95	28.5	14.0	90	90	51.3	90.6	10.7
Std Nominal	120	3.5	24.6	88	76	33.0	68.0	7.90
Determined	125	4.0	24.4	92	80	34.4	68.6	8.40



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Method	MA102	MA102	MA102	MA102	MA102	MA102	MA102	MA102
Result Name	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.05	0.05	0.05	0.2	0.02	0.05	0.02	0.05
BLANK 1	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.02	<0.05
LM17006	33.3	6.20	1.00	5.2	0.62	3.20	0.48	1.40
LM17031	36.2	6.65	1.10	5.4	0.62	3.05	0.48	1.30
LM17032	35.3	6.45	1.15	5.2	0.56	2.60	0.40	1.05
LM17047	29.2	5.50	0.75	4.8	0.60	3.15	0.54	1.55
LM17069	38.3	6.85	1.25	5.2	0.60	2.85	0.46	1.20
LM17071	35.9	6.75	1.10	5.4	0.64	3.20	0.52	1.45
LM17079	26.9	5.20	0.75	4.8	0.60	3.45	0.60	1.70
LM17080	29.2	6.35	0.80	7.0	0.90	5.15	0.82	2.15
LM17087	29.8	5.65	0.75	4.8	0.64	3.45	0.62	1.80
LM17088	24.1	4.50	0.65	4.0	0.50	2.90	0.48	1.45
LM17119	25.7	5.05	0.70	4.4	0.58	3.10	0.56	1.70
LM17127	29.1	5.50	0.75	4.6	0.58	2.85	0.46	1.30
LM17127 Rpt	28.5	5.65	0.75	4.8	0.56	2.90	0.48	1.35
LM17128	22.2	4.55	0.75	4.2	0.56	3.20	0.60	1.75
LM17129	9.40	3.05	1.00	4.2	0.64	4.25	0.86	2.60
LM17130	5.95	2.15	0.80	3.0	0.46	3.05	0.64	1.95
LM17131	5.95	2.15	0.80	3.0	0.46	3.10	0.62	2.20
LM17132	5.95	1.95	0.75	3.0	0.46	3.10	0.62	1.95
LM17133	7.35	2.55	0.95	3.6	0.58	3.75	0.78	2.40
Std Nominal	13.5	2.40		2.2	0.26	1.30	0.24	0.65
Determined	13.6	2.55	0.65	2.2	0.26	1.40	0.22	0.65
LM17153	28.1	5.35	0.75	4.8	0.60	3.30	0.58	1.50
LM17167	8.50	2.95	1.10	4.4	0.72	4.80	1.02	3.05
LM17168	8.00	2.85	1.10	4.4	0.70	4.80	0.96	2.95
LM17180	16.3	5.40	1.80	8.2	1.24	8.45	1.78	5.40
LM17181	17.4	5.90	1.80	8.6	1.32	9.20	1.86	5.75
LM17182	22.4	7.50	2.30	10.8	1.72	11.6	2.38	7.20
LM17183	46.5	22.2	2.80	29.6	4.08	24.0	4.38	12.4
LM17184	23.3	8.00	2.35	12.0	1.82	12.2	2.54	7.70
LM17185	25.3	8.45	2.60	12.6	1.92	13.0	2.64	8.30
LM17186	27.9	9.30	2.80	13.4	2.12	14.1	2.92	9.25
LM17187	26.1	8.80	2.65	12.6	1.94	13.3	2.70	8.40
LM17188	29.0	9.55	2.85	13.4	2.08	14.4	3.00	9.25
LM17189	31.2	10.0	2.85	14.0	2.14	14.5	2.94	9.10
Std Nominal								
Determined	11.0	2.85	1.05	3.4	0.60	3.10	0.60	1.80
LM17193	23.5	7.90	2.35	11.6	1.84	12.5	2.58	8.00
LM17203	20.9	7.05	2.25	10.6	1.64	11.4	2.32	7.10
LM17204	20.4	6.85	2.15	10.2	1.60	10.9	2.28	7.25
LM17205	22.6	7.55	2.50	11.2	1.74	11.9	2.48	7.65



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Method	MA102	MA102	MA102	MA102	MA102	MA102	MA102	MA102
Result Name	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.05	0.05	0.05	0.2	0.02	0.05	0.02	0.05
LM17206	9.85	3.40	1.15	5.0	0.80	5.40	1.10	3.20
LM17206 Rpt	10.5	3.65	1.20	5.2	0.82	5.60	1.12	3.50
LM17207	16.6	5.65	2.05	8.4	1.32	9.00	1.86	5.90
LM17208	25.7	8.65	2.60	12.4	1.94	13.4	2.74	8.55
LM17213	20.0	7.10	2.20	10.4	1.62	11.0	2.28	7.15
LM17214	25.4	8.50	2.65	12.6	1.90	12.8	2.62	8.15
LM17215	23.9	7.90	2.30	11.4	1.68	11.3	2.30	7.00
LM17216	19.7	6.75	1.90	9.6	1.44	9.35	1.92	5.95
LM17217	1.05	0.40	0.20	0.6	0.08	0.50	0.10	0.30
LM17218	0.35	0.20	<0.05	<0.2	0.06	0.35	0.06	0.15
LM17221	23.9	7.95	2.35	11.0	1.72	11.9	2.48	7.90
BLANK 2	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.02	<0.05
LM17222	23.2	7.65	2.40	10.8	1.70	11.3	2.36	7.30
LM17232	13.4	4.75	1.75	7.0	1.14	7.65	1.62	5.00
LM17273	2.70	0.95	0.35	1.4	0.24	1.55	0.32	1.00
LM17312	0.70	0.35	<0.05	0.4	0.06	0.35	0.06	0.20
LM17330	7.10	2.45	0.85	3.6	0.54	3.60	0.74	2.30
LM17331	17.8	4.10	1.15	4.6	0.66	4.25	0.82	2.45
LM17332	14.5	3.70	1.00	4.2	0.62	3.80	0.80	2.35
Std Nominal	19.4	3.80		3.2	0.42		0.42	1.20
Determined	19.5	3.75	1.05	3.2	0.42	2.25	0.40	1.15
LM17333	12.5	3.45	1.05	4.4	0.68	4.40	0.80	2.55
LM17334	8.80	2.70	1.00	3.8	0.60	3.85	0.78	2.40
LM17335	7.20	2.35	0.90	3.6	0.54	3.65	0.74	2.30
LM17353	13.1	3.60	1.30	4.6	0.64	4.05	0.76	2.25
LM17378	27.1	5.35	0.65	4.6	0.58	3.05	0.54	1.65
LM17391	7.15	2.50	0.90	3.6	0.56	3.70	0.76	2.35
LM17399	24.1	4.40	0.80	3.8	0.46	2.40	0.46	1.50
LM17406	13.7	4.70	1.60	6.8	1.04	6.90	1.42	4.30
LM17417	13.5	4.55	1.55	6.4	1.00	6.55	1.36	4.10
LM17423	15.2	4.90	1.45	6.8	1.08	7.10	1.42	4.25
LM17427	14.9	5.15	1.75	7.4	1.14	7.70	1.58	4.85
Std Nominal	27.0	5.50	1.30	5.6		4.30	0.80	2.50
Determined	26.4	5.40	1.30	5.2	0.72	4.20	0.82	2.50
LM17446	13.2	4.55	1.60	6.6	1.00	6.80	1.38	4.15
PG044184	17.7	5.45	2.10	7.8	1.20	7.95	1.64	4.85
PG044185	24.3	4.65	0.95	4.2	0.54	2.65	0.48	1.30
PG044185 Rpt	24.2	4.60	0.95	4.2	0.54	2.75	0.48	1.35
PG044187	0.50	0.10	<0.05	<0.2	<0.02	0.10	<0.02	<0.05
PGO44186	7.35	2.00	0.45	2.8	0.42	2.80	0.60	1.95
PGRCSS22001	8.15	2.65	0.95	3.8	0.62	4.00	0.82	2.45



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Method	MA102	MA102	MA102	MA102	MA102	MA102	MA102	MA102
Result Name	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.05	0.05	0.05	0.2	0.02	0.05	0.02	0.05
PGRCSS22002	39.1	11.3	3.55	14.8	2.30	14.8	3.02	9.20
PGRCSS22003	27.9	7.65	2.75	9.8	1.44	9.10	1.92	6.05
PGRCSS22004	34.3	9.55	2.90	12.4	1.96	12.9	2.66	8.25
PGRCSS22006	3.10	0.80	0.80	1.4	0.22	1.40	0.36	1.25
PGRCSS22007	0.90	0.25	<0.05	<0.2	0.04	0.25	0.06	0.15
PGRCSS22008	6.75	2.15	0.95	3.0	0.48	3.25	0.68	2.05
PGRCSS22009	41.5	7.50	1.35	6.4	0.74	3.50	0.56	1.50
PGRCSS22010	5.95	1.15	1.60	1.6	0.22	1.45	0.34	1.25
PGRCSS22010 Rpt	5.50	1.05	1.55	1.4	0.22	1.40	0.34	1.20
PGRCSS22011	5.70	0.85	1.05	1.0	0.12	0.85	0.18	0.65
PGRCSS22012	37.8	6.95	1.30	5.4	0.70	3.25	0.54	1.55
Std Nominal	30.6	5.95	1.40	5.4	0.80	4.85	0.92	2.60
Determined	31.0	5.80	1.40	5.8	0.82	4.70	0.94	2.70



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Method	MA102	MA102	MA102	MA101	MA101
Result Name	Tm	Yb	Lu	MA_Run	MA_Seq
Units	ppm	ppm	ppm		
Detection Limit	0.05	0.05	0.02	1	1
BLANK 1	<0.05	<0.05	<0.02	203297	141
LM17006	0.20	1.30	0.20	203297	142
LM17031	0.20	1.15	0.20	203297	143
LM17032	0.15	1.05	0.16	203297	144
LM17047	0.25	1.40	0.20	203297	145
LM17069	0.15	1.10	0.20	203297	146
LM17071	0.20	1.40	0.20	203297	147
LM17079	0.25	1.55	0.22	203297	148
LM17080	0.30	1.65	0.22	203297	149
LM17087	0.25	1.60	0.22	203297	150
LM17088	0.20	1.30	0.20	203297	151
LM17119	0.20	1.45	0.20	203297	152
LM17127	0.15	1.30	0.18	203297	153
LM17127 Rpt	0.20	1.25	0.18	203297	154
LM17128	0.25	1.50	0.20	203297	155
LM17129	0.40	2.40	0.32	203297	156
LM17130	0.30	1.75	0.26	203297	157
LM17131	0.30	1.85	0.26	203297	158
LM17132	0.30	1.80	0.26	203297	159
LM17133	0.35	2.15	0.32	203297	160
Std Nominal	0.10	0.65	0.10		
Determined	0.10	0.70	0.10	203297	161
LM17153	0.25	1.45	0.20	203297	162
LM17167	0.45	2.80	0.42	203297	163
LM17168	0.45	2.80	0.42	203297	164
LM17180	0.80	4.90	0.74	203297	165
LM17181	0.85	5.25	0.82	203297	166
LM17182	1.05	6.50	0.94	203297	167
LM17183	1.65	9.90	1.38	203297	168
LM17184	1.10	6.90	0.98	203297	169
LM17185	1.20	7.25	1.06	203297	170
LM17186	1.35	8.30	1.24	203297	171
LM17187	1.25	7.90	1.16	203297	172
LM17188	1.35	8.60	1.30	203297	173
LM17189	1.30	8.35	1.22	203297	174
Std Nominal					
Determined	0.25	1.75	0.26	203297	175
LM17193	1.15	7.15	1.04	203297	176
LM17203	1.00	6.45	0.96	203297	177
LM17204	1.05	6.60	0.94	203297	178
LM17205	1.10	7.05	1.04	203297	179



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Method	MA102	MA102	MA102	MA101	MA101
Result Name	Tm	Yb	Lu	MA_Run	MA_Seq
Units	ppm	ppm	ppm		
Detection Limit	0.05	0.05	0.02	1	1
LM17206	0.50	3.05	0.44	203297	180
LM17206 Rpt	0.50	3.20	0.46	203297	181
LM17207	0.80	5.15	0.74	203297	182
LM17208	1.25	7.95	1.16	203297	183
LM17213	1.00	6.20	0.94	203297	184
LM17214	1.20	7.40	1.06	203297	185
LM17215	1.00	6.10	0.90	203297	186
LM17216	0.90	5.40	0.80	203297	187
LM17217	<0.05	0.25	0.04	203297	188
LM17218	<0.05	0.15	<0.02	203297	189
LM17221	1.15	7.20	1.08	203297	190
BLANK 2	<0.05	<0.05	<0.02	203297	191
LM17222	1.10	6.65	0.98	203297	192
LM17232	0.75	4.45	0.64	203297	193
LM17273	0.15	0.95	0.14	203297	194
LM17312	<0.05	0.15	<0.02	203297	195
LM17330	0.35	1.95	0.28	203297	196
LM17331	0.35	2.15	0.30	203297	197
LM17332	0.35	2.05	0.30	203297	198
Std Nominal	0.15	1.05	0.16		
Determined	0.20	1.05	0.18	203297	199
LM17333	0.35	2.25	0.32	203297	200
LM17334	0.35	2.15	0.30	203297	201
LM17335	0.30	1.95	0.28	203297	202
LM17353	0.30	1.85	0.26	203297	203
LM17378	0.20	1.30	0.20	203297	204
LM17391	0.35	1.95	0.28	203297	205
LM17399	0.15	1.05	0.18	203297	206
LM17406	0.60	3.75	0.54	203297	207
LM17417	0.60	3.60	0.52	203297	208
LM17423	0.60	3.75	0.54	203297	209
LM17427	0.70	4.05	0.58	203297	210
Std Nominal	0.40	2.30			
Determined	0.40	2.25	0.30	203297	211
LM17446	0.60	3.65	0.54	203297	212
PG044184	0.70	4.35	0.62	203297	213
PG044185	0.15	0.95	0.14	203297	214
PG044185 Rpt	0.15	0.95	0.14	203297	215
PG044187	<0.05	<0.05	<0.02	203297	216
PGO44186	0.30	1.70	0.24	203297	217
PGRCS22001	0.35	2.25	0.34	203297	218



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Method	MA102	MA102	MA102	MA101	MA101
Result Name	Tm	Yb	Lu	MA_Run	MA_Seq
Units	ppm	ppm	ppm		
Detection Limit	0.05	0.05	0.02	1	1
PGRCSS22002	1.30	8.05	1.20	203297	219
PGRCSS22003	0.85	5.55	0.92	203297	220
PGRCSS22004	1.25	7.50	1.02	203297	221
PGRCSS22006	0.20	1.35	0.24	203297	222
PGRCSS22007	<0.05	0.15	<0.02	203297	223
PGRCSS22008	0.30	1.75	0.26	203297	224
PGRCSS22009	0.20	1.30	0.20	203297	225
PGRCSS22010	0.20	1.45	0.28	203297	226
PGRCSS22010 Rpt	0.20	1.35	0.26	203297	227
PGRCSS22011	0.10	0.85	0.20	203297	228
PGRCSS22012	0.20	1.30	0.20	203297	229
Std Nominal	0.35	2.50	0.38		
Determined	0.40	2.50	0.38	203297	230

These results pertain to the samples as received at this laboratory.
Where standards are reported, the nominal value for the element is reported above the result found.

"NR" Implies result is not required for this determination

"%" Implies this result reported in %

Sample Storage

The excess material (Residue) will be dumped after 30 days

The pulp samples (Pulp) will be held after 60 days as per instructions.

Sample Preparation

No sample preparation was required on these samples.

Digest and Analysis:

The sample(s) have been digested and refluxed with a mixture of Acids, including: Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. This extended digest approaches a total digest for many elements however, some refractory minerals are not completely attacked.

Al,Ba,Ca,Cr,Fe,K,Li,MA_Run,MA_Seq,Mg,Mn,Na,Ni,P,S,Sc,Ti,V,Zr

have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry.

Ag,As,Be,Bi,Cd,Ce,Co,Cs,Cu,Dy,Er,Eu,Ga,Gd,Hf,Ho,In,La,Lu,Mo,Nb,Nd,Pb,Pr,Rb,Re,Sb,Se,Sm,Sn,Sr,Ta,Tb,Te,Th,Tl,Tm,U,W,Y,Yb,Zn

have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry.