

Customer: **HPQ Silicon Resources** P.O.#
3000, Omer-Lavallée St, Montréal,, Québec H1Y 3R8 Canada

Date: 14-Dec-16

Job # S0GVB860

Customer ID: **Si**

Sample ID: S161208043

Test # 24-1

[Rev: 2016-12-15 13:41:23]

Element	Concentration [ppm wt]	Element	Concentration [ppm wt]
Li	< 0.05	Ag	< 0.1
Be	< 0.01	Cd	< 0.5
B	7.5	In	Binder
F	< 5	Sn	< 0.5
Na	0.90	Sb	< 0.1
Mg	4.8	Te	< 0.1
Al	200	I	< 5
Si	Matrix	Cs	< 5
P	150	Ba	0.37
S	0.60	La	< 5
Cl	6.6	Ce	0.32
K	4.8	Pr	< 0.05
Ca	60	Nd	< 0.05
Sc	< 0.05	Sm	< 0.05
Ti	30	Eu	< 0.1
V	6.1	Gd	< 0.05
Cr	2.7	Tb	< 0.05
Mn	2.6	Dy	< 0.05
Fe	260	Ho	< 0.05
Co	0.16	Er	< 0.05
Ni	0.72	Tm	< 0.05
Cu	3.9	Yb	< 0.05
Zn	< 0.1	Lu	< 0.05
Ga	< 0.1	Hf	< 0.05
Ge	2.9	Ta	< 100
As	< 0.1	W	1.5
Se	< 0.5	Re	< 0.05
Br	< 0.5	Os	< 0.05
Rb	0.90	Ir	< 0.05
Sr	0.80	Pt	< 0.1
Y	< 0.05	Au	< 2
Zr	3.2	Hg	< 0.1
Nb	< 0.05	Tl	< 0.05
Mo	< 0.05	Pb	< 0.5
Ru	< 0.05	Bi	< 0.05
Rh	< 0.05	Th	< 0.01
Pd	< 0.1	U	< 0.01

TMI = 751.37 [ppm wt]

ISO 17025



Testing Cert. #2797.03

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Analyzed according to WI F rev. 12/06/12

Reviewed by _____

J.RUSH (Analyst)

Customer: **HPQ Silicon Resources** P.O.#
3000, Omer-Lavallée St, Montréal,, Québec H1Y 3R8 Canada

Date: 14-Dec-16

Job # S0GVB860

Customer ID: **Si**

Sample ID: S161208044

Test #24-2

[Rev: 2016-12-15 13:41:32]

Element	Concentration [ppm wt]	Element	Concentration [ppm wt]
Li	< 0.05	Ag	< 0.1
Be	< 0.01	Cd	< 0.5
B	8.3	In	Binder
F	< 5	Sn	< 0.5
Na	1.4	Sb	< 0.1
Mg	11	Te	< 0.1
Al	420	I	< 5
Si	Matrix	Cs	< 5
P	150	Ba	1.6
S	0.25	La	< 5
Cl	1.4	Ce	0.50
K	18	Pr	< 0.05
Ca	250	Nd	< 0.05
Sc	< 0.05	Sm	< 0.05
Ti	46	Eu	< 0.1
V	7.4	Gd	< 0.05
Cr	3.0	Tb	< 0.05
Mn	2.7	Dy	< 0.05
Fe	330	Ho	< 0.05
Co	0.19	Er	< 0.05
Ni	1.5	Tm	< 0.05
Cu	3.9	Yb	< 0.05
Zn	< 0.1	Lu	< 0.05
Ga	< 0.1	Hf	< 0.05
Ge	2.6	Ta	< 100
As	< 0.1	W	0.98
Se	< 0.5	Re	< 0.05
Br	< 0.5	Os	< 0.05
Rb	2.0	Ir	< 0.05
Sr	3.9	Pt	< 0.1
Y	< 0.05	Au	< 2
Zr	4.5	Hg	< 0.1
Nb	< 0.05	Tl	< 0.05
Mo	< 0.05	Pb	< 0.5
Ru	< 0.05	Bi	< 0.05
Rh	< 0.05	Th	0.03
Pd	< 0.1	U	< 0.01

TMI = 1271.15 [ppm wt]

ISO 17025



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J.RUSH (Analyst)

Customer: **HPQ Silicon Resources** P.O.#
3000, Omer-Lavallée St, Montréal,, Québec H1Y 3R8 Canada

Date: 14-Dec-16

Job # S0GVB860

Customer ID: **Si**

Sample ID: S161208045

Test #24-3

[Rev: 2016-12-15 13:41:44]

Element	Concentration [ppm wt]	Element	Concentration [ppm wt]
Li	< 0.05	Ag	< 0.1
Be	< 0.01	Cd	< 0.5
B	9.8	In	Binder
F	< 5	Sn	< 0.5
Na	3.1	Sb	< 0.1
Mg	5.7	Te	< 0.1
Al	97	I	< 5
Si	Matrix	Cs	< 5
P	160	Ba	< 0.05
S	0.25	La	< 5
Cl	3.4	Ce	0.30
K	18	Pr	< 0.05
Ca	36	Nd	< 0.05
Sc	< 0.05	Sm	< 0.05
Ti	18	Eu	< 0.1
V	1.2	Gd	< 0.05
Cr	1.8	Tb	< 0.05
Mn	1.3	Dy	< 0.05
Fe	180	Ho	< 0.05
Co	0.12	Er	< 0.05
Ni	0.70	Tm	< 0.05
Cu	1.6	Yb	< 0.05
Zn	< 0.1	Lu	< 0.05
Ga	< 0.1	Hf	< 0.05
Ge	5.9	Ta	< 100
As	< 0.1	W	0.37
Se	< 0.5	Re	< 0.05
Br	< 0.5	Os	< 0.05
Rb	0.77	Ir	< 0.05
Sr	0.27	Pt	< 0.1
Y	< 0.05	Au	< 2
Zr	1.7	Hg	< 0.1
Nb	< 0.05	Tl	< 0.05
Mo	< 0.05	Pb	< 0.5
Ru	< 0.05	Bi	< 0.05
Rh	< 0.05	Th	< 0.01
Pd	< 0.1	U	< 0.01

TMI = 547.28 [ppm wt]

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J.RUSH (Analyst)