Appendix; Indicator mineral counts; data listing

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
A02	168	0	0	0	0	20.5	0	0	0	0
A03	68	0	0	0	0	25.7	0	0	0	0
A04	35	0	0	0	0	17.6	0	0	0	0
A05	38	0	0	0	0	24.9	0	0	0	0
A06	209	2	1	0	1	26.1	96	81	0	14
A07	255	0	0	0	0	32.9	0	0	0	0
A08	119	3	3	0	0	25.6	85	85	0	0
A09	241	1	1	0	0	34.4	6	6	0	0
A10	133	4	4	0	0	34.8	19	19	0	0
A11	5	4	4	0	0	40.9	17	17	0	0
A12	126	1	1	0	0	35.5	5	5	0	0
A13	137	0	0	0	0	5.5	0	0	0	0
B02	118	1	1	0	0	18.2	4	4	0	0
B03	82	4	4	0	0	27.6	58	58	0	0
B04	91	1	1	0	0	26.8	14	14	0	0
B05	240	1	1	0	0	40.4	16	16	0	0
B06	153	1	0	1	0	21.2	1	0	1	0
B07	233	0	0	0	0	8.6	0	0	0	0
B08	245	5	4	1	0	33.5	29	28	1	0
B09	98	2	2	0	0	18.1	650	650	0	0
B10	11	4	4	0	0	29.9	16	16	0	0
B11	56	1	1	0	0	37.5	27	27	0	0
B12	173	1	1	0	0	15.5	<1	<1	0	0
C02	189	1	0	0	1	29.8	6	0	0	6
C03	51	0	0	0	0	13.3	0	0	0	0
C04	6	2	1	1	0	31.4	12	<1	12	0
C05a	93	0	0	0	0	26.9	0	0	0	0
C05b	46	0	0	0	0	35.0	0	0	0	0
C06	237	0	0	0	0	30.4	0	0	0	0
C07	145	4	4	0	0	30.4	17	17	0	0
C08	136	4	4	0	0	18.0	161	161	0	0
C09	131	1	1	0	0	34.2	11	11	0	0
C10	210	1	0	1	0	52.9	<1	0	<1	0
C11	169	6	5	0	1	19.8	93	91	0	3
C12	166	7	4	3	0	21.9	155	151	4	0
D02	143	2	2	0	0	17.9	67	67	0	0
D03	149	5	5	0	0	16.6	21	21	0	0
D04	9	2	2	0	0	28.4	6	6	0	0
D05	106	0	0	0	0	37.9	0	0	0	0
D06	3	4	4	0	0	46.8	58	58	0	0
D07	14	8	7	1	0	21.4	151	150	1	0
D08	230	1	1	0	0	48.5	8	8	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
D09	139	2	2	0	0	20.4	28	28	0	0
D10	127	0	0	0	0	45.4	0	0	0	0
D11	39	2	2	0	0	33.8	107	107	0	0
D12	225	1	1	0	0	35.7	2	2	0	0
E02	92	1	1	0	0	18.8	1	1	0	0
E03	190	0	0	0	0	18.3	0	0	0	0
E04	186	1	1	0	0	32.9	1	1	0	0
E05	61	1	1	0	0	37.9	130	130	0	0
E06	12	2	1	1	0	17.5	9	5	5	0
E07	195	2	2	0	0	39.2	33	33	0	0
E08	113	3	3	0	0	22.9	83	83	0	0
E09	181	4	4	0	0	64.1	10	10	0	0
E10	101	4	3	1	0	58.7	25	19	6	0
E11	167	3	1	2	0	47.0	6	4	2	0
F02	185	2	2	0	0	21.8	18	18	0	0
F03	198	1	1	0	0	19.7	4	4	0	0
F04	211	2	2	0	0	47.4	3	3	0	0
F05	142	2	2	0	0	17.3	33	33	0	0
F06	57	0	0	0	0	41.6	0	0	0	0
F07	64	0	0	0	0	28.3	0	0	0	0
F08A	269	1	1	0	0	41.0	16	16	0	0
F08B	264	2	2	0	0	69.8	7	7	0	0
F09	229	0	0	0	0	42.8	0	0	0	0
F10	158	1	1	0	0	30.9	3	3	0	0
G02	125	0	0	0	0	30.5	0	0	0	0
G03	94	2	2	0	0	23.8	43	43	0	0
G04	163	3	2	1	0	23.6	14	12	2	0
G05	236	1	1	0	0	14.1	26	26	0	0
G06	90	3	3	0	0	19.8	7	7	0	0
G07	174	2	2	0	0	27.6	60	60	0	0
G08	193	0	0	0	0	26.7	0	0	0	0
G09	232	4	4	0	0	103.1	9	9	0	0
G10	22	1	1	0	0	164.8	1	1	0	0
H02	222	0	0	0	0	24.8	0	0	0	0
H03	179	0	0	0	0	10.6	0	0	0	0
H04	105	1	1	0	0	15.4	138	138	0	0
H05	124	2	2	0	0	27.1	10	10	0	0
H06	77	1	1	0	0	44.0	15	15	0	0
H07	170	5	5	0	0	36.1	49	49	0	0
H08	132	1	1	0	0	32.3	3	3	0	0
H09	271	0	0	0	0	264.3	0	0	0	0
H10	7	2	2	0	0	194.3	5	5	0	0
I02	34	1	1	0	0	19.3	10	10	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
I03	87	3	3	0	0	34.5	35	35	0	0
I04	165	2	2	0	0	27.7	46	46	0	0
I05	217	1	1	0	0	65.9	32	32	0	0
I06	13	4	4	0	0	50.3	13	13	0	0
I07	86	0	0	0	0	32.1	0	0	0	0
I08	73	3	3	0	0	76.0	7	7	0	0
I09	60	4	2	2	0	79.5	122	119	3	0
I10	155	3	3	0	0	48.5	4	4	0	0
J02	66	0	0	0	0	31.8	0	0	0	0
J03	47	2	2	0	0	13.5	3	3	0	0
J04	103	3	3	0	0	22.5	120	120	0	0
J05	226	3	3	0	0	46.2	49	49	0	0
J06	183	6	5	0	1	40.9	37	35	0	2
J07	204	40	39	1	0	160.8	67	67	<1	0
J08	107	3	3	0	0	73.7	10	10	0	0
J09	130	4	4	0	0	55.2	73	73	0	0
J10	20	2	1	0	1	53.4	4	4	0	<1
K02	273	3	2	1	0	38.1	41	15	27	0
K03	41	0	0	0	0	16.6	0	0	0	0
K04	250	0	0	0	0	13.7	0	0	0	0
K05	21	1	0	1	0	37.7	1	0	1	0
K06	261	1	1	0	0	169.9	4	4	0	0
K07	148	3	2	1	0	195.0	17	15	2	0
K08	121	7	7	0	0	317.5	4	4	0	0
K09	111	0	0	0	0	208.1	0	0	0	0
K10	228	0	0	0	0	63.2	0	0	0	0
L02	18	2	1	1	0	27.4	24	23	1	0
L03	251	4	4	0	0	34.7	35	35	0	0
L04	220	1	1	0	0	37.8	5	5	0	0
L05E	23	4	4	0	0	54.7	15	15	0	0
L05W	4	0	0	0	0	2.1	0	0	0	0
L06E	40	13	13	0	0	339.3	14	14	0	0
L06WA	218	2	2	0	0	47.4	82	82	0	0
L06WB	184	0	0	0	0	38.5	0	0	0	0
L07	44	9	7	2	0	126.4	18	16	2	0
L08	267	2	2	0	0	134.0	2	2	0	0
L09	19	3	1	2	0	237.0	1	1	<1	0
L10	99	0	0	0	0	275.5	0	0	0	0
L11	150	0	0	0	0	197.5	0	0	0	0
M02	78	0	0	0	0	15.5	0	0	0	0
M03	152	1	1	0	0	17.9	36	36	0	0
M04	248	0	0	0	0	18.6	0	0	0	0
M05	29	3	3	0	0	79.3	10	10	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
M06	49	3	3	0	0	94.6	6	6	0	0
M07	172	2	2	0	0	123.5	1	1	0	0
M08	128	2	2	0	0	66.0	6	6	0	0
M09	180	0	0	0	0	172.5	0	0	0	0
M10	188	0	0	0	0	156.7	0	0	0	0
M11	120	0	0	0	0	168.3	0	0	0	0
N03	215	0	0	0	0	17.2	0	0	0	0
N04	147	0	0	0	0	8.7	0	0	0	0
N05	138	2	2	0	0	60.7	92	92	0	0
N06	202	4	4	0	0	102.3	12	12	0	0
N07	16	8	8	0	0	188.4	27	27	0	0
N08	259	4	3	1	0	93.7	6	5	1	0
N09	32	4	4	0	0	59.1	96	96	0	0
N10	242	4	4	0	0	289.9	6	6	0	0
N11	266	0	0	0	0	81.3	0	0	0	0
N12	270	0	0	0	0	32.2	0	0	0	0
O03	177	1	0	1	0	34.6	11	0	11	0
O04	8	0	0	0	0	8.7	0	0	0	0
O05	272	7	6	1	0	102.0	30	20	10	0
O06	207	6	6	0	0	121.9	2	2	0	0
O07	182	11	11	0	0	262.8	108	108	0	0
O08	212	8	7	1	0	132.9	9	9	<1	0
O09	246	3	3	0	0	78.8	8	8	0	0
O10	162	3	3	0	0	95.8	11	11	0	0
O11	221	0	0	0	0	237.6	0	0	0	0
O12	65	0	0	0	0	59.3	0	0	0	0
P03	37	8	8	0	0	46.4	17	17	0	0
P04	28	4	4	0	0	11.7	193	193	0	0
P05	206	9	9	0	0	170.6	15	15	0	0
P06	268	16	15	1	0	106.4	22	22	<1	0
P07	48	12	7	3	2	83.8	50	44	6	1
P08	247	1	1	0	0	20.8	4	4	0	0
P09	154	4	4	0	0	139.7	25	25	0	0
P10	157	3	3	0	0	60.6	34	34	0	0
P11	123	1	1	0	0	392.8	5	5	0	0
P12	62	1	0	1	0	54.6	<1	0	<1	0
P13	10	0	0	0	0	275.1	0	0	0	0
Q02	72	0	0	0	0	5.6	0	0	0	0
Q03	200	2	2	0	0	35.1	21	21	0	0
Q03A	129	8	8	0	0	44.0	36	36	0	0
Q04	257	1	1	0	0	25.6	3	3	0	0
Q05	203	7	6	1	0	148.1	37	36	1	0
Q06	108	6	6	0	0	96.3	23	23	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
Q07	17	1	1	0	0	40.4	53	53	0	0
Q08	156	3	3	0	0	35.2	4	4	0	0
Q09	96	4	4	0	0	76.2	20	20	0	0
Q10	275	5	5	0	0	39.1	29	29	0	0
Q11	58	0	0	0	0	73.7	0	0	0	0
Q12	97	1	1	0	0	435.4	5	5	0	0
Q13	263	0	0	0	0	70.7	0	0	0	0
R02	253	0	0	0	0	2.4	0	0	0	0
R03	15	3	3	0	0	37.6	5	5	0	0
R04	199	7	7	0	0	46.5	40	40	0	0
R05	219	3	3	0	0	30.9	47	47	0	0
R06	164	2	2	0	0	21.9	10	10	0	0
R07	134	5	4	0	1	84.4	22	21	0	1
R08	24	0	0	0	0	12.6	0	0	0	0
R09	201	5	5	0	0	65.8	18	18	0	0
R10	151	3	3	0	0	20.4	32	32	0	0
R11	213	0	0	0	0	17.6	0	0	0	0
R12	194	1	1	0	0	595.5	<1	<1	0	0
R13	192	0	0	0	0	425.9	0	0	0	0
R14	171	1	1	0	0	705.2	<1	<1	0	0
R15	74	1	1	0	0	77.2	2	2	0	0
S01	75	0	0	0	0	38.4	0	0	0	0
S02	45	3	3	0	0	7.2	41	41	0	0
S03	112	3	2	1	0	58.4	5	2	3	0
S04	79	6	5	0	1	73.4	92	7	0	85
S05	89	2	2	0	0	34.5	8	8	0	0
S06	53	1	1	0	0	34.6	19	19	0	0
S07	224	2	2	0	0	23.1	5	5	0	0
S08	81	1	0	1	0	10.2	2	0	2	0
S09	249	1	1	0	0	8.5	10	10	0	0
S10	55	0	0	0	0	47.4	0	0	0	0
S11	84	5	3	2	0	6.1	4699	4684	15	0
S12	116	10	8	0	2	185.0	10	10	0	<1
S13	146	1	1	0	0	494.1	<1	<1	0	0
S14	80	1	1	0	0	165.9	30	30	0	0
S15	187	3	1	0	2	151.3	2	1	0	1
S16	256	0	0	0	0	32.8	0	0	0	0
T01	71	1	1	0	0	32.8	6	6	0	0
T02	144	3	3	0	0	25.3	19	19	0	0
T03	254	1	1	0	0	38.4	1	1	0	0
T04	265	4	4	0	0	51.9	10	10	0	0
T05	88	0	0	0	0	49.6	0	0	0	0
T06	140	7	6	0	1	81.1	84	84	0	<1

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
T07	117	2	2	0	0	32.9	12	12	0	0
T08	85	2	2	0	0	22.5	7	7	0	0
T09	67	0	0	0	0	13.3	0	0	0	0
T10	27	0	0	0	0	181.4	0	0	0	0
T11	33	6	6	0	0	21.6	81	81	0	0
T11-2	260	3	2	1	0	50.9	88	81	7	0
T12	216	4	4	0	0	86.2	22	22	0	0
T14	208	6	6	0	0	307.5	3	3	0	0
T15	59	1	1	0	0	403.7	1	1	0	0
T16	25	0	0	0	0	9.4	0	0	0	0
U02	235	4	4	0	0	55.9	7	7	0	0
U03	191	3	3	0	0	26.3	27	27	0	0
U04	83	1	1	0	0	53.8	4	4	0	0
U05	54	1	1	0	0	79.0	5	5	0	0
U08	234	0	0	0	0	16.0	0	0	0	0
U09	31	6	5	1	0	7.9	654	651	3	0
U10	135	5	3	2	0	36.1	11	5	6	0
U11	205	3	1	1	1	31.5	8445	6	2	8438
V02	70	1	1	0	0	40.5	5	5	0	0
V03	231	1	1	0	0	59.8	3	3	0	0
V04	50	0	0	0	0	55.6	0	0	0	0
V06	227	0	0	0	0	35.0	0	0	0	0
V07	36	3	3	0	0	22.8	45	45	0	0
V08	238	1	1	0	0	17.3	11	11	0	0
V09	178	12	5	3	4	101.9	33	8	22	2
W02	104	2	2	0	0	16.5	12	12	0	0
W03	102	0	0	0	0	24.0	0	0	0	0
W04	175	4	4	0	0	38.2	19	19	0	0
W05	100	4	4	0	0	67.4	40	40	0	0
W06	196	3	3	0	0	49.3	6	6	0	0
X01	43	2	2	0	0	28.7	10	10	0	0
X02	243	3	3	0	0	32.6	9	9	0	0
X03	274	2	2	0	0	26.4	41	41	0	0
X04	110	4	4	0	0	43.5	6	6	0	0
X05	244	0	0	0	0	18.9	0	0	0	0
Y05	42	7	7	0	0	77.6	16	16	0	0
Z01	109	0	0	0	0	29.9	0	0	0	0
Z02	160	0	0	0	0	45.5	0	0	0	0
Z03	223	1	1	0	0	30.9	33	33	0	0
Z04	141	1	1	0	0	68.1	9	9	0	0
Z05	161	0	0	0	0	113.4	0	0	0	0
Z06	176	1	1	0	0	3.2	663	663	0	0
Z07	63	1	1	0	0	73.6	9	9	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED

GOLD GRAIN SUMMARY SHEET

Sample Number		Number of Visible Gold Grains				Nonmag HMC Weight	Calculated PPB Visible Gold in HMC			
		Total	Reshaped	Modified	Pristine	(g)	Total	Reshaped	Modified	Pristine
Z08	258	2	2	0	0	749.8	1	1	0	0
Z09	239	2	2	0	0	267.8	8	8	0	0
Z10	26	2	2	0	0	68.8	2	2	0	0
Z11	262	1	1	0	0	168.9	2	2	0	0
Z12	76	4	4	0	0	115.4	11	11	0	0
Z13	159	8	7	1	0	199.1	28	27	1	0
Z14	52	17	13	4	0	179.8	23	21	2	0
Z15	30	6	6	0	0	156.8	3	3	0	0
Z16	214	0	0	0	0	26.9	0	0	0	0
Z17	252	3	2	1	0	71.5	13	8	5	0
Z18	69	0	0	0	0	366.6	0	0	0	0
Z19	122	0	0	0	0	1,636.5	0	0	0	0
Z20	115	1	1	0	0	354.0	<1	<1	0	0
96TCA18	114	15	11	0	4	84.6	12	11	0	1
96TCA19	197	20	15	0	5	67.9	72	67	0	5
96TCA23	95	6	5	0	1	87.2	22	22	0	<1

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-3	Yes	5 C	25	25	1			1			~1000 grains marcasite 25µ.
		10 C	25	75	1			1			No PGMs.
		13 C	25	100	1			1			
		22 C	75	150	1			1			
								4	46.8	58	
NA-01-4	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-5	Yes	3 C	15	15	2			2			No sulphides. No PGMs.
		5 C	25	25	1			1			
		15 C	50	100	1			1			
								4	40.9	17	
NA-01-6	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		13 C	25	100			1	1			
								2	31.4	12	
NA-01-7	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
		15 C	50	100	1			1			
								2	194.3	5	
NA-01-8	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-9	Yes	8 C	25	50	2			2			No sulphides. No PGMs.
								2	28.4	6	
NA-01-10	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-11	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	25	75	1			1			
		10 C	50	50	1			1			
								4	29.9	16	
NA-01-12	Yes	8 C	25	50	1		1	2			No sulphides. No PGMs.
								2	17.5	9	
NA-01-13	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	25	75	1			1			
		13 C	50	75	1			1			
								4	50.3	13	
NA-01-14	Yes	5 C	25	25	2		1	3			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	25	75	1			1			
		13 C	50	75	1			1			
		18 C	75	100	1			1			
		20 C	75	125	1			1			
								8	21.4	151	
NA-01-15	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		8 C	25	50	2			2			
								3	37.6	5	
NA-01-16	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	3			3			
		15 C	75	75	1			1			
		18 C	75	100	1			1			
		22 C	75	150	1			1			
								8	188.4	27	
NA-01-17	Yes	22 C	100	125	1			1			No sulphides. No PGMs.
								1	40.4	53	
NA-01-18	Yes	5 C	25	25			1	1			No sulphides. No PGMs.
		15 C	75	75	1			1			
								2	27.4	24	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-19	Yes	3 C	15	15		1		1			No sulphides. No PGMs.
		5 C	25	25		1		1			
		10 C	50	50	1			1			
								3	237.0	1	
NA-01-20	Yes	3 C	15	15			1	1			~200 grains marcasite 50µ.
		10 C	50	50	1			1			No PGMs.
								2	53.4	4	
NA-01-21	Yes	5 C	25	25		1		1			No sulphides. No PGMs.
								1	37.7	1	
NA-01-22	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	164.8	1	
NA-01-23	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	2			2			
		13 C	50	75	1			1			
								4	54.7	15	
NA-01-24	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-25	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-26	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
								2	68.8	2	
NA-01-27	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-28	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		8 C	25	50	1			1			
		22 C	100	125	1			1			
								4	11.7	193	
NA-01-29	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		13 C	50	75	2			2			
								3	79.3	10	
NA-01-30	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		7 C	15	50	2			2			
		5 C	25	25	1			1			
		8 C	25	50	1			1			
		10 C	50	50	1			1			
								6	156.8	3	
NA-01-31	Yes	5 C	25	25	2	1		3			No sulphides. No PGMs.
		8 C	25	50	1			1			
		22 C	100	125	1			1			
		25 C	125	125	1			1			
								6	7.9	654	
NA-01-32	Yes	10 C	25	75	1			1			No sulphides. No PGMs.
		13 C	50	75	2			2			
		50 M	100	125	1			1			
								4	59.1	96	
NA-01-33	Yes	8 C	25	50	2			2			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	2			2			
		15 C	50	100	1			1			
								6	21.6	81	
NA-01-34	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	19.3	10	
NA-01-36	Yes	10 C	25	75	2			2			No sulphides. No PGMs.
		15 C	75	75	1			1			
								3	22.8	45	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-37	Yes	7 C	15	50	2			2			No sulphides. No PGMs.
		5 C	25	25	2			2			
		8 C	25	50	3			3			
		13 C	50	75	1			1			
								8	46.4	17	
NA-01-42	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	25	75	2			2			
		10 C	50	50	4			4			
								7	77.6	16	
NA-01-43	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
								2	28.7	10	
NA-01-45	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	50	50	1			1			
								3	7.2	41	
NA-01-48	Yes	3 C	15	15			1	1			No sulphides. No PGMs.
		4 C	15	25		1		1			
		5 C	25	25	2			2			
		8 C	25	50	1	1	1	3			
		10 C	50	50	2			2			
		13 C	50	75		1		1			
		18 C	75	100	1			1			
		22 C	75	150	1			1			
								12	83.8	50	
NA-01-50	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-53	Yes	15 C	50	100	1			1			No sulphides. No PGMs.
								1	34.6	19	
NA-01-54	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
								1	79.0	5	
NA-01-55	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-58	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-59	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
								1	403.7	1	
NA-01-62	Yes	4 C	15	25		1		1			~50 grains pyrite 50µ.
								1	54.6	<1	No PGMs.
NA-01-67	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-70	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	40.5	5	
NA-01-71	Yes	10 C	25	75	1			1			No sulphides. No PGMs.
								1	32.8	6	
NA-01-72	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-74	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	77.2	2	
NA-01-75	Yes	NO VISIBLE GOLD									~1000 grains marcasite 50µ. No PGMs.
NA-01-79	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	50	50	2			2			
		31 C	100	225			1	1			
								6	73.4	92	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-80	Yes	29 C	100	200	1			1			No sulphides. No PGMs.
								1	165.9	30	
NA-01-81	Yes	5 C	25	25		1		1			No sulphides. No PGMs.
								1	10.2	2	
NA-01-83	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	53.8	4	
NA-01-84	Yes	4 C	15	25		1		1			No sulphides. No PGMs.
		5 C	25	25	1			1			
		8 C	25	50	1	1		2			
		50 C	250	300	1			1			
								5	6.1	4699	
NA-01-85	Yes	8 C	25	50	2			2			No sulphides. No PGMs.
								2	22.5	7	
NA-01-88	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-89	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
								2	34.5	8	
NA-01-95	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		5 C	25	25			1	1			
		8 C	25	50	1			1			
		10 C	50	50	1			1			
		15 C	50	100	1			1			
		18 C	50	125	1			1			
								6	87.2	22	
NA-01-96	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		10 C	25	75	1			1			
		15 C	50	100	1			1			
		15 C	75	75	1			1			
								4	76.2	20	
NA-01-97	Yes	22 C	75	150	1			1			No sulphides. No PGMs.
								1	435.4	5	
NA-01-100	Yes	10 C	25	75	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
		15 C	75	75	1			1			
		20 C	100	100	1			1			
								4	67.4	40	
NA-01-102	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-104	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
								2	16.5	12	
NA-01-108	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	2			2			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
		18 C	75	100	1			1			
								6	96.3	23	
NA-01-110	Yes	5 C	25	25	3			3			No sulphides. No PGMs.
		10 C	50	50	1			1			
								4	43.5	6	
NA-01-112	Yes	4 C	15	25	1			1			~100 grains pyrite 50µ.
		8 C	25	50	1			1			No PGMs.
		10 C	25	75		1		1			
								3	58.4	5	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-116	Yes	3 C	15	15	1		1	2			No sulphides. No PGMs.
		4 C	15	25	3			3			
		5 C	25	25	1		1	2			
		13 C	50	75	2			2			
		18 C	50	125	1			1			
								10	185.0	10	
NA-01-117	No	5 C	25	25	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
								2	32.9	12	
NA-01-123	Yes	22 C	100	125	1			1			No sulphides. No PGMs.
								1	392.8	5	
NA-01-129	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		5 C	25	25	1			1			
		8 C	25	50	2			2			
		10 C	25	75	2			2			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
								8	44.0	36	
NA-01-134	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1		1	2			
		15 C	50	100	1			1			
		18 C	50	125	1			1			
								5	84.4	22	
NA-01-135	Yes	5 C	25	25	1	1		2			No sulphides. No PGMs.
		8 C	25	50	2			2			
		10 C	50	50		1		1			
								5	36.1	11	
NA-01-140	Yes	7 C	15	50	1			1			No sulphides. No PGMs.
		5 C	25	25	1		1	2			
		8 C	25	50	1			1			
		10 C	50	50	1			1			
		20 C	75	125	1			1			
		29 C	100	200	1			1			
								7	81.1	84	
NA-01-144	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		13 C	50	75	1			1			
								3	25.3	19	
NA-01-146	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	494.1	<1	
NA-01-151	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
								3	20.4	32	
NA-01-154	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
		25 C	125	125	1			1			
								4	139.7	25	
NA-01-156	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		8 C	25	50	1			1			
								3	35.2	4	
NA-01-157	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
		20 C	75	125	1			1			
								3	60.6	34	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-164	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
								2	21.9	10	
NA-01-171	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	705.2	<1	
NA-01-175	Yes	8 C	25	50	2			2			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
								4	38.2	19	
NA-01-178	Yes	5 C	25	25	1		2	3			No sulphides. No PGMs.
		8 C	25	50	1		2	3			
		10 C	25	75	2			2			
		13 C	25	100	1			1			
		13 C	50	75		2		2			
		20 C	75	125		1		1			
								12	101.9	33	
NA-01-187	Yes	8 C	25	50			2	2			No sulphides. No PGMs.
		10 C	50	50	1			1			
								3	151.3	2	
NA-01-191	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		7 C	15	50	1			1			
		15 C	50	100	1			1			
								3	26.3	27	
NA-01-192	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-194	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	595.5	<1	
NA-01-196	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	50	50	1			1			
								3	49.3	6	
NA-01-199	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	3			3			
		10 C	50	50	1			1			
		13 C	50	75	1			1			
		18 C	50	125	1			1			
								7	46.5	40	
NA-01-200	Yes	8 C	25	50	1			1			30% marcasite 25µ. No PGMs.
		15 C	75	75	1			1			
								2	35.1	21	
NA-01-201	Yes	8 C	25	50	1			1			5% marcasite 25µ. No PGMs.
		10 C	25	75	1			1			
		10 C	50	50	1			1			
		13 C	50	75	2			2			
								5	65.8	18	
NA-01-203	Yes	10 C	25	75	1			1			No sulphides. No PGMs.
		10 C	50	50		1		1			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
		18 C	50	125	2			2			
		22 C	75	150	1			1			
								7	148.1	37	
NA-01-205	Yes	7 C	15	50		1		1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		175 M	400	500			1	1			
								3	31.5	8445	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-206	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		8 C	25	50	3			3			
		10 C	25	75	1			1			
		10 C	50	50	3			3			
		20 C	75	125	1			1			
								9	170.6	15	
NA-01-208	Yes	8 C	25	50	3			3			No sulphides. No PGMs.
		10 C	50	50	2			2			
		13 C	50	75	1			1			
								6	307.5	3	
NA-01-213	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-216	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		15 C	50	100	1			1			
		18 C	75	100	1			1			
								4	86.2	22	
NA-01-219	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
		18 C	50	125	1			1			
								3	30.9	47	
NA-01-224	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
								2	23.1	5	
NA-01-227	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-231	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	59.8	3	
NA-01-234	Yes	NO VISIBLE GOLD									~50 grains marcasite 25µ. No PGMs.
NA-01-235	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		8 C	25	50	2			2			
		10 C	50	50	1			1			
								4	55.9	7	
NA-01-238	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	17.3	11	
NA-01-243	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		8 C	25	50	2			2			
								3	32.6	9	
NA-01-244	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-247	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	20.8	4	
NA-01-249	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	8.5	10	
NA-01-253	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-254	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
								1	38.4	1	
NA-01-256	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-257	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	25.6	3	
NA-01-260	Yes	13 C	50	75	1	1		2			No sulphides. No PGMs.
		50 M	75	125	1			1			
								3	50.9	88	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-263	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-265	Yes	7 C	15	50	1			1			No sulphides. No PGMs.
		5 C	25	25	1			1			
		8 C	25	50	1			1			
		13 C	50	75	1			1			
								4	51.9	10	
NA-01-268	Yes	4 C	15	25	1	1		2			No sulphides. No PGMs.
		5 C	25	25	3			3			
		8 C	25	50	4			4			
		10 C	25	75	2			2			
		10 C	50	50	2			2			
		13 C	50	75	3			3			
								16	106.4	22	
NA-01-274	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		18 C	75	100	1			1			
								2	26.4	41	
NA-01-275	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		8 C	25	50	1			1			
		13 C	50	75	1			1			
		15 C	75	75	1			1			
								5	39.1	29	
NA-01-35	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-38	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-39	Yes	20 C	75	125	1			1			No sulphides. No PGMs.
		22 C	100	125	1			1			
								2	33.8	107	
NA-01-40	Yes	4 C	15	25	2			2			No sulphides. No PGMs.
		8 C	25	50	2			2			
		10 C	50	50	4			4			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
		18 C	50	125	2			2			
		15 C	75	75	1			1			
								13	339.3	14	
NA-01-41	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-44	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	2	1		3			
		10 C	25	75	1	1		2			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
		15 C	75	75	1			1			
								9	126.4	18	
NA-01-46	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-47	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		5 C	25	25	1			1			
								2	13.5	3	
NA-01-49	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
								3	94.6	6	
NA-01-51	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-52	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		4 C	15	25	1	1		2			
		5 C	25	25	3	1		4			
		8 C	25	50	3	1		4			
		10 C	25	75		1		1			
		13 C	25	100	1			1			
		10 C	50	50	1			1			
		13 C	50	75	1			1			
		18 C	75	100	1			1			
		20 C	75	125	1			1			
								17	179.8	23	
NA-01-56	Yes	18 C	75	100	1			1			No sulphides. No PGMs.
								1	37.5	27	
NA-01-57	Yes	NO VISIBLE GOLD									~100 grains marcasite 25µ. No PGMs.
NA-01-60	Yes	5 C	25	25	1	1		2			No sulphides. No PGMs.
		10 C	25	75		1		1			
		36 C	125	250	1			1			
								4	79.5	122	
NA-01-61	Yes	29 C	125	175	1			1			No sulphides. No PGMs.
								1	37.9	130	
NA-01-63	Yes	15 C	50	100	1			1			No sulphides. No PGMs.
								1	73.6	9	
NA-01-64	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-65	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-66	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-68	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-69	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-73	Yes	8 C	25	50	2			2			No sulphides. No PGMs.
		13 C	50	75	1			1			
								3	76.0	7	
NA-01-82	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
		18 C	50	125	1			1			
								4	27.6	58	
NA-01-90	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		8 C	25	50	1			1			
								3	19.8	7	
NA-01-91	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
								1	26.8	14	
NA-01-92	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
								1	18.8	1	
NA-01-93	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-94	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
		15 C	50	100	1			1			
								2	23.8	43	
NA-01-98	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
		38 C	150	250	1			1			
								2	18.1	650	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-101	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		13 C	50	75		1		1			
		18 C	75	100	1			1			
								4	58.7	25	
NA-01-106	Yes	NO VISIBLE GOLD									~100 grains marcasite 25µ. No PGMs.
NA-01-113	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
		20 C	50	150	1			1			
								3	22.9	83	
NA-01-114	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		4 C	15	25	1		1	2			
		5 C	25	25	3		3	6			
		8 C	25	50	3			3			
		10 C	25	75	1			1			
		10 C	50	50	2			2			
								15	84.6	12	
NA-01-118	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	18.2	4	
NA-01-119	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		15 C	50	100	1			1			
		20 C	75	125	1			1			
								3	25.6	85	
NA-01-125	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-126	Yes	10 C	50	50	1			1			10 grains pyrite 75µ.
								1	35.5	5	No PGMs.
NA-01-127	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-131	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
								1	34.2	11	
NA-01-133	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	25	75	1			1			
		13 C	50	75	1			1			
								4	34.8	19	
NA-01-136	Yes	10 C	50	50	2			2			No sulphides. No PGMs.
		18 C	75	100	1			1			
		20 C	75	125	1			1			
								4	18.0	161	
NA-01-137	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-139	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
								2	20.4	28	
NA-01-142	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
								2	17.3	33	
NA-01-143	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
		18 C	75	100	1			1			
								2	17.9	67	
NA-01-145	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
		7 C	15	50	1			1			
		8 C	25	50	1			1			
		13 C	50	75	1			1			
								4	30.4	17	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-149	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	4			4			
								5	16.6	21	
NA-01-153	Yes	5 C	25	25		1		1			No sulphides. No PGMs.
								1	21.2	1	
NA-01-158	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	30.9	3	
NA-01-163	Yes	7 C	15	50		1		1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	50	50	1			1			
								3	23.6	14	
NA-01-166	Yes	3 C	15	15		2		2			No sulphides. No PGMs.
		4 C	15	25	1			1			
		5 C	25	25	1			1			
		8 C	25	50		1		1			
		13 C	50	75	1			1			
		25 C	100	150	1			1			
								7	21.9	155	
NA-01-167	Yes	5 C	25	25		1		1			No sulphides. No PGMs.
		8 C	25	50		1		1			
		10 C	50	50	1			1			
								3	47.0	6	
NA-01-168	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-169	Yes	7 C	15	50	1		1	2			No sulphides. No PGMs.
		5 C	25	25	2			2			
		10 C	50	50	1			1			
		20 C	75	125	1			1			
								6	19.8	93	
NA-01-173	Yes	3 C	15	15	1			1			No sulphides. No PGMs.
								1	15.5	<1	
NA-01-174	Yes	15 C	75	75	1			1			No sulphides. No PGMs.
		18 C	75	100	1			1			
								2	27.6	60	
NA-01-181	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	50	50	1			1			
		13 C	50	75	1			1			
								4	64.1	10	
NA-01-185	Yes	10 C	25	75	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
								2	21.8	18	
NA-01-186	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
								1	32.9	1	
NA-01-189	Yes	10 C	50	50			1	1			No sulphides. No PGMs.
								1	29.8	6	
NA-01-190	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-193	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-195	Yes	15 C	50	100	2			2			No sulphides. No PGMs.
								2	39.2	33	
NA-01-198	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	19.7	4	
NA-01-209	Yes	13 C	50	75			1	1			No sulphides. No PGMs.

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
		22 C	100	125	1			1			
								2	26.1	96	
NA-01-210		4 C	15	25			1	1			
								1	52.9	<1	
NA-01-211	Yes	8 C	25	50	2			2			No sulphides. No PGMs.
								2	47.4	3	
NA-01-225	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	35.7	2	
NA-01-229	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-230	Yes	13 C	50	75	1			1			~200 gr pyrite 100µ. No PGMs.
								1	48.5	8	
NA-01-232	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		10 C	25	75	1			1			
		13 C	50	75	2			2			
								4	103.1	9	
NA-01-233	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-236	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
								1	14.1	26	
NA-01-237	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-240	Yes	15 C	50	100	1			1			No sulphides. No PGMs.
								1	40.4	16	
NA-01-241	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	34.4	6	
NA-01-245	Yes	5 C	25	25	1		1	2			No sulphides. No PGMs.
		8 C	25	50	1			1			
		10 C	50	50	1			1			
		15 C	50	100	1			1			
								5	33.5	29	
NA-01-255	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-264	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
								2	69.8	7	
NA-01-269	Yes	15 C	75	75	1			1			No sulphides. No PGMs.
								1	41.0	16	
NA-01-170	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		5 C	25	25	1			1			
		8 C	25	50	1			1			
		15 C	50	100	1			1			
		18 C	75	100	1			1			
								5	36.1	49	
NA-01-76	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
								4	115.4	11	
NA-01-77	Yes	15 C	50	100	1			1			No sulphides. No PGMs.
								1	44.0	15	
NA-01-78	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-86	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-87	Yes	10 C	50	50	1			1			No sulphides. No PGMs.

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
		13 C	50	75	1			1			
		15 C	50	100	1			1			
								3	34.5	35	
NA-01-99	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-103	Yes	10 C	25	75	1			1			No sulphides. No PGMs.
		18 C	75	100	1			1			
		20 C	75	125	1			1			
								3	22.5	120	
NA-01-105	Yes	22 C	100	125	1			1			No sulphides. No PGMs.
								1	15.4	138	
NA-01-107	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
		15 C	75	75	1			1			
								3	73.7	10	
NA-01-109	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-111	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-115	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	354.0	<1	
NA-01-120	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-121	Yes	4 C	15	25	1			1			No sulphides. No PGMs.
		5 C	25	25	1			1			
		8 C	25	50	1			1			
		10 C	25	75	1			1			
		10 C	50	50	2			2			
		15 C	50	100	1			1			
								7	317.5	4	
NA-01-122	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-124	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	25	75	1			1			
								2	27.1	10	
NA-01-128	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
								2	66.0	6	
NA-01-130	Yes	10 C	50	50	2			2			No sulphides. No PGMs.
		20 C	75	125	1			1			
		22 C	100	125	1			1			
								4	55.2	73	
NA-01-132	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
								1	32.3	3	
NA-01-138	Yes	15 C	50	100	1			1			No sulphides. No PGMs.
		29 C	125	175	1			1			
								2	60.7	92	
NA-01-141	Yes	15 C	50	100	1			1			No sulphides. No PGMs.
								1	68.1	9	
NA-01-147	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-148	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		13 C	50	75		1		1			
		25 C	100	150	1			1			
								3	195.0	17	
NA-01-150	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-152	Yes	15 C	75	75	1			1			No sulphides. No PGMs.

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
								1	17.9	36	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-155	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	2			2			
								3	48.5	4	
NA-01-159	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		8 C	25	50	3			3			
		10 C	50	50	1	1		2			
		29 C	150	150	1			1			
								8	199.1	28	
NA-01-160	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-161	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-162	Yes	10 C	25	75	1			1			1 gr osmiridium 25µ.
		10 C	50	50	1			1			
		15 C	50	100	1			1			
								3	95.8	11	
NA-01-165	Yes	15 C	50	100	2			2			No sulphides. No PGMs.
								2	27.7	46	
NA-01-172	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1			1			
								2	123.5	1	
NA-01-176	Yes	22 C	100	125	1			1			No sulphides. No PGMs.
								1	3.2	663	
NA-01-177	Yes	13 C	50	75		1		1			No sulphides. No PGMs.
								1	34.6	11	
NA-01-179	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-180	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-182	Yes	5 C	25	25	3			3			No sulphides. No PGMs.
		8 C	25	50	2			2			
		10 C	50	50	1			1			
		13 C	50	75	1			1			
		15 C	50	100	2			2			
		18 C	75	100	1			1			
		75 M	125	300	1			1			
								11	262.8	108	
NA-01-183	Yes	8 C	25	50	3		1	4			No sulphides. No PGMs.
		10 C	50	50	1			1			
		18 C	75	100	1			1			
								6	40.9	37	
NA-01-184	Yes	NO VISIBLE GOLD									~1000 gr marcasite 25µ. No PGMs.
NA-01-188	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-197	Yes	3 C	15	15			1	1			No sulphides. No PGMs.
		9 C	15	75			1	1			
		5 C	25	25	1		1	2			
		8 C	25	50	7		2	9			
		10 C	25	75	3			3			
		10 C	50	50	2			2			
		20 C	75	125	2			2			
								20	67.9	72	
NA-01-202	Yes	7 C	15	50	2			2			No sulphides. No PGMs.
		8 C	25	50	1			1			
		18 C	75	100	1			1			
								4	102.3	12	

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-204	Yes	4 C	15	25	3		1	4			No sulphides. No PGMs.
		7 C	15	50	3			3			
		5 C	25	25	8			8			
		8 C	25	50	9			9			
		10 C	50	50	6			6			
		13 C	50	75	4			4			
		15 C	50	100	1			1			
		18 C	50	125	2			2			
		15 C	75	75	1			1			
		20 C	75	125	1			1			
		22 C	100	125	1			1			
								40	160.8	67	
NA-01-207	Yes	4 C	15	25	2			2			No sulphides. No PGMs.
		5 C	25	25	2			2			
		8 C	25	50	2			2			
								6	121.9	2	
NA-01-212	Yes	4 C	15	25			1	1			No sulphides. No PGMs.
		5 C	25	25	2			2			
		8 C	25	50	2			2			
		10 C	25	75	1			1			
		10 C	50	50	1			1			
		15 C	50	100	1			1			
								8	132.9	9	
NA-01-214	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-215	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-217	Yes	22 C	75	150	1			1			No sulphides. No PGMs.
								1	65.9	32	
NA-01-218	Yes	18 C	75	100	1			1			No sulphides. No PGMs.
		25 C	100	150	1			1			
								2	47.4	82	
NA-01-220	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
								1	37.8	5	
NA-01-221	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-222	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-223	Yes	18 C	75	100	1			1			No sulphides. No PGMs.
								1	30.9	33	
NA-01-226	Yes	13 C	25	100	1			1			No sulphides. No PGMs.
		13 C	50	75	1			1			
		20 C	100	100	1			1			
								3	46.2	49	
NA-01-228	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-239	Yes	5 C	25	25	1			1			~50 gr pyrite 25µ. No PGMs.
		22 C	100	125	1			1			
								2	267.8	8	
NA-01-242	Yes	5 C	25	25	2			2			No sulphides. No PGMs.
		15 C	75	75	1			1			
		18 C	75	100	1			1			
								4	289.9	6	
NA-01-246	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
		13 C	50	75	1			1			
								3	78.8	8	
NA-01-248	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-250	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
NA-01-251	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		13 C	50	75	3			3			
								4	34.7	35	
NA-01-252	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
		13 C	50	75	1		1	2			
								3	71.5	13	
NA-01-258	Yes	10 C	50	50	1			1			No sulphides. No PGMs.
		15 C	50	100	1			1			
								2	749.8	1	
NA-01-259	Yes	5 C	25	25	1			1			No sulphides. No PGMs.
		8 C	25	50	1		1	2			
		13 C	50	75	1			1			
								4	93.7	6	
NA-01-261	Yes	15 C	75	75	1			1			No sulphides. No PGMs.
								1	169.9	4	
NA-01-262	Yes	13 C	50	75	1			1			No sulphides. No PGMs.
								1	168.9	2	
NA-01-266	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-267	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	50	50	1			1			
								2	134.0	2	
NA-01-270	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-271	Yes	NO VISIBLE GOLD									No sulphides. No PGMs.
NA-01-272	Yes	8 C	25	50	1			1			No sulphides. No PGMs.
		10 C	25	75	1			1			
		13 C	50	75	3			3			
		15 C	50	100	1			1			
		18 C	75	100			1	1			
								7	102.0	30	
NA-01-273	No	10 C	50	50	1			1			~200 gr marcasite (25µ). No PGMs.
		13 C	50	75	1			1			
		18 C	75	100			1	1			
								3	38.1	41	

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

Field no	Lab no	<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																		Total KIMs
		Total	Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm							0.25 to 0.5 mm						
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC																														
						Processed Split																														
						Total																													
					Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	
												*			**																	**	
A02	168	703.0	679.7	2.8	20.5	100	20.5	0.7	13.7	3.8	1.7	0.6	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
A03	68	746.5	716.5	4.3	25.7	100	25.7	0.8	20.7	2.8	0.9	0.5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
A04	35	610.9	590.6	2.7	17.6	100	17.6	0.2	14.7	2.0	0.5	0.2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
A05	38	606.5	577.2	4.4	24.9	100	24.9	0.3	20.4	3.0	0.9	0.3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
A06	209	699.9	669.9	3.9	26.1	100	26.1	0.7	21.7	2.7	0.8	0.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
A07	255	618.0	577.7	7.4	32.9	100	32.9	0.8	27.3	3.1	1.0	0.70	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
A08	119	624.3	593.7	5.0	25.6	100	25.6	0.4	21.3	3.0	0.8	0.10	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
A09	241	820.1	782.9	2.8	34.4	100	34.4	0.5	30.8	2.3	0.6	0.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
A10	133	728.8	691.3	2.7	34.8	100	34.8	0.6	25.7	4.7	2.6	1.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
A11	5	933.8	889.4	3.5	40.9	100	40.9	2.1	30.1	4.5	2.5	1.70	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0	6
A12	126	820.7	782.1	3.1	35.5	100	35.5	1.3	25.4	5.8	2.2	0.80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A13	137	613.9	608.0	0.4	5.5	100	5.5	0.8	3.3	0.6	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B02	118	665.8	643.7	3.9	18.2	100	18.2	0.5	15.2	2.0	0.4	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
B03	82	849.8	821.0	1.2	27.6	100	27.6	0.2	23.1	2.9	1.0	0.40	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
B04	91	617.0	585.9	4.3	26.8	100	26.8	0.1	22.8	2.7	0.9	0.30	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
B05	240	637.1	588.9	7.8	40.4	100	40.4	1.1	33.3	4.1	1.3	0.60	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	3
B06	153	585.6	560.4	4.0	21.2	100	21.2	0.6	17.2	2.5	0.7	0.2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
B07	233	419.4	409.5	1.3	8.6	100	8.6	0.5	5.2	2.0	0.7	0.20	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B08	245	866.1	825.6	7.0	33.5	100	33.5	1.0	26.9	3.9	1.3	0.40	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
B09	98	624.8	603.3	3.4	18.1	100	18.1	0.2	14.0	2.5	1.0	0.40	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
B10	11	1,018.1	987.7	0.5	29.9	100	29.9	1.1	24.6	2.8	1.0	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
B11	56	730.3	687.3	5.5	37.5	100	37.5	0.6	27.4	5.5	2.5	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
B12	173	1,057.4	1,041.0	0.9	15.5	100	15.5	0.5	7.9	1.2	1.5	4.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
C02	189	696.6	664.2	2.6	29.8	100	29.8	0.5	26.5	2.1	0.4	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
C03	51	395.5	379.3	2.9	13.3	100	13.3	0.4	10.7	1.7	0.4	0.1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
C04	6	903.9	866.7	5.8	31.4	100	31.4	1.5	23.9	3.4	1.7	0.90	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
C05a	93	609.5	577.9	4.7	26.9	100	26.9	0.1	23.0	2.9	0.7	0.20	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
C05b	46	618.9	578.8	5.1	35.0	100	35.0	0.7	31.2	2.5	0.4	0.2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
C06	237	795.0	760.3	4.3	30.4	100	30.4	0.9	23.3	3.7	1.9	0.60	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
C07	145	1,204.2	1,168.6	5.2	30.4	100	30.4	0.6	25.1	3.2	1.0	0.5	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
C08	136	817.9	797.3	2.6	18.0	100	18.0	0.4	14.0	2.4	0.8	0.4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
C09	131	482.8	443.4	5.2	34.2	100	34.2	1.7	22.9	5.9	2.6	1.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C10	210	643.3	577.2	13.2	52.9	100	52.9	1.4	38.6	8.8	2.4	1.70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10
C11	169	955.9	935.6	0.5	19.8	100	19.8	0.5	15.8	2.3	0.8	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
C12	166	1,297.9	1,274.0	2.0	21.9	100	21.9	0.6	17.8	2.4	0.8	0.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
D02	143	847.0	826.1	3.0	17.9	100	17.9	0.6	14.4	1.9	0.6	0.4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
D03	149	586.9	566.6	3.7	16.6	100	16.6	0.2	14.3	1.5	0.4	0.2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D04	9	824.4	790.7	5.3	28.4	100	28.4	1.7	22.8	2.9	0.7	0.30	0	0	7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5	0	7
D05	106	650.6	609.4	3.3	37.9	100	37.9	1.6	26.1	5.9	2.6	1.70	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
D06	3	799.0	746.1	6.1	46.8	100	46.8	3.4	33.3	6.6	2.3	1.20	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
D07	14	948.5	923.5	3.6	21.4	100	21.4	0.3	17.3	2.7	0.9	0.20	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D08	230	663.4	609.6	5.3	48.5	100	48.5	2.6	35.3	6.2	3.0	1.40	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D09	139	603.8	580.1	3.3	20.4	100	20.4	0.9	15.5	2.6	1.1	0.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
D10	127	727.1	681.5	0.2	45.4	100	45.4	2.2	29.5	5.3	3.5	4.90	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D11	39	1,028.0	992.1	2.1	33.8	100	33.8	0.7	26.0	4.0	1.6	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

		<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																		
			Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm						0.25 to 0.5 mm						
					Nonferromagnetic HMC																														
						Processed Split																														
						Total																													
Field no	Lab no	Total	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
												*			**																		**	
D12	225	723.3	682.8	4.8	35.7	100	35.7	0.7	29.1	3.4	1.6	0.90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
E02	92	508.2	485.3	4.1	18.8	100	18.8	0.0	16.4	2.0	0.3	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
E03	190	660.3	637.4	4.6	18.3	100	18.3	0.4	15.2	2.0	0.6	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E04	186	907.8	868.7	6.2	32.9	100	32.9	0.7	26.2	4.0	1.4	0.6	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0	6
E05	61	738.9	693.4	7.6	37.9	100	37.9	0.4	32.9	3.4	0.9	0.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
E06	12	736.2	715.4	3.3	17.5	100	17.5	0.9	12.9	2.6	0.9	0.20	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
E07	195	629.9	586.4	4.3	39.2	100	39.2	3.1	27.0	5.4	2.6	1.10	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E08	113	579.1	551.3	4.9	22.9	100	22.9	0.2	18.9	3.1	0.6	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
E09	181	1,157.1	1,081.2	11.8	64.1	100	64.1	1.4	46.3	8.2	5.0	3.2	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
E10	101	847.9	783.3	5.9	58.7	100	58.7	0.9	47.7	8.0	1.8	0.30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
E11	167	1,046.7	995.2	4.5	47.0	100	47.0	0.8	35.7	5.8	2.8	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F02	185	772.0	748.4	1.8	21.8	100	21.8	0.5	18.0	2.4	0.7	0.2	1	0	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	5	0	7
F03	198	634.1	610.9	3.5	19.7	100	19.7	0.6	15.3	2.5	0.9	0.40	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
F04	211	823.5	768.4	7.7	47.4	100	47.4	2.5	35.3	5.7	2.6	1.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
F05	142	995.8	975.6	2.9	17.3	100	17.3	0.6	13.3	2.0	0.8	0.6	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F06	57	672.5	625.7	5.2	41.6	100	41.6	2.0	29.8	5.9	2.7	1.2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F07	64	550.3	517.4	4.6	28.3	100	28.3	0.7	24.1	2.8	0.6	0.1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
F08A	269	587.2	537.4	8.8	41.0	100	41.0	1.2	33.7	4.0	1.4	0.70	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
F08B	264	1,063.3	979.5	14.0	69.8	100	69.8	2.6	54.9	7.7	3.0	1.60	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
F09	229	1,175.6	1,130.8	2.0	42.8	100	42.8	0.9	37.1	3.2	1.0	0.60	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	7
F10	158	920.2	884.5	4.8	30.9	100	30.9	1.1	18.6	5.0	3.7	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G02	125	806.8	769.9	6.4	30.5	100	30.5	0.9	23.9	3.9	1.2	0.60	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G03	94	696.9	668.5	4.6	23.8	100	23.8	0.2	19.6	2.5	0.9	0.60	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	5	0	7
G04	163	817.8	791.0	3.2	23.6	100	23.6	0.5	18.1	3.4	1.2	0.4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
G05	236	700.8	683.2	3.5	14.1	100	14.1	0.5	11.5	1.7	0.4	0.04	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G06	90	344.4	318.9	5.7	19.8	100	19.8	0.1	18.8	0.8	0.1	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G07	174	537.3	503.2	6.5	27.6	100	27.6	0.6	23.1	3.0	0.7	0.2	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	5
G08	193	822.3	790.7	4.9	26.7	100	26.7	0.6	22.5	2.5	0.8	0.30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
G09	232	1,079.2	952.6	23.5	103.1	100	103.1	2.1	82.3	13.5	3.7	1.50	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
G10	22	1,001.2	790.2	46.2	164.8	100	164.8	4.5	125.3	22.4	7.7	4.90	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	15(30)	31
H02	222	718.3	689.4	4.1	24.8	100	24.8	1.1	18.1	3.4	1.4	0.8	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
H03	179	422.2	410.3	1.3	10.6	100	10.6	0.6	7.9	1.5	0.5	0.10	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
H04	105	657.2	638.4	3.4	15.4	100	15.4	0.5	12.3	1.9	0.6	0.1	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	1	0	4
H05	124	597.0	562.9	7.0	27.1	100	27.1	0.5	22.5	2.8	0.9	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
H06	77	498.7	444.6	10.1	44.0	100	44.0	0.5	38.5	3.9	0.9	0.2	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
H07	170	768.1	725.0	7.0	36.1	100	36.1	1.0	29.3	4.0	1.4	0.4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	5
H08	132	652.2	611.4	8.5	32.3	100	32.3	0.6	26.0	4.0	1.3	0.4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
H09	271	1,350.4	1,033.3	52.8	264.3	100	264.3	4.6	198.2	43.8	12.4	5.30	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
H10	7	1,528.9	1,294.0	40.6	194.3	100	194.3	9.8	114.8	33.7	21.2	14.80	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
I02	34	485.2	460.8	5.1	19.3	100	19.3	0.8	16.5	1.7	0.20	0.09	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I03	87	628.1	585.6	8.0	34.5	100	34.5	0.9	29.0	3.2	1.0	0.4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
I04	165	933.6	899.0	6.9	27.7	100	27.7	0.7	21.4	3.3	1.5	0.80	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
I05	217	856.3	775.6	14.8	65.9	100	65.9	2.5	54.0	6.8	2.0	0.6	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I06	13	1,103.7	1,041.1	12.3	50.3	100	50.3	1.8	37.1	7.6	2.8	1.00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	4	0	6
I07	86	1,008.2	968.9	7.2	32.1	100	32.1	0.8	24.4	4.9	1.6	0.4	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

		<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																		
			Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm						0.25 to 0.5 mm						
					Nonferromagnetic HMC																															
						Processed Split																														
						Total																													
Field no	Lab no	Total	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
												*			**																		**	
I08	73	1,047.6	954.5	17.1	76.0	100	76.0	0.8	57.5	11.7	4.8	1.20	0	1	10	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	8	0	9
I09	60	800.2	703.6	17.1	79.5	100	79.5	1.7	61.3	11.5	3.9	1.1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I10	155	761.6	702.8	10.3	48.5	100	48.5	1.5	39.1	5.4	2.0	0.50	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
J02	66	683.6	646.6	5.2	31.8	100	31.8	1.2	26.9	3.1	0.5	0.1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J03	47	517.0	500.3	3.2	13.5	100	13.5	0.3	11.0	1.6	0.5	0.1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J04	103	601.1	573.1	5.5	22.5	100	22.5	1.2	17.1	3.0	0.9	0.3	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J05	226	692.1	640.7	5.2	46.2	100	46.2	0.6	38.9	5.0	1.4	0.3	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J06	183	707.1	658.1	8.1	40.9	100	40.9	1.3	33.1	4.6	1.5	0.40	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
J07	204	1,183.5	967.1	55.6	160.8	100	160.8	4.2	121.5	19.9	9.8	5.4	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	15(25)	26
J08	107	830.6	738.6	18.3	73.7	100	73.7	2.5	51.3	10.8	6.4	2.7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	10
J09	130	548.0	481.8	11.0	55.2	100	55.2	1.5	43.8	7.2	2.2	0.5	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
J10	20	391.2	330.0	7.8	53.4	100	53.4	3.9	41.5	6.2	1.5	0.30	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
K02	273	602.7	559.8	4.8	38.1	100	38.1	2.1	30.2	4.4	1.0	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K03	41	473.6	454.1	2.9	16.6	100	16.6	0.5	13.6	1.9	0.4	0.2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
K04	250	444.0	427.1	3.2	13.7	100	13.7	0.5	11.7	1.1	0.3	0.08	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K05	21	589.8	543.8	8.3	37.7	100	37.7	0.4	32.0	4.1	0.9	0.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8
K06	261	1,087.2	869.4	47.9	169.9	100	169.9	5.2	115.0	32.7	12.0	5.00	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	20(200)	205
K07	148	1,122.5	868.1	59.4	195.0	100	195.0	4.5	152.7	26.7	7.5	3.60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5
K08	121	1,161.2	748.9	94.8	317.5	100	317.5	14.7	201.7	57.6	28.3	15.2	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	8	2	11
K09	111	1,117.1	859.9	49.1	208.1	100	208.1	6.6	150.5	28.5	15.7	6.8	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
K10	228	671.5	594.8	13.5	63.2	100	63.2	1.2	53.0	6.3	2.1	0.6	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
L02	18	359.2	328.3	3.5	27.4	100	27.4	1.3	20.8	3.9	1.0	0.40	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
L03	251	640.1	596.8	8.6	34.7	100	34.7	1.0	29.6	2.9	0.9	0.30	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
L04	220	712.4	666.0	8.6	37.8	100	37.8	1.5	31.1	3.7	1.1	0.4	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
L05E	23	621.7	558.1	8.9	54.7	100	54.7	2.0	43.4	6.9	1.70	0.70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L05W	4	417.9	415.4	0.4	2.1	100	2.1	0.2	1.4	0.4	0.1	0.01	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L06E	40	1,333.6	924.7	69.6	339.3	100	339.3	5.7	248.1	58.4	19.3	7.8	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4
L06WA	218	955.1	898.7	9.0	47.4	100	47.4	1.3	33.7	8.3	2.6	1.5	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
L06WB	184	625.0	581.1	5.4	38.5	100	38.5	2.1	29.9	2.9	1.4	2.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L07	44	1,313.3	1,139.3	47.6	126.4	100	126.4	1.5	89.5	20.9	9.8	4.7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
L08	267	1,622.7	1,455.2	33.5	134.0	100	134.0	1.9	107.5	14.4	6.9	3.30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L09	19	908.8	622.7	49.1	237.0	100	237.0	10.6	176.1	32.5	13.5	4.30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L10	99	834.5	521.2	37.8	275.5	100	275.5	4.2	208.7	48.8	12.4	1.4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
L11	150	917.9	687.2	33.2	197.5	100	197.5	6.1	152.9	26.0	10.8	1.70	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M02	78	683.9	664.8	3.6	15.5	100	15.5	0.8	11.8	2.0	0.7	0.2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
M03	152	798.4	776.2	4.3	17.9	100	17.9	0.7	15.2	1.4	0.4	0.20	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M04	248	564.7	540.3	5.8	18.6	100	18.6	0.4	15.5	2.0	0.5	0.2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
M05	29	1,093.8	1,001.0	13.5	79.3	100	79.3	2.1	60.7	12.7	2.70	1.10	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10
M06	49	1,489.4	1,379.2	15.6	94.6	100	94.6	2.2	71.3	14.2	4.2	2.7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
M07	172	717.9	560.7	33.7	123.5	100	123.5	2.6	94.0	16.7	6.5	3.70	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M08	128	515.7	430.7	19.0	66.0	100	66.0	2.8	44.7	11.7	5.4	1.4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
M09	180	936.0	724.8	38.7	172.5	100	172.5	7.1	124.9	26.1	12.2	2.20	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M10	188	739.2	557.7	24.8	156.7	100	156.7	1.7	132.9	12.7	7.0	2.4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M11	120	1,046.5	864.2	14.0	168.3	100	168.3	4.2	147.8	9.4	4.8	2.1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N03	215	496.8	475.9	3.7	17.2	100	17.2	0.9	13.9	1.8	0.5	0.1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

		<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																		
			Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm						0.25 to 0.5 mm						
					Nonferromagnetic HMC																														
						Processed Split																														
						Total																													
Field no	Lab no	Total	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
												*			**																		**	
N04	147	723.5	712.8	2.0	8.7	100	8.7	0.4	6.5	1.1	0.4	0.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
N05	138	796.1	724.7	10.7	60.7	100	60.7	1.6	47.3	7.7	2.6	1.50	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9
N06	202	1,041.9	919.0	20.6	102.3	100	102.3	0.8	86.1	11.0	3.2	1.2	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	0	7
N07	16	845.3	617.7	39.2	188.4	100	188.4	5.6	138.4	29.9	10.5	4.00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
N08	259	595.5	483.0	18.8	93.7	100	93.7	4.0	68.1	14.6	5.5	1.50	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21(50)	50
N09	32	472.2	399.4	13.7	59.1	100	59.1	2.5	43.2	9.2	2.80	1.40	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
N10	242	745.3	408.9	46.5	289.9	100	289.9	4.6	227.3	40.5	15.7	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N11	266	451.4	354.9	15.2	81.3	100	81.3	2.5	70.5	5.9	2.0	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11
N12	270	465.6	429.0	4.4	32.2	100	32.2	1.5	22.6	6.9	1.0	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O03	177	711.1	666.8	9.7	34.6	100	34.6	1.3	29.1	3.2	0.8	0.20	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
O04	8	510.0	498.8	2.5	8.7	100	8.7	0.2	7.6	0.6	0.2	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
O05	272	1,288.3	1,172.1	14.2	102.0	100	102.0	1.9	81.3	14.0	3.0	1.80	0	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
O06	207	1,158.9	1,017.6	19.4	121.9	100	121.9	0.9	98.4	14.7	5.0	2.9	0	0	7	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	8	0	11
O07	182	1,315.0	984.8	67.4	262.8	100	262.8	7.3	180.4	46.8	18.7	9.60	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4(10)	0	10
O08	212	951.5	762.0	56.6	132.9	100	132.9	3.0	91.7	22.3	8.0	7.9	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
O09	246	719.1	613.2	27.1	78.8	100	78.8	2.3	54.4	13.0	6.0	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O10	162	989.2	870.8	22.6	95.8	100	95.8	3.7	70.7	12.2	5.4	3.80	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
O11	221	797.6	520.5	39.5	237.6	100	237.6	5.0	170.6	41.1	17.5	3.4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O12	65	310.8	242.0	9.5	59.3	100	59.3	0.7	52.7	5.3	0.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P03	37	1,230.1	1,168.3	15.4	46.4	100	46.4	1.5	38.3	4.6	1.50	0.50	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
P04	28	571.0	555.7	3.6	11.7	100	11.7	0.5	10.4	0.7	0.08	0.01	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
P05	206	1,306.2	1,112.5	23.1	170.6	100	170.6	3.4	134.5	20.6	7.6	4.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
P06	268	1,009.2	882.8	20.0	106.4	100	106.4	1.4	87.3	11.7	3.90	2.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
P07	48	830.8	730.1	16.9	83.8	100	83.8	2.9	66.7	9.9	2.90	1.40	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	5
P08	247	537.6	509.2	7.6	20.8	100	20.8	0.4	17.9	1.7	0.50	0.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
P09	154	1,154.4	968.8	45.9	139.7	100	139.7	4.6	74.7	34.3	17.8	8.30	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
P10	157	520.3	442.0	17.7	60.6	100	60.6	1.6	42.1	10.5	4.2	2.20	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P11	123	924.1	428.8	102.5	392.8	100	392.8	15.9	300.4	65.3	10.3	0.90	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20(60)	60
P12	62	489.9	416.3	19.0	54.6	100	54.6	1.1	42.0	8.9	2.1	0.50	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P13	10	1,416.5	1,106.9	34.5	275.1	100	275.1	7.9	213.5	36.6	14.6	2.50	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6(20)	21
Q02	72	283.5	276.3	1.6	5.6	100	5.6	0.2	4.8	0.5	0.1	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Q03	200	425.0	385.1	4.8	35.1	100	35.1	1.7	26.3	4.7	1.8	0.60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Q03A	129	508.9	450.6	14.3	44.0	100	44.0	0.4	40.0	2.7	0.6	0.30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Q04	257	757.0	725.4	6.0	25.6	100	25.6	0.6	21.9	2.3	0.60	0.20	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Q05	203	1,395.7	1,227.0	20.6	148.1	100	148.1	4.6	124.8	13.7	2.7	2.30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
Q06	108	1,092.3	976.0	20.0	96.3	100	96.3	0.8	78.6	11.7	3.4	1.80	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q07	17	1,122.6	1,073.8	8.4	40.4	100	40.4	1.5	31.4	5.3	1.6	0.60	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q08	156	667.7	622.6	9.9	35.2	100	35.2	1.1	24.4	6.4	2.3	1.00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q09	96	1,277.0	1,188.2	12.6	76.2	100	76.2	1.1	57.9	11.3	3.7	2.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Q10	275	593.0	540.6	13.3	39.1	100	39.1	0.8	26.6	7.1	3.20	1.40	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	8
Q11	58	738.5	638.9	25.9	73.7	100	73.7	1.2	54.1	12.3	4.5	1.60	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q12	97	876.0	321.4	119.2	435.4	100	435.4	5.9	325.6	80.4	18.9	4.60	0	0	13	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Q13	263	471.3	390.0	10.6	70.7	100	70.7	2.7	52.6	10.8	3.30	1.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
R02	253	305.4	302.6	0.4	2.4	100	2.4	0.1	2.0	0.2	0.05	0.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R03	15	794.1	743.0	13.5	37.6	100	37.6	0.7	32.7	3.1	0.9	0.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

		<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																			
			Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm						0.25 to 0.5 mm						
					Nonferromagnetic HMC																															
						Processed Split																														
						Total																														
Field no	Lab no	Total	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
												*			**																		**	
R04	199	631.0	568.9	15.6	46.5	100	46.5	0.5	42.1	3.4	0.5	0.04	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
R05	219	620.8	578.9	11.0	30.9	100	30.9	1.0	25.7	2.9	0.9	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R06	164	554.2	525.2	7.1	21.9	100	21.9	0.5	19.9	1.3	0.2	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
R07	134	1,089.0	990.0	14.6	84.4	100	84.4	1.5	69.5	9.9	2.6	0.90	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
R08	24	365.1	349.0	3.5	12.6	100	12.6	0.6	11.0	0.8	0.20	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R09	201	626.8	551.2	9.8	65.8	100	65.8	2.1	46.3	11.5	4.1	1.80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R10	151	375.9	349.7	5.8	20.4	100	20.4	0.6	14.5	3.4	1.2	0.70	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
R11	213	451.0	430.7	2.7	17.6	100	17.6	1.5	10.0	3.9	1.7	0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
R12	194	1,278.2	557.7	125.0	595.5	100	595.5	49.5	423.0	101.9	18.3	2.80	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	20(50)	51
R13	192	960.0	445.2	88.9	425.9	100	425.9	13.7	296.8	83.5	25.6	6.30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30(200)	200
R14	171	1,718.1	792.6	220.3	705.2	100	705.2	21.2	532.1	105.7	36.9	9.30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R15	74	312.9	229.0	6.7	77.2	100	77.2	1.5	65.8	9.0	0.8	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S01	75	290.6	248.7	3.5	38.4	100	38.4	1.3	32.9	3.2	0.6	0.40	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S02	45	506.2	497.1	1.9	7.2	100	7.2	0.4	6.0	0.7	0.10	0.00	No Sample	0	0	No Sample						0	0	0	0	0	0	0	0	0	0	0	0	0	0
S03	112	917.5	846.5	12.6	58.4	100	58.4	1.8	47.1	6.1	2.4	1.00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
S04	79	607.8	511.0	23.4	73.4	100	73.4	0.4	68.4	3.9	0.5	0.20	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5	0	7
S05	89	1,008.7	965.0	9.2	34.5	100	34.5	1.1	21.3	7.0	3.7	1.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
S06	53	638.5	592.3	11.6	34.6	100	34.6	1.0	28.8	3.8	0.90	0.10	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
S07	224	536.5	506.1	7.3	23.1	100	23.1	0.7	20.2	1.9	0.30	0.01	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
S08	81	200.7	186.9	3.6	10.2	100	10.2	0.1	9.4	0.6	0.1	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
S09	249	513.2	503.6	1.1	8.5	100	8.5	0.4	7.0	0.8	0.20	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
S10	55	955.9	899.0	9.5	47.4	100	47.4	0.7	38.1	6.6	1.6	0.40	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
S11	84	415.2	407.8	1.3	6.1	100	6.1	0.2	5.2	0.5	0.2	0.01	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
S12	116	1,498.9	1,284.0	29.9	185.0	100	185.0	4.0	147.0	23.9	7.5	2.60	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
S13	146	992.5	409.2	89.2	494.1	100	494.1	16.7	281.7	95.7	60.0	40.00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
S14	80	371.4	93.6	111.9	165.9	100	165.9	9.2	107.4	42.9	5.6	0.80	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S15	187	599.3	423.9	24.1	151.3	100	151.3	2.9	124.3	18.0	5.3	0.80	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S16	256	455.9	416.6	6.5	32.8	100	32.8	1.4	24.1	6.4	0.90	0.05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5	7
T01	71	668.1	630.1	5.2	32.8	100	32.8	0.2	28.8	3.0	0.6	0.20	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T02	144	541.2	509.1	6.8	25.3	100	25.3	0.7	20.4	3.0	0.8	0.40	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
T03	254	904.5	859.9	6.2	38.4	100	38.4	0.9	30.0	4.8	1.80	0.90	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
T04	265	955.9	895.5	8.5	51.9	100	51.9	0.7	41.8	6.4	2.30	0.70	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T05	88	714.6	660.5	4.5	49.6	100	49.6	0.3	44.7	3.5	0.9	0.20	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
T06	140	636.3	544.5	10.7	81.1	100	81.1	1.4	72.7	6.1	0.8	0.10	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11
T07	117	712.2	670.6	8.7	32.9	100	32.9	0.8	26.1	4.3	1.3	0.40	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5	0	7
T08	85	804.0	774.8	6.7	22.5	100	22.5	0.4	19.1	2.1	0.6	0.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T09	67	506.8	490.2	3.3	13.3	100	13.3	0.4	11.6	1.0	0.2	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T10	27	441.0	248.5	11.1	181.4	100	181.4	9.1	105.2	53.9	10.40	2.80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T11	33	646.3	622.8	1.9	21.6	100	21.6	1.1	4.7	8.3	5.90	1.60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T11-2	260	667.0	601.0	15.1	50.9	100	50.9	2.9	28.7	13.1	5.00	1.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
T12	216	628.9	534.4	8.3	86.2	100	86.2	3.9	70.2	10.2	1.7	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
T14	208	1,072.5	718.8	46.2	307.5	100	307.5	16.5	219.6	49.9	17.0	4.50	0	3	20(40)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T15	59	1,040.4	368.7	268.0	403.7	100	403.7	9.8	291.4	72.1	20.9	9.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T16	25	128.0	116.7	1.9	9.4	100	9.4	0.9	5.7	2.6	0.20	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
U02	235	526.8	448.8	22.1	55.9	100	55.9	0.8	50.4	3.8	0.80	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

		<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																		
			Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm							0.25 to 0.5 mm						
					Nonferromagnetic HMC																															
						Processed Split																														
						Total																														
Field no	Lab no	Total	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
												*			**																		**	
U03	191	424.8	390.5	8.0	26.3	100	26.3	0.3	21.4	3.4	1.0	0.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
U04	83	397.1	337.2	6.1	53.8	100	53.8	0.3	48.7	4.0	0.7	0.10	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
U05	54	976.6	872.0	25.6	79.0	100	79.0	0.4	70.6	6.0	1.5	0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
U08	234	483.2	464.5	2.7	16.0	100	16.0	1.0	12.1	1.8	0.70	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U09	31	433.4	423.1	2.4	7.9	100	7.9	0.4	6.4	0.9	0.20	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
U10	135	722.4	678.4	7.9	36.1	100	36.1	1.1	28.7	4.5	1.4	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U11	205	728.6	696.6	0.5	31.5	100	31.5	1.1	24.0	4.8	1.4	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V02	70	621.4	574.4	6.5	40.5	100	40.5	0.5	34.9	3.9	0.9	0.30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V03	231	738.5	668.1	10.6	59.8	100	59.8	0.8	54.4	3.4	1.00	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
V04	50	600.1	530.3	14.2	55.6	100	55.6	1.2	48.1	5.3	0.90	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
V06	227	531.8	488.7	8.1	35.0	100	35.0	1.0	29.8	2.9	0.90	0.40	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	3
V07	36	462.2	433.5	5.9	22.8	100	22.8	0.5	20.2	1.8	0.20	0.08	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
V08	238	503.0	481.9	3.8	17.3	100	17.3	0.6	14.4	1.6	0.50	0.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V09	178	682.8	559.5	21.4	101.9	100	101.9	1.6	86.1	12.4	1.4	0.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W02	104	386.2	365.0	4.7	16.5	100	16.5	0.1	14.7	1.3	0.3	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
W03	102	429.0	398.5	6.5	24.0	100	24.0	0.2	21.4	2.0	0.4	0.04	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W04	175	461.4	408.0	15.2	38.2	100	38.2	0.1	36.5	1.4	0.2	0.02	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W05	100	750.5	661.1	22.0	67.4	100	67.4	0.4	61.1	4.9	0.8	0.20	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
W06	196	626.2	563.6	13.3	49.3	100	49.3	1.4	42.6	4.6	0.6	0.06	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
X01	43	568.5	533.4	6.4	28.7	100	28.7	0.7	25.1	2.3	0.50	0.05	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X02	243	569.3	528.7	8.0	32.6	100	32.6	0.7	28.9	2.5	0.40	0.10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X03	274	623.3	587.4	9.5	26.4	100	26.4	0.4	22.3	2.8	0.70	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X04	110	731.2	671.6	16.1	43.5	100	43.5	0.3	39.7	2.7	0.6	0.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3
X05	244	466.2	439.4	7.9	18.9	100	18.9	0.2	17.1	1.3	0.20	0.10	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y05	42	587.1	495.2	14.3	77.6	100	77.6	1.4	67.1	7.0	1.40	0.70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Z01	109	819.9	781.3	8.7	29.9	100	29.9	1.3	23.2	4.0	1.1	0.3	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z02	160	699.8	642.0	12.3	45.5	100	45.5	2.3	36.4	5.4	1.3	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
Z03	223	723.9	688.0	5.0	30.9	100	30.9	0.9	22.4	5.5	1.7	0.4	0	6	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z04	141	718.4	643.0	7.3	68.1	100	68.1	1.9	54.4	9.8	1.8	0.20	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Z05	161	683.2	557.4	12.4	113.4	100	113.4	3.2	78.7	22.7	7.1	1.70	6	26	50(150)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Z06	176	566.3	562.4	0.7	3.2	100	3.2	0.1	2.6	0.4	0.1	0.03	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Z07	63	808.2	724.8	9.8	73.6	100	73.6	1.9	56.4	11.9	2.5	0.9	0	1	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Z08	258	1,688.2	849.3	89.1	749.8	100	749.8	14.4	622.5	77.9	26.8	8.20	1	16	30(200)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	25(80)	81
Z09	239	1,720.2	1,417.3	35.1	267.8	100	267.8	7.8	144.4	74.8	27.6	13.2	1	24	40(250)	0	0	0	0	0	0	0	0	0	0	0	0	6(20)	0	0	2	0	2(5)	10(50)	77
Z10	26	708.8	618.6	21.4	68.8	100	68.8	1.0	56.6	9.1	1.60	0.50	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	4
Z11	262	1,517.7	1,302.8	46.0	168.9	100	168.9	3.0	127.1	22.8	10.2	5.80	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
Z12	76	1,284.7	1,143.9	25.4	115.4	100	115.4	4.0	93.4	13.9	2.9	1.2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Z13	159	1,309.6	1,081.4	29.1	199.1	100	199.1	4.6	157.4	22.4	9.7	5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z14	52	740.3	527.3	33.2	179.8	100	179.8	2.1	155.9	16.4	4.1	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Z15	30	864.2	682.0	25.4	156.8	100	156.8	2.3	129.5	21.5	2.90	0.60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	4
Z16	214	491.2	455.4	8.9	26.9	100	26.9	0.5	21.3	4.1	0.8	0.2	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Z17	252	862.7	771.6	19.6	71.5	100	71.5	2.7	57.6	8.4	2.1	0.70	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z18	69	1,075.4	648.7	60.1	366.6	100	366.6	1.6	276.3	70.6	16.9	1.20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z19	122	2,505.1	401.2	467.4	1,636.5	20	327.3	11.8	221.1	81.0	10.9	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z20	115	964.6	509.5	101.1	354.0	100	354.0	16.2	232.1	78.5	25.0	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

		<2.0 mm Table Concentrate (g)											Selected MMSIMs			KIM Count																		
			Heavy Liquid Separation S.G 3.20										1.0 to 2.0 mm	0.5 to 1.0 mm	0.25 to 0.5 mm	1.0 to 2.0 mm							0.5 to 1.0 mm							0.25 to 0.5 mm						
					Nonferromagnetic HMC																															
						Processed Split																														
						Total																													
Field no	Lab no	Total	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	-0.25 mm	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm	Low-Cr diopside	Low-Cr diopside	Low-Cr diopside	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	GP	GO	DC	IM	CR	FO	Total KIMs
												*			**																		**	
96TCA1	114	808.3	703.9	19.8	84.6	100	84.6	1.6	68.6	10.6	2.8	1.00	0	5	63	0	0	0	1	0	1	4	4	2	3	0	14	21	11	16	22	17	49	165
96TCA1	197	668.6	581.4	19.3	67.9	100	67.9	0.7	56.8	7.8	1.9	0.7	0	10	88	0	0	0	0	0	0	3	5	2	1	0	9	18	19	16	14	13	26	126
96TCA2	95	1,241.1	1,133.7	20.2	87.2	100	87.2	0.6	70.4	11.1	3.4	1.70	0	13	78	0	0	0	0	0	1	2	2	5	1	0	5	21	19	14	15	29	31	145

* Values greater than 0.1 g were weighed only to one decimal place; the zero was added in the second decimal position to facilitate column alignment.

** Numbers in brackets are estimated total indicator grains present in samples where not all of the grains were picked.

Field #	Lab #	REMARKS:
		SEM check from 1.0-2.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 1 well-worn, second-cycle CR versus crustal
A02	168	ilmenite candidate = 1 crustal ilmenite.
A03	68	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 2 CR versus crustal ilmenite candidates = 1 crustal ilmenite and 1 rutile. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine
A04	35	candidate = 1 almandine; and 5 CR versus IM candidates = 1 CR and 4 crustal ilmenite.
A05	38	Sole CR from 0.25-0.5 mm fraction lost in transfer to vial.
A06	209	SEM check from 0.25-0.5 mm fraction: 1 CR candidate = 1 CR.
A07	255	Sole CR from 0.25-0.5 mm fraction lost in transfer to vial.
A08	119	No KIM remarks.
A09	241	No KIM remarks.
		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidatse = 2
A10	133	crustal ilmenite.
		SEM checks from 1.0-2.0 mm fraction: 2 IM versus crustal ilmenite candidates = 1 crustal ilmenite and 1 tourmaline. SEM checks from 0.5-1.0 mm fraction: 10 IM versus crustal ilmenite candidates = 1 IM with weak MgO, no Cr2O3 and mantled by CrZn-spinel and 9 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite; and 4 CR versus crustal ilmenite candidates = 2 CR and 2 crustal ilmenite.
A11	5	
A12	126	No KIM remarks.
A13	137	No KIM remarks.
B02	118	No KIM remarks.
B03	82	No KIM remarks.
		SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
B04	91	ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; and
B05	240	1 CR versus crustal ilmenite candidate = 1 crustal ilmenite.
B06	153	No KIM remarks.
B07	233	No KIM remarks.
B08	245	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 1 crustal
B09	98	ilmenite and 2 SiO2 (silica glass contamination).
B10	11	SEM check from 0.25-0.5 mm fraction: 1 CR versus hercynite candidate = 1 CR.
		SEM checks from 0.25-0.5 mm fraction: 3 CR versus rutile candidates = 2 CR and 1 crustal
B11	56	ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 3 crustal
B12	173	ilmenite.
C02	189	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; and
C03	51	2 CR versus crustal ilmenite candidate = 1 CR and 1 crustal ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 10 CR versus crustal ilmenite candidates = 1 CR and 9
C04	6	crustal ilmenite.
		SEM check from 0.5-1.0 mm fraction: 1 FO versus enstatite candidate = 1 enstatite. SEM checks from 0.25-0.5 mm fraction: 6 CR versus IM candidates = 2 CR and 4 crustal ilmenite.
C05a	93	
		SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal
C05b	46	ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 3 CR versus crustal ilmenite candidates = 2 CR and 1
C06	237	crustal ilmenite.
C07	145	No KIM remarks.

Field #	Lab #	REMARKS:
		SEM checks from 0.25-0.5 mm fraction: 1 IM versus rutile candidate = 1 IM; and 1 FO versus
C08	136	zoisite candidate = 1 diopside.
C09	131	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 8 CR versus crustal ilmenite candidates = 1 CR, 6
C10	210	crustal ilmenite and 1 tourmaline.
		SEM checks from 0.25-0.5 mm fraction: 2 FO versus zoisite candidates = 1 corundum and 1
C11	169	enstatite.
		SEM checks from 0.25-0.5 mm fraction: 3 CR versus crustal ilmenite candidates = 2 CR and 1
C12	166	crustal ilmenite.
D02	143	No KIM remarks.
D03	149	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 3 IM versus crustal ilmenite candidates = 3 crustal ilmenite; and 1 FO versus enstatite candidate = 1 enstatite. SEM checks from 0.25-0.5 mm
D04	9	fraction: 9 IM versus crustal ilmenite candidates = 8 crustal ilmenite and 1 CR.
D05	106	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 1 GO versus almandine candidate = 1 spessartine; and 1 CR versus hercynite candidate = 1 CR. SEM checks from 0.25-0.5 mm fraction: 2 CR versus
D06	3	crustal ilmenite candidates = 1 CR and 1 crustal ilmenite.
D07	14	No KIM remarks.
D08	230	No KIM remarks.
D09	139	No KIM remarks.
D10	127	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal
D11	39	ilmenite.
D12	225	No KIM remarks.
E02	92	No KIM remarks.
E03	190	No KIM remarks.
E04	186	No KIM remarks.
E05	61	SEM checks from 0.25-0.5 mm fraction: 3 CR candidates = 3 CR (one is Zn-bearing).
E06	12	No KIM remarks.
		SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
E07	195	ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 2 CR versus crustal ilmenite candiadtes = 1 CR and 1
E08	113	crustal ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal
E09	181	ilmenite; and 4 CR versus crustal ilmenite candidates = 1 CR and 3 crustal ilmenite.
E10	101	No KIM remarks.
E11	167	No KIM remarks.
F02	185	SEM check from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine.
		SEM checks from 0.25-0.5 mm fraction: 4 CR versus rutile candidates = 2 CR and 2 crustal
F03	198	ilmenite; and 1 FO versus diopside candidate = 1 zoisite.
F04	211	No KIM remarks.
F05	142	No KIM remarks.
F06	57	No KIM remarks.
		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 2 CR versus crustal ilmenite candidates = 1
F07	64	CR and 1 crustal ilmenite.
F08A	269	SEM checks from 0.25-0.5 mm fraction: 3 CR versus rutile candidates = 3 crustal ilmenite.
		SEM checks from 0.5-1.0 mm fraction: 2 CR versus crustal ilmenite candidates = 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 4 CR versus crustal ilmenite candidates = 4
F08B	264	crustal ilmenite.
F09	229	No KIM remarks.
F10	158	No KIM remarks.

Field #	Lab #	REMARKS:
G02	125	No KIM remarks.
G03	94	SEM checks from 0.25-0.5 mm fraction: 6 CR versus IM candidates = 3 CR and 3 crustal ilmenite.
G04	163	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 3 crustal ilmenite.
G05	236	No KIM remarks.
G06	90	No KIM remarks.
G07	174	SEM check from 0.5-1.0 mm fraction: 1 IM versus CR candidate = 1 CR.
G08	193	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 1 FO versus diopside candidate = 1 corundum.
G09	232	SEM checks from 0.25-0.5 mm fraction: 4 CR versus rutile candidates = 1 CR and 3 crustal ilmenite.
G10	22	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite.
H02	222	No KIM remarks.
H03	179	No KIM remarks.
H04	105	SEM checks from 0.5-1.0 mm fraction: 2 CR versus goethite candidates = 1 CR and 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 3 CR versus crustal ilmenite candidates = 1 CR and 2 crustal ilmenite; and 1 FO versus epidote candidate = 1 zoisite.
H05	124	No KIM remarks.
H06	77	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 6 IM versus CR candidates = 1 CR and 5 crustal ilmenite.
H07	170	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 CR.
H08	132	No KIM remarks.
H09	271	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 1 CR versus crustal ilmenite candidate = 1 Ti-andradite.
H10	7	SEM checks from 0.5-1.0 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite.
I02	34	No KIM remarks.
I03	87	SEM checks from 0.25-0.5 mm fraction: 3 CR versus crustal ilmenite candidates = 2 CR and 1 IM.
I04	165	No KIM remarks.
I05	217	SEM check from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite candidate = 1 crustal ilmenite.
I06	13	SEM checks from 0.25-0.5 mm fraction: 1 DC versus Cr-garnet candidate = 1 DC; and 6 CR versus tourmaline candidates = 4 CR and 2 crustal ilmenite.
I07	86	SEM checks from 0.25-0.5 mm fraction: 5 CR versus crustal ilmenite candidates = 5 crustal ilmenite.
I08	73	SEM checks from 0.5-1.0 mm fraction: 1 GP versus GO candidate = 1 GP; 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite; and 3 FO versus fayalite candidates = 3 fayalite.
I09	60	No KIM remarks.
I10	155	No KIM remarks.
J02	66	No KIM remarks.
J03	47	No KIM remarks.
J04	103	No KIM remarks.
J05	226	No KIM remarks.
J06	183	No KIM remarks.
J07	204	SEM check from 0.25-0.5 mm fraction: 1 well-worn, second-cycle GP versus zircon candidate = 1 GP.

Field #	Lab #	REMARKS:
J08	107	SEM checks from 0.25-0.5 mm fraction: 13 CR versus crustal ilmenite candidates = 3 CR and 10 crustal ilmenite; and 3 FO versus fayalite candidates = 2 FO and 1 fayalite.
J09	130	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 3 crustal ilmenite.
J10	20	SEM check from 0.25-0.5 mm fraction: 1 CR versus andradite candidate = 1 CR.
K02	273	No KIM remarks.
K03	41	SEM checks from 0.25-0.5 mm fraction: 5 CR versus IM candidates = 4 CR and 1 crustal ilmenite.
K04	250	No KIM remarks.
K05	21	No KIM remarks.
K06	261	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 5 CR versus crustal ilmenite candidates = 1 CR and 4 crustal ilmenite; and 5 FO versus fayalite candidates = 5 FO (Fo60).
K07	148	SEM checks from 0.25-0.5 mm fraction: 7 CR versus crustal ilmenite candidates = 1 CR (high Al) and 6 crustal ilmenite.
K08	121	SEM checks from 0.25-0.5 mm fraction: 6 IM versus crustal ilmenite candidates = 6 crustal ilmenite; and 2 FO versus diopside candidates = 2 FO. Sole GP from 0.25-0.5 mm fraction is a well-worn, second-cycle grain.
K09	111	SEM checks from 0.25-0.5 mm fraction: 3 FO versus zoisite candidates = 2 FO and 1 apatite.
K10	228	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; and 1 FO versus epidote candidate = 1 FO.
L02	18	No KIM remarks.
L03	251	No KIM remarks.
L04	220	SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite.
L05E	23	SEM checks from 0.5-1.0 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite.
L05W	4	SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 3 crustal ilmenite.
L06E	40	SEM check from 0.25-0.5 mm fraction: 1 FO versus diopside candidate = 1 FO.
L06WA	218	SEM checks from 0.25-0.5 mm fraction: 2 CR versus crustal ilmenite candidates = 2 crustal ilmenite.
L06WB	184	No KIM remarks.
L07	44	SEM checks from 0.5-1.0 mm fraction: 2 CR versus crustal ilmenite candidates = 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 9 CR versus crustal ilmenite candidates = 9 crustal ilmenite.
L08	267	No KIM remarks.
L09	19	SEM checks from 0.25-0.5 mm fraction: 2 CR candidates = 2 crustal ilmenite.
L10	99	SEM check from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite candidate = 1 CR.
L11	150	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 4 crustal ilmenite.
M02	78	No KIM remarks.
M03	152	No KIM remarks.
M04	248	No KIM remarks.
M05	29	No KIM remarks.
M06	49	No KIM remarks.
M07	172	SEM checks from 0.5-1.0 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite.

Field #	Lab #	REMARKS:
M08	128	No KIM remarks.
M09	180	No KIM remarks.
M10	188	No KIM remarks.
M11	120	No KIM remarks.
N03	215	No KIM remarks.
N04	147	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 4 crustal
N05	138	ilmenite and 1 CR.
N06	202	SEM checks from 0.25-0.5 mm fraction: 6 IM versus CR candidates = 6 crustal ilmenite.
N07	16	SEM check from 0.25-0.5 mm fraction: 1 CR candidate = 1 CR.
N08	259	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal
N09	32	ilmenite.
N10	242	No KIM remarks.
N11	266	No KIM remarks.
N12	270	No KIM remarks.
O03	177	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal
O04	8	ilmenite; and 2 CR versus rutile candidates = 2 crustal ilmenite.
O05	272	No KIM remarks.
		SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
O06	207	ilmenite.
		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 5 CR versus andradite candidates = 3 Ti-
O07	182	andradite and 2 crustal ilmenite.
		SEM checks from 0.5-1.0 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 1 CR versus andradite candidate = 1 Ti-
O08	212	andradite; and 2 FO versus fayalite candidates = 2 FO (Mg-poor).
O09	246	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 10 IM versus crustal ilmenite candidates = 10 crustal
O10	162	ilmenite.
O11	221	No KIM remarks.
O12	65	No KIM remarks.
P03	37	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 3 CR versus rutile candidates = 2 CR and 1 crustal
P04	28	ilmenite.
P05	206	No KIM remarks.
P06	268	No KIM remarks.
		SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 grossular; and 7
P07	48	IM versus crustal ilmenite candidates = 5 crustal ilmenite and 2 CR.
P08	247	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 10 IM versus crustal ilmenite candidates = 10 crustal
P09	154	ilmenite.
		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
P10	157	ilmenite.
P11	123	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
P12	62	ilmenite; and 1 CR versus crustal ilmenite candidate = 1 crustal ilmenite.
		SEM checks from 0.25-0.5 mm fraction: 6 FO candidates = 6 FO. Sole FO from 0.5-1.0 mm
P13	10	fraction confirmed by SEM (see MMSIM notes).
		SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
Q02	72	ilmenite.
Q03	200	No KIM remarks.

Field #	Lab #	REMARKS:
Q03A	129	No KIM remarks.
Q04	257	No KIM remarks.
Q05	203	No KIM remarks.
Q06	108	No KIM remarks.
Q07	17	No KIM remarks. SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; and 1 CR versus andradite candidate = 1
Q08	156	andradite.
Q09	96	SEM checks from 0.5-1.0 mm fraction: 4 CR versus rutile candidates = 4 crustal ilmenite. SEM checks from 0.25-0.5 mm fraction: 7 FO versus fayalite candidates = 6 FO and 1 epidote.
Q10	275	
Q11	58	No KIM remarks.
Q12	97	0.5-1.0 mm CR is chromitite (see MMSIM notes).
Q13	263	No KIM remarks.
R02	253	No KIM remarks.
R03	15	No KIM remarks.
R04	199	SEM check from 0.25-0.5 mm fraction: 1 CR versus tourmaline candidate = 1 CR.
R05	219	No KIM remarks.
R06	164	No KIM remarks. SEM checks from 0.25-0.5 mm fraction: 1 GP versus zircon candidate = 1 zircon; 1 GO versus staurolite candidate = 1 staurolite; and 4 IM versus crustal ilmenite candidates = 4 crustal
R07	134	ilmenite.
R08	24	No KIM remarks.
R09	201	No KIM remarks. SEM checks from 0.25-0.5 mm fraction: 5 IM versus crustal ilmenite candidates = 5 crustal
R10	151	ilmenite.
R11	213	No KIM remarks.
R12	194	No KIM remarks.
R13	192	No KIM remarks. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
R14	171	ilmenite; and 1 CR versus crustal ilmenite candidate = 1 crustal ilmenite.
R15	74	No KIM remarks.
S01	75	No KIM remarks.
S02	45	No KIM remarks. SEM checks from 0.25-0.5 mm fraction: 3 IM versus crustal ilmenite candidates = 2 crustal
S03	112	ilmenite and 1 CR; and 3 CR versus hematite candidates = 1 CR and 2 hematite. SEM checks from 0.25-0.5 mm fraction: 1 red-pink GP versus almandine candidate = 1 GP; 1 GO versus almandine candidate = 1 almandine; 5 IM versus crustal ilmenite candidates = 1 IM (moderate MgO), 3 crustal ilmenite and 1 CR; and 6 CR candidates = 4 CR and 2 crustal
S04	79	ilmenite. 1 CR is a well-worn, second-cycle grain. SEM checks from 0.25-0.5 mm fraction: 2 GO versus spessartine candidates = 2 staurolite.
S05	89	
S06	53	SEM check from 0.25-0.5 mm fraction: 1 GO versus grossular candidate = 1 grossular. SEM checks from 0.25-0.5 mm fraction: 2 IM versus crustal ilmenite candidates = 2 crustal
S07	224	ilmenite; and 1 FO versus diopside candidate = 1 siderite.
S08	81	No KIM remarks.
S09	249	No KIM remarks.
S10	55	No KIM remarks.
S11	84	No KIM remarks. SEM checks from 0.25-0.5 mm fraction: 6 CR versus crustal ilmenite candidates = 1 CR and 5
S12	116	crustal ilmenite.
S13	146	No KIM remarks.
S14	80	No KIM remarks.

Field #	Lab #	REMARKS:
S15	187	No KIM remarks.
S16	256	SEM check from 0.5-1.0 mm fraction: 1 FO versus fayalite candidate = 1 FO. SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 5 FO versus fayalite candidates = 5 FO.
T01	71	SEM checks from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal ilmenite; and 1 CR candidate = 1 crustal ilmenite.
T02	144	SEM check from 0.25-0.5 mm fraction: 1 CR versus crustal ilmenite candidate =1 CR.
T03	254	SEM checks from 0.25-0.5 mm fraction: 5 CR versus crustal ilmenite candidates = 2 CR and 3 crustal ilmenite.
T04	265	No KIM remarks.
T05	88	SEM checks from 0.25-0.5 mm fraction: 7 CR versus IM candidates = 4 CR and 3 crustal ilmenite.
T06	140	SEM checks from 0.25-0.5 mm fraction: 5 GO versus almandine candidates = 5 almandine; 8 IM versus crustal ilmenite candidates = 7 crustal ilmenite and 1 CR; and 1 FO versus diopside candidate = 1 enstatite.
T07	117	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM and 3 crustal ilmenite.
T08	85	SEM checks from 0.25-0.5 mm fraction: 1 GO versus almandine candidate = 1 almandine; 2 IM versus crustal ilmenite candidates = 2 crustal ilmenite; and 3 FO versus zoisite candidates = 2 diopside and 1 andradite.
T09	67	No KIM remarks.
T10	27	No KIM remarks.
T11	33	No KIM remarks.
T11-2	260	SEM check from 0.25-0.5 mm fraction: 1 FO versus fayalite candidate = 1 zoisite.
T12	216	No KIM remarks.
T14	208	No KIM remarks.
T15	59	No KIM remarks.
T16	25	No KIM remarks.
U02	235	No KIM remarks.
U03	191	No KIM remarks.
U04	83	SEM checks from 0.25-0.5 mm fraction: 5 CR versus IM candidates = 4 CR and 1 Ti-andradite.
U05	54	No KIM remarks.
U08	234	No KIM remarks.
U09	31	No KIM remarks.
U10	135	No KIM remarks.
U11	205	No KIM remarks.
V02	70	No KIM remarks.
V03	231	SEM checks from 0.25-0.5 mm fraction: 7 CR versus tourmaline candidates = 6 CR and 1 crustal ilmenite.
V04	50	No KIM remarks.
V06	227	SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. SEM checks from 0.25-0.5 mm fraction: 3 CR versus crustal ilmenite candidates = 1 CR and 2 crustal ilmenite.
V07	36	No KIM remarks.
V08	238	No KIM remarks.
V09	178	No KIM remarks.
W02	104	SEM checks from 0.25-0.5 mm fraction: 2 CR with attached silicate = 2 CR + fayalite; 1 CR candidate = 1 CR; and 1 FO versus fayalite candidate = 1 siderite.
W03	102	SEM checks from 0.5-1.0 mm fraction: 2 FO versus zoisite candidates = 2 diopside.
W04	175	No KIM remarks.
W05	100	SEM checks from 0.25-0.5 mm fraction: 4 IM versus crustal ilmenite candidates = 1 IM and 3 crustal ilmenite.

Field #	Lab #	REMARKS:
		SEM checks from 0.25-0.5 mm fraction: 1 DC versus Cr-garnet candidate = 1 DC; and 3 well-
W06	196	worn, second-cycle CR versus goethite candidates = 3 crustal ilmenite.
X01	43	No KIM remarks.
X02	243	No KIM remarks.
X03	274	No KIM remarks.
X04	110	No KIM remarks.
X05	244	No KIM remarks.
Y05	42	No KIM remarks.
Z01	109	No KIM remarks.
Z02	160	SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM.
Z03	223	No KIM remarks.
Z04	141	No KIM remarks.
		SEM check from 0.25-0.5 mm fraction: 1 IM versus crustal ilmenite candidate = 1 crustal
Z05	161	ilmenite.
Z06	176	No KIM remarks.
Z07	63	No KIM remarks.
Z08	258	SEM checks from 0.25-0.5 mm fraction: 5 FO versus diopside candidates = 5 FO.
Z09	239	SEM checks from 0.5-1.0 mm fraction: 6 FO versus diopside candidates = 6 FO.
		SEM checks from 0.25-0.5 mm fraction: 1 DC versus Cr-grossular candidate = 1 uvarovite; and
Z10	26	5 CR versus crustal ilmenite candidates = 3 CR and 2 crustal ilmenite.
Z11	262	No KIM remarks.
Z12	76	SEM checks from 0.25-0.5 mm fraction: 2 CR versus tourmaline candidates = 2 CR.
Z13	159	No KIM remarks.
Z14	52	No KIM remarks.
		SEM check from 0.5-1.0 mm fraction: 1 FO versus zoisite candidate = 1 FO. SEM checks from
Z15	30	0.25-0.5 mm fraction: 3 CR versus rutile candidates = 3 CR.
		SEM check from 0.5-1.0 mm fraction: 1 IM versus crustal ilmenite candidate = 1 IM. Sole IM
Z16	214	from 0.5-1.0 mm fraction shows major wear, indicating long transport.
Z17	252	No KIM remarks.
Z18	69	No KIM remarks.
Z19	122	No KIM remarks.
Z20	115	No KIM remarks.
		SEM checks from 0.5-1.0 mm fraction: 5 GO versus almandine candidates = 5 almandine. SEM checks from 0.25-0.5 mm fraction: 15 GO versus almandine candidates = 5 GO (Cr-poor pyrope) and 10 almandine; 8 IM versus crustal ilmenite candidates = 1 IM, 4 CR and 3 crustal
96TCA18	114	ilmenite; and 8 FO versus zoisite candidates = 6 FO and 2 zoisite.
		SEM checks from 0.5-1.0 mm fraction: 4 GO versus almandine candidates = 3 GO (Cr-poor pyrope) and 1 almandine; 3 IM versus crustal ilmenite candidates = 1 IM and 2 crustal ilmenite;
96TCA19	197	and 4 FO versus zoisite candidates = 2 FO, 1 zoisite and 1 sphalerite.
		SEM checks from 0.5-1.0 mm fraction: 7 GO versus almandine candidates = 1 GO (pyrope-almandine) and 6 almandine; and 6 FO versus apatite candidates = 5 FO and 1 andradite. SEM checks from 0.25-0.5 mm fraction: 6 GO versus almandine candidates = 1 GO (Cr-poor pyrope) and 5 almandine. 1 GO and sole IM from 0.5-1.0 mm fraction and 1 GP and 1 IM from 0.25-0.5
96TCA23	95	mm fraction have partial alteration mantles.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
A02	168	0	15% barite (~1000 gr)	0	20	1 pale grey	Tr Mn-epidote (1 gr) Tr low-Cr diopside (12 gr)	Tr (2 gr)	5	Tr	Tr	8	0	0	Tr	Tr (1 gr; see KIM data)	2	0	Almandine-goethite-hornblende/epidote-diopside-barite assemblage. 0.5-1.0 mm fraction contains 10% (~200 gr) barite.	1.0-2.0 mm fraction: 26 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 1 spinel 1 Mn-epidote 12 low-Cr diopside 2 red rutile 1 chromite (picked as KIM)	Almandine-goethite-hornblende/epidote-diopside-barite	0.5-1.0 mm fraction contains 10% (~200 gr) barite.
A03	68	0	0	Tr (1 gr)	10	0	Tr low-Cr diopside (1 gr)	0	2	Tr	Tr	4	0	0	0	Tr (2 gr; see KIM data)	1	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	
A04	35	0	5% barite (~200 gr)	0	8	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	Tr	Tr	Tr	0	0	0	Tr (3 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage. 0.5-1.0 mm fraction contains 10% (~70 grains) barite.	1.0-2.0 mm fraction: 6 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 1 low-Cr diopside 1 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende/epidote	0.5-1.0 mm fraction contains 10% (~70 grains) barite.
A05	38	0	2% barite (~100 gr)	0	5	0	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	3	0	0	Tr	Tr (1 gr; see KIM data)	2	Tr	Almandine-hornblende-hematite/epidote assemblage.	0.5-1.0 mm fraction: 13 barite 0.25-0.5 mm fraction: 20 representative barite 4 low-Cr diopside 1 chromite (counted as KIM; lost in transfer to vial)	Almandine-hornblende-hematite/epidote	
A06	209	0	Tr (barite (9 gr)	0	5	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	3	Tr	Tr	0	0	0	Tr (1 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 8 barite 0.25-0.5 mm fraction: 9 barite 1 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote	
A07	255	0	Tr barite (3 gr)	Tr (3 gr)	8	1 green gahnite; 2 pale blue spinel	Tr low-Cr diopside (1 gr)	Tr (1 gr)	1	2	Tr	2	0	0	0	Tr (1 gr; see KIM data)	1	0	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 5 barite versus leucoxene candidates = 5 barite. SEM checks from 0.25-0.5 mm fraction: 4 barite candidates = 3 barite and 1 sillimanite; and 1 green gahnite versus spinel candidate = 1 gahnite.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 5 barite 0.25-0.5 mm fraction: 3 barite 1 sillimanite resembling barite 1 gahnite 2 spinel 1 low-Cr diopside 1 red rutile 1 chromite (picked as KIM; lost in transfer to vial)	Almandine-hornblende/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 5 barite versus leucoxene candidates = 5 barite. SEM checks from 0.25-0.5 mm fraction: 4 barite candidates = 3 barite and 1 sillimanite; and 1 green gahnite versus spinel candidate = 1 gahnite.
A08	119	0	Tr barite (13 gr)	0.2 (~10 gr)	8	1 blue-green gahnite; 3 pale purple spinel	Tr low-Cr diopside (4 gr)	Tr (2 gr)	2	Tr	Tr	3	0	0	0	Tr (5 gr; see KIM data)	Tr	0	Almandine-hematite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite; 3 pale purple spinel candidates = 3 spinel; and 1 PbSn-solder candidate = 1 Zn-Metal (contamination).	0.25-0.5 mm fraction: 13 barite 1 gahnite 3 spinel 4 low-Cr diopside 2 red rutile 5 chromite (picked as KIMs) 1 Zn-metal (contamination)	Almandine-hematite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite; 3 pale purple spinel candidates = 3 spinel; and 1 PbSn-solder candidate = 1 Zn-Metal (contamination).

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
A09	241	0	0	0	Tr	3 pale purple, pale blue	Tr low-Cr diopside (1 gr)	Tr (2 gr)	Tr	Tr	Tr	7	0	0	Tr	Tr (1 gr; see KIM data)	5	Tr	Almandine-hornblende-hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 spinel 1 low-Cr diopside 2 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote	
A10	133	0	0	Tr (3 gr)	15	1 blue-green gahnite; 1 blue-green spinel	0	0	Tr	Tr	Tr	25	0	0	0	Tr (3 gr; see KIM data)	2	0	Almandine-hematite-goethite/epidote- staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.25-0.5 mm fraction: 1 gahnite 1 spinel 3 chromite (picked as KIMs)	Almandine-hematite-goethite/epidote-staurolite	SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.
A11	5	0	0	0	10	1 green gahnite; 2 pale blue spinel	Tr low-Cr diopside (1 gr)	Tr (2 gr)	Tr	Tr	5	45	0	0	0	Tr (5 gr; see KIM data)	2	0	Almandine-hematite-ilmenite/staurolite- epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 earthy orange barite candidate = 1 florencite {CeAl3(P04)2(OH)6}; 1 green gahnite versus spinel candidate = 1 gahnite; and 2 pale blue gahnite versus spinel candidates = 2 spinel.	0.25-0.5 mm fraction: 1 florencite resembling barite 1 gahnite 2 spinel 1 low-Cr diopside 2 red rutile 5 chromite (picked as KIMs)	Almandine-hematite-ilmenite/staurolite-epidote	SEM checks from 0.25-0.5 mm fraction: 1 earthy orange barite candidate = 1 florencite {CeAl3(P04)2(OH)6}; 1 green gahnite versus spinel candidate = 1 gahnite; and 2 pale blue gahnite versus spinel candidates = 2 spinel.
A12	126	0	0	0	10	1 pale blue-green	0	0	1	0	Tr	5	0	0	0	0	1	0	Almandine-hornblende-ilmenite/epidote- titanite assemblage.	0.25-0.5 mm fraction: 1 spinel	Almandine-hornblende-ilmenite/epidote-titanite	
A13	137	0	0	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0	Goethite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 barite versus zoisite candidates = 1 zoisite, 1 diopside and 8 quartz. Goethite dominates all fractions.	0.25-0.5 mm fraction: 1 zoisite resembling barite 1 diopside resembling barite 8 quartz resembling barite	Goethite/epidote	SEM checks from 0.25-0.5 mm fraction: 10 barite versus zoisite candidates = 1 zoisite, 1 diopside and 8 quartz. Goethite dominates all fractions.
B02	118	0	0	0	5	4 pale blue	0	Tr (1 gr)	3	Tr	Tr	3	0	0	0	Tr (2 gr; see KIM data)	1	0	Almandine-hornblende-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 pale blue spinel 0.25-0.5 mm fraction: 4 spinel 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende-ilmenite/epidote	
B03	82	0	2% barite (~150 gr)	0	15	1 pale purple	Tr Mn-epidote (2 gr) Tr low-Cr diopside (4 gr)	Tr (3 gr)	2	2	Tr	15	0	0	0	Tr (1 gr; see KIM data)	3	Tr	Almandine-hornblende-goethite/epidote-staurolite assemblage.	0.5-1.0 mm fraction: 24 barite 0.25-0.5 mm fraction: 20 representative barite 1 spinel 2 Mn-epidote 4 low-Cr diopside 3 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-goethite/epidote-staurolite	
B04	91	0	3% barite (~200 gr)	0	5	0	Tr sapphire corundum (1 gr) Tr low-Cr diopside (4 gr)	Tr (1 gr)	1	Tr	Tr	4	0	0	Tr	Tr (3 gr; see KIM data)	4	0	Almandine-hornblende-hematite/epidote assemblage. 0.5-1.0 mm fraction contains 8% (~80 gr) barite.	1.0-2.0 mm fraction: 7 barite 0.5-1.0 mm fraction: 20 representative barite 1 low-Cr diopside 0.25-0.5 mm fraction: 20 representative barite 1 sapphire corundum 4 low-Cr diopside 1 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote	0.5-1.0 mm fraction contains 8% (~80 gr) barite.
B05	240	0	0	0	3	1 green gahnite; 1 green spinel	Tr low-Cr diopside (3 gr)	Tr (1 gr)	1	1	Tr	2	0	0	0	Tr (1 gr; see KIM data)	3	0	Almandine-hornblende-hematite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 gahnite 1 spinel 3 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 1 gahnite and 1 spinel.
B06	153	0	0	0	1	1 pale blue	Tr low-Cr diopside (3 gr)	Tr (2 gr)	3	1	Tr	5	0	0	Tr	Tr (2 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 3 low-Cr diopside 2 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
B07	233	0	0	0	Tr	1 purple	Tr low-Cr diopside (2 gr)	Tr (1 gr)	2	2	Tr	4	0	0	Tr	0	15	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 2 low-Cr diopside 1 red rutile	Almandine-hornblende/epidote-diopside	
B08	245	0	0	0	Tr	1 pale purple	Tr low-Cr diopside (3 gr)	Tr (2 gr)	Tr	Tr	Tr	5	0	0	Tr	Tr (3 gr; see KIM data)	Tr	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 3 low-Cr diopside 2 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
B09	98	0	0	0	15	0	Tr low-Cr diopside (5 gr)	0	2	Tr	Tr	3	0	0	Tr	Tr (1 gr; see KIM data)	1	0	Almandine-hornblende-goethite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 glassy blue tourmaline candidates = 2 SiO2 (silica glass contamination).	0.25-0.5 mm fraction: 5 low-Cr diopside 1 chromite (picked as KIM) 4 silica glass (contamination; see KIM notes)	Almandine-hornblende-goethite/epidote	SEM checks from 0.25-0.5 mm fraction: 2 glassy blue tourmaline candidates = 2 SiO2 (silica glass contamination).
B10	11	0	0	0	8	4 pale blue, grey	0	Tr (4 gr)	Tr	Tr	Tr	8	0	0	0	Tr (2 gr; see KIM data)	1	Tr	Almandine-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 grey fluorite versus spinel candidates = 1 spinel; and 2 Mn-epidote versus monazite candidates = 2 monazite.	0.25-0.5 mm fraction: 4 spinel 2 monazite resembling Mn-epidote 4 red rutile 4 chromite (picked as KIMs)	Almandine-hematite/epidote	SEM checks from 0.25-0.5 mm fraction: 1 grey fluorite versus spinel candidates = 1 spinel; and 2 Mn-epidote versus monazite candidates = 2 monazite.
B11	56	0	0	Tr (2 gr)	10	1 pale blue	0	Tr (4 gr)	1	Tr	3	15	0	0	0	Tr (2 gr; see KIM data)	8	0	Almandine-hematite-hornblende/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 spinel 4 red rutile 2 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote staurolite	
B12	173	0.5 (1 gr)	0	0.5 (1 gr)	80	0	0	0.5 (1 gr)	10	0	0	25	0	0	0	Tr (1 gr; see KIM data)	5	0	Goethite/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 1 red rutile 1 chromite (picked as KIM)	Goethite/epidote-staurolite	
C02	189	0	0	Tr (2 gr)	3	4 pale purple, pale blue, pale blue-green	Tr topaz (3 gr)	0	2	Tr	Tr	2	0	0	0	Tr (1 gr; see KIM data)	2	Tr	Almandine-hematite-hornblende/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 barite candidates = 1 barite and 1 xenotime (YPO4). SEM checks from 0.25-0.5 mm fraction: 3 topaz candidates = 3 topaz.	0.5-1.0 mm fraction: 1 barite 1 xenotime resembling barite 0.25-0.5 mm fraction: 4 spinel 3 topaz 1 chromite (picked as KIM)	Almandine-hematite-hornblende/epidote	SEM checks from 0.5-1.0 mm fraction: 2 barite candidates = 1 barite and 1 xenotime (YPO4). SEM checks from 0.25-0.5 mm fraction: 3 topaz candidates = 3 topaz.
C03	51	0	0	0	10	0	Tr low-Cr diopside (2 gr)	Tr (2 gr)	0.5	Tr	Tr	2	0	0	0	Tr (1 gr; see KIM data)	2	Tr	Almandine-hornblende-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 2 low-Cr diopside 2 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote	
C04	6	0	Tr barite (8 gr)	Tr (3 gr)	5	1 blue grey	Tr low-Cr diopside (7 gr)	0	Tr	Tr	0.5	1	0	0	0	Tr (1 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 barite versus zoisite candidates = 2 barite.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 4 barite 0.25-0.5 mm fraction: 8 barite 1 spinel 7 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote	SEM checks from 0.5-1.0 mm fraction: 2 barite versus zoisite candidates = 2 barite.
C05a	93	0	2% barite (~150 gr)	Tr (10 gr)	5	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (8 gr)	Tr (1 gr)	1	Tr	Tr	5	0	0	0	Tr (2 gr; see KIM data)	3	0	Almandine-hornblende/epidote assemblage. 0.5-1.0 mm fraction contains 5% (~40 gr) barite.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 1 Mn-epidote 1 sapphire corundum 8 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	0.5-1.0 mm fraction contains 5% (~40 gr) barite.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp					>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
C05b	46	0	5% barite (~300 gr)	Tr (8 gr)	3	1 blue-green	0	0	Tr	Tr	Tr	1	0	0	1	Tr (3 gr; see KIM data)	6	Tr	Hornblende-almandine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 5 earthy barite versus epidote candidates = 5 barite. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.5-1.0 mm fraction: 5 barite 1 low-Cr diopside 0.25-0.5 mm fraction: 20 representative barite 1 spinel 3 chromite (picked as KIMs)	Hornblende-almandine/epidote	SEM checks from 0.5-1.0 mm fraction: 5 earthy barite versus epidote candidates = 5 barite. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.
C06	237	0	0	Tr (5 gr)	10	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	2	Tr	3	0	0	Tr	Tr (2 gr; see KIM data)	2	Tr	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	
C07	145	0	2% barite (~60 gr)	0	15	1 blue-grey	Tr ruby corundum (1 gr) Tr low-Cr diopside (11 gr)	Tr (4 gr)	8	Tr	Tr	10	0	0	Tr	Tr (1 gr; see KIM data)	3	0	Almandine-hornblende-goethite/epidote assemblage.	1.0-2.0 mm fraction: 6 barite 0.5-1.0 mm fraction: 38 barite 0.25-0.5 mm fraction: 20 representative barite 1 spinel 1 ruby corundum 11 low-Cr diopside 4 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-goethite/epidote	
C08	136	0	0	0	5	1 pale blue-green	Tr low-Cr diopside (6 gr)	Tr (6 gr)	2	Tr	Tr	3	0	0	0	Tr (1 gr; see KIM data)	1	Tr	Almandine-hornblende-augite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 pale blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 1 spinel 6 low-Cr diopside 6 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-augite/epidote	SEM check from 0.25-0.5 mm fraction: 1 pale blue-green gahnite versus spinel candidate = 1 spinel.
C09	131	0	0	85	1	0	0	0	Tr	0	Tr	3	0	0	0	0	Tr	0	Siderite-almandine/pyrite assemblage. "Pyrite" is mainly marcasite.		Siderite-almandine/pyrite	"Pyrite" is mainly marcasite.
C10	210	0	0	0	8	2 green gahnite; 7 pale blue-green, pale blue, colourless spinel	0	Tr (9 gr)	Tr	2	Tr	7	0	0	0	Tr (10 gr; see KIM data)	Tr	Tr	Almandine-hematite-hornblende/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 metal candidate = 1 Pb-metal (contamination). SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 gahnite; and 1 colourless spinel versus topaz candidate = 1 spinel.	0.5-1.0 mm fraction: 1 Pb-metal (contamination) 0.25-0.5 mm fraction: 2 gahnite 7 spinel 9 red rutile 10 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote	SEM check from 0.5-1.0 mm fraction: 1 metal candidate = 1 Pb-metal (contamination). SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 gahnite; and 1 colourless spinel versus topaz candidate = 1 spinel.
C11	169	0	0	Tr (1 gr)	5	0	Tr Mn-epidote (1 gr) Tr corundum (1 gr)	Tr (3 gr)	4	Tr	Tr	25	0	0	Tr	Tr (5 gr; see KIM data)	2	0	Almandine-ilmenite-hornblende/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 1 corundum (see KIM notes) 3 red rutile 1 enstatite (see KIM notes) 5 chromite (picked as KIMs)	Almandine-ilmenite-hornblende/epidote-staurolite	
C12	166	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	Tr (2 gr)	3	Tr	Tr	15	0	0	0	Tr (3 gr; see KIM data)	3	Tr	Almandine-hornblende/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-staurolite	
D02	143	0	15% barite (~700 gr)	0	15	0	Tr low-Cr diopside (2 gr)	0	Tr	0	Tr	Tr	0	0	0	Tr (1 gr; see KIM data)	Tr	Tr	Almandine-hornblende-hematite-goethite/ epidote-barite assemblage. 0.5-1.0 mm fraction contains 7% (~70 gr) barite.	1.0-2.0 mm fraction: 14 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 2 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende-hematite-goethite/ epidote-barite	0.5-1.0 mm fraction contains 7% (~70 gr) barite.
D03	149	0	0	0	1	0	Tr low-Cr diopside (3 gr)	0	2	0	Tr	5	Tr	0	0	0	2	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside	Almandine-hornblende/epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
D04	9	0	0	Tr (1 gr)	2	0	Tr low-Cr diopside (7 gr)	0	0	Tr	Tr	2	0	0	0	Tr (5 gr; see KIM data)	4	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 2 chromite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 7 low-Cr diopside 5 chromite (picked as KIMs)	Almandine-hornblende/epidote	
D05	106	0	3% barite (~800 gr)	90 (~20,000 gr)	Tr	0	Tr low-Cr diopside (9 gr)	0	0	1	0	Tr	0	0	0	0	Tr	0	Almandine-hematite/pyrite assemblage. "Pyrite" is mainly marcasite. 0.5-1.0 mm fraction contains 10% (~40 gr) barite.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 9 low-Cr diopside	Almandine-hematite/pyrite	"Pyrite" is mainly marcasite. 0.5-1.0 mm fraction contains 10% (~40 gr) barite.
D06	3	Tr (1 gr)	0	40 (~6000 gr)	5	0	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	0.5	0.5	0	0	0	Tr (1 gr; see KIM data)	Tr	0	Siderite-almandine/pyrite-epidote assemblage. "Pyrite" is mostly marcasite.	0.5-1.0 mm fraction: 1 spessartine (see KIM notes) 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 chalcopyrite 2 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Siderite-almandine/pyrite-epidote	"Pyrite" is mostly marcasite.
D07	14	0	0	0	10	0	Tr low-Cr diopside (6 gr)	0	2	1	0.5	4	0	0	0	0	4	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 6 low-Cr diopside	Almandine-hornblende/epidote	
D08	230	0	Tr barite (~30 gr)	75 (~15,000 gr)	5	1 green gahnite	Tr low-Cr diopside (3 gr)	0	Tr	Tr	Tr	2	0	0	0	0	Tr	0	Siderite-almandine-hornblende/pyrite assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite. "Pyrite" is mainly marcasite.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 7 barite 0.25-0.5 mm fraction: 10 representative barite 1 gahnite 3 low-Cr diopside	Siderite-almandine-hornblende/pyrite	SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite. "Pyrite" is mainly marcasite.
D09	139	0	0	0	15	0	Tr low-Cr diopside (1 gr)	0	3	0	Tr	0	0	0	1	Tr (1 gr; see KIM data)	Tr	Tr	Almandine-hornblende-goethite/epidote-diopside-titanite assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende-goethite/epidote-diopside-titanite	
D10	127	0	0	90 (~18,000 gr)	Tr	0	Tr low-Cr diopside (1 gr)	0	0	0	Tr	1	0	0	0	0	Tr	0	Siderite-almandine/pyrite assemblage. "Pyrite" is mainly marcasite and marcasite-cemented sandstone.	0.25-0.5 mm fraction: 1 low-Cr diopside	Siderite-almandine/pyrite	"Pyrite" is mainly marcasite and marcasite-cemented sandstone.
D11	39	0	0	0.5 (~50 gr)	8	0	Tr Mn-epidote (1 gr)	Tr (1 gr)	Tr	Tr	Tr	10	0	0	Tr	Tr (3 gr; see KIM data)	4	Tr	Ilmenite-almandine/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 1 red rutile 3 chromite (picked as KIMs)	Ilmenite-almandine/epidote	
D12	225	0	0	0	15	2 pale blue-green, pale purple	0	Tr (1 gr)	2	Tr	Tr	15	0	0	0	Tr (2 gr; see KIM data)	2	0	Almandine-hematite-goethite/epidote- staurolite assemblage.	0.25-0.5 mm fraction: 2 spinel 1 red rutile 2 chromite (picked as KIMs)	Almandine-hematite-goethite/epidote-staurolite	
E02	92	0	0	0	3	0	Tr low-Cr diopside (1 gr)	0	2	Tr	Tr	2	0	0	Tr	Tr (2 gr; see KIM data)	4	0	Almandine-hornblende/epidote-titanite assemblage. SEM check from 0.5-1.0 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.5-1.0 mm fraction: 1 spinel 0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite	SEM check from 0.5-1.0 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.
E03	190	0	0.5% barite (18 gr)	0	10	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (1 gr)	0	5	Tr	Tr	5	0	0	2	0	5	0	Almandine-hornblende/epidote-titanite assemblage.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 9 barite 0.25-0.5 mm fraction: 18 barite 1 Mn-epidote 1 low-Cr diopside	Almandine-hornblende/epidote-titanite	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp: % Cpy	Misc. Prime MMSIMs	% Py	<1.0 amp: % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp: # Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	0.8-1.0 amp: % Tm	% St	<0.8 amp: % Sps	% Fay	% Opx	% Cr	Phosphates >1.0 amp: % Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
E04	186	0	5% barite (~600 gr)	0	5	2 pale blue	Tr low-Cr diopside (7 gr)	0	2	Tr	Tr	3	0	0	0	Tr (5 gr; see KIM data)	5	0	Almandine-hematite-hornblende/epidote assemblage.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 46 barite 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 20 representative barite 2 spinel 7 low-Cr diopside 5 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote	
E05	61	0	0	Tr (3 gr)	5	1 pale blue	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	0	Tr	3	0	0	0	Tr (3 gr; see KIM data)	Tr	Tr	Almandine-hematite-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 1 low-Cr diopside 1 red rutile 3 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote diopside	
E06	12	0	Tr barite (7 gr)	Tr (10 gr)	8	1 grey	Tr low-Cr diopside (10 gr)	Tr (3 gr)	1	Tr	0.5	3	0	0	1	Tr (1 gr; see KIM data)	2	0	Almandine-hornblende/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 5 barite versus apatite candidates = 5 barite.	0.5-1.0 mm fraction: 5 barite 0.25-0.5 mm fraction: 7 barite 1 spinel 10 low-Cr-diopside 3 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote	SEM checks from 0.5-1.0 mm fraction: 5 barite versus apatite candidates = 5 barite.
E07	195	Tr (1 gr)	Tr barite (1 gr)	85 (~18,000 gr)	Tr	0	Tr low-Cr diopside (7 gr)	0	Tr	Tr	Tr	0	0	0	0	0	Tr	0	Siderite-almandine/pyrite assemblage. SEM check from 0.5-1.0 mm fraction: 1 barite candidate = 1 barite. SEM check from 0.25-0.5 mm fraction: 1 barite candidate = 1 barite. "Pyrite" is mainly marcasite.	0.5-1.0 mm fraction: 1 barite 0.25-0.5 mm fraction: 1 chalcopyrite 1 barite 7 low-Cr diopside	Siderite-almandine/pyrite	SEM check from 0.5-1.0 mm fraction: 1 barite candidate = 1 barite. SEM check from 0.25-0.5 mm fraction: 1 barite candidate = 1 barite. "Pyrite" is mainly marcasite.
E08	113	0.1 (2 gr)	1% barite (~20 gr)	0.5 (~10 gr)	3	1 pale purple	0	0	2	1	Tr	2	0	0	0	Tr (1 gr; see KIM data)	Tr	0	Almandine-hematite-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 8 barite versus zoisite candidates = 7 barite and 1 kyanite.	0.5-1.0 mm fraction: 7 barite 0.25-0.5 mm fraction: 2 chalcopyrite 20 representative barite 1 kyanite resembling barite 1 spinel 1 chromite (picked as KIM)	Almandine-hematite-hornblende/epidote	SEM checks from 0.25-0.5 mm fraction: 8 barite versus zoisite candidates = 7 barite and 1 kyanite.
E09	181	Tr (1 gr)	0	Tr (~25 gr)	Tr	1 green gahnite	Tr sapphirine (1 gr) Tr low-Cr diopside (5 gr)	0	2	0.5	Tr	4	0	0	Tr	Tr (1 gr; see KIM data)	Tr	0	Almandine-hematite-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite; and 1 blue-green gahnite versus sapphirine candidate = 1 sapphirine.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 1 gahnite 1 sapphirine 5 low-Cr diopside 1 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote diopside	SEM checks from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite; and 1 blue-green gahnite versus sapphirine candidate = 1 sapphirine.
E10	101	0	0	0	12	0	0	Tr (2 gr)	2	Tr	Tr	35	0	0	0	Tr (1 gr; see KIM data)	2	0	Almandine-hornblende/epidote-staurolite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 2 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote-staurolite	
E11	167	0	0	0	30	1 pale blue	0	Tr (4 gr)	2	Tr	Tr	20	0	0	0	0	2	Tr	Almandine-goethite-hematite-ilmenite/ epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 spinel 4 red rutile	Almandine-goethite-hematite-ilmenite/ epidote-staurolite	
F02	185	0	0	0	2	2 pale grey, blue-grey	Tr Mn-epidote (1 gr) Tr topaz (9 gr) Tr low-Cr diopside (12 gr)	0	2	Tr	Tr	3	0	0	Tr	Tr (5 gr; see KIM data)	2	0	Almandine-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 topaz versus zoisite candidates = 3 topaz.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 2 spinel 1 Mn-epidote 9 topaz 10 low-Cr diopside 5 chromite (picked as KIMs)	Almandine-hornblende/epidote	SEM checks from 0.25-0.5 mm fraction: 3 topaz versus zoisite candidates = 3 topaz.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
F03	198	0	0	Tr (~15 gr)	8	1 pale blue	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	Tr	1	0	0	0	Tr (3 gr; see KIM data)	Tr	Tr	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 2 low-Cr diopside 1 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside	
F04	211	0	4% barite (~800 gr)	70 (~10,000 gr)	40	0	0	0	Tr	Tr	Tr	1	0	0	0	Tr (2 gr; see KIM data)	3	0	Goethite-hornblende/pyrite assemblage. "Pyrite" is mainly marcasite. 0.5-1.0 mm fraction contains 1% (~20 gr) barite.	1.0-2.0 mm fraction: 7 barite 0.5-1.0 mm fraction: 10 representative barite 0.25-0.5 mm fraction: 20 representative barite 2 chromite (picked as KIMs)	Goethite-hornblende/pyrite	"Pyrite" is mainly marcasite. 0.5-1.0 mm fraction contains 1% (~20 gr) barite.
F05	142	0	5% barite (~200 gr)	Tr (~15 gr)	5	1 pale blue-green	Tr low-Cr diopside (2 gr)	0	2	0	Tr	2	0	0	Tr	0	Tr	Tr	Almandine-hornblende-hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 10 earthy brown to white barite candidates = 10 barite. SEM check from 0.25-0.5 mm fraction: 1 pale blue-green gahnite versus spinel candidate = 1 spinel.	1.0-2.0 mm fraction: 5 barite 0.5-1.0 mm fraction: 57 barite 0.25-0.5 mm fraction: 50 representative barite 1 spinel 2 low-Cr diopside	Almandine-hornblende-hematite/epidote	SEM checks from 0.5-1.0 mm fraction: 10 earthy brown to white barite candidates = 10 barite. SEM check from 0.25-0.5 mm fraction: 1 pale blue-green gahnite versus spinel candidate = 1 spinel.
F06	57	Tr (1 gr)	Tr barite (10 gr)	80 (~15,000 gr)	0	1 pale blue	Tr low-Cr diopside (2 gr)	0	Tr	0	0	0	0	0	Tr	0	Tr	0	Siderite-almandine/marcasite assemblage. SEM checks from 0.5-1.0 mm fraction: 4 barite candidates = 4 barite; and 2 galena versus Pb-metal candidates = 2 Pb-metal (contamination). SEM checks from 0.25-0.5 mm fraction: 2 barite candidates = 1 barite and 1 kyanite. "Pyrite" is mainly marcasite.	0.5-1.0 mm fraction: 4 barite 4 Pb-metal (contamination) 0.25-0.5 mm fraction: 1 chalcopyrite 10 barite 1 spinel 1 kyanite resembling barite 2 low-Cr diopside 1 Pb-metal (contamination)	Siderite-almandine/marcasite	SEM checks from 0.5-1.0 mm fraction: 4 barite candidates = 4 barite; and 2 galena versus Pb-metal candidates = 2 Pb-metal (contamination). SEM checks from 0.25-0.5 mm fraction: 2 barite candidates = 1 barite and 1 kyanite. "Pyrite" is mainly marcasite.
F07	64	0	0	0	0	0	Tr low-Cr diopside (3 gr)	0	Tr	Tr	Tr	5	0	0	0	Tr (1 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote	
F08A	269	0	0	0	5	1 pale blue	Tr low-Cr diopside (4 gr)	Tr (4 gr)	Tr	1	Tr	2	0	0	Tr	Tr (1 gr; see KIM data)	Tr	Tr	Almandine-hornblende-hematite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 barite versus sillimanite candidates = 1 sillimanite and 1 zoisite.	0.5-1.0 mm fraction: 1 chalcopyrite 2 barite 0.25-0.5 mm fraction: 1 sillimanite resembling barite 1 zoisite resembling barite 1 spinel 4 low-Cr diopside 4 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote diopside	SEM checks from 0.25-0.5 mm fraction: 2 barite versus sillimanite candidates = 1 sillimanite and 1 zoisite.
F08B	264	0	Tr barite (6 gr)	60 (~12,000 gr)	Tr	1 green gahnite; 1 pale blue spinel	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	1	0	0	4	Tr (1 gr; see KIM data)	Tr	0	Siderite-almandine-hornblende-ilmenite/ pyrite-epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite. "Pyrite" is mainly marcasite.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 1 chalcopyrite 9 barite 0.25-0.5 mm fraction: 6 barite 1 gahnite 1 spinel 4 low-Cr diopside 1 chromite (picked as KIM)	Siderite-almandine-hornblende-ilmenite/ pyrite-epidote	SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite. "Pyrite" is mainly marcasite.
F09	229	0	0	0	30	2 pale green, pale blue	0	0	Tr	3	Tr	5	0	0	0	Tr (6 gr; see KIM data)	10	0	Almandine-goethite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 2 spinel 6 chromite (picked as KIMs)	Almandine-goethite-hematite/epidote	
F10	158	0	0	0	15	0	0	0	Tr	Tr	Tr	20	0	0	0	0	Tr	0	Almandine-hornblende-goethite/epidote-staurolite assemblage.		Almandine-hornblende-goethite/epidote-staurolite	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp						>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
G02	125	0	0	0	5	1 pale blue	Tr low-Cr diopside (4 gr)	Tr (1 gr)	2	Tr	0	3	0	0	0	0	Tr	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 4 low-Cr diopside 1 red rutile	Almandine-hornblende/epidote	
G03	94	0	0.5% barite (~40 gr)	0.5 (~50 gr)	8	0	Tr low-Cr diopside (5 gr)	0	Tr	Tr	Tr	2	0	0	0	Tr (5 gr; see KIM data)	3	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 4 barite 0.25-0.5 mm fraction: 20 representative barite 5 low-Cr diopside 5 chromite (picked as KIMs)	Almandine-hornblende/epidote	
G04	163	0	5% barite (~500 gr)	Tr (10 gr)	3	1 pale purple	Tr chondrodite (2 gr) Tr low-Cr diopside (4 gr)	Tr (2 gr)	1	0	Tr	3	0	0	Tr	Tr (2 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage. 0.5-1.0 mm fraction contains 4% (~50 gr) barite.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 40 representative barite 1 spinel 2 chondrodite 4 low-Cr diopside 2 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	0.5-1.0 mm fraction contains 4% (~50 gr) barite.
G05	236	0	35% barite (~2000 gr)	Tr (8 gr)	Tr	0	Tr low-Cr diopside (4 gr)	0	Tr	Tr	0	Tr	0	0	Tr	0	Tr	0	Almandine-hornblende/epidote-barite assemblage. SEM checks from 0.5-1.0 mm fraction: 3 barite candidates = 3 barite. 0.5-1.0 mm fraction contains 20% (~60 grains) barite.	0.5-1.0 mm fraction: 10 representative barite 0.25-0.5 mm fraction: 20 representative barite 4 low-Cr diopside	Almandine-hornblende/epidote-barite	SEM checks from 0.5-1.0 mm fraction: 3 barite candidates = 3 barite. 0.5-1.0 mm fraction contains 20% (~60 grains) barite.
G06	90	0	0	0	2	0	0	0	Tr	Tr	0	5	0	0	0	0	8	Tr	Almandine-hornblende/epidote-diopside assemblage.		Almandine-hornblende/epidote-diopside	
G07	174	0	0	0	4	1 pale purple	Tr low-Cr diopside (7 gr)	0	2	Tr	0	3	0	0	0	Tr (4 gr; see KIM data)	Tr	Tr	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue sapphire corundum candidate = 1 andalusite.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 spinel 1 andalusite resembling sapphire corundum 7 low-Cr diopside 4 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 blue sapphire corundum candidate = 1 andalusite.
G08	193	0	0	0	5	0	Tr corundum (1 gr) Tr low-Cr diopside (1 gr)	0	0.5	0	Tr	3	0	0	0	Tr (3 gr; see KIM data)	1	Tr	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 corundum (see KIM notes) 1 low-Cr diopside 3 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside	
G09	232	0	0	0	3	1 pale blue	Tr Mn-epidote (1 gr) Tr low-Cr diopside (6 gr)	Tr (5 gr)	Tr	1	Tr	3	0	Tr	Tr	Tr (5 gr; see KIM data)	3	Tr	Almandine-augite-hornblende-hematite/ epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 1 Mn-epidote 6 low-Cr diopside 5 red rutile 5 chromite (picked as KIMs)	Almandine-augite-hornblende-hematite/ epidote	
G10	22	0	0	0	2	1 blue-grey gahnite	Tr low-Cr diopside (2 gr)	Tr (2 gr)	2	0	Tr	20	0	7	Tr	0	5	Tr	Augite-ilmenite/epidote-staurolite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 granular blue-grey sapphirine versus spinel candidate = 1 gahnite.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 1 gahnite 2 low-Cr diopside 2 red rutile 15 representative forsterite (see KIM data; picked as KIMs)	Augite-ilmenite/epidote-staurolite	SEM checks from 0.25-0.5 mm fraction: 1 granular blue-grey sapphirine versus spinel candidate = 1 gahnite.
H02	222	0	25% barite (~1000 gr)	Tr (~15 gr)	30	2 blue-grey, pale blue	Tr low-Cr diopside (5 gr)	0	Tr	0	0	0	0	0	0	Tr (3 gr; see KIM data)	Tr	0	Almandine-goethite-hornblende/epidote- barite assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-grey gahnite versus spinel candidate = 1 spinel. 0.5-1.0 mm fraction contains 4% (~40 gr) barite.	1.0-2.0 mm fraction: 4 barite 0.5-1.0 mm fraction: 20 representative barite 1 low-Cr diopside 0.25-0.5 mm fraction: 20 representative barite 2 spinel 5 low-Cr diopside 3 chromite (picked as KIMs)	Almandine-goethite-hornblende/epidote-barite	SEM check from 0.25-0.5 mm fraction: 1 blue-grey gahnite versus spinel candidate = 1 spinel. 0.5-1.0 mm fraction contains 4% (~40 gr) barite.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
H03	179	0	0	0	Tr	0	Tr low-Cr diopside (8 gr)	0	2	Tr	0	4	0	0	5	Tr (3 gr; see KIM data)	0	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 8 low-Cr diopside 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
H04	105	0	Tr barite (8 gr)	0	5	0	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	2	0	0	Tr	Tr (1 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 12 barite 2 chromite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 8 barite 4 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	
H05	124	0	0	0	10	0	0	0	1	0	Tr	6	0	0	Tr	Tr (3 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
H06	77	0	0	0	2	3 pale pink, pale blue	Tr low-Cr diopside (7 gr)	0	Tr	Tr	Tr	2	0	0	0	Tr (7 gr; see KIM data)	2	0	Almandine-hornblende/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 pale blue spinel 2 low-Cr diopside 0.25-0.5 mm fraction: 3 spinel 7 low-Cr diopside 7 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite	
H07	170	0	0	0	3	1 pale blue	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	Tr	0	0	Tr	Tr (4 gr; see KIM data)	2	0	Almandine-hornblende/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 barite candidate = 1 leucoxene.	0.5-1.0 mm fraction: 1 leucoxene resembling barite 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 spinel 4 low-Cr diopside 4 chromite (picked as KIMs)	Almandine-hornblende/epidote	SEM check from 0.5-1.0 mm fraction: 1 barite candidate = 1 leucoxene.
H08	132	0	0	Tr (4 gr)	4	0	Tr low-Cr diopside (3 gr)	Tr (1 gr)	2	Tr	Tr	Tr	0	0	Tr	Tr (1 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	
H09	271	0	0	0	0	1 blue-green	Tr low-Cr diopside (5 gr)	0	0	0	0	25	0	8	Tr	0	Tr	0	Augite/epidote-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 spinel 5 low-Cr diopside	Augite/epidote-staurolite	SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.
H10	7	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	Tr (2 gr)	0	Tr	0.5	0.5	0	50	Tr	Tr (1 gr; see KIM data)	15	Tr	Fayalite-augite/diopside-apatite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 fayalite (major paramagnetic assemblage mineral) candidates = 5 fayalite; and 5 hedenbergite versus augite (major paramagentic assemblage mineral) candidates = 5 Ca-augite.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 red rutile 1 chromite (picked as KIM) 5 representative fayalite 5 representative augite	Fayalite-augite/diopside-apatite	SEM checks from 0.25-0.5 mm fraction: 5 fayalite (major paramagnetic assemblage mineral) candidates = 5 fayalite; and 5 hedenbergite versus augite (major paramagentic assemblage mineral) candidates = 5 Ca-augite.
I02	34	0	0	0	5	0	Tr Mn-epidote (1 gr) Tr ruby corundum (1 gr) Tr low-Cr diopside (3 gr)	0	5	0	Tr	10	0	0	2	0	5	Tr	Hornblende-almandine/epidote-titanite- diopside assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 1 ruby corundum 3 low-Cr diopside	Hornblende-almandine/epidote-titanite-diopside	
I03	87	0	0	0	5	0	Tr sapphirine (1 gr) Tr low-Cr diopside (2 gr)	0	Tr	0	Tr	0	0	0	Tr	Tr (2 gr; see KIM data)	2	0	Almandine-hematite-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue gahnite versus sapphirine candidate = 1 sapphirine.	0.25-0.5 mm fraction: 1 sapphirine 2 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 blue gahnite versus sapphirine candidate = 1 sapphirine.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp % Cpy	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp Misc. Prime MMSIMs	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp % Py	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: <1.0 amp % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp # Grains + Colour Spinel	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp Misc. Prime MMSIMs	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp % Red Rutile	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp % Ky	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp % Sil	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: 0.8-1.0 amp % Tm	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: 0.8-1.0 amp % St	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: <0.8 amp % Sps	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: <0.8 amp % Fay	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: <0.8 amp % Opx	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: <0.8 amp % Cr	Phosphates: >1.0 amp % Ap	Phosphates: >1.0 amp % Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
I04	165	0	0	0	5	2 pale blue	Tr low-Cr diopside (1 gr)	0	2	1	Tr	3	0	0	Tr	Tr (2 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 spinel 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	
I05	217	0	0	0	2	1 blue-green gahnite; 1 blue-green spinel	Tr low-Cr diopside (7 gr)	Tr (3 gr)	0.5	0	Tr	5	0	Tr	0.5	0	3	0	Almandine-hornblende-hematite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.	0.5-1.0 mm fraction: 1 brass (contamination) 0.25-0.5 mm fraction: 1 gahnite 1 spinel 7 low-Cr diopside 3 red rutile	Almandine-hornblende-hematite/epidote diopside	SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel.
I06	13	0	0	0	5	0	Tr low-Cr diopside (1 gr)	Tr (3 gr)	Tr	Tr	Tr	5	0	0	0	Tr (4 gr; see KIM data)	Tr	0	Almandine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 low-Cr diopside 3 red rutile 4 chromite (picked as KIMs)	Almandine-hematite/epidote	
I07	86	Tr (1 gr)	0	0	8	0	Tr low-Cr diopside (10 gr)	Tr (2 gr)	Tr	Tr	Tr	5	0	0	Tr	Tr (2 gr; see KIM data)	4	0	Almandine-hornblende-augite/epidote- diopside assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 10 low-Cr diopside 2 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende-augite/epidote-diopside	
I08	73	0	0	0	5	1 grey green	Tr low-Cr diopside (10 gr)	Tr (2 gr)	0.5	Tr	Tr	4	0	Tr	2	Tr (8 gr; see KIM data)	8	0	Augite-almandine/epidote-diopside assemblage	0.5-1.0 mm fraction: 1 low-Cr diopside 3 representative fayalite (see KIM notes) 0.25-0.5 mm fraction: 1 spinel 10 low-Cr diopside 2 red rutile 8 chromite (picked as KIMs)	Augite-almandine/epidote-diopside	
I09	60	0	0	Tr (1 gr)	1	0	Tr low-Cr diopside (3 gr)	Tr (2 gr)	3	Tr	Tr	5	0	Tr	0	0	Tr	Tr	Augite/epidote-diopside-titanite assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 2 red rutile	Augite/epidote-diopside-titanite	
I10	155	0	0	0	3	1 pale blue	Tr low-Cr diopside (6 gr)	0	1	0.5	Tr	2	0	Tr	7	Tr (2 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 6 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	
J02	66	0	0.5% barite (~40 gr)	0.2 (~15 gr)	8	0	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	2	0	0	0	0	Tr	0	Almandine-hornblende-hematite/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 10 barite candidates = 10 barite. SEM checks from 0.25-0.5 mm fraction: 5 pyrite versus pentlandite candidates = 5 pyrite. 0.5-1.0 mm fraction contains 0.5% (~25 grains) barite.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 10 representative barite 0.25-0.5 mm fraction: 20 representative barite 5 pyrite resembling pentlandite 4 low-Cr diopside	Almandine-hornblende-hematite/epidote diopside	SEM checks from 0.5-1.0 mm fraction: 10 barite candidates = 10 barite. SEM checks from 0.25-0.5 mm fraction: 5 pyrite versus pentlandite candidates = 5 pyrite. 0.5-1.0 mm fraction contains 0.5% (~25 grains) barite.
J03	47	0	Tr barite (~40 gr)	Tr (1 gr)	3	1 grey	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	Tr	1	0	0	Tr	0	3	0	Almandine-hornblende-hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 10 barite candidates = 9 barite and 1 calcite.	0.5-1.0 mm fraction: 9 barite 1 calcite resembling barite 0.25-0.5 mm fraction: 28 representative barite 1 spinel 2 low-Cr diopside 1 red rutile	Almandine-hornblende-hematite/epidote	SEM checks from 0.5-1.0 mm fraction: 10 barite candidates = 9 barite and 1 calcite.
J04	103	0	0	0	10	0	Tr low-Cr diopside (6 gr)	0	3	0	Tr	5	0	0	0.5	0	5	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 6 low-Cr diopside	Almandine-hornblende/epidote-diopside	
J05	226	0	0	0	Tr	1 pale blue	Tr low-Cr diopside (6 gr)	Tr (1 gr)	1	0	0	5	0	Tr	0	0	Tr	0	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 6 low-Cr diopside 1 red rutile	Almandine-hornblende-hematite/epidote diopside	
J06	183	0	0	0	10	0	Tr low-Cr diopside (8 gr)	0	1	Tr	Tr	7	0	Tr	3	Tr (1 gr; see KIM data)	3	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 8 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp					>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
J07	204	0	0	0	7	1 blue	Tr Mn-epidote (1 gr) Tr low-Cr diopside (8 gr)	0	Tr	Tr	Tr	20	0	5	Tr	0	Tr	0	Augite-hematite-almandine/epidote- staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 1 spinel 1 Mn-epidote 8 low-Cr diopside 15 representative forsterite (see KIM data; picked as KIMs)	Augite-hematite-almandine/epidote-staurolite	SEM check from 0.25-0.5 mm fraction: 1 blue gahnite versus spinel candidate = 1 spinel.
J08	107	0	0	0	1	0	Tr low-Cr diopside (2 gr)	Tr (2 gr)	Tr	Tr	Tr	5	0	0	1	Tr (8 gr; see KIM data)	Tr	0	Augite-almandine-hornblende/epidote- diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 augite (major nonparamagnetic assemblage mineral) versus orthopyroxene candidates = 3 augite and 1 bronzite.	0.25-0.5 mm fraction: 2 low-Cr diopside 2 red rutile 4 representative augite 1 bronzite resembling augite 8 chromite (picked as KIMs) 2 forsterite (see KIM data; picked as KIMs)	Augite-almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 augite (major nonparamagnetic assemblage mineral) versus orthopyroxene candidates = 3 augite and 1 bronzite.
J09	130	0	0	0	5	3 grey, blue-grey, pale pink	0.5% low-Cr diopside (15 gr)	0	2	Tr	Tr	20	0	Tr	Tr	Tr (1 gr; see KIM data)	5	0	Augite-almandine-hornblende/epidote- diopside-staurolite assemblage.	0.25-0.5 mm fraction: 3 spinel 15 low-Cr diopside 1 chromite (picked as KIM)	Augite-almandine-hornblende/epidote-diopside-staurolite	
J10	20	0	0	60 (~5000 gr)	0	0	Tr low-Cr diopside (4 gr)	0	Tr	0	Tr	6	0	0	1	Tr (1 gr; see KIM data)	5	0	Siderite-almandine-hornblende-ilmenite/pyrite-epidote assemblage. Ilmenite occurs mainly as moderately-worn, second-cycle grains and "pyrite" is mainly marcasite.	0.25-0.5 mm fraction: 4 low-Cr diopside 1 chromite (picked as KIM)	Siderite-almandine-hornblende-ilmenite/pyrite- epidote	Ilmenite occurs mainly as moderately-worn, second-cycle grains and "pyrite" is mainly marcasite.
K02	273	0	4% barite (~700 gr)	70 (~1200 gr)	Tr	0	0	0	Tr	Tr	Tr	2	0	0	Tr	0	Tr	0	Siderite-almandine/pyrite-epidote assemblage. 0.5-1.0 mm fraction contains 0.2% (~30 gr) barite. "Pyrite" is mainly marcasite.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 15 representative barite 0.25-0.5 mm fraction: 20 representative barite	Siderite-almandine/pyrite-epidote	0.5-1.0 mm fraction contains 0.2% (~30 gr) barite. "Pyrite" is mainly marcasite.
K03	41	0	5% barite (~200 gr)	0	3	0	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	3	0	0	1	Tr (4 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage.	1.0-2.0 mm fraction: 6 barite 0.5-1.0 mm fraction: 27 barite 0.25-0.5 mm fraction: 20 representative barite 4 low-Cr diopside 4 chromite (picked as KIMs)	Almandine-hornblende/epidote	
K04	250	0	0	Tr (2 gr)	Tr	0	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	Tr	1	0	0	Tr	0	Tr	0	Almandine-hornblende-hematite/epidote-diopside-titanite assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 1 red rutile	Almandine-hornblende-hematite/epidote diopside-titanite	
K05	21	0	0	0	3	1 pale blue	0	Tr (3 gr)	Tr	Tr	Tr	3	0	Tr	Tr	Tr (8 gr; see KIM data)	Tr	0	Almandine-hornblende-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 3 red rutile 8 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote	
K06	261	0	0	0	2	3 pale blue	Tr Mn-epidote (1 gr) Tr low-Cr diopside (7 gr)	0	Tr	Tr	Tr	8	0	20	Tr	Tr (4 gr; see KIM data)	1	0	Augite-almandine-fayalite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 3 spinel 1 Mn-epidote 7 low-Cr diopside 4 chromite (picked as KIMs) 20 representative forsterite (see KIM data; picked as KIMs)	Augite-almandine-fayalite/epidote	
K07	148	0	0	0	Tr	0	0	0	0	Tr	Tr	10	0	10	Tr	Tr (1 gr; see KIM data)	Tr	0	Augite/diopside-epidote assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM) 4 forsterite (see KIM data; picked as KIMs)	Augite/diopside-epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

		Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp				
Field Number	Lab Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
K08	121	Tr (1 gr)	0	0	0	0	Tr corundum (1 gr) Tr low-Cr diopside (4 gr)	Tr (1 gr)	Tr	Tr	Tr	2	0	15	0	Tr (8 gr; see KIM data)	2	0	Augite-fayalite-ilmenite/diopside-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 barite versus leucoxene candidates = 1 florencite (Ce,REE)Al3(PO4)2(OH)6 and 1 corundum.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 1 florencite resembling barite 1 corundum 4 low-Cr diopside 1 red rutile 8 chromite (picked as KIMs)	Augite-fayalite-ilmenite/diopside-epidote	SEM checks from 0.25-0.5 mm fraction: 2 barite versus leucoxene candidates = 1 florencite (Ce,REE)Al3(PO4)2(OH)6 and 1 corundum.
K09	111	0	0	0	0	0	Tr low-Cr diopside (3 gr)	Tr (5 gr)	0	0	Tr	2	0	8	0	Tr (1 gr; see KIM data)	3	Tr	Augite-ilmenite/diopside assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 5 red rutile 1 chromite (picked as KIM) 2 forsterite (see KIM data; picked as KIMs)	Augite-ilmenite/diopside	
K10	228	0	0	0	Tr	1 green	Tr ruby corundum (1 gr) Tr low-Cr diopside (4 gr)	Tr (1 gr)	0.5	0	Tr	5	0	Tr	0	0	Tr	Tr	Almandine-augite-hornblende/epidote- diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 spinel; and 1 purple spinel versus almandine candidate = 1 ruby corundum.	0.25-0.5 mm fraction: 1 spinel 1 ruby corundum 4 low-Cr diopside 1 red rutile 1 forsterite (see KIM data; picked as KIM)	Almandine-augite-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 spinel; and 1 purple spinel versus almandine candidate = 1 ruby corundum.
L02	18	0	0	0	3	0	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	0	Tr	2	0	0	Tr	Tr (3 gr; see KIM data)	1	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 1 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
L03	251	0	Tr barite (~25 gr)	0	Tr	0	Tr low-Cr diopside (4 gr)	Tr (2 gr)	1	Tr	Tr	5	0	0	Tr	Tr (1 gr; see KIM data)	3	0	Almandine-hornblende-hematite/epidote-diopside assemblage.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 12 barite 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 15 representative barite 4 low-Cr diopside 2 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote diopside	
L04	220	0	0	Tr (2 gr)	15	1 grey	Tr low-Cr diopside (12 gr)	0	2	Tr	Tr	10	0	0	Tr	Tr (3 gr; see KIM data)	2	0	Hornblende-almandine-goethite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 12 low-Cr diopside 3 chromite (picked as KIMs)	Hornblende-almandine-goethite/epidote-diopside	
L05E	23	0	0	Tr (2 gr)	4	1 blue-green gahnite	0	Tr (1 gr)	Tr	Tr	Tr	8	0	Tr	Tr	0	5	0	Almandine-ilmenite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 green gahnite versus spinel candidate = 1 spinel. SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus sapphirine candidate = 1 gahnite; and 3 yellow siderite versus fayalite candidates = 3 fayalite.	0.5-1.0 mm fraction: 1 green spinel 0.25-0.5 mm fraction: 1 gahnite 1 red rutile 3 fayalite	Almandine-ilmenite/epidote	SEM check from 0.5-1.0 mm fraction: 1 green gahnite versus spinel candidate = 1 spinel. SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus sapphirine candidate = 1 gahnite; and 3 yellow siderite versus fayalite candidates = 3 fayalite.
L05W	4	0	0	Tr (2 gr)	10	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	0	Tr	1	0	0	0	0	2	0	Almandine-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 Sn-metal versus Zn-metal candidates = 2 Zn-meta (contamination).	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile 2 Zn-metal (contamination)	Almandine-hornblende/epidote	SEM checks from 0.25-0.5 mm fraction: 2 Sn-metal versus Zn-metal candidates = 2 Zn-metal (contamination).
L06E	40	Tr (1 gr)	0	15 (~450 gr)	Tr	1 pale blue-green	Tr low-Cr diopside (9 gr)	0	Tr	Tr	Tr	5	0	0	0	Tr (3 gr; see KIM data)	20	0	Augite-ilmenite/diopside-apatite-pyrite-epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 10 earthy orange barite versus siderite candidates = 10 siderite. SEM check from 0.25-0.5 mm fraction: 1 pale blue-green gahnite versus spinel candidate = 1 spinel. "Pyrite" is mainly marcasite.	0.5-1.0 mm fraction: 10 siderite resembling barite 0.25-0.5 mm fraction: 1 chalcopyrite 1 spinel 9 low-Cr diopside 3 chromite (picked as KIMs) 1 forsterite (see KIM data; picked as KIM)	Augite-ilmenite/diopside-apatite-pyrite-epidote	SEM checks from 0.5-1.0 mm fraction: 10 earthy orange barite versus siderite candidates = 10 siderite. SEM check from 0.25-0.5 mm fraction: 1 pale blue-green gahnite versus spinel candidate = 1 spinel. "Pyrite" is mainly marcasite.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates				
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp					>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
L06WA	218	0	0	0	3	2 pale blue	Tr Mn-epidote (3 gr) Tr low-Cr diopside (3 gr)	Tr (1 gr)	Tr	0	Tr	3	0	0	0	Tr (7 gr; see KIM data)	5	0	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 2 spinel 3 Mn-epidote 3 low-Cr diopside 1 red rutile 7 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside	
L06WB	184	0	0	20 (~2000 gr)	8	0	Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	5	0	0	0	0	5	0	Almandine-hornblende/epidote-pyrite assemblage. "Pyrite" is mainly marcasite.	0.25-0.5 mm fraction: 1 low-Cr diopside	Almandine-hornblende/epidote-pyrite	"Pyrite" is mainly marcasite.
L07	44	0	0	0	10	0	Tr low-Cr diopside (2 gr)	Tr (5 gr)	Tr	Tr	Tr	10	0	0	0	Tr (2 gr; see KIM data)	3	0	Hematite-almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 5 red rutile 2 chromite (picked as KIMs)	Hematite-almandine-hornblende/epidote	
L08	267	0	0	0	5	0	Tr low-Cr diopside (3 gr)	Tr (1 gr)	0	0	0	15	0	0	0	0	Tr	0	Hematite-almandine-hornblende/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 1 red rutile	Hematite-almandine-hornblende/epidote staurolite	
L09	19	0	0	0	3	0	Tr low-Cr diopside (3 gr)	0	Tr	Tr	Tr	5	0	30	Tr	0	Tr	Tr	Augite-fayalite-hematite/diopside-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 red monazite versus other REE mineral candidates = 2 florencite.	0.25-0.5 mm fraction: 3 low Cr-diopside 2 florencite	Augite-fayalite-hematite/diopside-epidote	SEM checks from 0.25-0.5 mm fraction: 2 red monazite versus other REE mineral candidates = 2 florencite.
L10	99	0	0	0	0	0	Tr low-Cr diopside (3 gr)	Tr (2 gr)	0	Tr	Tr	0	0	1	0.5	Tr (8 gr; see KIM data)	Tr	0	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 fayalite candidates = 4 fayalite and 1 K-feldspar. Augite dominates all fractions.	0.25-0.5 mm fraction: 3 low-Cr diopside 2 red rutile 8 chromite (picked as KIMs) 4 representative fayalite 1 K-feldspar resembling fayalite	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 5 fayalite candidates = 4 fayalite and 1 K-feldspar. Augite dominates all fractions.
L11	150	0	0	0	0	2 green	Tr low-Cr diopside (1 gr)	Tr (2 gr)	0	Tr	Tr	Tr	0	Tr	0	0	Tr	Tr	Augite/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 spinel.	0.25-0.5 mm fraction: 2 spinel 1 low-Cr diopside 2 red rutile	Augite/diopside	SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 spinel.
M02	78	0	0	Tr (7 gr)	10	1 pale blue	Tr low-Cr diopside (1 gr)	Tr (1 gr)	1	1	Tr	2	0	0	Tr	Tr (2 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 1 low-Cr diopside 1 red rutile 2 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	
M03	152	0	0	0	5	0	Tr low-Cr diopside (2 gr)	0	1	1	0	1	0	0	Tr	0	Tr	0	Almandine-hornblende/epidote-titanite assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside	Almandine-hornblende/epidote-titanite	
M04	248	0	0	0	15	0	Tr low-Cr diopside (5 gr)	0	2	Tr	Tr	5	0	0	Tr	Tr (1 gr; see KIM data)	5	0	Hornblende-almandine-goethite/epidote- titanite assemblage.	0.25-0.5 mm fraction: 5 low-Cr diopside 1 chromite (picked as KIM)	Hornblende-almandine-goethite/epidote-titanite	
M05	29	0	Tr fluorite (1 gr)	0	8	3 colourless, grey blue	Tr Mn-epidote (1 gr) Tr low-Cr diopside (13 gr)	Tr (3 gr)	Tr	Tr	Tr	8	0	0	Tr	Tr (10 gr; see KIM data)	Tr	Tr	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 fluorite 3 spinel 1 Mn-epidote 13 low-Cr diopside 3 red rutile 10 chromite (picked as KIMs)	Almandine-hornblende/epidote	
M06	49	0	0	0	2	3 pale blue, blue-green	Tr low-Cr diopside (1 gr)	Tr (4 gr)	Tr	Tr	1	5	0	0	Tr	Tr (2 gr; see KIM data)	8	0	Almandine-ilmenite-hornblende-hematite/ epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 3 spinel 1 low-Cr diopside 4 red rutile 2 chromite (picked as KIMs)	Almandine-ilmenite-hornblende-hematite/ epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.
M07	172	0	0	0	Tr	3 pale blue, blue-green	Tr low-Cr diopside (1 gr)	Tr (4 gr)	Tr	Tr	Tr	8	0	0	2	0	Tr	0	Almandine-ilmenite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 3 spinel 1 low-Cr diopside 4 red rutile	Almandine-ilmenite/epidote	SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.
M08	128	0	0	0	0	0	Tr low-Cr diopside (6 gr)	0	0	Tr	Tr	40	0	Tr	0	Tr (2 gr; see KIM data)	Tr	Tr	Augite-almandine-ilmenite/staurolite- diopside assemblage.	0.25-0.5 mm fraction: 6 low-Cr diopside 2 chromite (picked as KIMs)	Augite-almandine-ilmenite/staurolite-diopside	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
M09	180	0	0	0	0	0	Tr low-Cr diopside (4 gr)	0	0	1	0	Tr	0	0	0	0	10	0	Augite/diopside assemblage. Augite dominates all fractions.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 4 low-Cr diopside	Augite/diopside	Augite dominates all fractions.
M10	188	0	0	0	0	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	0	0	Tr	0	0	3	0	0	1	Tr	Augite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile	Augite/epidote-diopside	
M11	120	0	0	0	0	0	Tr low-Cr diopside (1 gr)	Tr (9 gr)	0	0	5	0	0	8	0	0	3	0	Augite-hematite/leucoxene assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 9 red rutile	Augite-hematite/leucoxene	
N03	215	0	Tr barite (2 gr)	Tr (2 gr)	4	0	Tr topaz (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	0	0	Tr	4	0	0	0	Tr (1 gr; see KIM data)	4	0	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 barite candidates = 2 barite; 1 colourless spinel versus topaz candidate = 1 topaz; and 1 blue sapphire corundum candidate = 1 sapphire corundum.	0.25-0.5 mm fraction: 2 barite 1 topaz 1 sapphire corundum 1 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 barite candidates = 2 barite; 1 colourless spinel versus topaz candidate = 1 topaz; and 1 blue sapphire corundum candidate = 1 sapphire corundum.
N04	147	0	0	Tr (1 gr)	7	0	0	0	Tr	0	0	3	0	0	0	Tr (1 gr; see KIM data)	2	0	Almandine-hornblende-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote	
N05	138	0	0	0	2	0	Tr Mn-epidote (1 gr) Tr Cr-grossular (1 gr) Tr low-Cr diopside (2 gr)	Tr (3 gr)	0	Tr	0	5	0	0	Tr	Tr (9 gr; see KIM data)	1	0	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 pink Mn-epidote candidate = 1 Mn-epidote; and 1 Cr-grossular candidate = 1 Cr-grossular.	0.25-0.5 mm fraction: 1 Mn-epidote 1 Cr-grossular 2 low-Cr diopside 3 red rutile 9 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 pink Mn-epidote candidate = 1 Mn-epidote; and 1 Cr-grossular candidate = 1 Cr-grossular.
N06	202	0	0	0	1	1 blue-grey	Tr low-Cr diopside (10 gr)	0	Tr	Tr	Tr	2	0	0	Tr	Tr (6 gr; see KIM data)	3	0	Almandine-hornblende-ilmenite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spinel 10 low-Cr diopside 6 chromite (picked as KIMs)	Almandine-hornblende-ilmenite/epidote-diopside	
N07	16	0	0	0	5	0	Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	Tr (2 gr)	Tr	0	Tr	20	0	Tr	0.5	Tr (1 gr; see KIM data)	Tr	0	Almandine-hematite-hornblende/epidote-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 blue gahnite versus spinel candidate = 1 spinel.	0.5-1.0 mm fraction: 1 spinel 0.25-0.5 mm fraction: 1 sapphire corundum 2 low-Cr diopside 2 red rutile 1 chromite (picked as KIM)	Almandine-hematite-hornblende/epidote staurolite	SEM check from 0.5-1.0 mm fraction: 1 blue gahnite versus spinel candidate = 1 spinel.
N08	259	0	0	0	0	0	Tr low-Cr diopside (3 gr)	Tr (1 gr)	0	Tr	0	2	0	8	0	0	1	0	Augite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 1 red rutile 21 representative forsterite (see KIM data; picked as KIMs)	Augite/epidote-diopside	
N09	32	0	0	0	8	0	0	0	Tr	Tr	Tr	15	0	Tr	1	Tr (7 gr; see KIM data)	Tr	0	Almandine-hematite-hornblende/epidote-staurolite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 7 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote staurolite	
N10	242	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	Tr	0	Augite/epidote assemblage.		Augite/epidote	
N11	266	0	0	0	Tr	0	0	0	0	Tr	Tr	0	0	10	0	0	Tr	Tr	Augite/epidote assemblage.	0.25-0.5 mm fraction: 11 forsterite (see KIM data; picked as KIMs)	Augite/epidote	
N12	270	0	Tr malachite + chalcocite (4 gr)	0	Tr	0	0	0	0	Tr	Tr	0	0	25	0	0	Tr	0	Augite-fayalite/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 malachite-mantled sulphide grains = 2 malachite + chalcocite.	0.25-0.5 mm fraction: 4 malachite + chalcocite	Augite-fayalite/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 malachite-mantled sulphide grains = 2 malachite + chalcocite.
O03	177	0	0	0	3	0	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	Tr	3	0	0	0	Tr (4 gr; see KIM data)	1	0	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 1 red rutile 4 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
O04	8	0	0	0.3 (8 gr)	5	1 grey	Tr Mn-epidote (1 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	Tr	0	2	0	0	2	Tr (2 gr; see KIM data)	2	0	Hornblende-almandine/epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 1 Mn-epidote 1 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Hornblende-almandine/epidote	
O05	272	0	0	0	Tr	1 pale blue	Tr ruby corundum (1 gr) Tr low-Cr diopside (10 gr)	Tr (2 gr)	Tr	Tr	Tr	3	0	0	0	Tr (3 gr; see KIM data)	2	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 spinel 1 ruby corundum 10 low-Cr diopside 2 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
O06	207	0	0	0	5	1 pale blue	Tr chondrodite (1 gr) Tr low-Cr diopside (7 gr)	Tr (2 gr)	0	Tr	Tr	3	0	0	0	Tr (8 gr; see KIM data)	Tr	1	Almandine-hornblende/epidote-diopside assemblage.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 spinel 1 chondrodite 7 low-Cr diopside 2 red rutile 8 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
O07	182	0	0	0	1	1 pale blue	Tr low-Cr diopside (10 gr)	Tr (5 gr)	Tr	Tr	Tr	15	0	2	0	Tr (~10 gr; see KIM data)	2	Tr	Augite-almandine/epidote-staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 brass candidate = 1 CuSn-bronze (contamination).	0.25-0.5 mm fraction: 1 spinel 10 low-Cr diopside 5 red rutile 4 representative chromite (picked as KIMs) 1 bronze (contamination)	Augite-almandine/epidote-staurolite	SEM check from 0.25-0.5 mm fraction: 1 brass candidate = 1 CuSn-bronze (contamination).
O08	212	0	0	0	5	2 green gahnite; 3 pale blue spinel	Tr Cr-grossular (1 gr) Tr low-Cr diopside (3 gr)	Tr (1 gr)	0	Tr	Tr	3	0	2	0	Tr (1 gr; see KIM data)	Tr	0	Hematite-almandine-hornblende-augite/ epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 gahnite; and 1 Cr-grossular candidate = 1 Cr-grossular.	0.25-0.5 mm fraction: 2 gahnite 3 spinel 1 Cr-grossular 3 low-Cr diopside 1 red rutile 1 chromite (see KIM data; picked as KIM) 2 forsterite (see KIM data; picked as KIMs)	Hematite-almandine-hornblende-augite/ epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 gahnite; and 1 Cr-grossular candidate = 1 Cr-grossular.
O09	246	0	0	0	10	0	0	0	Tr	0	0	15	0	Tr	Tr	0	1	0	Hematite-almandine-hornblende/epidote-diopside-staurolite assemblage.		Hematite-almandine-hornblende/epidote diopside-staurolite	
O10	162	0	0	0.5 (~25 gr)	Tr	0	Tr Cr-grossular (1 gr) Tr low-Cr diopside (4 gr)	0	0	Tr	Tr	5	0	1	Tr	Tr (3 gr; see KIM data)	Tr	Tr	Augite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 Cr-grossular candidate = 1 Cr-grossular.	0.25-0.5 mm fraction: 1 Cr-grossular 4 low-Cr diopside 3 chromite (picked as KIMs)	Augite/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 Cr-grossular candidate = 1 Cr-grossular.
O11	221	0	0	0	Tr	0	Tr low-Cr diopside (4 gr)	0	0	0	Tr	1	0	20	0	0	Tr	Tr	Augite-fayalite-ilmenite/diopside assemblage.	0.25-0.5 mm fraction: 4 low-Cr diopside	Augite-fayalite-ilmenite/diopside	
O12	65	0	1% barite (8 gr)	1 (7 gr)	Tr	0	0	0	Tr	Tr	1	Tr	0	Tr	0	0	1	0	Augite-hematite/diopside assemblage. "Pyrite" is mainly marcasite.	0.25-0.5 mm fraction: 8 barite	Augite-hematite/diopside	"Pyrite" is mainly marcasite.
P03	37	Tr (3 gr)	0	0	8	0	Tr low-Cr diopside (3 gr)	Tr (1 gr)	Tr	Tr	Tr	3	0	0	1	Tr (3 gr; see KIM data)	10	0	Hornblende-almandine/epidote-titanite- diopside assemblage.	0.25-0.5 mm fraction: 3 chalcopyrite 3 low-Cr diopside 1 red rutile 3 chromite (picked as KIMs)	Hornblende-almandine/epidote-titanite-diopside	
P04	28	0	0	1 (10 gr)	5	0	Tr low-Cr diopside (1 gr)	0	Tr	0	0	3	0	0	Tr	Tr (2 gr; see KIM data)	0	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp					>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
P05	206	Tr (3 gr)	0	0	1	0	0	Tr (3 gr)	Tr	Tr	Tr	3	0	0	Tr	Tr (2 gr; see KIM data)	5	Tr	Hornblende-almandine/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 barite candidate = 1 zoisite.	0.25-0.5 mm fraction: 3 chalcopyrite 1 zoisite resembling barite 3 red rutile 2 chromite (picked as KIMs)	Hornblende-almandine/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 barite candidate = 1 zoisite.
P06	268	0	0	0	3	3 pale blue	Tr ruby corundum (1 gr)	Tr (1 gr)	Tr	Tr	Tr	Tr	0	0	0	Tr (3 gr; see KIM data)	1	Tr	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 spinel 1 ruby corundum 1 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside	
P07	48	0	0	0	1	0	Tr sapphirine (1 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	0.5	Tr	Tr	5	0	0	0	Tr (4 gr; see KIM data)	1	0	Hornblende-almandine/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 cloudy blue gahnite versus spinel candidate = 1 sapphirine.	0.25-0.5 mm fraction: 1 sapphirine 1 low-Cr diopside 1 red rutile 4 chromite (picked as KIMs)	Hornblende-almandine/epidote	SEM check from 0.25-0.5 mm fraction: 1 cloudy blue gahnite versus spinel candidate = 1 sapphirine.
P08	247	0	0	Tr (1 gr)	3	0	0	Tr (1 gr)	0	Tr	Tr	2	0	0	0	Tr (2 gr; see KIM data)	4	0	Almandine-hornblende/epidote-titanite assemblage. SEM check from 0.5-1.0 mm fraction: 1 arsenopyrite versus loellingite candidate = 1 loellingite.	0.5-1.0 mm fraction: 1 loellingite 0.25-0.5 mm fraction: 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite	SEM check from 0.5-1.0 mm fraction: 1 arsenopyrite versus loellingite candidate = 1 loellingite.
P09	154	0	0	0	30	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (4 gr)	Tr (2 gr)	0	0	0	20	0	0	5	Tr (3 gr; see KIM data)	Tr	0	Hematite-goethite/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 4 low-Cr diopside 2 red rutile 3 chromite (picked as KIMs)	Hematite-goethite/epidote-staurolite	
P10	157	0	0	0	0.5	0	Tr low-Cr diopside (1 gr)	0	Tr	0	0	10	0	10	Tr	0	10	0	Augite-ilmenite/titanite-diopside-epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 low-Cr diopside	Augite-ilmenite/titanite-diopside-epidote	
P11	123	0	0	0	0	0	Tr low-Cr diopside (6 gr)	0	0	0	Tr	Tr	0	15	Tr	0	20	0	Augite-fayalite/titanite-diopside-apatite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 6 low-Cr diopside 20 representative forsterite (see KIM data; picked as KIMs)	Augite-fayalite/titanite-diopside-apatite	
P12	62	0	0	Tr (1 gr)	0.5	0	Tr low-Cr diopside (3 gr)	0	0	0	Tr	0	0	5	0	0	15	0	Augite/epidote-diopside-apatite assemblage. Augite dominates all fractions.	0.25-0.5 mm fraction: 3 low-Cr diopside	Augite/epidote-diopside-apatite	Augite dominates all fractions.
P13	10	0	0	2 (3 gr)	Tr	0	Tr low-Cr diopside (7 gr)	0	0	Tr	Tr	Tr	0	3	Tr	0	20	0	Augite/titanite-diopside-apatite assemblage. SEM checks from 0.5-1.0 mm fraction: 4 yellow spessartine versus andradite candidates = 1 andradite, 1 fayalite, 1 hypersthene and 1 forsterite. SEM checks from 0.25-0.5 mm fraction: 5 representative augite (major paramagnetic assemblage mineral) versus pigeonite candidates = 3 Ca-augite and 2 pigeonite (grouped with augite in mineral assemblage).	0.5-1.0 mm fraction: 1 andradite resembling spessartine 1 fayalite resembling spessartine 1 hypersthene resembling spessartine 1 forsterite resembling spessartine (picked as KIM) SEM checks from 0.25-0.5 mm fraction: 7 low-Cr diopside 3 representative augite 2 representative pigeonite 6 representative forsterite (see KIM data; picked as KIMs)	Augite/titanite-diopside-apatite	SEM checks from 0.5-1.0 mm fraction: 4 yellow spessartine versus andradite candidates = 1 andradite, 1 fayalite, 1 hypersthene and 1 forsterite. SEM checks from 0.25-0.5 mm fraction: 5 representative augite (major paramagnetic assemblage mineral) versus pigeonite candidates = 3 Ca-augite and 2 pigeonite (grouped with augite in mineral assemblage).
Q02	72	0	Tr galena (2 gr) Tr cerussite (7 gr) Tr barite (2 gr)	Tr (3 gr)	0	0	0	Tr (1 gr)	Tr	Tr	0	Tr	0	0	0	Tr (1 gr; see KIM data)	5	0	Hornblende-almandine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 matte-grey galena candidates = 2 galena; 2 platy, orange to white, secondary precipitates = 2 cerussite (probably contamination); and 2 barite versus apatite candidates = 2 barite.	0.25-0.5 mm fraction: 2 galena 7 cerussite 2 barite 1 red rutile 1 chromite (picked as KIM)	Hornblende-almandine/epidote	SEM checks from 0.25-0.5 mm fraction: 2 matte-grey galena candidates = 2 galena; 2 platy, orange to white, secondary precipitates = 2 cerussite (probably contamination); and 2 barite versus apatite candidates = 2 barite.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
Q03	200	0	0	90 (~18000 gr)	0	0	0	0	0	0	0	Tr	0	0	0	Tr (1 gr; see KIM data)	Tr	Tr	Siderite-almandine-hornblende/pyrite assemblage. "Pyrite" is mainly marcasite.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)	Siderite-almandine-hornblende/pyrite	"Pyrite" is mainly marcasite.
Q03A	129	0	1% barite (~40 gr)	1 (~40 gr)	2	0	Tr low-Cr diopside (1 gr)	0	Tr	0	0	Tr	0	0	Tr	Tr (2 gr; see KIM data)	2	0	Almandine-hornblende/epidote-titanite assemblage. SEM checks from 1.0-2.0 mm fraction: 2 barite versus siderite candidates = 2 barite. SEM checks from 0.5-1.0 mm fraction: 4 barite versus siderite candidates = 4 barite.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 8 barite 0.25-0.5 mm fraction: 20 representative barite 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite	SEM checks from 1.0-2.0 mm fraction: 2 barite versus siderite candidates = 2 barite. SEM checks from 0.5-1.0 mm fraction: 4 barite versus siderite candidates = 4 barite.
Q04	257	0	0	Tr (1 gr)	5	0	Tr low-Cr diopside (4 gr)	0	2	0	Tr	3	0	0	Tr	Tr (1 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 4 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote	
Q05	203	0	0	Tr (1 gr)	3	1 blue-grey	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	Tr (3 gr)	1	Tr	Tr	8	0	0	Tr	Tr (1 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 1 Mn-epidote 2 low-Cr diopside 3 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote	
Q06	108	0	0	0	1	1 grey	Tr low-Cr diopside (3 gr)	Tr (1 gr)	Tr	Tr	0	Tr	Tr	0	1	0	20	Tr	Hornblende-almandine/epidote-diopside- apatite assemblage.	0.25-0.5 mm fraction: 1 spinel 3 low-Cr diopside 1 red rutile	Hornblende-almandine/epidote-diopside apatite	
Q07	17	0	0	0	10	1 grey	Tr Mn-epidote (1 gr) Tr low-Cr diopside (6 gr)	0	1	Tr	0	2	0	0	Tr	0	5	Tr	Hornblende-almandine/epidote assemblage.	0.25-0.5 mm fraction: 1 spinel 1 Mn-epidote 6 low-Cr diopside	Hornblende-almandine/epidote	
Q08	156	0	0	0	5	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	0	0	0	3	0	0	Tr	0	1	Tr	Almandine-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile	Almandine-ilmenite/epidote	
Q09	96	0	0	0	25	1 blue-grey	Tr Mn-epidote (1 gr) Tr ruby corundum (1 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	Tr	Tr	20	0	0	0	Tr (1 gr; see KIM data)	3	0	Almandine-goethite-hornblende-ilmenite/ epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 spinel 1 Mn-epidote 1 ruby corundum 1 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-goethite-hornblende-ilmenite/ epidote-staurolite	
Q10	275	0	0	0	5	0	Tr low-Cr diopside (1 gr)	0	0	0	0	2	0	0.5	Tr	Tr (2 gr; see KIM data)	Tr	0	Hematite-augite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs) 6 forsterite (see KIM data; picked as KIMs)	Hematite-augite/epidote-diopside	
Q11	58	0	0	0	2	0	Tr low-Cr diopside (3 gr)	0	1	Tr	Tr	10	0	10	Tr	0	5	0	Augite-hornblende-ilmenite/epidote-titanite-diopside assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside	Augite-hornblende-ilmenite/epidote-titanite- diopside	
Q12	97	0	0	0	Tr	0	Tr low-Cr diopside (13 gr)	Tr (1 gr)	0	0	0	0	0	15	Tr	0	30	Tr	Augite-ilmenite-fayalite/apatite-titanite- diopside assemblage. SEM check from 0.5-1.0 mm fraction: 1 chromitite candidate = 1 chromitite (chromite in plagioclase matrix).	0.5-1.0 mm fraction: 1 chromitite (picked as KIM) 0.25-0.5 mm fraction: 13 low-Cr diopside 1 red rutile	Augite-ilmenite-fayalite/apatite-titanite-diopside	SEM check from 0.5-1.0 mm fraction: 1 chromitite candidate = 1 chromitite (chromite in plagioclase matrix).
Q13	263	0	0	1 (1 gr)	0	0	0	0	1	3	1	0	0	5	Tr	0	5	0	Augite/diopside assemblage.	0.25-0.5 mm fraction: 3 forsterite (see KIM data; picked as KIMs)	Augite/diopside	
R02	253	0	3% barite (13 gr)	5 (~20 gr)	Tr	0	0	Tr (1 gr)	Tr	0	0	Tr	0	0	0	0	10	0	Almandine-hornblende/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 3 barite versus epidote candidates = 3 barite.	0.5-1.0 mm fraction: 3 barite 0.25-0.5 mm fraction: 13 barite 1 red rutile	Almandine-hornblende/epidote	SEM checks from 0.5-1.0 mm fraction: 3 barite versus epidote candidates = 3 barite.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
R03	15	0	0	0	5	1 green gahnite	Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	2	0	0	0	Tr (2 gr; see KIM data)	1	0	Almandine-hornblende-hematite/epidote- titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 1 gahnite and 1 diopside.	0.25-0.5 mm fraction: 1 gahnite 1 diopside resembling gahnite 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote titanite	SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 1 gahnite and 1 diopside.
R04	199	0	0	0	3	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	0	0.5	0	0	0	Tr (1 gr; see KIM data)	5	Tr	Almandine-hornblende-hematite/epidote-diopside assemblage.	0.5-1.0 mm fraction: 1 red rutile 0.25-0.5 mm fraction: 2 Mn-epidote 2 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote diopside	
R05	219	0	0	0	3	0	0	0	Tr	Tr	Tr	1	0	0	0	0	1	0	Almandine-hornblende/epidote-diopside assemblage.		Almandine-hornblende/epidote-diopside	
R06	164	0	0	Tr (3 gr)	5	0	0	0	2	Tr	Tr	2	0	0	Tr	Tr (1 gr; see KIM data)	5	0	Hornblende-almandine/epidote-titanite- diopside assemblage.	0.25-0.5 mm fraction: 1 chromite (picked as KIM)	Hornblende-almandine/epidote-titanite-diopside	
R07	134	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (5 gr)	Tr (3 gr)	Tr	Tr	Tr	1	0	0	Tr	Tr (4 gr; see KIM data)	2	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 5 low-Cr diopside 3 red rutile 4 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
R08	24	0	0	0	1	0	0	0	Tr	0	0	1	0	0	Tr	0	8	0	Hornblende-almandine/epidote-diopside assemblage.		Hornblende-almandine/epidote-diopside	
R09	201	0	0	Tr (3 gr)	3	0	0	0	Tr	Tr	0	15	0	0	Tr	0	15	0	Almandine-hornblende/diopside-epidote-staurolite-apatite assemblage.		Almandine-hornblende/diopside-epidote-staurolite-apatite	
R10	151	0	0	0	20	0	Tr low-Cr diopside (1 gr)	0	0	0	0	20	Tr	Tr	5	Tr (1 gr; see KIM data)	Tr	Tr	Hematite-goethite-ilmenite/epidote-staurolite assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 chromite (picked as KIM)	Hematite-goethite-ilmenite/epidote-staurolite	
R11	213	0	0	7 (~1000 gr)	8	0	0	Tr (2 gr)	Tr	Tr	Tr	10	0	0	0	Tr (5 gr; see KIM data)	3	0	Almandine-hematite-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 red rutile 5 chromite (picked as KIMs)	Almandine-hematite-hornblende/epidote	
R12	194	0	0	0	0	0	Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	1	0	30	Tr	Tr (1 gr; see KIM data)	60	0	Augite-fayalite/apatite-titanite assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 chromite (picked as KIM) 20 representative forsterite (see KIM data; picked as KIMs)	Augite-fayalite/apatite-titanite	
R13	192	0	0	0	0	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (3 gr)	0	Tr	Tr	0	Tr	0	30	Tr	0	70	0	Augite-fayalite-ilmenite/apatite-titanite assemblage. SEM check from 1.0-2.0 mm fraction: 1 Pb-metal candidate = 1 Pb-metal (contamination; bullet fragment).	1.0-2.0 mm fraction: 1 Pb-metal (contamination) 0.25-0.5 mm fraction: 1 Mn-epidote 3 low-Cr diopside 30 representative forsterite (see KIM data; picked as KIMs)	Augite-fayalite-ilmenite/apatite-titanite	SEM check from 1.0-2.0 mm fraction: 1 Pb-metal candidate = 1 Pb-metal (contamination bullet fragment).
R14	171	0	0	0	Tr	1 pale blue	Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	Tr	0	10	Tr	0	20	0	Augite/diopside-apatite assemblage. SEM check from 1.0-2.0 mm fraction: 1 malachite candidate = 1 malachite.	1.0-2.0 mm fraction: 1 malachite 0.25-0.5 mm fraction: 1 spinel 1 low-Cr diopside	Augite/diopside-apatite	SEM check from 1.0-2.0 mm fraction: 1 malachite candidate = 1 malachite.
R15	74	0	0	0	0	0	Tr low-Cr diopside (1 gr)	0	0	Tr	Tr	0	0	Tr	0	0	1	0	Augite-ilmenite/diopside assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside	Augite-ilmenite/diopside	
S01	75	0	0	75 (~8000 gr)	Tr	0	Tr low-Cr diopside (2 gr)	0	Tr	Tr	Tr	2	0	0	0	0	2	0	Almandine-hornblende-siderite/pyrite assemblage. "Pyrite" is mostly marcasite.	0.25-0.5 mm fraction: 2 low-Cr diopside	Almandine-hornblende-siderite/pyrite	"Pyrite" is mostly marcasite.
S02	45	0	0	25 (~30 gr)	2	0	0	0	10	0	0	0	0	0	Tr	0	5	0	Almandine-hornblende/epidote-pyrite-titanite assemblage.		Almandine-hornblende/epidote-pyrite-titanite	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp	<0.8 amp					>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
S03	112	0	Tr barite (4 gr)	60 (~15000 gr)	1	1 grey	Tr low-Cr diopside (4 gr)	0	Tr	Tr	Tr	2	0	0	0	Tr (2 gr; see KIM data)	2	Tr	Almandine-hornblende/pyrite assemblage. SEM checks from 0.5-1.0 mm fraction: 2 barite versus siderite candidates = 2 barite. "Pyrite" is mostly marcasite.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 2 barite 0.25-0.5 mm fraction: 4 barite 1 spinel 4 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/pyrite	SEM checks from 0.5-1.0 mm fraction: 2 barite versus siderite candidates = 2 barite. "Pyrite" is mostly marcasite.
S04	79	0	0	Tr (1 gr)	Tr	0	Tr low-Cr diopside (3 gr)	Tr (2 gr)	Tr	0.5	Tr	2	Tr	0	1	Tr (5 gr; see KIM data)	0.5	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 2 red rutile 5 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
S05	89	Tr (1 gr)	0	0.2 (~20 gr)	7	1 green gahnite	Tr Mn-epidote (3 gr)	Tr (2 gr)	0.5	Tr	0.5	2	0	Tr	1	Tr (1 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite.	0.25-0.5 mm fraction: 1 chalcopyrite 1 gahnite 3 Mn-epidote 2 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite.
S06	53	0	0	0	8	0	Tr low-Cr diopside (4 gr)	Tr (1 gr)	2	Tr	Tr	3	0	0	Tr	Tr (2 gr; see KIM data)	5	0	Almandine-hornblende/epidote-titanite- diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 topaz candidate = 1 zoisite.	0.25-0.5 mm fraction: 1 zoisite resembling topaz 4 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite-diopside	SEM check from 0.25-0.5 mm fraction: 1 topaz candidate = 1 zoisite.
S07	224	0	0	0	3	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	0	Tr	0	Tr	Tr	0	0	0	Tr (1 gr; see KIM data)	5	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 2 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote	
S08	81	0	0	0	Tr	0	0	Tr (1 gr)	1	Tr	Tr	Tr	0	0	0	Tr (2 gr; see KIM data)	1	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
S09	249	0	0	0	5	0	Tr low-Cr diopside (1 gr)	0	0.5	0	0	3	0	0	Tr	Tr (2 gr; see KIM data)	3	0	Almandine-hornblende/epidote-diopside- titanite assemblage. SEM check from 0.25-0.5 mm fraction: 1 topaz versus zoisite candidate = 1 zoisite.	0.25-0.5 mm fraction: 1 zoisite resembling topaz 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside-titanite	SEM check from 0.25-0.5 mm fraction: 1 topaz versus zoisite candidate = 1 zoisite.
S10	55	0	0	0	2	1 green gahnite	Tr low-Cr diopside (1 gr)	0	0	Tr	0	15	0	0	0	Tr (2 gr; see KIM data)	6	0	Almandine-augite-hornblende/epidote- staurolite assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite.	0.25-0.5 mm fraction: 1 gahnite 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-augite-hornblende/epidote-staurolite	SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite.
S11	84	0	0	Tr (1 gr)	5	0	Tr low-Cr diopside (2 gr)	0	0	Tr	Tr	10	0.5	0	0	Tr (1 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote	
S12	116	0	0	0	Tr	0	Tr low-Cr diopside (2 gr)	0	0	Tr	0	2	Tr	0	Tr	Tr (1 gr; see KIM data)	1	0	Augite-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 1 chromite (picked as KIM)	Augite-hornblende/epidote-diopside	
S13	146	0	0	0	0	0	Tr low-Cr diopside (1 gr)	0	3	0	0	0	0	50	0	Tr (1 gr; see KIM data)	50	0	Fayalite-augite-ilmenite/apatite-zircon assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 chromite (picked as KIM)	Fayalite-augite-ilmenite/apatite-zircon	
S14	80	0	0	0	0	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (3 gr)	0	Tr	0	0	Tr	0	20	0	0	1	0	Augite-ilmenite-fayalite/diopside-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 pale green cyrptocrystalline Cr-andradite versus epidote candidates = 2 epidote	0.25-0.5 mm fraction: 1 Mn-epidote 2 epidote resembling Cr-andradite 3 low-Cr diopside	Augite-ilmenite-fayalite/diopside-titanite	SEM checks from 0.25-0.5 mm fraction: 2 pale green cyrptocrystalline Cr-andradite versus epidote candidates = 2 epidote

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
S15	187	0	0	1 (2 gr)	0	0	1% low-Cr diopside (3 gr)	0	1	2	0	2	0	5	Tr	0	30	0	Augite/diopside-apatite assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside	Augite/diopside-apatite	
S16	256	0	0	1 (2 gr)	0	0	0	0	Tr	0	0	0	0	5	0	Tr (1 gr; see KIM data)	5	0	Augite/epidote assemblage.	0.5-1.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 chromite (picked as KIM) 5 forsterite (see KIM data; picked as KIMs)	Augite/epidote	
T01	71	0	0	Tr (6 gr)	0.5	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (5 gr)	Tr (2 gr)	4	Tr	Tr	2	Tr	0	3	0	2	0	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 4 orange spessartine versus almandine candidates = 3 spessartine and 1 almandine.	0.25-0.5 mm fraction: 1 Mn-epidote 5 low-Cr diopside 2 red rutile 3 representative spessartine 1 almandine resembling spessartine	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 4 orange spessartine versus almandine candidates = 3 spessartine and 1 almandine.
T02	144	0	5% barite (~300 gr)	10 (~600 gr)	3	0	Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	Tr	0	0	Tr	Tr (1 gr; see KIM data)	1	0	Almandine-hornblende-hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus clinopyroxene candidate = 1 augite. 0.5-1.0 mm fraction contains 5% (~50 grains) barite.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 1 augite resembling gahnite 1 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende-hematite/epidote	SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus clinopyroxene candidate = 1 augite. 0.5-1.0 mm fraction contains 5% (~50 grains) barite.
T03	254	0	5% barite (~200 gr)	Tr (8 gr)	4	1 blue	Tr low-Cr diopside (3 gr)	Tr (1 gr)	Tr	Tr	Tr	1	0	0	0	Tr (2 gr; see KIM data)	3	0	Almandine-hornblende/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue gahnite versus spinel candidate = 1 spinel. 0.5-1.0 mm fraction contains 5% (~120 grains) barite.	1.0-2.0 mm fraction: 12 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 20 representative barite 1 spinel 3 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	SEM check from 0.25-0.5 mm fraction: 1 blue gahnite versus spinel candidate = 1 spinel. 0.5-1.0 mm fraction contains 5% (~120 grains) barite.
T04	265	Tr (5 gr)	0	0	3	1 pale blue	Tr low-Cr diopside (1 gr)	Tr (2 gr)	Tr	0	0.5	Tr	0	Tr	0	0	10	Tr	Almandine-hematite-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 monazite versus bastnaesite candidate = 1 monazite.	0.25-0.5 mm fraction: 5 chalcopyrite 1 spinel 1 low-Cr diopside 2 red rutile 1 monazite	Almandine-hematite-hornblende/epidote diopside	SEM check from 0.25-0.5 mm fraction: 1 monazite versus bastnaesite candidate = 1 monazite.
T05	88	0	0	0	Tr	0	Tr low-Cr diopside (5 gr)	Tr (1 gr)	1	Tr	Tr	1	0	0	Tr	Tr (4 gr; see KIM data)	3	0	Almandine-hornblende/epidote-titanite assemblage.	0.25-0.5 mm fraction: 5 low-Cr diopside 1 red rutile 4 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite	
T06	140	0	Tr barite (1 gr)	0	0.5	1 blue-green gahnite	Tr low-Cr diopside (7 gr)	Tr (5 gr)	Tr	Tr	0.5	2	0	0	Tr	Tr (11 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite.	0.25-0.5 mm fraction: 1 barite 1 gahnite 7 low-Cr diopside 5 red rutile 11 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite.
T07	117	0	0	0	2	2 grey-blue, pale purple	Tr low-Cr diopside (6 gr)	Tr (1 gr)	Tr	Tr	Tr	2	Tr	0	Tr	Tr (5 gr; see KIM data)	1	Tr	Almandine-hornblende-hematite/epidote-diopside-titanite assemblage.	0.25-0.5 mm fraction: 2 spinel 6 low-Cr diopside 1 red rutile 5 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside-titanite	
T08	85	0	0	0	1	0	0	Tr (1 gr)	Tr	0	0	2	0	0	Tr	0	2	Tr	Hornblende-almandine/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 red rutile	Hornblende-almandine/epidote-diopside	
T09	67	0	0	40 (~1500 gr)	0	0	0	0	Tr	0	0	Tr	0	0	0	0	1	0	Almandine-hornblende-siderite/pyrite- diopside-epidote assemblage. "Pyrite" is mostly marcasite.		Almandine-hornblende-siderite/pyrite-diopside-epidote	"Pyrite" is mostly marcasite.
T10	27	0	0	Tr (5 gr)	0	1 grey	0	0	Tr	0	0	Tr	0	0	0	0	8	0	Hornblende/diopside assemblage.	0.25-0.5 mm fraction: 1 spinel	Hornblende/diopside	
T11	33	0	0	0	50	0	0	0	0	0	0	60	0	0	0	0	Tr	Tr	Goethite-almandine/staurolite-epidote assemblage.		Goethite-almandine/staurolite-epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates				
		>1 amp			<1.0 amp	>1.0 amp					0.8-1.0 amp		<0.8 amp					>1.0 amp				
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
T11-2	260	0	0	Tr (5 gr)	8	0	0	0	0	0	0	8	0	Tr	0	Tr (1 gr; see KIM data)	2	Tr	Almandine-hematite-augite-hornblende/ diopside-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 monazite versus bastnaesite candidates = 6 monazite.	0.25-0.5 mm fraction: 1 chromite (picked as KIM) 6 monazite resembling bastnaesite	Almandine-hematite-augite-hornblende/ diopside-epidote	SEM checks from 0.25-0.5 mm fraction: 6 monazite versus bastnaesite candidates = 6 monazite.
T12	216	0	0	0	0	0	0	0	Tr	Tr	0	5	0	0	Tr	Tr (6 gr; see KIM data)	2	Tr	Almandine-hornblende-hematite/diopside-epidote assemblage.	0.25-0.5 mm fraction: 6 chromite (picked as KIMs)	Almandine-hornblende-hematite/diopside- epidote	
T14	208	0	0	0	0	0	Tr low-Cr diopside (~40 gr)	0	Tr	0	0	Tr	0	4	Tr	0	10	0	Augite-hornblende/diopside-titanite assemblage	0.5-1.0 mm fraction: 3 low-Cr diopside 1 red rutile 0.25-0.5 mm fraction: 20 representative low-Cr diopside	Augite-hornblende/diopside-titanite	
T15	59	0	0	0	0	0	0	0	Tr	0	0	0	0	60	0	0	25	0	Fayalite-ilmenite-augite/diopside-apatite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 apatite (major nonparamagnetic assemblage mineral) candidates = 5 apatite.	0.25-0.5 mm fraction: 5 representative apatite	Fayalite-ilmenite-augite/diopside-apatite	SEM checks from 0.25-0.5 mm fraction: 5 apatite (major nonparamagnetic assemblage mineral) candidates = 5 apatite.
T16	25	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	Tr	0	Augite-fayalite/epidote assemblage.	0.25-0.5 mm fraction: 7 forsterite (see KIM data; picked as KIMs)	Augite-fayalite/epidote	
U02	235	0	0	0.2 (~40 gr)	2	0	Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	2	0	0	Tr	Tr (1 gr; see KIM data)	4	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	
U03	191	0	0	0.1 (5 gr)	2	0	Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	5	0	0	Tr	Tr (2 gr; see KIM data)	5	0	Almandine-hornblende-ilmenite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende-ilmenite/epidote-diopside	
U04	83	0	15% barite (~1500 gr)	0	0	1 pale blue	Tr low-Cr diopside (5 gr)	Tr (1 gr)	Tr	Tr	Tr	1	0	0	0	Tr (5 gr; see KIM data)	5	Tr	Almandine-hornblende/epidote-barite assemblage. SEM checks from 0.25-0.5 mm fraction: 3 barite (major nonparamagnetic assemblage mineral) versus epidote candidates = 3 barite. 0.5-1.0 mm fraction contains 10% (80 grains) barite.	1.0-2.0 mm fraction: 4 barite 0.5-1.0 mm fraction: 20 representative barite 0.25-0.5 mm fraction: 15 representative barite 1 spinel 5 low-Cr diopside 1 red rutile 5 chromite (picked as KIMs)	Almandine-hornblende/epidote-barite	SEM checks from 0.25-0.5 mm fraction: 3 barite (major nonparamagnetic assemblage mineral) versus epidote candidates = 3 barite. 0.5-1.0 mm fraction contains 10% (80 grains) barite.
U05	54	0	0	Tr (~15 gr)	4	0	Tr sapphire corundum (1 gr)	0	1	Tr	Tr	Tr	0	0	Tr	Tr (4 gr; see KIM data)	10	Tr	Hornblende-almandine/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 sapphire corundum 4 chromite (picked as KIMs)	Hornblende-almandine/epidote-diopside	
U08	234	0	0	70 (~4000 gr)	1	0	0	0	Tr	Tr	Tr	2	0	0	1	0	Tr	0	Siderite-hornblende-almandine/marcasite assemblage. "Pyrite" is mainly marcasite.		Siderite-hornblende-almandine/marcasite	"Pyrite" is mainly marcasite.
U09	31	0	0	Tr (1 gr)	Tr	0	0	Tr (1 gr)	Tr	Tr	0	Tr	0	0	Tr	Tr (1 gr; see KIM data)	4	0	Almandine-hornblende/diopside-titanite- epidote assemblage.	0.25-0.5 mm fraction: 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/diopside-titanite-epidote	
U10	135	0	0	0	1	0	Tr Mn-epidote (4 gr)	Tr (2 gr)	0	Tr	Tr	20	0	0.5	Tr	0	10	0	Hornblende-almandine-augite/epidote- staurolite assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 2 red rutile	Hornblende-almandine-augite/epidote-staurolite	
U11	205	0	0	Tr (3 gr)	Tr	0	0	0	Tr	Tr	0	2	0	0	0	0	15	Tr	Almandine-hornblende/epidote-diopside- apatite assemblage. Picked 1 pristine 175 x 400 x 500µ gold grain from 0.25-0.5 mm fraction.	0.25-0.5 mm fraction: 1 gold grain	Almandine-hornblende/epidote-diopside-apatite	Picked 1 pristine 175 x 400 x 500µ gold grain from 0.25-0.5 mm fraction.
V02	70	0	0	Tr (5 gr)	2	0	Tr corundum (1 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	3	0	Tr	3	0	0	Tr	0	10	Tr	Almandine-hornblende/epidote-diopside assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 corundum 1 low-Cr diopside 1 red rutile	Almandine-hornblende/epidote-diopside	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm										Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
V03	231	0	0	Tr (2 gr)	Tr	1 pink	0	0	Tr	0	Tr	Tr	0	0	Tr	Tr (6 gr; see KIM data)	4	0	Hornblende-almandine/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 spiel 6 chromite (picked as KIMs)	Hornblende-almandine/epidote-diopside	
V04	50	0	0	Tr (3 gr)	2	1 grey	Tr dumortierite (1 gr)	Tr (3 gr)	3	Tr	0	3	0	0	Tr	Tr (1 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue-purple sapphire corundum versus kyanite candidate = 1 dumortierite ($Al7(BO3)(SiO4)3O3$).	0.25-0.5 mm fraction: 1 spinel 1 dumortierite 3 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	SEM checks from 0.25-0.5 mm fraction: 1 blue-purple sapphire corundum versus kyanite candidate = 1 dumortierite ($Al1BSi3O18$).
V06	227	0	Tr barite (4 gr)	Tr (8 gr)	2	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	0.5	Tr	0	Tr	0	0	Tr	Tr (2 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 barite versus apatite candidates = 3 barite.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 4 barite 1 low-Cr diopside 0.25-0.5 mm fraction: 4 barite 1 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	SEM checks from 0.5-1.0 mm fraction: 3 barite versus apatite candidates = 3 barite.
V07	36	0	0	0.2 (~15 gr)	2	0	Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	Tr	0	0	Tr	Tr (2 gr; see KIM data)	Tr	Tr	Almandine-hornblende/epidote-diopside- titanite assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside-titanite	
V08	238	0	0	0	5	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	0	Tr	1	0	0	2	0	5	Tr	Hornblende-almandine/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile	Hornblende-almandine/epidote	
V09	178	Tr (1 gr)	Tr arsenopyrite (7 gr)	0.2 (~40 gr)	Tr	2 pale blue, pale blue-green	Tr ruby corundum (1 gr)	0	Tr	Tr	0	2	0	0	0	0	20	0	Hornblende-almandine/epidote-diopside- apatite assemblage. SEM check from 0.25-0.5 mm fraction: 1 ruby corundum candidate = 1 ruby corundum.	0.25-0.5 mm fraction: 1 chalcopyrite 7 arsenopyrite 2 spinel 1 ruby corundum	Hornblende-almandine/epidote-diopside apatite	SEM check from 0.25-0.5 mm fraction: 1 ruby corundum candidate = 1 ruby corundum
W02	104	0	0	Tr (2 gr)	1	0	0	0	0	Tr	Tr	0.5	0	0	0	Tr (5 gr; see KIM data)	6	Tr	Hornblende-almandine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 5 chromite (picked as KIMs)	Hornblende-almandine/epidote-titanite	
W03	102	0	Tr barite (12 gr)	Tr (3 gr)	2	1 green gahnite; 1 pale blue spinel	Tr low-Cr diopside (2 gr)	0	Tr	0	Tr	2	0	0	0	0	12	0	Hornblende-almandine/epidote-titanite assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus diopside candidate = 1 gahnite.	0.5-1.0 mm fraction: 6 barite 0.25-0.5 mm fraction: 12 barite 1 gahnite 1 spinel 2 low-Cr diopside	Hornblende-almandine/epidote-titanite	SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus diopside candidate = 1 gahnite.
W04	175	0	0	Tr (2 gr)	5	0	Tr low-Cr diopside (2 gr)	0	1	0.5	Tr	3	0	0	Tr	0	3	Tr	Hornblende-almandine/epidote-titanite- diopside assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside	Hornblende-almandine/epidote-titanite-diopside	
W05	100	0	0	0	1	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (5 gr)	Tr (1 gr)	Tr	0	0	1	Tr	0	1	Tr (2 gr; see KIM data)	1	Tr	Almandine-hornblende/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue-green clinopyroxene versus sapphirine candidate = 1 diopside (with minor ompahcite component); and 2 orange spessartine candidates = 2 spessartine.	0.25-0.5 mm fraction: 1 diopside resembling sapphirine 1 Mn-epidote 5 low-Cr diopside 1 red rutile 2 representative spessartine 2 chromite (picked as KIMs)	Almandine-hornblende/epidote-titanite	SEM checks from 0.25-0.5 mm fraction: 1 blue-green clinopyroxene versus sapphirine candidate = 1 diopside (with minor ompahcite component); and 2 orange spessartine candidates = 2 spessartine.
W06	196	0	0	Tr (1 gr)	5	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	Tr	3	0	0	1	0	3	0	Hornblende-almandine/epidote-titanite-apatite assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 2 low-Cr diopside	Hornblende-almandine/epidote-titanite-apatite	
X01	43	0	0	Tr (1 gr)	0.5	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (4 gr)	0	0.5	0	0	2	0	0	0	0	25	0	Hornblende-almandine/epidote-apatite-titanite assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 4 low-Cr diopside	Hornblende-almandine/epidote-apatite-titanite	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp % Cpy	Misc. Prime MMSIMs	% Py	<1.0 amp % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: # Grains + Colour Spinel	>1.0 amp Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	0.8-1.0 amp % Tm	% St	<0.8 amp % Sps	% Fay	% Opx	% Cr	Phosphates >1.0 amp % Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
X02	243	0	0	Tr (~10 gr)	Tr	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (1 gr)	0	Tr	0	Tr	3	0	0	2	0	4	0	Hornblende-almandine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 1 low-Cr diopside	Hornblende-almandine/epidote-titanite	
X03	274	0	0	Tr (4 gr)	3	0	0	0	Tr	0	Tr	1	0	0	0	0	1	Tr	Hornblende-hematite-almandine/epidote assemblage.		Hornblende-hematite-almandine/epidote	
X04	110	0	0	0	3	1 blue-green gahnite	0	Tr (2 gr)	Tr	0	0	2	Tr	0	Tr	Tr (2 gr; see KIM data)	1	Tr	Almandine-hornblende-hematite/epidote- titanite diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 dark blue-green hercynite versus clinopyroxene candidate = 1 gahnite.	0.25-0.5 mm fraction: 1 gahnite 2 red rutile 2 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote titanite-diopside	SEM check from 0.25-0.5 mm fraction: 1 dark blue-green hercynite versus clinopyroxene candidate = 1 gahnite.
X05	244	0	0	0	5	0	Tr low-Cr diopside (3 gr)	0	Tr	Tr	Tr	1	0	0	0.5	0	7	0	Hornblende-almandine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside	Hornblende-almandine/epidote-titanite	
Y05	42	0	0	Tr (1 gr)	Tr	0	0	0	0	Tr	Tr	1	0	Tr	Tr	Tr (3 gr; see KIM data)	2	0	Almandine-hornblende/epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 chromite (picked as KIMs)	Almandine-hornblende/epidote-diopside	
Z01	109	0	0	0	Tr	0	Tr low-Cr diopside (6 gr)	0	Tr	0	Tr	2	0	0	8	0	10	Tr	Hornblende-almandine/epidote-titanite assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 6 low-Cr diopside	Hornblende-almandine/epidote-titanite	
Z02	160	0	0	2 (~200 gr)	3	0	0	0	0	Tr	Tr	1	0	0	Tr	Tr (2 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 chromite (picked as KIMs)	Almandine-hornblende/epidote	
Z03	223	0	0	0.2 (~15 gr)	Tr	0	Tr low-Cr diopside (9 gr)	0	0	0	Tr	Tr	0	0	3	0	Tr	0	Almandine-hornblende/epidote-diopside assemblage.	0.5-1.0 mm fraction: 6 low-Cr diopside 0.25-0.5 mm fraction: 9 low-Cr diopside	Almandine-hornblende/epidote-diopside	
Z04	141	0	0	Tr (2 gr)	1	0	Tr low-Cr diopside (7 gr)	0	Tr	0	0	1	0	0	5	Tr (1 gr; see KIM data)	2	0	Almandine-augite-hornblende/diopside assemblage.	0.25-0.5 mm fraction: 7 low-Cr diopside 1 chromite (picked as KIM)	Almandine-augite-hornblende/diopside	
Z05	161	Tr (1 gr)	0	Tr (1 gr)	0	0	1% low-Cr diopside (~150 gr)	0	2	1	0	40	0	0	5	Tr (1 gr; see KIM data)	5	0	Almandine-hornblende-augite/diopside-staurolite assemblage. SEM check from 0.5-1.0 mm fraction: 1 low-Cr diopside + enstatite candidate = 1 low-Cr diopside + bronzite. Coarsest low-Cr diopside occurs mainly in bimineralic lithic grains with bronzite (i.e. websterite).	1.0-2.0 mm fraction: 6 low-Cr diopside + bronzite 0.5-1.0 mm fraction: 26 low-Cr diopside ± bronzite 0.25-0.5 mm fraction: 1 chalcopyrite 50 representative low-Cr diopside 1 chromite (picked as KIM)	Almandine-hornblende-augite/diopside-staurolite	SEM check from 0.5-1.0 mm fraction: 1 low-Cr diopside + enstatite candidate = 1 low-Cr diopside + bronzite. Coarsest low-Cr diopside occurs mainly in bimineralic lithic grains with bronzite (i.e. websterite).
Z06	176	0	0	0	5	0	Tr low-Cr diopside (3 gr)	0	0	Tr	Tr	2	0	0	Tr	Tr (2 gr; see KIM data)	0	0	Almandine-hematite-augite/diopside assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 2 chromite (picked as KIMs)	Almandine-hematite-augite/diopside	
Z07	63	Tr (1 gr)	0	Tr (2 gr)	Tr	2 pale grey	Tr Mn-epidote (2 gr) Tr low-Cr diopside (29 gr)	Tr (1 gr)	Tr	0	Tr	Tr	0	0	10	Tr (5 gr; see KIM data)	2	0	Hornblende-augite-almandine/diopside- epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 2 spinel 2 Mn-epidote 29 low-Cr diopside 1 red rutile 5 chromite (picked as KIMs)	Hornblende-augite-almandine/diopside-epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates		Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp				>1.0 amp					
		% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz				
Z08	258	0	0	0	0	2 pale blue	Tr sapphirine (2 gr) Tr ruby corundum (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~200 gr)	Tr (17 gr)	0	0	Tr	Tr	0	Tr	15	0	2	0	Hornblende-almandine-augite-orthopyroxene/diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 3 sapphirine versus sapphire corundum candidates = 2 sapphirine and 1 sapphire corundum; and 2 ruby corundum versus almandine candidates = 2 ruby corundum.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 16 low-Cr diopside 1 forsterite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 2 spinel 2 sapphirine 4 ruby corundum 1 sapphire corundum 30 representative low-Cr diopside 17 red rutile 25 representative forsterite (see KIM data; picked as KIMs)	Hornblende-almandine-augite-orthopyroxene/diopside	SEM checks from 0.25-0.5 mm fraction: 3 sapphirine versus sapphire corundum candidates = 2 sapphirine and 1 sapphire corundum; and 2 ruby corundum versus almandine candidates = 2 ruby corundum.
Z09	239	Tr (3 gr)	0.4 (~200 gr) millerite ± gaspeite	0.2 (~100 gr)	0	4 pale blue, grey, green	0.5% low-Cr diopside (~250 gr)	Tr (2 gr)	0	0	0	0	0	0	40	Tr (5 gr; see KIM data)	0	0	Orthopyroxene-augite-honblende/diopside assemblage. SEM checks from 1.0-2.0 mm fraction: 2 pyrrhotite versus pentlandite candidates = 2 millerite (NiS); 1 green alteration mineral = 1 gaspeite (Ni,Mg,Fe)CO3 + calcite; and 1 dark green gahnite versus spinel candidate = 1 spinel. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 spinel. 1.0-2.0 mm fraction contains 20 unpicked millerite ± gaspeite, 0.5-1.0 mm fraction contains ~200 unpicked millerite ± gaspeite and 0.25-0.5 mm fraction contains ~5 unpicked slag (contamination).	1.0-2.0 mm fraction: 4 chalcopyrite within gabbro fragments 33 representative millerite 31 representative gaspeite 1 spinel 1 low-Cr diopside 1 slag (contamination) 0.5-1.0 mm fraction: 1 chalcopyrite 50 representative millerite ± gaspeite 24 low-Cr diopside 6 forsterite (see KIM data; picked as KIMs) 6 slag (contamination) 0.25-0.5 mm fraction: 3 chalcopyrite 20 representative millerite ± gaspeite 4 spinel 40 representative low-Cr diopside 2 red rutile 2 representative chromite (picked as KIMs) 10 representative forsterite (see KIM data; picked as KIMs) 2 representative slag	Orthopyroxene-augite-honblende/diopside	SEM checks from 1.0-2.0 mm fraction: 2 pyrrhotite versus pentlandite candidates = 2 millerite (NiS); 1 green alteration mineral = 1 gaspeite (Ni,Mg,Fe)CO3 + calcite; and 1 dark green gahnite versus spinel candidate = 1 spinel. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 spinel. 1.0-2.0 mm fraction contains 20 unpicked millerite ± gaspeite, 0.5-1.0 mm fraction contains ~200 unpicked millerite ± gaspeite and 0.25-0.5 mm fraction contains ~5 unpicked slag (contamination).
Z10	26	0	0	Tr (6 gr)	0.5	3 pink, blue-green	Tr uvarovite (1 gr) Tr-low-Cr diopside (8 gr)	Tr (3 gr)	1	Tr	0	3	0	0	Tr	Tr (3 gr; see KIM data)	10	0	Almandine-hornblende-hematite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.	0.25-0.5 mm fraction: 3 spinel 1 uvarovite (see KIM notes) 8 low-Cr diopside 3 red rutile 3 chromite (picked as KIMs)	Almandine-hornblende-hematite/epidote diopside	SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 spinel.
Z11	262	0	0	0	0	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	0	Tr	Tr	4	0	0	0	Tr (1 gr; see KIM data)	1	0	Almandine-hornblende/epidote-diopside assemblage.	0.5-1.0 mm fraction: 1 chromite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile 1 chromite (picked as KIM)	Almandine-hornblende/epidote-diopside	
Z12	76	0	Tr barite (2 gr)	Tr (3 gr)	Tr	0	Tr low-Cr diopside (2 gr)	Tr (1 gr)	0	Tr	Tr	Tr	0	0	0	Tr (2 gr; see KIM data)	2	0	Augite-almandine-hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 barite 2 low-Cr diopside 1 red rutile 2 chromite (picked as KIMs)	Augite-almandine-hematite/epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

Field Number	Lab Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp % Cpy	Misc. Prime MMSIMs	% Py	<1.0 amp % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp # Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	0.8-1.0 amp % Tm	% St	<0.8 amp % Sps	% Fay	% Opx	% Cr	Phosphates >1.0 amp % Ap	% Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
Z13	159	0	0	0	Tr	2 pale blue	0	Tr (~50 gr)	Tr	Tr	0	3	0	0	Tr	0	2	0	Almandine-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 spinel 25 representative red rutile	Almandine-hornblende/epidote	
Z14	52	0	0	0	0	1 pale purple	Tr Mn-epidote (2 gr)	0	1	1	Tr	10	0	0	Tr	Tr (5 gr; see KIM data)	2	0	Hornblende-almandine/epidote assemblage.	0.5-1.0 mm fraction: 1 spinel 2 Mn-epidote 5 chromite (picked as KIMs)	Hornblende-almandine/epidote	
Z15	30	Tr (6 gr)	0	Tr (15 gr)	Tr	0	Tr Mn-epidote (1 gr)	Tr (1 gr)	Tr	0	Tr	1	0	0	Tr	Tr (3 gr; see KIM data)	10	0	Hornblende-hematite-almandine/epidote-diopside assemblage.	0.5-1.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.25-0.5 mm fraction: 6 chalcopyrite 1 Mn-epidote 1 red rutile 3 chromite (picked as KIMs)	Hornblende-hematite-almandine/epidote diopside	
Z16	214	Tr (1 gr)	0	Tr (5 gr)	Tr	0	Tr low-Cr diopside (8 gr)	0	0.5	0	Tr	Tr	0	Tr	1	0	2	0	Hornblende-almandine-augite/epidote- diopside assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 8 low-Cr diopside	Hornblende-almandine-augite/epidote-diopside	
Z17	252	Tr (1 gr)	0	Tr (~20 gr)	Tr	0	Tr low-Cr diopside (3 gr)	0	Tr	0	0	Tr	0	0	Tr	0	Tr	0	Hornblende-almandine/epidote-diopside assemblage.	0.5-1.0 mm fraction: 2 chalcopyrite 0.25-0.5 mm fraction: 1 chalcopyrite 3 low-Cr diopside	Hornblende-almandine/epidote-diopside	
Z18	69	0	80% barite (~800 gr)	0	0	0	Tr low-Cr diopside (1 gr)	0	0	1	0	0	0	5	0	0	Tr	0	Augite/barite assemblage.	0.5-1.0 mm fraction: 14 barite 0.25-0.5 mm fraction: 25 representative barite 1 low-Cr diopside	Augite/barite	
Z19	122	0	0	0	0	0	0	Tr (1 gr)	0	Tr	Tr	Tr	0	10	0	0	60	0	Augite/apatite-diopside assemblage.	0.25-0.5 mm fraction: 1 red rutile	Augite/apatite-diopside	
Z20	115	0	0	0	0	0	0	0	0	0	0	Tr	0	10	0	0	5	Tr	Augite/diopside assemblage.		Augite/diopside	
96TCA18	114	0	0	Tr (5 gr)	0	1 grey-green	0.3% low-Cr diopside (63 gr)	Tr (5 gr)	1	Tr	0	2	0	0	Tr	Tr (17 gr; see KIM data)	1	0	Almandine-hornblende-augite/epidote- diopside assemblage. SEM check from 1.0-2.0 mm fraction: 1 beige sphalerite versus titanite candidate = 1 sphalerite.	1.0-2.0 mm fraction: 1 sphalerite 1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 5 low-Cr diopside 14 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 spinel 63 low-Cr diopside 5 red rutile 17 chromite (picked as KIMs) 49 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende-augite/epidote-diopside	SEM check from 1.0-2.0 mm fraction: 1 beige sphalerite versus titanite candidate = 1 sphalerite.
96TCA19	197	Tr (1 gr)	0	Tr (8 gr)	Tr	1 pale blue	Tr low-Cr diopside (88 gr)	0	Tr	0	0	1	0	0	Tr	Tr (13 gr; see KIM data)	Tr	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 sphalerite (see KIM notes) 10 low-Cr diopside 9 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 1 chalcopyrite 1 spinel 88 low-Cr diopside 13 chromite (picked as KIMs) 26 forsterite (see KIM data; picked as KIMs)	Almandine-hornblende/epidote	

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Batch Number: 2492

		Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm										Phosphates				
		>1 amp			<1.0 amp	>1.0 amp				0.8-1.0 amp		<0.8 amp				>1.0 amp				
Field Number	Lab Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
96TCA23	95	Tr (3 gr)	0	Tr (~40 gr)	Tr	Spinel 1 colourless	0.2% low-Cr diopside (78 gr)	Tr (2 gr)	Tr	Tr	0	2	0	0	Tr	Tr (29 gr; see KIM data)	0.5	Tr	Almandine-hornblende-augite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 barite versus epidote candidates = 1 barite and 1 cleiophane sphalerite.	1.0-2.0 mm fraction: 1 forsterite (see KIM data; picked as KIM) 0.5-1.0 mm fraction: 1 sphalerite 1 barite 13 low-Cr diopside 5 forsterite (see KIM data; picked as KIMs) 0.25-0.5 mm fraction: 3 chalcopyrite 1 spinel 78 low-Cr diopside 2 red rutile 29 chromite (picked as KIMs) 31 forsterite (see KIM data; picked as KIMs)

INPUT Assemblage	INPUT Remarks
Almandine-hornblende-augite/epidote	SEM checks from 0.5-1.0 mm fraction: 2 barite versus epidote candidates = 1 barite and 1 cleiophane sphalerite.

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
A02	168	0	0	0	0	1	0	12	0	1000	0	0	0	0	0	0	0	20
A03	68	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	1	10
A04	35	0	0	0	0	3	0	1	0	200	0	0	0	0	0	0	0	8
A05	38	0	0	0	0	1	0	4	0	100	0	0	0	0	0	0	0	5
A06	209	0	0	0	0	1	0	1	0	9	0	0	0	0	0	0	0	5
A07	255	0	0	0	0	1	0	1	0	3	0	0	0	0	0	0	3	8
A08	119	0	0	0	0	5	0	4	0	13	0	0	0	0	0	0	10	8
A09	241	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
A10	133	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	15
A11	5	0	0	0	1	5	0	1	0	0	0	0	0	0	0	0	0	10
A12	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
A13	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99
B02	118	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5
B03	82	0	0	0	0	1	0	4	0	150	0	0	0	0	0	0	0	15
B04	91	0	0	0	0	3	0	5	0	200	0	0	0	0	0	0	0	5
B05	240	1	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	3
B06	153	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	1
B07	233	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
B08	245	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0
B09	98	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	15
B10	11	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	8
B11	56	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	10
B12	173	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	80
C02	189	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	3
C03	51	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	10
C04	6	1	0	0	0	1	0	7	0	8	0	0	0	0	0	0	3	5
C05a	93	0	0	0	0	2	0	8	0	150	0	0	0	0	0	0	10	5
C05b	46	0	0	0	0	3	0	1	0	300	0	0	0	0	0	0	8	3
C06	237	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	5	10
C07	145	0	0	0	0	1	0	11	0	60	0	0	0	0	0	0	0	15
C08	136	0	0	0	1	1	0	6	0	0	0	0	0	0	0	0	0	5
C09	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	1
C10	210	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	8
C11	169	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	5
C12	166	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0
D02	143	0	0	0	0	1	0	2	0	700	0	0	0	0	0	0	0	15
D03	149	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1
D04	9	0	0	0	0	7	0	7	0	0	0	0	0	0	0	0	1	2
D05	106	1	0	0	0	0	0	9	0	800	0	0	0	0	0	0	20000	0
D06	3	0	0	0	0	2	0	2	1	0	0	0	0	0	0	0	6000	5
D07	14	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	10
D08	230	0	0	0	0	0	0	3	0	30	0	0	0	0	0	0	15000	5

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
D09	139	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	15
D10	127	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	18000	0
D11	39	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	50	8
D12	225	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	15
E02	92	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	3
E03	190	0	0	0	0	0	0	1	0	18	0	0	0	0	0	0	0	10
E04	186	0	0	0	0	6	0	7	0	600	0	0	0	0	0	0	0	5
E05	61	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	3	5
E06	12	0	0	0	0	1	0	10	0	7	0	0	0	0	0	0	10	8
E07	195	0	0	0	0	0	0	7	1	1	0	0	0	0	0	0	18000	0
E08	113	0	0	0	0	1	0	0	2	20	0	0	0	0	0	0	10	3
E09	181	0	0	0	0	1	0	6	1	0	0	0	0	0	0	0	25	0
E10	101	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	12
E11	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
F02	185	0	0	1	0	6	0	11	0	0	0	0	0	0	0	0	0	2
F03	198	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	15	8
F04	211	0	0	0	0	2	0	0	0	800	0	0	0	0	0	0	10000	40
F05	142	0	0	0	0	0	0	2	0	200	0	0	0	0	0	0	15	5
F06	57	0	0	0	0	0	0	2	1	10	0	0	0	0	0	0	15000	0
F07	64	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0
F08A	269	0	0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	5
F08B	264	1	0	0	0	1	0	4	0	6	0	0	0	0	0	0	12000	0
F09	229	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	30
F10	158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
G02	125	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	5
G03	94	1	0	1	0	5	0	5	0	40	0	0	0	0	0	0	50	8
G04	163	0	0	0	0	2	0	4	0	500	0	0	0	0	0	0	10	3
G05	236	0	0	0	0	0	0	4	0	2000	0	0	0	0	0	0	8	0
G06	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
G07	174	0	0	0	0	5	0	7	0	0	0	0	0	0	0	0	0	4
G08	193	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	5
G09	232	0	0	0	0	5	0	6	0	0	0	0	0	0	0	0	0	3
G10	22	1	0	0	0	0	30	2	0	0	0	0	0	0	0	0	0	2
H02	222	0	0	0	0	3	0	6	0	1000	0	0	0	0	0	0	15	30
H03	179	0	0	0	0	3	0	8	0	0	0	0	0	0	0	0	0	0
H04	105	1	0	0	0	3	0	4	0	8	0	0	0	0	0	0	0	5
H05	124	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	10
H06	77	0	0	0	0	7	0	9	0	0	0	0	0	0	0	0	0	2
H07	170	0	0	0	0	5	0	4	0	0	0	0	0	0	0	0	0	3
H08	132	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	4	4
H09	271	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
H10	7	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
I02	34	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	5
I03	87	0	0	0	1	2	0	2	0	0	0	0	0	0	0	0	0	5
I04	165	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	5
I05	217	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	2
I06	13	0	0	1	0	5	0	1	0	0	0	0	0	0	0	0	0	5
I07	86	0	0	0	0	2	0	10	1	0	0	0	0	0	0	0	0	8
I08	73	1	0	0	0	8	0	11	0	0	0	0	0	0	0	0	0	5
I09	60	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1
I10	155	0	0	0	0	2	0	6	0	0	0	0	0	0	0	0	0	3
J02	66	0	0	0	0	0	0	4	0	40	0	0	0	0	0	0	15	8
J03	47	0	0	0	0	0	0	2	0	40	0	0	0	0	0	0	1	3
J04	103	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	10
J05	226	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
J06	183	0	0	0	0	1	0	8	0	0	0	0	0	0	0	0	0	10
J07	204	1	0	0	0	0	25	8	0	0	0	0	0	0	0	0	0	7
J08	107	0	0	0	0	8	2	2	0	0	0	0	0	0	0	0	0	1
J09	130	0	0	1	0	1	0	15	0	0	0	0	0	0	0	0	0	5
J10	20	0	0	0	0	1	0	4	0	0	0	0	0	0	0	0	5000	0
K02	273	0	0	0	0	0	0	0	0	700	0	0	0	0	0	0	1200	0
K03	41	0	0	0	0	4	0	4	0	200	0	0	0	0	0	0	0	3
K04	250	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0
K05	21	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	3
K06	261	0	0	0	0	5	200	7	0	0	0	0	0	0	0	0	0	2
K07	148	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0
K08	121	1	0	0	0	8	2	5	1	0	0	0	0	0	0	0	0	0
K09	111	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0
K10	228	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0
L02	18	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	3
L03	251	0	0	0	0	2	0	4	0	25	0	0	0	0	0	0	0	0
L04	220	0	0	0	0	3	0	12	0	0	0	0	0	0	0	0	2	15
L05E	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
L05W	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	10
L06E	40	0	0	0	0	3	1	9	1	0	0	0	0	0	0	0	450	0
L06WA	218	0	0	0	0	7	0	3	0	0	0	0	0	0	0	0	0	3
L06WB	184	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2000	8
L07	44	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	10
L08	267	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	5
L09	19	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
L10	99	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0
L11	150	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
M02	78	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	7	10
M03	152	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
M04	248	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	15
M05	29	0	0	0	0	10	0	13	0	0	1	0	0	0	0	0	0	8
M06	49	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	2
M07	172	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
M08	128	0	0	0	0	2	0	6	0	0	0	0	0	0	0	0	0	0
M09	180	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
M10	188	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
M11	120	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
N03	215	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	2	4
N04	147	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	7
N05	138	0	0	0	0	9	0	2	0	0	0	0	0	0	0	0	0	2
N06	202	0	0	1	0	6	0	10	0	0	0	0	0	0	0	0	0	1
N07	16	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	5
N08	259	0	0	0	0	0	50	3	0	0	0	0	0	0	0	0	0	0
N09	32	0	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	8
N10	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N11	266	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0
N12	270	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
O03	177	0	0	0	0	4	0	2	0	0	0	0	0	0	0	0	0	3
O04	8	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	8	5
O05	272	0	0	0	0	3	0	11	0	0	0	0	0	0	0	0	0	0
O06	207	0	0	1	1	9	0	7	0	0	0	0	0	0	0	0	0	5
O07	182	0	0	0	0	10	0	10	0	0	0	0	0	0	0	0	0	1
O08	212	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	5
O09	246	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
O10	162	0	0	0	0	3	0	4	0	0	0	0	0	0	0	0	25	0
O11	221	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
O12	65	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	7	0
P03	37	0	0	0	0	3	0	3	3	0	0	0	0	0	0	0	0	8
P04	28	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	10	5
P05	206	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	1
P06	268	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
P07	48	0	0	1	0	4	0	1	0	0	0	0	0	0	0	0	0	1
P08	247	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	3
P09	154	0	0	0	0	3	0	4	0	0	0	0	0	0	0	0	0	30
P10	157	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1
P11	123	0	0	0	0	0	60	7	0	0	0	0	0	0	0	0	0	0
P12	62	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1
P13	10	0	0	0	0	0	21	7	0	0	0	0	0	0	0	0	3	0
Q02	72	0	0	0	0	1	0	0	0	2	0	0	2	7	0	0	3	0
Q03	200	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	18000	0
Q03A	129	0	0	0	0	2	0	1	0	40	0	0	0	0	0	0	40	2

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
Q04	257	0	0	0	0	1	0	4	0	0	0	0	0	0	0	0	1	5
Q05	203	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	1	3
Q06	108	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1
Q07	17	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	10
Q08	156	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5
Q09	96	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	25
Q10	275	0	0	0	0	2	6	1	0	0	0	0	0	0	0	0	0	5
Q11	58	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2
Q12	97	0	0	0	0	1	0	13	0	0	0	0	0	0	0	0	0	0
Q13	263	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0
R02	253	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	20	0
R03	15	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	5
R04	199	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3
R05	219	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
R06	164	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	5
R07	134	0	0	0	0	4	0	5	0	0	0	0	0	0	0	0	0	0
R08	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
R09	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
R10	151	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	20
R11	213	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1000	8
R12	194	0	0	0	0	1	50	1	0	0	0	0	0	0	0	0	0	0
R13	192	0	0	0	0	0	200	3	0	0	0	0	0	0	0	0	0	0
R14	171	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
R15	74	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
S01	75	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	8000	0
S02	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	2
S03	112	0	0	0	0	2	0	4	0	4	0	0	0	0	0	0	15000	1
S04	79	1	0	0	1	5	0	3	0	0	0	0	0	0	0	0	1	0
S05	89	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	20	7
S06	53	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	8
S07	224	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3
S08	81	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
S09	249	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	5
S10	55	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	2
S11	84	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	1	5
S12	116	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0
S13	146	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
S14	80	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
S15	187	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	0
S16	256	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	2	0
T01	71	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	6	1
T02	144	0	0	0	0	1	0	1	0	300	0	0	0	0	0	0	600	3

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
T03	254	0	0	0	0	2	0	3	0	200	0	0	0	0	0	0	8	4
T04	265	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	3
T05	88	0	0	0	0	4	0	5	0	0	0	0	0	0	0	0	0	0
T06	140	0	0	0	0	11	0	7	0	1	0	0	0	0	0	0	0	1
T07	117	0	0	1	1	5	0	6	0	0	0	0	0	0	0	0	0	2
T08	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
T09	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1500	0
T10	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
T11	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
T11-2	260	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	8
T12	216	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
T14	208	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0
T15	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T16	25	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0
U02	235	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	40	2
U03	191	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	5	2
U04	83	0	0	0	0	5	0	5	0	1500	0	0	0	0	0	0	0	0
U05	54	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	15	4
U08	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4000	1
U09	31	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
U10	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
U11	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
V02	70	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	5	2
V03	231	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	2	0
V04	50	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	2
V06	227	0	0	0	1	2	0	2	0	4	0	0	0	0	0	0	8	2
V07	36	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	15	2
V08	238	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5
V09	178	0	0	0	0	0	0	0	1	0	0	0	0	0	7	0	40	0
W02	104	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	2	1
W03	102	0	0	0	0	0	0	2	0	12	0	0	0	0	0	0	3	2
W04	175	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	5
W05	100	0	0	0	1	2	0	5	0	0	0	0	0	0	0	0	0	1
W06	196	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	1	5
X01	43	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	1
X02	243	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	000000000
X03	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3
X04	110	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
X05	244	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Y05	42	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Cr-pyrope	E-garnet	Hi-Cr-diop	Mg-ilmenite	Chromite	Olivine	Cr-diopside	Cpy	Barite	Fluorite	Mal/chalc	Galena	Cerussite	Arseno	Mill/gasp	Pyrite	Goethite%
Z01	109	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0
Z02	160	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	200	3
Z03	223	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	15	0
Z04	141	0	0	0	0	1	0	7	0	0	0	0	0	0	0	0	2	1
Z05	161	0	0	0	0	1	0	182	1	0	0	0	0	0	0	0	1	0
Z06	176	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	5
Z07	63	0	0	0	0	5	0	30	1	0	0	0	0	0	0	0	2	0
Z08	258	0	0	0	0	0	81	217	0	0	0	0	0	0	0	0	0	0
Z09	239	0	0	2	0	5	70	275	3	0	0	0	0	0	0	200	100	0
Z10	26	0	0	1	0	3	0	8	0	0	0	0	0	0	0	0	6	1
Z11	262	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0
Z12	76	0	0	0	0	2	0	2	0	2	0	0	0	0	0	0	3	0
Z13	159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z14	52	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Z15	30	0	0	0	0	3	1	0	6	0	0	0	0	0	0	0	15	0
Z16	214	0	0	0	1	0	0	8	1	0	0	0	0	0	0	0	5	0
Z17	252	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	20	0
Z18	69	0	0	0	0	0	0	1	0	800	0	0	0	0	0	0	0	0
Z19	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Z20	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96TCA18	114	25	15	18	26	17	64	68	0	0	0	0	0	0	0	0	5	0
96TCA19	197	21	24	18	15	13	35	98	1	0	0	0	0	0	0	0	8	0
96TCA23	95	23	21	19	16	29	37	91	3	0	0	0	0	0	0	0	40	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
A02	168	1	0	0	0	0	0	1	0	0	2	5	0.1	0.1	8	0	0	0.1	2	0
A03	68	0	0	0	0	0	0	0	0	0	0	2	0.1	0.1	4	0	0	0	1	0
A04	35	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	0.1	0	0	0	5	0
A05	38	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	3	0	0	0.1	2	0.1
A06	209	0	0	0	0	0	0	0	0	0	1	0.1	3	0.1	0.1	0	0	0	0.1	0
A07	255	3	1	0	0	0	0	0	0	0	1	1	2	0.1	2	0	0	0	1	0
A08	119	4	1	0	0	0	0	0	0	0	2	2	0.1	0.1	3	0	0	0	0.1	0
A09	241	3	0	0	0	0	0	0	0	0	2	0.1	0.1	0.1	7	0	0	0.1	5	0.1
A10	133	2	1	0	0	0	0	0	0	0	0	0.1	0.1	0.1	25	0	0	0	2	0
A11	5	3	1	0	0	0	0	0	0	0	2	0.1	0.1	5	45	0	0	0	2	0
A12	126	1	0	0	0	0	0	0	0	0	0	1	0	0.1	5	0	0	0	1	0
A13	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B02	118	4	0	0	0	0	0	0	0	0	1	3	0.1	0.1	3	0	0	0	1	0
B03	82	1	0	0	0	0	0	2	0	0	3	2	2	0.1	15	0	0	0	3	0.1
B04	91	0	0	0	1	0	0	0	0	0	1	1	0.1	0.1	4	0	0	0.1	4	0
B05	240	2	1	0	0	0	0	0	0	0	1	1	1	0.1	2	0	0	0	3	0
B06	153	1	0	0	0	0	0	0	0	0	2	3	1	0.1	5	0	0	0.1	0.1	0
B07	233	1	0	0	0	0	0	0	0	0	1	2	2	0.1	4	0	0	0.1	15	0.1
B08	245	1	0	0	0	0	0	0	0	0	2	0.1	0.1	0.1	5	0	0	0.1	0.1	0.1
B09	98	0	0	0	0	0	0	0	0	0	0	2	0.1	0.1	3	0	0	0.1	1	0
B10	11	4	0	0	0	0	0	0	0	0	4	0.1	0.1	0.1	8	0	0	0	1	0.1
B11	56	1	0	0	0	0	0	0	0	0	4	1	0.1	3	15	0	0	0	8	0
B12	173	0	0	0	0	0	0	0	0	0	1	10	0	0	25	0	0	0	5	0
C02	189	4	0	0	0	0	0	0	0	3	0	2	0.1	0.1	2	0	0	0	2	0.1
C03	51	0	0	0	0	0	0	0	0	0	2	0.5	0.1	0.1	2	0	0	0	2	0.1
C04	6	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.5	1	0	0	0	5	0
C05a	93	0	0	0	1	0	0	1	0	0	1	1	0.1	0.1	5	0	0	0	3	0
C05b	46	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	1	0	0	1	6	0.1
C06	237	0	0	0	0	0	0	0	0	0	1	0.1	2	0.1	3	0	0	0.1	2	0.1
C07	145	1	0	0	1	0	0	0	0	0	4	8	0.1	0.1	10	0	0	0.1	3	0
C08	136	1	0	0	0	0	0	0	0	0	6	2	0.1	0.1	3	0	0	0	1	0.1
C09	131	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	3	0	0	0	0.1	0
C10	210	9	2	0	0	0	0	0	0	0	9	0.1	2	0.1	7	0	0	0	0.1	0.1
C11	169	0	0	0	1	0	0	1	0	0	3	4	0.1	0.1	25	0	0	0.1	2	0
C12	166	0	0	0	0	0	0	0	0	0	2	3	0.1	0.1	15	0	0	0	3	0.1
D02	143	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1	0	0	0	0.1	0.1
D03	149	0	0	0	0	0	0	0	0	0	0	2	0	0.1	5	0.1	0	0	2	0
D04	9	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	2	0	0	0	4	0
D05	106	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0	0	0	0.1	0
D06	3	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0.5	0.5	0	0	0	0.1	0
D07	14	0	0	0	0	0	0	0	0	0	0	2	1	0.5	4	0	0	0	4	0
D08	230	1	1	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	0.1	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
D09	139	0	0	0	0	0	0	0	0	0	0	3	0	0.1	0	0	0	1	0.1	0.1
D10	127	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1	0	0	0	0.1	0
D11	39	0	0	0	0	0	0	1	0	0	1	0.1	0.1	0.1	10	0	0	0.1	4	0.1
D12	225	2	0	0	0	0	0	0	0	0	1	2	0.1	0.1	15	0	0	0	2	0
E02	92	0	0	0	0	0	0	0	0	0	0	2	0.1	0.1	2	0	0	0.1	4	0
E03	190	0	0	0	0	0	0	1	0	0	0	5	0.1	0.1	5	0	0	2	5	0
E04	186	2	0	0	0	0	0	0	0	0	0	2	0.1	0.1	3	0	0	0	5	0
E05	61	1	0	0	0	0	0	0	0	0	1	0.1	0	0.1	3	0	0	0	0.1	0.1
E06	12	1	0	0	0	0	0	0	0	0	3	1	0.1	0.5	3	0	0	1	2	0
E07	195	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0	0	0	0	0.1	0
E08	113	1	0	0	0	0	0	0	0	0	0	2	1	0.1	2	0	0	0	0.1	0
E09	181	1	1	0	0	0	0	0	1	0	0	2	0.5	0.1	4	0	0	0.1	0.1	0
E10	101	0	0	0	0	0	0	0	0	0	2	2	0.1	0.1	35	0	0	0	2	0
E11	167	1	0	0	0	0	0	0	0	0	4	2	0.1	0.1	20	0	0	0	2	0.1
F02	185	2	0	0	0	0	0	1	0	9	0	2	0.1	0.1	3	0	0	0.1	2	0
F03	198	1	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	1	0	0	0	0.1	0.1
F04	211	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	1	0	0	0	3	0
F05	142	1	0	0	0	0	0	0	0	0	0	2	0	0.1	2	0	0	0.1	0.1	0.1
F06	57	1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1	0.1	0
F07	64	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	5	0	0	0	5	0
F08A	269	1	0	0	0	0	0	0	0	0	4	0.1	1	0.1	2	0	0	0.1	0.1	0.1
F08B	264	2	1	0	0	0	0	0	0	0	0	0.1	0.1	0.1	1	0	0	4	0.1	0
F09	229	2	0	0	0	0	0	0	0	0	0	0.1	3	0.1	5	0	0	0	10	0
F10	158	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	20	0	0	0	0.1	0
G02	125	1	0	0	0	0	0	0	0	0	1	2	0.1	0	3	0	0	0	0.1	0
G03	94	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	3	0
G04	163	1	0	2	0	0	0	0	0	0	2	1	0	0.1	3	0	0	0.1	0.1	0
G05	236	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0.1	0	0	0.1	0.1	0
G06	90	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	5	0	0	0	8	0.1
G07	174	1	0	0	0	0	0	0	0	0	0	2	0.1	0	3	0	0	0	0.1	0.1
G08	193	0	0	0	1	0	0	0	0	0	0	0.5	0	0.1	3	0	0	0	1	0.1
G09	232	1	0	0	0	0	0	1	0	0	5	0.1	1	0.1	3	0	0.1	0.1	3	0.1
G10	22	1	1	0	0	0	0	0	0	0	2	2	0	0.1	20	0	7	0.1	5	0.1
H02	222	2	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.1	0
H03	179	0	0	0	0	0	0	0	0	0	0	2	0.1	0	4	0	0	5	0	0
H04	105	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0.1	2	0
H05	124	0	0	0	0	0	0	0	0	0	0	1	0	0.1	6	0	0	0.1	2	0
H06	77	3	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	2	0
H07	170	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0.1	2	0
H08	132	0	0	0	0	0	0	0	0	0	1	2	0.1	0.1	0.1	0	0	0.1	2	0
H09	271	1	0	0	0	0	0	0	0	0	0	0	0	0	25	0	8	0.1	0.1	0
H10	7	0	0	0	0	0	0	0	0	0	2	0	0.1	0.5	0.5	0	50	0.1	15	0.1

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
I02	34	0	0	0	1	0	0	1	0	0	0	5	0	0.1	10	0	0	2	5	0.1
I03	87	0	0	0	0	0	0	0	1	0	0	0.1	0	0.1	0	0	0	0.1	2	0
I04	165	2	0	0	0	0	0	0	0	0	0	2	1	0.1	3	0	0	0.1	0.1	0
I05	217	2	1	0	0	0	0	0	0	0	3	0.5	0	0.1	5	0	0.1	0.5	3	0
I06	13	0	0	0	0	0	0	0	0	0	3	0.1	0.1	0.1	5	0	0	0	0.1	0
I07	86	0	0	0	0	0	0	0	0	0	2	0.1	0.1	0.1	5	0	0	0.1	4	0
I08	73	1	0	0	0	0	0	0	0	0	2	0.5	0.1	0.1	4	0	0.1	2	8	0
I09	60	0	0	0	0	0	0	0	0	0	2	3	0.1	0.1	5	0	0.1	0	0.1	0.1
I10	155	1	0	0	0	0	0	0	0	0	0	1	0.5	0.1	2	0	0.1	7	0.1	0
J02	66	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	0.1	0
J03	47	1	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	1	0	0	0.1	3	0
J04	103	0	0	0	0	0	0	0	0	0	0	3	0	0.1	5	0	0	0.5	5	0
J05	226	1	0	0	0	0	0	0	0	0	1	1	0	0	5	0	0.1	0	0.1	0
J06	183	0	0	0	0	0	0	0	0	0	0	1	0.1	0.1	7	0	0.1	3	3	0
J07	204	1	0	0	0	0	0	1	0	0	0	0.1	0.1	0.1	20	0	5	0.1	0.1	0
J08	107	0	0	0	0	0	0	0	0	0	2	0.1	0.1	0.1	5	0	0	1	0.1	0
J09	130	3	0	0	0	0	0	0	0	0	0	2	0.1	0.1	20	0	0.1	0.1	5	0
J10	20	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	6	0	0	1	5	0
K02	273	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0.1	0.1	0
K03	41	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	3	0	0	1	5	0
K04	250	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	1	0	0	0.1	0.1	0
K05	21	1	0	0	0	0	0	0	0	0	3	0.1	0.1	0.1	3	0	0.1	0.1	0.1	0
K06	261	3	0	0	0	0	0	1	0	0	0	0.1	0.1	0.1	8	0	20	0.1	1	0
K07	148	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	10	0	10	0.1	0.1	0
K08	121	0	0	0	1	0	0	0	0	0	1	0.1	0.1	0.1	2	0	15	0	2	0
K09	111	0	0	0	0	0	0	0	0	0	5	0	0	0.1	2	0	8	0	3	0.1
K10	228	1	0	0	1	0	0	0	0	0	1	0.5	0	0.1	5	0	0.1	0	0.1	0.1
L02	18	0	0	0	0	0	0	0	0	0	1	0.1	0	0.1	2	0	0	0.1	1	0.1
L03	251	0	0	0	0	0	0	0	0	0	2	1	0.1	0.1	5	0	0	0.1	3	0
L04	220	1	0	0	0	0	0	0	0	0	0	2	0.1	0.1	10	0	0	0.1	2	0
L05E	23	1	1	0	0	0	0	0	0	0	1	0.1	0.1	0.1	8	0	0.1	0.1	5	0
L05W	4	0	0	0	0	0	0	0	0	0	1	0.1	0	0.1	1	0	0	0	2	0
L06E	40	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	5	0	0	0	20	0
L06WA	218	2	0	0	0	0	0	3	0	0	1	0.1	0	0.1	3	0	0	0	5	0
L06WB	184	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	5	0	0	0	5	0
L07	44	0	0	0	0	0	0	0	0	0	5	0.1	0.1	0.1	10	0	0	0	3	0
L08	267	0	0	0	0	0	0	0	0	0	1	0	0	0	15	0	0	0	0.1	0
L09	19	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	5	0	30	0.1	0.1	0.1
L10	99	0	0	0	0	0	0	0	0	0	2	0	0.1	0.1	0	0	1	0.5	0.1	0
L11	150	2	0	0	0	0	0	0	0	0	2	0	0.1	0.1	0.1	0	0.1	0	0.1	0.1
M02	78	1	0	0	0	0	0	0	0	0	1	1	1	0.1	2	0	0	0.1	2	0
M03	152	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0.1	0.1	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
M04	248	0	0	0	0	0	0	0	0	0	0	2	0.1	0.1	5	0	0	0.1	5	0
M05	29	3	0	0	0	0	0	1	0	0	3	0.1	0.1	0.1	8	0	0	0.1	0.1	0.1
M06	49	3	0	0	0	0	0	0	0	0	4	0.1	0.1	1	5	0	0	0.1	8	0
M07	172	3	0	0	0	0	0	0	0	0	4	0.1	0.1	0.1	8	0	0	2	0.1	0
M08	128	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	40	0	0.1	0	0.1	0.1
M09	180	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0	0	0	10	0
M10	188	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0	0	3	0	1	0.1
M11	120	0	0	0	0	0	0	0	0	0	9	0	0	5	0	0	8	0	3	0
N03	215	0	0	0	1	0	0	0	0	1	1	0	0	0.1	4	0	0	0	4	0
N04	147	0	0	0	0	0	0	0	0	0	0	0.1	0	0	3	0	0	0	2	0
N05	138	0	0	0	0	1	0	1	0	0	3	0	0.1	0	5	0	0	0.1	1	0
N06	202	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0.1	3	0
N07	16	0	0	0	1	0	0	0	0	0	2	0.1	0	0.1	20	0	0.1	0.5	0.1	0
N08	259	0	0	0	0	0	0	0	0	0	1	0	0.1	0	2	0	8	0	1	0
N09	32	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	15	0	0.1	1	0.1	0
N10	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0.1	0
N11	266	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	10	0	0.1	0.1
N12	270	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	25	0	0.1	0
O03	177	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	3	0	0	0	1	0
O04	8	1	0	0	0	0	0	1	0	0	1	0.1	0.1	0	2	0	0	2	2	0
O05	272	1	0	0	1	0	0	0	0	0	2	0.1	0.1	0.1	3	0	0	0	2	0.1
O06	207	1	0	1	0	0	0	0	0	0	2	0	0.1	0.1	3	0	0	0	0.1	1
O07	182	1	0	0	0	0	0	0	0	0	5	0.1	0.1	0.1	15	0	2	0	2	0.1
O08	212	5	2	0	0	1	0	0	0	0	1	0	0.1	0.1	3	0	2	0	0.1	0
O09	246	0	0	0	0	0	0	0	0	0	0	0.1	0	0	15	0	0.1	0.1	1	0
O10	162	0	0	0	0	1	0	0	0	0	0	0	0.1	0.1	5	0	1	0.1	0.1	0.1
O11	221	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1	0	20	0	0.1	0.1
O12	65	0	0	0	0	0	0	0	0	0	0	0.1	0.1	1	0.1	0	0.1	0	1	0
P03	37	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	3	0	0	1	10	0
P04	28	0	0	0	0	0	0	0	0	0	0	0.1	0	0	3	0	0	0.1	0	0
P05	206	0	0	0	0	0	0	0	0	0	3	0.1	0.1	0.1	3	0	0	0.1	5	0.1
P06	268	3	0	0	1	0	0	0	0	0	1	0.1	0.1	0.1	0.1	0	0	0	1	0.1
P07	48	0	0	0	0	0	0	0	1	0	1	0.5	0.1	0.1	5	0	0	0	1	0
P08	247	0	0	0	0	0	0	0	0	0	1	0	0.1	0.1	2	0	0	0	4	0
P09	154	0	0	0	0	0	0	1	0	0	2	0	0	0	20	0	0	5	0.1	0
P10	157	0	0	0	0	0	0	0	0	0	0	0.1	0	0	10	0	10	0.1	10	0
P11	123	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	15	0.1	20	0
P12	62	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	5	0	15	0
P13	10	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0	3	0.1	20	0
Q02	72	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0	0.1	0	0	0	5	0
Q03	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0.1
Q03A	129	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0.1	2	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
Q04	257	0	0	0	0	0	0	0	0	0	0	2	0	0.1	3	0	0	0.1	5	0
Q05	203	1	0	0	0	0	0	1	0	0	3	1	0.1	0.1	8	0	0	0.1	5	0
Q06	108	1	0	0	0	0	0	0	0	0	1	0.1	0.1	0	0.1	0.1	0	1	20	0.1
Q07	17	1	0	0	0	0	0	1	0	0	0	1	0.1	0	2	0	0	0.1	5	0.1
Q08	156	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0.1	1	0.1
Q09	96	1	0	0	1	0	0	1	0	0	1	0.1	0.1	0.1	20	0	0	0	3	0
Q10	275	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.5	0.1	0.1	0
Q11	58	0	0	0	0	0	0	0	0	0	0	1	0.1	0.1	10	0	10	0.1	5	0
Q12	97	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	15	0.1	30	0.1
Q13	263	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	5	0.1	5	0
R02	253	0	0	0	0	0	0	0	0	0	1	0.1	0	0	0.1	0	0	0	10	0
R03	15	1	1	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	1	0
R04	199	0	0	0	0	0	0	2	0	0	1	0.1	0.1	0	0.5	0	0	0	5	0.1
R05	219	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	1	0	0	0	1	0
R06	164	0	0	0	0	0	0	0	0	0	0	2	0.1	0.1	2	0	0	0.1	5	0
R07	134	0	0	0	0	0	0	1	0	0	3	0.1	0.1	0.1	1	0	0	0.1	2	0.1
R08	24	0	0	0	0	0	0	0	0	0	0	0.1	0	0	1	0	0	0.1	8	0
R09	201	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	15	0	0	0.1	15	0
R10	151	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0.1	0.1	5	0.1	0.1
R11	213	0	0	0	0	0	0	0	0	0	2	0.1	0.1	0.1	10	0	0	0	3	0
R12	194	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	1	0	30	0.1	60	0
R13	192	0	0	0	0	0	0	1	0	0	0	0.1	0.1	0	0.1	0	30	0.1	70	0
R14	171	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0.1	0	10	0.1	20	0
R15	74	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0.1	0	1	0
S01	75	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	2	0
S02	45	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0.1	5	0
S03	112	1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0	2	0.1
S04	79	0	0	0	0	0	0	0	0	0	2	0.1	0.5	0.1	2	0.1	0	1	0.5	0.1
S05	89	1	1	0	0	0	0	3	0	0	2	0.5	0.1	0.5	2	0	0.1	1	2	0
S06	53	0	0	0	0	0	0	0	0	0	1	2	0.1	0.1	3	0	0	0.1	5	0
S07	224	0	0	0	0	0	0	1	0	0	0	0.1	0	0.1	0.1	0	0	0	5	0
S08	81	0	0	0	0	0	0	0	0	0	1	1	0.1	0.1	0.1	0	0	0	1	0
S09	249	0	0	0	0	0	0	0	0	0	0	0.5	0	0	3	0	0	0.1	3	0
S10	55	1	1	0	0	0	0	0	0	0	0	0	0.1	0	15	0	0	0	6	0
S11	84	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	10	0.5	0	0	0.1	0
S12	116	0	0	0	0	0	0	0	0	0	0	0	0.1	0	2	0.1	0	0.1	1	0
S13	146	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	50	0	50	0
S14	80	0	0	0	0	0	0	1	0	0	0	0.1	0	0	0.1	0	20	0	1	0
S15	187	0	0	0	0	0	0	0	0	0	0	1	2	0	2	0	5	0.1	30	0
S16	256	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	5	0	5	0
T01	71	0	0	0	0	0	0	1	0	0	2	4	0.1	0.1	2	0.1	0	3	2	0
T02	144	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0.1	1	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
T03	254	1	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	1	0	0	0	3	0
T04	265	1	0	0	0	0	0	0	0	0	2	0.1	0	0.5	0.1	0	0.1	0	10	0.1
T05	88	0	0	0	0	0	0	0	0	0	1	1	0.1	0.1	1	0	0	0.1	3	0
T06	140	1	1	0	0	0	0	0	0	0	5	0.1	0.1	0.5	2	0	0	0.1	2	0
T07	117	2	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	2	0.1	0	0.1	1	0.1
T08	85	0	0	0	0	0	0	0	0	0	1	0.1	0	0	2	0	0	0.1	2	0.1
T09	67	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	1	0
T10	27	1	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	8	0
T11	33	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0.1	0.1
T11-2	260	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0.1	0	2	0.1
T12	216	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	5	0	0	0.1	2	0.1
T14	208	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	4	0.1	10	0
T15	59	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	60	0	25	0
T16	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0.1	0
U02	235	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	0.1	4	0
U03	191	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	5	0	0	0.1	5	0
U04	83	1	0	0	0	0	0	0	0	0	1	0.1	0.1	0.1	1	0	0	0	5	0.1
U05	54	0	0	0	1	0	0	0	0	0	0	1	0.1	0.1	0.1	0	0	0.1	10	0.1
U08	234	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	2	0	0	1	0.1	0
U09	31	0	0	0	0	0	0	0	0	0	1	0.1	0.1	0	0.1	0	0	0.1	4	0
U10	135	0	0	0	0	0	0	4	0	0	2	0	0.1	0.1	20	0	0.5	0.1	10	0
U11	205	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	2	0	0	0	15	0.1
V02	70	0	0	0	1	0	0	0	0	0	1	3	0	0.1	3	0	0	0.1	10	0.1
V03	231	1	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1	0	0	0.1	4	0
V04	50	1	0	0	0	0	1	0	0	0	3	3	0.1	0	3	0	0	0.1	0.1	0
V06	227	0	0	0	0	0	0	0	0	0	1	0.5	0.1	0	0.1	0	0	0.1	2	0
V07	36	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1
V08	238	0	0	0	0	0	0	0	0	0	1	0.1	0	0.1	1	0	0	2	5	0.1
V09	178	2	0	0	1	0	0	0	0	0	0	0.1	0.1	0	2	0	0	0	20	0
W02	104	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.5	0	0	0	6	0.1
W03	102	2	1	0	0	0	0	0	0	0	0	0.1	0	0.1	2	0	0	0	12	0
W04	175	0	0	0	0	0	0	0	0	0	0	1	0.5	0.1	3	0	0	0.1	3	0.1
W05	100	0	0	0	0	0	0	1	0	0	1	0.1	0	0	1	0.1	0	1	1	0.1
W06	196	0	0	0	0	0	0	1	0	0	0	1	0.1	0.1	3	0	0	1	3	0
X01	43	0	0	0	0	0	0	1	0	0	0	0.5	0	0	2	0	0	0	25	0
X02	243	0	0	0	0	0	0	2	0	0	0	0.1	0	0.1	3	0	0	2	4	0
X03	274	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	1	0	0	0	1	0.1
X04	110	1	1	0	0	0	0	0	0	0	2	0.1	0	0	2	0.1	0	0.1	1	0.1
X05	244	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	1	0	0	0.5	7	0
Y05	42	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	1	0	0.1	0.1	2	0

Appendix. Indicator mineral visual and SEM counts

Field no	Lab no	Spinel	Gahnite	Chondro	Corund	Cr-garnet	Dumort	Mn-epidote	Sapphir	Topaz	Red rut	Kyanite%	Sill%	Tm%	St%	Sps%	Fay%	Opx%	Ap%	Mz%
Z01	109	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	2	0	0	8	10	0.1
Z02	160	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	1	0	0	0.1	0.1	0
Z03	223	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	3	0.1	0
Z04	141	0	0	0	0	0	0	0	0	0	0	0.1	0	0	1	0	0	5	2	0
Z05	161	0	0	0	0	0	0	0	0	0	0	2	1	0	40	0	0	5	5	0
Z06	176	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	2	0	0	0.1	0	0
Z07	63	2	0	0	0	0	0	2	0	0	1	0.1	0	0.1	0.1	0	0	10	2	0
Z08	258	2	0	0	5	0	0	0	2	0	17	0	0	0.1	0.1	0	0.1	15	2	0
Z09	239	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	40	0	0
Z10	26	3	0	0	0	1	0	0	0	0	3	1	0.1	0	3	0	0	0.1	10	0
Z11	262	0	0	0	0	0	0	0	0	0	1	0	0.1	0.1	4	0	0	0	1	0
Z12	76	0	0	0	0	0	0	0	0	0	1	0	0.1	0.1	0.1	0	0	0	2	0
Z13	159	2	0	0	0	0	0	0	0	0	50	0.1	0.1	0	3	0	0	0.1	2	0
Z14	52	1	0	0	0	0	0	2	0	0	0	1	1	0.1	10	0	0	0.1	2	0
Z15	30	0	0	0	0	0	0	1	0	0	1	0.1	0	0.1	1	0	0	0.1	10	0
Z16	214	0	0	0	0	0	0	0	0	0	0	0.5	0	0.1	0.1	0	0.1	1	2	0
Z17	252	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0.1	0.1	0
Z18	69	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0.1	0
Z19	122	0	0	0	0	0	0	0	0	0	1	0	0.1	0.1	0.1	0	10	0	60	0
Z20	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	10	0	5	0.1
96TCA18	114	1	0	0	0	0	0	0	0	0	5	1	0.1	0	2	0	0	0.1	1	0
96TCA19	197	1	0	0	0	0	0	0	0	0	0	0.1	0	0	1	0	0	0.1	0.1	0
96TCA23	95	1	0	0	0	0	0	0	0	0	2	0.1	0.1	0	2	0	0	0.1	0.5	0.1

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
A02	168	n-168-13	4		48		52	642	111	5619	1159	40	343	22		2	3			30	3	3	0			1	2	0	2	1	0	1	0	1	0	0	0	0	0	0		0		
A08	119	n-119-01	6		52	17	58	1028	158	5804	844	31	317	23	0	3	3	0		4	5	2	0	0		0	0	0	1	0	0	1	0	1	0	1	0	0	0	0		0		
A08	119	n-119-02	12		67	11	49	882	76	2023	919	34	168	24	1	1	3	0		149	5	3	0	0	0	1	5	1	6	2	1	2	0	1	0	1	0	0	0	0		0		
A08	119	n-119-03	38		66	13	88	781	255	4174	797	36	421	22	0	6	3	0		26	10	27	0		0	2	8	2	9	3	1	2	0	2	0	1	0	1	0	1	0	1	0	0
A08	119	n-119-04	2		55	14	42	898	86	4336	798	30	39	18	0	1	3			102	3	1	0		0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0		
B05	240	n-240-04	62	2	59		49	1494	137	8901	967	33	413	0	61	9	3	0		29	47	49	0			3	53	14	70	16	2	12	2	9	2	4	1	4	0	3		1		
B05	240	n-240-05	51		60		18	457	59	3609	1103	36	1089		52	7	3			35	22	33	0	0		11	44	7	32	6	2	5	1	4	1	2	0	2	0	1	0	1	0	0
B05	240	n-240-06	5		70	21	31	653	50	5474	777	33	264	1	23	1	3			242	5	3	0		0	2	10	2	11	3	1	2	0	1	0	0	0	0	0	0		1	0	
B06	153	n-153-01	2		42	19	38	845	123	6322	1047	28	96	22	1	2	3			97	4	2	0	0	0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0		
B06	153	n-153-02	8		46	15	39	803	112	4869	901	27	134	20	1	2	2	0		100	4	2			0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0	0	
B06	153	n-153-03	59	1	40		31	1161	82	3715	579	29	767	16	0	4	3	1		16	16	39			0	10	41	6	25	4	2	4	1	3	1	1	0	1	0	2	0	1	0	
B07	233	n-233-01	48		67		57	944	153	6101	758	33	415		17	6	2			26	5	21	0			4	11	1	7	1	0	1	0	1	0	1	0	0	0	1		1	0	0
C04	6	n-6-01	29	1	21		67	307	165	2442	1059	42	687	32		6	3		0	5	27	45			0	7	20	3	10	3	1	4	1	5	1	3	0	2	0	2	0	1	0	0
C04	6	n-6-02	14	0	20		50	1455	130	5703	944	39	255	26		4	3			124	6	9	0		0	3	12	2	11	3	1	2	0	1	0	1	0	0	0	0		0	0	
C04	6	n-6-03	28	1	14		58	1254	124	4011	1470	35	449	73		10	3			32	18	53	0		0	12	48	8	29	6	1	4	1	3	1	2	0	2	0	2	0	1	0	0
C04	6	n-6-04	23	1	15		44	382	92	1548	1129	28	134	28		2	3			97	7	7	0		0	1	8	2	12	3	1	3	0	2	0	1	0	1	0	0	0	1			
C04	6	n-6-05	15	0	23		57	1216	92	4165	842	30	106	23		2	3			118	5	4	0		0	1	5	1	5	2	0	2	0	1	0	0	0	0	0	0		0	0	
C04	6	n-6-06	7	0	22		60	1331	129	5261	807	30	58	31		2	3			151	6	5	0		0	2	7	1	8	2	1	2	0	1	0	1	0	0	0	0		0	0	
C04	6	n-6-07	5	0	21		47	1161	254	6657	1009	28	53	37		2	3			96	6	3	0		0	1	5	1	5	2	0	1	0	1	0	1	0	0	0	0		0	0	
C07	145	n-145-01	6		53	12	65	1008	78	4656	703	30	164	16	2	2	3			115	4	4	0		0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0		
C07	145	n-145-02	27	1	52		45	529	315	5867	1125	38	263	38	0	8	3	0		101	5	13		0	0	3	15	3	20	5	1	3	0	1	0	0	0	0	0	1		5	0	0
C07	145	n-145-03	17	0	42	22	34	850	160	5654	1087	25	97	23	2	1	3	0		103	4	2	0		0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0	0	
C07	145	n-145-04	30	0	43		42	509	106	3697	1327	30	180	51	0	6	3			54	8	23	0			9	29	4	16	3	1	2	0	1	0	1	0	1	0	1		1	1	0
C07	145	n-145-05	48	1	55		42	573	121	4976	1050	35	287	23	0	4	3			75	4	8	0	0		2	7	1	4	1	0	1	0	1	0	0	0	0	0	0		1	0	0
C07	145	n-145-06	9		29	42	55	1212	132	2288	838	30	162	21	3	2	3		0	92	5	4	0		1	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0	0	
C07	145	n-145-07	25		44		46	284	82	2695	999	35	175	22		3	3		0	103	4	13				2	7	1	5	1	0	1	0	1	0	0	0	0	0	0		0	0	
C07	145	n-145-08	5		42	22	26	736	65	4767	917	26	200	17		1	2	0		96	3	1	0	0	0	1	3	0	3	1	0	1	0	1	0	0	0	0	0	0		0		
C07	145	n-145-09	12		51	13	50	942	104	5077	964	30	110	22	2	2	3			88	5	2	0		0	1	3	1	4	1	0	1	0	1	0	1	0	0	0	0		0		
C07	145	n-145-10	18	1	47	2	34	308	68	964	1253	28	300	56		3	3	0		109	11	15	0	0	0	16	55	9	40	7	2	5	1	3	0	1	0	1	0	1		1	0	0
C08	136	n-136-01	3		52		70	1458	218	6425	1051	39	383	24	1	4	4			6	6	3		0		0	0	0	1	0	0	1	0	1	0	1	0	1	0	0			0	
C08	136	n-136-02	11		66	16	49	864	96	4678	867	32	244	21	1	2	2			143	4	4	0		0	2	5	1	6	2	0	2	0	1	0	0	0	0	0	0		0	0	
C08	136	n-136-03	6		60	4	66	1401	221	8113	1189	43	372	29	0	5	4	0		6	7	4	0		0	0	1	0	1	1	0	1	0	1	0	1	0	1	0	0			0	
C08	136	n-136-04	7	0	85	424	44	963	99	4376	1076	37	144	26	15	3	3	0	2	85	4	5	0		15	1	4	1	4	2	0	1	0	1	0	0	0	0	0	0		0	0	
C08	136	n-136-05	12		112	13	41	854	136	4878	1029	26	58	24	1	1	3	0		81	5	2	0		0	1	3	1	4	1	0	1	0	1	0	0	0	1	0	0		0		
C08	136	n-136-06	15		57	16	54	1136	199	4495	942	24	45	24		2	3	0		136	6	4	0	0	0	2	6	1	6	2	0	2	0	1	0	1	0	0	0	0	0	0		0
C12	166	n-166-01	27		45	27	78	1232	148	4719	872	29	197	17		3	2			95	5	4	0	0	1	1	5	1	5	1	0	1	0	1	0	1	0	0	0	0		0	0	0
D02	143	n-143-01	59	1	27		32	719	81	4650	1364	43	552	45	0	5	4	2		9	120	29	0	0		12	80	18	95	28	1	26	4	25	4	11	1	7	1	2	0	2	0	0
D02	143	n-143-02	11		55	5	44	924	59	5931	680	32	334	23		3	3	0		127	4	6	0	0	0	3	12	2	14	3	1	2	0	1	0	0	0	0	0	0		0	0	
D03	149	n-149-01	4		48		73	1286	198	7743	985	37	380	21	1	4	3		0	6	6	3	0	0		0	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	0	
D03	149	n-149-02	25	1	53		54	1837	197	7086	698	30	507	39	0	9	2	0		60	8	82	0	0		13	44	7	29	5	1	3	0	2	0	1	0	1	0	3		1	0	0
D03	149	n-149-03	9		55	42	66	1301	196	7131	1094	36	346	25	1	4	3	0	0	8	7	5	0	0	1	0	1	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	0	
D04	9	n-9-01	12		17		64	1343	229	8357	1087	42	478	25		5	3			10	9	5	0		0	0	1	0	2	1	0	1	0	2	0	1	0	1	0	0		0	0	
D04	9	n-9-02	8	0	18		65	1189	93	7402	619	30	222	19		3	2		0	85	6	8	0		2	2	10	2	12	3	1	3	0	1	0	0	0	0	0	0	0	0	0	0
D04	9	n-9-03	28	1	28		77	576	167	5500	934	36	347	39		6	3		0	13	97	33	0		1	28	114	19	83	20	1	19	3	18	4	9	1	7	1	2	0	1	0	0
D04	9	n-9-04	11		29		50	1117	153	4919	913	28	166	24		2	3			119	7	4	0		0	2	6	1	7	2	1	2	0	2	0	1	0	1	0	0	0	0	0	
D04	9	n-9-05	10	0	25		49	1122	250	5039	1067	23	32	26		2	3			118	6	4	0		0	2	6	1	7	2	0	2	0	1	0	1	0	0	0	0	0	0		

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
D04	9	n-9-06	7		31		45	1430	139	8600	876	36	316	23		4	3		0	94	5	7	0		2	2	7	1	7	2	1	1	0	1	0	1	0	0	0	0	0	0	0	0	
D04	9	n-9-07	10	0	24		40	381	71	3167	734	32	125	22		2	2			109	3	5	0		1	3	8	1	4	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0
D05	106	n-106-03	44	1	56		65	194	112	4721	1115	37	334	48		7	3			14	16	35	0	0		13	58	9	33	6	1	4	1	3	1	1	0	1	0	1	0	1	0	0
D05	106	n-106-04	1		63		80	1300	209	5355	671	16	220	5	1	3	3	0		154	14	54	0			17	43	5	17	2	1	2	0	3	1	2	0	2	0	2		2	1	0
D06	3	n-3-03	36	0	24		45	632	123	5614	809	29	210	19		3	2			55	4	8	0			4	10	1	3	1	0	1	0	1	0	0	0	0	0	0	1	0	0
D06	3	n-3-04	56	1	13		43	558	129	3209	1267	32	210	45		7	3		4	126	5	8	0		17	1	4	1	6	2	1	2	0	1	0	0	0	0	0	0		2	0	0
D07	14	n-14-02	8		42		59	1132	167	7214	1482	57	464	43		4	3			8	6	4	0		1	0	1	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0	0	
D07	14	n-14-03	6		34		66	1419	212	6746	1028	37	389	26		4	3			5	8	4	0		0	0	1	0	1	0	0	1	0	1	0	1	0	1	0	0		0		0
D07	14	n-14-04	11		31		69	1108	168	6296	1042	40	372	23		3	3			5	5	2	0		0	0	1	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0
D07	14	n-14-05	2		54		60	978	103	1280	1057	34	129	25		1	2			120	6	3				1	5	1	6	2	1	2	0	1	0	1	0	0	0				0	
D07	14	n-14-06	22	0	30		47	300	87	2598	812	35	183	20		2	2			123	3	6	0			2	5	1	5	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0
D07	14	n-14-07	7	0	34		41	950	102	1912	1105	29	152	22		2	2			118	5	3	0		0	2	6	1	6	2	0	2	0	1	0	1	0	0	0	0		0	0	
D07	14	n-14-07	8		49		38	944	107	1913	1322	31	159	26		2	2			113	6	3			0	2	5	1	6	2	0	2	0	1	0	0	0	1	0			0		
D08	230	n-230-02	108	1	69		63	1245	134	4552	847	31	442		25	7	3	0		17	29	41	0			44	148	20	73	11	1	8	1	6	1	3	0	3	0	1	0	1	0	0
D08	230	n-230-03	21		54		54	913	151	5011	1025	33	405	0	27	5	3			29	8	29	0			4	14	2	8	2	1	1	0	1	0	1	0	1	0	1	0	1	0	0
D10	127	n-127-01	1		57		50	590	76	8093	585	30	341	13	1	2	3			30	2	2	0			1	2	0	2	1	0	1	0	0	0	0	0	0	0	0				
E06	12	n-12-01	2		63	22	39	764	98	4349	836	30	93	17	1	1	3	0		85	3	1		0	0	1	2	0	3	1	0	1	0	1	0	0	0	0	0	0		0		
E06	12	n-12-02	22	1	51	4	50	314	120	3849	1055	36	749	26	0	6	3			11	23	61	0	0		12	59	10	38	7	2	5	1	4	1	2	0	2	0	2	0	1	0	0
E06	12	n-12-03	8		63	14	50	1292	224	3892	1082	25	29	26	0	2	3	1		123	7	4	0	0	0	2	7	1	7	2	0	2	0	1	0	1	0	1	0	0		0	0	
E06	12	n-12-04	12		55	16	50	785	45	2723	526	26	190	12	1	1	2			193	3	3	0		0	2	5	1	5	1	0	1	0	1	0	0	0	0	0	0		0		
E06	12	n-12-05	13		63	15	51	1334	236	5630	1026	28	99	25	2	2	4	0		106	7	4	0	0	0	2	6	1	6	2	0	2	0	2	0	1	0	1	0	0		0	0	
E06	12	n-12-06	3		56	13	44	961	85	5209	642	27	141	15	1	2	2	0		89	3	2	0	0	0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0	0	
E06	12	n-12-07	1		48	9	42	617	101	5305	828	37	127	16	1	2	3	0		39	2	1	0	0		0	1	0	2	1	0	1	0	1	0	0	0	0	0					
E06	12	n-12-08	16		54		46	498	106	3493	992	34	135	20		2	3	0		84	4	6		0		2	6	1	6	2	0	1	0	1	0	0	0	0	0	0		0	0	
E06	12	n-12-09	3		51	16	33	789	88	4472	950	25	47	19		1	3	0		104	3	1	0	0	0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0	0	
E06	12	n-12-10	2		54	11	46	951	71	5275	777	29	206	19	1	2	3	1		129	4	3	0		0	1	4	1	5	2	0	1	0	1	0	0	0	0	0	0		0		
E07	195	n-195-05	19		64		61	2130	279	4696	758	23	352	12	1	5	2	0		22	15	9		0	0	0	1	0	2	1	0	2	0	3	1	2	0	2	0	0				
F02	185	n-185-04	9		44		45	939	178	5451	1250	46	530	36		4	3	0		4	6	3	0	0	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	0		0		
F02	185	n-185-05	3		11	3	14	276	41	1626	272	9	90	6	1	1	1	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
F03	198	n-198-04	12		72	20	35	808	84	6001	763	34	360	4	23	3	3		0	106	4	4	0	0	0	1	6	1	7	2	1	2	0	1	0	0	0	0	0	0		0		
F05	142	n-142-01	43	1	52		67	1125	142	7304	728	29	379	19	0	8	3	1		13	48	49	0			13	74	14	67	15	1	12	2	10	2	5	1	4	0	2		1	0	
F05	142	n-142-02	9		56		50	603	105	3645	895	34	304	20		3	3	0		64	3	4	0			1	2	0	2	1	0	1	0	1	0	0	0	0	0	0		1	0	
F08A	269	n-269-04	128	1	68	312	47	271	127	7719	990	24	245	22	79	5	3	1	1	76	5	11	0		13	2	6	1	6	2	1	2	0	1	0	0	0	0	0	1		3	0	0
G02	125	n-125-01	63	0	38		74	258	162	1844	1456	28	94	37	0	3	3			37	4	5	0	0		1	3	0	2	1	0	1	0	1	0	0	0	0	0	0		1		
G02	125	n-125-02	31	1	50		50	276	100	3729	1139	31	142	67		3	3			24	11	19	0	0		13	39	5	20	4	1	3	0	2	0	1	0	1	0	1		1	0	0
G02	125	n-125-03	19		49	5	54	1138	113	4325	930	36	201	23	13	3	3	0		103	4	4	0		0	1	4	1	5	1	0	1	0	1	0	0	0	0	0	0		0		
G02	125	n-125-04	70	2	60	144	37	432	122	7751	1227	34	277	63		8	3	1	0	38	21	42	0		0	9	40	7	34	8	1	6	1	4	1	2	0	2	0	2		1	0	0
G04	163	n-163-01	27		52	19	48	884	65	3692	901	24	135	14	0	1	3			129	3	3	0		0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0		
G04	163	n-163-03	23		56		63	525	126	2820	1081	31	307	41	0	6	3			58	11	20	0	0		8	26	4	17	3	1	3	0	2	0	1	0	1	0	1		1	0	0
G04	163	n-163-04	21		57		58	641	128	2687	1267	33	165	39		6	3			71	10	27		0		9	28	4	20	5	1	3	0	2	0	1	0	1	0	1		1	0	0
G09	232	n-232-07	66		65		90	1510	182	5135	857	36	576		19	5	3			33	17	67	0			7	26	4	16	3	1	3	0	3	1	2	0	2	0	2	0	0		
G09	232	n-232-11	50		57		44	743	127	3432	1090	36	206		29	4	3			41	5	7	0	0		7	19	2	7	1	1	1	0	1	0	0	0	0	0	0		1	0	0
G10	22	n-22-01	4		65		58	749	113	7181	1071	39	318	24		3	3	0		52	5	6	0			2	6	1	5	1	0	1	0	1	0	0	0	0	0	0		0	0	0
G10	22	n-22-02	2	0	27	4	20	344	27	2559	327	16	85	7		1	1			35	1	1			0	0	1	0	2	0	0	0	0	0	0	0	0	0		0		0	0	
H09	271	n-271-02	13		41	441	19	408	56	2421	436	17	204	1	15	2	1		0	62	2	3	0		2	1	3	1	3	1	0	1	0	0	0	0	0	0	0	0		1	0	0
I05	217	n-217-01	44	1	75		74	757	218	4761	1138	54	605	1	33	4	3			13	9	19	0	0		12	21	2	6	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
I06	13	n-13-01	34	0	25		53	1275	219	5484	940	29	104	25		2	3			147	7	4	0		0	2	7	1	7	2	1	2	0	2	0	1	0	0	0	0		0	0	0
I06	13	n-13-06	65	1	21		112	1066	187	8801	667	32	647	12		6	3			23	45	68	0			2	39	10	53	12	1	9	1	8	2	5	1	4	1	3		1		
I07	86	n-86-10	36		66		54	905	192	5244	983	40	421	0	24	6	3			36	5	12	0	0		4	10	1	6	1	0	1	0	1	0	1	0	1	0	0		1	0	0
I07	86	n-86-11	55		65		56	709	146	5865	950	37	411	0	26	7	2			23	5	22	0	0	0	5	19	3	11	2	1	1	0	1	0	1	0	0	0	1	0	1	0	0
I08	73	n-73-10	5		61		71	1165	194	7146	1134	41	262	24		4	4			5	5	3	0			0	0	0	1	0	0	1	0	1	0	1	0	1	0	0				
I08	73	n-73-11	3		58		61	800	126	6357	1043	38	309	22		3	3	0		38	4	4	0		0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0	0	0	0	
I08	73	n-73-12	2		54	13	35	872	135	4913	994	24	122	20		1	3			91	4	2			0	1	3	1	4	1	0	1	0	1	0	0	0	0	0	0		0		
I08	73	n-73-13	2	0	54	11	36	785	89	2736	844	30	174	19	1	1	2	0		110	3	2	0		0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0		0
I08	73	n-73-14	45	1	46		62	910	188	7004	649	38	507	26		5	3	2		5	58	38	0			11	58	11	53	14	1	15	2	12	2	5	1	3	0	3	0	1	0	0
I08	73	n-73-15	9		56	8	38	771	206	2873	1622	25	16	25	0	1	3			85	5	2			0	1	4	1	4	1	0	1	0	1	0	1	0	0	0	0		0		
I08	73	n-73-16	11		72	6	73	1391	234	2845	1152	31	104	28	1	2	3			121	10	6		0	0	2	8	2	9	3	1	3	0	2	0	1	0	1	0	0		0		
I08	73	n-73-17	4		55	2	47	636	94	5746	855	31	275	19	0	2	3	0		31	3	4	0	0	0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0	0	0
I08	73	n-73-18	2		58	21	54	1162	72	5648	713	28	240	19	1	2	2	0		196	5	5	0		0	2	7	1	8	2	1	2	0	1	0	1	0	0	0	0		0	0	
I08	73	n-73-19	89		53		52	250	93	3234	1286	29	124	33		3	3			40	4	7				2	5	1	5	1	0	1	0	1	0	0	0	0	0	0		1	0	
I10	155	n-155-03	2		82		47	689	104	4696	858	31	179	1	20	1	3			102	3	1				1	2	0	3	1	0	1	0	1	0	0	0	0				0		
I10	155	n-155-04	68		76		75	983	110	9654	618	37	790		22	6	3			12	52	56				4	46	10	55	14	2	13	2	11	2	5	1	4	1	3		2		
I10	155	n-155-07	8		43		63	980	166	4936	1261	27	33		44	6	4	1		198	13	53	0		0	7	20	3	13	3	1	3	0	3	0	1	0	1	0	1		6	1	0
J05	226	n-226-01	18	1	61	36	58	621	87	11307	658	26	287	1	15	3	3			84	3	4	0		3	1	4	1	4	1	0	1	0	1	0	0	0			0		0	0	
J05	226	n-226-03	84	1	70	164	56	503	118	6561	1249	29	154	1	30	4	3			167	3	5	0		1	1	2	0	3	1	0	1	0	1	0	0	0	0	0	0		1	0	0
J07	204	n-204-10	0		91		64	350	98	7034	627	31	366	1	13	2	4			59	3	3	0		0	1	5	1	5	1	0	1	0	1	0	0	0	0	0	0				
J07	204	n-204-13	4		81		52	740	124	6019	1088	41	367		23	3	2			31	5	5	0			1	3	1	3	1	0	1	0	1	0	0	0	0	0	0				
J10	20	n-20-01	5	0	26		35	927	160	4904	789	22	42	20		1	3			108	3	2	0		0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0	0	
J10	20	n-20-02	5	0	33		56	1337	161	5298	924	26	168	27		2	3			123	6	4	0		0	2	5	1	6	2	1	2	0	1	0	1	0	1	0	0		0	0	
J10	20	n-20-03	47	1	22		33	524	74	2614	831	35	659	51		4	3			7	17	18	0			12	43	7	31	6	1	4	1	4	1	2	0	1	0	1		2	0	0
J10	20	n-20-04	24	0	35		54	1151	95	3651	829	29	112	23		2	3			123	4	3	0		0	1	5	1	5	1	0	1	0	1	0	0	0	0	0	0	0	0		0
K06	261	n-261-28	11		84	15	30	593	61	5739	920	37	335	1	25	2	2			130	3	2			0	1	4	1	5	2	0	1	0	1	0	0	0	0	0	0		0	0	0
K06	261	n-261-32	7		56		71	758	113	6541	806	27	130	2	16	2	3	0		115	4	4	0			1	4	1	5	1	0	1	0	1	0	0	0	0	0	0		0		
L05W	4	n-4-01	25	0	14		44	404	102	2558	1066	37	190	34		4	3			98	5	9	0			3	10	2	7	2	0	1	0	1	0	0	0	0	0	0		0	0	
L06WA	218	n-218-09	13	1	62	663	100	1294	123	9382	901	28	215	1	25	4	3	1	0	221	8	18	3		9	8	28	5	22	4	1	3	0	2	0	1	0	1	0	1	0	1	0	0
L06WA	218	n-218-10	2		78	101	51	870	110	6118	888	33	343	0	17	2	3	0	0	36	5	6	0		0	2	5	1	4	1	0	1	0	1	0	1	0	1	0	0	0	1	1	0
L06WB	184	n-184-01	86	1	90		64	267	95	8153	718	34	590		22	5	2	1		46	22	26	0			19	66	9	37	7	2	5	1	5	1	2	0	2	0	1		1	0	0
M05	29	n-29-01	3		63	9	58	1180	129	4597	1003	27	121	23		1	3	0		146	6	3	0		0	2	7	1	8	2	1	2	0	1	0	1	0	1	0	0		0	0	
M05	29	n-29-02	56	1	51		49	213	83	2218	1668	30	118	73	0	5	4			32	4	5		0	0	1	3	1	3	1	0	1	0	1	0	0	0	1	0	0		1	0	
M05	29	n-29-03	11		55	2	55	941	126	8140	966	46	727	26	1	4	3	0		44	5	6	0	0		1	4	1	4	1	0	1	0	1	0	1	0	1	0	0				0
M05	29	n-29-05	3		58	5	56	700	99	4769	958	37	314	20		2	3	0		34	3	3	0		2	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0		
M05	29	n-29-06	65	2	61		85	483	176	2787	1694	35	284	137	0	7	5	1		17	86	30		0		15	79	17	97	30	1	26	3	19	3	8	1	7	1	2	0	1	0	0
M05	29	n-29-07	49	2	47		62	188	116	2656	1355	28	84	33		4	4	0		193	7	10		0		3	10	2	8	2	1	2	0	2	0	1	0	1	0	0		3	0	0
M05	29	n-29-09	42	2	47		69	105	97	871	1676	27	109	29		2	4	0		169	17	5				1	4	1	10	5	2	6	1	4	1	1	0	1	0	0		1		0
M05	29	n-29-10	2		53		53	652	98	6225	872	35	319	17		3	3			25	3	3	0			1	2	0	2	1	0	1	0	1	0	0	0	0	0	0		0	0	0
M05	29	n-29-11	14		61		56	662	96	7586	1041	42	380	29	0	3	4			49	4	5	0			1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0	0	0
M05	29	n-29-12	32		46		56	168	98	1814	1240	27	127	38		4	3	0		39	3	4	0	0		1	3	1	4	1	0	1	0	1	0	0	0	0	0	0		1		
M05	29	n-29-13	36	1	45		52	174	113	1768	1140	24	94	35		3	3	0		111	10	5		0	0	2	7	1	8	3	1	3	0	2	0	1	0	1	0	0		1	0	
N05	138	n-138-01	3		47	6	53	848	105	4565	607	29	195	14	1	2	3			89	2	1	0			0	1	0	2	1	0	1	0	0	0	0	0	0	0	0		0		
N06	202	n-202-07	1		92	6	42	267	71	10348	618	29	389	1	13	2	3			48	3	2	0			1	4	1	3	1	0	1	0	0	0	0	0	0	0	0				
N06	202	n-202-08	27		72	9	56	639	238	7803	704	22	323	1	9	3	1			1	9	1	0			0	0		0	0	0	0	0	1	0	1	0	1	0					
N06	202	n-202-09	25		69	898	74	1033	138	6349	1085	36	195		30	5	4		0	74	3	7	0		13	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		1	0	0

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
N07	16	n-16-01	40	1	44		50	189	112	2728	1329	23	69	69	1	7	3			85	5	4	0	0		0	1	0	3	2	1	2	0	1	0	0	0	0	0	0		1		
N07	16	n-16-02	14	0	43		40	332	80	3810	917	24	107	40		4	2	0		162	6	8	0	0		2	10	2	15	4	1	3	0	1	0	0	0	0	0	1		1		
N09	32	n-32-01	8		60	12	56	780	101	6100	996	43	405	26	2	3	3	0		42	4	6	0	0	0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0	0	
O04	8	n-8-03	20	1	36		26	570	55	6448	711	29	515	33		6	3		0	20	33	109	0		0	17	65	11	47	11	3	8	1	7	1	3	0	3	0	3	0	1	0	0
O05	272	n-272-10	7		71	15	67	1048	63	6340	654	26	165		17	2	2			140	9	18	0		0	3	13	3	15	5	1	4	1	2	0	1	0	1	0	1			0	
O06	207	n-207-03	3		99	50	48	934	98	10323	1010	36	385	1	24	4	3			225	7	15	0		0	6	20	4	21	5	1	3	0	2	0	1	0	0	0	1		0	0	
O10	162	n-162-01	96	1	88		77	129	83	8231	680	38	811		29	7	3	0		33	17	18	0			9	31	4	17	4	1	4	0	4	1	2	0	2	0	1		1	0	0
O10	162	n-162-02	71		87	4	48	1033	118	7752	943	31	541	1	54	7	3	1		42	35	81	0		1	10	75	16	73	15	2	9	1	8	1	3	0	3	0	4		1	0	
P04	28	n-28-01	54	1	52		128	634	253	3590	1167	32	208	34	0	8	3	1		11	60	34	0			12	51	10	51	13	2	13	2	12	2	6	1	5	1	3	0	1	0	0
P07	48	n-48-01	77	1	34		53	383	134	2454	1135	28	121	32		4	3			75	4	6	0		0	1	5	1	5	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0
P07	48	n-48-04	2	0	28		60	175	197	8057	525	15	249	4		1	1			8	2	3	0			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
P09	154	n-154-01	3		62		60	1071	132	7616	1162	44	399	33		4	3	0		51	5	9	0	0		3	8	1	7	2	0	2	0	1	0	0	0	1	0	0		1	1	0
P09	154	n-154-02	2		67	5	63	985	132	5883	1018	36	286	21	0	3	3	1		53	5	8	0		0	2	6	1	6	2	0	1	0	1	0	1	0	0	0	0		0	0	0
P09	154	n-154-03	3		54	3	66	864	121	7102	998	38	326	21	0	3	3			39	4	4	0			1	3	1	4	1	0	1	0	1	0	0	0	0	0	0		0		
P09	154	n-154-04	3		50	17	48	602	92	6852	824	31	298	17		2	3	0		31	3	2	0		0	1	2	0	3	1	0	1	0	1	0	0	0	0	0	0		0	0	0
P11	123	n-123-01	1	0	39		67	1060	180	6393	1080	43	286	26		3	4			7	5	2	0		0	0	1	0	1	0	0	1	0	1	0	1	0	0	0	0		0		
P11	123	n-123-01	1		33	2	66	1067	184	6543	1194	45	294	27	1	3	4			7	5	2	0		0	0	1	0	1	0	0	1	0	1	0	1	0	1	0	0		0	0	
P11	123	n-123-22	3		55		59	635	118	5568	1284	43	321	27		2	3			29	3	3	0			0	2	0	2	1	0	1	0	0	0	0	0	0	0					
P11	123	n-123-22	3		39	7	60	661	122	5938	1321	46	336	26	0	2	4			29	3	3	0		0	1	2	0	2	1	0	1	0	1	0	0	0	0	0	0	0	0	0	
P11	123	n-123-23	7		50		61	907	135	6764	1052	32	238	21		3	3			46	6	7	0		0	1	5	1	4	1	0	1	0	1	0	1	0	1	0	0		0	0	0
P11	123	n-123-23	6		48	7	62	1039	150	7158	1225	35	267	21	1	4	3	0		45	6	8	0	0	0	1	5	1	5	1	0	1	0	1	0	1	0	1	0	0	0	0	0	
P11	123	n-123-24	59	1	33		42	197	128	2643	1005	30	192	67		6	3			75	4	6	0			3	11	2	9	2	1	2	0	1	0	0	0	0	0	0		1		
P11	123	n-123-24	60	2	33		44	220	128	3074	1114	32	201	67		6	3			67	4	7	0	0		3	11	2	10	2	1	2	0	1	0	0	0	0	0	0		1	0	
P11	123	n-123-25	2		42		43	470	86	3339	944	31	224	19		2	2			24	3	2				0	2	0	2	0	0	1	0	0	0	0	0	0	0			0		
P11	123	n-123-25	2		33	31	42	485	88	3451	906	30	220	16	1	2	2			25	3	2	0	0	0	0	2	0	2	1	0	0	0	0	0	0	0	0	0	0		0	0	
P11	123	n-123-26	3	0	47		69	412	104	5317	635	32	350	18		3	3		0	57	4	5	0		1	2	5	1	5	1	0	1	0	1	0	0	0	0	0	0	0	0	0	
P11	123	n-123-26	1		39	18	70	418	120	5495	723	35	375	14	3	2	3		0	57	4	6	0		0	2	6	1	6	1	0	1	0	1	0	0	0	0	0	0	0	0	0	
P11	123	n-123-27	7		44		99	1944	303	6627	901	37	172	23		4	4			14	7	5	0			0	1	0	2	1	0	1	0	1	0	1	0	1	0	0	0	0			
P11	123	n-123-27	8	0	33		95	1962	307	6794	1008	39	174	24	2	5	3			13	6	5	0	0	0	0	1	0	1	1	0	1	0	1	0	1	0	1	0	0				0
P13	10	n-10-08	18		23		61	591	138	4971	904	41	389	18		3	2			63	4	4	0		0	3	9	2	8	2	0	1	0	1	0	0	0	0	0	0		0	0	
P13	10	n-10-08	30		36	5	57	609	136	5708	944	41	420	19	40	3	3			63	3	4	0		0	3	9	2	8	1	0	1	0	1	0	0	0	0	0	0	0	0	0	
P13	10	n-10-09	1		18		49	742	115	9756	526	26	339	11		2	2			99	3	5	0		0	1	6	1	6	1	0	1	0	1	0	0	0	0	0	0	0	0	0	
P13	10	n-10-09	1	0	65	19	73	2918	250	2937	908	39	243	21	2	6	3	0		157	10	35	1	0	0	5	18	4	19	5	1	4	0	2	0	1	0	1	0	1	0	0	0	0
P13	10	n-10-10	1		19		55	278	78	6361	555	30	349	12		2	3			38	3	2	0		0	1	3	1	3	1	0	1	0	1	0	0	0	0	0	0			0	
P13	10	n-10-10	4	0	28	103	58	334	79	5957	613	29	317	14	1	2	3		0	35	3	3	0	0	1	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0	0	0	0
P13	10	n-10-11	8		18		81	600	82	5367	523	27	335	11		2	2			47	3	3	0		0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0		
P13	10	n-10-11	12		31	25	72	617	72	6153	549	27	372	13	3	2	3			53	2	4			0	1	4	1	4	1	0	1	0	1	0	0		0	0	0		0		
P13	10	n-10-12	2		21		48	820	104	9591	602	28	336	14		2	3			67	4	3	0		0	2	5	1	4	1	0	1	0	1	0	0	0	0	0	0		0	0	
P13	10	n-10-12	1		29	6	47	788	92	9531	544	27	350	12	2	2	3			72	3	3	0	0	0	2	6	1	5	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
P13	10	n-10-13	0	0	19		57	490	70	9948	479	26	314	13		2	3			98	4	5	0		0	3	8	1	7	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0
P13	10	n-10-13	1		40	8	54	457	66	9972	475	25	334	7	1	2	3			95	3	5	0		0	2	8	2	7	2	0	1	0	1	0	0	0	0	0	0			0	0
P13	10	n-10-14	38	1	15		73	221	118	3691	1051	26	80	29		2	3		0	88	10	6	0		0	2	12	3	19	6	1	4	1	2	0	1	0	1	0	0		1	0	0
P13	10	n-10-14	54		33	81	67	159	107	3056	1041	26	89	25	3	2	2		0	65	9	4		0	2	1	8	2	16	5	1	4	0	2	0	1	0	0	0	0		1		
Q03A	129	n-129-01	6	0	45		60	1210	88	8117	652	31	280	20		3	3			159	6	11	0		0	3	13	3	14	3	1	3	0	2	0	1	0	0	0	1	0	0	0	0
Q09	96	n-96-02	34	1	51		42	236	114	6870	1398	27	160	24		4	3			19	4	18	0			6	13	2	6	2	0	1	0	1	0	0	0	0	0	1		1	0	0
Q11	58	n-58-01	13		63	46	62	1022	213	4992	1214	49	397	28	0	5	3		0	40	5	6		0	5	1	2	0	3	1	0	1	0	1	0	1	0	1	0	1		3	0	0

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
Q11	58	n-58-02	14		54	9	94	1319	75	5874	713	27	82	15	0	3	3			211	6	12	0			4	15	3	17	4	1	3	0	2	0	0	0	0	0	1		0		
Q11	58	n-58-03	34	2	56		74	427	227	4137	1122	44	419	59	0	8	4	0	0	15	16	24	0		0	9	39	7	37	10	0	8	1	4	1	1	0	1	0	1	0	1	0	0
Q12	97	n-97-02	8	1	48		33	209	40	1113	1022	22	137	27	0	2	2	1		325	11	39	0	0		9	32	5	26	6	2	4	1	2	0	1	0	1	0	1		1	0	0
Q12	97	n-97-03	27	0	42		33	297	76	2747	591	30	514	59	0	6	3	0		67	1	4	0			0	1	0	1	1	0	1	0	0	0	0	0		0	0		0	0	
Q12	97	n-97-04	3		58	4	74	934	181	5028	1273	46	418	25	0	4	3	0		31	5	6	0			1	3	1	3	1	0	1	0	1	0	1	0	0	0	0		0	0	0
Q12	97	n-97-05	2		40		46	608	96	4878	789	29	231	17		2	3			30	3	3	0			1	3	1	3	1	0	1	0	1	0	0	0	0	0	0		0	0	0
Q12	97	n-97-06	78	1	45		49	254	113	3083	1686	28	183	61	0	5	3			44	15	7	0			3	12	2	10	2	0	2	0	2	0	1	0	2	0	1		1		
Q12	97	n-97-07			56	7	60	556	78	7426	533	26	312	11	1	2	3			103	4	7	0		0	3	10	2	9	2	1	1	0	1	0	0	0	0	0	0	0		0	
Q12	97	n-97-08	3		44		39	477	80	4538	978	35	259	22	0	2	3	0		28	2	3	0	0		1	2	0	2	1	0	1	0	0	0	0	0	0	0	0		0	0	
Q12	97	n-97-09	18		55	5	43	1587	130	7442	1041	37	344	33		5	3	0		84	8	9	0	0		2	10	2	12	3	1	3	0	2	0	1	0	1	0	0		0	0	
Q12	97	n-97-10	3		51	2	55	766	98	6385	1035	38	321	22	1	2	3			43	4	4	0		0	1	4	1	4	1	0	1	0	1	0	0	0	0	0	0		0	0	
Q12	97	n-97-11	35		44	190	32	424	64	3556	964	25	133	28		2	2			63	3	4	0		0	2	8	1	6	1	0	1	0	1	0	0	0	0	0	0		1	0	0
Q12	97	n-97-12	2		52	4	57	689	110	6076	994	38	309	21		3	4			32	3	3	0			1	3	0	3	1	0	1	0	1	0	0	0	0	0	0			0	
Q12	97	n-97-13	3		54		58	687	109	3349	986	34	240	19		2	3			32	3	4	0	0		1	2	0	3	1	0	1	0	1	0	0	0	0	0	0		0	0	0
Q12	97	n-97-14	5		56	10	62	1099	43	4643	725	25	127	23	1	2	3	0	0	231	7	14	0		1	6	23	4	24	6	2	4	0	2	0	1	0	0	0	0		0	0	
R03	15	n-15-03	10	0	27		74	807	127	7694	615	29	642	20		3	2			41	5	12	0			2	8	1	5	1	0	1	0	1	0	1	0	1	0	0		1	0	0
R07	134	n-134-01	37	1	48		23	222	57	3361	1236	40	530	38		4	4			3	5	20	0			5	13	2	7	1	0	1	0	1	0	0	0	1	0	1		1	0	0
R10	151	n-151-02	46	1	36		40	301	95	3480	1183	26	119	31		3	1			89	5	9	0			5	12	2	9	2	1	2	0	1	0	0	0		0	0		1		
R10	151	n-151-02	47		40		41	321	98	3842	1206	27	125	33		3	3			91	5	9	0	0	0	5	13	2	10	2	1	2	0	1	0	0	0	0	0	0	0	2	0	0
S04	79	n-79-01	12		27		51	987	146	7885	917	36	477	24		3	4			6	5	2	0		0	0	1	0	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	
S04	79	n-79-02	34	1	40		32	418	135	6657	8001	43	773	66		6	4			8	28	37	0			21	67	10	35	6	1	5	1	5	1	3	0	2	0	2	0	1	0	0
S04	79	n-79-03	7	1	42		46	873	59	5283	957	32	161	21		2	3		0	136	5	4	0		0	2	7	1	8	2	1	2	0	1	0	0	0	0	0	0	0	0	0	0
S05	89	n-89-01	55	0	59		97	508	181	8424	600	27	441	13		3	1			22	5	14	0			4	9	1	4	1	0	1	0	1	0	1	0	0	0	1		1	0	0
S13	146	n-146-02	9	0	41		70	1077	48	8232	490	21	57	15		2	3			278	4	12	0		0	4	14	3	14	3	1	2	0	1	0	0	0	0	0	1		0	0	0
T01	71	n-71-01	7		50	18	41	1016	175	3474	1152	23	51	22	0	1	3	0		86	4	2	0		0	1	3	1	4	1	0	1	0	1	0	0	0	0	0	0		0		
T01	71	n-71-02	3		47	19	36	820	88	5260	769	30	103	16	0	1	2	0		102	3	2	0		0	1	3	0	3	1	0	1	0	1	0	0	0	0	0	0		0		
T01	71	n-71-03	51	1	47	26	71	1666	166	6619	784	39	705	24	2	6	3	1	0	5	38	76	0		0	3	16	3	15	5	1	6	1	7	1	4	1	3	0	2	0	1	0	0
T02	144	n-144-02	30	0	49		40	737	112	5283	931	29	298	26		4	3		0	148	7	14	0		3	3	10	2	9	2	1	2	0	1	0	1	0	1	0	1	0	1	0	0
T05	88	n-88-05	46	0	73		49	622	164	4208	914	27	308	29		4	3			42	7	58	0			20	54	8	31	5	1	3	0	2	0	1	0	1	0	1		1	0	0
T05	88	n-88-06	3		91		55	2404	242	4656	775	24	364	14		4	2			90	18	20	0			1	3	1	4	1	1	2	0	3	1	2	0	2	0	1				
T05	88	n-88-07	6	0	62		75	1727	245	6503	1100	38	394	28		5	3			9	9	6	0			0	1	0	2	1	0	1	0	2	0	1	0	1	0	0		0		
T05	88	n-88-08	48	1	59		62	698	154	7444	715	30	444	20		5	3			22	10	66	0			12	35	5	18	3	1	2	0	2	0	1	0	1	0	2	0	1	0	0
T05	88	n-88-09	30	0	52		57	692	140	2272	644	31	172	17		3	2			50	5	21	0			3	9	1	6	2	1	2	0	1	0	0	0	1	0	1	0	1	0	0
T06	140	n-140-02	1		42		44	834	106	4033	729	37	195	19		2	1			110	2	2	0			1	4	1	4	1	0	1	0	1	0	0								0
T06	140	n-140-03	11	0	35		62	674	155	4016	767	29	281	17		3	2			24	5	5	0			1	5	1	4	1	0	1	0	1	0	1	0	1	0	0		0		0
T06	140	n-140-04	12	0	53		67	1791	254	6301	1310	48	378	33		6	3		0	9	10	7	0		1	0	1	0	2	1	0	1	0	2	0	1	0	1	0	0	0	0	0	0
T06	140	n-140-05	65	0	36		41	226	103	3251	1113	25	151	26		2	1			39	3	4				1	3	1	3	1	0	1	0	0	0	0	0	0		0	0	1		
T06	140	n-140-06	35	0	37		60	596	161	3775	724	34	671	21		5	2			23	8	27	0		0	9	34	5	17	3	1	2	0	1	0	1	0	1	0	1	0	1	0	0
T06	140	n-140-07	23	0	49		49	413	91	1551	1019	35	626	50		8	3			22	20	51	0			10	39	6	30	7	1	5	1	4	1	2	0	2	0	2		1	0	0
T06	140	n-140-08	15		44		25	590	78	3916	806	24	127	16		1	2			88	2	1			0	0	2	0	2	0	0	1	0	0	0			0				0		
T07	117	n-117-01	24	1	34		57	1145	107	4185	1309	35	211	84		6	3		0	107	6	9	0		3	3	11	2	10	3	1	2	0	1	0	1	0	1	0	1	0	1	0	0
T07	117	n-117-02	16	2	35		59	231	80	2071	1284	37	277	62		3	7			17	9	8	0			5	15	2	9	2	0	2	0	2	0	1	0	1	0	0	0	2	0	0
T07	117	n-117-03	16		43		69	832	145	5643	999	38	332	29		4	3		1	65	5	5	0		1	1	5	1	5	2	0	1	0	1	0	1	0	0	0	0		0	0	0
T07	117	n-117-04	37	1	44		75	97	75	265	1375	25	73	40		2	3			191	8	3				1	4	1	9	4	1	4	0	2	0	1	0		0	0		1		
T07	117	n-117-05	85	1	48		49	219	114	1334	1293	29	109	33		3	2			58	5	6				1	5	1	6	2	0	1	0	1	0	0	0	0	0	0		2		
T07	117	n-117-06	15	0	43		51	882	119	4194	926	28	100	24		2	3			209	6	7	0		0	2	7	1	6	2	0	2	0	1	0	1	0	0	0	0		1	0	0

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
T07	117	n-117-13	1	1	58		85	942	378	11264	418	15	207	14		2	3		0	140	2	25	1		2	1	4	1	4	1	0	1	0	0	0	0	0	0	0	2	0	1	0	0
U03	191	n-191-01	65		64		65	590	191	7045	700	32	572	14	0	4	2	0		35	6	21	0	0		1	4	1	4	1	0	1	0	1	0	1	0	1	0	1		1	0	0
W05	100	n-100-01	11	2	59		53	3884	229	108	2114	41	32	88		8	5			1307	28	186	0			25	88	17	84	19	5	14	2	8	1	3	0	2	0	7		1		
W05	100	n-100-02	3	1	48		5	218	13	4	343	1	1	17		2	4		0	8	6	6				4	11	2	7	2	0	1	0	1	0	1	0	1	0			0	0	0
W06	196	n-196-03	10		63	176	30	928	78	11795	664	22	325	11	0	3	2	1	1	233	4	5	0	0	10	2	8	2	9	2	1	2	0	1	0	0	0	0	0	0		1	0	
X04	110	n-110-01	6		32		31	471	65	6311	632	30	226	14		1	2			79	2	1	0		0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Z03	223	n-223-06	57		70		50	426	128	2683	1000	37	226	0	27	5	3			126	6	27	0			3	7	1	6	2	0	1	0	1	0	1	0	1	0	1		2	0	0
Z05	161	n-161-01	51	3	56		51	595	133	5502	1115	47	505	3	51	5	4			19	13	23	0		0	11	48	6	19	3	1	3	0	2	1	1	0	1	0	1		2	0	0
Z05	161	n-161-06	53		55		46	543	130	5397	1048	45	461	1	47	5	4			17	11	22	0		3	9	38	5	16	3	1	2	0	2	0	1	0	1	0	1	0	2	0	0
Z05	161	n-161-11	63		61		49	930	141	5267	1124	48	543	1	51	6	4			18	13	33	0			13	48	6	19	3	1	2	0	3	0	1	0	1	0	2	0	2	0	0
Z05	161	n-161-14	12		50		31	720	66	6049	804	25	323		37	2	3			96	7	8	0			11	30	4	16	3	1	2	0	2	0	1	0	1	0	0		0		0
Z05	161	n-161-15	45	2	36		49	544	129	5206	1046	44	456	1	43	4	4			19	12	20	0		1	11	43	5	17	3	1	2	0	2	0	1	0	1	0	1	0	2	0	0
Z05	161	n-161-16	54		42		50	469	124	5264	1093	46	481	1	45	4	4			18	12	17	0			10	41	5	17	3	1	3	0	2	0	1	0	1	0	1	0	2	0	
Z05	161	n-161-21	62	2	28		52	933	140	5968	1203	51	560		49	5	4			20	15	34	0			13	52	6	20	3	1	3	0	3	1	2	0	1	0	2		2		
Z05	161	n-161-26	45	1	58	29	53	336	122	5072	1123	49	486	1	57	4	5			19	12	17	0			7	35	5	16	3	1	3	0	2	0	1	0	1	0	1	0	2		
Z05	161	n-161-28	46	2			52	723	134	5138	1101	49	504		72	5	4			15	12	30			0	9	37	5	16	3	1	2	0	2	1	1	0	1	0	2		2	0	0
Z05	161	n-161-29	53		51		51	656	139	5799	1138	50	529		46	5	4			20	13	25	0		0	12	48	6	19	3	1	3	0	3	1	1	0	2	0	1		2		
Z05	161	n-161-30	50		59	58	52	468	127	5113	1120	49	518		48	5	5			21	13	18	0			9	42	6	18	3	1	2	0	2	0	1	0	1	0	1		2	0	
Z05	161	n-161-31	44		57		66	472	177	3911	872	34	425		20	5	3			54	9	16	0			8	26	4	21	5	1	3	0	2	0	1	0	1	0	1		1	0	0
Z05	161	n-161-36	38	1	33		102	273	201	3842	1186	40	207		33	3	4		0	6	3	17	0			9	21	2	7	1	0	1	0	1	0	0	0	0	0	1		1	0	0
Z05	161	n-161-37	30		53		73	1459	170	7700	767	44	861		25	8	4			43	34	77				12	57	10	47	10	1	8	1	6	1	4	0	3	0	4		1	0	
Z05	161	n-161-38	44	1	45	63	50	1031	149	4789	887	31	508	1	26	6	4		0	32	14	33	0		0	16	82	15	64	12	2	7	1	3	1	1	0	1	0	2		1	0	
Z05	161	n-161-41	63	1	76	98	50	1129	144	5607	1153	49	541		45	6	5			19	15	38	0			13	54	7	22	4	1	3	0	3	1	1	0	2	0	2	0	1		0
Z05	161	n-161-42	57		81		44	440	83	4496	891	44	609		43	10	5			32	23	56	0		1	17	75	13	58	12	2	8	1	4	1	2	0	1	0	3	0	1		0
Z05	161	n-161-45	41	1	75		46	712	138	5219	1075	46	484		47	5	3			19	13	29	0			12	48	6	19	3	1	3	0	3	0	1	0	1	0	2	0	2	0	
Z05	161	n-161-46	57	1	38		47	616	140	5567	1131	47	489		48	5	2			20	13	21	0			11	50	6	21	3	1	3	0	3	0	1	0	1	0	1	0	2		0
Z05	161	n-161-49	48	2	78		21	483	65	7356	2635	34	498		60	7	6			8	193	36	1			13	61	12	66	26	1	29	5	34	6	17	2	16	2	2	1	1	0	0
Z05	161	n-161-50	47	2	89	4	48	850	137	5732	1120	49	502	1	62	5	3			18	13	30	0		0	15	51	6	20	3	1	3	0	2	1	1	0	2	0	2	0	2	0	0
Z05	161	n-161-58	45	1	70		48	519	124	4599	1070	44	442		38	4	3			17	12	24	0			9	40	5	17	3	1	2	0	2	0	1	0	1	0	1	0	2	0	0
Z05	161	n-161-59	44	1	75		29	646	88	7411	1267	38	780	1	59	6	4	0		13	75	74	0			30	142	27	128	28	2	22	3	16	3	7	1	4	1	3	0	2	0	0
Z05	161	n-161-67	82	1	99		64	1601	158	5803	825	40	779		34	8	2			37	28	159	0			9	39	8	38	8	1	7	1	6	1	3	0	2	0	6	0	1	0	0
Z05	161	n-161-70	41	1	76	6	63	1069	188	3878	910	39	471	0	26	5	2			31	8	18	0		0	5	17	3	13	3	1	2	0	2	0	1	0	1	0	1		1	0	
Z05	161	n-161-72	24	1	97		50	960	139	3454	1322	35	232		53	4	3			77	6	13	0			7	20	3	9	1	1	1	0	1	0	1	0	1	0	0		1	0	0
Z05	161	n-161-78	69	2	94		39	552	88	5485	692	30	677		20	5	3	0		7	28	35	0	0		15	63	10	43	9	1	7	1	6	1	2	0	2	0	2	0	1	1	0
Z08	258	n-258-15	22		30		26	92	38	2280	446	22	355		14	4	1	0		7	16	28	0			6	29	4	19	4	1	3	0	3	1	2	0	1	0	1		0	0	0
Z08	258	n-258-32	2	1	64		4	697	34	20	2760	9	18		51	7	2	0		14	8	39	1	0		7	21	3	10	2	0	2	0	1	0	1	0	1	0	1	0	1	1	0
Z08	258	n-258-44	40	1	48		45	1409	137	7905	906	38	904	1	43	9	3			34	51	52				3	41	9	49	13	2	12	2	10	2	5	1	4	1	3		1	0	
Z08	258	n-258-45	27		66		61	588	116	9406	599	26	526	1	10	3	2			230	9	98	0			41	108	13	46	6	2	3	0	2	0	1	0	1	0	2		3	1	0
Z08	258	n-258-46	38	1	37	6	22	178	46	6163	1448	36	860	2	40	5	4	1	0	8	48	30	0	0	1	8	42	8	42	11	1	10	1	8	2	4	1	4	1	2		1	0	0
Z08	258	n-258-47	33		40		57	951	169	4117	869	34	385	0	21	5	2			19	12	56	0	0		4	14	2	8	2	0	2	0	2	0	1	0	2	0	2		1		
Z08	258	n-258-48	37		44	65	162	282	692	3735	1159	40	270	3	41	6	4		0	12	19	28	0		7	7	31	5	23	5	1	4	1	4	1	2	0	2	0	2	0	1	0	0
Z08	258	n-258-49	30	1	45		12	226	63	4480	1672	28	713		67	4	5			3	53	27	0			10	30	4	16	5	1	6	1	8	2	5	1	6	1	1	0	1	0	0
Z08	258	n-258-50	78		43		62	1062	220	6239	764	27	350	1	17	5	2			22	10	29				4	11	2	8	2	1	2	0	2	0	1	0	1	0	1		1	0	0
Z08	258	n-258-51	18		53		85	136	133	3333	1190	39	247		22	3	2			45	5	11	0			8	21	3	10	1	0	1	0	1	0	0	0	0	0	0		2	0	0
Z08	258	n-258-52	53		73		82	2179	195	7252	857	32	507		19	7	3			26	28	78	0			11	45	7	34	7	1	6	1	6	1	3	0	2	0	3		1	1	
Z08	258	n-258-53	21		78		31	106	100	5673	1540	52	409		62	3	2			32	3	16	0	0		4	12	2	6	1	0	0	0	0	0	0	0	0	0	1		1	0	0

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
Z08	258	n-258-54	48	1	94		22	526	87	6845	2101	43	599		34	4	4			16	10	36	0	0	1	12	28	3	11	2	0	2	0	2	0	1	0	1	0	1		1	1	0
Z08	258	n-258-55	29	1	59		50	407	145	4833	799	29	353	3	14	2	3			52	8	13				4	7	1	3	1	0	1	0	2	0	1	0	1	0	0		1	0	0
Z08	258	n-258-56	22	1	65		25	138	85	2852	1619	48	429		94	7	4			24	6	9				1	2	0	2	1	0	1	0	1	0	1	0	1	0	0		1		
Z08	258	n-258-57	56		82		51	1318	147	9113	713	39	698		23	8	2			30	31	86				4	57	14	69	14	1	9	1	6	1	3	0	2	0	4		1		
Z08	258	n-258-58	38	4	77		3	381	135	7694	1499	37	444		74	12	4			4	29	34	1			23	84	11	39	7	1	5	1	5	1	3	0	3	0	1	0	1	0	0
Z08	258	n-258-61	31	1	53		33	1144	138	9666	1083	48	395		87	5	4	1		41	6	17	0	0		2	6	1	5	1	0	1	0	1	0	1	0	1	0	0		1	0	
Z08	258	n-258-62	20	1	51	8	22	44	61	3214	1534	35	383		49	4	5	0		23	11	19	0	0		18	57	8	27	4	1	2	0	2	0	1	0	1	0	1	0	3	0	0
Z08	258	n-258-63	26	0	69		61	757	147	12949	548	23	433	1	15	6	3	0		134	15	263	0			50	140	19	76	12	3	7	1	4	1	2	0	1	0	9	0	3	2	0
Z08	258	n-258-64	44		15		110	693	240	5869	881	31	410		20	5	1			5	41	31	0		2	11	44	8	33	7	1	7	1	8	2	5	1	4	0	3	0	1	0	0
Z08	258	n-258-65	94		39		71	731	213	6934	665	27	338		16	5	1			21	14	62	0	0		8	21	3	11	3	1	3	0	3	0	2	0	2	0	2		1	0	0
Z08	258	n-258-66	62	3	43		32	517	39	5798	1651	36	789		90	6	4			17	71	48	0	0		16	111	23	111	26	2	19	3	15	3	6	1	5	1	1	0	1	0	0
Z08	258	n-258-67	37		33		37	504	75	3553	1219	40	780		52	6	4		0	17	49	22	0		0	17	85	16	75	16	1	12	2	10	2	5	1	4	1	1		1	0	0
Z08	258	n-258-68	28	2	45		29	958	78	5396	1379	34	673		46	8	3			18	70	46	0			19	79	14	67	18	2	16	2	14	2	7	1	6	1	2	0	1	0	0
Z09	239	n-239-10	36	0	70		69	910	205	4257	1206	41	423	1	26	7	4			13	19	72	0			9	29	4	16	3	1	3	1	3	1	2	0	2	0	2	0	1	1	0
Z09	239	n-239-11	12		103		80	646	168	5058	1019	34	456	0	25	7	3	1		168	17	91	0		0	16	47	7	26	4	1	3	0	3	1	2	0	2	0	3		1	0	0
Z09	239	n-239-14	42	1	87		77	1014	188	4002	1059	37	394		26	8	3	0		11	32	104	0			14	60	9	40	8	2	6	1	6	1	3	0	3	0	4	0	0	0	0
Z09	239	n-239-15	36	1	78		78	1210	249	4685	1515	45	550		73	10	5	1	0	9	135	41	0			6	54	14	79	25	1	26	4	26	5	13	2	11	1	2	0	1		
Z09	239	n-239-16	46	1	73		54	1533	171	7456	1167	38	489		29	6	3			14	20	40	0			14	41	6	27	6	1	5	1	4	1	2	0	1	0	1	0	1	1	0
Z09	239	n-239-18	11		76		64	1339	214	7856	1248	44	399	1	27	5	3			6	7	4				0	1	0	1	1	0	1	0	1	0	1	0	1	0	0				
Z09	239	n-239-19	36		72		70	437	142	6010	882	36	440	1	19	4	2			43	5	18	0		0	4	11	2	5	1	0	1	0	1	0	1	0	1	0	1		1		
Z09	239	n-239-19	37	0	76		71	446	153	6306	952	38	456		22	4	2			45	6	19			0	4	13	2	6	1	0	1	0	1	0	1	0	0	0	1		1		
Z09	239	n-239-20	19	1	75		51	853	152	3540	1325	53	568		36	6	3			36	15	44	0			8	21	3	11	3	1	3	0	3	1	1	0	1	0	1		2	1	0
Z09	239	n-239-21	31		74	102	14	555	113	4050	875	40	1299	2	23	5	3		0	15	7	17	0		3	9	24	3	8	2	0	1	0	1	0	1	0	1	0	0	0	2	0	0
Z09	239	n-239-22	31	2	71		58	617	148	6291	1157	31	509		54	9	4	1		8	132	59	0			22	122	24	117	30	2	27	4	27	5	13	2	10	1	3	0	1		
Z09	239	n-239-23	30	1	55		61	188	136	6199	711	27	316		22	3	3	0		10	65	34	0			15	80	15	67	17	1	14	2	14	2	6	1	4	1	1		1	0	0
Z09	239	n-239-24	88	1	82		100	2078	221	7115	898	38	705	1	23	5	4			11	37	71	0			11	62	11	52	10	1	8	1	7	1	3	0	3	0	3		1	0	
Z09	239	n-239-25	30		82		70	905	162	4697	923	35	556		25	7	3			37	18	106	0			9	34	5	23	4	1	3	1	3	1	2	0	2	0	3		0	0	0
Z09	239	n-239-26	38	1	70		88	339	178	7639	887	31	450	1	17	4	2			5	20	61	0		0	21	100	15	54	7	2	4	1	4	1	2	0	2	0	2		1	0	0
Z09	239	n-239-30	28		84		78	2270	242	5766	962	37	596		26	7	3			27	26	125	0			14	56	9	36	6	1	5	1	5	1	3	0	2	0	4	0	1	0	0
Z09	239	n-239-32	51		73		73	934	194	9713	734	29	466		12	4	2			14	13	41	0			11	28	3	10	2	1	2	0	2	1	1	0	1	0	1	0	1	0	0
Z09	239	n-239-46	55	1	95	11	99	727	159	5292	798	32	606	7	16	4	2	0		9	18	36	0		1	14	35	4	16	3	1	3	0	3	1	2	0	2	0	2		2	0	0
Z09	239	n-239-47	35	2	103	51	79	265	183	6493	916	35	594	16	31	4	4	1	0	10	112	37	0	0	1	15	104	23	112	28	2	24	4	22	4	10	1	7	1	2	0	2		0
Z09	239	n-239-49	42		82		77	744	211	6701	955	35	468		16	5	3			8	13	30	0			17	50	5	16	2	1	2	0	2	0	1	0	1	0	1	0	1	0	0
Z09	239	n-239-50	31	1	79	48	59	2057	169	7762	988	32	727	1	33	8	3	1	0	29	40	66	0		1	12	45	7	35	8	1	8	1	8	2	4	1	3	0	2	0	1	1	0
Z09	239	n-239-51	45		100	3	83	438	174	8842	863	33	435		15	4	2			7	21	67	0			15	42	5	18	3	1	4	1	4	1	2	0	2	0	2		1	0	4
Z09	239	n-239-52	33	2	81		63	769	143	9552	892	31	575		21	4	3	1		13	50	56	0			24	111	19	86	17	2	13	2	11	2	4	1	3	0	2	0	1	1	0
Z09	239	n-239-53	32	1	65	42	81	174	177	6184	856	33	529	12	30	4	4	1		9	96	33	0		11	12	86	19	96	25	2	21	3	19	3	9	1	6	1	2		2		0
Z09	239	n-239-55	40	1	73		73	328	151	7428	899	30	428		26	6	3	0		6	77	43	0			30	111	17	75	19	1	17	2	16	3	8	1	5	1	2	0	1	0	0
Z09	239	n-239-56	41	2	89	5	39	1207	62	9154	692	31	919		21	10	3			4	79	51	0		0	14	77	15	74	20	1	18	3	16	3	8	1	6	1	3	0	1		0
Z09	239	n-239-57	46		81		64	174	96	5396	1110	46	540		32	6	4	1	0	20	71	48				42	153	24	100	23	3	21	3	16	3	6	1	4	0	2		2	0	0
Z09	239	n-239-58	20		87		69	694	226	5806	1087	40	436	1	21	5	4			25	23	60	0			12	37	5	20	4	1	4	1	5	1	2	0	2	0	2		1	0	0
Z09	239	n-239-61	34	1	82		49	253	126	7845	972	37	807		28	6	3			6	43	36	0			12	53	9	41	10	1	9	1	8	2	4	1	3	0	2		1	0	0
Z09	239	n-239-62	67	1	77	14	69	1471	187	8361	904	32	381	2	19	5	2			8	35	61	0		1	24	94	14	58	11	1	8	1	7	1	3	0	2	0	3	0	1	0	0
Z09	239	n-239-63	44	1	94		69	348	146	8758	881	32	457		25	5	3	1		4	82	45	0			22	110	20	95	22	2	20	3	16	3	7	1	5	1	2	0	1		0
Z09	239	n-239-64	52	1	94	6	78	959	225	8313	1050	40	696	10	27	9	4			15	70	64	0			20	102	19	88	20	2	18	3	14	3	7	1	5	1	3	0	1	0	0
Z09	239	n-239-65	90	2	74		121	1184	200	10193	722	30	499		16	4	2	1		14	39	70	0			6	43	10	48	11	1	9	1	7	1	3	1	3	0	3		1	0	

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	Li	Be	P	K	Sc	Ti	V	Cr	Mn	Co	Ni	Zn	Cu	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
Z09	239	n-239-69	26	1	80	54	68	1945	141	8341	787	46	1176	11	46	8	2		0	16	47	23			2	9	40	9	44	12	1	11	2	10	2	5	1	3	0	1		2	2	
Z09	239	n-239-70	45		82		61	861	161	7539	949	30	363		23	7	2			14	23	108	0	0		10	36	5	23	5	1	4	1	4	1	2	0	3	0	3		1	0	0
Z09	239	n-239-71	40	1	87		62	1020	151	9782	817	30	561		25	4	4	1		8	109	41	0			19	112	29	171	50	2	40	5	26	4	10	1	6	1	3	0	1	1	
Z09	239	n-239-72	32	1	80		80	239	187	6738	822	31	461		25	4	3	1		9	108	29	0			10	73	17	90	25	2	23	3	21	4	9	1	7	1	2	0	2	0	
Z09	239	n-239-73	41		79		65	1153	158	7385	689	28	420		11	3	2			37	9	42	0			11	30	3	9	1	0	2	0	2	0	1	0	1	0	1		1	0	0
Z09	239	n-239-74	28	1	89		71	1224	165	4581	895	33	551	1	19	6	3			30	22	132	0			15	52	7	29	5	1	4	1	4	1	2	0	2	0	4		1	0	0
Z09	239	n-239-75	37		92	6	81	387	182	5525	1071	35	454	1	33	5	3			11	22	26	0		0	11	37	5	19	4	1	3	1	4	1	2	0	3	0	2		1	0	
Z09	239	n-239-76	7		94	149	39	599	106	5905	915	24	434		16	4	4	0	0	418	11	32	0		2	13	31	4	16	3	1	2	0	2	1	1	0	1	0	1	0	2	1	0
Z09	239	n-239-77	39		112	30	36	92	49	7944	838	42	1039	0	27	6	5	1		70	92	20	0			10	45	9	55	18	2	20	3	19	3	8	1	6	1	1		1	0	0
Z09	239	n-239-78	40	1	77	7	63	579	145	8725	768	29	569		37	3	2	1		17	74	26	0		0	11	56	12	63	19	1	18	3	16	3	7	1	5	1	1		1		
Z09	239	n-239-79	46	1	75	133	56	1094	158	6711	1020	30	416	5	19	5	2	1	0	73	13	63	0		72	17	48	6	21	3	1	3	0	3	1	1	0	1	0	2	0	12	1	0
Z09	239	n-239-80	33	1	79		77	769	238	36105	5969	44	426		31	6	3			11	36	81	0			20	62	8	35	8	1	8	1	8	2	4	1	3	0	3	0	1	0	0
Z09	239	n-239-81	45		78		81	1025	158	5644	942	36	422	1	20	4	3			36	13	35	0			5	18	3	10	3	1	2	0	2	1	1	0	1	0	1	0	0		
Z09	239	n-239-82	39	3	78		49	605	71	6708	1433	36	802	1	39	10	4	1		7	203	65	0	0		27	148	28	130	37	1	36	6	39	8	20	2	15	2	4	0	2	0	0
Z09	239	n-239-83	38		84		49	482	109	4264	849	35	481		20	5	2	1		43	6	40	0		1	7	17	2	8	1	0	1	0	1	0	1	0	1	0	1		2	1	0
Z09	239	n-239-84	50	2	67		85	517	154	5750	958	35	558		26	6	4	1		5	111	31	0	0		6	46	12	71	22	2	21	3	21	4	10	1	7	1	2		1		
Z10	26	n-26-01	44	1	58		61	309	124	4306	1441	35	342	81		5	4	1		36	24	24	0	0		20	59	9	38	8	1	6	1	5	1	2	0	2	0	1		1	0	0
Z10	26	n-26-03	47	1	54	274	34	279	76	4031	761	23	191	25		2	2		0	116	6	6	0	0	1	4	16	3	15	4	1	3	0	2	0	1	0	0	0	0		1		0
Z10	26	n-26-04	125	1	46		51	539	101	7838	832	35	712	35		6	4			24	45	31	0			21	98	17	72	15	2	11	2	9	2	4	1	3	0	2	0	1	0	0
Z10	26	n-26-04	124	2	16		52	551	104	8259	900	37	756	40		6	3			23	46	30	0			21	96	17	74	16	2	11	2	9	2	4	1	3	0	2		1	0	0
Z10	26	n-26-04	26		45		58	809	127	4386	887	36	237	17		3	3			29	6	12	0		0	2	6	1	5	1	0	1	0	1	0	1	0	1	0	0		1	0	0
Z10	26	n-26-05	72	2	47		45	248	81	2288	1303	30	112	37		3	4			55	4	6	0	0		2	5	1	4	1	0	1	0	1	0	0	0	0	0	0	0	2	0	0
Z10	26	n-26-06	43	1	44	120	50	172	98	2104	1488	27	166	45		5	3	0	1	42	8	13			0	6	21	3	16	3	1	2	0	2	0	1	0	1	0	1		2	0	0
Z10	26	n-26-07	27	0	50	7	78	443	87	2372	1025	31	95	40		2	3	0	0	424	5	16	0	0	0	12	30	4	18	3	1	2	0	1	0	0	0	0	0	1		1	0	0
Z10	26	n-26-08	93	4	59		90	607	168	5109	1021	38	480	38		9	4	1		4	229	54	0	0		29	130	26	139	51	1	52	8	50	9	21	3	15	2	3	0	2	3	1
Z11	262	n-262-03	15		50	25	66	1028	121	9516	656	22	266	1	13	4	2			91	5	19	0			2	8	2	10	3	1	2	0	1	0	1	0	0	0	1	0		0		

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
A02	168	n-168-13	52.73	0.10	1.38	0.83	3.45	0.12	17.44	22.38	0.29	0.01
A08	119	n-119-01	52.58	0.19	2.77	1.03	6.14	0.14	20.77	15.51	0.17	0.02
A08	119	n-119-02	53.75	0.13	0.82	0.73	3.23	0.09	17.61	22.79	0.38	0.03
A08	119	n-119-03	52.46	0.10	2.56	0.62	4.28	0.08	15.79	22.75	0.73	0.01
A08	119	n-119-04	53.46	0.15	0.77	0.78	3.26	0.08	17.43	23.12	0.26	0.02
B05	240	n-240-04	52.49	0.27	1.96	1.06	4.14	0.14	15.27	22.50	0.99	0.00
B05	240	n-240-05	53.48	0.06	1.60	0.46	3.60	0.15	15.87	23.09	0.83	0.00
B05	240	n-240-06	54.02	0.10	0.67	0.65	3.50	0.08	18.76	21.09	0.35	
B06	153	n-153-01	52.91	0.16	1.13	1.00	3.56	0.10	17.27	22.59	0.31	0.01
B06	153	n-153-02	52.94	0.16	1.24	0.94	3.84	0.10	17.26	22.35	0.35	0.02
B06	153	n-153-03	53.09	0.20	1.62	0.62	2.32	0.07	16.66	23.69	0.64	0.03
B07	233	n-233-01	52.69	0.16	2.60	0.91	2.96	0.09	15.61	23.27	0.79	0.01
C04	6	n-6-01	53.20	0.08	2.05	0.34	4.41	0.14	15.98	22.80	0.79	0.00
C04	6	n-6-02	52.85	0.25	1.76	0.85	4.29	0.10	18.29	20.70	0.46	0.01
C04	6	n-6-03	52.69	0.15	2.28	0.67	4.97	0.21	15.33	22.05	1.10	0.01
C04	6	n-6-04	53.74	0.02	0.82	0.24	4.39	0.17	16.15	23.22	0.49	0.00
C04	6	n-6-05	53.79	0.23	0.86	0.69	3.69	0.10	17.18	23.02	0.21	0.01
C04	6	n-6-06	53.42	0.24	0.96	0.80	3.48	0.13	17.24	23.37	0.28	
C04	6	n-6-07	53.32	0.20	1.11	0.78	3.79	0.12	17.54	22.46	0.24	0.02
C07	145	n-145-01	52.62	0.17	1.42	0.70	3.27	0.07	17.21	23.48	0.24	0.01
C07	145	n-145-02	52.66	0.09	2.06	0.96	4.61	0.14	15.25	22.08	0.97	0.01
C07	145	n-145-03	53.49	0.16	0.85	0.83	3.64	0.12	17.49	22.18	0.29	0.02
C07	145	n-145-04	51.91	0.08	3.02	0.59	4.79	0.14	14.83	22.84	0.85	
C07	145	n-145-05	52.86	0.10	2.24	0.69	3.81	0.14	15.51	22.94	0.83	0.00
C07	145	n-145-06	53.08	0.19	1.19	0.54	3.93	0.12	16.93	23.20	0.25	
C07	145	n-145-07	53.31	0.06	1.18	0.45	4.02	0.13	16.22	23.22	0.63	0.00
C07	145	n-145-08	53.96	0.11	0.75	0.78	2.61	0.10	17.78	23.22	0.26	0.01
C07	145	n-145-09	53.27	0.13	0.85	0.78	3.66	0.13	17.59	22.45	0.26	0.01
C07	145	n-145-10	53.56	0.03	0.93	0.15	4.10	0.12	15.95	23.74	0.66	0.01
C08	136	n-136-01	51.48	0.23	2.92	1.19	4.97	0.06	17.52	20.62	0.23	0.01
C08	136	n-136-02	53.46	0.14	0.87	0.57	3.49	0.12	17.63	22.34	0.37	0.01
C08	136	n-136-03	51.52	0.24	3.31	1.37	5.87	0.19	18.44	18.39	0.25	0.01
C08	136	n-136-04	52.74	0.16	1.36	0.79	4.65	0.11	17.52	21.17	0.37	
C08	136	n-136-05	53.39	0.15	0.83	0.85	3.89	0.13	17.92	21.75	0.28	0.01
C08	136	n-136-06	53.13	0.23	1.07	0.59	4.05	0.15	17.13	22.78	0.27	0.02
C12	166	n-166-01	52.58	0.21	2.05	0.68	3.76	0.08	16.40	23.09	0.46	0.00
D02	143	n-143-01	52.84	0.11	1.37	0.74	4.12	0.17	15.94	23.24	0.46	0.01
D02	143	n-143-02	52.70	0.16	1.56	0.88	3.34	0.09	17.49	22.55	0.33	
D03	149	n-149-01	51.61	0.22	2.75	1.23	4.71	0.15	17.52	20.74	0.25	0.01
D03	149	n-149-02	51.44	0.32	3.74	1.14	3.59	0.09	14.77	22.89	0.85	0.02
D03	149	n-149-03	51.79	0.20	2.69	1.08	6.06	0.16	19.74	17.21	0.33	0.01
D04	9	n-9-01	51.47	0.21	3.58	1.31	5.06	0.16	18.17	19.03	0.34	
D04	9	n-9-02	50.89	0.18	2.01	1.07	2.91	0.04	16.80	21.62	0.29	0.01
D04	9	n-9-03	53.22	0.07	1.36	0.63	3.45	0.07	16.23	23.57	0.55	0.01
D04	9	n-9-04	53.17	0.19	1.16	0.68	4.20	0.12	17.67	21.80	0.37	0.01
D04	9	n-9-05	53.46	0.15	0.70	0.75	3.27	0.14	17.69	23.04	0.25	

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
D04	9	n-9-06	51.96	0.26	2.84	1.46	4.23	0.11	18.52	19.24	0.57	
D04	9	n-9-07	53.45	0.03	0.98	0.39	3.05	0.10	16.73	24.15	0.44	0.00
D05	106	n-106-03	53.57	0.04	1.62	0.72	4.48	0.13	15.95	22.77	0.81	0.02
D05	106	n-106-04	52.95	0.23	3.80	0.83	2.68	0.05	15.58	22.18	1.51	0.01
D06	3	n-3-03	53.22	0.09	2.23	0.95	3.25	0.09	16.70	22.08	0.83	
D06	3	n-3-04	53.89	0.06	1.43	0.57	4.33	0.13	15.06	23.53	1.02	0.02
D07	14	n-14-02	51.66	0.19	2.82	1.09	5.19	0.15	18.04	19.31	0.32	0.01
D07	14	n-14-03	52.10	0.24	3.09	1.13	5.55	0.16	19.07	17.94	0.30	
D07	14	n-14-04	51.78	0.19	2.32	1.06	4.70	0.13	17.97	20.82	0.21	0.02
D07	14	n-14-05	53.48	0.17	0.65	0.14	4.18	0.16	17.50	23.05	0.18	
D07	14	n-14-06	53.72	0.04	0.90	0.39	3.83	0.13	16.59	23.59	0.61	
D07	14	n-14-07	53.65	0.15	0.81	0.25	3.73	0.11	17.81	23.04	0.26	0.01
D07	14	n-14-07	53.65	0.15	0.81	0.25	3.73	0.11	17.81	23.04	0.26	0.01
D08	230	n-230-02	52.76	0.21	2.09	0.71	3.46	0.10	15.78	23.16	0.83	0.02
D08	230	n-230-03	51.96	0.18	2.83	0.75	4.46	0.11	14.96	23.04	0.79	0.01
D10	127	n-127-01	52.62	0.09	1.95	1.43	2.67	0.05	18.50	21.35	0.25	0.01
E06	12	n-12-01	53.66	0.13	0.79	0.73	3.10	0.08	17.75	22.76	0.24	0.02
E06	12	n-12-02	52.85	0.05	2.42	0.62	4.49	0.10	15.78	22.45	0.75	
E06	12	n-12-03	53.34	0.19	0.79	0.71	3.74	0.12	17.47	22.89	0.24	0.02
E06	12	n-12-04	53.43	0.13	0.98	0.47	2.60	0.09	17.50	24.00	0.20	
E06	12	n-12-05	53.11	0.24	1.16	0.77	4.29	0.09	17.09	22.18	0.31	0.01
E06	12	n-12-06	53.10	0.17	1.15	0.68	3.05	0.06	17.19	23.76	0.25	0.02
E06	12	n-12-07	53.63	0.08	1.31	0.89	3.56	0.08	18.57	21.34	0.26	0.01
E06	12	n-12-08	53.84	0.07	1.11	0.63	3.78	0.13	16.30	23.51	0.62	0.00
E06	12	n-12-09	53.67	0.13	0.73	0.69	3.25	0.12	17.44	22.91	0.26	0.01
E06	12	n-12-10	53.22	0.17	0.98	0.94	3.54	0.10	17.15	22.80	0.33	0.00
E07	195	n-195-05	50.66	0.35	6.60	0.72	3.13	0.09	15.76	20.22	1.15	0.04
F02	185	n-185-04	52.82	0.16	1.89	0.56	4.19	0.13	15.71	23.06	0.82	0.00
F02	185	n-185-05	51.16	0.23	4.27	1.12	6.80	0.16	20.20	15.22	0.30	0.01
F03	198	n-198-04	52.97	0.15	1.83	1.13	3.43	0.10	18.13	21.11	0.43	0.01
F05	142	n-142-01	53.23	0.22	1.97	1.19	3.79	0.04	17.06	20.90	0.87	0.00
F05	142	n-142-02	53.70	0.09	1.31	0.54	3.19	0.11	16.38	23.59	0.64	0.01
F08A	269	n-269-04	53.43	0.07	1.46	0.61	3.35	0.07	16.13	23.36	0.72	0.01
G02	125	n-125-01	53.56	0.04	0.79	0.27	5.16	0.18	15.09	23.93	0.62	0.00
G02	125	n-125-02	53.25	0.05	1.46	0.61	4.68	0.11	15.95	22.76	0.56	0.02
G02	125	n-125-03	52.82	0.21	1.41	0.64	4.55	0.15	17.69	21.32	0.35	0.00
G02	125	n-125-04	52.91	0.09	1.69	1.15	4.69	0.13	15.04	23.07	0.87	0.01
G04	163	n-163-01	53.27	0.15	0.75	0.53	2.77	0.11	17.23	23.95	0.17	0.03
G04	163	n-163-03	53.18	0.10	1.73	0.43	3.90	0.10	15.79	23.33	0.69	0.00
G04	163	n-163-04	52.81	0.11	2.11	0.47	4.58	0.15	15.30	22.83	0.77	0.01
G09	232	n-232-07	52.48	0.26	2.68	0.76	3.41	0.11	15.55	22.91	0.70	0.02
G09	232	n-232-11	53.05	0.11	1.84	0.56	4.04	0.15	15.58	23.24	0.73	0.01
G10	22	n-22-01	52.64	0.11	2.12	0.95	4.72	0.15	18.97	19.24	0.31	0.01
G10	22	n-22-02	53.41	0.11	1.17	0.83	2.91	0.07	18.09	22.47	0.27	0.01
H09	271	n-271-02	49.01	0.43	8.31	0.87	5.76	0.07	18.05	12.56	1.47	0.63
I05	217	n-217-01	53.17	0.12	1.77	0.72	4.38	0.11	15.70	22.95	0.64	

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
I06	13	n-13-01	53.44	0.21	0.89	0.73	4.10	0.12	17.24	22.61	0.27	0.02
I06	13	n-13-06	53.52	0.18	1.80	1.44	3.17	0.13	15.68	22.59	1.18	0.02
I07	86	n-86-10	52.38	0.16	2.74	0.88	4.22	0.14	15.08	22.85	0.89	
I07	86	n-86-11	52.60	0.11	2.31	0.94	3.97	0.10	15.32	22.80	0.86	0.01
I08	73	n-73-10	51.97	0.20	2.61	0.98	3.86	0.10	16.90	22.49	0.24	0.02
I08	73	n-73-11	52.79	0.13	2.15	0.93	3.61	0.11	17.14	22.70	0.32	
I08	73	n-73-12	53.54	0.15	0.66	0.66	3.26	0.09	17.89	22.78	0.25	0.01
I08	73	n-73-13	53.66	0.14	0.84	0.42	3.69	0.14	17.99	22.50	0.29	
I08	73	n-73-14	53.43	0.12	2.01	1.11	4.19	0.05	16.34	22.01	0.77	0.00
I08	73	n-73-15	54.04	0.11	0.70	0.47	4.55	0.22	18.07	21.56	0.23	0.01
I08	73	n-73-16	53.27	0.20	0.84	0.61	4.40	0.11	17.37	22.59	0.22	0.01
I08	73	n-73-17	53.27	0.11	2.11	0.90	4.66	0.12	20.13	18.92	0.28	
I08	73	n-73-18	52.97	0.22	1.12	0.90	3.52	0.10	17.14	23.51	0.33	0.01
I08	73	n-73-19	53.99	0.05	0.89	0.49	4.44	0.18	15.76	23.86	0.61	0.02
I10	155	n-155-03	53.14	0.10	1.13	0.88	3.25	0.07	17.30	22.94	0.30	0.01
I10	155	n-155-04	53.42	0.18	1.80	1.37	3.24	0.07	15.35	22.61	1.19	
I10	155	n-155-07	52.45	0.15	2.46	0.66	3.79	0.14	15.59	22.95	0.81	0.01
J05	226	n-226-01	52.94	0.11	2.13	1.73	3.00	0.05	15.87	22.18	1.41	0.02
J05	226	n-226-03	54.00	0.04	0.83	0.60	4.43	0.16	15.14	23.76	0.90	0.01
J07	204	n-204-10	53.35	0.04	2.34	0.95	2.61	0.08	18.38	21.99	0.26	
J07	204	n-204-13	52.75	0.14	2.07	0.90	4.67	0.14	18.64	19.84	0.30	
J10	20	n-20-01	53.49	0.14	0.61	0.77	3.07	0.11	17.74	23.54	0.26	0.01
J10	20	n-20-02	52.75	0.24	0.98	0.81	3.94	0.12	17.15	22.81	0.28	0.00
J10	20	n-20-03	53.33	0.10	0.97	0.47	6.57	0.17	17.79	19.42	0.46	0.01
J10	20	n-20-04	52.66	0.21	0.93	0.60	4.01	0.13	17.06	23.10	0.27	0.01
K06	261	n-261-28	54.16	0.10	0.78	0.86	3.03	0.09	17.82	22.20	0.51	0.01
K06	261	n-261-32	53.26	0.13	1.66	0.99	3.60	0.08	16.74	21.98	0.79	
L05W	4	n-4-01	53.25	0.09	1.08	0.40	4.36	0.11	16.79	22.53	0.66	0.02
L06WA	218	n-218-09	51.79	0.21	2.50	1.69	3.19	0.09	15.70	22.95	0.94	
L06WA	218	n-218-10	52.62	0.17	2.80	0.94	3.78	0.16	17.84	21.00	0.32	0.01
L06WB	184	n-184-01	54.10	0.05	1.55	1.21	3.07	0.08	16.70	22.43	0.84	0.00
M05	29	n-29-01	53.91	0.21	0.70	0.70	3.73	0.11	17.28	23.12	0.26	
M05	29	n-29-02	53.49	0.03	0.72	0.21	5.23	0.26	14.96	23.87	0.66	0.01
M05	29	n-29-03	52.15	0.16	3.13	1.20	4.77	0.11	18.08	19.53	0.36	0.01
M05	29	n-29-05	53.05	0.10	1.52	0.67	3.68	0.11	18.19	21.63	0.26	
M05	29	n-29-06	53.34	0.10	1.04	0.43	5.24	0.22	15.41	22.88	0.71	0.00
M05	29	n-29-07	53.22	0.02	1.39	0.49	4.60	0.14	15.04	23.64	0.76	0.01
M05	29	n-29-09	53.79	0.02	0.97	0.13	4.78	0.19	15.17	24.16	0.67	
M05	29	n-29-10	52.75	0.12	1.90	0.96	3.87	0.07	18.58	20.68	0.23	0.03
M05	29	n-29-11	52.21	0.11	2.33	1.08	3.33	0.13	16.39	23.12	0.49	0.01
M05	29	n-29-12	53.96	0.02	0.66	0.25	4.37	0.14	15.44	24.13	0.58	
M05	29	n-29-13	53.77	0.03	1.15	0.25	4.24	0.17	15.43	23.59	0.83	
N05	138	n-138-01	52.46	0.16	1.79	0.68	3.18	0.11	17.06	23.32	0.26	0.02
N06	202	n-202-07	53.12	0.05	2.21	1.57	2.49	0.11	18.73	21.29	0.30	0.00
N06	202	n-202-08	52.65	0.11	5.35	1.20	2.30	0.08	16.02	20.93	1.28	
N06	202	n-202-09	53.47	0.14	1.73	0.86	3.59	0.12	15.64	23.98	0.57	0.01

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
N07	16	n-16-01	53.31	0.02	1.34	0.43	5.09	0.19	14.47	23.07	1.11	
N07	16	n-16-02	54.05	0.05	1.04	0.56	4.03	0.18	15.48	23.70	0.88	0.01
N09	32	n-32-01	52.73	0.15	2.23	0.88	3.77	0.10	17.38	21.87	0.33	0.01
O04	8	n-8-03	52.12	0.11	3.00	1.00	4.72	0.11	15.86	21.58	0.81	0.01
O05	272	n-272-10	53.53	0.20	1.61	1.02	3.12	0.07	17.55	22.39	0.53	
O06	207	n-207-03	52.30	0.18	2.85	0.99	4.25	0.09	17.00	21.43	0.47	0.02
O10	162	n-162-01	52.94	0.01	1.25	1.25	3.65	0.07	16.01	22.62	0.82	0.01
O10	162	n-162-02	52.44	0.17	2.10	1.07	3.79	0.10	15.33	22.99	0.86	0.01
P04	28	n-28-01	53.22	0.08	1.74	0.56	5.21	0.15	16.17	22.12	0.68	
P07	48	n-48-01	53.13	0.08	0.88	0.32	4.25	0.22	15.26	24.16	0.64	0.01
P07	48	n-48-04	53.22	0.03	2.70	1.20	1.44	0.07	16.12	22.96	1.13	0.00
P09	154	n-154-01	51.72	0.15	2.70	1.09	3.17	0.11	16.23	23.28	0.50	0.01
P09	154	n-154-02	52.51	0.14	2.34	0.89	3.39	0.14	16.57	23.28	0.33	0.00
P09	154	n-154-03	52.62	0.12	1.74	0.93	3.12	0.09	17.02	23.23	0.26	0.01
P09	154	n-154-04	52.97	0.12	2.10	1.02	3.80	0.12	18.25	20.74	0.30	0.00
P11	123	n-123-01	52.21	0.17	1.84	1.02	5.10	0.15	18.26	19.91	0.19	0.01
P11	123	n-123-01	52.21	0.17	1.84	1.02	5.10	0.15	18.26	19.91	0.19	0.01
P11	123	n-123-22	52.73	0.09	1.49	0.78	3.69	0.14	17.35	22.82	0.25	
P11	123	n-123-22	52.73	0.09	1.49	0.78	3.69	0.14	17.35	22.82	0.25	
P11	123	n-123-23	52.79	0.19	2.22	0.98	3.43	0.13	16.43	23.03	0.42	
P11	123	n-123-23	52.79	0.19	2.22	0.98	3.43	0.13	16.43	23.03	0.42	
P11	123	n-123-24	53.55	0.02	0.79	0.43	4.46	0.18	15.49	23.64	0.89	
P11	123	n-123-24	53.55	0.02	0.79	0.43	4.46	0.18	15.49	23.64	0.89	
P11	123	n-123-25	53.86	0.09	1.41	0.56	5.42	0.17	20.82	17.41	0.22	
P11	123	n-123-25	53.86	0.09	1.41	0.56	5.42	0.17	20.82	17.41	0.22	
P11	123	n-123-26	52.54	0.04	2.88	0.96	3.13	0.06	18.09	21.64	0.29	
P11	123	n-123-26	52.54	0.04	2.88	0.96	3.13	0.06	18.09	21.64	0.29	
P11	123	n-123-27	51.66	0.33	2.60	1.04	4.85	0.13	17.06	21.10	0.26	0.00
P11	123	n-123-27	51.66	0.33	2.60	1.04	4.85	0.13	17.06	21.10	0.26	0.00
P13	10	n-10-08	51.78	0.10	4.26	0.87	3.85	0.11	19.53	18.35	0.39	0.02
P13	10	n-10-08	51.78	0.10	4.26	0.87	3.85	0.11	19.53	18.35	0.39	0.02
P13	10	n-10-09	52.08	0.17	2.87	1.59	2.85	0.08	17.42	21.99	0.45	0.02
P13	10	n-10-09	52.08	0.17	2.87	1.59	2.85	0.08	17.42	21.99	0.45	0.02
P13	10	n-10-10	53.07	0.04	2.50	0.91	2.54	0.06	19.07	21.24	0.29	0.02
P13	10	n-10-10	53.07	0.04	2.50	0.91	2.54	0.06	19.07	21.24	0.29	0.02
P13	10	n-10-11	52.21	0.13	2.82	0.71	3.28	0.08	17.65	22.28	0.25	0.01
P13	10	n-10-11	52.21	0.13	2.82	0.71	3.28	0.08	17.65	22.28	0.25	0.01
P13	10	n-10-12	53.28	0.12	1.83	1.50	2.56	0.06	18.24	21.76	0.32	
P13	10	n-10-12	53.28	0.12	1.83	1.50	2.56	0.06	18.24	21.76	0.32	
P13	10	n-10-13	52.61	0.07	2.43	1.48	2.15	0.05	18.00	22.52	0.36	
P13	10	n-10-13	52.61	0.07	2.43	1.48	2.15	0.05	18.00	22.52	0.36	
P13	10	n-10-14	53.62	0.04	0.62	0.47	3.83	0.13	15.91	24.57	0.50	0.01
P13	10	n-10-14	53.62	0.04	0.62	0.47	3.83	0.13	15.91	24.57	0.50	0.01
Q03A	129	n-129-01	51.77	0.24	2.45	1.23	3.79	0.10	16.86	22.50	0.40	0.00
Q09	96	n-96-02	53.33	0.02	1.07	0.98	4.66	0.22	15.14	23.40	0.71	0.00
Q11	58	n-58-01	53.17	0.06	1.51	0.63	4.61	0.15	15.69	23.17	0.40	0.01

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
Q11	58	n-58-02	52.35	0.22	1.66	0.89	3.56	0.11	16.48	23.66	0.41	0.01
Q11	58	n-58-03	52.53	0.12	2.32	0.83	2.77	0.12	16.50	23.43	0.41	0.01
Q12	97	n-97-02	53.92	0.03	0.71	0.16	3.91	0.13	16.12	23.19	1.08	0.01
Q12	97	n-97-03	53.50	0.03	1.35	0.45	4.50	0.09	15.20	24.07	0.71	0.00
Q12	97	n-97-04	51.57	0.16	3.48	0.76	3.92	0.10	16.43	22.46	0.36	0.01
Q12	97	n-97-05	53.09	0.13	2.20	0.88	5.30	0.13	20.21	17.27	0.23	0.02
Q12	97	n-97-06	53.65	0.04	0.62	0.47	4.87	0.23	15.20	23.59	0.77	0.02
Q12	97	n-97-07	52.62	0.09	2.81	1.10	2.49	0.05	17.47	22.47	0.34	0.01
Q12	97	n-97-08	53.51	0.09	1.32	0.74	5.20	0.16	20.19	17.98	0.21	0.02
Q12	97	n-97-09	51.78	0.28	3.13	1.12	5.14	0.13	17.73	19.53	0.53	
Q12	97	n-97-10	53.16	0.10	1.21	0.90	3.34	0.12	18.23	22.19	0.26	0.02
Q12	97	n-97-11	53.85	0.13	1.52	0.66	4.12	0.13	17.38	20.29	0.56	0.06
Q12	97	n-97-12	52.86	0.14	1.88	0.97	3.69	0.12	17.87	21.74	0.27	
Q12	97	n-97-13	53.33	0.11	1.68	0.42	4.29	0.13	19.07	19.82	0.25	
Q12	97	n-97-14	52.62	0.21	1.69	0.58	3.82	0.08	16.00	23.68	0.57	
R03	15	n-15-03	53.14	0.15	1.82	0.72	2.60	0.08	16.68	23.91	0.47	0.00
R07	134	n-134-01	53.46	0.05	1.50	0.54	4.07	0.15	16.11	23.13	0.46	0.00
R10	151	n-151-02	53.24	0.05	0.84	0.57	4.00	0.11	15.85	23.87	0.58	0.01
R10	151	n-151-02	53.24	0.05	0.84	0.57	4.00	0.11	15.85	23.87	0.58	0.01
S04	79	n-79-01	58.24	0.14	2.78	0.91	3.23	0.09	29.54	17.42	0.59	0.02
S04	79	n-79-02	52.52	0.07	1.57	0.93	3.69	1.08	15.91	22.34	0.62	0.01
S04	79	n-79-03	53.23	0.15	0.92	0.82	3.90	0.13	17.90	21.73	0.35	0.00
S05	89	n-89-01	53.31	0.08	1.75	1.29	2.48	0.07	16.16	23.33	0.95	0.00
S13	146	n-146-02	52.81	0.14	1.12	1.16	2.51	0.03	16.71	23.43	0.54	0.01
T01	71	n-71-01	53.76	0.16	0.81	0.50	3.93	0.13	17.34	22.83	0.22	0.00
T01	71	n-71-02	53.35	0.15	0.83	0.84	3.26	0.08	17.70	22.82	0.29	0.02
T01	71	n-71-03	53.04	0.26	2.11	0.97	3.80	0.08	15.57	22.97	0.91	
T02	144	n-144-02	53.77	0.02	1.51	0.79	3.31	0.13	15.69	23.52	0.96	0.01
T05	88	n-88-05	52.43	0.09	2.88	0.62	3.66	0.12	15.46	22.84	0.82	
T05	88	n-88-06	51.21	0.39	7.23	0.74	3.51	0.11	15.88	18.68	1.63	
T05	88	n-88-07	51.26	0.28	3.55	1.07	5.36	0.14	17.64	19.52	0.29	0.00
T05	88	n-88-08	53.14	0.12	1.95	1.24	3.46	0.10	16.02	22.57	0.99	0.01
T05	88	n-88-09	50.54	0.10	1.87	0.32	2.80	0.06	15.55	21.02	0.70	
T06	140	n-140-02	53.92	0.15	1.31	0.62	3.43	0.11	18.23	21.79	0.34	0.00
T06	140	n-140-03	53.15	0.11	1.47	0.62	3.49	0.12	16.59	23.86	0.45	
T06	140	n-140-04	51.56	0.29	3.72	0.91	6.17	0.19	17.47	18.99	0.36	
T06	140	n-140-05	54.01	0.03	0.67	0.52	3.65	0.13	15.96	24.50	0.52	0.01
T06	140	n-140-06	53.35	0.10	1.60	0.52	3.39	0.09	16.38	22.75	0.76	
T06	140	n-140-07	52.67	0.08	2.57	0.25	4.51	0.10	15.33	23.20	0.77	
T06	140	n-140-08	53.86	0.10	0.78	0.45	3.05	0.11	17.86	22.85	0.21	0.01
T07	117	n-117-01	53.28	0.15	1.29	0.55	4.24	0.18	15.22	24.03	0.68	
T07	117	n-117-02	53.54	0.04	0.70	0.36	4.97	0.19	16.12	23.34	0.39	
T07	117	n-117-03	52.44	0.16	2.33	0.68	4.03	0.14	17.28	21.66	0.31	
T07	117	n-117-04	53.84	0.01	0.57	0.05	4.30	0.22	15.87	24.60	0.41	0.00
T07	117	n-117-05	53.52	0.04	1.04	0.28	4.51	0.20	15.35	23.93	0.78	0.00
T07	117	n-117-06	53.79	0.02	1.03	0.20	5.34	0.25	14.77	22.72	1.42	

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
T07	117	n-117-13	53.96	0.12	0.26	1.90	2.37	0.05	16.44	22.95	1.33	
U03	191	n-191-01	53.04	0.10	2.78	1.11	2.83	0.07	15.70	23.24	0.92	0.01
W05	100	n-100-01	50.58	0.54	2.47	0.01	9.77	0.26	11.87	22.47	1.36	
W05	100	n-100-02	55.03	0.04	0.25	0.01	0.86	0.06	18.11	25.73	0.03	
W06	196	n-196-03	52.35	0.17	1.85	1.74	2.46	0.08	15.64	23.46	0.92	0.03
X04	110	n-110-01	53.20	0.08	1.01	0.91	2.92	0.10	18.27	22.31	0.34	0.01
Z03	223	n-223-06	53.01	0.09	2.48	0.44	4.61	0.14	15.25	22.38	1.12	0.01
Z05	161	n-161-01	53.22	0.07	1.35	0.75	4.69	0.11	15.51	23.25	0.68	0.01
Z05	161	n-161-06	53.15	0.10	1.48	0.80	6.61	0.16	16.09	20.85	0.63	0.01
Z05	161	n-161-11	53.50	0.10	1.57	0.72	4.88	0.15	15.17	22.84	0.67	0.00
Z05	161	n-161-14	53.20	0.13	1.28	0.92	3.97	0.12	16.91	21.92	0.64	0.00
Z05	161	n-161-15	53.03	0.08	1.42	0.74	4.84	0.10	15.34	22.90	0.66	0.00
Z05	161	n-161-16	52.65	0.08	1.40	0.74	4.94	0.12	15.25	22.79	0.61	0.01
Z05	161	n-161-21	52.73	0.21	1.89	0.82	4.96	0.16	15.01	22.99	0.70	0.01
Z05	161	n-161-26	53.09	0.04	1.32	0.72	4.68	0.15	15.34	23.27	0.64	
Z05	161	n-161-28	52.74	0.14	1.78	0.84	4.77	0.15	14.89	23.09	0.76	
Z05	161	n-161-29	52.94	0.11	1.53	0.81	5.07	0.12	15.27	22.75	0.67	
Z05	161	n-161-30	53.04	0.05	1.42	0.75	4.74	0.13	15.34	23.31	0.63	0.00
Z05	161	n-161-31	53.03	0.08	2.17	0.54	3.83	0.12	15.72	22.98	0.85	
Z05	161	n-161-36	53.27	0.04	1.53	0.58	4.50	0.14	15.99	23.42	0.37	
Z05	161	n-161-37	52.74	0.26	2.02	1.17	3.84	0.07	15.16	22.68	1.03	0.01
Z05	161	n-161-38	53.19	0.15	1.62	0.65	2.94	0.09	15.99	23.85	0.67	
Z05	161	n-161-41	52.38	0.20	1.76	0.86	5.06	0.13	15.15	22.42	0.69	
Z05	161	n-161-42	52.61	0.10	2.69	0.59	3.56	0.12	15.20	23.11	0.85	
Z05	161	n-161-45	52.45	0.11	1.61	0.86	5.55	0.14	15.63	22.16	0.65	0.01
Z05	161	n-161-46	52.99	0.08	1.43	0.73	4.93	0.14	15.20	23.02	0.68	
Z05	161	n-161-49	51.73	0.08	2.31	1.00	5.19	0.33	14.53	22.55	0.83	
Z05	161	n-161-50	52.85	0.13	1.50	0.76	4.77	0.13	15.21	22.98	0.72	0.01
Z05	161	n-161-58	52.82	0.11	1.48	0.73	4.94	0.17	15.32	22.90	0.67	
Z05	161	n-161-59	52.59	0.12	1.76	1.10	4.12	0.12	15.30	23.11	0.65	
Z05	161	n-161-67	51.76	0.28	2.72	0.85	4.25	0.08	14.99	22.67	0.96	0.01
Z05	161	n-161-70	53.42	0.15	2.01	0.58	3.53	0.13	15.99	23.10	0.73	
Z05	161	n-161-72	52.43	0.15	2.15	0.52	4.70	0.17	15.12	22.92	0.82	0.01
Z05	161	n-161-78	53.88	0.11	1.60	0.82	2.89	0.08	16.54	22.63	0.83	
Z08	258	n-258-15	53.24	0.02	2.18	0.75	4.11	0.08	15.50	23.23	0.87	0.01
Z08	258	n-258-32	52.78	0.12	2.26		2.77	0.33	16.89	24.37	0.10	
Z08	258	n-258-44	52.62	0.21	2.35	1.18	3.96	0.10	15.03	22.41	1.06	
Z08	258	n-258-45	52.92	0.09	2.84	1.37	2.76	0.06	15.51	21.94	1.39	0.00
Z08	258	n-258-46	53.45	0.02	1.27	0.93	3.21	0.15	16.37	23.14	0.65	0.01
Z08	258	n-258-47	52.33	0.17	3.01	0.65	4.03	0.07	15.66	22.65	0.70	0.01
Z08	258	n-258-48	52.91	0.06	1.63	0.55	5.66	0.13	15.09	22.83	0.55	0.02
Z08	258	n-258-49	53.52	0.03	1.46	0.87	3.16	0.22	16.19	23.25	0.60	0.00
Z08	258	n-258-50	52.81	0.19	2.08	0.96	2.89	0.07	16.12	23.59	0.63	0.00
Z08	258	n-258-51	53.61	0.03	1.32	0.47	4.27	0.17	16.21	22.86	0.60	0.02
Z08	258	n-258-52	52.32	0.38	3.04	1.12	3.34	0.06	15.98	22.55	0.66	0.02
Z08	258	n-258-53	52.57	0.01	1.83	0.85	5.19	0.19	15.15	22.75	0.51	0.01

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
Z08	258	n-258-54	52.83	0.08	1.91	0.99	2.85	0.18	15.98	23.37	0.53	0.00
Z08	258	n-258-55	53.81	0.05	1.16	0.72	2.98	0.09	16.58	23.60	0.58	0.01
Z08	258	n-258-56	52.97	0.01	2.01	0.38	4.89	0.18	15.55	23.17	0.48	0.00
Z08	258	n-258-57	53.11	0.23	2.03	1.32	3.08	0.09	15.65	22.82	1.01	
Z08	258	n-258-58	52.21	0.07	3.04	1.17	4.18	0.17	15.21	22.31	0.80	
Z08	258	n-258-61	53.18	0.17	1.27	0.73	8.92	0.22	17.62	17.21	0.57	0.01
Z08	258	n-258-62	53.45	0.00	1.35	0.57	3.90	0.16	16.10	23.05	0.58	
Z08	258	n-258-63	53.15	0.14	3.06	1.85	3.18	0.08	15.60	20.49	1.73	0.01
Z08	258	n-258-64	52.90	0.11	2.09	0.81	3.25	0.07	15.79	23.47	0.58	
Z08	258	n-258-65	52.91	0.10	2.27	1.01	2.85	0.06	16.20	22.66	0.65	
Z08	258	n-258-66	52.37	0.10	1.74	0.90	5.78	0.22	14.91	22.41	0.66	
Z08	258	n-258-67	53.21	0.08	1.07	0.55	4.01	0.12	15.93	23.24	0.54	
Z08	258	n-258-68	52.97	0.16	1.69	0.85	4.25	0.17	15.58	23.03	0.67	
Z09	239	n-239-10	51.91	0.17	2.84	0.62	4.87	0.11	15.02	23.06	0.63	
Z09	239	n-239-11	52.86	0.08	2.91	0.74	4.25	0.11	14.98	21.92	1.44	0.00
Z09	239	n-239-14	52.25	0.15	3.18	0.57	4.15	0.12	15.47	22.85	0.68	
Z09	239	n-239-15	53.08	0.17	1.56	0.70	4.83	0.14	15.39	22.96	0.63	0.01
Z09	239	n-239-16	52.42	0.26	2.47	1.09	3.73	0.12	15.35	23.20	0.71	0.01
Z09	239	n-239-18	51.94	0.21	3.31	1.19	5.86	0.18	18.81	17.88	0.24	0.00
Z09	239	n-239-19	53.00	0.08	2.00	0.95	3.00	0.11	16.03	23.47	0.51	0.00
Z09	239	n-239-19	53.00	0.08	2.00	0.95	3.00	0.11	16.03	23.47	0.51	0.00
Z09	239	n-239-20	52.47	0.14	2.45	0.55	5.01	0.14	15.23	22.98	0.58	0.00
Z09	239	n-239-21	52.51	0.08	3.10	0.61	3.06	0.09	15.87	23.34	0.58	0.01
Z09	239	n-239-22	52.83	0.09	2.13	0.87	4.46	0.17	15.37	22.97	0.68	
Z09	239	n-239-23	54.19	0.03	1.31	0.97	4.68	0.11	17.98	19.66	0.58	
Z09	239	n-239-24	52.78	0.36	2.40	1.09	3.22	0.08	15.64	23.40	0.74	
Z09	239	n-239-25	52.10	0.15	3.34	0.72	3.85	0.10	15.12	22.97	0.93	
Z09	239	n-239-26	53.01	0.07	2.25	1.14	3.11	0.08	16.07	23.24	0.67	
Z09	239	n-239-30	52.03	0.39	3.52	0.82	3.94	0.13	14.93	22.92	0.91	0.01
Z09	239	n-239-32	52.49	0.15	3.12	1.47	2.85	0.04	15.64	23.02	0.81	0.00
Z09	239	n-239-46	53.47	0.19	1.87	0.81	3.08	0.08	15.92	23.29	0.82	
Z09	239	n-239-47	53.42	0.05	1.42	0.95	3.08	0.12	16.00	23.32	0.71	
Z09	239	n-239-49	52.64	0.14	2.62	1.03	3.31	0.10	15.59	23.35	0.69	0.00
Z09	239	n-239-50	52.13	0.33	2.78	1.14	3.84	0.15	15.16	22.99	0.73	0.00
Z09	239	n-239-51	52.72	0.08	2.46	1.22	3.03	0.08	15.76	23.35	0.66	0.00
Z09	239	n-239-52	52.54	0.13	2.26	1.35	2.72	0.09	16.02	23.15	0.63	0.01
Z09	239	n-239-53	53.50	0.01	1.01	0.87	3.19	0.12	16.27	23.56	0.63	0.00
Z09	239	n-239-55	53.30	0.05	1.79	1.23	4.43	0.13	17.11	21.15	0.53	0.01
Z09	239	n-239-56	53.13	0.19	1.77	1.15	2.39	0.06	16.31	23.67	0.57	0.00
Z09	239	n-239-57	53.10	0.02	1.58	0.74	4.02	0.14	15.82	23.26	0.62	0.01
Z09	239	n-239-58	52.50	0.11	2.62	0.89	3.97	0.12	15.37	23.07	0.70	
Z09	239	n-239-61	53.20	0.05	1.72	1.20	3.14	0.11	15.86	23.49	0.65	
Z09	239	n-239-62	52.37	0.22	2.29	1.18	3.11	0.10	15.70	23.39	0.61	0.01
Z09	239	n-239-63	53.30	0.07	1.66	1.33	2.91	0.07	16.02	23.37	0.66	
Z09	239	n-239-64	53.06	0.16	1.91	1.17	3.63	0.11	15.55	22.93	0.70	
Z09	239	n-239-65	53.49	0.20	1.99	1.59	2.80	0.03	15.68	22.83	0.91	0.00

Appendix. Clinopyroxene mineral chemistry

Field	Lab	Grain	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O	K2O
Z09	239	n-239-69	53.36	0.21	1.79	1.13	2.90	0.11	16.02	23.49	0.71	
Z09	239	n-239-70	52.26	0.14	3.19	1.10	3.37	0.11	15.18	23.19	0.82	
Z09	239	n-239-71	52.53	0.16	2.04	1.50	3.03	0.09	15.86	23.27	0.71	0.01
Z09	239	n-239-72	53.67	0.02	1.40	0.98	3.00	0.11	16.13	23.38	0.72	0.02
Z09	239	n-239-73	52.45	0.19	3.40	1.08	2.64	0.07	15.89	23.39	0.60	0.01
Z09	239	n-239-74	52.51	0.20	3.18	0.64	3.82	0.10	15.30	23.06	0.89	0.01
Z09	239	n-239-75	52.70	0.06	1.70	0.80	4.15	0.12	15.49	23.20	0.70	0.01
Z09	239	n-239-76	53.94	0.07	1.18	0.99	3.07	0.12	16.23	22.76	1.07	0.02
Z09	239	n-239-77	53.43	0.01	1.37	1.23	2.78	0.07	16.15	23.37	0.69	
Z09	239	n-239-78	53.28	0.10	1.18	1.26	3.38	0.08	16.33	22.53	0.71	0.00
Z09	239	n-239-79	52.33	0.20	3.48	1.04	3.08	0.10	15.50	23.15	0.71	
Z09	239	n-239-80	52.41	0.15	2.35	1.17	4.18	0.16	15.34	23.11	0.64	0.01
Z09	239	n-239-81	52.14	0.18	2.87	0.78	3.38	0.09	15.56	23.28	0.71	0.02
Z09	239	n-239-82	52.73	0.12	1.76	1.10	4.19	0.15	15.63	22.51	0.64	0.01
Z09	239	n-239-83	52.20	0.08	3.26	0.61	3.52	0.09	15.48	23.37	0.70	0.01
Z09	239	n-239-84	52.79	0.08	1.76	0.86	3.95	0.11	15.57	23.24	0.61	
Z10	26	n-26-01	52.57	0.07	1.78	0.71	5.61	0.22	15.10	22.33	0.72	0.01
Z10	26	n-26-03	54.50	0.06	1.50	0.74	3.75	0.09	18.13	19.64	0.59	0.09
Z10	26	n-26-04	53.19	0.09	1.41	1.30	3.54	0.05	15.90	22.67	0.82	0.01
Z10	26	n-26-04	53.19	0.09	1.41	1.30	3.54	0.05	15.90	22.67	0.82	0.01
Z10	26	n-26-04	53.33	0.16	1.51	0.70	3.67	0.11	16.36	23.25	0.51	0.01
Z10	26	n-26-05	53.74	0.04	0.76	0.36	4.56	0.18	15.69	23.80	0.46	0.00
Z10	26	n-26-06	53.55	0.03	1.12	0.35	4.52	0.18	15.46	23.37	0.71	0.00
Z10	26	n-26-07	53.66	0.07	0.71	0.36	4.79	0.13	15.71	23.61	0.45	0.02
Z10	26	n-26-08	53.31	0.09	1.63	0.81	4.25	0.08	16.34	22.69	0.56	0.00
Z11	262	n-262-03	51.95	0.16	5.16	1.43	3.07	0.08	15.66	20.24	1.49	0.00

Appendix. Ilmenite mineral chemistry

Field	Lab	Grain	Sc	V	Cr	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO
K05	21	na-21-01	63	949	1178	1984	94	236	4	128	1	5	422	305	0.0	49.8	0.1	0.3	45.1	0.4	3.1
K05	21	na-21-07	58	2844	1300	3635	159	81	8	279	1	6	223	96	0.0	53.4		0.2	42.8	0.5	2.5
K05	21	na-21-08	80	1269	512	3227	156	211	8	236	2	7	137	462	0.0	50.8	0.0	0.1	45.7	0.4	2.2
M05	29	na-29-05	14	385	192	530	20	24	2	35	1	1	185	30	0.0	50.8	0.0	0.1	46.4	0.4	1.4
N09	32	na-32-06	10	130	27	735	31	6	1	52	0	1	94	45		49.4	0.0	0.0	47.6	0.6	1.8
N09	32	na-32-05	94	2374	2046	3169	185	207	8	218	2	7	349	66	0.0	50.4	0.1	0.3	44.9	0.4	3.2
N09	32	na-32-01	114	1046	1	3970	180	34	8	109	1	7	171	31	0.0	52.0	0.0	0.0	44.4	0.5	2.7
L06E	40	n-40-13	82	2249	269	2991	155	147	6	187	3		304	86	0.0	48.8	0.1	0.1	46.5	0.4	2.8
S04	79	na-79-09	253	992	2304	4245	103	59	8	270	0	7	63	58	0.0	51.8		0.3	42.5	0.5	4.5
I03	87	n-87-01	26	1782	1938	2034	160	277	20	137	15	8	392	1262	0.0	49.1	0.4	0.4	39.5	0.3	8.5
W05	100	n-100-05	20	824	26117	2245	158	1402	22	90	3	5	97	849	0.0	52.8	0.1	5.0	28.3	0.4	12.8
T07	117	n-117-12	18	924	20535	1463	111	929	18	76	4	3	91	538	0.0	51.1	0.2	5.2	30.1	0.3	11.8
K08	121	n-121-03	87	2616	1418	3629	146	343	7	204	2	9	92	117	0.0	50.1	0.0	0.3	45.4	0.5	2.3
K08	121	n-121-05	79	2571	441	3267	101	66	13	129	2	9	414	112	0.0	49.8	0.0	0.1	45.4	0.4	2.6
K08	121	n-121-10	89	1547	272	3562	145	143	7	177	1	9	318	104	0.0	49.3	0.1	0.0	46.1	0.5	2.2
Z02	160	n-160-01	21	1353	15941	2525	157	970	28	120	6	6	109	649	0.0	51.6	0.1	2.7	32.5	0.4	11.0
O07	182	n-182-13	79	1720	252	3362	112	67	6	312	5	9	133	285		49.9	0.0	0.0	46.9	0.5	1.1
N06	202	n-202-01	93	3728	30	2995	161	373	15	258	8	8	786	117	0.0	48.5	0.1	0.0	46.1	0.4	2.9
N06	202	n-202-02	70	2176	1106	2581	52	31	49	300	12	5	85	144	0.3	66.9	0.2	0.4	23.3	0.3	0.7
N06	202	n-202-05	73	1528	361	3701	97	66	9	134	2	10	66	146	0.0	50.9		0.0	47.0	0.5	0.8
O06	207	n-207-01	94	1769	959	4338	143	182	7	205	3	10	303	69	0.0	50.7	0.3		45.1	0.5	2.6
O06	207	n-207-11	126	1253	1600	3756	114	230	24	95	16	7	196	339	0.1	57.6	0.1	0.2	32.2	0.6	3.0
Z16	214	n-214-01	18	1050	18512	2892	196	1245	43	143	6	7	86	806	0.1	53.2	0.2	2.7	30.6	0.4	11.9
V06	227	n-227-01	19	1048	14592	2389	167	842	39	126	6		113	776	0.0	51.9	0.2	2.4	32.9	0.3	11.0
F09	229	n-229-03	79	1888	30	3217	130	129	7	205	3	8	770	206	0.0	50.5	0.0	0.0	44.2	0.5	2.6
F09	229	n-229-05	66	1472	333	3456	129	176	7	184	3	8	628	302		50.5	0.1	0.1	45.1	0.4	2.2

Appendix. Garnet mineral chemistry

Field	Lab	grain	T(Ni) C	P(Cr) kB	Sc/Y	Sc	Ti	V	Co	Ni	Ga	Sr	Y	Zr	Nb	La1	Ce1	Pr1	Nd1	Sm1	Eu1	Gd1	Dy1	Ho1	Er1	Yb1	Lu1	Hf
C04	6	na-06-09	1351	45.6	6.6	110.1	4654.8	287.9	42.8	111.0	11.8	0.9	16.6	99.0			0.8	0.4	3.3	1.1	0.8	3.5	2.6	0.7	2.4		0.3	3.4
G10	22	na-22-01	1413	36.4	7.3	101.1	3200.4	299.1	51.0	125.2	11.8	0.6	13.8	39.8	0.3	0.0	0.4	0.1	1.4	0.8	0.4	1.5	2.2	0.5	1.5	1.6	0.3	1.1
I08	73	n-73-09	1340	33.1	3.3	94.2	4595.7	273.5	49.2	108.6	14.7	0.6	28.3	78.2	0.3	0.1	0.5	0.2	1.3	0.9	0.5	2.1	4.3	1.2	3.6	4.1	0.6	2.2
S04	79	na-79-10	1407	39.8	6.0	117.8	3772.9	320.2	51.5	123.7	10.3	0.9	19.7	52.5	0.3	0.1	0.6	0.2	1.8	1.1	0.5	2.1	3.3	0.8	2.2	2.4	0.4	1.4
G03	94	n-94-12	995	44.7	85.2	146.4	217.5	332.5	42.6	44.5	4.8	0.9	1.7	32.4	1.4	0.2	1.7	0.6	4.5	1.6	0.4	0.9	0.4	0.1	0.2	0.3	0.1	0.5
H04	105	n-105-01	868	34.0	5.1	91.4	1054.4	167.6	43.8	28.0	9.8	0.2	17.9	19.8	0.1	0.0	0.1	0.0	0.5	0.5	0.3	1.6	2.7	0.7	2.0	2.2	0.3	0.3
D05	106	n-106-01	1004	46.5	63.2	154.6	524.8	391.2	42.8	45.9	4.1	0.8	2.4	29.2	0.4	0.1	1.3	0.6	5.6	1.3	0.4	0.8	0.4	0.1	0.3	0.4	0.1	0.6
K08	121	n-121-02	771	33.7	10.8	158.1	275.4	158.2	39.9	18.2	3.6	0.1	14.7	9.6	0.1	0.0	0.1	0.1	0.5	0.4	0.2	1.1	2.3	0.5	2.0	2.3	0.4	0.2
O10	162	n-162-06	447		0.5	14.9	1423.9	690.1	3.3	1.9	33.2	0.0	31.1	26.9	0.1		0.0	0.0	0.3	0.3	0.2	0.9	2.8	0.8	3.4	4.3	0.7	1.7
J07	204	n-204-08	795	31.7	6.1	87.0	865.2	172.9	47.1	20.4	10.7		14.2	5.9	0.1		0.0			0.2	0.1	0.8	2.1	0.5	1.6	2.1	0.3	0.1
B05	240	n-240-01	961	42.6	13.7	122.7	932.1	227.2	44.0	39.7	8.1	0.3	9.0	31.4	0.3	0.0	0.6	0.2	1.9	1.2	0.5	1.8	1.8	0.3	0.9	1.1	0.2	0.6
F08B	264	n-264-01	1270	46.2	12.7	127.0	3049.9	332.6	43.6	93.7	9.8	0.7	10.0	42.9	0.3	0.0	0.5	0.2	2.0	1.3	0.5	1.8	1.9	0.4	1.0	1.1	0.2	1.1
H09	271	n-271-07	1265	47.7	15.6	131.5	2893.4	356.7	46.0	92.5	9.6	0.4	8.4	39.3	0.3		0.3	0.1	1.0	1.0	0.6	1.7	1.5	0.3	1.1	1.1	0.2	1.0
Field	**Lab**	**grain**		**SiO2**	**TiO2**	**Al2O3**	**Cr2O3**	**FeO**	**MnO**	**MgO**	**CaO**	**Na2O**	**La2**	**Ce2**	**Pr2**	**Nd2**	**Sm2**	**Eu2**	**Gd2**	**Dy2**	**Ho2**	**Er2**	**Yb2**	**Lu2**				
C04	6	na-06-09	G11	41.51	0.84	18.16	5.44	6.98	0.23	20.97	5.40	0.08		1.3	4.5	7.3	7.7	13.6	17.8	10.6	12.2	15.2		13.2				
G10	22	na-22-01	G1	41.82	0.52	20.13	2.99	7.10	0.25	21.58	5.01	0.04	0.2	0.7	1.7	3.0	5.6	7.3	7.5	9.0	9.2	9.6	10.0	12.5				
I08	73	n-73-09	G1	41.89	0.79	20.53	2.41	8.16	0.28	21.40	4.95	0.06	0.2	0.8	1.7	3.0	6.4	9.1	10.8	17.5	21.0	22.7	25.2	24.2				
S04	79	na-79-10	G1	41.46	0.64	19.09	3.81	7.92	0.28	20.71	5.28	0.04	0.3	1.1	2.3	4.1	7.6	9.5	10.8	13.4	13.9	13.7	14.7	16.4				
G03	94	n-94-12	G9+	41.28	0.03	18.60	6.76	7.29	0.37	19.94	6.16	0.02	0.7	2.8	6.4	10.0	10.8	6.9	4.7	1.5	1.4	1.6	2.1	3.3				
H04	105	n-105-01	G9	42.27	0.17	21.33	2.96	8.25	0.42	20.48	4.56	0.06	0.0	0.2	0.4	1.1	3.3	5.6	8.0	11.2	12.2	12.8	13.4	13.3				
D05	106	n-106-01	G9+	41.18	0.05	18.20	7.50	6.96	0.38	20.11	5.96	0.05	0.4	2.2	7.0	12.3	9.1	6.9	4.0	1.8	1.7	1.6	2.5	2.5				
K08	121	n-121-02	G7	41.92	0.04	20.80	3.79	8.65	0.54	18.74	6.47	0.00	0.2	0.2	0.6	1.1	2.9	3.3	5.6	9.5	9.0	12.8	13.8	15.0				
O10	162	n-162-06	Cr-grossularite	37.39	0.25	15.74	5.31	5.40	5.59	0.18	28.50	0.00		0.0	0.2	0.6	2.1	2.9	4.3	11.5	15.2	21.5	26.7	29.6				
J07	204	n-204-08	G9	41.53	0.15	21.37	2.69	9.47	0.48	19.93	4.65	0.03		0.0			1.7	2.3	4.3	8.8	9.5	10.1	13.0	12.7				
B05	240	n-240-01	G9	41.07	0.16	18.94	5.60	7.58	0.35	19.99	5.47	0.04	0.2	1.1	2.5	4.1	7.8	9.3	9.1	7.3	5.8	5.6	6.6	7.3				
F08B	264	n-264-01	G11	41.54	0.50	18.38	5.95	6.23	0.28	20.72	5.70	0.06	0.1	0.9	2.2	4.5	8.6	9.0	9.1	8.0	6.9	6.2	7.0	8.1				
H09	271	n-271-07	G11	41.58	0.48	17.74	7.11	7.44	0.29	20.01	6.17	0.04		0.5	1.4	2.2	7.0	9.8	8.6	6.3	6.1	7.1	6.7	9.9				

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
A02	168	n-168-01	660	GG-5	Kim	1.5	1085.4	704.2	2602.0	502.1	314.9	0.5	1968.1	10.3	4.2	0.3	0.8	0.0	0.2	9.1	54.2	27.7	0.5	6.7		0.0
A03	68	n-68-02	795	GG-7	OM	9.5	3745.5	1526.1	3443.2	383.3	668.5		1165.8	53.5	6.8	0.8	0.7	0.0	0.7	16.9	41.1	33.5	0.6	5.7	0.0	0.0
A03	68	n-68-03	720	GG-5	OM	7.7	4861.7	1911.1	6818.9	474.0	686.0	1.2	1531.4	61.4	7.5	3.3	0.8	0.0	0.9	15.9	42.8	32.7	0.9	3.2	0.0	0.0
A04	35	n-35-01	664	GG-7	UML	0.4	1953.4	924.9	2552.8	442.9	450.8		1929.8	63.3	5.8	0.3	0.7	0.0	0.3	24.2	37.9	29.3	0.4	6.8		0.0
A04	35	n-35-02	846	GG-7	Kim	8.8	3984.4	1612.8	2378.0	399.6	1127.9		990.6	64.4	7.0	6.7	1.5		0.3	24.0	37.8	29.3	0.4	6.9	0.0	0.1
A04	35	n-35-03	1074	GG-7	UML	1.6	2749.8	1349.8	1962.5	220.0	1249.3	1.6	553.5	46.3	4.3	0.4	0.7	0.0	0.5	18.3	44.3	23.7	0.3	10.8		0.0
A08	119	n-119-05	1029	GG-7	UML	2.9	3248.2	1133.8	2247.8	309.0	839.6	0.8	611.0	46.9	5.7	0.3	0.6	0.0	0.6	18.8	41.3	29.9	0.4	8.0	0.0	0.0
A08	119	n-119-07	1229	GG-7	OM	4.6	2510.1	952.9	1817.4	211.4	437.5	1.2	412.4	38.3	4.5	1.2	0.8	0.0	0.4	14.0	51.3	21.8	0.3	11.0	0.0	
A08	119	n-119-08	809	L-4	OM	12.1	11816.2	2017.2	2585.7	313.0	966.2	0.7	1113.2	65.2	7.0	3.6	0.7	0.0	2.2	14.4	37.7	36.2	0.4	6.9	0.0	0.0
A08	119	n-119-09	428	GG-5	Kim	1.9	4250.7	1455.4	2617.2	272.6	59.2		7701.0	32.3	4.6	3.1	1.8	0.1	1.2	13.9	51.6	23.9	0.4	7.0	0.0	0.0
A09	241	n-241-01	566	GG-5	OM	3.2	3065.8	1161.4	5733.3	524.6	472.7		3113.9	33.4	5.5	0.6	0.7	0.0	0.6	10.5	49.0	30.4	0.8	5.8		
A10	133	n-133-02	969	GG-7	UML	5.3	3608.5	1552.7	2108.4	310.5	728.5	0.8	705.2	56.8	5.8	0.3	0.6	0.0	0.7	18.3	40.5	29.8	0.4	8.5		0.0
A10	133	n-133-03	501	GG-5	OM	2.7	2584.6	1113.2	4336.9	894.8	243.1		4589.8	4.8	5.3	0.6	0.8		0.3	15.5	49.0	25.0	0.7	7.9		0.0
A11	5	n-5-02	838	GG-7	UML	7.3	5568.1	1543.0	2527.1	260.0	493.4	2.5	1017.3	50.6	6.1	2.1	1.1	0.0	1.0	9.8	47.9	32.5	0.4	6.0	0.0	0.0
A11	5	n-5-03	925	GG-5	Kim	1.4	1363.5	1042.6	2600.5	389.2	438.0	10.0	790.8	21.7	3.1	0.7	1.2	0.1	0.2	12.4	58.3	15.0	0.5	12.5	0.0	0.0
A11	5	n-5-04	851	GG-7	OM	7.9	4181.5	1574.6	2686.2	374.5	741.1	0.5	976.5	52.1	6.5	0.8	0.9	0.0	0.8	16.7	39.8	34.9	0.4	5.7		0.0
A11	5	n-5-05	626	GG-5	OM	0.4	936.9	601.9	2747.5	540.9	350.9	0.4	2302.5	5.4	4.7	0.1	0.8	0.0	0.2	5.4	51.2	35.4	0.6	4.1		0.0
A11	5	n-5-06	604	GG-5	Kim	0.7	1068.8	581.7	3655.2	653.3	305.5	0.5	2553.2	9.6	4.8	1.2	1.1	0.0	0.2	9.7	53.9	27.1	0.6	6.3		0.0
B02	118	n-118-01	894	GG-7	OM	4.4	5773.8	1369.9	3037.2	305.6	1043.4		860.2	48.1	7.0	0.4	0.7	0.0	1.1	13.4	41.6	36.2	0.5	4.9		0.0
B03	82	n-82-01d	820	L-4	UML	4.2	6278.3	1695.4	2302.6	415.3	805.0	1.5	1077.1	62.0	6.3	0.6	0.7	0.0	1.1	18.5	41.9	29.4	0.4	8.4	0.0	0.0
B04	91	n-91-06	1211	GG-7	UML	5.0	1994.4	993.4	1732.0	260.0	843.9	1.2	425.3	42.7	5.0	0.6	0.7	0.0	0.4	18.5	45.8	22.7	0.3	11.7		0.0
B04	91	n-91-08	1414	GG-7	UML	6.7	2250.3	655.7	1208.9	192.8	1463.2	7.7	311.4	33.7	3.8	0.5	0.9	0.1	0.4	14.6	50.3	17.9		14.0	0.0	0.0
B05	240	n-240-02	861	L-4	Kim	2.5	12499.8	2075.0	2524.8	334.7	1029.9	0.8	946.6	77.6	7.5	0.4	2.3		2.3	15.8	33.6	38.9	0.4	6.1		0.0
B05	240	n-240-03	575	GG-5	Kim	2.5	691.7	532.0	3098.9	572.4	231.6		2967.2	7.7	5.5	0.7	0.8	0.0	0.1	8.7	54.8	27.3	0.5	6.0		
B06	153	n-153-04	920	GG-7	UML	6.1	4093.9	1399.6	2650.8	446.2	1155.7	1.0	800.8	61.7	8.0	0.6	1.0	0.0	0.3	24.1	40.2	24.9	0.4	8.6	0.0	0.0
B06	153	n-153-05	734	GG-7	UML	0.7	1682.9	1340.4	1655.6	395.3	334.7		1453.1	37.7	3.8	0.2	0.5	0.0	0.5	18.1	44.3	24.7	0.4	10.1		0.0
B10	11	n-11-01	1317	GG-7	UML	25.1	2023.9	834.5	1260.6	213.5	899.5	1.6	358.0	39.2	3.0	2.3	0.9	0.0	0.2	17.3	52.3	14.1	0.2	14.9	0.0	
B10	11	n-11-02	783	GG-7	UML	5.3	2984.9	1073.3	1396.8	259.5	789.7	9.0	1218.2	42.5	4.5	0.6	1.0	0.1	0.5	11.6	53.1	22.3	0.3	10.3		
B11	56	n-56-01	1170	L-4	UML	3.1	7097.6	806.3	1118.6	191.2	1554.5	10.8	458.2	77.9	4.2	1.0	0.8	0.1	1.2	26.8	35.6	19.1	0.2	16.0	0.0	0.0
B11	56	n-56-02	1127	GG-7	UML	6.5	3800.7	1494.9	2767.4	219.6	888.8	0.7	496.6	53.2	5.4	0.3	0.8		0.7	18.0	42.5	27.9	1.0	8.6	0.0	
B12	173	n-173-01	1097	GG-7	UML	9.5	3450.1	1421.2	2280.2	308.5	659.6	0.5	527.4	48.4	5.8	2.2	0.7	0.0	0.6	17.3	41.1	30.8	0.4	7.6		0.0
C03	51	n-51-01	1136	GG-7	UML	5.1	2562.8	975.9	2101.7	289.5	771.9	1.4	488.2	39.3	5.6	0.7	0.7	0.0	0.4	17.5	44.8	26.9	0.4	8.7		0.0
C04	6	n-6-08	561	GG-5	Kim	2.7	1199.5	722.5	3093.9	521.5	325.9	0.6	3205.2	9.5	4.6	0.5	0.9	0.0	0.2	9.8	53.7	27.3	0.6	6.7	0.0	0.2
C05a	93	n-93-01	598	GG-5	Kim	0.5	947.8	627.3	2950.2	584.1	342.7	0.6	2630.5	8.2	5.0	0.5	0.9	0.0	0.2	10.1	53.5	27.4	0.5	6.8		0.0
C05a	93	n-93-02	847	L-4	OM	8.8	12873.6	1982.3	3295.1	334.6	821.3	0.8	986.8	60.9	7.6	1.4	0.9		2.2	16.3	36.7	36.7	0.4	5.6		
C05b	46	n-46-01	547	GG-5	Kim	2.1	875.4	678.1	3308.3	614.9	503.1		3468.2	29.4	6.8	0.3	0.9	0.0	0.2	8.6	50.5	32.9	0.5	5.4		0.0
C05b	46	n-46-02	1024	GG-3	UML	3.2	1340.5	1231.1	3192.0	304.9	282.1	0.6	617.7	50.3	5.5	0.6	0.9	0.0	0.2	18.0	45.2	25.9	0.6	8.0	0.0	0.0
C05b	46	n-46-03	731	GG-5	OM	5.7	959.7	821.7	2639.3	562.2	248.2	0.8	1466.4	19.1	5.6	0.5	1.0	0.1	0.2	10.4	56.6	25.5	0.5	5.6		0.0
C06	237	n-237-01	1503	GG-7	UML	2.4	1195.9	688.3	1229.7	188.4	851.3	1.3	277.8	35.5	2.9		0.9	0.0	0.2	16.3	53.1	14.2	0.3	14.7		0.0
C06	237	n-237-02	526	GG-5	UML	1.0	2512.6	952.5	3103.5	752.6	536.0		3918.2	30.0	5.2	0.3	0.7	0.0	0.4	18.3	45.8	25.5	0.5	7.4		0.0
C07	145	n-145-01	873	K-1	Kim	6.1	20601.6	2230.6	2263.2	206.7	1456.6	10.4	913.1	139.5	8.4	14.3	8.7	0.1	3.6	5.2	43.4	35.9	0.4	8.3	0.0	0.0
C08	136	n-136-07	1018	GG-7	UML	3.3	3734.6	1611.9	2137.7	299.3	805.8	0.5	626.6	56.5	5.9	0.4	0.7	0.0	0.6	18.9	40.9	27.7	0.4	9.8		
C10	210	n-210-01	902	GG-5	Kim	3.3	1138.7	864.5	1799.0	363.2	435.5	5.3	841.2	25.4	3.7	0.5	0.9	0.0	0.2	12.0	56.2	17.8	0.3	11.1	0.0	
C10	210	n-210-03	908	GG-7	OM	3.6	1387.1	725.3	1659.8	333.1	508.9	1.1	826.5	25.5	2.8	0.4	0.8	0.1	0.2	13.7	55.8	15.9	0.3	12.1		
C10	210	n-210-05	805	L-6	Kim	4.4	9337.3	1347.9	4201.4	246.2	317.0	0.6	1128.9	51.6	6.2	16.0	1.7	0.0	1.4	15.0	41.0	34.3	0.7	4.3	0.0	
C10	210	n-210-06	1368	GG-7	UML	7.0	2346.0	634.0	1259.0	198.5	1490.7	8.9	332.0	34.7	3.6	0.5	0.9	0.1	0.4	14.0	51.2	18.7	0.2	13.4		0.0

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
C10	210	n-210-08	1179	GG-7	OM	6.3	2268.7	640.7	1497.1	210.2	1128.6	10.1	450.9	34.1	4.6	0.4	0.8	0.1	0.4	13.6	49.5	22.3	0.3	10.9	0.0	0.0
C10	210	n-210-09	690	GG-5	OM	2.1	3721.1	1193.2	4850.6	454.5	475.1	0.5	1730.1	40.4	7.4	1.2	0.7	0.0	0.4	15.4	41.1	34.8	0.7	4.2	0.0	0.0
C10	210	n-210-10	977	GG-7	OM	8.1	3259.6	1386.7	2528.1	307.1	635.2	0.7	691.0	53.1	6.4	0.4	0.6	0.0	0.6	17.1	39.2	32.9	0.4	6.6		
C11	169	n-169-02	924	GG-5	OM	6.6	3618.4	1394.7	4264.0	259.2	176.4	0.4	792.7	47.3	6.7	2.8	0.8	0.1	0.7	16.1	41.5	35.0	0.7	4.6	0.0	0.0
C12	166	n-166-02	1182	GG-7	UML	3.3	2409.8	1242.2	1523.4	234.5	939.8	1.7	448.3	43.2	5.3	0.3	0.8	0.0	0.4	17.7	46.7	21.5	0.3	12.1	0.0	0.0
C12	166	n-166-03	1020	K-1	Kim	9.9	36516.6	1192.5	2247.7	244.8	741.1	6.8	624.1	44.5	9.0	7.4	2.2	0.0	6.7	8.3	33.6	38.7	0.4	10.4		
C12	166	n-166-04	732	GG-5	Kim	1.0	753.3	686.3	2587.1	544.9	290.6	1.0	1463.3	16.4	5.4	0.2	0.9	0.0	0.1	9.1	55.2	25.9	0.5	7.0	0.0	0.0
D02	143	n-143-03	747	GG-7	UML	3.0	3617.4	1626.7	2354.4	391.4	982.9	0.9	1385.1	64.8	7.5	0.2	0.6		0.6	18.3	36.2	35.0	0.4	6.8		0.0
D04	9	n-9-08	829	GG-7	UML	5.8	5333.9	1370.5	2419.9	382.1	908.4	1.5	1043.9	47.8	5.8	0.4	0.7	0.0	1.0	17.5	38.9	34.6	0.5	5.2	0.0	0.0
D04	9	n-9-12	1352	L-2	UML	7.7	1762.7	753.9	1594.5	203.9	1344.6	8.2	339.8	26.5	3.3	0.7	1.0	0.1	0.3	11.9	55.8	16.9	0.2	13.5	0.0	0.0
D04	9	n-9-14	642	GG-5	Kim	3.0	425.0	775.4	2762.0	479.6	227.8	0.4	2130.4	22.0	4.6	0.2	1.1		0.1	7.0	58.2	25.8	0.4	7.0	0.0	0.0
D06	3	n-3-01	921	GG-7	UML	0.2	1399.1	2190.3	2353.4	287.0	762.0	0.8	798.1	77.7	6.6	0.3	0.8	0.0	0.1	27.0	32.9	33.7	0.3	4.3		0.0
D06	3	n-3-02	1171	GG-5	OM	5.0	4603.5	1428.5	2762.5	270.2	766.2	0.5	457.5	41.9	5.8	0.6	0.8	0.0	0.8	16.1	42.4	31.2	0.5	6.9	0.0	
D09	139	n-139-02	759	GG-7	OM	4.5	3428.5	1578.1	2862.2	337.3	1097.4	0.6	1324.1	54.5	6.8	0.5	0.7		0.6	17.2	37.7	36.3	0.5	4.8	0.0	0.0
D11	39	n-39-01	688	GG-5	OM	1.5	1287.8	631.7	2574.9	246.5	731.7	6.9	1740.1	36.4	5.9	0.2	0.8	0.0	0.3	16.9	43.9	30.0	0.4	7.6		0.0
D11	39	n-39-02	1372	GG-7	OM	3.6	1454.9	799.9	1546.1	211.9	903.5	0.9	330.1	41.9	3.1	0.2	1.0	0.0	0.2	17.4	52.6	14.3	0.3	14.5	0.0	
D11	39	n-39-03	979	GG-7	UML	3.0	1520.5	1081.6	1918.8	270.7	526.5	0.7	687.4	40.7	4.5	0.7	0.8	0.0	0.3	18.0	47.0	23.1	0.4	10.2		0.0
D12	225	n-225-01	1353	GG-7	OM	5.2	1869.2	764.9	1825.2	224.9	821.0	5.5	339.4	35.5	4.5	0.7	0.8	0.0	0.3	18.2	47.3	20.6	0.3	10.7		0.0
D12	225	n-225-02	956	L-4	UML	3.2	5889.2	1587.1	1502.3	247.6	1022.8	1.2	729.2	67.8	5.6	0.4	0.7		1.1	19.5	40.2	27.7	0.3	8.1	0.0	0.0
E02	92	n-92-01d	1369	GG-7	OM	3.1	1324.8	779.3	1660.7	202.2	1107.2	1.0	331.8	38.7	3.0		0.9	0.0	0.2	17.3	50.7	14.3		14.8	0.0	0.0
E02	92	n-92-02	1071	GG-7	UML	5.2	2681.4	971.9	2001.9	268.8	653.5	1.1	556.9	40.8	4.6	4.6	0.9	0.0	0.5	14.3	50.9	22.5	0.3	9.8	0.0	0.0
E04	186	n-186-02	1058	K-1	OM	10.0	694.2	384.3	2006.3	339.3	461.6	1.5	572.8	14.1	4.0	0.2	1.1	0.0	0.1	5.6	62.0	19.4	0.4	10.8		0.0
E04	186	n-186-03	1055	GG-7	UML	3.9	3283.6	1269.4	2463.9	292.6	1145.1	0.5	576.4	50.6	5.1	0.1	0.7		0.6	17.9	40.4	32.4	0.4	6.2		0.0
E04	186	n-186-05	725	GG-5	Kim	0.4	1119.4	774.4	2846.3	585.7	258.0	0.3	1505.5	10.3	4.5	0.7	0.9	0.0	0.2	8.4	56.1	27.0	0.5	6.7		0.0
E04	186	n-186-06	743	GG-5	OM	0.6	1992.4	890.0	2915.8	495.6	338.5	0.6	1405.0	15.0	5.2	0.9	0.8	0.0	0.3	11.3	51.7	28.4	0.5	6.1		0.0
E05	61	n-61-02	864	GG-7	UML	4.1	4904.1	1268.2	3293.4	677.3	874.8		937.1	52.8	6.4	0.3	0.7	0.0	0.5	17.9	40.8	32.5	0.5	5.6		0.0
E05	61	n-61-03	732	GG-3	UML	0.2	264.9	533.7	1736.6	584.7	1300.9		1465.7	93.1	5.1		0.5	0.0	0.1	33.4	28.8	24.7	0.3	11.2	0.0	0.0
E05	61	n-61-04	342	GG-5	UML	2.5	852.6	855.3	16386.0	304.9	155.7		16494.1	15.5	6.7	0.1	1.0	0.0	0.1	5.0	51.1	35.4	2.6	1.2	0.0	0.1
E06	12	n-12-01	958	K-1	Kim	10.6	15543.2	914.8	4414.8	270.3	851.5	2.5	725.3	36.0	6.1	11.9	1.4	0.0	2.7	8.8	42.9	32.5	0.7	10.5		
E09	181	n-181-01	918	GG-5	Kim	1.9	1322.5	853.9	3498.3	327.5	617.4	0.7	805.9	32.6	5.7	0.4	1.0	0.1	0.2	9.5	53.8	28.7	0.6	5.4	0.0	0.0
E10	101	n-101-01	1191	GG-7	OM	3.0	1295.0	770.1	1741.3	218.3	790.4	1.2	440.6	33.9	3.1	0.3	0.8	0.0	0.1	14.4	54.5	16.4	0.4	13.6	0.0	0.0
F02	185	n-185-13	805	GG-5	Kim	2.1	774.7	556.9	2680.2	432.5	398.3	1.8	1129.3	13.5	5.2	0.3	0.9	0.1	0.1	9.9	54.0	26.8	0.5	6.6	0.0	0.0
F02	185	n-185-14	598	GG-5	Kim	0.4	706.9	556.4	2188.9	509.1	349.0	0.4	2635.1	10.3	4.4	0.3	0.7	0.1	0.0	11.6	47.7	31.3	0.5	6.5		0.0
F02	185	n-185-15	1228	GG-7	UML	3.2	3213.7	1089.3	1650.4	231.4	930.6	1.5	413.5	47.1	4.3	0.2	0.8		0.6	18.9	45.0	22.5	0.3	11.6		0.0
F02	185	n-185-16	794	L-6	OM	6.7	8829.2	1842.2	4711.8	435.8	642.6	0.4	1170.3	61.5	8.1	2.1	1.3	0.0	1.4	13.7	39.7	40.2	0.8	2.3		0.0
F03	198	n-198-01	1389	GG-7	OM	5.8	1765.1	763.1	1652.8	212.8	887.4	1.6	322.4	38.5	4.7	0.4	0.7	0.0	0.3	18.1	47.0	19.5	0.3	12.8	0.0	0.0
F03	198	n-198-02	1118	K-1	Kim	7.2	20292.8	804.8	1961.4	227.1	986.0	6.5	505.6	32.3	6.2	4.3	1.5	0.1	3.8	7.8	42.5	30.8	0.3	11.2		0.0
F03	198	n-198-03	958	L-6	OM	3.8	7056.4	1292.2	3553.2	274.5	562.8	0.8	724.1	51.6	7.3	2.1	0.7	0.0	1.3	15.1	40.6	34.4	0.6	5.6	0.0	
F04	211	n-211-01	770	GG-5	Kim	2.8	397.6	423.7	3398.2	375.3	516.9		1272.3	10.9	5.0		0.6	0.0	0.1	3.9	51.2	36.8	0.8	4.2		0.0
F04	211	n-211-02	858	L-4	OM	5.0	5179.1	1349.7	1963.2	344.6	1055.1	1.9	954.8	51.0	4.9	1.8	0.7	0.2	0.9	16.5	46.2	22.8	0.4	11.0	0.0	0.0
F07	64	n-64-01	415	GG-7	UML	0.3	847.9	705.3	1916.8	455.8	1520.9	0.3	8522.7	185.3	6.0	0.2	0.5		0.1	28.8	28.2	30.3	0.3	9.3		0.1
F09	229	n-229-01	1404	GG-7	OM	1.9	1315.5	795.6	1663.9	204.9	1085.9	1.2	315.9	37.0	2.9		0.8	0.0	0.2	19.1	49.7	14.7	0.3	14.4	0.0	0.0
F09	229	n-229-06	1149	GG-7	UML	12.7	3159.5	1194.1	1808.0	256.3	898.6	2.7	476.8	50.5	4.7	2.7	0.7	0.0	0.6	17.4	43.9	26.4	0.4	9.2	0.0	0.0
F09	229	n-229-07	905	GG-7	UML	6.8	2783.3	1092.3	4267.3	290.9	652.0	1.0	835.0	66.8	6.7	2.8	0.8	0.0	0.3	18.0	43.9	26.4	0.7	8.4	0.0	0.0
G03	94	n-94-06	663	GG-5	UML	1.8	1115.5	2159.1	5381.8	328.0	274.1	0.5	1937.8	78.0	7.6	0.5	0.8	0.0	0.1	20.3	39.6	35.7	0.8	1.9		0.0
G03	94	n-94-07	1051	GG-7	UML	7.5	2978.2	1260.6	2324.8	230.4	676.7	0.8	582.5	48.1	5.3	2.5	0.9	0.0	0.6	14.4	49.9	23.9	0.4	9.9	0.0	0.0

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
G03	94	n-94-08	549	GG-5	OM	6.8	1369.6	738.9	5111.0	278.2	964.8	0.7	3434.1	33.2	5.6	0.2	0.7		0.2	15.1	46.2	26.7	0.4	8.4		0.0
G03	94	n-94-09	933	K-1	Kim	11.2	26899.9	359.3	2735.1	254.0	1662.9	4.1	773.3	61.6	5.6	89.8	19.0	0.0	4.8	10.1	40.7	28.7	0.4	13.5		0.0
G03	94	n-94-10	965	GG-5	OM	4.7	5849.5	1432.6	3316.2	327.6	927.8	1.1	712.3	47.8	7.8	0.7	0.7	0.0	1.0	16.1	40.0	36.9	0.5	3.9	0.0	0.0
G04	163	n-163-05	608	GG-5	OM	3.1	1679.4	885.1	2216.8	363.5	415.4	0.8	2511.8	22.4	5.7	0.3	0.8	0.0	0.4	15.0	48.2	26.9	0.4	7.2	0.0	0.0
G04	163	n-163-06	386	L-6	OM	2.3	11227.5	2041.2	3554.9	1096.9	621.3	0.4	10869.7	49.2	8.5	0.9	0.7	0.0	1.4	13.1	38.7	39.9	0.7	1.6	0.0	0.0
G07	174	n-174-03	773	GG-5	Kim	2.9	1973.8	1026.2	2762.2	369.1	816.5	6.5	1260.8	42.0	7.4	1.5	1.3	0.1	0.9	8.9	48.6	31.0	0.4	8.1		0.0
G07	174	n-174-04	807	GG-7	Kim	3.4	2322.0	909.0	1982.7	400.8	631.8	0.4	1122.8	32.6	5.6	2.1	0.9	0.0	0.4	13.6	48.1	30.8	0.3	4.9	0.0	0.0
G07	174	n-174-05	843	GG-7	UML	5.3	3961.1	1343.0	2653.3	339.5	811.4	1.0	1001.1	52.2	6.5	0.4	0.7	0.0	0.7	17.7	38.1	35.2	0.5	6.1	0.0	0.0
G08	193	n-193-03	539	GG-5	Kim	1.2	1142.4	533.2	3288.7	539.0	323.8	0.3	3633.8	16.1	4.6	0.6	0.9	0.1	0.2	7.8	52.6	30.8	0.6	5.3	0.0	0.0
G08	193	n-193-04	388	GG-5	Kim	0.5	1719.0	684.8	8395.7	584.5	194.9	0.5	10769.6	18.4	7.4	0.2	0.9	0.1	0.3	10.8	48.2	35.7	1.3	0.7	0.0	0.0
H02	222	n-222-02	805	GG-5	OM	2.2	938.1	663.0	3951.5	360.2	514.6	2.8	1129.1	33.9	5.7	0.4	0.7	0.1	0.2	8.4	56.8	25.1	0.5	7.7	0.0	0.0
H02	222	n-222-03	988	L-4	UML	6.5	6055.0	1697.1	1895.1	251.1	996.8	2.2	672.5	65.7	5.9	0.5	0.5	0.0	1.0	17.3	40.5	29.6	0.3	9.2	0.0	0.0
H02	222	n-222-04	574	GG-3	UML	0.7	904.3	779.9	2694.9	615.4	1063.5		2981.7	80.9	6.2	0.2	0.4	0.0	0.1	22.7	35.6	31.8	0.4	7.7	0.0	0.0
H04	105	n-105-02	1246	GG-7	UML	2.9	2339.3	1062.1	1811.8	218.6	974.2	2.1	400.9	44.3	5.0	0.2	0.7	0.0	0.4	19.2	45.1	21.6	0.4	11.8	0.0	0.0
H04	105	n-105-03	525	GG-5	OM	2.6	1328.8	704.0	2627.6	583.7	583.7	1.7	3961.1	16.0	5.9	0.2	0.7		0.3	13.8	46.7	29.5	0.5	7.3		0.0
H04	105	n-105-04	1242	L-2	Lam	9.6	25284.8	800.2	2050.9	230.3	1367.2	19.2	403.4	51.4	7.0	6.8	1.8	0.1	4.3	9.4	40.7	30.6	0.3	12.6		0.0
H05	124	n-124-02	530	GG-5	OM	0.3	1544.2	687.5	3343.4	738.8	404.8		3835.6	12.7	5.4	0.6	0.7	0.1	0.2	14.5	48.8	27.1	0.5	7.0	0.0	0.0
H06	77	n-77-01	1181	L-4	OM	5.9	9988.1	751.0	1414.1	199.5	1140.1	6.1	448.5	58.7	5.6	1.2	0.7	0.1	1.8	17.2	39.4	27.3	0.3	11.9	0.0	0.0
H06	77	n-77-04	825	L-4	OM	7.4	11997.9	2447.2	2322.8	351.3	633.1	3.3	1058.9	68.5	6.4	2.0	0.8	0.0	2.4	10.7	43.9	31.9	0.3	8.8		0.0
H06	77	n-77-05	885	L-4	OM	6.2	6948.3	1320.5	1878.5	363.9	1059.6	1.6	883.5	58.2	4.7	3.6	0.7	0.0	1.3	16.6	46.0	24.2	0.3	9.8		0.0
H07	170	n-170-01	589	K-1	Kim	0.2	29.5	44.2	814.1	499.9	160.6	0.4	2755.3	21.0	2.3		0.4		0.0	3.9	65.0	22.5	0.4	6.4	0.0	0.0
H07	170	n-170-05	5248	GG-4	OM	0.3	542.3	162.6	200.4	28.5	93.6	0.1	64.0	5.9	0.6	0.0	0.1	0.0	1.0	18.5	38.7	28.3		10.0		
H10	7	n-7-01	1064	GG-7	Kim	3.4	2920.3	760.9	1666.5	322.0	732.7	3.1	566.3	28.0	3.8	0.7	1.1	0.1	0.5	12.3	55.0	19.2	0.4	11.6	0.0	0.0
I03	87	n-87-03	469	GG-5	Kim	0.8	549.1	467.8	3593.0	672.2	313.3	0.6	5673.6	8.5	6.3		0.8	0.0	0.1	8.9	52.1	30.3	0.6	5.7	0.0	0.0
I04	165	n-165-03	1322	GG-5	OM	1.4	1710.3	404.5	2892.3	220.0	403.8		355.3	16.5	2.6	0.7	0.4	0.0	1.1	12.3	50.7	27.2	0.5	6.6	0.0	0.0
I06	13	n-13-02	973	GG-7	OM	10.1	5037.3	1598.7	2719.1	303.6	733.2	0.9	698.3	57.5	5.6	2.4	0.8	0.0	0.9	16.3	40.5	33.2	0.5	6.5		0.0
I06	13	n-13-03	1113	GG-7	UML	5.4	2377.2	949.3	1331.4	216.1	487.1	0.6	511.0	36.2	3.8	2.1	0.9	0.0	0.4	14.1	52.0	20.4	0.3	11.7	0.0	
I06	13	n-13-05	1092	GG-7	UML	9.1	3108.1	1313.7	1967.3	263.5	626.7	1.3	533.3	45.8	4.9	2.3	0.8	0.0	0.5	18.3	43.4	26.5	0.3	10.1		0.0
I06	13	n-13-07	1512	GG-7	UML	4.9	1310.1	703.1	1308.4	183.5	972.5	1.0	275.0	31.3	2.7	0.1	0.9	0.0	0.2	16.5	53.2	13.3	0.3	15.0	0.0	0.0
I07	86	n-86-01	1014	GG-7	UML	8.5	3573.8	1404.4	2294.7	289.6	890.8		632.9	57.9	6.1	0.9	0.6		0.6	17.4	39.8	32.1	0.4	7.6	0.0	0.0
I07	86	n-86-02	740	GG-5	OM	2.3	4317.3	1458.3	2199.6	250.4	344.9		1419.5	26.6	6.7	1.4	0.7	0.0	0.8	14.5	42.5	34.5	0.3	5.0		0.0
I08	73	n-73-01	818	L-4	OM	5.8	6455.2	2020.5	2425.9	344.9	987.6	0.7	1081.9	63.9	7.2	0.3	0.6	0.0	1.2	16.1	39.3	33.6	0.3	7.9		0.0
I08	73	n-73-04	756	GG-5	OM	0.6	738.2	434.7	2556.5	536.4	465.6		1340.4	18.0	5.4	0.2	0.8	0.1	0.1	9.4	54.9	27.3	0.4	6.9	0.0	0.0
I08	73	n-73-08	985	GG-7	UML	7.9	3111.6	1719.6	2359.8	328.1	896.1	1.2	678.5	61.4	7.8	0.4	0.8	0.0	0.5	22.1	38.8	20.9	0.3	13.0	0.0	0.0
I10	155	n-155-01	784	GG-5	OM	1.3	885.7	806.6	2950.3	457.9	189.5	0.6	1213.9	4.8	4.9	0.3	0.8	0.1	0.2	9.8	59.0	21.1	0.5	8.0	0.0	
I10	155	n-155-02	644	GG-5	OM	1.6	2767.4	1261.7	3139.8	539.1	721.0		2110.0	36.0	8.2		0.5	0.0	0.5	16.2	37.2	37.1	0.5	5.3	0.0	0.0
J06	183	n-183-09	586	GG-5	OM	0.7	1299.7	784.9	2846.2	514.9	346.5	0.8	2807.5	9.8	5.7	0.2	0.7	0.0	0.2	10.0	53.6	26.4	0.1	6.9	0.0	0.0
J08	107	n-107-01	881	GG-7	OM	9.4	5330.0	1567.3	2474.6	336.0	810.2	1.0	893.0	61.8	7.3	0.6	0.7	0.0	0.9	16.3	40.9	31.4	0.4	8.0		0.0
J08	107	n-107-02	781	L-4	OM	2.1	11132.2	2106.3	2828.5	396.5	970.2	0.4	1224.9	70.8	8.5	0.3	0.5	0.0	1.9	16.7	34.2	41.6	0.5	3.1	0.0	0.0
J08	107	n-107-05	823	GG-5	OM	1.0	4611.4	1742.0	3054.0	367.5	651.4	0.5	1065.9	35.5	7.5	4.3	0.7	0.0	0.3	16.9	40.0	34.1	0.5	6.5		0.0
J08	107	n-107-06	948	GG-7	UML	6.6	5612.8	1903.8	2469.4	318.5	959.6	1.2	743.6	63.7	6.5	0.8	0.6	0.0	1.0	18.2	39.2	32.5	0.4	7.4	0.0	0.0
J08	107	n-107-07	941	GG-7	UML	3.9	3471.9	1212.7	2105.2	288.1	927.3	4.8	758.1	44.8	5.6	0.6	0.9	0.0	0.6	12.1	50.7	25.2	0.3	10.0	0.0	0.0
J08	107	n-107-08	632	GG-7	UML	1.9	3023.2	1311.8	2047.3	594.9	660.4		2238.0	47.8	7.3		0.6		0.5	19.3	41.1	30.8	0.3	6.6		0.0
J10	20	n-20-05	1045	GG-7	UML	4.9	1245.9	768.3	1338.0	228.4	918.2	3.8	589.2	33.3	3.1	0.3	0.9	0.1	0.2	15.2	51.0	19.4	0.3	11.8		0.0
K03	41	n-41-01	782	GG-7	OM	10.6	4411.4	1892.5	2318.2	333.7	815.2	0.7	1222.5	57.2	8.2	1.0	0.9	0.1	0.8	16.2	38.4	36.1	0.5	5.9		0.0
K03	41	n-41-02	873	GG-5	Kim	2.4	2486.5	781.8	2378.5	450.8	877.6	1.3	915.0	33.6	5.2	0.3	0.9	0.0	0.4	15.2	50.3	23.6	0.4	8.5	0.0	0.0

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
K03	41	n-41-03	369	GG-5	Kim	2.4	1610.1	767.9	1610.3	1264.9	404.9	1.3	12752.4	12.0	5.8	3.6	0.9	0.0	0.3	17.0	47.8	27.8	0.3	3.7	0.0	0.1
K03	41	n-41-04	1281	GG-7	UML	0.9	831.1	729.8	1249.4	178.8	825.5	0.5	378.8	41.7	2.5	0.1	0.8	0.0	0.2	19.1	49.7	14.8	0.2	14.7	0.0	0.0
K05	21	n-21-02	941	GG-5	OM	3.4	1395.4	879.6	2368.4	335.8	447.5	0.5	757.9	30.8	3.9		0.4	0.0	0.4	13.9	49.7	25.7	0.4	8.0		0.0
K05	21	n-21-03	943	GG-7	UML	7.8	2971.8	1029.0	1586.0	259.2	974.8	5.5	754.2	47.5	3.6	0.7	1.1	0.1	0.6	12.0	51.6	23.1	0.3	10.7	0.0	0.0
K05	21	n-21-05	1056	K-1	UML	6.1	10295.9	894.8	1380.9	225.6	1231.6	30.2	575.4	40.0	4.8	1.9	1.1	0.1	1.9	8.2	49.3	28.6	0.3	9.7	0.0	0.0
K05	21	n-21-06	729	L-6	Kim	0.9	7949.4	1518.2	4030.3	382.6	621.8	1.2	1480.1	55.1	6.5	2.1	1.1	0.0	0.6	14.3	39.6	40.6	0.6	2.1		0.0
K06	261	n-261-03	1000	L-4	UML	6.6	5285.4	1269.5	1911.4	293.7	1105.5	6.0	653.4	49.0	4.9	2.2	1.0	0.0	1.0	12.6	50.1	23.6	0.4	11.1		0.0
K06	261	n-261-04	1082	GG-7	UML	5.8	2498.2	1071.0	1685.2	238.7	904.6	5.3	545.0	47.4	3.6	0.5	0.9	0.0	0.5	12.3	52.5	21.8	0.3	11.3	0.0	0.0
K06	261	n-261-05	903	GG-7	UML	4.2	2477.3	1135.3	1865.0	306.0	686.4	8.2	839.3	45.3	4.5	0.4	0.9	0.1	0.4	12.0	50.7	24.8	0.3	9.6	0.0	
K07	148	n-148-01	901	L-4	UML	8.0	13357.5	2195.1	1561.1	254.9	2005.9	1.2	842.4	117.0	6.8	1.3	0.4		2.3	28.4	25.9	31.0	0.2	11.3	0.0	0.0
K08	121	n-121-06	853	L-4	OM	4.8	9636.7	844.2	1945.1	250.8	847.0	61.1	968.9	42.5	7.2	1.8	0.8	0.1	1.6	9.8	48.2	32.1	0.3	6.5	0.0	0.0
K08	121	n-121-09	1209	GG-7	OM	6.7	2209.5	871.4	1549.4	224.2	962.2	10.2	426.8	33.1	4.0	0.5	0.7	0.1	0.4	12.7	51.5	22.8	0.3	10.6		0.0
K09	111	n-111-01	1159	GG-7	OM	7.5	2486.2	1029.5	1630.7	228.6	880.2	5.5	467.7	41.7	5.4	0.7	0.7	0.0	0.5	12.7	51.4	21.8	0.3	11.6		0.0
L02	18	n-18-01	861	L-4	OM	5.0	5485.9	1052.3	1687.5	304.1	1186.9	3.4	945.6	52.4	4.3	1.5	0.8		1.0	16.7	43.8	25.2	0.3	10.8		0.0
L02	18	n-18-02	698	GG-7	OM	2.6	4571.3	905.2	2709.6	453.5	1441.9	0.4	1671.1	43.9	6.2	0.3	0.6	0.0	0.8	15.8	33.6	40.1	0.4	6.2	0.0	0.0
L02	18	n-18-03	508	GG-6	Kim	1.7	542.1	325.7	3591.7	514.2	425.8	0.2	4384.9	5.0	4.8	0.1	0.7	2.3	0.1	4.7	52.5	30.9	0.7	6.0		0.0
L03	251	n-251-02	983	GG-7	UML	1.4	1039.4	947.5	2366.7	266.1	1225.3		680.7	47.3	3.3		0.6	0.1	0.2	22.5	44.6	17.7	0.3	13.4		
L06E	40	n-40-13b	1079	GG-7	UML	5.8	2758.2	1002.0	1740.4	255.9	966.1	4.9	548.5	40.0	4.5	1.0	0.9	0.0	0.5	12.1	52.4	23.0	0.3	10.8	0.0	0.0
L06WA	218	n-218-01	782	GG-7	OM	3.2	6016.2	1915.4	3100.5	343.4	941.1		1222.0	64.2	8.1	0.9	0.6	0.0	1.0	13.6	39.0	38.4	0.5	5.0	0.0	0.0
L06WA	218	n-218-02	941	K-1	Kim	3.9	30194.8	1286.3	1696.7	245.9	1516.8	45.4	757.1	54.7	7.0	5.0	1.9	0.1	5.4	9.4	40.7	31.3	0.3	10.5	0.0	
L06WA	218	n-218-03	568	GG-5	OM	0.3	1072.8	904.3	3108.7	562.6	307.8		3082.2	11.7	5.6	0.3	0.6	0.1	0.2	10.6	52.5	27.7	0.5	6.5	0.0	0.0
L06WA	218	n-218-04	918	GG-7	UML	11.1	3574.1	1612.4	1944.9	241.7	699.1	1.3	805.1	65.7	6.3	2.5	0.6	0.1	0.6	20.7	36.0	31.3	0.3	9.7	0.0	0.0
L06WA	218	n-218-05	1064	GG-7	UML	8.5	4354.5	1462.8	1970.4	239.7	904.5	1.2	566.4	55.3	5.1	1.7	0.6		0.8	18.1	42.6	26.8	0.4	9.9		0.0
L06WA	218	n-218-06	982	GG-7	UML	4.5	2819.1	1513.6	2433.1	287.0	788.5		682.0	54.1	5.1	0.2	0.5	0.1	0.5	18.1	41.5	30.0	0.4	8.0		
L06WA	218	n-218-07	824	L-4	OM	4.4	6395.7	1487.5	2285.6	319.7	748.1	7.2	1061.0	50.8	5.7	1.4	1.2	0.5	1.2	10.3	48.9	29.0	0.4	8.5	0.0	0.1
L07	44	n-44-01	1005	L-4	UML	6.7	6400.6	1440.5	1738.8	256.7	880.1	6.0	646.5	54.3	5.8	2.3	0.9	0.0	2.1	11.3	48.9	25.1	0.3	9.2	0.0	0.0
L07	44	n-44-02	921	GG-5	OM	5.0	1412.4	1061.3	1804.2	317.9	437.0	1.9	797.8	26.5	3.9	0.7	1.1	0.1	0.3	12.1	56.3	19.5	0.3	10.0		0.0
L10	99	n-99-01	955	GG-7	UML	4.3	2524.5	1004.4	1770.3	305.3	735.5	4.2	729.9	42.4	4.1	0.5	0.9	0.1	0.4	12.5	52.6	21.2	0.3	11.0	0.0	0.0
M02	78	n-78-02	1280	GG-7	UML	5.3	3601.5	957.0	1873.0	245.3	825.8	2.7	379.2	43.5	4.5	0.9	0.7		0.6	17.6	44.5	25.0	0.4	10.0		0.0
M05	29	n-29-01	1304	GG-7	OM	5.1	2846.6	883.1	1944.7	239.0	624.0	1.5	365.0	40.9	4.0	0.9	1.0	0.0	0.5	17.5	44.3	26.3	0.4	9.5		
M05	29	n-29-02	838	GG-7	Kim	2.3	4405.7	811.3	2065.3	420.7	1151.1	3.7	1016.1	55.3	5.1	4.7	1.5	0.0	0.9	12.9	48.2	26.6	0.3	9.6		0.0
M05	29	n-29-03	1452	GG-7	OM	3.6	1094.5	762.0	1376.6	208.4	976.7	0.8	296.3	34.8	2.9	0.2	1.1	0.0	0.2	18.4	49.7	15.2	0.2	14.8		0.1
M05	29	n-29-04	1017	GG-7	UML	5.2	3293.5	1154.5	1783.0	274.8	764.6	4.8	628.8	45.5	4.6	0.9	1.1	0.0	0.6	11.8	51.6	23.4	0.3	10.4		
M05	29	n-29-06	844	GG-7	UML	5.5	4933.5	1596.9	2630.0	304.7	710.2	0.5	995.9	55.9	6.9	1.0	1.1	0.0	0.8	14.5	36.8	39.4	0.5	4.9	0.0	0.0
M05	29	n-29-07	738	GG-5	UML	1.5	1756.0	998.0	4410.2	322.0	992.1	0.3	1429.5	41.6	4.1	0.2	0.9	0.0	0.3	20.3	42.2	23.3	0.7	11.4		
M05	29	n-29-08	1500	GG-8	UML	7.8	1362.4	712.0	1367.0	191.5	1051.5	2.0	278.9	19.1	3.3	0.5	1.3	0.1	0.2	8.4	58.2	20.5	0.3	10.5		0.0
M05	29	n-29-09	556	GG-5	Kim	2.3	879.2	625.1	3169.6	644.1	309.1	0.9	3294.2	7.5	4.6	0.4	1.2	0.1	0.1	8.6	55.4	26.4	0.6	6.4	0.0	0.0
M05	29	n-29-10	520	L-6	OM	4.4	8315.6	1701.7	5734.2	400.8	427.9	0.4	4083.1	59.4	8.0	1.8	1.3	0.0	0.5	14.7	35.3	44.2	0.9	0.7		0.0
M06	49	n-49-02	1400	GG-8	UML	7.9	907.5	666.0	1585.2	210.2	1003.1	9.5	317.3	18.0	4.5	0.4	1.1	0.1	0.2	8.5	59.9	18.2	0.3	12.0	0.0	0.0
M06	49	n-49-03	395	GG-5	OM	2.6	1838.4	1314.4	3326.9	1184.4	71.5		10055.4	4.6	7.4	0.4	0.7	0.1	0.2	13.0	46.4	34.9	0.5	1.6		0.1
M07	172	n-172-01	1478	GG-5	OM	4.3	1718.9	1522.9	2879.9	117.0	348.2	0.8	286.5	24.3	3.1	0.4	0.3	0.0	0.8	17.1	41.8	31.6	0.6	6.8	0.0	0.0
M08	128	n-128-02	938	L-4	OM	7.4	6764.3	1776.5	1959.0	288.1	995.0	7.9	764.0	58.2	5.8	0.9	0.8	0.0	1.2	12.3	47.7	27.0	0.4	9.9	0.0	0.0
N03	215	n-215-01	1001	GG-7	UML	6.4	3820.0	1437.3	1703.6	234.6	920.7	0.7	653.0	53.4	4.9	0.8	0.5	0.0	0.7	18.7	41.8	26.3	0.4	9.8	0.0	
N06	202	n-202-03	945	GG-5	Kim	1.8	635.6	1022.3	5189.8	478.8	617.5		750.2	47.4	5.9	0.2	0.7		0.1	13.7	50.4	24.7	0.7	9.3		
N06	202	n-202-04	356	GG-5	OM	0.5	1302.7	611.6	10276.1	221.2	127.9	1.5	14387.4	95.7	10.2	0.4	0.7	0.0	0.2	15.4	43.9	35.3	1.3	0.6	0.0	0.0
N07	16	n-16-01	909	L-4	UML	3.6	26123.5	2643.3	1645.4	260.4	1570.5	1.6	824.0	112.3	6.0	1.0	0.5	0.0	4.8	21.5	24.8	38.3	0.3	7.6		

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
N09	32	n-32-02	841	GG-7	UML	3.9	3102.3	1069.2	1932.5	295.8	800.5	5.3	1006.5	42.9	4.7	1.0	1.0	0.0	0.6	10.4	51.4	26.8	0.4	8.6	0.0	0.0
N09	32	n-32-03	929	GG-5	UML	4.9	2698.8	1018.2	2497.4	260.6	695.9	0.4	780.7	37.6	4.6	0.6	1.0	0.0	0.5	10.1	50.6	29.5	0.5	6.6		0.0
N09	32	n-32-04	875	L-4	OM	4.1	4954.9	896.6	1873.5	331.1	812.0	2.5	908.3	37.5	4.5	1.7	1.0	0.0	1.0	12.1	49.2	26.0	0.4	8.7	0.0	0.0
N09	32	n-32-07	932	L-4	Kim	8.7	6081.2	1717.5	2371.8	309.3	1213.1	1.0	775.9	58.3	6.2	2.7	1.3	0.0	1.0	14.5	36.9	37.9	0.4	6.5	0.0	0.0
O03	177	n-177-01	669	GG-5	OM	1.7	1891.8	671.8	2379.1	549.0	502.3	1.1	1891.0	29.8	4.9		0.7	0.0	0.3	14.4	50.0	25.3	0.4	8.5	0.0	0.0
O03	177	n-177-02	918	GG-5	OM	3.2	851.4	789.4	1879.8	312.4	367.4	3.2	805.6	25.9	4.3	0.4	0.8	0.1	0.2	11.8	58.5	16.7	0.4	11.1	0.0	0.0
O03	177	n-177-03	599	GG-5	OM	0.9	907.8	714.6	3122.0	563.9	245.6	0.6	2627.0	10.1	5.8	0.7	0.8	0.0	0.1	9.7	55.3	27.1	0.5	6.1	0.0	0.0
O03	177	n-177-04	442	GG-5	OM	0.7	888.2	625.2	3117.0	713.6	271.6	1.4	6918.3	5.5	5.1		0.6	0.1	0.2	11.7	53.5	25.8	0.4	6.5	0.0	0.0
O04	8	n-8-01	1121	GG-7	UML	4.3	4458.5	1071.0	1987.1	242.3	988.2	1.2	503.0	43.1	4.6	0.2	0.8	0.0	0.8	19.0	42.6	24.4	0.3	11.2		0.0
O04	8	n-8-02	964	GG-5	UML	3.2	2006.7	826.6	3304.5	586.4	694.6	0.5	713.7	37.0	5.2	0.2	0.7	0.0	0.3	18.7	40.0	29.5	0.5	9.2		0.0
O05	272	n-272-01	1025	GG-7	Kim	6.0	2898.2	1273.2	2614.0	284.0	244.0	7.8	617.4	42.4	3.9	3.9	1.4	0.0	0.4	14.3	50.9	22.8	0.4	10.3	0.0	0.0
O06	207	n-207-02	1437	GG-7	OM	3.2	1148.3	676.9	996.1	181.9	741.5	0.8	302.1	33.2	3.1		0.7	0.0	0.2	16.7	52.2	14.4	0.3	14.4	0.0	
O06	207	n-207-05	709	GG-5	OM	2.2	1310.2	676.4	4407.1	334.3	652.0		1599.4	30.8	5.4		0.7	0.0	0.3	14.9	47.0	26.8	0.6	8.3	0.0	0.0
O06	207	n-207-06	1172	GG-7	OM	7.1	2552.8	1043.3	1538.1	230.4	961.9	7.0	456.7	35.8	4.5	0.6	0.7	0.1	0.5	13.2	50.7	23.3	0.3	10.4	0.0	0.0
O06	207	n-207-08	571	GG-5	OM	1.1	1263.2	877.5	2961.3	540.0	128.7		3035.6	7.0	5.0	0.4	0.7	0.1	0.2	11.2	52.0	28.2	0.5	6.1	0.0	0.0
O07	182	n-182-11	935	GG-7	OM	4.6	2736.9	1092.7	1804.5	258.2	818.9	3.2	769.8	41.1	5.5	0.5	0.7	0.1	0.5	11.3	51.8	25.3	0.3	9.6	0.0	
O07	182	n-182-12	974	GG-7	OM	4.7	2424.3	1022.8	1798.3	270.9	771.6	6.0	696.1	46.6	4.8	0.2	0.8	0.0	0.4	11.9	51.8	23.7	0.3	10.5		0.0
O07	182	n-182-14	881	GG-7	OM	4.4	2145.5	920.8	1373.3	191.9	529.8		893.4	39.2	4.8	4.0	0.7		0.4	14.3	52.3	20.9	0.2	11.4	0.0	
O08	212	n-212-01	917	GG-7	OM	7.3	3337.6	1311.8	2708.7	290.5	1366.5		808.2	58.2	6.2	0.4	0.6	0.1	0.6	17.3	40.6	32.9	0.6	6.3	0.0	0.0
O10	162	n-162-04	578	GG-5	OM	1.9	848.5	519.7	2631.1	579.2	314.1	0.7	2925.4	13.5	5.6		0.7	0.0	0.1	11.6	52.6	25.4	0.5	7.5	0.0	0.0
P03	37	n-37-03	766	L-4	OM	4.9	6791.4	1682.9	2223.5	399.9	1377.2	1.6	1292.2	57.9	5.1	3.0	0.9	0.0	1.2	13.9	44.2	30.0	0.4	8.2		0.0
P04	28	n-28-01	640	GG-5	Kim	3.9	1113.9	966.3	2952.5	648.9	343.8	1.6	2153.8	17.9	3.2	0.5	1.2	0.1	0.2	13.4	54.8	21.9	0.5	7.5	0.0	0.0
P04	28	n-28-02	905	L-4	UML	4.5	4770.1	1296.8	1824.4	314.5	653.4	2.4	833.4	52.3	4.3	0.4	0.8	0.0	0.9	17.9	39.2	30.3	0.3	8.9		0.0
P05	206	n-206-01	984	GG-7	UML	2.8	2567.5	1150.0	3387.6	327.0	673.1	0.4	679.7	53.5	5.8	2.4	0.8	0.0	0.2	18.0	43.4	29.0	0.6	8.3	0.0	
P06	268	n-268-01	954	GG-5	OM	6.2	3032.3	1136.9	3006.6	336.1	726.0	0.6	732.2	45.3	8.1	1.7	0.9		0.5	17.1	42.0	34.5	0.5	4.0	0.0	
P06	268	n-268-02	904	GG-5	OM	4.0	3018.7	1063.0	6030.9	289.9	475.2	0.4	836.7	39.8	5.6	2.6	0.8	0.0	0.7	16.4	44.3	29.0	0.9	7.2	0.0	0.0
P07	48	n-48-02	873	GG-5	Kim	1.1	692.5	761.7	1824.4	356.4	226.4	1.9	912.6	8.8	3.0	0.1	1.1	0.1	0.1	13.9	57.3	16.0	0.3	11.6		0.0
P07	48	n-48-03	1288	L-4	Lam	4.3	14606.2	1251.6	1075.6	202.0	1900.8	13.3	374.2	59.2	4.3	3.4	1.3	0.1	2.7	14.6	43.9	22.0	0.2	14.7		0.0
P07	48	n-48-04	990	GG-5	UML	4.6	1470.1	919.6	1686.8	299.5	473.5	2.3	669.9	25.7	3.2	0.5	1.1	0.0	0.3	12.6	55.4	19.6	0.4	10.5		0.0
P07	48	n-48-05	1442	L-2	Lam	10.9	23398.4	362.9	1537.2	198.0	1370.0	15.9	300.0	35.6	5.0	11.8	2.9	0.1	4.6	6.5	41.5	31.4	0.3	13.1	0.0	0.0
P08	247	n-247-02	632	GG-5	UML	2.3	2860.8	1133.1	4984.8	368.7	392.3	0.5	2236.7	39.9	6.2	2.6	1.3	0.0	0.2	17.8	43.3	30.7	0.8	6.0	0.0	0.0
P09	154	n-154-01	799	L-4	OM	3.1	8014.8	1352.8	1422.0	261.9	726.0	4.3	1152.1	46.2	3.5	2.1	0.7	0.0	4.4	7.4	38.8	40.0	0.4	6.7	0.0	
P09	154	n-154-02	866	GG-7	UML	3.6	2324.6	922.7	1507.7	279.4	622.4	4.8	933.0	36.5	3.7	0.8	0.9	0.0	0.8	11.5	52.2	23.6	0.3	10.2	0.0	0.0
Q02	72	n-72-01	1113	K-1	UML	7.4	14690.6	238.7	1616.2	229.3	1500.0	28.1	510.9	32.7	4.0	4.4	1.0	0.0	2.9	8.0	49.2	24.0	0.3	13.3	0.0	0.0
Q03	200	n-200-01	983	GG-7	OM	12.1	4027.9	1239.6	2606.7	382.7	996.5	0.8	681.6	48.1	6.8	2.7	0.8	0.1	0.7	16.7	43.7	32.5	0.4	5.2		0.0
Q03A	129	n-129-02	799	GG-7	UML	4.0	2024.8	981.8	1637.6	275.7	846.6	2.1	1152.4	33.9	2.7	0.7	0.9	0.0	0.4	18.5	50.5	17.0	0.3	12.6		
Q04	257	n-257-01	1014	GG-3	UML	2.2	632.0	722.6	2163.9	238.9	748.6	1.2	632.3	56.6	4.1	0.2	0.9		0.1	15.0	51.3	21.7	0.4	10.8	0.0	0.0
Q05	203	n-203-03	596	GG-5	OM	0.6	797.0	698.4	3007.0	577.1	289.1	0.4	2665.2	9.3	5.3	0.3	0.8	0.1	0.1	10.0	53.4	28.3	0.6	6.3	0.0	0.0
Q09	96	n-96-03	869	L-4	UML	3.4	8854.3	1541.8	2049.9	305.0	898.0	9.8	925.0	50.2	4.8	1.5	0.9	0.0	1.7	10.2	48.6	28.3	0.3	8.7	0.0	0.0
Q10	275	n-275-01	884	GG-7	UML	3.5	2424.5	1136.6	1665.1	290.3	823.8	7.1	884.9	61.5	5.0	0.8	0.9	0.1	1.1	10.5	53.2	23.8	0.4	10.4		0.0
Q10	275	n-275-02	1196	GG-7	UML	6.6	2497.6	987.7	1347.6	225.4	752.2	9.7	436.6	38.9	4.1	0.5	0.9	0.0	0.5	12.0	54.1	19.3	0.3	12.9	0.0	0.0
R03	15	n-15-01	1044	K-1	UML	5.2	1085.6	783.9	1615.4	308.2	529.0	3.7	590.6	22.5	3.0	0.3	1.0	0.0	0.2	9.9	60.9	16.0	0.3	11.8		0.0
R03	15	n-15-02	985	K-1	OM	4.3	839.6	780.6	1794.1	315.9	425.1	7.8	678.2	23.0	3.2	0.2	1.0	0.1	0.2	9.6	61.4	16.3	0.4	11.2	0.0	0.0
R04	199	n-199-03	775	GG-5	OM	4.6	1540.8	1012.1	3938.3	499.6	516.1	23.7	1250.7	32.3	5.3	0.4	0.9	0.0	0.3	13.6	51.4	25.1	0.7	7.6		
R06	164	n-164-01	1063	GG-7	UML	11.6	4850.3	1505.2	2328.0	272.7	929.2	3.1	567.5	56.2	5.4	2.9	1.0		0.9	16.2	45.2	26.1	0.5	10.1	0.0	0.0
R07	134	n-134-01	994	GG-7	UML	10.7	3390.8	1231.2	1844.8	285.5	675.6	0.9	664.0	54.3	4.8	1.8	0.8	0.0	0.6	18.0	41.0	29.9	0.4	9.0	0.0	0.0

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
R07	134	n-134-03	879	GG-7	UML	2.3	1693.4	933.4	1374.6	328.0	667.5	1.9	898.4	37.5	2.7	0.3	0.9	0.0	0.3	19.4	50.8	15.6	0.3	13.0	0.0	
R07	134	n-134-04	1135	GG-7	UML	5.4	1200.5	725.5	1598.9	186.2	954.8	0.8	489.0	31.7	2.3	0.1	0.9	0.0	0.2	16.2	53.3	14.8	0.3	14.1	0.0	
R11	213	n-213-01	287	GG-5	UML	4.5	1503.4	564.0	12882.6	150.8	403.7	1.7	30666.7	21.5	6.3	0.4	0.9	0.1	0.3	10.6	49.9	30.5	2.0	0.4	0.0	0.1
R11	213	n-213-02	1038	GG-7	UML	6.2	3573.0	1540.3	2747.5	282.6	843.9	0.6	598.7	53.5	6.8	0.9	0.8	0.0	0.6	17.4	40.1	34.0	0.5	5.7	0.0	0.0
R11	213	n-213-03	1018	GG-7	UML	5.1	2302.4	1006.2	1663.4	242.0	849.0	5.5	626.2	36.7	5.1	0.3	0.9	0.1	0.5	12.2	51.4	22.9	0.3	10.8		0.0
R11	213	n-213-04	868	L-4	OM	6.7	4889.3	1247.5	2089.8	355.8	947.9	1.2	927.8	51.3	5.7	1.1	0.8	0.0	0.9	16.9	44.0	26.5	0.4	9.7		0.0
R11	213	n-213-05	686	GG-7	UML	2.6	3429.3	850.5	2833.4	495.4	1472.2	0.5	1756.0	46.7	7.4	0.1	0.6	0.0	0.6	22.6	33.4	32.9	0.4	8.0		0.0
R12	194	n-194-08	1202	K-2	UML	5.5	1214.2	635.8	1667.0	256.4	836.0	8.8	432.6	22.8	4.6	0.2	1.0	0.1	0.2	10.2	54.0	22.0	0.4	12.4		0.0
S03	112	n-112-01	613	GG-5	Kim	1.4	1651.4	919.9	3593.8	621.5	308.1	0.5	2449.4	21.9	5.1	0.7	1.2	0.0	0.3	12.2	51.4	28.6	0.6	5.6	0.0	0.0
S03	112	n-112-02	1443	GG-7	UML	3.8	1307.3	689.4	1136.2	184.8	759.3	0.7	299.6	29.2	2.7	0.2	1.0	0.0	0.2	16.3	53.0	14.0	0.2	14.6	0.0	0.0
S04	79	n-79-04	967	GG-7	Kim	3.8	2717.1	771.0	1410.2	317.3	921.7	2.0	708.2	38.9	3.5	0.5	0.9	0.0	0.5	16.3	47.5	21.5	0.3	12.0	0.0	
S04	79	n-79-05	991	GG-7	UML	4.4	1312.3	816.7	1319.9	269.0	833.5	13.1	667.8	34.7	2.3	0.4	0.9	0.0	0.2	16.1	55.5	13.1	0.3	13.8		
S04	79	n-79-06	599	GG-5	Kim	1.1	1218.1	928.1	2670.9	500.8	453.9	0.9	2617.7	10.1	3.5	0.6	0.9	0.0	0.2	8.9	53.4	27.7	0.5	7.1	0.0	0.0
S06	53	n-53-01	1074	GG-5	OM	4.0	2076.4	954.0	3690.3	312.3	390.7	1.7	553.4	36.1	5.2	1.5	1.2	0.1	0.2	17.0	43.1	30.4	0.7	6.7	0.0	
S06	53	n-53-02	544	GG-7	UML	2.3	2392.5	727.3	2407.3	596.6	754.6	0.5	3529.5	56.5	5.0	0.2	0.7	0.0	0.5	20.1	38.0	31.1	0.4	7.4	0.0	0.0
S08	81	n-81-02	683	GG-5	UML	2.0	2207.0	890.3	6331.5	333.0	523.3	0.4	1777.4	43.6	4.4	2.3	0.8	0.0	0.2	18.0	42.0	29.9	1.0	6.9		0.0
S09	249	n-249-01	757	GG-5	UML	0.3	4004.6	1768.7	4929.7	320.7	967.8	0.9	1331.5	60.5	8.0	0.2	0.7		0.7	17.6	37.7	36.7	0.8	4.3		0.0
S09	249	n-249-02	432	GG-5	OM	3.1	2229.4	1068.0	7203.2	370.5	263.6		7458.9	28.1	7.3	0.8	0.8		0.3	16.0	42.4	35.9	1.1	2.1	0.0	0.0
S10	55	n-55-01	1045	L-4	UML	5.0	4665.4	1120.6	1579.6	254.0	783.8	4.2	589.8	47.5	4.1	2.1	0.9	0.0	1.6	11.1	49.5	25.4	0.3	10.2		
S10	55	n-55-02	679	GG-5	Kim	1.3	1373.2	917.9	2577.7	642.7	271.9	0.5	1807.5	7.1	4.2	0.4	0.9	0.1	0.3	12.9	51.3	26.4	0.5	6.4	0.0	0.0
S11	84	n-84-01	905	L-4	OM	7.2	6932.1	1418.4	2017.8	323.7	1042.8	6.4	834.2	51.2	5.6	4.4	1.2	0.0	1.3	12.0	47.0	28.3	0.3	9.6	0.0	0.0
S13	146	n-146-01	834	L-4	UML	3.8	4505.9	988.3	1870.7	300.1	781.3	6.8	1029.5	41.4	3.5	0.7	0.9	0.1	1.0	11.2	52.3	24.1	0.4	9.7		0.0
S16	256	n-256-06	1001	GG-7	UML	4.2	2716.8	1044.7	1776.0	297.3	777.0	4.9	651.9	41.4	4.8	0.8	0.9	0.1	0.6	12.2	52.2	22.2	0.3	10.9	0.0	0.0
T02	144	n-144-01	1183	GG-7	UML	3.7	1292.8	778.2	1213.6	198.8	945.1	2.1	447.4	33.4	2.5		1.0	0.0	0.2	17.2	52.9	14.2	0.2	14.8	0.0	0.0
T03	254	n-254-01	642	GG-5	Kim	4.7	570.0	1219.9	2659.9	519.5	326.2		2135.0	33.3	6.4	0.2	0.8	0.0	0.1	8.8	49.8	33.5	0.5	4.8		0.0
T03	254	n-254-02	868	GG-5	OM	1.3	2052.4	1438.1	4851.4	386.4	493.6		927.2	43.2	7.5	0.3	0.7	0.1	0.4	15.3	40.1	37.0	0.8	4.4	0.0	0.0
T05	88	n-88-01	763	GG-5	Kim	3.3	990.1	809.1	2921.7	491.6	177.8	0.7	1304.5	6.7	4.3	0.3	1.2	0.1	0.2	9.5	59.0	23.4	0.6	6.7	0.0	
T05	88	n-88-02	557	GG-5	Kim	3.1	570.3	381.9	2980.9	556.8	510.1	0.3	3271.2	11.9	5.2	0.1	1.0	0.1	0.1	8.4	52.1	31.2	0.5	5.7	0.0	0.0
T05	88	n-88-03	1154	L-2	Lam	3.6	28273.6	1825.4	1453.6	241.7	1701.3	45.0	472.0	62.1	5.0	2.1	2.4	0.1	4.3	10.8	47.2	23.0	0.2	13.1		0.0
T05	88	n-88-04	817	GG-5	OM	4.2	990.9	794.3	2082.2	385.6	490.0	1.9	1086.9	23.1	3.2	0.4	1.2	0.0	0.2	12.9	56.3	20.0	0.4	9.0	0.0	0.0
T06	140	n-140-10	1018	GG-5	UML	6.7	1138.0	932.3	1662.5	301.5	459.5	1.7	626.5	24.9	3.3	0.6	1.0	0.1	0.2	11.2	56.2	21.0	0.4	9.9		
T06	140	n-140-11	953	GG-5	Kim	1.3	858.9	788.3	1713.2	332.1	240.7	21.1	733.6	17.3	2.9	0.2	1.1	0.1	0.1	9.2	59.7	18.0		10.0		
T06	140	n-140-13	724	GG-5	OM	2.2	4139.0	1252.4	3172.5	541.0	957.5	2.2	1509.7	47.2	6.6	1.1	1.4	0.0	0.6	15.9	45.4	29.3	0.4	7.5	0.0	0.0
T06	140	n-140-14	923	GG-5	OM	8.6	1047.9	1013.4	2163.3	354.0	434.3	2.7	794.8	21.7	3.6	0.4	1.1	0.0	0.2	8.8	59.5	22.3	0.4	7.5	0.0	0.0
T06	140	n-140-15	958	GG-7	UML	7.3	1011.5	678.8	1707.5	308.9	484.3	4.7	725.8	28.2	2.8	0.3	1.1	0.0	0.2	11.8	59.4	16.6	0.4	11.3		
T06	140	n-140-16	709	GG-5	OM	2.3	2094.7	952.4	4105.5	352.7	415.4	0.5	1603.8	34.2	5.0	1.1	0.8	0.0	0.2	16.8	42.8	31.3	0.8	6.5	0.0	0.0
T06	140	n-140-18	690	GG-5	UML	2.3	464.1	948.2	1670.6	444.8	542.6	1.3	1728.9	23.6	3.6	0.2	0.7	0.0	0.1	26.7	37.5	22.7	0.4	11.4	0.0	0.0
T06	140	n-140-19	659	GG-7	UML	3.2	4085.8	1562.7	2051.6	412.4	766.4	2.3	1972.7	64.6	4.7	0.3	0.7	0.0	0.8	18.2	39.0	31.6	0.4	8.3	0.0	0.0
T07	117	n-117-07	1105	GG-7	UML	4.1	4761.7	1120.9	2337.3	302.9	1628.1	1.1	519.6	47.4	4.9	1.0	0.9	0.1	0.9	15.6	44.8	28.3	0.4	8.5	0.0	0.0
T07	117	n-117-09	507	GG-5	Kim	1.6	787.3	427.4	2969.1	529.2	232.5	0.3	4421.6	9.7	4.5	0.4	0.9	0.1	0.1	5.8	55.9	30.8	0.6	4.9		0.0
T07	117	n-117-10	1049	GG-7	UML	4.6	1867.9	771.7	2006.2	191.5	1122.7	3.4	584.5	46.8	3.7	0.3	0.7	0.1	0.4	26.9	35.3	26.0	0.4	10.2	0.0	
T07	117	n-117-11	1002	GG-5	UML	0.3	1665.0	1378.0	3257.7	314.3	829.0	0.4	651.5	46.9	6.2	0.2	0.7	0.0	0.1	24.3	33.4	32.9	0.5	7.2		0.0
T11-2	260	n-260-01	558	GG-5	Kim	1.3	2074.7	675.5	4474.4	764.4	385.6	0.4	3254.0	8.5	7.9	1.8	1.3	0.0	0.3	11.4	52.2	28.5	0.6	5.6	0.0	0.0
T12	216	n-216-01	754	GG-5	Kim	0.6	1349.8	674.2	2939.7	510.3	195.0		1346.6	6.4	5.3	0.6	0.9	0.0	0.2	11.2	54.4	25.3	0.5	7.8	0.0	0.0
U02	235	n-235-02	759	GG-5	OM	5.3	2717.3	886.8	2816.9	328.3	898.1	0.5	1322.2	35.6	8.4	0.2	0.7	0.0	0.5	11.6	41.9	37.4	0.5	5.7	0.0	0.0
U04	83	n-83-01	1354	L-2	Lam	10.8	23907.4	410.9	1621.1	199.4	1320.1	17.1	338.8	39.6	4.9	8.7	2.3	0.1	4.7	7.8	38.9	32.9	0.3	12.7		

Appendix. Chromite mineral chemistry

Field	Lab	Grain	T(Zn) C	nweighted, with Mn	Yao-CART	Sc	Ti	V	Mn	Co	Ni	Cu	Zn	Ga	Ge	Zr	Nb	SiO2	TiO2	Al2O3	Cr2O3	FeO	MnO	MgO	CaO	Na2O
U04	83	n-83-02	926	GG-5	Kim	2.8	977.8	627.1	1688.1	380.0	301.4	2.2	788.6	21.6	3.1	0.5	1.0	0.0	0.2	11.3	58.7	17.1	0.3	10.7		0.0
U04	83	n-83-04	996	GG-7	OM	7.5	5816.1	1393.6	2701.7	295.4	1025.6	0.6	660.0	53.7	5.1	1.1	0.8	0.1	1.1	15.9	39.4	34.6	0.6	5.8	0.0	0.0
U05	54	n-54-01	1099	GG-7	UML	10.5	3277.3	1196.8	1980.6	273.5	796.2	0.6	526.1	50.0	4.7	2.2	0.8	0.0	0.6	17.4	40.5	33.2	0.6	5.4	0.0	0.0
U05	54	n-54-02	934	L-6	OM	6.6	8075.3	1652.9	3964.2	335.5	824.4	0.3	770.6	56.6	6.2	0.9	0.7		1.5	15.7	37.3	37.0	0.6	4.9		0.0
U05	54	n-54-04	1203	GG-7	UML	6.3	1862.2	810.2	1246.6	226.1	947.3	5.7	431.9	45.2	3.2	0.3	0.8	0.1	0.3	18.7	45.9	20.6	0.3	12.5	0.0	
V03	231	n-231-01	1370	K-2	UML	7.4	911.6	725.3	1362.9	197.1	902.5	7.2	331.0	18.6	4.4	0.4	1.1	0.1	0.2	8.5	59.8	17.7	0.3	12.6	0.0	
V03	231	n-231-02	782	GG-5	Kim	0.7	909.2	496.5	2939.1	559.5	528.5	0.8	1220.5	21.8	6.5	0.2	1.0	0.0	0.2	9.9	51.5	30.6	0.5	5.7	0.0	0.0
V03	231	n-231-03	866	GG-7	UML	1.2	3054.1	1230.9	2413.9	389.3	706.7	0.5	932.7	55.6	5.8	0.3	0.8	0.0	0.5	19.1	40.9	31.3	0.5	6.8	0.0	0.0
V03	231	n-231-04	1154	GG-5	OM	12.9	2779.3	1209.6	2957.1	260.3	841.2	2.4	472.3	44.4	6.3	1.8	0.8	0.0	0.5	17.0	44.5	29.9	0.4	6.8	0.0	0.0
V03	231	n-231-05	756	L-4	OM	6.5	7140.9	1892.5	2353.5	362.7	863.9	0.6	1340.4	62.9	7.2	0.4	0.6		1.3	17.1	35.9	36.3	0.4	6.8	0.0	0.0
V03	231	n-231-06	477	GG-5	Kim	3.2	1392.1	865.8	3537.4	775.4	539.9		5365.0	37.7	6.8	0.2	1.1	0.0	0.2	14.8	45.6	32.0	0.5	5.3	0.0	0.0
V04	50	n-50-01	1314	GG-7	UML	5.1	1893.9	834.8	1877.2	217.6	789.7	1.0	359.6	34.7	3.5	1.6	1.0	0.1	0.4	14.1	51.8	20.1	0.4	11.3		0.0
V06	227	n-227-03	1027	GG-5	UML	5.9	958.8	824.6	1752.8	302.9	452.8	9.1	614.5	21.6	3.8		1.1	0.0	0.8	8.3	48.0	35.7	2.2	0.4	0.0	0.1
V07	36	n-36-01	832	GG-7	OM	1.4	4001.5	1914.5	1958.4	245.8	501.4	0.9	1034.6	57.0	5.5	0.5	0.8		0.7	14.3	41.1	34.7	0.4	6.4	0.0	0.0
V07	36	n-36-02	573	GG-5	Kim	1.4	1701.2	802.4	2522.2	525.5	314.7	0.5	3005.6	7.2	3.9	0.3	0.9	0.0	0.3	13.5	49.9	27.0	0.4	6.5		0.0
W05	100	n-100-03	1472	GG-4	UML	6.2	3305.8	708.0	1097.8	178.8	1029.1	4.8	288.6	32.9	2.5	0.7	1.1		0.2	15.7	53.7	15.0	0.3	14.1		
Z06	176	n-176-01	633	GG-5	UML	0.1	247.6	1541.1	2887.0	620.0	90.0		2228.1	11.4	1.1	0.1	0.1		0.3	20.2	41.2	30.7	0.5	6.0	0.0	0.0
Z06	176	n-176-02	568	GG-3	UML	0.4	1054.0	572.2	2575.8	534.8	563.4		3085.2	89.3	7.1	0.3	0.6		0.2	21.6	37.9	32.4	0.4	6.5	0.0	0.0
Z07	63	n-63-01	932	GG-7	OM	3.3	2770.6	1032.4	1951.4	277.2	920.0	3.2	775.8	38.4	5.8	0.2	0.8	0.0	0.5	13.0	46.5	28.5	0.4	9.2	0.0	0.0
Z07	63	n-63-02	675	GG-5	UML	1.0	947.3	837.4	2879.2	355.7	702.3	0.9	1839.0	40.5	5.1	0.2	0.7		0.2	21.3	40.8	25.8	0.5	9.7		0.0
Z07	63	n-63-03	752	GG-5	OM	3.0	2191.0	1161.7	3276.8	399.0	702.0		1359.8	45.6	7.1	0.1	0.7	0.0	0.4	13.7	42.9	34.9	0.6	6.0		0.0
Z07	63	n-63-04	815	L-4	OM	6.3	5704.4	1642.8	2086.5	302.1	1407.1	1.9	1093.0	68.3	7.6	0.5	0.7	0.0	1.0	16.5	35.0	36.6	0.4	8.2	0.0	
Z07	63	n-63-05	723	L-4	UML	0.9	6531.5	2433.2	2538.8	398.4	1749.6	1.3	1515.4	109.4	8.6	4.5	0.6	0.0	0.6	19.2	31.8	38.2	0.1	6.7		0.0
Z10	26	n-26-01	1342	L-4	OM	3.5	7262.0	869.4	933.5	175.3	1459.1	12.7	344.9	52.9	3.2	1.0	1.0	0.2	1.4	19.9	43.4	18.0	0.2	15.3		0.0
Z10	26	n-26-02	930	K-1	Kim	6.0	21738.8	1620.6	2148.4	214.2	1475.9	12.1	780.2	95.2	6.1	21.7	9.8	0.0	4.5	2.3	44.9	37.8	0.4	6.9	0.0	0.0
Z10	26	n-26-03	1170	GG-7	UML	7.3	2239.1	1081.6	1363.7	212.9	675.7	2.9	457.9	34.4	3.4	0.6	1.1	0.0	0.4	14.9	49.1	22.8	0.3	10.6	0.0	0.0
Z14	52	n-52-01	1177	GG-7	UML	5.8	2489.9	1095.4	1903.5	223.4	893.2	1.1	452.4	43.0	4.8	0.8	1.0	0.0	0.5	14.4	50.3	22.9	0.4	10.4		0.0
Z14	52	n-52-02	603	GG-7	Kim	0.4	2034.3	1910.4	3135.4	241.4	572.5	10.5	2574.0	92.6	8.2	0.3	1.9	0.0	0.2	15.6	37.0	42.8	0.5	0.9	0.0	0.0
Z14	52	n-52-03	821	GG-5	OM	4.0	2711.2	974.1	2088.9	289.7	616.3	0.5	1072.6	31.6	6.0	0.7	0.8	0.1	0.5	14.7	47.7	27.4	0.4	7.6		0.0
Z14	52	n-52-04	1186	GG-7	OM	6.7	2767.0	1089.5	2023.3	216.4	1060.6	0.6	444.7	42.3	4.5	1.7	0.8	0.0	0.5	14.1	50.9	22.6	0.4	10.4	0.0	
Z14	52	n-52-05	1123	GG-7	UML	5.7	2146.3	927.2	1253.6	219.1	710.7	0.5	500.5	36.0	3.7	0.7	0.9	0.0	0.4	13.8	51.2	21.2	0.2	11.3	0.0	0.0
Z15	30	n-30-02	614	GG-7	OM	4.4	3780.1	1215.9	2702.7	372.7	564.2	0.3	2435.7	41.9	5.9	1.4	0.9	0.0	0.7	15.3	43.2	34.2	0.5	4.3		0.0
Z15	30	n-30-03	1101	GG-7	UML	3.6	1606.4	869.5	1845.2	238.7	1111.4	1.3	523.4	37.1	4.0	0.7	1.1	0.0	0.3	17.6	48.2	20.7	0.4	11.4	0.0	0.0