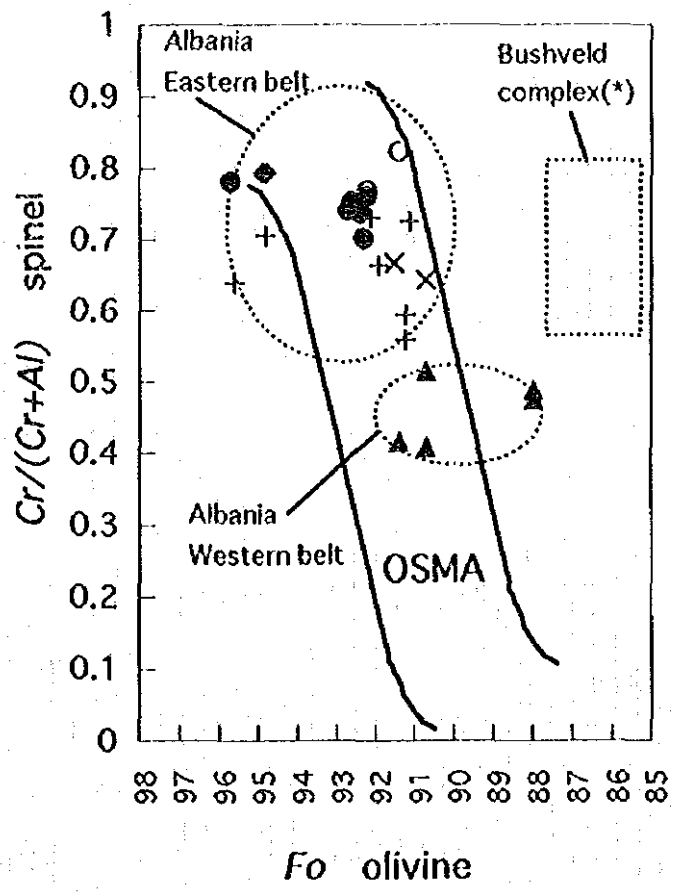
Apx. 2-1-2 Cr# of orthopyroxene in chromitite, dunite and harzburgite in the Central Shebenik area

No.	Sample No.	Rock type	OPX	spinel				
			Cr#	TiO_2	V_2O_3	Cr#	Mg#	Fe^{3+}#
1	IM002 Cr	Ol-chromitite		0.12	0.09	0.824	0.718	0.0412
2	IM002 Du	Dunite		0.10	0.15	0.757	0.547	0.0195
3	IM002 Hz	Harzburgite	0.179	0.03	0.29	0.594	0.554	0.0151
4	IM003 Cr	Ol-chromitite		0.07	0.13	0.766	0.652	0.0182
5	IM003 Du	Dunite		0.09	0.19	0.711	0.554	0.0159
6	IM003 Hz	Harzburgite	0.115	0.06	0.30	0.737	0.485	0.0180
7	IM005 Cr	Chromitite		0.07	0.13	0.790	0.638	0.0259
8	IM005 Du	Dunite		0.08	0.17	0.766	0.511	0.0406
9	IM005 Hz	Harzburgite	0.160	0.01	0.31	0.706	0.551	0.0162
10	IM007 Cr	Ol-chromitite		0.08	0.08	0.852	0.611	0.0204
11	IM007 Du	Dunite		0.11	0.13	0.810	0.540	0.0256
12	IM007 Hz	Harzburgite	0.161	0.01	0.31	0.726	0.509	0.0198
13	IM009 Cr	Chr+Dun		0.03	0.12	0.838	0.642	0.0233
14	IM009 Du	Dunite		0.06	0.22	0.753	0.555	0.0287
15	IM009 Hz	OPX poor harz.		0.03	0.22	0.794	0.467	0.0162
16	IM011 Cr	Ol-chromitite		0.06	0.15	0.794	0.620	0.0161
17	IM011 Du	Dunite		0.07	0.13	0.778	0.515	0.0240
18	IM011 Hz	Harzburgite	0.174	0.05	0.16	0.731	0.515	0.0150
19	IM013 Cr	Ol-chromitite		0.08	0.12	0.759	0.679	0.0300
20	IM013 Cr2	Ol-chromitite		0.09	0.16	0.780	0.651	0.0290
21	IM013 Du	Dunite		0.08	0.16	0.737	0.569	0.0255
22	IM013 Hz	Harzburgite	0.215	0.00	0.27	0.678	0.567	0.0140
23	IM014 Cr1	Ol-chromitite		0.09	0.11	0.819	0.695	0.0328
24	IM014 Du1	Dunite		0.06	0.20	0.707	0.556	0.0298
25	IM014 Cr2	Ol-chromitite		0.08	0.14	0.790	0.636	0.0220
26	IM014 Du2	Dunite		0.08	0.16	0.740	0.509	0.0359
27	IM014 Hz	Harzburgite	0.259	0.03	0.31	0.639	0.523	0.0163
28	IM017 Cr	Dun with sp. conc.		0.12	0.11	0.801	0.585	0.0260
29	IM017 Du	Dunite		0.12	0.15	0.782	0.572	0.0274
30	IM017 Hz	Harzburgite	0.145	0.03	0.38	0.785	0.496	0.0210
31	IM021 Hz	Harzburgite	0.163	0.03	0.28	0.643	0.563	0.0085
32	IM022 Du	Dunite		0.04	0.23	0.823	0.485	0.0203
33	IM023 Du	Dunite		0.07	0.24	0.769	0.544	0.0180
34	IM023 Hz	Harzburgite	0.152	0.03	0.30	0.668	0.542	0.0104
35	NN006 Cr	Sp-rich dunite		0.07	0.11	0.854	0.621	0.0344
36	NN006 Du	Dunite		0.07	0.18	0.833	0.506	0.0254
37	NN006 Hz	Orthopyroxenite		0.08	0.32	0.823	0.421	0.0373
38	NN008 Hz	Harzburgite	0.141	0.01	0.22	0.559	0.588	0.0150
39	NN009 Cr	Ol-chromitite		0.08	0.13	0.855	0.659	0.0303
40	NN009 Du	Dunite		0.08	0.21	0.761	0.560	0.0199
41	NN009 Hz	Harzburgite	0.158	0.05	0.22	0.663	0.580	0.0126
42	NN010 Du	Harzburgite		0.04	0.24	0.713	0.522	0.0182
43	NN010 Hz	Harzburgite	0.192	0.05	0.24	0.756	0.512	0.0128
44	NN011 Hz	Harzburgite	0.150	0.03	0.30	0.649	0.547	0.0148

Note; The samples of IM013 (Lugu i Batres) and IM014 (Ahu i Vetem) are relatively higher in Cr# than the other place's one.

Apx. 2-1-3 Cr#-Fo diagram of the Shebenik area with olivine-spinel mantle array by Arai (1994)



+ Harzburgite of massive suite from the Shebenik massif

● Dunite of massive suite from the Shebenik massif

◆ Chromitite of massive suite from the Shebenik massif

× Harzburgite of layering suite from the Shebenik massif

O Dunite of layering suite from the Shebenik massif

▲ Harzburgite from the Vallamare and the Voskopoja massives

OSMA : olivine-spinel mantle array of Arai(1987; 1994)

*) compositional range for Bushveld complex (Jackson, 1969; Cameron, 1978; Raedeke and McCallum, 1984)

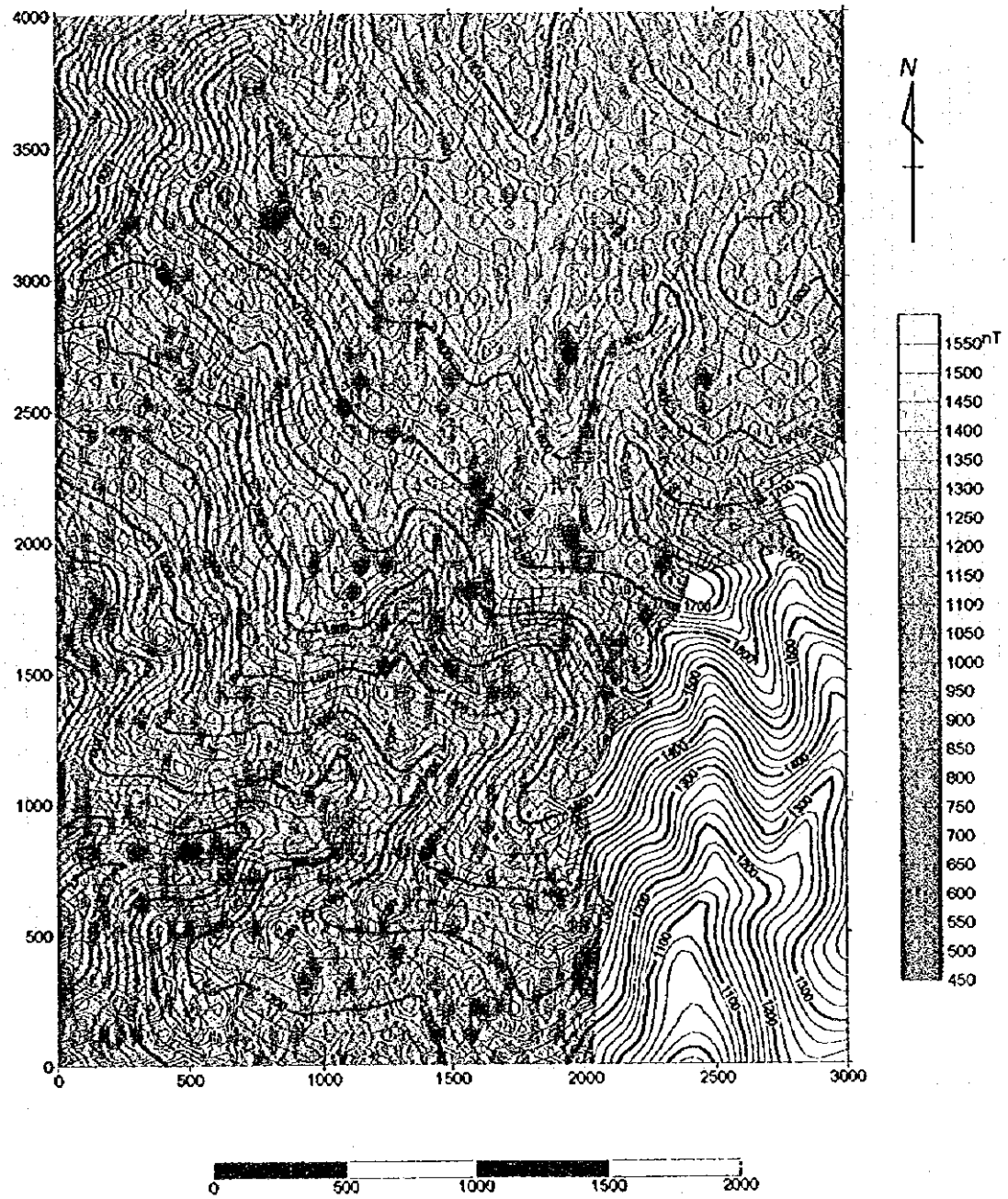
Appendix 2-2-1 Terrain Correction

Terrain correction was implemented according to the following procedure:

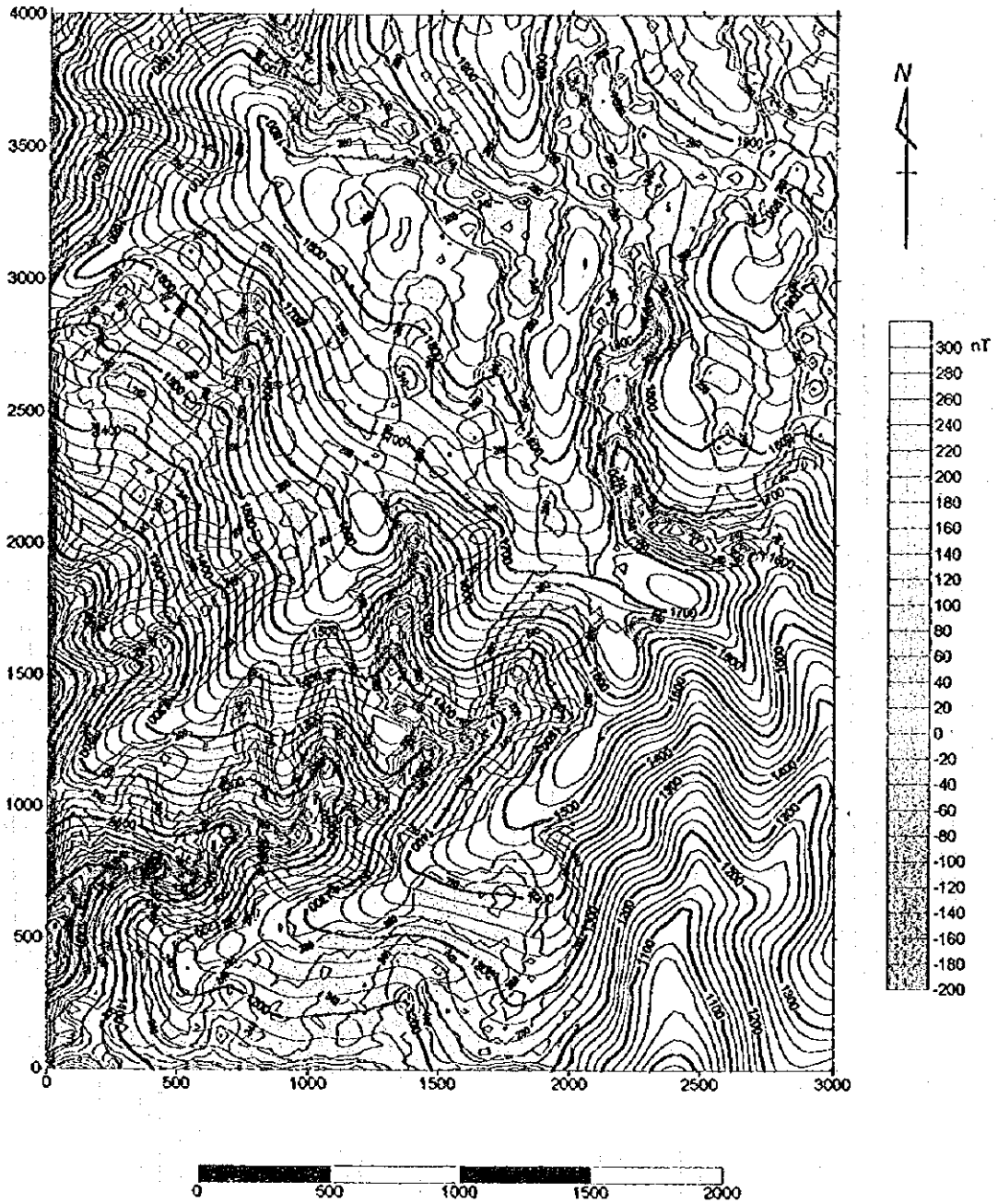
1) Reduction of total magnetic intensity to the pole was performed before terrain correction.
   (Apx.2-2-1(1) Reduction to the pole map before correction)
2) Computing a theoretical reduction to the pole map assigning a magnetic susceptibility to the terrain
   (Apx.2-2-1(2) Reduction to the pole map by terrain model)
3) Obtaining the magnetic susceptibility distribution by correlation of 1) and 2) above
   (Apx.2-2-1(3) Magnetic susceptibility map)
4) Computing total magnetic intensity after assigning the terrain the magnetic susceptibilities of 3) above
   (Apx.2-2-1(4) Total magnetic intensity map computed by susceptibilities)
5) Subtracting the computed total magnetic intensity of 4) above from the original total magnetic intensity of 1) above to map the total magnetic intensity after terrain correction
   (Fig.2-2-5 in section 2-2-3)

It should be noted that the lowest elevation of the area was taken as the base of the terrain model and that a magnetic susceptibility of 1×10^{-3} CGS was assigned.

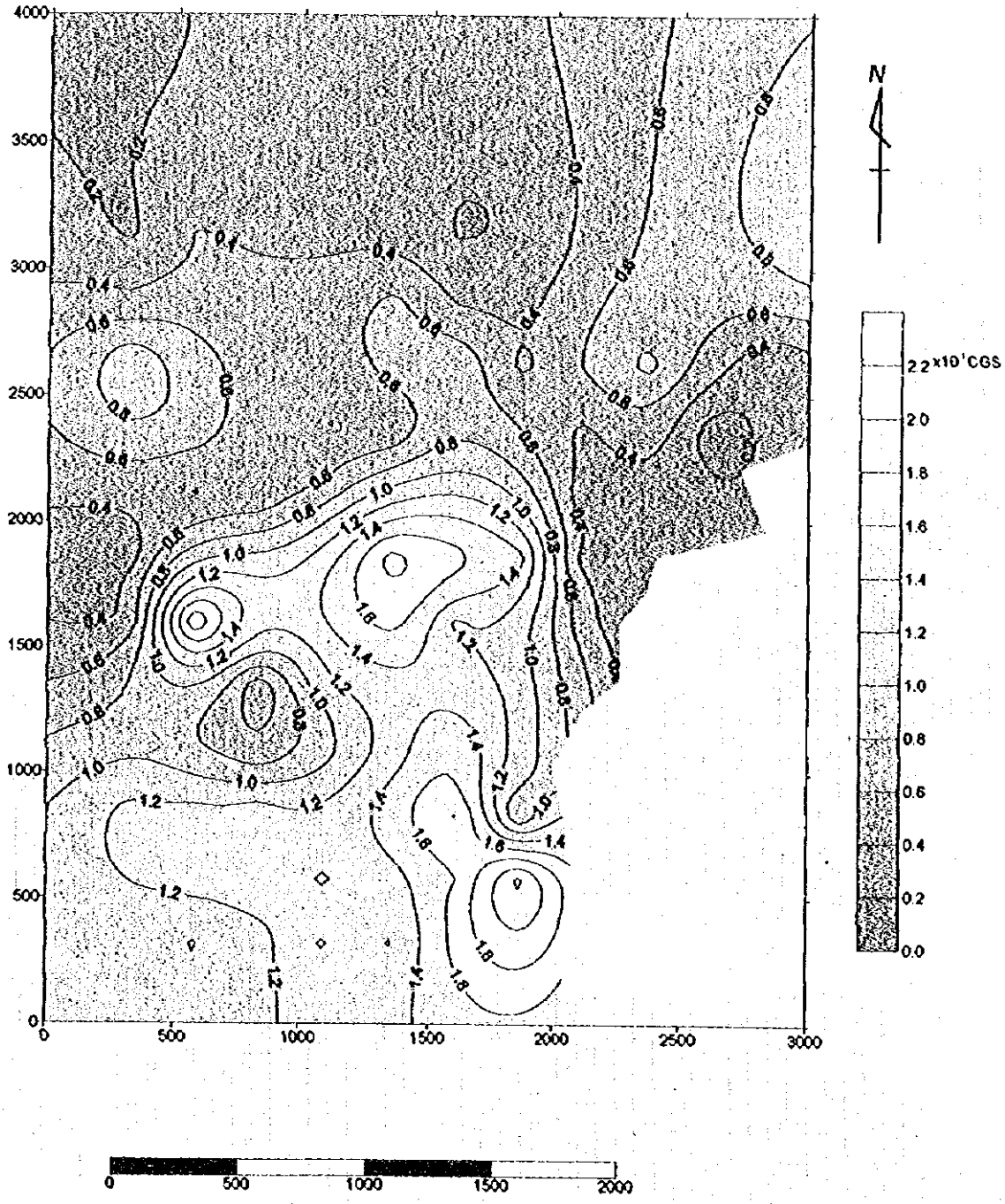
Apx. 2-2-1 (1) Reduction to the pole map before correction, Central Shebenik area



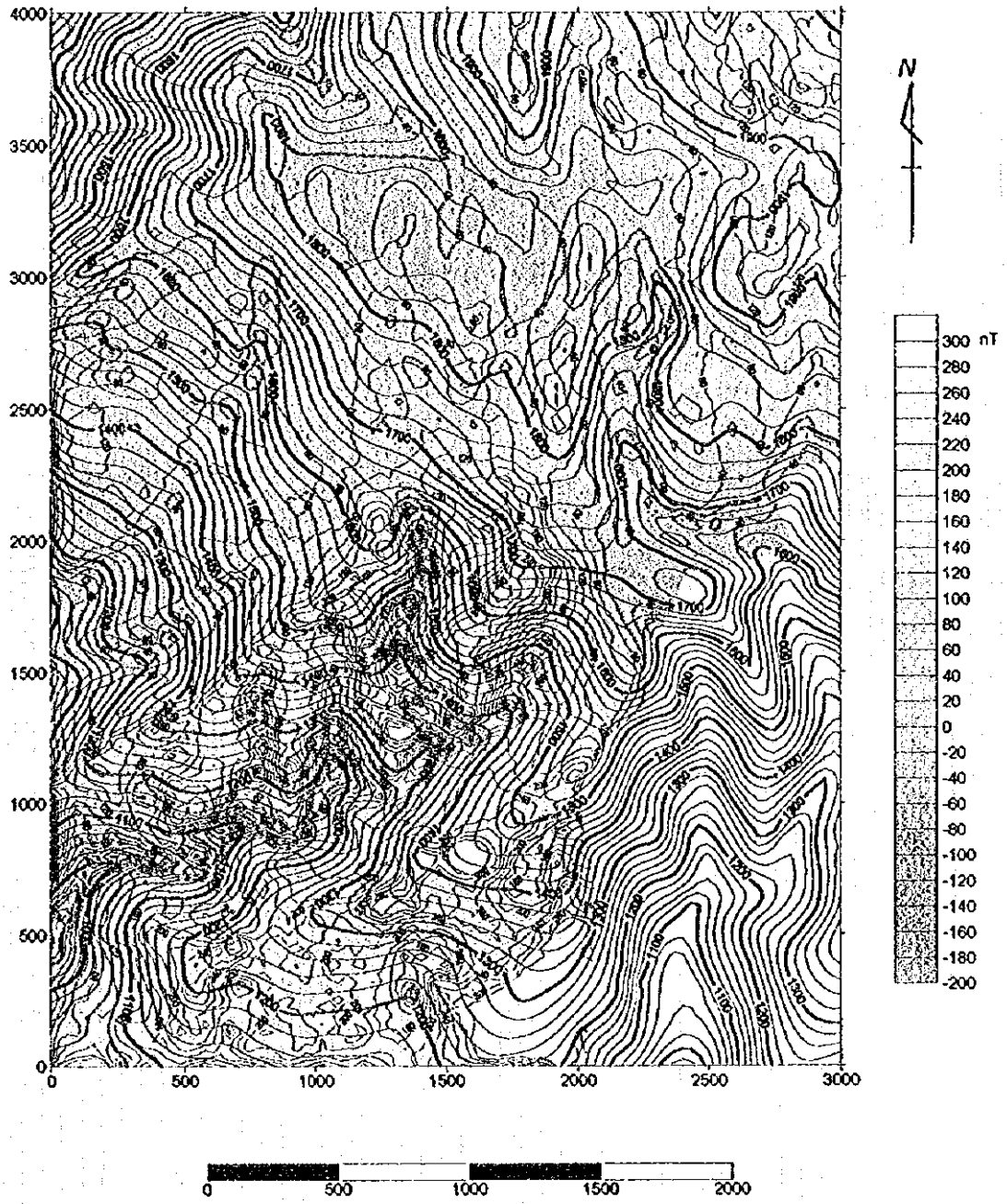
Apx. 2-2-1 (2) Reduction to the pole map by terrain model, Central Shebenik area



Apx. 2-2-1 (3) Magnetic susceptibility map, Central Shebenik area



Apx. 2-2-1 (4) Total magnetic intensity map computed with susceptibilities, Central Shebenik area



Apx. 2-3-1 (1) Geological logging of MJAS-1, Bregu i Pishes area

MJAS-1

INCLINATION : −43°

AREA : BREGU I PISHES BEARING : S60° W (240°) ELEVATION : 1,141.32m FINAL DEPTH : 80.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
			0.00 - 4.00: Non Core						0	Non Core
									0	
									0	
									0	
5			4.00 - 19.43: Harzburgite; serpentinized, dark green, Px:30%, with foliation of 75 - 80 degree of core angle, with thin dunites,						80	97
									0	100
		5.70 - 5.80:	Dunite; brown,						0	97
									0	100
		8.00 - 8.10:	Dunite; brown,						0	36
		8.50 - 9.50:	fault zone, friable,						0	
10									0	72
		10.20 - 10.40:	Dunite; brown, poor in Cr-spinel,						0	62
		11.30 - 11.45:	sheared zone in Harzburgite,						56	100
									75	100
		13.60 - 13.75:	Dunite; brown, gradual contact with harzburgite,						80	
		14.50 - 14.60:	Dunite; brown, gradual contact with harzburgite,						100	100
15		15.10 - 15.20:	Dunite; brown, gradual contact with harzburgite,						50	100
		15.40 - 16.10:	Fault zone, friable,						80	71
									20	100
		17.50 - 18.00:	brecciated zone with blocks of harzburgite,						30	100
		18.85 - 19.43:	fault zone, friable, with blocks of harzburgite,						30	84
20		19.43 - 22.00:	Harzburgite; serpentinized, dark green, Px:35-40%, hard, with thin dunites,						35	100
									65	94
		22.85 - 23.00:	Dunite; brown, medium hard,						70	
		23.00 - 30.80	Harzburgite; serpentinized, dark green, partly brecciated, Px:20-25%, with thin dunites,						100	100
25							25.30 1−R−5		100	
									100	100
		26.10 - 26.60:	brecciated						30	100
		26.60 - 26.80:	Dunite; dark greenish gray, gradual contact with Hz,						30	100
30		30.40 - 30.80:	fault zone, friable,						40	
		30.80 - 41.65:	Harzburgite; dark green, compact, hard, with thin dunites						80	100
							41.70-42.10 1−C−1		100	
35		34.10 - 35.00:	strongly brecciated,						0	29
		35.18 - 36.15:	strongly brecciated,				42.10-42.30 1−C−2		20	62
		37.00 - 38.10:	fault zone ?, friable, with blocks of dunite and harzburgite,						0	67
							1−R−3		0	100
		38.90 - 39.00:	Dunite; brown,				39.50		75	
40		39.90 - 40.00, 40.25-40.30:	Dunite; gradual contact with Hz,				1−R−1		50	
		41.65 - 49.00:	Dunite with chromitite accompanied with harzburgite; dunites is relatively thick,			36.70	42.00		50	
		41.65 - 41.70:	Dunite envelope of chromitite (upper), brown,		41.70 - 42.73: Chromitite; high grade disseminated ore, width = 1.03 cm, about 35% Cr_2O_3, 42.10-42.30 is richer than others,	34.40			30	
		41.70 - 42.73:	Chromitite; high grade disseminated ore, width = 1.03 cm, about 35% Cr_2O_3, 42.10-42.30 is richer than others,			32.40	43.00 1−R−2		50	
45									0	
		42.73 - 43.70:	Dunite envelope of chromitite (lower), brown,						0	
		43.70 - 43.80:	brecciated zone,				42.30-42.73 1−C−3		0	
		44.10 - 44.90:	fault zone with friable material mainly of dunite,						0	
		45.30 - 46.00:	fault zone with friable material mainly of dunite,						20	
50		46.00 - 46.65:	Dunite; brown,						70	
		46.65 - 46.95:	fault zone with friable material mainly of dunite,						80	
		46.95 - 47.00:	Dunite; brown,						10	
		47.00 - 49.00:	fault zone with friable material mainly of dunite,				53.40 1−R−4		50	
		49.00 - 80.00:	Harzburgite; dark green, compact, Px: 30-35%, with thin dunites, frequently, broken into small fragments,						50	
55		49.20 - 49.80:	brecciated zone,						0	
		50.80 - 51.11:	fault zone, brecciated at lower part,						20	
		55.70 - 56.70:	Dunite; brown, medium hard,						0	
		57.00 - 58.50:	fault zone, brecciated at bottom,						40	
60		59.20 - 59.70:	fault zone, friable,						40	
		59.70 - 59.80:	fault zone,						100	
		59.80 - 60.20:	Dunite; brown,						60	
		60.70 - 61.10:	brecciated zone, green, core angle of contact:20 degree,						30	
		62.30 - 62.50:	Dunite; brown, core angle of contact: 0 degree,						0	
65		63.00 - 63.50:	Dunite; brown,						20	
		65.50 - 65.40:	fault zone, green, friable, brecciated,						30	
		68.00 - 68.50:	brecciated zone, green, friable, core angle of contact:0 to 20 degree,						60	
									67	
									36	
70		68.50 - 68.60:	Dunite; brown,						22	

GEOLOGIC LOG (2)

MJAS-1

INCLINATION : −43°

AREA : BREGU I PISHES BEARING : S60°W (240°) ELEVATION : 1,141.32m FINAL DEPTH : 80.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70			70.40 - 70.50; friable zone, maybe fault,						14	100
			71.30 - 72.60; friable zone, maybe fault,						0	100
									29	100
									87	100
			74.50 - 75.32; friable zone, maybe fault,						14	100
75			75.32 - 75.42; Dunite; brown,						42	100
			76.25 - 76.45; brecciated zone,						20	65
			76.45 - 76.55; Dunite; brown,						0	37
			76.55 - 80.00; friable zone, green, brecciated, may be fault,						0	29
80		80.00							0	29

Apx. 2-3-1 (2) Geological logging of MJAS-2, Bregu i Pishes area

MJAS-2

INCLINATION : −45°

AREA : BREGU I PISHES BEARING : S60°W (240°) ELEVATION : 1,141.46m FINAL DEPTH : 80.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 10.50	Harzburgite with dunite; weathered to brown, serpentinized, medium hard, Px:30 - 35% and max. 4 mm in size, core angle of foliation: 80 - 90 degree,						0	28
		0.60 - 1.00	friable materials of dunite; brown, fault zone ?						0	
		1.00 - 1.80	Dunite; weathered to brown, medium hard, poor in Cr-spinel, gradual contact with harzburgite,						18	52
		3.50 - 4.50	fault zone, friable, lumps are mainly of harzburgite,						5	
		5.40 - 5.60	Dunite; brown,						32	
		5.60 - 5.83	friable material of dunite; brown, fault zone,						83	
		5.83 - 9.30	Dunite; brown to dark brown,						20	87
		8.00 - 8.60	*friable materials of dunite; fault zone*						17	
		10.30 - 10.50	friable materials of harzburgite; fault zone,						26	88
		10.50 - 22.50	Harzburgite; serpentinized, dark greenish gray, medium hard, Px:25 - 30%, core angle of foliation: 70 - 90 degree,						46	94
		13.90 - 14.00	Dunite; brown,						48	71
		22.50 - 40.42	Harzburgite; serpentinized, dark green, medium hard, Px:30 - 35% and max. 4 mm in size, with thin dunite,				22.30 2−R−1		78	100
		24.30 - 24.50	broken into small blocks,						100	82
		26.60 - 27.90	brecciated zone, friable,						90	90
		28.55 - 29.62	brecciated zone, friable,						100	89
		31.30 - 32.95	brown in color,						85	
		32.95 - 33.10	Dunite, brown, very rare in Cr-spinel grains,						85	88
		33.40 - 33.70	Dunite, brown, core angle of contact: 90 degree,						100	
		34.10 - 34.40	Dunite, brown,						82	86
		35.30 - 35.60	brecciated dunite; green, core angle of contact:30 degree,						80	97
		36.37 - 38.10	Dunite; brown to dark green, partly brecciated,						84	81
		38.10 - 40.42	Harzburgite with intercalation of thin dunite (1 - 2 cm in thickness) with core angle of 90 degree,						100	
		40.42 - 80.00	Harzburgite; dark greenish gray partly brown, medium hard, core angle of foliation: 80 - 90 degree, with very thin dunite bands of 0.5 - 2 cm in thickness parallel to foliation,				40.50 2−R−2		70	80
		43.90 - 44.20	broken into small blocks,						0	
		45.00 - 46.00	brownish green, hard, Px:35 - 40% and max. 5mm in size,						60	87
		52.40 - 54.60	brecciated zone, green, friable,						85	
		55.30 - 55.80	brecciated zone, green,						32	62
		57.30 - 57.50	brecciated zone, brown, friable,						73	
		58.10 - 58.50	Dunite, brown, compact, core angle of contact: 0 degree,						10	73
		58.80 - 59.00	Dunite envelope of following chromitite, brown,						30	81
		59.00 - 59.25	Chromitite; dense disseminated ore, olivine is green in color,		59.00 - 59.25; Chromitite; dense disseminated ore, olivine is green in color,	38.60			55	56
		59.25 - 60.05	Dunite, brown, rare in Cr-spinel, medium hard,						0	75
		60.05 - 60.90	*Chromitite; black, massive, medium hard, size of Cr-spinel is up to 3 mm, with green olivine patches, lower boundary is cut by fault to contact direct with harzburgite without dunite envelope,*		60.05 - 60.90; Chromitite; black, massive, medium hard, size of Cr-spinel is up to 3 mm, with green olivine patches, lower boundary is cut by fault to contact direct with harzburgite without dunite envelope,	49.70	59.00-59.25 2−C−1		73	99
		60.90 - 61.80	brecciated harzburgite,						30	
		61.80 - 62.30	friable zone of Hz and dunite, brown, may be fault,						82	100
		62.30 - 63.00	Dunite, brown,						50	
		63.00 - 63.40	brecciated zone of friable material, brown,						35	100
		64.40 - 65.40	Harzburgite with dunite intercalation between 65.2 - 65.4 m,						50	
		65.40 - 65.80	brecciated zone, brown						20	100
		65.80 - 67.10	Harzburgite with dunite intercalation same as 38.1 - 40.42 m,						30	
		67.10 - 68.61	brecciated zone, green,						78	100
		69.30 - 73.20	brecciated zone, green, soft, with blocks of harzburgite,						40	
							59.80 2−R−3		65	100
							60.30 2−R−4		50	100
									46	100
									100	
									43	100
									46	100
									40	
									100	100
									90	
									80	100
									26	100
									30	100
							60.05-60.90 2−C−2		40	100
									90	100
									75	100
									30	100
									42	100
									55	100
									60	100
									80	100
									0	100
									57	
							66.40 2−R−5		80	100
									70	
									100	
									35	100
									50	
									40	100

GEOLOGIC LOG (2)

MJAS-2

INCLINATION : −45°

AREA : BREGU I PISHES BEARING : S60° W (240°) ELEVATION : 1,141.46m FINAL DEPTH : 80.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									25	100
									0	100
									20	100
									20	
			74.10 - 75.50; brecciated zone in harzburgite, green,						60	100
75			75.80 - 75.90; ditto,						15	100
			75.81 - 76.30; Dunite, brown, very rare in Cr-spinel,						10	100
			76.30 - 77.75, 77.90 - 78.60, 79.20 - 80.00; brecciated zone in harzburgite, green,						0	
									0	100
									35	100
80		80.00								

Apx. 2-3-1 (3) Geological logging of MJAS-3, Bregu i Pishes area

MJAS-3

INCLINATION : −40°

AREA : BREGU I PISHES BEARING : S60°W (240°) ELEVATION : 1,135.48m FINAL DEPTH : 130.86m

1:200 SCALE(m)	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 0.80;	Surface soil; brown, very soft.						0	100
		0.80 - 1.30;	Strongly weathered ultrabasic rock like soil; green.						0	100
		1.30 - 3.60;	Weathered harzburgite; green, friable, with harzburgite block between 3.60 m and 4.50 m.						0	100
		3.60 - 10.95;	Harzburgite; serpentinized, dark greenish gray, medium hard, Px: approx. 30%, weakly weathered, with thin dunite,						40	
5									55	100
									30	100
									49	
									15	100
		8.40 - 8.70;	Dunite; brown, gradual contact with harzburgite, poor in Cr-spinel,						80	100
10									70	100
									0	100
		10.95 - 16.60;	Harzburgite; serpentinized, dark greenish gray, medium hard, Px:30-35%,				11.00 3−R−1		26	100
									100	100
									100	100
15									100	
		16.30 - 16.60;	brecciated zone, green,						100	100
		16.60 - 72.00;	Harzburgite; serpentinized, dark greenish gray, medium hard, poor in Cr-spinel,						13	90
									25	100
		16.80 - 17.00;	brecciated zone, green,						18	
20		18.80 - 19.00;	brecciated zone of friable materials, green to red, core angle of contact: 0 degree,						40	92
									36	80
		20.70 - 21.40;	fault zone ?, friable, green to red,						46	100
									40	100
									80	
25									34	
		25.00 - 25.40;	Dunite; brown, medium hard, poor in Cr-spinel,						85	100
		26.00 - 26.60;	Ditto				26.50 3−R−2		52	
									76	100
									69	
30		29.90 - 30.10;	Dunite of two thin bands; brown, medium hard, core angle of contact: 60 degree,						100	100
									80	100
		30.50 - 31.10;	Dunite, brown, medium hard, with Cr-spinel grains up to 1 mm, gradual contact with harzburgite,						27	50
									75	100
		31.10 -33.00;	Harzburgite; with core angle of foliation of 80-90 degree, olivine is brown in color,						70	100
35									50	100
		33.00 - 34.10;	Harzburgite; broken into small blocks,						44	
		35.00 - 35.10;	Pyroxinite dike; green, medium hard,						67	100
		36.40 - 37.00;	brecciated zone; green, soft, core angle: 60 degree,						35	
		37.00 - 37.30;	Dunite, brown, intercalated with harzburgite,						27	
40		37.30 - 39.50;	sheared in parallel with drilling axis,						0	100
		39.50 - 39.70;	friable zone, green, core angle of contact with harzburgite: 0 degree						25	100
		39.70 - 42.40;	Harzburgite; broken into small blocks,						37	100
		42.40 - 42.90;	brecciated zone, friable, green,						100	100
45		43.70 - 43.80;	Dunite; brown, core angle of contact: 70 degree,						45	100
									20	100
		46.10 - 46.40;	brecciated zone, friable, green,						53	100
		46.40 - 46.90;	Dunite, brown, poor in Cr-spinel,						38	100
		48.40 - 49.10;	friable zone, may be fault zone,						37	
		49.90 - 50.00;	brecciated zone; green, friable,						0	100
50		50.70 - 51.10;	brecciated zone; green, friable, core angle of contact:70 degree,						48	100
									52	
		51.10 - 51.70;	Dunite in networks; brown,						71	100
		52.80 - 53.95;	Dunite; brown, brecciated, poor in Cr-spinel,						90	
55		55.00 - 55.20;	brecciated zone in harzburgite, dark green,						64	100
		55.50 - 55.70;	Ditto						70	
									100	100
									100	
		58.35 - 58.85;	Repetition of dunite and brecciated zone with core angle of contact: 50-90 degree, brecciated zones at 58.45-58.55, 58.65-58.75,				59.20 3−R−3		80	
60									83	100
		60.00 - 61.00;	Harzburgite; Px: 35-40%, with thin pyroxinite dikes between 60.40 and 60.70 m,						90	100
									53	
									26	33
		62.85 - 65.10;	Harzburgite; broken into small blocks,						0	75
65									0	40
		65.10 - 65.20;	Dunite; brown, poor in Cr-spinel,						10	44
		66.30 - 66.40;	Ditto,						20	
		67.50 - 67.60;	Ditto,						0	33
									0	42
70									0	45
									40	41

GEOLOGIC LOG (2)

MJAS-3

INCLINATION : −40°

AREA : BREGU I PISHES BEARING : S60°W (240°) ELEVATION : 1,135.48m FINAL DEPTH : 130.86m

SCALE (m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									15	38
			72.00 - 79.10: strongly brecciated and fractured zone rich in dunite and serpentinized harzburgite, low in core recovery,						0	31
			72.00 - 72.50: brecciated zone, green, friable,						0	30
			72.50 - 75.40: Serpentinized harzburgite blocks with dunite lump including Cr-spinel grains up to 2 mm in diameter,						0	33
75			75.40 - 76.00: Harzburgite, serpentinized, brecciated,				74.00 3—R—4		0	39
			76.00 - 76.50: Harzburgite, serpentinized,						0	45
			76.50 - 79.10: brecciated zone, mainly of harzburgite, green, friable,						0	64
			79.10 - 86.85: Harzburgite; strongly serpentinized, green to dark greenish gray, soft to medium hard, broken to small blocks and relatively low in core recovery,						17	[illegible]
			81.15 - 81.35: brecciated zone						37	80
			81.70 - 81.90: Dunite; brown, broken to small blocks, poor in Cr-spinel,						40	84
80			83.20 - 83.30: Dunite; brown,						52	91
			84.50 - 84.70: brecciated zone, green, friable,						16	92
			86.10 - 86.55: Ditto						0	86
			86.75 - 86.85: Dunite, brecciated, brown,						0	86
			86.85 - 93.10: strongly brecciated zone of fault; mainly of strongly serpentinized harzburgite and dunite, green,						0	85
			86.85 - 89.15: brecciated zone rich in dunite, green, friable,						0	92
			89.15 - 90.80: brecciated zone rich in dunite, green, compact,						0	85
85			90.80 - 91.60: brecciated zone with serpentine, brown to white,						0	80
			91.60 - 92.75: brecciated zone with limonite, brown to red,						0	56
			92.75 - 93.10: Harzburgite, serpentinized, transitional zone?						0	[illegible]
			93.10 - 130.86: Harzburgite: fresh, gray to brownish yellow, hard,						0	80
									0	82
90									100	[illegible]
									70	94
									42	88
									25	88
									100	100
95									100	
									100	97
									47	[illegible]
									55	94
									10	
100									50	87
									24	97
									0	
									70	100
									50	96
105									70	100
									100	97
									100	
									65	100
			108.90 - 110.00: brecciated zone, green, soft,						34	
110									13	90
									15	90
									48	95
									90	98
									100	
115									50	92
							115.50 3—R—5		80	100
									60	93
									50	90
									80	93
120									100	
									100	97
									100	
			122.80 - 123.00: friable materials mainly of serpentinized harzburgite, green to dark green,						85	94
									90	
125									34	97
									64	99
									100	
									100	100
									100	100
130									100	100
		130.86								

Apx. 2-3-1 (4) Geological logging of MJAS-4, Fusha e Madhe area

MJAS-4

INCLINATION : −45°

AREA : FUSHA E MADHE BEARING : N50°W (310°) ELEVATION : 1,119.44m FINAL DEPTH : 191.50m

1:200 SCALE(m)	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
			0.00 - 55.00; Lateritic surface soil; reddish brown, soft, with blocks of harzburgite in various size,						0	
									0	
									44	100
									25	
5									40	100
									26	
									0	71
									24	
									10	67
10									14	36
									27	80
									0	
									0	19
									0	
15									0	58
									0	
									0	
									10	40
									11	
20									0	19
									0	
									0	55
									0	83
									32	
25									13	83
									22	
									90	
									100	83
									92	
30									72	100
									70	
									80	100
									0	100
									28	
35									85	100
									60	
									34	
									80	100
									16	
40									30	
									46	100
									15	
									0	52
									46	
45									64	90
									0	
									46	
									100	65
									0	
50									0	100
									55	100
									52	
									90	
									100	100
									48	
55			55.00 - 63.00; Harzburgite; serpentinized, strongly weathered along cracks, brown to yellowish brown,						12	100
									66	
			55.00 - 56.90; friable, strongly weathered,						50	100
			58.20 - 61.20; greenish gray, Px: 35 to 40% and 3 to 5mm in size,						100	
60									100	100
									100	
			61.20 - 62.70; weathered, brown,						100	100
			62.70 - 63.00; with foliation of 70 degree of core angle,						52	
			63.00 - 86.23; Harzburgite; serpentinized, green to dark green, weathered along cracks, brown to yellowish brown, Px: 35 to 40% and 3 mm in size, accompanied with thin dunite sparsely,						90	97
65									86	
			63.00 - 64.38; core angle of foliation: 60 degree,						61	
			64.38 - 64.70; Dunite; brown partly dark green, medium hard, with fine-grained Cr-spinel grains sparsely,						100	100
			68.45 - 68.75; weathered along crack, yellowish brown,						100	100
			69.00 - 69.10; Dunite; green to dark green, poor in Cr-spinel, core angle of contact: 60 degree in parallel with foliation in harzburgite.						66	
70									100	100

GEOLOGIC LOG (2)

MJAS-4

INCLINATION : −45°

AREA : FUSHA E MADHE BEARING : N50°W (310°) ELEVATION : 1,119.44m FINAL DEPTH : 191.50m

1:200 SCALE(m)	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70			70.00 - 70.10; Dunite; dark green, poor in Cr-spinel,						100	100
									56	
			72.20 - 72.85; strongly weathered along crack, brown to yellowish brown, cores are broken into small blocks,						28	100
									90	
			73.70 - 73.80; Dunite; brown, poor in Cr-spinel, core angle of contact: 60 degree,						30	100
75									68	100
			75.00 - 75.76; Dunite; weathered, brown to yellowish brown, poor in Cr-spinel, soft to medium hard,						0	100
									0	100
			76.76 - 78.80; broken into small blocks, strongly weathered, yellowish brown, maybe fault zone,						10	80
80									17	
			81.00 - 82.00; ditto,						23	47
									0	60
									92	87
									40	100
85			85.00 - 86.23; broken into small blocks, weathered to yellowish brown along cracks,						45	58
									0	
			86.23 - 117.80; Harzburgite; serpentinized, dark green, open cracks are stained by iron oxides, with thin dunite sparsely, core angle of foliation: 50 to 60 degree,						80	92
									28	
									0	
90			87.00 - 88.23; broken into small blocks, weakly weathered,						14	64
			88.23 - 88.53; Dunite; brown to yellowish brown,						100	100
									100	
									100	90
									77	
95			94.50 - 94.70; Dunite; dark brown,						75	100
			96.60 - 96.90; fault zone, friable, with blocks of harzburgite and dunite,						40	87
			97.80 - 97.90; Dunite; brown, broken into small blocks,						28	
									38	93
									50	
100			99.70 - 100.10; broken into small blocks, weathered, yellowish brown,,						68	100
			100.10 - 101.00; Dunite; weathered, brown to yellowish brown, with Cr-spinel grains,						20	100
									50	64
			101.50 - 102.05; broken into small blocks,						40	100
			102.45 - 103.40; weathered, brown, broken into small blocks						23	90
105			103.40 - 104.60; Dunite; brown, weathered, broken into small blocks, maybe faulted,						13	100
									0	100
			104.90 - 105.80; Dunite, ditto,						28	100
									55	89
			108.00 - 108.20; fault zone, very friable, weathered,						55	50
			108.80 - 109.00; Dunite, dark brown, medium hard,						12	100
110									15	
			111.80 - 112.30; broken into small blocks, partly stained by iron oxides, maybe fault zone,						29	100
									0	100
									85	100
									70	75
115									65	90
									32	
									10	
			117.80 - 121.60; fault zone partly brecciated; strongly weathered, reddish brown to yellowish brown, partly friable, blocks are mainly of harzburgite but partly of dunite,						0	100
							119.40 4−R−1		18	81
120			117.80 - 118.80; broken into small blocks, with brecciated zone of friable materials at the interval of 118.34 to 118.40 m,						20	100
			118.80 - 119.00; brecciated zone, friable, weathered strongly, reddish brown,						10	100
			119.00 - 119.10; Dunite; weathered to light brown, with Cr-spinel grains,						33	100
			119.20 - 119.50; ditto,						73	100
125			119.50 - 119.90; broken harzburgite into small blocks,				124.10 4−R−2		90	100
			119.90 - 121.10; brecciated zone; weathered, reddish brown, friable, with blocks of harzburgite,						90	
			121.10 - 121.20; Dunite; strongly weathered, yellowish brown,						80	100
			121.20 - 121.60; brecciated zone; weathered, reddish brown, friable, with blocks of harzburgite,						53	
									20	100
130			121.60 - 140.00; Harzburgite; serpentinized, dark green, with thin dunite, Px: 30 to 35%,						12	100
			123.20 - 123.40; faulted zone, friable, weathered, brown, with blocks of dark green colored harzburgite,						36	100
			128.30 - 130.46; strongly fragmented fault zone, weathered, reddish brown, friable,						75	100
			131.10 - 131.20; friable, weathered to reddish brown,						18	88
135			133.00 - 135.00; broken into small blocks, partly friable, some cracks are filled with calcite veinlets,						55	43
			135.00 - 135.20; friable, partly oxidized,						10	
			135.20 - 135.55; Dunite, dark brown,						50	
			137.80 - 137.95; brecciated zone, green, core angle of contact: 60 degree						100	57
			139.10 - 139.15; brecciated zone, green, core angle of contact: 80 - 90 degree,						100	
140									82	
									25	50

GEOLOGIC LOG (3)

MJAS-4

INCLINATION : −45°

AREA : FUSHA E MADHE BEARING : N50°W (310°) ELEVATION : 1,119.44m FINAL DEPTH : 191.50m

1:200 SCALE(m)	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
140			140.00 - 145.65; Dunite; serpentinized, dark brown, medium hard, poor in Cr-spinel,						0	60
									27	
			143.10 - 143.20; fault zone, friable, green partly reddish brown,						100	57
									15	
									32	
145			145.65 - 161.05; Complex zone of harzburgite and dunite; both are serpentinized and medium hard, harzburgite is dark green and dunite is generally dark brown, fractures are filled with serpentine minerals and calcite,				145.50 4−R−3		40	67
									34	
									24	
			147.15 - 147.80; broken into small blocks, rich in network veinlets of calcite,				149.00 4−R−4		100	100
150									85	
									0	
			147.80 - 147.90; Dunite; dark brown,						20	100
			149.00 - 149.30; Dunite; dark brown, with network veinlets of serpentine minerals,						30	100
			149.60 - 150.25; ditto, partly brecciated, core angle of contact: 40 to 50 degree,						34	100
155									53	
			151.20 - 151.60; Harzburgite; broken into small blocks, partly reddish brown, fault zone ?,						100	100
									43	
			151.60 - 151.80; Dunite; dark brown,						61	100
			152.00 - 152.50; ditto, the interval between 152.10 and 152.25 is friable,						62	
			154.60 - 156.55; Dunite, dark green partly dark brown, poor in Cr-spinel,						33	100
160			157.30 - 157.80; Dunite, dark brown,						30	
			158.10 - 158.15; ditto,						90	100
			159.40 - 159.70; ditto, broken into small blocks,						43	
			160.00 - 160.30; ditto, partly dark green,						27	100
			161.05 - 169.50; Dunite; dark green partly brown, poor in Cr-spinel,						0	85
165			162.60 - 163.00; broken into small blocks, dark brown,						28	
			163.00 - 165.60; brown in color, broken into small blocks at intervals of 163.60-163.70, 164.00-164.60 and 165.00-165.05,				166.30 4−R−5		84	100
									69	
									66	
170									68	
			169.50 - 172.80; Harzburgite; serpentinized, dark green, Px:30 to 40% and up to 3mm in size,				170.30 4−R−6		100	100
									100	
			172.80 - 182.80; Complex zone of harzburgite and dunite; both are medium hard and serpentinized, Harzburgite is dark green and dunite is dark brown, fractures are filled with serpentine minerals,						79	100
									48	
									70	100
175			172.80 - 172.90; Dunite,						61	
			173.30 - 175.60; Dunite, dark brown,						80	100
			176.70 - 177.20; Dunite,						95	100
			177.20 - 177.35; Harzburgite with dunite intercalation,						95	
			177.35 - 180.00; Dunite; dark green to green partly dark brown, poor in Cr-spinel,						39	100
180									85	100
			181.50 - 182.80; Dunite; same as above,						80	100
									43	
									100	
			182.80 - 188.20; Harzburgite; serpentinized, green, fractures are filled with serpentine minerals,						100	100
185									65	
									80	
									10	100
			188.20 - 191.50; Complex zone of harzburgite and dunite; both are serpentinized and medium hard, Harzburgite is dark green and dunite is generally dark brown, fractures are filled with serpentine minerals,				4−R−7		64	100
							189.00 189.60 4−R−8		100	
190			188.20 - 188.30; Dunite; brown,						100	
			189.10 - 189.90; Dunite; brown, lower part is broken into small blocks, poor in Cr-spinel,						0	40
			190.10 -191.50; ditto,							
		191.50								
195										
200										

Apx. 2-3-1 (5) Geological logging of MJAS-6, Gjorduke area

MJAS-6

INCLINATION : −60°

AREA : GJORDUKE BEARING : S70°W (250°) ELEVATION : 1,304.85m FINAL DEPTH : 170.10m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 3.04	Surface soil; brown, very soft, with blocks of Hz.						0	100
									0	100
									0	100
		3.04 - 22.70	Harzburgite; greenish gray, medium hard, Px: approximately 35%, weathered up to the depth of 7.10 m,						18	100
5		3.20 - 3.30	Dunite; brown, serpentinized,						29	100
		4.90 - 6.10	brecciated zone; composed mainly of friable materials of harzburgite and dunite, brown to reddish brown,						77	100
		6.10 - 6.65	Dunite; dark brown, cut by thin networks veinlets of serpentine, broken easily to small blocks,						46	100
									100	
									100	100
10		6.65 - 7.10	fault zone, composed mainly of friable materials,						83	
		7.10 - 11.25	Compact harzburgite, green, serpentinized but olivine is remained in some parts						46	100
									90	100
									90	
									100	100
15									100	100
		15.40 - 16.30	friable zone, with blocks of harzburgite and dunite, may be fault, green to reddish brown						44	100
		16.85 - 17.90	friable materials mainly of harzburgite, green to reddish brown, partly brecciated,						0	100
									0	100
		18.70 - 19.20	fault zone; brecciated and friable, green,						56	100
20		19.20 - 19.70	Harzburgite; broken into small blocks,						0	100
		20.40 - 20.60	Ditto,						74	100
		20.60 - 20.90	Dunite; serpentinized, brown, with a small amount of Cr-spinel, gradual contact with harzburgite with core angle of 90 degree,						70	100
		21.70 - 21.75	fault zone,						84	100
		22.50 - 22.70	fault zone,						46	100
25		22.70 - 37.20	Harzburgite; greenish gray, medium hard, Px: approx. 35%, accompanied with many dunites in various thickness,						67	100
									100	100
		23.15 - 23.50	Dunite; serpentinized, brown,						90	100
		24.05 - 24.70	Dunite, brown to greenish gray, compact, medium hard, with Cr-spinel,						69	100
30		24.70 - 25.05	brecciated zone; with blocks mainly of harzburgite,						67	100
		25.05 - 26.85	Dunite; fresh, gray, compact, medium had, with a small amount of Cr-spinel grains,						30	82
		27.10 - 28.60	Ditto						72	95
		31.90 - 32.10	brecciated zone, green, friable,				6−R−1		51	100
		32.90 - 33.00	ditto,				34.50		33	100
35		33.20 - 33.50	Dunite; brown,				35.65		60	100
		33.70 - 35.10	Dunite; brown, medium hard, gradual contact with harzburgite, with Cr-spinel,				6−R−2		64	100
		36.20 - 36.30	brecciated zone; green to reddish brown,						67	100
		36.30 - 36.40	Dunite,						23	100
		36.40 - 36.70	brecciated zone; green to reddish brown,						64	100
40		36.80 - 37.20	Dunite,						84	
		37.20 - 54.70	Harzburgite; weakly serpentinized, greenish gray, medium hard, Px: approx. 30 to 35%,						100	100
		37.20 - 40.40	Harzburgite; with foliation of 80 - 90 degree of core angle,						30	97
45		44.50 - 44.60	fault zone, brecciated, friable, green to reddish brown,						0	100
		45.20 - 45.30	ditto						33	100
		45.40 - 45.60	ditto						30	100
		46.10 - 46.30	ditto						30	89
		47.50 - 47.60	ditto						0	98
		47.60 - 50.50	Harzburgite, compact,						20	100
50		50.50 - 50.70	Dunite; brown, gradual contact with harzburgite,						0	95
		50.70 - 50.80	brecciated zone, green, friable,						0	95
		51.20 - 51.30	Dunite; brown, gradual contact with harzburgite,						33	96
		52.30 - 53.00	Fissures are filled with serpentine minerals stained by iron oxides, core angle of fissures: 30 & 60 degree,						69	100
		54.70 - 82.70	Harzburgite; weakly serpentinized in part, pale greenish gray, transitional zone between serpentinized and fresh harzburgites,						72	100
55		55.50 - 55.70	Dunite; greenish gray, gradual contact with harzburgite, with a small amount of Cr-spinel,						59	100
		58.50 - 58.60	brecciated zone, green, core angle of contact: 60 degree,						73	100
									100	
									100	100
									100	
									100	100
									100	100
									84	100
60									87	
									90	100
		61.40 - 63.30	fragmented cores of small blocks of harzburgite,						49	100
									12	100
		63.70 - 64.40	brecciated zone, green, compact,						60	68
65									77	
		66.00 - 66.30	Dunite; greenish gray,						100	100
		66.80 - 67.20	ditto,						100	
		69.70 - 70.50	Dunite; serpentinized, brown, gradual contact with harzburgite,						100	100
70									90	
									100	100

GEOLOGIC LOG (2)

MJAS-6

INCLINATION : −60°

AREA : GJORDUKE BEARING : S70°W (250°) ELEVATION : 1,304.85m FINAL DEPTH : 170.10m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									100	97
		71.70 - 71.90:	brecciated zone, friable, green,				6−R−3		67	97
		72.10 - 72.50:	ditto,				72.80		70	
		72.50 - 73.10:	Dunite; greenish gray,				73.70		90	100
75		74.42:	Foliation in harzburgite is 70 to 90 degree of core angle,				6−R−4		56	100
									100	100
									100	100
									60	100
									100	100
80		79.20 - 80.20:	Dunite; brown, compact, thin harzburgite occurs between 79.65 and 79.75						100	100
									33	100
		81.45 - 82.60:	Dunite; fragmented to small blocks, brown,						58	100
		82.60 - 82.70:	brecciated zone, brown, core angle of contact: 50 degree,						76	100
		82.70 - 113.30:	Fresh harzburgite; light yellowish green, hard,						100	100
85									100	
		85.00 - 89.60:	brecciated zone, compact, upper part includes blocks of harzburgite and dunite, but lower part includes only harzburgite,						70	100
									60	
		89.10 - 89.30:	Dunite; brown, partly greenish gray,						0	100
90		90.30 - 92.90:	brecciated zone, green to brown, compact, with blocks of harzburgite and dunite,						33	98
									80	100
									78	100
									35	100
									100	100
									90	100
95		95.90 - 98.50:	Weakly serpentinized harzburgite, greenish gray, 97.80 to 97.90 is brecciated,						85	100
									100	100
									90	
									40	100
									37	100
100		98.50 - 102.60:	Harzburgite; broken into small blocks, serpentinized,						40	100
									10	100
		102.60 - 103.70:	brecciated zone; green, friable, core angle of contact: 25 degree,						18	100
									45	92
105		104.10 - 105.55:	Dunite; brown, the intervals of 104.50 - 104.60 and 104.90 - 105.45 are of brecciated zone of reddish brown friable materials,						56	100
									35	
		107.00 - 107.30:	Dunite; brown, gradual contact with harzburgite with 60 degree of core angle,						77	100
									80	100
									100	
110		109.85 - 110.30:	Harzburgite; cut by veinlets of serpentine minerals,						100	
		110.30 - 110.35:	brecciated zone,						100	100
									100	
		112.60 - 112.80:	Dunite; brown,						100	
		113.30 - 133.60:	Harzburgite; fresh but partly serpentinized, with thin dunites and dunite intercalation in part,						43	100
115									46	100
		113.30 - 113.50:	Harzburgite with intercalation of dunite, dunite is brown and 2 to 3 cm in thickness,						80	
		113.50 - 114.00:	brecciated zone; reddish brown, friable,						100	100
		114.30 - 114.50:	ditto,						100	
		114.60 - 114.80:	ditto,				118.50		100	
120		114.80 - 114.90:	Dunite; brown,				6−R−5		100	100
		115.20 - 116.10:	Dunite; brown, with Cr-spinel,						100	
		116.90 - 117.30:	brecciated zone; reddish brown, friable,						100	100
		118.35 - 119.30:	Dunite; fresh, brown, cor angle of contact: 80 to 90 degree,				121.40		92	
		119.30 - 119.60:	brecciated zone, green,				6−R−6		95	100
		121.60 - 122.10:	Dunite; brown, core angle of contact: 60 degree,						100	
125		122.10 - 122.30:	brecciated zone, fault?, core angle of contact: 60degree,						100	100
		123.10 - 124.00:	Dunite; brown, with Cr-spinel,						100	
		124.00 - 126.25:	With intercalation of thin dunites of 2 to 3 cm in thick,						100	100
		126.25 - 126.50:	brecciated zone; green, with blocks of harzburgite,						72	
		126.60 - 127.30:	ditto,						100	
		127.70 - 130.45:	brecciated zone; green with brown patches, compact, 130.05 - 130.45 m is reddish brown and friable,						100	100
130		130.90 - 131.20:	brecciated zone; green with brown patches, compact,						56	
		131.20 - 131.50:	Harzburgite, broken into small blocks, accompanied with few dunite lumps,						67	100
		131.50 - 133.60:	brecciated zone; green with brown patches, compact,						100	
		133.60 - 153.70:	Fresh harzburgite; greenish gray, frequently cut by network veinlets of black serpentine minerals,						100	
135									100	100
									85	
		139.00 - 139.50:	brecciated zone in harzburgite,						84	100
		138.50 - 141.00:	Dunite; brown, with network veinlets of black serpentine minerals,						70	100
140									65	100

GEOLOGIC LOG (3)

MJAS-6

INCLINATION : −60°

AREA : GJORDUKE BEARING : S70°W (250°) ELEVATION : 1,304.85m FINAL DEPTH : 170.10m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	ROCK PROPERTY: RQD (%)	ROCK PROPERTY: Core Rec (%)
140									67	100
									60	100
			142.00 - 144.00; Fresh dunite, yellowish green, with Cr-spinel,						100	
									100	100
									100	
145									100	100
			145.70 - 145.90; Ditto,						100	
									100	100
									100	
150									54	100
			150.00 - 150.10; Dunite; brown, gradual contact with harzburgite,						66	
									85	100
							153.00		64	
			153.70 - 162.90; Fresh dunite with thin harzburgite; yellowish green, hard,				6—R—8		100	
155			core angle of contact with harzburgite: 60 degree,						100	100
			155.60 - 156.10; Dunite with Cr-spinel spots up to 7 mm in diameter,			4.97	156.00		100	
			yellowish green, hard,				6—R—7		100	100
									100	
160			159.50 - 160.50; Fresh harzburgite; yellowish green, hard,						100	100
			160.70 - 161.10; Ditto,				155.60-156.10		100	
			162.80 - 162.90; fault, serpentinized,				6—C—1		100	100
									83	100
			162.90 - 170.10; Fresh harzburgite; yellowish green, hard,						100	100
									100	100
165									100	100
			165.10 - 165.50; Fresh dunite, yellowish green, hard,						72	100
									80	100
									100	100
170									54	100
		170.10								

Apx. 2-3-1 (6) Geological logging of MJAS-7, Gjorduke area

MJAS-7

INCLINATION : −49°

AREA : GJORDUKE BEARING : S70°W (250°) ELEVATION : 1,303.65m FINAL DEPTH : 167.30m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 1.00:	Surface soil; brown, with blocks of harzburgite,						0	100
		1.00 - 4.75:	Blocks of harzburgite, weathered,						0	100
									0	56
									0	80
									0	78
									23	84
5		4.75 - 97.70:	Harzburgite; greenish gray, serpentinized, hard. Px: 30 to 35%, core angle of foliation: 80 to 90 degree,						95	100
		6.40 - 6.75:	with intercalation of very thin dunite,						100	100
		6.75 - 8.00:	Dunite; brown, with Cr-spinel,						43	100
		8.20 - 8.60:	Ditto,						46	92
10		8.70 - 8.80:	brecciated zone; green to reddish brown, friable,						100	100
		8.85 - 9.20:	Ditto,						100	100
									100	100
		12.20 - 14.70:	Harzburgite with intercalation of dunite at intervals of 12.20 - 12.40, 13.20 - 13.40, 13.65 - 14.70,				7—R—1		80	97
							14.00		68	
15							15.00		51	100
							7—R—2		71	100
									77	
		16.90 - 17.10:	Dunite; brown, with Cr-spinel,						100	100
		19.00 - 19.15:	fault zone, friable, green,						100	100
20									67	100
		21.00 - 21.05:	Dunite; brown, with Cr-spinel,						90	100
		21.50 - 23.00:	brecciated zone; green but partly reddish brown, compact, mainly of harzburgite,						46	100
		23.00 - 31.20:	Cracks are filled with brown materials with iron oxides at the depth of 23.70, 24.40, 24.60, 27.30, 30.15-30.45,						50	
									88	100
25									80	
									100	100
									100	
									100	100
									90	100
30									95	100
									40	
		31.20 - 31.40:	fault zone ?, friable, green partly reddish brown,						62	100
									80	100
									85	
35									80	100
		35.70 - 35.90:	friable zone, green,						83	
		35.90 - 35.95:	Dunite; brown,						85	100
		37.30 - 38.00:	Fractures with core angle of 0 degree are stained by iron oxides to reddish brown,						54	98
									90	100
40		38.70 - 40.05:	brecciated zone, with core angle 30 degree, green, compact,						92	
		40.05 - 46.20:	Some cracks at the depth of 40.60, 41.30, 44.00 are filled with iron oxides ,						90	100
									92	97
									62	100
		43.50 - 43.90:	Dunite; brown,,						88	100
45									84	100
									90	100
		46.20 - 46.30:	Ditto						85	100
									27	100
		48.00 - 48.10:	friable zone,						32	100
50		49.50 - 51.60:	broken into small blocks,						14	50
									10	100
									13	100
		51.60 - 51.80:	friable zone, maybe fault,						21	100
									100	100
55		53.70 - 53.75:	Dunite; brown,						90	100
		53.90 - 54.25:	brecciated zone; compact, green to reddish brown, core angle of contact: 30 degree,						51	
									82	100
		54.55 - 55.55:	brecciated zone; compact, green to reddish brown,						31	
		56.80 - 57.75:	broken into small blocks,						54	100
		57.15 - 57.25:	Dunite, brown, broken into small blocks,						48	100
60		57.50 - 57.60:	brecciated zone; green to reddish brown, compact,						28	100
		58.30 - 58.40:	ditto,						28	100
		58.40 - 58.70:	Dunite; brown, core angle of contact: 60 degree,						58	100
		58.80 - 58.90:	brecciated zone, compact,						47	100
		58.90 - 73.00:	Fractures are filled with green serpentine minerals and some are with brown iron oxides,						32	75
65		64.10 - 64.20:	Dunite; brown partly green, with Cr-spinel,						50	71
		64.40 - 64.60:	Ditto,						10	42
		65.00 - 65.10:	Ditto,						34	92
									56	83
70									25	79

GEOLOGIC LOG (2)

MJAS-7

INCLINATION : −49°

AREA : GJORDUKE BEARING : S70°W (250°) ELEVATION : 1,303.65m FINAL DEPTH : 167.30m

SCALE (m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									61	100
									50	73
									66	92
		73.00 - 73.50;	Dunite; brown, with Cr-spinel, broken into small blocks,						0	85
		73.50 - 73.90;	friable zone of Du and Hz, fault ?,						18	
75		74.25 - 75.30;	Dunite; brown, partly broken, with Cr-spinel,						26	70
		76.25 - 76.40;	friable zone; green, maybe fault,						0	67
		77.10 - 78.10;	brecciated zone, green partly reddish brown, compact partly very friable,						37	73
		78.10 - 78.30;	Dunite; greenish gray, gradual contact with harzburgite,				7−R−3		54	82
80		79.90 - 80.10;	Dunite; green, core angle of contact: 30 degree,				79.60		38	91
							80.00		100	82
							7−R−4		100	93
									42	92
									35	93
85		84.70 - 84.75;	brecciated zone; green to reddish brown, friable,						0	80
		85.25 - 88.50;	brecciated zone, green partly reddish brown, compact partly friable, core angle of contact: 70 to 90 degree,						26	72
		87.50 - 87.60;	Dunite; brown, core angle of contact: 80 degree,						60	98
		87.80 - 88.50;	Dunite; green, with Cr-spinel,						80	
90		89.50 - 90.20;	Dunite; green to brown, with network veinlets of serpentine minerals, core angle of contact: 80 to 90 degree,						100	
		90.15 - 92.25;	Dunite; green,						82	96
		94.00 - 94.35;	brecciated zone of harzburgite and dunite, green partly brown, friable,						90	
		94.35 - 94.75;	Dunite; green, poor in Cr-spinel,						90	
95		95.00 - 96.30;	Ditto, core angle of contact: 80 to 90 degree,						90	100
		97.15 - 97.70;	Dunite; brown, with Cr-spinel, cut by fault filled with serpentine minerals at upper part,						39	
		97.70 - 125.30;	Harzburgite in transitional zone, greenish gray, poor in Cr-spinel, Px: approx. 35% and 1 to 2 cm in size, frequently cut by network veinlets of green to black colored serpentine mineral,						100	96
									67	
									90	98
100									100	
									90	
		101.15 - 101.20;	Dunite; green,				101.00		92	100
							7−R−5		94	
		103.25 - 103.65;	Cut by networks veinlets of serpentine minerals,						95	
		104.00 - 104.10;	Dunite; brown, poor in Cr-spinel, core angle of contact: 50 degree, gradual contact with harzburgite,						100	100
105									90	
		104.80 - 105.00;	Dunite; brown partly green,						100	
		106.20 - 106.25;	Dunite; brown,						100	100
		108.40 - 108.45;	Dunite; green, gradual contact with harzburgite,						100	
		108.80 - 108.85;	Ditto,						100	
110									92	100
									83	100
									90	
									100	100
									100	
115									38	
									41	91
		116.80 - 117.60;	Dunite, brown to green, partly brecciated,						58	91
		118.70 - 118.80;	broken into small blocks,						40	96
		119.90 - 119.95;	Dunite; brown, gradual contact with harzburgite,						12	76
120		120.40 - 120.45;	Ditto,						32	82
		121.15 - 121.20;	brecciated zone, friable, green to reddish brown,						12	92
		122.50 - 122.70;	brecciated zone; green,						14	
		122.75 - 123.20;	ditto, with blocks of dunite,						10	92
		123.35 - 124.60;	ditto, with blocks of dunite,						0	100
125		124.85 - 125.30;	ditto, with blocks of dunite, partly brown,						67	94
		125.30 - 167.30;	Fresh harzburgite; gray, Px: 30% and 1 to 2 cm in size, hard,				126.40		52	99
							7−R−6		100	98
		127.65 - 127.70;	Dunite; fresh, gray, gradual contact with harzburgite,						90	
130									43	94
									61	100
		131.50 - 132.50;	Dunite; cut by networks of serpentine minerals,						60	
		133.20 - 133.70;	Ditto,						100	100
									50	
135		134.40 - 135.50;	Ditto,						75	100
									65	
									75	
									100	98
									82	
140		139.75 - 140.45;	fault zone; consist of friable materials with dunite.						86	95

GEOLOGIC LOG (3)

MJAS-7

INCLINATION : −49°

AREA : GJORDUKE BEARING : S70°W (250°) ELEVATION : 1,303.65m FINAL DEPTH : 167.30m

SCALE (m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
140			140.45 - 140.90; Dunite; brown to dark gray, serpentinized, medium hard, very rare in Cr-spinel,						28	94
									33	92
			140.90 - 141.70; fault zone; consist of friable material with dunite, green,						56	97
			141.70 - 142.30; Dunite; brown to dark gray, serpentinized, medium hard, very rare in Cr-spinel,						42	
145			142.50 - 143.20; fault zone; consist of friable material with dunite, green,						70	100
			143.20 - 144.10; brecciated zone with blocks of dunite, green to brown,						25	
			144.90 - 145.60; ditto,						24	100
									34	
									90	100
150									75	
									77	100
			150.70 - 151.40; Dunite, fresh, yellowish gray,				150.85 7−R−7		100	
									100	100
									84	
155			154.40 - 155.00; Dunite, fresh, yellowish gray, with Cr-spinel,						92	100
									92	
									36	100
			156.60 - 156.80; Dunite, brown, with Cr-spinel,						80	61
									18	100
160									100	100
									100	100
							7−R−9		83	
			162.70 - 164.30; Dunite, fresh, yellowish gray with Cr-spinel,				162.50 163.15 7−R−8		100	100
									100	100
165			164.30 - 164.70; friable materials of serpentine minerals, green, core angle of contact: 30 degree,						61	
									90	100
									100	100
		167.30								
170										

Apx. 2-3-1 (7) Geological logging of MJAS-8, Qarri i Zi area

MJAS- 8

INCLINATION : −40°

AREA : QARRI I ZI BEARING : N60°E(60°) ELEVATION : 644.87m FINAL DEPTH : 87.50m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
			0.00 - 3.15; Dunite: brown but partly green, weathered, strongly fragmented into very small chips and powder,				4.85-5.11 8−C−1		0	100
									0	
							5.19-5.21 8−C−2		0	100
									0	
		S=1/50	3.15 - 4.85; Dunite; green but partly brown, very strongly fragmented partly powder like, rare in Cr-spinel,						0	100
5						40.50	4.90			
			4.85 - 5.32; Chromitite; disseminated ore, fine-grained		4.85 - 5.32; Chromitite; disseminated ore, fine-grained,	33.40	8−R−8		0	100
			5.11 - 5.19; intercalation of dunite, strongly fragmented,			36.00			40	
			5.21 - 5.29; ditto,				5.29-5.32 8−C−3		0	100
			5.32 - 9.75; Dunite: brown, fragmented, cracks are filed with serpentine minerals and rarely with calcite,						0	
10						24.30	9.77		0	100
			6.65 - 7.25; broken into very small blocks,		9.75 - 10.00; Chromitite; olive green disseminated ore, friable,		8−R−9		40	100
			7.25 - 9.75; very friable, maybe fault zone,						0	100
			9.75 - 10.00; Chromitite; olive green, disseminated ore, friable,				9.75-10.00 8−C−4		44	100
			10.00 - 12.90; Dunite: green to brown, with Cr-spinel grains and spots, partly friable, with networks veinlets of serpentine minerals,						0	
15									31	100
			core angle of contact with harzburgite: 70 degree,						0	100
			11.50 - 12.20; powder like core, very friable, fault ?,						0	
			12.90 - 16.00; Harzburgite, green partly brown, medium hard, Px: 35% and 3 to 4 mm in size,						20	100
									0	
			16.00 - 20.70; brecciated zone: with harzburgite and dunite blocks, green,						0	100
20			some cracks are filled with calcite,						0	
			20.70 - 22.46; Dunite, weathered, brown,						10	100
			22.46 - 24.20; Harzburgite; same as the interval of 12.90 - 16.00 m,				22.70 8−R−1		40	100
									67	100
			24.20 - 43.30; Dunite; weathered weakly, dark brown, fractures are filled with serpentine minerals and some with calcite,						13	100
25									13	100
									13	100
			27.68 - 28.58; brecciated zone in dunite, green, friable,						15	
			28.58 - 28.73; Intercalation of harzburgite, brown,						30	78
			28.76 - 28.81; Chromitite; disseminated, core angle of contact: 50 to 90 degree,		28.76 - 28.81; Chromitite; disseminated core angle of contact; 50 to 90 degree				44	100
30									0	24
			28.81 - 31.97; with Cr-spinel grains, partly broken into small blocks,						0	
			31.97 - 32.80; brecciated zone in dunite; light brown to green, partly friable, core angle of contact:40 degrees,						42	46
									10	
35									14	58
									0	
			35.70 - 36.00; Intercalation of Hz; dark brown, Px: 30%,						10	26
			36.00 - 39.50; weathered, with Cr-spinel grains,						0	
									23	40
							43.30-43.85 8−C−5		23	63
40			39.50 - 41.40; brecciated zone in dunite, friable,						0	
			42.70 - 43.30; ditto, compact,						17	82
							8−R−2		0	
			43.30 - 43.85; Chromitite; disseminated ore, fine grained, hard, olivine shows green color, core angle of upper contact: 30 degree, and lower contact is not clear,		43.30 - 43.85; Chromitite; disseminated ore, fine grained, hard, olivine shows green color, core angle of upper contact:30 degree,and lower contact is not clear,	21.70	43.70		38	92
45							44.45 8−R−3		32	100
			43.85 - 48.80; Dunite: green to brown, with network veinlets of serpentine minerals and calcite, broken into blocks,						100	88
									63	
			44.30 - 44.50; with a few pyroxene grains,						70	75
									100	85
			48.80 - 49.25; Chromitite; disseminated, fine-grained, core angle of upper contact: 50 degree and lower: 35 degree,		48.80 - 49.25; Chromitite; disseminated , fine grained,core angle of upper contact:50 degree and lower:35 degree,	26.70	49.20 8−R−4		60	100
50									37	83
			49.25 - 53.30; Dunite; brown, with network veinlets of serpentine minerals and few calcite,		50.80 ; Chromitite brand of 2 to 3 mm with core angle of 90 degree,		48.80-49.25 8−C−6		72	
			50.80 ; Chromite band of 2 to 3 mm with core angle of 90 degree,						54	83
			52.00 - 53.30; brecciated zone in dunite, reddish brown to green,						53	91
55			withnetworks of calcite, fault ?,						100	100
			53.30 - 58.58; Harzburgite; dark green, hard, Px: 30% and 3 mm in size, fractures are filled with calcite and serpentine minerals,				55.23 8−R−5		65	100
									65	100
									39	100
			58.58 - 59.85; Dunite; dark brown, medium hard,						90	100
60									82	100
			59.85 - 61.40; Serpentinite; with dunite at the interval of 60.05 - 60.25 m,						58	100
			core angle of contact: 80 to 90 degree,						18	100
			61.40 - 87.50; Harzburgite; dark green, Px: 35%, with network veinlets						90	100
			of serpentine minerals and calcite,						38	
65			65.53 - 69.95; broken into small blocks,						22	56
									0	
									0	94
									0	66
							8−R−6		0	47
70							70.00		25	

GEOLOGIC LOG (2)

MJAS-8

AREA : QARRI I ZI

INCLINATION : −40°

BEARING : N60°E(60°)

ELEVATION : 644.87m

FINAL DEPTH : 87.50m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	ROCK PROPERTY: RQD (%)	ROCK PROPERTY: Core Rec (%)
70									100	87
									100	
			72.22 - 75.22: ditto.						15	53
									0	
75									0	60
			76.00 - 77.00: strongly fragmented core, may be fault.						38	91
									0	51
									0	43
									0	50
80									0	49
									10	
									0	51
									20	
									32	69
									29	
85							85.00 S−R−7		60	64
			87.00 - 87.50: Brecciated zone; partly compact but friable, fault.						11	75
		87.50								
90										
95										
100										

Apx. 2-3-1 (8) Geological logging of MJAS-9, Qarri i Zi area

MJAS-9

INCLINATION : −51°

AREA : QARRI I ZI BEARING : N60°E (60°) ELEVATION : 644.68m FINAL DEPTH : 101.55m

SCALE(m) 1:200 — COLUMN

DEPTH (m)	DESCRIPTION	REMARKS
0.00 - 0.30	Surface soil; brown, with blocks of dunite,	
0.30 - 12.00	Dunite with chromitite; weathered, gray to greenish gray, serpentinized, friable, broken into small blocks, with Cr-spinel grains and spots,	
3.60 - 4.51	Chromitite; massive to disseminated, friable,	
3.60 - 3.87	massive ore,	
3.87 - 4.13	densely disseminated ore,	
4.13 - 4.51	disseminated ore,	
4.93 - 5.00	Chromitite disseminated, broken into small chips,	
6.97 - 7.47	Chromitite; dense disseminated ore, friable,	
7.47 - 8.28	brecciated zone in dunite, with spots of Cr-spinel in dunite lumps,	
9.30 - 9.32	Chromitite as small chips, disseminate,	
11.17 - 11.19	Chromitite as small chips, disseminated,	
12.00 - 18.70	Complex zone of dunite and harzburgite; Dunite is brown and harzburgite is brown to dark gray in color, both are friable and broken into small blocks,	
12.00 - 12.60	Harzburgite; Px: 30%,	
12.60 - 14.90	Dunite,	
14.90 - 18.70	Harzburgite; Px: 30%,	
16.85 - 17.20	fault zone, friable, partly with clay,	
18.70 - 31.90	Dunite; brown, poor in Cr-spinel grains, with disseminated thin chromitite lenses, fractures are filled with serpentine minerals,	
21.75 - 21.80	Chromitite; disseminated, core angle of contact with dunite: 60 degree, Cr_2O_3 content estimated: 20%,	
23.55 - 23.58	Chromitite; disseminated, Cr_2O_3 content estimated: 15%,	
25.60 - 25.65	Chromitite; disseminated, core angle of contact with dunite: 50 degree, Cr_2O_3 content estimated: 18%,	
26.20 - 26.23	Chromitite; disseminated, Cr_2O_3 content estimated: 15%,	
31.90 - 53.19	Complex zone of dunite and harzburgite; Dunite is brown to dark green and harzburgite is brown to dark green in color, fractures in both are filled with serpentine minerals and calcite, core angle of foliation in harzburgite: 70 to 80 degree,	
31.90 - 32.65	brecciated zone, dark green to gray, with lumps of dunite and harzburgite, with veinlets of serpentine minerals and calcite,	
33.00 - 36.40	Dunite; brown, fractured, friable, with schlieren of chromitite sparsely,	
36.30 - 36.32	Chromitite lens, disseminated, core angle of contact with dunite: 80 to 90 degree,	
40.60 - 47.20	Dunite; brown to dark green, fractures are filled with network veinlets of calcite,	
43.70 - 44.15	fault zone, partly brecciated, friable,	
48.60 - 53.19	Dunite; brown to dark green, fractures are filled with networks of calcite,	
52.30 - 52.50	brecciated zone, with calcite veinlets, green,	
53.19 - 101.55	Harzburgite; dark greenish gray, fractures are filled with veinlets of calcite and serpentine minerals, Px: 30 to 35% and 1 to 3 mm in size, with thin dunite,	
60.23 - 60.28	brecciated zone, core angle of contact: 35 degree,	
60.60 - 60.80	Dunite; brown,	
63.00 - 68.14	brecciated zone with lumps of harzburgite, green to dark green,	

MINERALIZATION	Cr_2O_3 (%)
3.60 - 4.51; Chromitite; massive to disseminated, friable,	25.60
4.93 - 5.00; Chromitite disseminated, broken into small chips,	23.00
6.97 - 7.47; Chromitite; dense disseminated ore, friable,	22.70
9.30 - 9.32; Chromitite as small chips, disseminate,	27.10
11.17 - 11.19; Chromitite as small chips, disseminated,	
21.75 - 21.80; Chromitite; disseminated, core angle of contact with dunite: 60 degree, Cr_2O_3 content estimated: 20%,	
23.55 - 23.58; Chromitite; disseminated, Cr_2O_3 content estimated: 15%,	
25.60 - 25.65; Chromitite; disseminated, core angle of contact with dunite: 50 degree, Cr_2O_3 content estimated: 18%,	
26.20 - 26.23; Chromitite; disseminated, Cr_2O_3 content estimated: 15%,	
36.30 - 36.32; Chromitite lens, disseminated, core angle of contact with dunite: 80 to 90 degree,	

SAMPLE No.
3.60-3.87
9−C−1
3.87-4.13
9−C−2
4.13-4.51
9−C−3
6.97-7.47
9−C−4
12.9
9−R−1
18.5
9−R−2
39.51
9−R−3
42.7
9−R−4

ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
	0	100
	0	
	0	100
	0	100
	0	100
	0	100
	0	100
	0	36
	0	
	0	35
	0	
	0	63
	0	42
	0	78
	15	98
	0	100
	0	
	23	
	0	83
	13	
	23	100
	10	55
	11	67
	0	86
	13	85
	12	
	57	100
	27	100
	0	100
	45	
	20	100
	0	100
	15	100
	0	
	30	100
	0	100
	0	100
	36	100
	73	100
	84	100
	93	
	53	100
	83	
	66	100
	0	94
	40	100
	80	
	100	100
	100	
	60	100
	59	100
	92	100
	0	
	34	100
	0	100
	15	100
	66	100
	0	100
	0	100
	67	100
	56	100
	56	100
	0	73
	15	78
	0	
	52	76
	25	76
	0	
	63	100
	0	100
	30	

GEOLOGIC LOG (2)

MJAS-9

INCLINATION : −51°

AREA : QARRI I ZI BEARING : N60° E (60°) ELEVATION : 644.68m FINAL DEPTH : 101.55m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70			70.00 - 70.05; brecciated zone, green, with calcite veinlets,						0	43
			70.40 - 70.50; ditto,						28	
									0	41
									53	60
75									40	61
									50	
									0	45
									0	
			78.60 - 78.80; brecciated zone, brown, with calcite veinlets, compact,				78.7 9−R−5		0	67
80									29	
									60	73
									42	
									61	91
									0	40
			84.00 - 84.50; brecciated zone, friable, with calcite veinlets,						44	84
85			85.00 - 85.20; ditto,						44	81
							86.5 9−R−6		86	100
									84	85
									23	
									60	78
90									69	100
									80	100
									71	
									48	100
									65	89
95									87	
									81	88
									67	78
									0	46
									0	100
100									20	100
		101.55								

Apx. 2-3-1 (9) Geological logging of MJAS-10, Qarri i Zi area

MJAS-10

INCLINATION : −46°

AREA : QARRI I ZI BEARING : N60° E (60°) ELEVATION : 627.18m FINAL DEPTH : 101.13m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 1.60	Harzburgite; serpentinized, weathered, dark brown, Px: 30 to 35%, broken into small blocks,						0	100
									0	100
									36	92
									84	100
5		1.60 - 8.85	Harzburgite; serpentinized, weathered, dark brown, Px: 35 to 40% and 2 to 3 mm in size,						12	100
									0	100
									24	100
									13	75
									12	100
10		8.85 - 12.70	Dunite with thin harzburgite; Dunite is brown in color and poor in Cr-spinel, harzburgite is the same as the interval of 1.60 - 8.85, both are serpentinized and weakly weathered, broken into small blocks,						0	100
							10−R−1		0	100
							−11.3		16	100
		9.20 - 9.53	Harzburgite,				−12.2		0	100
		11.70 - 12.30	Harzburgite,				10−R−2		26	91
15		12.70 - 101.13	Harzburgite; dark greenish gray, serpentinized, Px: 35 to 40% and 2 to 3 mm in size, sparsely accompanied with dunite and pyroxinite dikes, fractures are filled with serpentine minerals and calcite,				−14.7		30	80
							10−R−3		50	85
									14	74
		12.80 - 12.85	fault zone, green, friable,						45	90
		12.85 - 16.40	poor in pyroxene grains so that partly looks like dunite,						15	100
20									31	100
		20.30 - 20.50	Dunite; dark gray, serpentinized,						40	
									10	100
									0	100
		23.90 - 24.00	brecciated zone,						0	100
25		24.50 - 25.55	brecciated zone, green, with calcite veinlets						63	100
		25.90 - 26.00	ditto,						12	100
		26.80 - 27.40	ditto, core angle of contact: 35 to 40 degree,						40	68
									15	
									0	83
30		29.40 - 30.90	pyroxene content: approx. 30%,						50	100
									46	100
									47	100
									82	100
		33.80 - 33.90	brecciated zone, brown, core angle of contact: 50 degree, with calcite veinlets						53	93
35									20	98
		35.00 - 35.05	brecciated zone, brown, core angle of contact: 40 degree, with calcite veinlets,						35	
									68	100
									52	90
									46	100
									70	
40		40.20 - 40.40	brecciated zone, brown, with calcite veinlets,				−39.6 10−R−4		46	87
									0	86
									14	88
									35	70
45									30	82
									64	100
									30	100
									37	79
									15	100
									0	79
50		51.10 - 51.12	Pyroxinite dike; width: 2 cm, core angle of contact: 30 degree,						0	100
									62	93
									0	81
									31	92
55									0	100
									83	100
									100	100
									84	100
60									73	100
									46	100
									100	100
									70	100
									100	100
65		65.40 - 66.00	fault zone, brecciated and partly broken into small blocks,						37	100
									89	100
									90	
									100	100
70									68	

GEOLOGIC LOG (2)

MJAS-10

INCLINATION : −46°

AREA : QARRI I ZI BEARING : N60° E (60°) ELEVATION : 627.18m FINAL DEPTH : 101.13m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									93	
									100	100
									93	
			72.66 - 72.70; brecciated zone, green to brown,						34	100
75									20	
									28	100
									92	100
							77.0		20	
							10−R−5		12	100
			78.10 - 78.30; brecciated zone, green to brown, with calcite veinlets, core angle of contact: 40 degree,						21	100
80									28	95
									12	89
									0	94
									12	
85									36	80
									0	52
									0	86
									12	82
									0	75
90									0	100
									0	90
			91.70 - 91.90; Dunite; brown,						0	100
									0	100
									0	100
95									0	100
									0	100
									0	75
									0	81
									0	100
100							10−R−6		44	
							100.7		36	100
		101.13								

Apx. 2-3-1 (10) Geological logging of MJAS-12, Shesh Bush No.1 area

MJAS-12

INCLINATION : −40°

AREA : SHESH BUSH No.1 BEARING : S60°W (240°) ELEVATION : 1,202.04m FINAL DEPTH : 100.60m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
			0.00 - 3.10; Surface soil; brown, with blocks of dunite and harzburgite,						0	100
									0	
									0	
			3.10 - 5.30; Harzburgite; weathered to brown, serpentinized, Px; approx. 35%,						14	100
5									0	100
			5.30 - 11.50; Dunite, weathered to brown, with thin harzburgite sparsely, poor in Cr-spinel, fractures are filled with serpentine minerals, core angle of contact: 60 degree						15	
									0	100
			7.70 - 9.20; brecciated zone, brown partly green, compact,						63	
									20	100
10			10.20 - 10.80; brecciated zone, green, partly friable,				9.3 12−R−1		61	
			10.80 - 11.20; Harzburgite; weathered, brown, Px; 35% and 1 - 3 mm in size,						27	100
									0	
			11.50 - 16.00; Harzburgite; weathered to brown, Px;25 to 30%, fractures are filled with serpentine minerals,				12.1 12−R−2		24	100
									31	
15									68	100
									0	
			16.00 - 24.60; Complex zone of dunite and harzburgite; weakly weathered, Dunite is brown in color and poor in Cr-spinel, Harzburgite is intercalated with very thin dunite bands (up to 1 cm in thick) and shows foliation of 50 to 70-80 degree of core angle,						64	
									78	100
									38	
20			16.00 - 16.80; Dunite,				12−R−3		23	100
			17.80 - 18.20; Dunite,				20.6		38	
			19.80 - 20.80; Dunite,				21.0 12−R−4		50	100
			21.00 - 22.60; Dunite,						70	
			23.20 - 23.25; Dunite,						30	
			23.30 - 23.40; Dunite,						17	100
25			24.60 - 51.70; Dunite; weakly weathered, brown to greenish gray, sparsely accompanied with thin harzburgite,						14	
			24.60 - 24.70; brecciated zone, green to brown, friable,				26.8 12−R−5		49	100
			25.00 - 25.10; ditto,						23	100
			25.90 - 26.20; ditto, core angle of contact: 50 degree,						50	
30			28.00 - 31.30; brecciated zone, green to brown, compact,						38	100
			31.50 - 31.70; ditto,						56	
			31.70 - 32.00; Harzburgite,						10	100
			33.60 - 33.70; brecciated zone, green,						10	100
									11	100
35									66	100
									86	100
			36.80 - 37.00; brecciated zone, green,				36.4 12−R−6		55	
									34	100
									100	
40									80	100
			40.70 - 40.80; brecciated zone, green, mainly of serpentine minerals,						73	
			42.00 - 42.50; brecciated zone, green partly brown, core angle of contact: 10 to 30 degree,						13	100
									56	
									46	
45			45.30 - 48.30; fractures are filled with serpentine minerals and calcite, some of which are accompanied with iron oxides,				44.4 12−R−7		82	100
									77	
									43	
									50	100
									71	100
50									50	
									73	100
									87	
			51.70 - 100.60; Harzburgite; dark greenish gray, medium hard, sparsely accompanied with thin dunite and pyroxinite dikes, Px;30 to 35% and 1 to 2 mm in size, fractures are filled with serpentine minerals and partly calcite with iron oxides,						42	100
									60	
55							53.7 12−R−8		68	100
									59	
			54.80 - 55.10; Dunite, greenish dark gray,						86	100
			55.60 - 56.00; ditto,						46	
									13	100
60							59.5 12−R−9		53	100
									39	
									63	100
									61	
									28	100
65									100	
									72	100
									72	
									69	100
									50	100
70									10	100

GEOLOGIC LOG (2)

MJAS-12

INCLINATION : −40°

AREA : SHESH BUSH No.1 BEARING : S60°W (240°) ELEVATION : 1,202.04m FINAL DEPTH : 100.60m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70			70.60 - 70.80; Pyroxinite dike; core angle of contact: 10 to 20 degree,						36	100
									13	
									77	100
									14	100
75									27	100
									26	100
									28	100
			76.90 - 77.10; Pyroxinite dike; core angle of contact: 60 degree,						66	100
			78.30 - 78.70; Dunite; brown, poor in Cr-spinel,						38	100
80			78.80 - 79.50; ditto, partly brecciated,						14	
									70	100
			81.25 - 81.35; Pyroxinite dike; core angle of contact: 40 degree,						100	100
									48	100
			83.30 - 83.40; Pyroxinite dike; core angle of contact: 60 degree,						75	100
85									32	100
									43	100
									46	
									83	100
									70	100
90			89.65 - 89.75; Pyroxinite dike; core angle of contact: 90 degree,						54	100
			91.10 - 91.13; Pyroxinite dike; core angle of contact: 60 degree,						22	
			91.13 - 100.60; pyroxene is 4 to 5 mm in size,						74	100
									100	100
							−93.6		80	
							12−R−10		100	
95									100	100
									100	
									100	100
									100	100
									70	
100									84	100
		100.60								

Apx. 2-3-1 (11) Geological logging of MJAS-13, Shesh Bush No.1 area

MJAS-13

INCLINATION : −43°

AREA : SHESH BUSH No.1 BEARING : S60°W (240°) ELEVATION : 1,199.60m FINAL DEPTH : 100.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
			0.00 - 3.60; Surface soil; brown, with blocks of dunite and harzburgite.						0	100
									0	
									10	100
									0	
			3.60 - 19.80; Dunite; accompanied with harzburgite, weathered, brown, serpentinized, very poor in Cr-spinel, partly broken into small blocks,						15	100
5			3.70 - 4.30; Harzburgite; weathered, brown, medium hard, Px: approx. 30% and 2 mm in size,				5.5 13−R−1		38	100
			4.30 - 4.35; fault zone, friable, green to brown,						10	
			6.35 - 6.60; Harzburgite; weathered to brown, Px: 35%,						10	100
			7.40 - 10.40; Harzburgite; greenish gray to brown, Px: 30% and 1 to 2 mm in size, intervals of 8.90 - 9.00 m and 9.90 - 10.40 m are fault zones of friable materials and green in color,				8.1 13−R−2		17	100
10									12	100
									12	
			12.20 - 12.90; fault zone in dunite, green, mainly of serpentine minerals,						28	100
			13.70 - 14.00; ditto,						10	
									11	100
15									11	100
									12	
			17.00 - 17.70; ditto,				13−R−3		43	100
									10	
			18.70 - 18.80; ditto,				18.4		81	100
									64	
20			19.80 - 35.00; Harzburgite; weakly weathered, serpentinized, greenish gray to brown, fractures are filled with serpentine minerals, Px: 30% and up to 3 mm in size, core angle of foliation: 50 to 60 degree, with thin dunite,				20.2 13−R−4		78	100
									21	
			21.40 - 21.65; Dunite; brown, interval of 21.55 - 21.65 m is mainly of serpentine minerals, maybe fault zone,						70	100
									80	
									69	
25									26	100
									55	
			27.70 - 28.00; fault zone; mainly of serpentine minerals,						66	100
									54	
30									47	100
									27	
			31.00 - 33.20; Dunite; brown, poor in Cr-spinel, the interval of 31.40 - 31.45 m is fault zone mainly of serpentine minerals,						53	
									50	100
			33.20 - 34.00; fault brecciated zone with a lot of blocks of dunite, friable,				32.8 13−R−5		12	
									47	100
35			35.00 - 78.80; Harzburgite, serpentinized, greenish gray partly brown, hard, Px: 30 % and up to 3 mm in size, but intervals of 44.00 - 56.90, 66.30 - 78.80 are rich in pyroxene up to 35 to 40 % and 1 to 2 cm in size, sparsely with thin dunite,						90	
									90	100
							37.5 13−R−6		90	
									100	
40									100	100
									85	
									75	
									83	100
									100	
45									100	100
									62	
									100	100
									100	
									76	
50									100	100
									90	
									100	
									100	100
									100	
55									50	100
									100	
									58	
			57.80 - 57.85; Dunite; brown,						83	100
			57.85 - 58.40; brecciated zone, friable, green to reddish brown,						44	
60									57	100
									56	
									40	100
									48	100
									57	100
65			64.30 - 64.40; ditto,						0	
			64.90 - 65.10; ditto,						66	100
									54	
									100	100
									85	
70									100	100

GEOLOGIC LOG (2)

MJAS-13

INCLINATION : −43°

AREA : SHESH BUSH No.1 BEARING : S60°W (240°) ELEVATION : 1,199.60m FINAL DEPTH : 100.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									90	100
									57	
									100	100
									58	
75									100	
									100	100
							76.7		100	100
							13−R−7		45	
			78.80 - 94.20; Complex zone of dunite and harzburgite; dunite is brown to greenish gray and poor in Cr-spinel, harzburgite is rich in pyroxene up to 35 to 40 % and the size is large up to 1 to 2 cm.						70	100
80							79.1		100	100
							13−R−8		90	
			78.80 - 79.50; Dunite,						47	100
			80.90 - 81.20; Dunite,						61	
			82.70 - 82.80; Dunite,						100	100
			82.90 - 83.10; Dunite,						100	
85			84.00 - 88.60; Dunite,						40	
									100	100
									100	
							88.1		100	100
							13−R−9		100	
90			89.90 - 91.10; Dunite, the interval of 90.70 - 90.80 is brecciated,						53	100
									100	
									100	100
			93.40 - 94.20; Dunite,						86	
95			94.20 - 100.00; Harzburgite; greenish gray, Px: 35 to 40% and large in size, with thin dunite.						65	
							96.0		78	100
							13−R−10		100	
			97.90 - 98.00; Dunite,						100	
			98.80 - 99.00; Dunite,						50	100
			99.00 - 99.20; fault zone of friable materials, green,						40	100
100			99.60 - 100.00; ditto,							
		100.00								

Apx. 2-3-1 (12) Geological logging of MJAS-14, Shesh Bush No.1 area

MJAS-14

INCLINATION : −40°

AREA : SHESH BUSH No.1 BEARING : S60° W(240°) ELEVATION : 1,199.76m FINAL DEPTH : 100.80m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 1.30:	Surface soil: brown, with small blocks of dunite,						0	
		1.30 - 11.30:	Dunite; accompanied with thin harzburgite, weathered, brown, serpentinized, with Cr-spinel, partly broken into small blocks,						0	100
									0	
									30	
5		2.80 - 3.50:	fault zone, friable partly argillized, green,				4.30 14−R−1		71	100
		6.30 - 6.70:	Harzburgite: weathered, brown to gray, Px: 30%, serpentinized, gradual contact with dunite,						60	
		6.90 - 7.40:	brecciated dunite: green to reddish brown, compact,						30	100
		7.40 - 7.60:	Harzburgite; dark gray, compact,						54	
		7.90 - 8.30:	Ditto, broken into small blocks,						0	100
10		8.30 - 8.90:	fault zone with blocks of harzburgite and dunite, friable, green, partly brecciated,						10	
									0	100
		10.60 - 11.30:	fault zone, green, friable, with blocks of dunite at upper and harzburgite at lower parts,				11.60 14−R−2		76	100
									55	
									100	
15		11.30 - 44.40:	Harzburgite; weakly weathered, brown to dark brown, partly greenish dark gray, Px: approx.35% and 3 to 4 mm in size, core angle of foliation: 50 degree, fractures are filled with serpentine minerals with friable materials of iron oxides, sparsely cut by pyroxinite dikes,						95	100
									56	
									100	100
		20.30 - 20.45:	brecciated zone, compact, brown to green,						100	
		20.60 - 20.75:	ditto,						10	
20		20.85 - 21.60:	ditto, friable,						15	100
		22.30 - 22.40:	Pyroxinite dike; width: 3 cm,						76	
		22.90 - 23.30:	Pyroxinite dike; gray, core angle of contact: 0 to 20 degree,						45	100
		24.70 :	Pyroxinite dike; width: 2 cm, core angle of contact: 40,						100	
									100	
25									73	100
									54	
									64	
							14−R−3		100	100
							28.20		100	
30		28.85 - 29.00:	Dunite: brown, with fine-grained Cr-spinel,				29.00 14−R−4		100	100
									100	
		31.90 - 32.30:	fault zone ?: green, friable,						60	100
									10	
									0	100
35									22	
									12	100
									32	
									49	100
		38.00 - 38.30:	friable materials partly of clay, green to reddish brown, with small blocks of dunite,						10	100
40									40	
									0	100
		41.20 - 41.30:	Dunite: brown, with Cr-spinel,						50	
									50	100
							14−R−5		46	100
45		44.40 - 46.50:	Dunite; brown to greenish gray, with Cr-spinel spots at upper part, highly possible to be continuation of dunite of Shesh Bush No.1 body,				44.50 14−R−6		34	
									68	100
							46.20		100	
		46.50 - 59.70:	Harzburgite; serpentinized, greenish gray, hard, fractures are filled with green colored serpentine minerals, sparsely cut by pyroxinite dikes,				46.70 14−R−7		100	
									100	100
50									100	
									100	
									100	100
									100	
									100	100
55									90	
									90	100
									60	
		57.50 - 57.65:	Pyroxinite dike; core angle of contact: 40 degree,						100	100
		57.80 - 58.26:	ditto, core angle of contact: 40 degree,						28	
		59.30 - 59.70:	brecciated zone, green, compact,						50	
60		59.70 - 72.70:	Complex zone of dunite and harzburgite; Cr-spinel is poor both in dunite and harzburgite, fractures are filled with serpentine minerals, dunite is brown to greenish gray and partly broken into small blocks,				60.3 14−R−8		34	100
									34	100
									37	100
		59.70 - 61.80:	dunite, brown to greenish gray,						15	100
		63.10 - 65.10:	ditto,						0	
65		66.80 - 68.60:	ditto,						30	100
		69.50 - 70.00:	ditto,						75	
									63	
									100	100
70									54	100

GEOLOGIC LOG (2)

MJAS-14

AREA : SHESH BUSH No.1 INCLINATION : −40° BEARING : S60°W(240°) ELEVATION : 1,199.76m FINAL DEPTH : 100.80m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	ROCK PROPERTY: RQD (%)	ROCK PROPERTY: Core Rec (%)
70		70.20 - 71.30:	ditto,						100	100
		72.00 - 72.70:	ditto, greenish gray,						60	
		72.70 - 86.80:	Harzburgite; serpentinized, dark greenish gray, frequently accompanied with dunite and sparsely with pyroxinite dikes,						100	100
75									100	
									90	
									88	
		77.00 - 77.10:	fault zone, friable, mainly of serpentine minerals,						90	100
		77.80 - 78.30:	Dunite; brown, poor in Cr-spinel,						34	
		79.30 - 80.00:	brecciated zone in harzburgite, compact, brown to dark gray,				78.4 14−R−10		80	100
80		80.00 - 80.30:	Dunite; brown, brecciated, poor in Cr-spinel,						100	
									70	
		81.60 - 82.10:	Pyroxinite dike; core angle of contact: 50 degree,						100	100
		82.60 - 83.40:	Dunite; brown,						83	
		84.90 - 85.00:	Dunite,						42	
		85.00 - 85.50:	brecciated zone, green, friable,						54	100
85		85.80 - 85.90:	Dunite,						50	
		85.90 - 86.60:	brecciated zone, green friable,						15	
		86.80 - 91.40:	Dunite; brown to dark green, serpentinized, with Cr-spinel,						26	100
		86.80 - 87.80:	brecciated zone with clay and partly with serpentine minerals, green to brown,				88.3 14−R−9		86	
90		91.00 - 91.40:	brecciated zone, compact, green to brown,						41	
		91.40 - 100.80:	Harzburgite; serpentinized, dark greenish gray, accompanied with dunite,						78	100
									60	
									82	100
									100	100
95		94.10 - 94.50:	Dunite; dark green, compact, core angle of contact: 40 degree,						100	
									90	100
		95.30 - 95.50:	Dunite, ditto,				96.3 14−R−11		90	100
		97.10 - 100.40:	Dunite; brecciated at the interval of 98.10 - 98.35 m,						100	
									70	100
100		100.40 - 100.60:	Pyroxinite dike; core angle of contact: 60 degree,						75	
		100.80							63	

Apx. 2-3-1 (13) Geological logging of MJAS-15, Pishkash South area

MJAS-15

INCLINATION : −45°

AREA : PISHKASH SOUTH BEARING : E (90°) ELEVATION : 959.19m FINAL DEPTH : 209.50m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 1.00	Lateritic surface soil; brown, soft, with blocks of harzburgite.						0	100
		1.00 - 2.00	ditto, with a lot of blocks of harzburgite.						0	100
		2.00 - 24.20	Harzburgite; serpentinized, dark green gray, weathered, brown or olive brown, medium hard, Px:30 to 35% and 2 to 3 mm (max. 5mm) in size, core angle of foliation : 50 degree, fractures are filled with green serpentine minerals,						20	100
									10	100
5									14	99
									69	
		5.80 - 6.05	broken into small blocks,						0	100
		6.05 - 6.70	fault zone ? ; friable						22	100
		7.50 - 7.70	ditto,						23	100
10									0	100
									46	100
									18	100
									20	100
									38	100
15									0	100
									30	100
									24	
							17.40 15−R−1		68	100
									30	
20									25	100
		21.90 - 21.95	fault zone?, friable,						32	100
		22.85 - 22.90	ditto,						30	
									47	100
									59	
25		24.20 - 74.60	Harzburgite; dark greenish gray, serpentinized, medium hard to hard, Px: 20 to 30% and 2 to 3 mm in size, fractures are filled with serpentine minerals frequently and rarely with calcite, following intervals are weakly weathered to show partly brown in color, namely, 31.40 - 32.30, 34.00 - 35.60, 37.70 - 41.00, 41.30 - 43.70, 45.50 - 49.50, 54.20 - 63.00 and 65.40 - 71.60,						87	100
									72	
									60	100
									74	
							28.80 15−R−2		79	100
30									25	
		29.70 - 30.10	fault zone ?, friable,						57	100
									60	
									72	100
									94	
35									47	
									41	100
		35.60 - 35.90	ditto,						60	100
									100	100
									100	100
40									56	100
									68	100
									100	
									100	100
45									100	100
									40	100
									100	
									72	100
50							15−R−3 50.70		56	
									100	
		51.20 - 52.10	Dunite; dark gray, with fine-grained Cr-spinel,				51.60 15−R−4		100	100
		53.40	calcite veinlets along fractures,						16	
		53.95	ditto.						69	100
55									81	100
									40	
									20	100
									64	100
		56.90 - 57.20	fault zone ?, friable						76	
		59.00 - 60.00	ditto,						17	100
60									86	100
									95	
									92	
									100	100
65									90	
									100	100
									100	
									100	
									95	100
70									100	

GEOLOGIC LOG (2)

MJAS-15

INCLINATION : −45°

AREA : PISHKASH SOUTH BEARING : E (90°) ELEVATION : 959.19m FINAL DEPTH : 209.50m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									100	100
									90	
									100	100
									60	
75			74.60 - 119.75; Harzburgite; dark greenish gray, serpentinized, medium hard, pyroxene rich parts (30 to 35%) alternated with poor parts (20 to 30%), partly brecciated and with network veinlets of serpentine minerals,						100	100
									100	
									100	
									48	100
									42	
80									65	
									62	100
									58	
									61	100
									75	
									80	100
85									57	
									90	100
									75	
									58	
									100	100
90									90	
									90	
									100	100
									85	
									95	
95									53	100
									73	
									100	100
									100	
							99.10		100	100
100							15—R—5		100	
			101.00 - 101.40; fault zone ?; green, friable, composed mainly of serpentine minerals,						55	
									53	100
									84	100
			104.15 - 104.65; ditto,						15	100
105			105.65 - 105.75; ditto,						16	100
			106.20 - 106.30; ditto,						12	100
			107.30 - 107.40; ditto,						19	100
									0	100
			108.72 - 109.20; ditto,						48	100
110									42	
									29	100
			111.70 - 112.00; ditto,						36	
			112.70 - 113.80; Dunite; greenish gray, rare in Cr-spinel,				15—R—6		73	100
							113.30		100	100
115							115.05		100	
							15—R—7		46	100
									100	100
									61	
			119.15 - 119.35; fault zone, green, friable,						48	
120			119.75 - 127.70; Dunite; oxidized, brown to reddish brown, very poor in Cr-spinel, rarely accompanied with thin harzburgite,						68	100
									43	
							122.30		40	100
							15—R—8		82	
			123.70 - 124.00; Harzburgite; brown, medium hard,						60	100
125			124.90 - 125.80; fault zone ?, mainly of friable materials derived from dunite,						0	
			126.40 - 127.70; brecciated zone in dunite, green, friable,						26	100
			30%), with network veinlets of serpentine minerals,						20	
			127.70 - 199.10; Harzburgite; dark greenish gray, serpentinized, medium hard, pyroxene rich parts (30 to 35%) alternated thickly with poor parts (20 to 30%), with network veinlets of serpentine minerals,						100	
							129.00		100	100
130							15—R—9		100	
									100	100
									100	
									100	100
									83	
135									87	100
			135.70 - 136.20; brecciated zone, green, compact,						13	
									95	100
									95	
140									53	100

GEOLOGIC LOG (3)

MJAS-15

INCLINATION : −45°

AREA : PISHKASH SOUTH BEARING : E (90°) ELEVATION : 959.19m FINAL DEPTH : 209.50m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr2O3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
140									100	100
									100	100
									100	100
									100	100
145									100	100
									100	100
									70	
			147.00 - 147.10; fault zone, mainly of serpentine minerals, green to dark greenish gray, friable,						95	100
			149.10 - 149.50; ditto,						100	
150									33	
									100	100
									100	
							152.20 15−R−10		80	
									11	100
155									77	
									79	100
									100	
									100	
160									100	100
			160.60 - 160.75; fault zone ?; green, friable,						77	
									80	100
									100	100
									50	
165									75	97
									100	
									100	
			167.80 - 167.85; with calcite veinlets of core angle of 40 degree,						66	100
			168.60 - 168.90; ditto,						82	
170			169.75 - 169.95; ditto,						69	
									63	
									100	100
									100	
									100	
175									100	100
									90	
							176.30 15−R−11		100	
									100	100
									100	
180									100	
									100	100
									100	
									100	100
185									100	100
									100	
									40	100
			188.10 - 191.10; brecciated zone; green to brown or reddish brown, compact but partly friable,						48	100
190									0	
									28	100
									100	100
									100	
			193.80 - 194.60; ditto, core angle of contact: 50 degree,						100	100
195									85	
									85	100
									54	
							15−R−12		100	100
							198.40		100	
200			199.10 - 203.50; Complex zone of dunite and harzburgite; dunite is brown to light reddish brown in color and poor in Cr-spinel,				199.70 15−R−13		100	100
									100	
									100	100
									60	
			203.50 - 209.50; Harzburgite; dark greenish gray, with thin dunite,						100	100
205			204.80 - 204.90; Dunite; brown,						100	
			205.10 - 205.15; ditto,						100	
			206.40; Pyroxinite dike; core angle of contact: 30 degree, 3 to 4 cm in thick,						100	100
									100	
210		209.50							15	

Apx. 2-3-1 (14) Geological logging of MJAS-16, Pishkash South area

MJAS-16

AREA : PISHKASH SOUTH INCLINATION : −60° BEARING : E(90°) ELEVATION : 885.63m FINAL DEPTH : 211.80m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	ROCK PROPERTY: RQD (%)	ROCK PROPERTY: Core Rec (%)
		0.00 - 1.55	Surface soil; brown, with blocks of harzburgite and limestone.						0	100
		1.55 - 2.70	Harzburgite, weathered, dark green partly brown, Px: 30%, medium hard,						0	
		2.60 - 2.70	friable zone, maybe fault.						24	
									26	100
5		2.70 - 7.60	Harzburgite; serpentinized, dark green partly brown, Px: 30 to 35% and 2 to 3 mm in size, fractures are filled with serpentine minerals and some fissures are very friable, intervals of 4.50 - 4.70 and 6.35 - 6.65 are broken into small blocks,						12	100
									0	100
									0	
									60	100
		7.60 - 16.20	Harzburgite; serpentinized, compact, green to dark green, Px: 30% and 5 mm in size, fractures are filled with serpentine minerals and rarely stained by iron oxides,						100	
10									85	
									90	100
		10.40 - 10.60	Pyroxinite dike; core angle of contact: 20 degree,						100	
									100	100
									56	
15		15.10 - 16.20	fractures are filled with green serpentine mineral partly brown in color,						100	100
									16	
		16.20 - 17.60	Brecciated zone in harzburgite, 16.20-17.70 is friable,						36	100
		17.60 - 22.40	Harzburgite; serpentinized, dark green partly brown, Px: 30 to 35% and 2 to 3 mm in size, fractures are filled with green serpentine minerals partly reddish brown to brown,						36	100
20									30	
									76	100
		22.10 - 22.40	broken into small blocks, maybe fault.						70	
									79	100
		22.40 - 131.30	Harzburgite; serpentinized, green partly brown, compact and hard, Px: 30 to 35% and 2 to 3 mm in size, core angle of foliation: 50 degree, fractures are filled with green serpentine minerals,						40	
									100	100
25									90	
									60	100
									95	100
									100	
									100	100
							29.00 16−R−1		100	
30									90	100
									100	
									100	100
									100	
35									100	
									100	100
		37.00	Pyroxinite dike; width: 2 to 3 cm, core angle of contact: 20 degree,						100	
									80	100
									100	
40									100	100
									70	
		42.00	Pyroxinite dike; width: 2 to 3 cm, core angle of contact: 50 degree,						100	100
		42.10	Ditto,						100	
		43.45 - 43.90	broken into small blocks						56	100
45									49	
		45.50 - 45.70	broken into small blocks partly friable, fault ?,						35	
		47.90 - 48.10	Pyroxinite dike; hard, core angle of contact: 20 degree,						63	100
		48.10 - 56.60	core angle of foliation: 50 degree,						37	100
									100	
50									90	
									100	100
									100	
									100	
55									90	100
									100	
		56.60 - 57.00	Pyroxinite dike; hard, core angle of contact: 40 to 80 degree,						100	100
									90	
									25	
									62	100
60									100	
									100	
									100	100
									100	
		63.70 - 64.50	cut by networks veinlets of serpentine minerals,						100	
65		64.80 - 65.30	friable zone, fault ?, green,						60	100
							65.70 16−R−2		62	100
		66.70 - 67.20	ditto,						56	
		67.80 - 68.00	broken into small blocks,						46	100
		68.20 - 68.70	friable zone, fault, green to dark green,						10	
70									77	100

GEOLOGIC LOG (2)

MJAS-16

INCLINATION : −60°

AREA : PISHKASH SOUTH BEARING : E(90°) ELEVATION : 885.63m FINAL DEPTH : 211.80m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70			70.60 - 70.75; friable zone, fault ?, green,						23	100
									100	100
									80	
			73.20 - 73.80; Pyroxinite dike, core angle of contact: 30 degree,						80	100
75			74.20 - 74.90; broken into small blocks,						20	
			76.00 - 76.20; ditto,						86	100
									32	
									40	100
									72	
80									65	100
									100	100
									100	
									90	100
									65	
85									100	
									100	100
									100	
									100	
									100	100
90							90.20 16—R—3		100	
									49	100
									84	
			94.00 - 94.10; ditto,						72	100
95			95.00 - 95.55; ditto,						43	100
			96.10 - 96.55; ditto,						18	
			98.50 - 98.55; brecciated zone; green, core angle of contact: 40 degree,						29	100
			99.00 - 99.20; Pyroxinite dike; width: 5 to 6 cm, core angle of contact: 40°,						80	
			99.50 - 99.70; ditto, width: 3 to 4 cm, core angle of contact: 60 degree,						43	
100			99.85 - 100.35; broken into small blocks,						80	100
			102.10 - 102.95; ditto,						20	
			103.50 - 104.80; Dunite, light brown, including very rarely pyroxene grains, medium hard, poor in Cr-spinel,						100	100
105									82	
									100	
									100	100
									38	
									85	100
110									77	
									77	
									100	100
									80	
									63	100
115									100	
			117.00 - 117.10; friable, fault ?,						90	100
									100	
									30	100
120									77	
									100	
									100	100
			124.20 - 125.40; brecciated zone; compact, green,						100	
125			125.40 - 129.85; with foliation of 35 degree of core angle,						60	100
									64	
							128.05 16—R—4		100	
			129.85 - 131.30; brecciated zone; partly compact and partly friable, core angle of contact: 60 degree,						95	100
130									47	
			131.30 - 152.20; Dunite; brown or light brown to green, medium hard,						43	100
			133.40 - 134.00; friable green, fault ?,						37	
			134.20 - 144.10; brecciated zone; green rarely reddish brown, compact, partly with calcite veinlets,				133.10 16—R—5		40	100
135									100	
									50	100
									100	
									100	
140									100	100

GEOLOGIC LOG (3)

MJAS-16

AREA : PISHKASH SOUTH INCLINATION : −60° BEARING : E(90°) ELEVATION : 885.63m FINAL DEPTH : 211.80m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
140									84	100
									36	
									50	
									100	100
145			144.10 - 145.00; brown, with network veinlets of serpentine minerals,						100	
			145.00 - 146.00; light brown to reddish brown, with network veinlets of serpentine minerals,						67	100
									71	
			146.00 - 148.00; dark brown partly green, with network veinlets of serpentine minerals,						79	100
							148.50 16−R−6		100	100
150			148.00 - 149.15; green, compact, poor in Cr-spinel,						90	
			149.15 - 151.60; light brown to reddish brown, poor in Cr-spinel,						46	
			151.60 - 151.70; friable zone, green, maybe fault,						22	
			151.70 - 152.20; lower part is brecciated, core angle of contact: 30 degree,						100	100
			152.20 - 163.60; Harzburgite with dunite; Harzburgite is same as the interval between 22.40 and 131.3m,						100	
155									100	
							155.60 16−R−7		100	100
			157.05 - 157.45; Dunite; green, compact, poor in Cr-spinel,						100	
			158.65 - 159.80; Ditto,						95	100
160									85	
			160.35 - 160.80; Ditto,						80	
			160.80 - 161.50; Dunite; brecciated, green,						20	100
			162.70 - 163.10; friable zone, green, fault in harzburgite,						40	100
			163.50 - 163.60; Pyroxinite dike; core angle of contact: 70 degree,						72	
165			163.60 - 211.80; Dunite with harzburgite rarely; cut by fault frequently, dark green, medium hard, some fractures are filled with calcite veinlets, poor in Cr-spinel,						100	100
									46	
									93	100
									100	100
									100	
170									100	100
							170.00 16−R−8		66	
									100	100
			172.30 - 173.00; Harzburgite; same as the interval of 22.40 - 131.30,						100	
			173.00 - 173.90; dark brown,						100	
175			175.10 - 176.80; brown to reddish brown, cut by network veinlets of serpentine minerals,						100	100
									100	
									100	100
									100	
180									100	100
									56	
			181.60 - 182.10; friable zone, green, fault?,						68	
									53	100
							183.30 16−R−9		63	
185									70	
			185.90 - 187.40; brecciated zone, compact,						100	100
									63	
			188.15; Pyroxinite dike; width: 1 cm,						52	
									100	100
190									100	
									100	100
									100	
									100	100
195									54	
			195.45 - 195.55; friable zone, green, fault,						53	
			196.50 - 196.70; ditto, with calcite veinlets,						50	100
									100	
									100	
200									100	100
									90	
									40	100
									60	
									100	100
205									100	
									100	100
									100	
									100	100
210									100	

GEOLOGIC LOG (4)

MJAS-16

INCLINATION : −60°

AREA : PISHKASH SOUTH BEARING : E(90°) ELEVATION : 885.63m FINAL DEPTH : 211.80m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY Angle of Fiss. (°)	RQD (%)	Core Rec (%)
210			210.20 - 210.40: ditto, fault, core angle of contact: 0 to 20 degree,				16—R—10 211.20		66 / 100	100
		211.80								
215										
220										

Apx. 2-3-1 (15) Geological logging of MJAS-18, Murriq area

MJAS-18

INCLINATION : −30°

AREA : MURRIQ BEARING : N (0°) ELEVATION : 714.35m FINAL DEPTH : 100.00m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr2O3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
		0.00 - 1.60	Surface soil; brown, with blocks of harzburgite,						0	100
		1.60 - 20.35	Harzburgite; serpentinized greenish gray partly brown, medium hard, fractures are filled with serpentine minerals, Px: 30% and 1 to 3 mm in size, weakly weathered to the depth of 10.4 m, with thin dunite sparsely,						23	
									0	100
									0	100
5									22	100
									54	
		6.20 - 6.50	fault clay, thickness: 3 mm, core angle of contact: 20 degree,						27	100
		7.20 - 7.40	brecciated zone, brown partly green,						42	100
									50	
									86	100
10		10.40 - 10.70	brecciated zone, green to gray, friable,				10.2 18−R−1		69	100
									58	
									95	100
		13.70 - 13.75	fault zone, green, friable,						50	100
15		14.80 - 14.90	fault zone, green, friable,						35	100
		15.20 - 15.30	fault clay, gray, core angle of contact: 80 degree,						49	100
		16.00 - 16.65	brecciated zone, partly of clay, green, core angle of contact: 30 to 40 degree,				16.75 18−R−2		56	
									70	100
		16.65 - 17.25	Dunite, greenish gray, hard, poor in Cr-spinel,						18	100
		17.75 - 17.85	fault zone, gray, friable,						60	100
20		18.00 - 18.18	ditto,						60	100
		18.40 - 18.60	fault clay, gray, core angle of contact: 30 degree,						53	
		20.20 - 20.35	ditto,				22.5 18−R−3		63	100
		20.35 - 28.10	Dunite; serpentinized, dark greenish gray, poor in Cr-spinel,						0	
		23.00 - 23.80	fault zone, green, friable,						64	100
25		24.50 - 27.00	brecciated zone, green, friable, core angle of contact: 60°,						25	100
									40	100
									0	93
		28.10 - 35.60	Harzburgite; serpentinized, dark greenish gray, medium hard, Px: approx. 30% and 1 to 3 mm in size,						32	95
									46	95
30		28.10 - 28.20	fault zone ?, green, friable,				30.0 18−R−4		64	100
		31.70 - 31.90	fault zone ?, green, friable, core angle of contact: 80 degree,						30	100
		32.40 - 32.50	ditto, core angle of contact: 80 degree,						26	100
		33.80 - 34.00	ditto, core angle of contact: 50 degree,						30	100
35									23	69
		35.60 - 37.80	Dunite; serpentinized, dark greenish gray, poor in Cr-spinel,						0	70
									12	100
		37.80 - 81.00	Harzburgite; dark greenish gray, medium hard, sparsely accompanied with thin dunite and pyroxinite dikes, Px:30 to 35% and 1 to 2 mm in size, fractures are filled with serpentine minerals and partly calcite with iron oxides,						16	64
									62	87
40									100	95
									34	
									55	97
									23	
									84	100
45									33	
		46.00 - 46.40	fault zone ?, green, friable,						35	100
									44	
									10	100
									68	100
50									27	
									45	100
		51.90 - 52.00	fault zone ?, green, friable,						74	100
									24	100
									84	100
55									68	
									34	100
									18	100
		57.47 - 57.70	brecciated zone, fault ?, friable, core angle of contact: 50°,				57.1 18−R−5		71	100
									42	100
60									30	87
									0	100
		61.80 - 61.85	fault zone ?, friable,						10	100
									32	89
									74	100
		64.30 - 64.35	fault zone ?, green, friable, core angle of contact: 80 to 90°						0	80
65									44	87
									0	100
									35	83
									20	93
70									20	96
										83
										100