GEOLOGIC LOG (2)

MJAS-18

AREA : MURRIQ | INCLINATION : −30° | BEARING : N (0°) | ELEVATION : 714.35m | 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									0	80
									18	85
			72.40 - 72.50; fault zone ?, friable, core angle of contact: 80 degree,						44	80
			72.60 - 73.00; ditto,						0	85
			73.60 - 73.80; ditto,						0	34
75			74.50 - 75.70; fault zone ?, friable, core angle of lower contact: 20 degree,						23	54
							76.0 18−R−6		20	62
			77.40 - 77.60; fault clay, greenish gray, friable,						0	74
									26	85
									17	92
80			80.20 - 81.00; fault clay, partly brecciated, green,						13	92
			81.00 - 82.80; Dunite; dark greenish gray, with Cr-spinel,						22	80
							82.0 18−R−7		26	72
			82.80 - 91.80; Fault clay; friable, partly with blocks of harzburgite at the intervals of 83.50 - 84.80 m and rarely dunite,						0	51
									10	62
85									0	51
									0	60
									0	100
									0	70
									0	
90									0	80
			91.80 - 100.00; Harzburgite; serpentinized greenish gray, medium hard, fractures are filled with serpentine minerals, Px: 30% and 1 to 3 mm in size,						0	74
									16	73
									26	87
95									0	88
									0	
									0	69
							18−R−8		0	85
							98.6		23	
100		100.00							0	

Apx. 2-3-1 (16) Geological logging of MJAS-19, Murriq area

MJAS-19

INCLINATION : −30°

AREA : MURRIQ BEARING : N (0°) ELEVATION : 719.74m 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 - 2.85; Surface soil; brown, with blocks of harzburgite,						0	
									26	
			2.85 - 100.00; Harzburgite; greenish gray, medium hard, core angle of foliation: 10 to 20 degree, Px: 30 to 35% and 1 to 2 mm (up to 3 to 4 mm) in size, sparsely accompanied with thin dunite and pyroxinite dikes,						88	100
									74	
									52	100
5									82	
									58	100
									50	100
									0	100
10			9.40 - 13.05; fractures are filled with serpentine minerals and calcite,						43	
									100	100
							11.4 19—R—1		100	
									90	100
			13.05 - 13.10; Dunite; brown,				13.4 19—R—2		80	100
15			13.10 - 14.00; rather poor in pyroxene (10 to 15%),						56	
			14.40 - 14.60; Dunite; greenish gray, poor in Cr-spinel,						26	
			14.60 - 14.90; brecciated zone, core angle of contact: 40 degree,						53	100
			16.00 - 18.00; Dunite; greenish gray, poor in Cr-spinel,				16.8 19—R—3		22	100
									15	100
20									60	100
									60	
									100	
							22.4 19—R—4		100	100
									0	
25									25	100
									37	
			26.70 - 26.80; Pyroxinite dike; core angle of contact: 30 to 35 degree,						18	100
									68	100
									13	100
30									79	100
			30.20 - 30.50; fault zone, green, core angle of contact: 70 degree						36	100
			30.90 - 31.25; ditto,						40	
			32.00 - 32.20; ditto,						24	100
									36	
35									25	100
									18	
									22	
									24	100
			38.10 - 38.30; brecciated zone, green, friable,						63	100
40			39.80 - 39.90; ditto,						25	100
									19	100
									0	100
									43	100
									35	100
45									20	100
									16	100
									0	100
									86	
			47.85 - 48.15; fault zone, green, friable,						0	100
									14	93
50									62	100
									44	100
									39	100
									36	100
			53.20 - 53.50; fault zone, green, friable,						39	
55									32	100
									46	92
									38	
							57.0 19—R—5		78	100
									52	81
60									32	92
									40	100
			61.50 - 61.60; fault zone, mainly of unconsolidated clay, green to dark green, core angle of contact: 80 to 90 degree,						54	
									13	100
									32	100
65									78	100
									57	100
			67.20 - 68.82; fault zone, mainly of unconsolidated clay, green to dark gray,						100	200
							19—R—6		90	100
							68.87		60	100
70			68.82 - 69.00; Dunite; dark greenish gray, core angle of contact: 50 degree,						48	100

GEOLOGIC LOG (2)

MJAS-19

AREA : MURRIQ　　INCLINATION : −30°　　BEARING : N (0°)　　ELEVATION : 719.74m　　FINAL DEPTH : 100.00m

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									33	100
									66	100
			72.60 - 72.65; Pyroxinite dike, core angle of contact: 30 degree.						88	100
									30	100
75									77	
									34	100
									82	100
									75	
			78.10 - 78.55; brecciated zone, friable, green, core angle of contact:40 degree.						0	100
80									0	100
									62	
									23	100
									22	100
									21	
									29	96
									37	100
85									10	100
									0	67
									0	50
									44	90
									53	100
90			90.10 - 91.60; fault zone, friable, with blocks of harzburgite max. 10 cm in size.						0	64
			91.60 - 93.70; with foliation of 10 degree of core angle.						31	69
									59	100
									43	71
									0	50
95									60	67
									100	92
									71	
							19−R−7		90	97
							99.2		71	
100		100.00								

Apx. 2-3-1 (17) Geological logging of MJAS-20, Mbi Skroske area

MJAS-20

INCLINATION : −55°

AREA : MBI SKROSKE BEARING : N54°E(54°) ELEVATION : 1,041.81m FINAL DEPTH : 100.17m

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 - 0.50: Surface soil: brown, with blocks of harzburgite.						0	100
			0.50 - 3.10: Harzburgite: strongly weathered, large blocks of harzburgite are embedded in brown lateritic materials,						0	100
									0	100
			3.10 - 4.68: Harzburgite: weathered, gray, broken into small blocks,						0	100
5			3.70 - 3.80: friable zone, fault ?.						0	100
			4.68 - 9.63: Harzburgite: serpentinized, dark green partly brown, weakly weathered, Px: 20 %, frequently broken into small blocks, fractures are filled with serpentine minerals and rarely with calcite,						50	100
									11	62
									56	100
			5.50 - 5.90: Pyroxinite dike: gray, hard, core angle of contact: 90 degree,						0	100
10			5.90 - 6.30: Dunite: greenish dark gray, serpentinized,						90	100
			6.30 - 7.10: broken into small blocks with lump of dunite and harzburgite, fault ?.						67	100
									59	100
			9.63 - 29.90: Harzburgite: serpentinized, dark greenish gray, medium hard, compact, Px: 10 to 20% and 1 mm in size, fractures are filled with green serpentine minerals,						45	100
									0	100
15									33	
			11.70 - 12.35: broken into small blocks,						0	38
			12.35 - 13.05: cut by network veinlets of serpentine minerals,						100	
			17.10 - 17.90: cut by network veinlets of serpentine minerals,						100	100
			17.90 - 20.32: brecciated zone: compact, green to reddish brown, with calcite veinlets of 70 degree of core angle,						100	73
20									0	
			20.32 - 21.30: cut by network veinlets of serpentine minerals,						83	
									100	100
									100	
									100	100
25			24.65 - 25.13: broken into small blocks,						44	
									0	68
			26.17 - 26.70: ditto,						45	100
			27.25 - 27.50: ditto, partly brecciated, fault ?,						55	
							28.60		100	100
30			29.90 - 32.50: Pyroxinite dike: gray, hard, core angle of contact: 60 degree,				20−R−1		100	
									100	100
									100	
			32.50 - 100.17: Harzburgite: serpentinized, greenish dark gray, hard, compact, Px: 30 to 35% and 2 to 3 mm in size, fractures are filled with, serpentine minerals,						100	100
									100	
35									100	100
									100	100
									100	
									52	100
							38.70		68	
40							20−R−2		100	100
			40.90 - 47.45: poor in pyroxene grains (10 to 20%),						100	
			43.70 : Pyroxinite dike: gray, width: 2 cm, core angle of contact: 50 degree,						100	100
									77	
									100	
45									100	88
									74	
									100	100
									76	
			48.40 - 50.08: broken into small blocks,						46	100
50			50.08 - 52.00: poor in pyroxene grains (10 to 20%),						0	100
									100	
									100	100
									100	
									100	100
55									100	100
									100	
			57.10 - 57.20: Pyroxinite dike: gray, core angle of contact: 75 to 80 degree,						100	100
									100	
									100	100
60									100	
									100	100
									100	
			62.50 - 67.61: poor in pyroxene grains (10 to 20%),						100	
									90	100
65			64.00 - 64.58: broken into small blocks,						45	
									80	100
									100	100
			67.61 - 70.30: with foliation of 80 to 90 degree of core angle,						100	
									100	100
70									100	

GEOLOGIC LOG (2)

MJAS-20

INCLINATION : −55°

AREA : MBI SKROSKE BEARING : N54°E(54°) ELEVATION : 1,041.81m FINAL DEPTH : 100.17m

SCALE(m) 1:200	COLUMN	DEPTH (m)	DESCRIPTION	REMARKS	MINERALIZATION	Cr_2O_3 (%)	SAMPLE No.	ROCK PROPERTY: Angle of Fiss. (°)	RQD (%)	Core Rec (%)
70									53	100
									84	100
			72.30 - 75.10: poor in pyroxene grains (10 to 20%).						85	100
									100	
75			75.10 - 75.30: Pyroxinite dike, gray, core angle of contact: 60 degree,				74.50		72	100
			75.70 - 83.40: with foliation of 90 degree of core angle.				20—R—3		68	100
									90	100
									100	100
80									100	100
									100	100
									100	100
			83.40 - 83.42: Pyroxinite dike; gray, core angle of contact: 70 degree,						100	100
			84.30 - 84.40: ditto,						100	
85			86.00 - 87.00: poor in pyroxene grains (10 to 20%),						100	100
			87.00 - 87.50: Pyroxinite dike; gray, hard, core angle of contact: 80 to 90 degree,						100	
			87.50 - 88.10: poor in pyroxene grains (10 to 20%),						64	100
			88.10 - 90.10: Pyroxinite dike; gray, hard, core angle of contact: 80 to 90 degree,						90	100
90									90	100
			90.10 - 93.32: poor in pyroxene grains (10 to 20%),						88	100
									100	
									100	100
									85	100
95			94.90 - 95.03: friable and broken into small blocks, fault ?,						86	100
							20—R—4		100	100
							96.60		100	
			97.50 - 100.17: poor in pyroxene grains (10 to 20%),						70	99
							20—R—5		100	
							99.20		90	
100		100.17								

Apx. 2-3-1 (18) Geological logging of MJAS-21, Mbi Skroske area

MJAS-21

INCLINATION : −55°

AREA : MBI SKROSKE BEARING : N30° E (30°) ELEVATION : 1,039.03m 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 - 56.70	Harzburgite; serpentinized, dark green, medium hard, Px: 30 to 35%, with foliation of 50 degree of core angle,						0	100
		0.00 - 0.80	broken into small blocks,						20	77
		2.05 - 2.75	ditto, lower part is friable,						0	54
		2.75 - 4.55	broken into small blocks,						10	75
									80	
									32	
5									100	100
									70	100
									66	100
									12	100
		8.60 - 9.22	broken into small blocks,						41	100
10		9.22 - 9.30	brecciated zone; green,						66	
									88	100
									43	100
									10	100
									0	100
15									53	100
									13	81
									0	64
		18.00 - 18.20	brecciated zone; green,						0	72
		18.29 - 24.89	sand like friable material with blocks of harzburgite,						0	76
20									0	
									0	
									0	72
									0	
									0	61
25									0	
									66	100
									62	100
									24	100
									86	100
		27.90 - 29.10	cracks of 0 degree of core angle are filled with serpentine minerals,						100	100
30		30.32 - 30.52	brecciated zone; green, core angle of contact: 35 degree,						78	100
		30.52 - 32.20	Pyroxinite dike; gray, hard,						100	100
		32.23 - 34.00	cut by network veinlets of green serpentine minerals and calcite,						100	
									90	100
									60	
35		35.25 - 36.15	ditto,						100	100
									100	
									38	100
									85	100
									28	
40									100	
		41.00 - 41.20	brecciated zone; green, friable, core angle of contact:40 degree,						92	100
									100	
		43.60 - 43.70	Pyroxinite dike, gray,						100	100
45		43.70 - 53.90	fractures are filled with serpentine minerals,						100	100
									100	
									100	100
									100	
									100	
50									100	100
									100	
									100	100
									100	
									90	
		53.90 - 54.60	Dunite; serpentinized, dark green, hard, with core angle of contact: 50 to 60 degree,				54.50 21−R−1		100	100
55		56.60 - 56.70	Pyroxinite dike, 3 cm in width,						100	
		56.70 - 95.70	Harzburgite; serpentinized, dark green, Px: 10 to 20%, medium hard,						100	100
									100	
									100	100
									52	
60									100	100
									100	100
		63.30 - 63.40	Dunite; serpentinized, dark green, hard,				62.35 21−R−2		100	100
		63.50	cut by pyroxinite dike of 2 cm in width, core angle of contact : 70 degree,						55	100
65		63.70	ditto,						100	100
		63.70 - 68.14	partly less pyroxene grains up to 10%, fractures are filled with serpentine minerals, partly broken into small blocks,						41	
									13	100
									10	100
		69.00 - 69.10	Dunite; serpentinized, dark green,						90	100
70		69.50 - 69.60	Pyroxinite dike,						90	100

GEOLOGIC LOG (2)

MJAS-21

INCLINATION : −55°

AREA : MBI SKROSKE BEARING : N30° E (30°) ELEVATION : 1,039.03m FINAL DEPTH : 100.60m

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									89	100
			70.80 - 70.90; ditto, core ankle of contact:60 degree, 2 to 3 cm in width,						100	100
									100	
									100	100
			74.00 - 74.46; broken into small blocks,						52	
75									100	100
									100	
			78.10 - 78.46; broken into small blocks,						90	100
									31	
80									40	52
									38	
									50	100
									100	100
									100	100
85									100	
									100	100
			86.44 - 86.64; broken into small blocks,						75	
									100	100
			88.93 - 89.15; broken into small blocks,						90	100
90									90	100
			91.10 - 91.70; broken into small blocks,						13	
			91.70 - 93.17; Pyroxinite dike; gray, hard,						100	100
			93.40 - 93.45; Pyroxinite dike; gray, hard, core angle of contact:70 degree,						90	100
95									100	
			95.70 - 100.60; Harzburgite; serpentinized, gray, hard, Px: 35%,						100	100
									100	
									100	
100							99.20 21−R−3		90	100
		100.60								

Apx. 2-3-1 (19) Geological logging of MJAS-22, Mbi Skroske area

MJAS-22

INCLINATION : −63°

AREA : MBI SKROSKE BEARING : S10° W (190°) ELEVATION : 1,080.12m 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 - 0.40	Surface soil: brown, very soft.						0	100
		0.40 - 3.15	Strongly weathered ultrabasic rock with blocks of harzburgite: brown.						0	100
									0	
		3.15 - 8.90	Weakly weathered harzburgite: serpentinized, brown to dark brown, medium hard. Px: 25 to 30%, core angle of foliation: 80 to 90 degree.						90	100
5									100	100
									74	100
									100	100
									73	100
									100	100
10		8.90 - 100.00	Harzburgite: serpentinized, greenish dark gray, medium hard to hard. Px: approx. 25 to 30%, core angle of foliation: 80 to 90 degree.						100	100
									90	100
		8.90 - 10.90	Pyroxinite dikes, core angle of contact: 0 degree.						100	100
		12.00 - 12.50	Small fault, width: 1 - 2 cm, core angle of contact: 0 degree.						85	100
									85	100
15									100	
									100	
									100	100
									100	
									100	
20		20.00 - 20.30	Pyroxinite dike, core angle of contact: 90 degree.						100	100
									90	100
									100	100
									90	
25									66	100
									100	100
									100	
		27.47 - 27.72	friable zone, with blocks of serpentinized harzburgite, fault ?.						70	100
									100	100
30									100	100
									100	100
									100	100
									70	100
									100	100
35									100	
									90	100
		36.00 - 38.63	Strongly serpentinized harzburgite, with pyroxinite dike between 38.53 - 38.62 m with core angle of contact: 0 degree.						34	
									60	100
									76	
40									100	100
									100	100
									100	100
									100	100
									100	100
45									40	100
									62	
		46.30 - 46.70	Sheared zone, 1 - 2cm in thick, core angle of contact: 0 degree.						62	100
									64	100
									100	100
50									100	100
									80	100
									100	
									100	100
									80	
55		54.26 - 55.70	Harzburgite accompanied with pyroxinite dike of 3 -10 cm thick, Px: 35 - 49%, core angle of foliation: 40 degree.						100	
									100	100
							56.8 22−R−1		100	
									100	100
									100	
60									100	
									100	100
									100	
									100	
65									100	100
									100	
									100	100
									100	100
									100	
70									100	100

GEOLOGIC LOG (2)

MJAS-22

INCLINATION : −63°

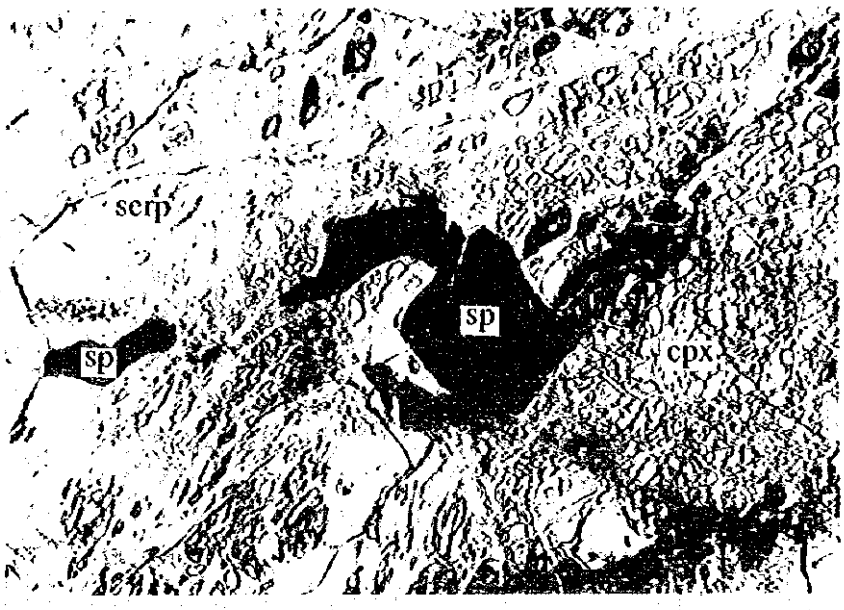
AREA : MBI SKROSKE BEARING : S10° W (190°) ELEVATION : 1,080.12m FINAL DEPTH : 100.00m

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	100
		71.70 - 72.00:	Pyroxinite dike, core ankle of contact: 30 to 40 degree,						100	100
		73.35 - 74.00:	Harzburgite with pyroxinite dike						100	100
75		75.64 - 75.94:	Strongly serpentinized harzburgite, sheared,						70	100
									90	100
80									80	100
									100	100
85									20	100
		88.90 - 89.10:	friable zone, composed mainly of serpentine minerals, fault ?,						60	100
90		91.38 - 95.50:	Harzburgite, broken into small blocks,						46	100
									60	100
95		95.50 - 96.60:	Pyroxinite dike, core angle of contact: 90 degree,				96.7 22−R−2		45	100
		97.60 - 97.80:	Harzburgite broken into small blocks, may be fault,						56	100
100		100.00							90	100

Apx. 2-3-2 Results of topographic survey of drilling points in 1996

Point	Bearing	True Bearing	Horizontal Distance, m	Deviation ΔY	Deviation ΔX	Coordinates Y	Coordinates X	Elevation m	Control Point
Bregu i Pishes									
+A: back to 760/1		320° 27' 52"	0.0	0.00	0.00	67,147.14	43,268.21	1,143.81	
MJAS-1	14° 36' 52"	335° 03' 52"	35.6	-15.00	32.28	67,132.14	43,300.49	1,141.32	+A
MJAS-2	18° 53' 20"	339° 21' 12"	71.0	-25.03	66.43	67,122.11	43,334.64	1,141.46	+A
MJAS-3	25° 28' 00"	345° 55' 52"	105.2	-25.57	102.04	67,121.57	43,370.25	1,135.48	+A
Fusha e Madhe									
+C: back to B		72° 44' 01"	0.0	0.00	0.00	66,158.24	43,967.54	1,125.94	
MJAS-4	288° 41' 00"	1° 25' 01"	77.9	1.93	77.88	66,160.17	44,045.42	1,119.44	+C
MJAS-5	Stopped	-	-	-	-	-	-	-	+C
Gjorduke									
+A: back to 414		141° 30' 14"	0.0	0.00	0.00	66,587.56	43,971.79	1,304.88	
MJAS-6	62° 31' 00"	204° 01' 14"	106.6	-43.39	-97.37	66,544.17	43,874.42	1,304.85	+A
MJAS-7	69° 35' 20"	211° 05' 34"	74.4	-38.42	-63.71	66,549.14	43,908.08	1,303.65	+A
Qarri i Zi									
Q1: back to Q		351° 16' 00"	0.0	0.00	0.00	55,357.81	53,823.91	650.04	
MJAS-8	344° 26' 20"	155° 42' 20"	7.8	3.21	7.13	55,361.02	53,816.78	644.87	Q1
Q: back to 209		256° 54' 27"	0	0	0	55,367.45	53,757.89	613.07	
MJAS-9	180° 47' 19"	356° 22' 30"	62.4	-3.91	62.27	55,363.50	53,829.16	644.68	Q
MJAS-10	199° 25' 55	15° 11' 04"	35.6	9.32	34.34	55,376.77	53,792.23	627.18	Q
MJAS-11	Stopped	-	-	-	-	-	-	-	.
Shesh Bush No.1									
9: back to 8		195° 12' 17"	0.0	0.00	0.00	65,789.26	42,956.19	1,203.60	
MJAS-12	149° 22' 00"	344° 34' 17"	133.3	-35.46	128.49	65,753.80	43,084.68	1,202.04	9
MJAS-13	148° 05' 00"	343° 17' 17"	91.0	-26.17	87.16	65,763.09	43,043.35	1,199.60	9
MJAS-14	143° 56' 00"	339° 08' 17"	49.0	-17.45	45.79	65,771.81	43,001.98	1,199.76	9
Pishkash South									
232/3: back to 232/2		137° 02' 30"	0.0	0.00	0.00	60,119.50	51,310.12	971.51	
MJAS-15	155° 46' 25"	112° 48' 55"	22.0	20.28	-8.85	60,139.78	51,301.59	959.19	232/3
MJAS-16	191° 05' 10"	148° 07' 40"	150.0	78.67	-127.38	60,198.17	51,182.74	885.63	232/3
Murriq									
M: back to U		289° 35' 18"	0.0	0.00	0.00	64,587.51	45,266.29	732.73	
MJAS-17	Stopped	-	-	-	-	-	-	-	.
MJAS-18	11° 55' 00"	301° 30' 18"	84.0	-71.62	43.90	64,515.89	45,310.19	714.35	M
MJAS-19	42° 55' 00"	332° 30' 18"	49.8	-22.99	44.17	64,564.52	45,310.46	719.74	M
Mbi Skroske									
SK/1: back to SK		316° 10' 00"	0.0	0.00	0.00	59,264.79	52,578.21	1,054.72	
MJAS-20	70° 57' 50"	27° 07' 50"	48.0	21.88	42.72	59,286.67	52,620.93	1,011.81	SK/1
MJAS-21	45° 20' 40"	1° 30' 40"	46.0	1.21	45.98	59,266.00	52,624.19	1,039.03	SK/1
SK: back to SK/1		136° 10' 00"	0.0	0.00	0.00	59,178.08	52,668.52	1,061.18	
MJAS-22	70° 46' 40"	343° 56' 40"	51.8	-14.32	49.78	59,163.75	52,718.30	1,080.12	SK

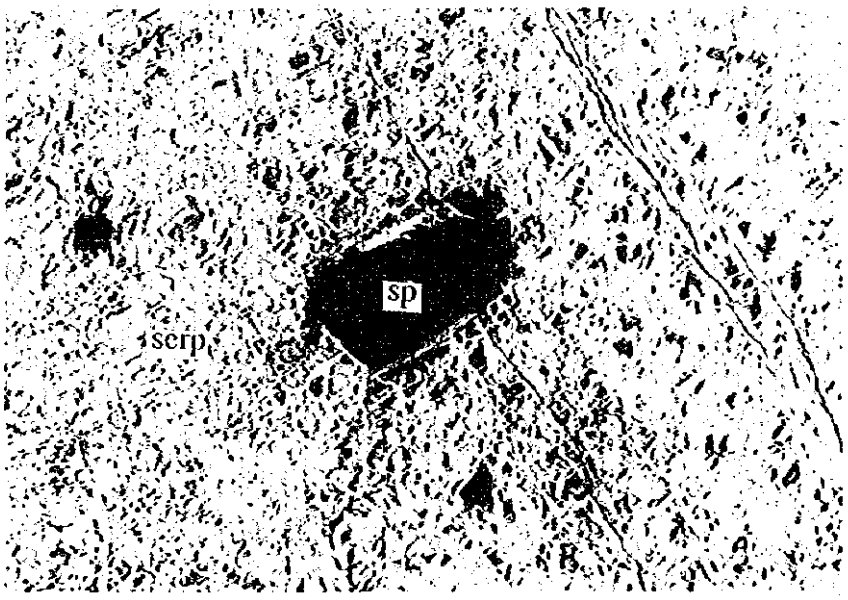
Apx. 2-3-3(1) Microphotographs of core samples



open nicol

0.5mm

Sample number : 1-R-5 (25.30m)
Rock type : harzburgite
Note : spinel (anhedral) with clinopyroxene

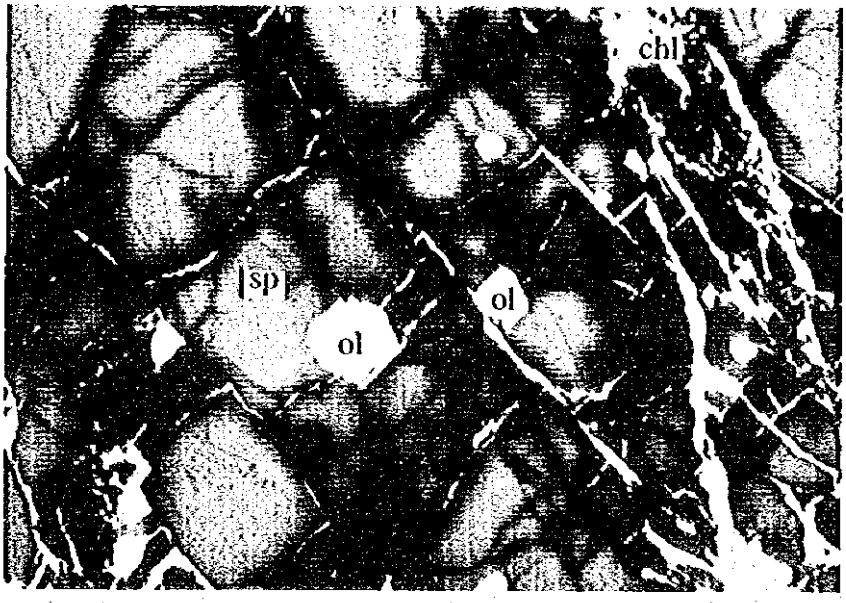


open nicol

0.5mm

Sample number : 2-R-3 (59.80m)
Rock type : dunite
Note : euhedral spinel

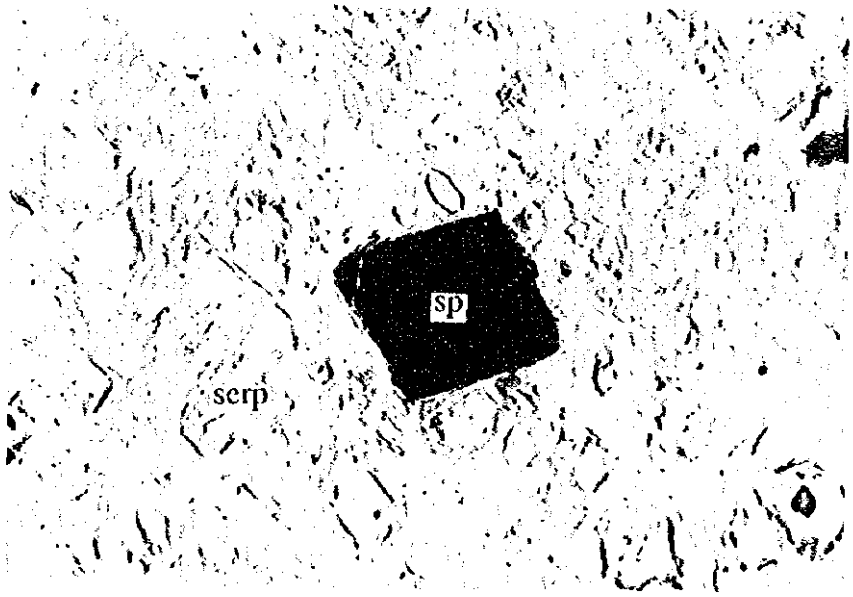
Apx. 2-3-3(2) Microphotographs of core samples



open nicol

0.5mm

Sample number : 2-R-4 (60.30m)
Rock type : chromitite
Note : olivine-inclusion (now altered)

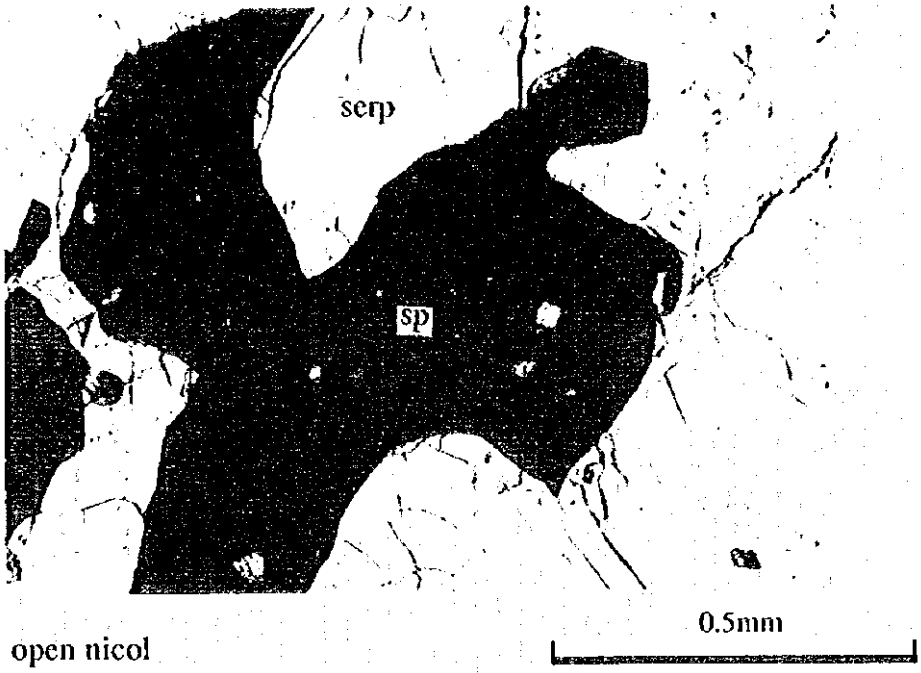


open nicol

0.5mm

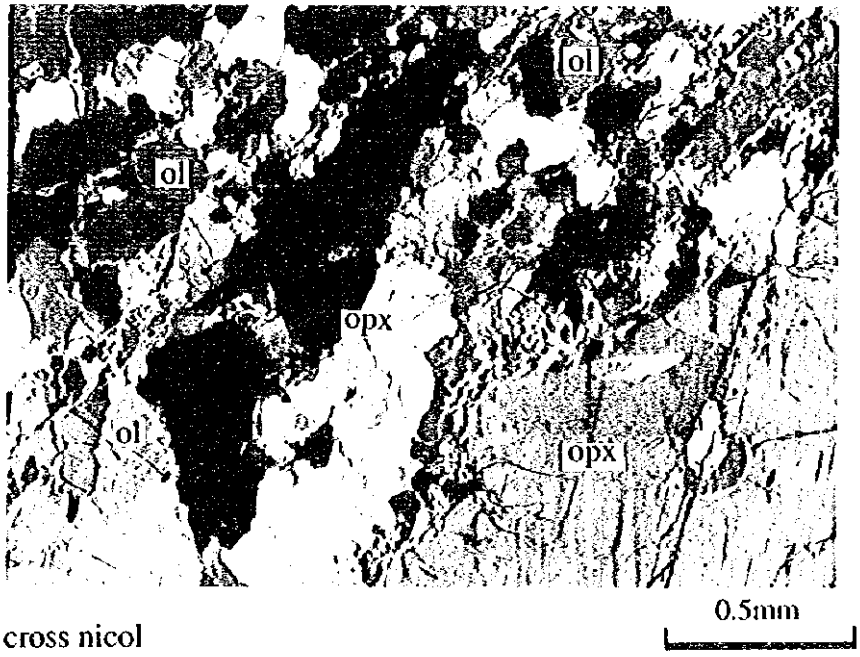
Sample number : 2-R-5 (66.40m)
Rock type : dunite
Note : euhedral spinel with inclusion

Apx. 2-3-3(3) Microphotographs of core samples



open nicol

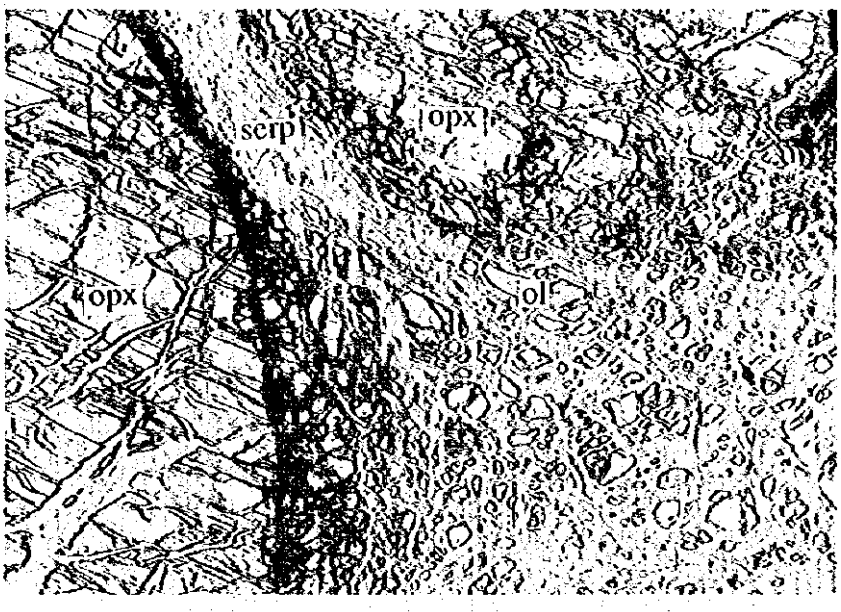
Sample number : 3-R-5 (115.50m)
Rock type : harzburgite
Note : anhedral spinel with inclusions



cross nicol

Sample number : 3-R-5 (115.50m)
Rock type : harzburgite
Note : fresh rock, porphyroclastic texture

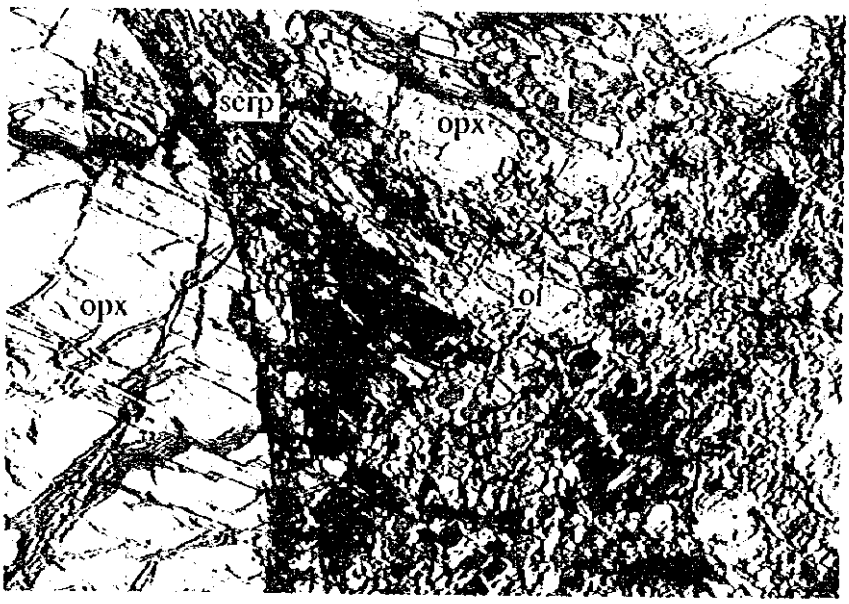
Apx. 2-3-3(4) Microphotographs of core samples



open nicol

0.5mm

Sample number : 4-R-2 (124.10m)
Rock type : harzburgite
Note : porphyroclastic texture



cross nicol

0.5mm

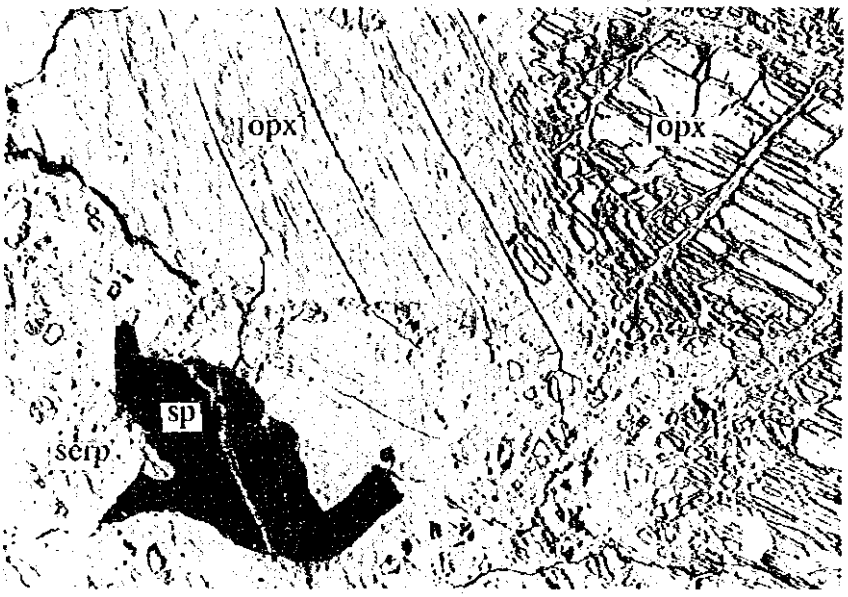
Sample number : 4-R-2 (124.10m)
Rock type : harzburgite
Note : porphyroclastic texture

Apx. 2-3-3(5) Microphotographs of core samples

open nicol

0.5mm

Sample number : 8-R-4 (49.20m)
Rock type : spinel-rich dunite
Note : spinel-rich part



open nicol

0.5mm

Sample number : 15-R-5 (99.10m)
Rock type : harzburgite
Note : anhedral spinel with orthopyroxene (partly altered)

Appendix 4-2-1 Geological Situation and Accessibility of Chromite Deposits in the Ahu i Vetem Area

PL 2-1-3 gives a geological map of the vicinity of the Ahu i Vetem deposit, and PL 2-1-4 (1)-(2) gives a geological map of the vicinity of the Lugu i Batres deposit. The following is a summary of the promising localities of the Ahu i Vetem area:

The Ahu i Vetem deposit is situated at an elevation of about 1,700 m near the middle of the survey area (PL 2-1-3). At it massive ore with a maximum thickness of 1.5 meters has been confirmed on the surface. Moreover, many EPMA anomalies were obtained from the samples taken from that deposit. The deposit is also situated not only in the Dunite-rich zone of the Massive dunite-harzburgite suite but also directly below the boundary with the upper-level stratum, which can be said to be a position with a high potential in geological terms as well. Gjeoalba's attention has long been attracted to the deposit, but the difficult terrain prevented it for surveying it adequately. Although there exists a forestry road to the deposit, a considerable part of it will have to be reinforced for bringing in heavy drilling equipment.

The Lugu i Batres deposit is situated on the north side of Ahu i Vetem at an elevation of 1,750-1,850 m (PL 2-1-4). On the surface distribution of massive ore with a maximum thickness of 2 meters has been confirmed. The geological conditions of the deposit are about the same as those of the Ahu i Vetem deposit, and it can be said to have a high potential. For access to the deposit it will be necessary to build about 3 additional kilometers of new road from Ahu i Vetem.

The Gobille deposit is situated on a steep slope southeast of Lugu i Batres. On the surface nodular ore with a maximum thickness of 1.5 meters has been confirmed. There are also many EPMA anomalies in the samples obtained from that zone. The geological conditions are about the same as for the above-mentioned two deposits, but because of the steep slope averaging about 40 degrees, the survey conditions are extremely poor.

The No. 115 indication is situated on a steep slope on the south side of Ahu i Vetem, and many EPMA anomalies have been obtained for it. The indication confirmed on the surface are 70 x 50 cm disseminated in lenticular form. In the vicinity of the indication there is also the Qafa e Dinarit deposit. According to the data obtained by previous exploration, the chromitite body is almost horizontal. Although the ore body has been confirmed by galleries, its extent has not yet been confirmed. On surface survey boulders of massive chromitite with a diameter of 30 cm have been confirmed. Since such indications are situated on steep slopes, access to them is difficult.

The Buzgare deposit is situated on the right bank of the Buzgare valley in the western part of the study area. In the vicinity three surface indications have been confirmed, and they include massive ore. A comparatively large number of EPMA anomalies have been recognized in the samples from this deposit. For access to the deposit it will be necessary to built about 300 m of new road.

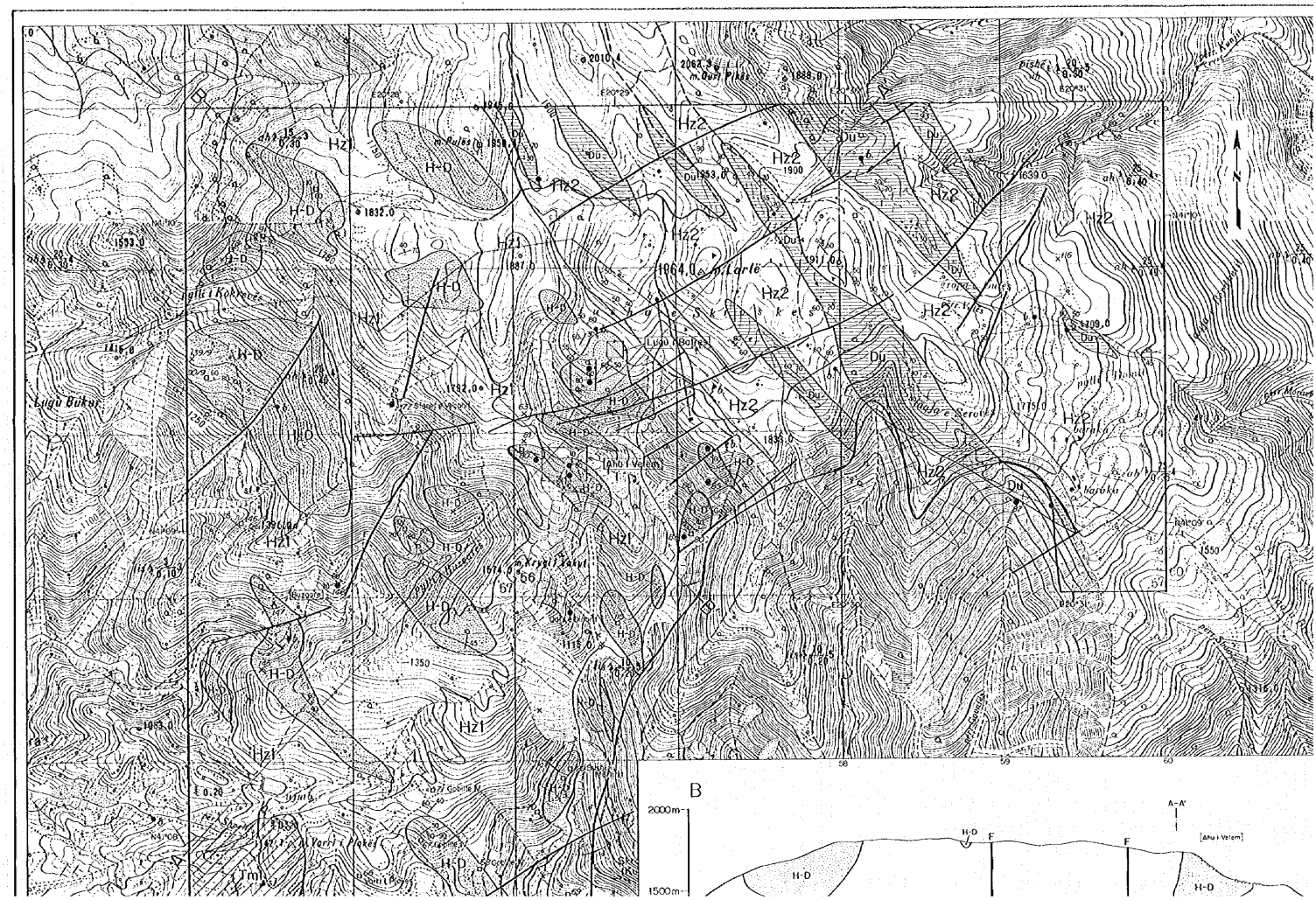
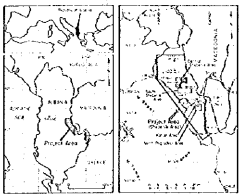

B
2000m
1500m
A-A'
H-D
F
F
[Aha i Velem]
Hz1
Hz2
Du
Tm
N

Plate 2-1-1

Report on the Mineral Exploration
in
the Shebenik Area, Republic of Albania
(Phase II)

Geological Map and Geological Profile of the Central Shebenik Area



Japan International Cooperation Agency
Metal Mining Agency of Japan
February 1997

Scale 1 : 10,000

0 500 1000m

LEGEND

Geological Age	Formation	Symbol	Lithologic
Holocene	Surficial Deposits		Rock fragments, etc.
			Rock fragments
Cretaceous	Cretaceous System		Limestone
Triassic	Middle-Upper Triassic Limestone (TONSHI)	Hz2	Hard rocks 2
			Hard rocks 2 and shale, sandstone
			Hard rocks 2 and shale, sandstone
			Hard rocks 2 and shale, sandstone
		Hz1	Hard rocks 1
			Hard rocks 1 and shale, sandstone
	Middle-Upper Triassic Limestone (TONSHI)	H-D	Dolomitic rock
			Hard rocks 1 and dolomitic rock

Strike and dip of bedding (Normal, overturned, vertical bedding)

Strike and dip of foliation

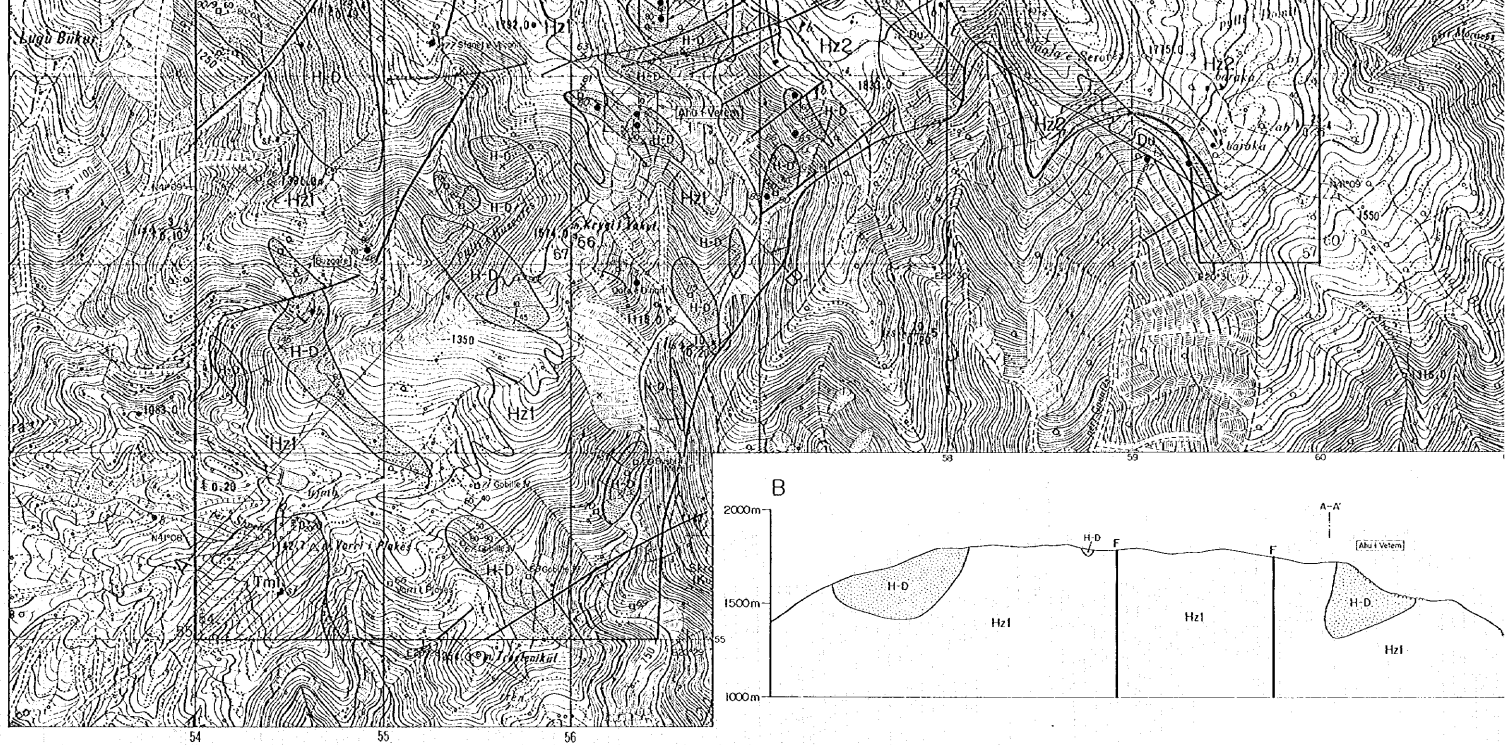
Fault

Geological boundary

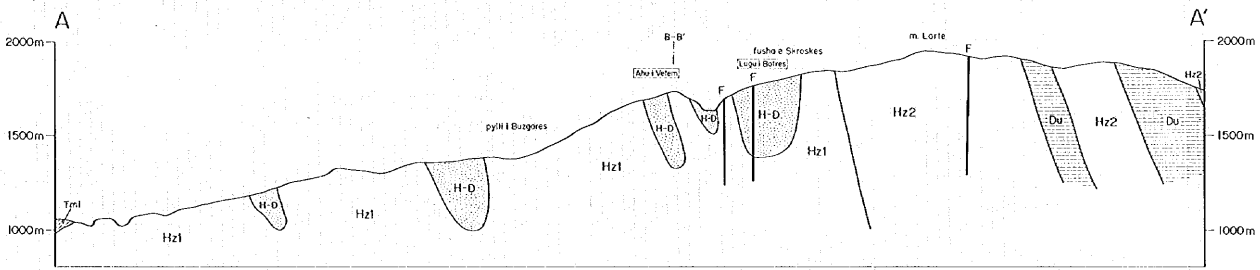
Chromite deposit (Prospect, indication, mining site)

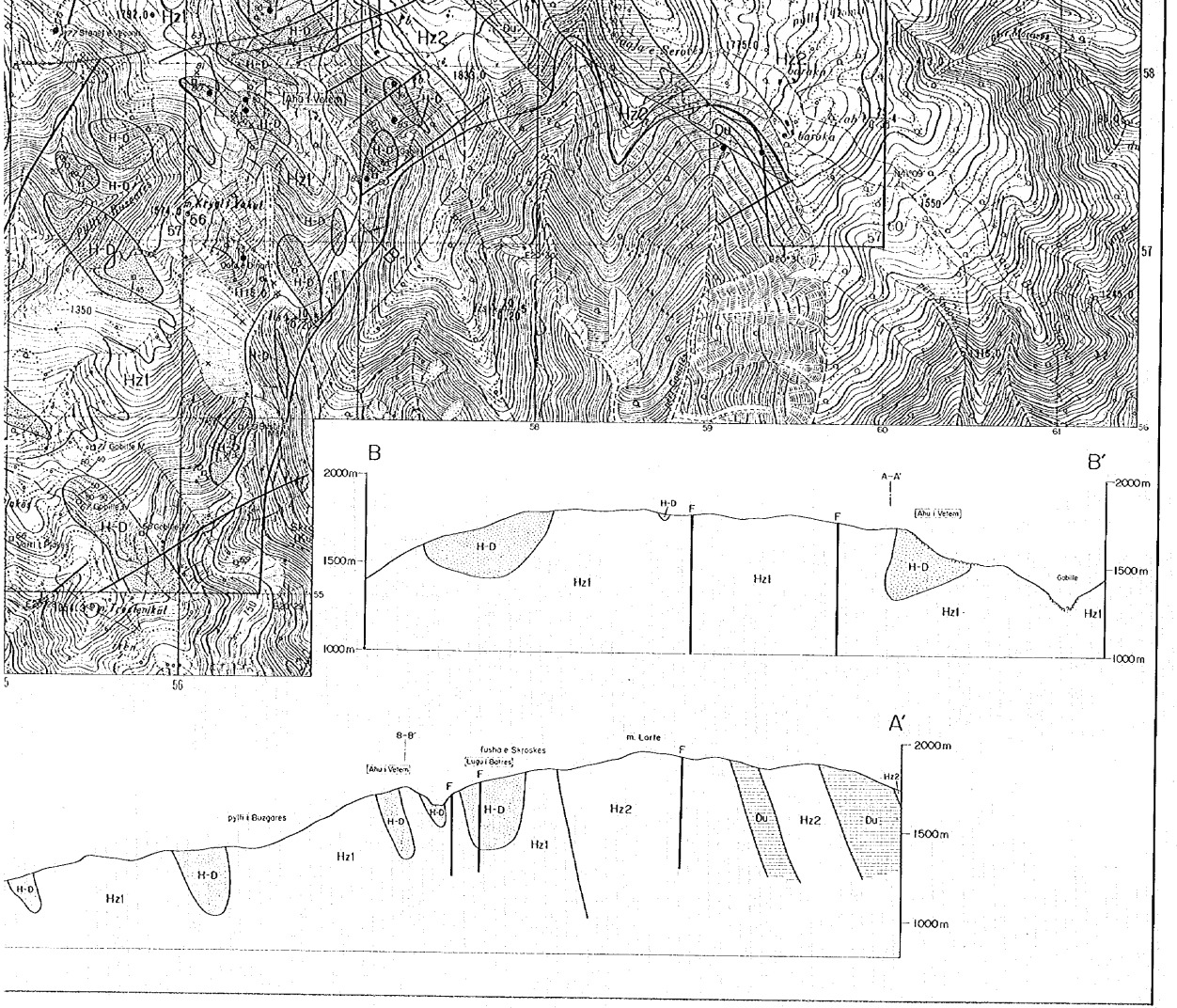
Chromite deposit (Prospect, indication, mining site)

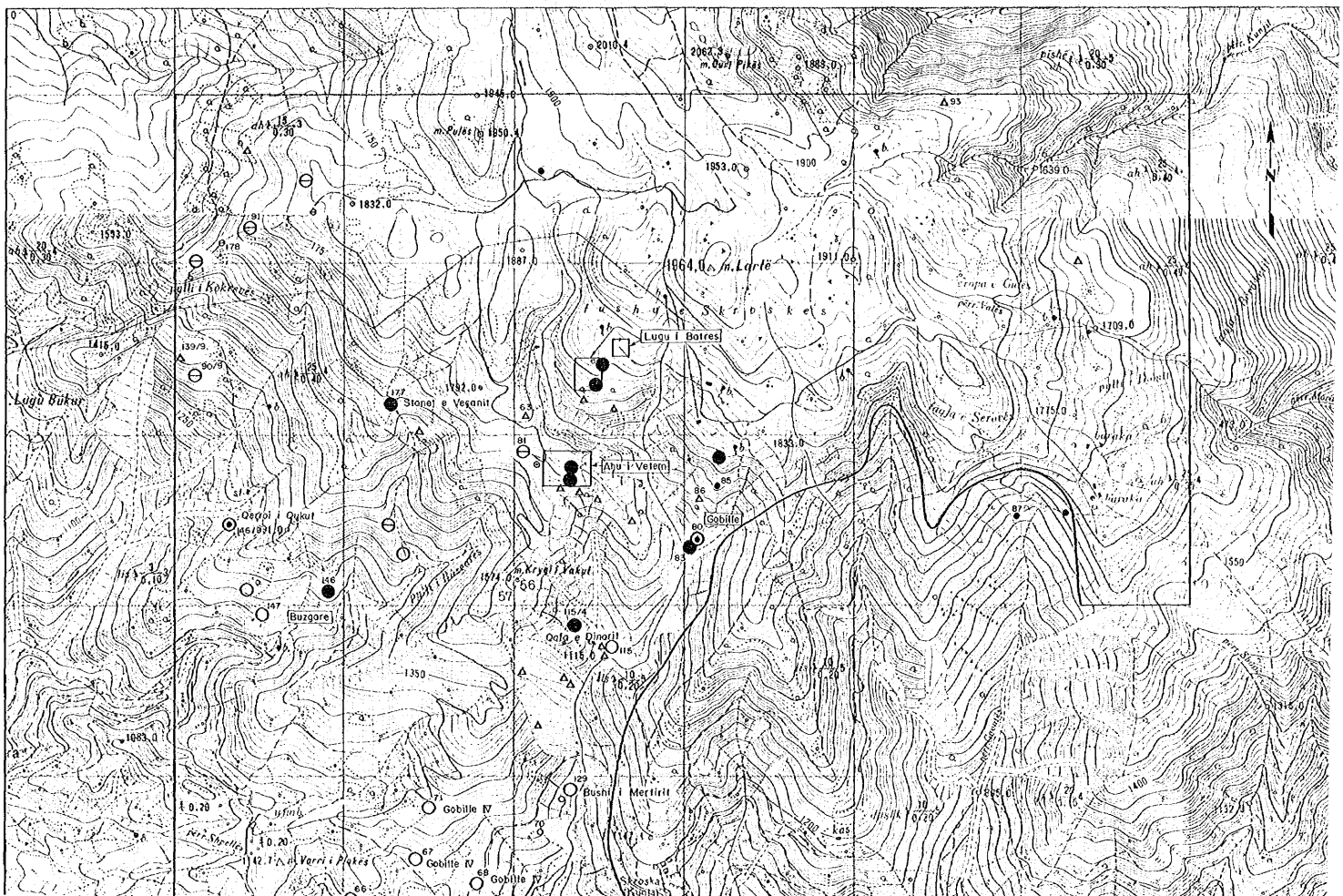
Chromite deposit (Prospect, indication, mining site) (Field survey of 1995 and 1996)


Lugu Bukur
Hz1
Hz2
H-D
Du
Tml
Kreshi i Vakut
Lugu i Vetem
Lugu i Bolres
Lugu i Trekenkut
1350
1118.0
1083.0
1182.0
1185.0
1150.0
1115.0
1050
1025
1000
54
55
56
57
58
59
60

B
2000m
1500m
1000m
H-D
F
A-A'
Albu i Vetem
Hz1


A
A'
2000m
1500m
1000m
Tml
Hz1
H-D
pylli i Buzgores
B-B'
Albu i Vetem
fusha e Skroskes
Lugu i Bolres
F
m. Lorte
Hz2
Du


Scale 1 : 10,000
0 500 1000 m
LEGEND
B
B'
A'
2000 m
1500 m
1000 m
A-A'
[Ahu i Vetem]
Gabile
Hz1
Hz2
H-D
Du
F
B-B'
[Ahu i Vetem]
[Lugu i Bores]
fusha e Shroskes
m. Lorte
pylli i Buzgares


N
m. Qurt Pikës
2062.3
1883.0
2010.4
1845.0
m. Pulës
1850.4
1832.0
1953.0
1900
1639.0
pishë
93
1533.0
91
178
pylli i Kokrenës
1887.0
1964.0
m. Larlë
1911.0
1709.0
Lugu i Batres
Lugu Bukur
1416.0
139/9
90/9
177
Stanet e Veçanit
1792.0
63
81
Ahu i Vetem
1833.0
85
86
Gobille
80
83
87
Qerroi i Qukut
146/871.0
146
Buzgore
147
pylli i Buzgarës
m. Kryqi i Vakut
57
56
115/4
Qafa e Dinorit
115
1350
1550
1400
1200
129
Bushi i Mertirit
71
Gobille IV
70
67
Gobille IV
68
Gobille IV
66
m. Varri i Plakës
përr. Shpellës
1083.0
Skroska
Kuqtal
1715.0
pylli i Dollë
Qafa e Serivës
baraka
Gropa e Gales
përr. Valës

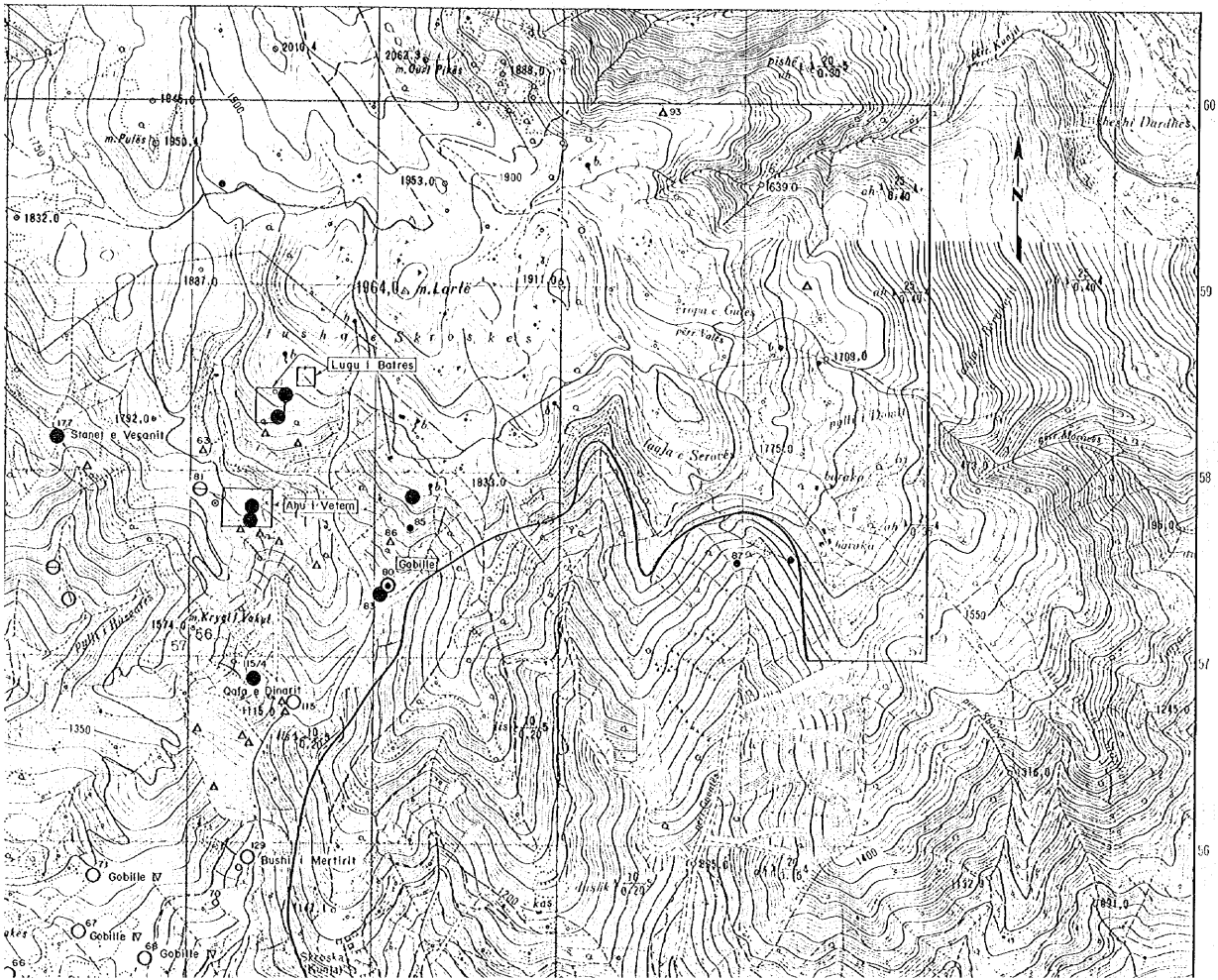
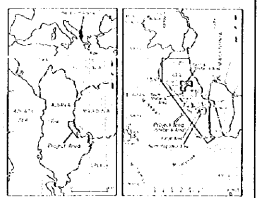


Plate 2-1-2

Report on the Mineral Exploration
in
the Shebenik Area, Republic of Albania
(Phase II)

Location of Chromitite Deposits and Showings in the Central Shebenik Area



Japan International Cooperation Agency
Metal Mining Agency of Japan
February 1997

Scale 1 : 10,000

0 500 1000m

LEGEND

Deposits and indications confirmed in the field work

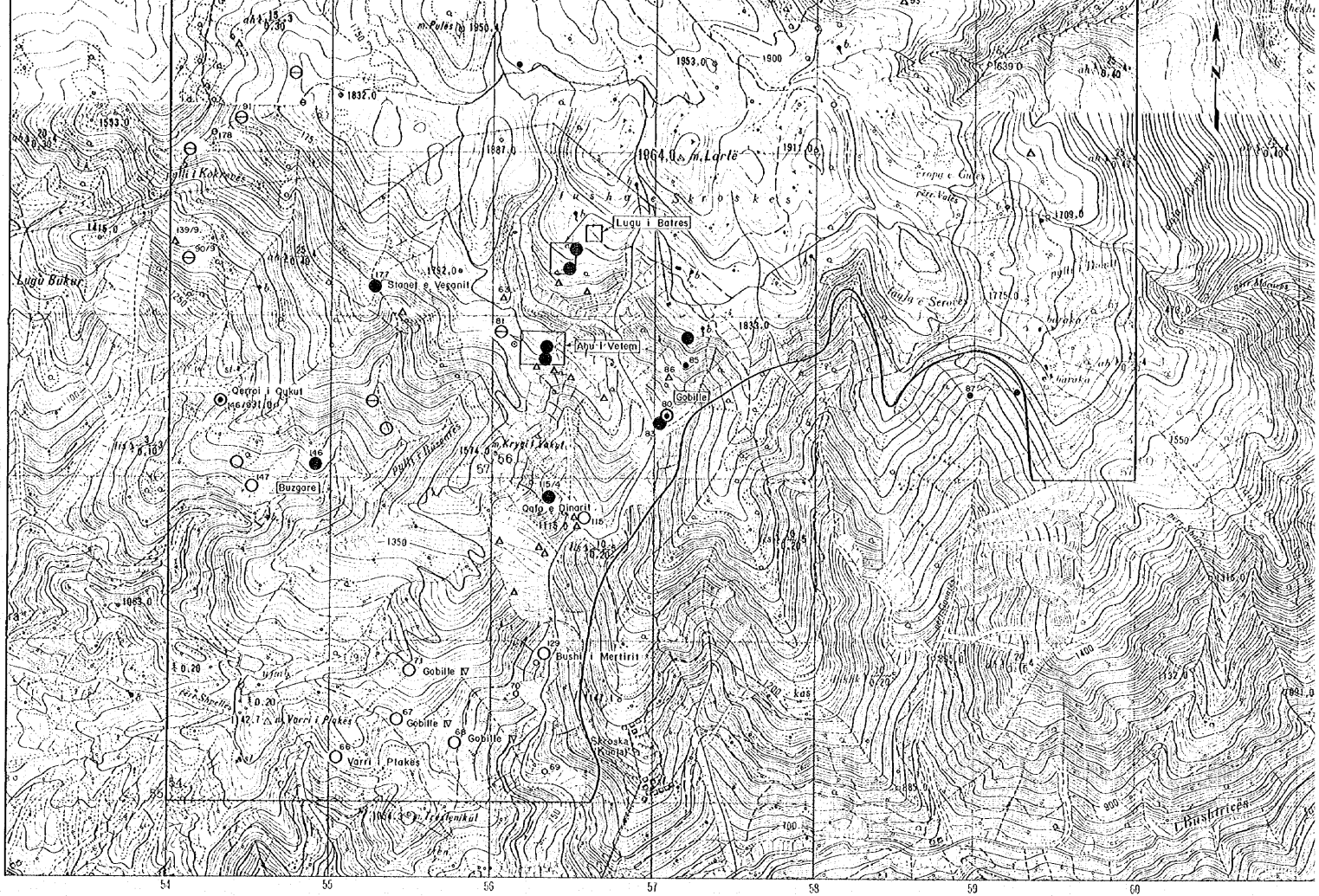
Mark confirmed in 1995	Mark confirmed in 1995	Miljet type classification
●	•	Massive chromitite
⊙	⊙	Nodular and antinodular chromitite
○	○	Disseminated chromitite
⊖	⊖	Banded chromitite

Not recognized in the field work but indicated in the pre-existing data

△

Others

○ 45 Represented number of Pogradec Ultramafic bodies


m. Pulës 1950.4
1832.0
1953.0
1900
1639.0
1887.0
1964.0 m. Larlë
1911.0
1593.0
pylli i Kokranës
1415.0
Lugu Bukur
lugje e Skroskes
Lugu i Batres
Stanet e Veganit
1792.0
Ahu i Vetem
1833.0
Gobille
lugja e Serovës
1775.0
1709.0
baraka
Qerroi i Qukut
146/931.0
Buzgare
pylli i Busantes
m. Krygi i Vakut
1514.0
Qafa e Dinarit
1115.0
1350
1550
1083.0
Bushi i Mertirit
Gobille IV
Varri i Plakës
Skroska (Kulla)
1200
900
700
1132.0
l. Bushtricës
54
55
56
57
58
59
60