



42A06SE0040 W9660-00063 LANGMUIR

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Outokumpu Mines Ltd.

Diamond Drilling Report

on the

Eldorado-Langmuir Property

A handwritten signature in black ink, appearing to read "Paul", followed by a long horizontal flourish.

Paul Davis
Outokumpu Mines Ltd.
February, 1996



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1.0 Introduction

Bradley Bros. Limited was contracted by Outokumpu Mines Ltd. to diamond drill 7 holes on the Eldorado-Langmuir property (Galata property) located in Eldorado and Langmuir Townships, Porcupine Mining Division, District of Cochrane. The property is comprised of 8 contiguous unpatented mining claims totaling 38.5 units (Fig. 1).

A total of 2137 metres of BQ diamond drilling was completed in 7 diamond drill holes between November 15 and December 17, 1995. All of the core was logged by Outokumpu personnel at the Outokumpu Mines Ltd office in Timmins, Ontario. Copies of all of the logs are attached in appendix 1 at the back of this report.

The objective of this program was to test the komatiitic stratigraphy on the property. The diamond drilling was concentrated on the komatiitic succession approximately 2 kilometres east of the Langmuir #1 Nickel Mine (Fig. 1). Coincident high magnetic anomalies and electromagnetic conductors were targeted within this diamond drill program.

2.0 Location, Access, and Topography

The Eldorado-Langmuir property is located in Eldorado (G-4001) and Langmuir (G-3226) Townships, District of Cochrane, Porcupine Mining Division. The property is situated approximately 20 kilometres south of the City of Timmins. The claim block is located along the central portion of the boundary separating Eldorado and Langmuir Townships (Fig. 2).

The property is accessed by a series of bush roads that lead off of the Langmuir Mine Road in Langmuir Township. The western portion of the property is accessed by old winter roads from Stringers Road, an all season gravel road.

The property is dominated by a large outcrop ridge that is surrounded by a large muskeg swamp with poor drainage. Outcrop exposure is approximately 5 percent. The soils are mainly gravels, tills, and clays.

3.0 Property

The Eldorado-Langmuir property consists of 8 contiguous unpatented mining claims comprising 38.5 units in Eldorado and Langmuir Townships (table 1). The property is 100% owned by Outokumpu Mines Ltd.. There are currently no extensions on any of the mining claims within this property.

Komatiite Nickel Exploration Projects: Shaw Dome and Bartlett Dome

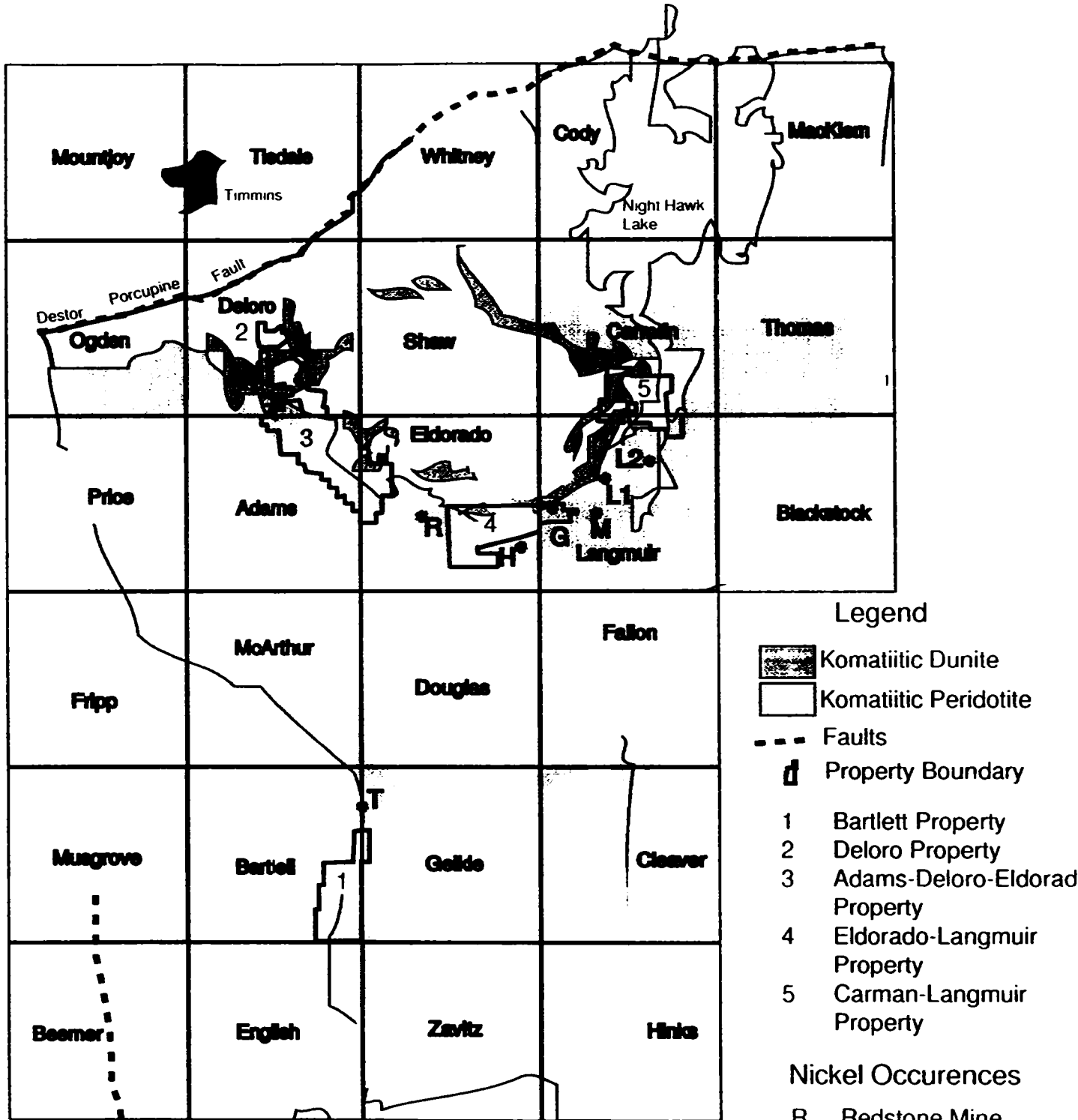


Figure 1: Location Map of Outokumpu Mines Ltd. Timmins Claims Grassroots Exploration Program.

- Nickel Occurrences**
- R Redstone Mine
 - L1 Langmuir #1 Mine
 - L2 Langmuir #2 Mine
 - H Hart Deposit
 - M McWatters Deposit
 - T Texmont Mine
 - G Galata

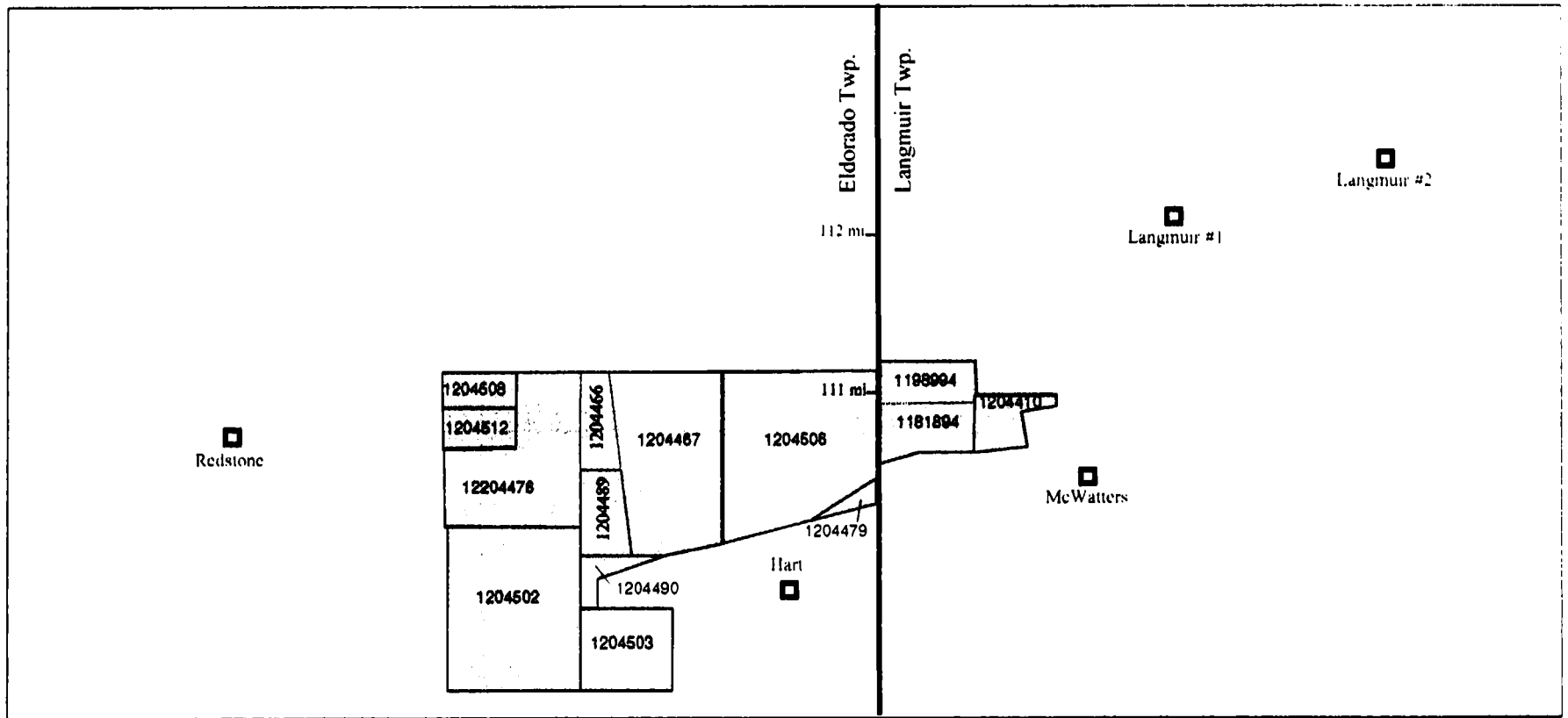


Figure 2 - Outokumpu Mines Ltd., Claims Location Map
Eldorado and Langmuir Townships.

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Outokumpu Mines



Claim Number	Number of Unit
1204502	16
1204503	4
1204506	8
1204508	2
1204512	2
1181894	3
1198994	1.5
1204410	2

Table 1: Outokumpu Mines Ltd. Property Holdings; Eldorado and Langmuir Townships.

4.0 Previous Work

Several companies have completed work on the property prior to Outokumpu Mines Ltd.. Work includes magnetic and electromagnetic geophysical surveys, geological mapping, and diamond drilling (table 2). Exploration was concentrated on nickel after the discovery of the Galata nickel showing on the property in 1964.

Year	Company	Type of Work
1964	Holinger Consolidated Gold Mines	geological mapping
1964	Urban Quebec Mines Ltd.	6 diamond drill holes
1967	E. Galata	4 diamond drill holes
1968	Pyrotex Mining	HLEM and Mag surveys, 1 diamond drill hole
1969	Falconbridge Nickel Mines Ltd.	HLEM and Mag surveys, 7 diamond drill holes
1989	Granges Ltd.	HLEM and Mag surveys, mechanical stripping and trenching

Table 2: Previous work performed on the Eldorado-Langmuir Property

5.0 Regional Geology

The Eldorado-Langmuir property is located in the southwestern portion of the Abitibi greenstone belt (Fig. 3). The Abitibi greenstone belt is characterized by east-west trending metasedimentary rocks and metavolcanic rocks that have been intruded by a series of felsic to intermediate plutons and diabase dykes.

The area south of the Destor-Porcupine Fault in the Timmins camp is comprised of a series of calc-alkalic mafic to felsic volcanic rocks, overlain by a series of thick sulphide and oxide iron formations, overlain by komatiitic dunites to basalts which are intercalated with minor proportions of tholeiitic volcanics.

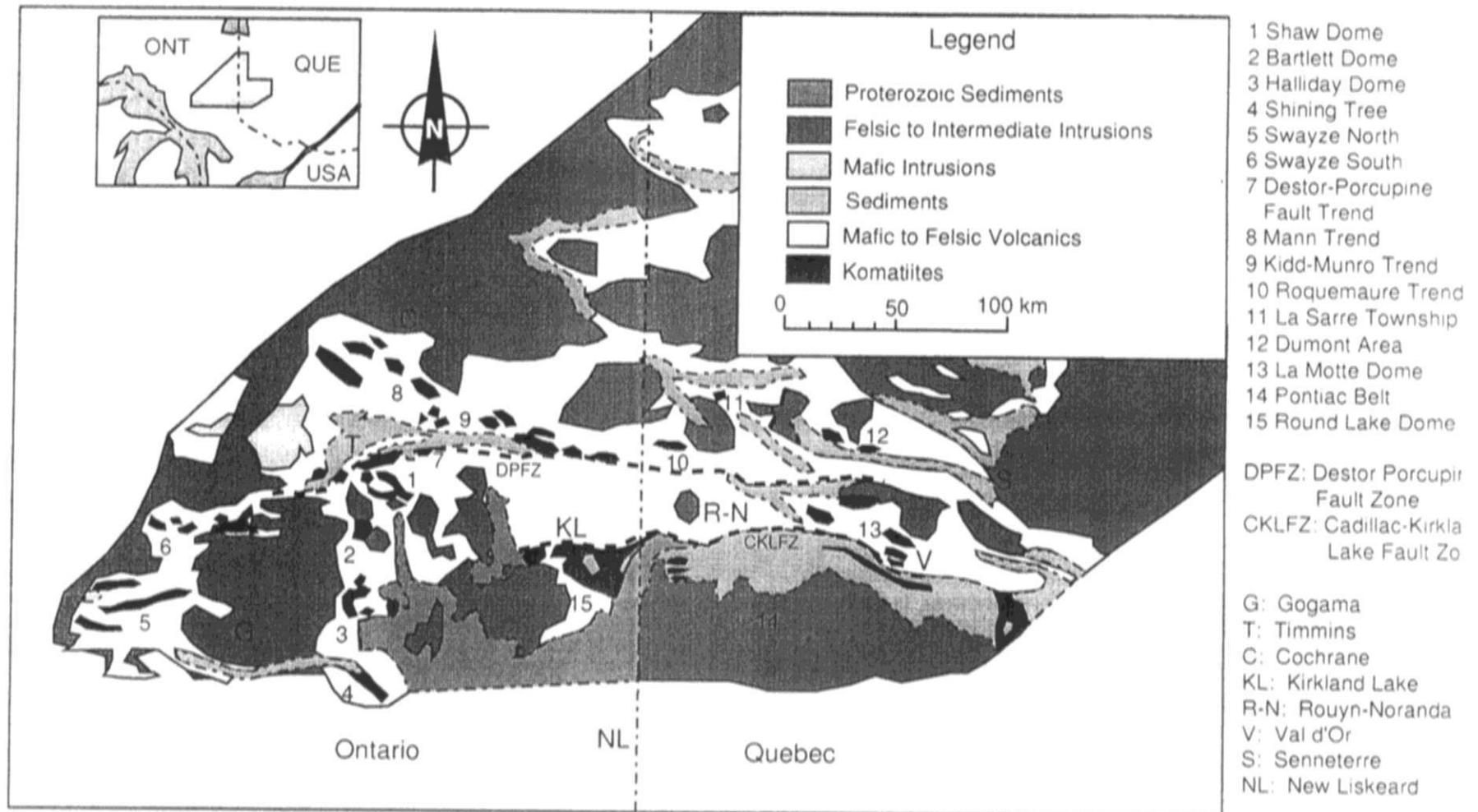


Figure 3: Regional geological map showing the distribution of komatiitic successions in the Abitibi greenstone belt (1-13) and the adjacent Pontiac metasedimentary belt (14) (modified from Goodwin and Ridler 1970; MERQ-OGS 1983; and Heather 1993).

Paul

and is topped by a thick sequence of komatiitic basalts and tholeiitic mafic to intermediate volcanics. The entire sequence has been intruded by numerous granitic and granodioritic intrusions, tholeiitic dykes and sills, and several generations of diabase dykes.

6.0 Property Geology

The property consists of a succession of calc-alkalic intermediate volcanic rocks, overlain by a discontinuous, thin, and sporadic series of dominantly oxide iron formation with minor zones of sulphide iron formation, overlain by a series of komatiitic dunites, peridotites, pyroxenites, and basalts. The volcanic stratigraphy is transgressed to the north by a large granitic intrusion. A small gabbroic intrusions cross cuts the komatiitic succession in the central portion of the property. Diabase dykes cross-cut all other rock types.

The volcanic rocks top to the south as interpreted from geology and geophysics, strikes east-west, and dips steeply to the south as indicated by flow contacts, geophysics, and diamond drill sections. The rocks have been cut by several episodes of brittle faulting which has offset much of the komatiite stratigraphy.

No new nickel mineralization has been discovered on the property to date.

7.0 Diamond Drilling

Seven diamond drill holes were completed for a total of 2137 metres of BQ diamond drill core (table 3). The diamond drill core was picked up daily from the drill and transported to the Outokumpu Mines Ltd. office in Timmins, Ontario. The core was then logged and sampled by Outokumpu personnel. Complete diamond drill logs with plans and sections have been attached to the back of this report in appendices 1 and 2.

Hole Number	Total Depth
EL-1-95	332m
EL-2-95	314m
EL-3-95	263m
EL-4-95	388m
EL-5-95	251m
EL-6-95	263m
EL-7-95	326m

Table 3: Diamond Drill Hole Depths; Eldorado-Langmuir Property.

8.0 Results and Conclusions

No economic or sub-economic iron-nickel-copper sulphides were intersected within the komatiitic rocks during this diamond drill hole program. Several thick sections of komatiitic peridotites and pyroxenites were drilled, but lacked the sulphide component which hosts the nickel mineralization. Two thin sulphide and oxide iron formations were intersected within andesitic volcanics in hole EL-3-95.

Diamond drilling indicated that the komatiitic succession is continuous for between 700 and 1500 metres in southeastern Langmuir Township. Metamorphism and alteration varies from pervasive serpentine alteration to talc-chlorite-carbonate alteration. Where pervasive, the alteration has destroyed many of the igneous textures making accurate rock identifications difficult. The alteration has also destroyed the magnetite component of some of the komatiitic rocks in effect masking their presence on the magnetic survey map.

Minor proportions of pyrite were discovered within the komatiitic rocks, but appears to be the result of secondary sulphide development associated with metamorphism and alteration.

9.0 Recommendations

Additional diamond drilling is recommended for the western portion of the Eldorado-Langmuir property. This area has not been adequately explored in the past and the stratigraphic associations are not well described due to poor outcrop exposure.

Appendix 1

Diamond Drill Hole Logs

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-6	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	1-95	000	330

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
13+00E	3+90S	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PCD <i>Paul Davis</i>	Nov 20, 1995	Bradley Bros	BQ	Nov 15, 1995	Nov 20, 1995	332

Remarks:Core stored at Hollinger building; Claim #: 1204410

Paul

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0	-50	330	10			20	-50		30		
40			50	-49.5		60			70		
80			90			100	-47		110		
120			130			140			150	-48.5	
160			170			180			190		
200	-47.25		210			220			230		
240			250	-46		260			270		
280			293			300	-46.25		310		
320			330			340			350		
360			370			380			390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

DDH E11-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
0.00	13.00	Overburden		casing							
13.00	14.00	Felsic to Intermediate Dyke	white to salmon, f.g. to m.g., strongly foliated at 50 degrees to the CA qtz, plag, hem, carb non-magnetic dyke has mylonitized appearance sharp lower contact	Fd/ld							
14.00	20.10	Basalt/Andesite	dark grey-green, aphanitic to f.g., moderately foliated at 57 degrees to the CA chl, carb, qtz highly altered non-magnetic qtz-carb veining disseminated cubic Py, secondary sharp contact with dykes	Ba/Ad	tr	Py	diss				
20.10	31.00	Felsic to Intermediate Dyke	brown-green-pink, f.g. to c.g., massive to weakly foliated at 65 degrees to the CA qtz, plag, carb, chl xenoliths of chl and talc-chl rocks sharp lower contact qtz-plag-carb veining non-magnetic	Fd/ld							
31.00	39.65	Basalt/Andesite	medium grey-green to light green, aphanitic to f.g., massive to weakly foliated at 46 degrees to the CA poss. intermittent chl-filled amygdules highly altered, moderately silicified chl, carb, qtz non-magnetic qtz-chl veining	Ba/Ad				WR	37123	35.0	38.0

DDH E11-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			sharp lower contact								
39.65	42.24	Felsic to Intermediate Dyke	white-green-brown-grey, f.g. to c.g., massive to weakly foliated at 42 degrees to the CA qtz, plag, carb chl xenoliths qtz-plag veining sharp contacts non-magnetic	Fd/ld							
42.24	44.95	Basalt/Andesite	medium grey-green, f.g. to aphanitic, massive to weakly foliated at 53 degrees to the CA chl, qtz, carb, plag silicified zones qtz-plag-carb veining sharp lower contact	Ba/Ad							
44.95	45.40	Mafic Dyke	light grey-green, f.g. to m.g., moderately foliated at 52 degrees to the CA carb, chl, talc poss. ultramafic dyke non-magnetic talc-carb veining sharp contacts	Md							
45.40	78.95	Andesite	light grey, f.g., massive to weakly foliated at 70 degrees to the CA qtz, plag, chl, carb homogeneous mineral composition qtz-plag-chl veining sharp lower contact non-magnetic	AD				WR	37124	70.0	73.0

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From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Type	Sample		
					%	Type	Mode		Tag #	From	To
78.95	83.45	Upper Komatiitic Pyroxenite	medium to light grey, aphanitic to f.g., massive to weakly foliated at 50 degrees to the CA chl, trem, carb, serp, talc non-magnetic qtz-chl veining strong chl-carb alteration at upper contact gradational lower contact to cumulates	KPx				WR	37125	80.0	83.0
83.45	92.00	Komatiitic Peridotite/Dunite	dark green-black, f.g. to m.g., massive to veined serp, ol, chl, trem, qtz, talc, mag olivine meso-accumulate moderately to strongly magnetic qtz-carb-serp-talc veining gradational lower contact to dunite	Kmc/ac				WR	37126	88.0	91.0
92.00	135.10	Komatiitic Dunite	apple green to dark green, f.g. to m.g. olivine accumulate serp, mag, talc, carb strongly magnetic talc-mag-serp-carb veining minor asbestose veining small sections of fault gauge throughout gradational lower contact to dark cumulates carb development from 129-130m 130.0-130.30m: rusty weathering trace diss Py, intragranular and interstitial	Kac	tr	Py	diss	WR AS	37127 13363	120.0 130.0	123.0 130.3
135.10	218.00	Komatiitic Dunite	dark green-black, f.g. to m.g., massive olivine accumulate serp, mag, talc, carb strongly magnetic serp-talc-mag-carb veining gradational contacts	Kac	tr	Py	diss	WR WR	37128 37129	145.0 205.0	148.0 208.0

DDH E11-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Type	Sample		
					%	Type	Mode		Tag #	From	To
			minor zones of fault gouge rodingite alteration assoc. with veining trace diss Py								
218.00	248.85	Komatitic Dunite	apple green to black, f.g. to m.g., massive and veined olivine adcumulate serp, talc, mag, carb strongly magnetic talc-serp-mag veining 248.07-248.85m: shear zone, rubbly core sharp lower contact	Kac	tr	Py	diss	WR	37130	237.0	240.0
248.85	250.03	Komatitic Pyroxenite/ Peridotite	dark to medium grey, aphanitic, highly altered chl, trem, carb, serp, talc poss. basal pyroxenite zone chl-carb-plag-serp veining non-magnetic sharp lower contact	Koc				WR	37131	249.0	250.0
250.03	284.00	Komatitic Peridotite	dark to light grey, f.g. to m.g., massive ol mesocumulate with poss relict olivines ol, chr, trem, serp, mag, carb non-magnetic to weakly magnetic core fairly hard, looks unaltered poss. basalt or andesite plag-chl-carb-mag veining change in colour may indicate flow tops gradational lower contact	Kmc	tr	Py	diss	WR	37132	280.0	283.0
284.00	314.90	Komatitic Pyroxenite/ Peridotite	dark to medium grey-green, massive variable talc-carb alteration ol orthocumulate to mesocumulate chl, trem, talc, carb, serp, mag weakly to moderately magnetic	Koc/mc	tr	Py	diss	WR	37133	305.0	308.0

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			chl-serp-talc-carb veining sharp lower contact with dyke more chloritic zones might represent flow tops									
314.90	315.10	Intermediate Dyke	medium grey, f.g. to m.g., massive plagioclase porphyry non-magnetic sharp contacts	ld								
315.10	316.88	Komatiitic Pyroxenite/ Peridotite	brown-green, f.g., massive chl, trem, talc, bio, carb biotite assoc. with contacts with dykes non-magnetic sharp contacts plag-chl-bio veining	KPx/oc								
316.88	316.64	Felsic Dyke	grey-white, aphanitic, massive qtz, plag, chl sharp contacts non-magnetic	Fd								
316.64	319.45	Komatiitic Pyroxenite/ Peridotite	medium grey, aphanitic, highly altered soapstone or steatite chl, talc, trem, serp non-magnetic no veining poss. flow top alteration related to dykes									
319.45	332.00	Komatiitic Pyroxenite/ Peridotite	medium to light grey, massive to weakly foliated at 48 degrees to the CA chl, talc, trem, serp, mag, chr relict chromites appear as black specks non-magnetic to weakly magnetic									

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From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			well developed carb grains serp-carb-talc veining 323.20-323.66m: fault gauge								
332.00		End of Hole									

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-6	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	2-95	000	330

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
12+00E	2+20S	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PCD <i>Paul Power</i>	Nov 27, 1995	Bradley Bros	BQ	Nov 20, 1995	Nov 25, 1995	315.0

Remarks:Core stored at Hollinger building; Claim #: 1204410

Paul

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0	-50	330	10	-49		20			30		
40			50	-47		60			70		
80			90			100	-45		110		
120			130			140			150	-44	
160			170			180			190		
200	-46.5		210			220			230		
240			250	-39.5		260			270		
280			293			300	-39.5		310		
320			330			340			350		
360			370			380			390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

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From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
0.00	4.00	Overburden		casing								
4.00	5.25	Komatiitic Dunite	apple green, f.g. to m.g., massive, olivine adcumulate serp, mag, carb highly altered, almost entirely serp serp-carb-mag veining strongly magnetic gradational lower contact	Kac								
5.25	49.60	Komatiitic Dunite/ Peridotite	dark green-black, f.g. to m.g., massive to veined, ol ad-mesocumulate serp, mag, carb, chl, qtz, plag qtz and plag are restricted to veins moderately to strongly magnetic serp-carb-mag veining trace diss. Py assoc. with carb alteration carb veins developed within some zones gradational lower contacts many rubbly zones assoc with serp alter.	Kac/mc	tr	Py	d	WR	37136	40.0	43.0	
49.60	61.00	Komatiitic Dunite	dark green-grey, f.g. to m.g., massive and veined, olivine adcumulate serp, mag, carb, stichtite strongly magnetic rubbly core serp-mag-carb veining gradational lower contact	Kac								
61.00	135.33	Komatiitic Dunite/ Peridotite	dark green-black to dark grey, f.g. to m.g., massiv and veined, ol ad-mesocumulate serp, ol, chl, trem, mag, carb, stichtite stichtite is a bright purple alteration mineral serp-carb-chl-mag veining	Koc/mc	tr	Py,Po	d	WR AS AS AS AS	37137 13374 13375 13376 13377	120.0 71.0 74.0 77.0 80.0	123.0 74.0 77.0 80.0 83.0	

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From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			qtz-plag veining near contact with dyke trace to 1% diss Py and Po moderately to strongly magnetic brecciation caused by veining carb alteration varies, minor carb develop. lower contact marked by chl-talc alteration					AS	13378	83.0	86.0
								AS	13379	92.0	95.0
								AS	13380	95.0	98.0
								AS	13381	98.0	101.0
								AS	13382	101.0	104.0
								AS	13383	104.0	107.0
								AS	13384	107.0	110.0
								AS	13385	110.0	113.0
135.33	143.78	Intermediate to Felsic Dyke	light brown-grey, f.g., massive feldspar porphyry qtz, plag, chl non-magnetic qtz-plag veining quenched upper contact	ld/Fd	tr	Py	d				
143.78	154.88	Komatitic Dunite/ Peridotite	dark to medium grey, f.g., massive to veined ol ad-mesocumulate serp, chl, carb, mag, qtz, talc qtz confined to veins moderately magnetic serp-carb-mag veining patchy carb alteration hornfelsed upper contact, metasomatized by the intermediate dyke gradational lower contact	Kac/mc	tr	Py	d	WR	37138	150.0	153.0
154.88	164.95	Komatitic Dunite/ Peridotite	light grey, f.g., massive to weakly foliated at 50 degrees to the CA, ol ad-mesocumulate strong carb and serp alteration serp, carb, chr, chl, mag weakly magnetic serp-chl-carb veining sharp lower contact	Kac/mc	tr	Py	d				

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From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
164.95	169.55	Komatiitic Peridotite/ Pyroxenite	medium grey-green, aphanitic to f.g., massive to banded at 27 degrees to the CA strong serp alteration serp, chl, trem, mag, carb, talc poss. relict chr grains very soft serp-chl-carb veining gradational lower contact 166.0-166.40m: fault gauge	Kmc/oc							
169.55	172.79	Komatiitic Pyroxenite	brown to grey-green, f.g., massive to weakly foliated at 40 degrees to the CA chl, trem, carb non-magnetic poss. basal pyroxenites zone variable carb alteration chl-carb-serp veining sharp lower contact at 32 degrees to the CA	KPx/oc							
172.79	175.55	Andesite	medium grey, aphanitic to f.g., weakly foliated at 44 degrees to the CA qtz, plag, chl non-magnetic either stretched plag phenocrysts or amygdules chl-qtz-plag veining sharp lower contact at 20 degrees to CA	Ad				WR	37139	173.0	174.0
175.55	230.46	Gabbro/Diabase	medium grey, f.g. to m.g., massive chl, plag, qtz, pyrox(?) non-magnetic qtz-plag-chl veining variable chl alteration sharp lower contact with quench or volcanic	Gb/Db							

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From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
230.46	233.25	Mafic Volcanic or Komatiitic Pyroxenite	medium grey, aphanitic to f.g., weakly foliated at 43 degrees to the CA chl, trem, talc, carb, qtz, plag poss. silicified komatiitic or intercalated komatiitic basalts qtz-plag-chl veining lower contact marked by change in hardness	Ba/KPx							
233.25	314.00	Gabbro	medium to dark grey-green, m.g., massive, equigranular chl, plag, pyrox(?), qtz non-magnetic variable chl alteration large qtz veins plag-chl veining grain sizes are highly variable								
314.00		End of Hole									

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-6	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	3-95	000	330

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
11+00E	0+50S	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PCD <i>Paul Pours</i>	Dec 1, 1995	Bradley Bros	BQ	Nov 25, 1995	Nov 29, 1995	259.0

Remarks:Core stored at Hollinger building; Claim #: 1204410

Paul

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0	-50	330	10	-46		20			30		
40			50	-48		60			70		
80			90			100	-46		110		
120			130			140			150	-43.5	
160			170			180			190		
200	-44		210			220			230		
240			250	-43		260			270		
280			293			300	-39.5		310		
320			330			340			350		
360			370			380			390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

DDH EI3-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
0.00	4.00	Overburden		casing								
4.00	28.60	Komatiitic Peridotite/ Pyroxenite	dark grey to dark green-grey, f.g. to m.g., massive, ol ortho-mesocumulate serp, chl, trem, mag, carb, epid weakly to moderately magnetic serp-carb-chl-mag veining trace to 1% diss, intragranular Po, Py poss. faulted lower contact becomes pyroxenite-rich downhole	Kmc/oc	tr	Po,Py	d	WR AS AS AS AS	37185 537 538 539 540 541	20.00 8.00 11.00 14.00 17.00 20.00 23.00	23.00 11.00 14.00 17.00 20.00 23.00	
28.60	34.40	Andesite	medium to light grey, aphanitic to f.g., massive, poss. amygduloidal qtz, chl, plag blue qtz grains non-magnetic qtz-plag veining sharp lower contact at 60 degrees to the CA	Ad				WR	37186	29.00	32.00	
34.40	45.83	Komatiitic Pyroxenite/ Peridotite	dark grey to dark green, f.g., massive ol ortho-mesocumulate upper contact chl-talc altered chl, serp, carc, talc, chr weakly magnetic serp-chl-carb veining silicified lower contact, sharp contact	Koc/mc	tr	Py	d	WR AS	37191 542	38.00 41.00	41.00 44.00	
45.83	59.05	Andesite	light to medium grey, aphanitic to f.g., massive to amygduloidal qtz, chl, plag non-magnetic qtz-plag-chl veining lower contact becomes more chloritic	Ad								

DDH E13-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
59.05	59.65	Mafic Dyke	dark green, aphanitic, highly altered, soft chl alteration is pervasive and extends beyond the upper and lower contacts into the andesites rubby lower contact non-magnetic	Md								
59.65	66.35	Andesite	medium grey, aphanitic to f.g., massive chl, qtz poss. amygduloidal qtz-chl veining gradational lower contact	Ad								
66.35	88.15	Andesite	medium to light grey, aphanitic, brecciated and weakly foliated at 60 degrees to the CA strongly silicified non-magnetic mottled appearances assoc. with silicification sharp lower contact at 70 degrees to the CA	Ad								
88.15	89.50	Iron Formation	creamy green, aphanitic cherty with bands of Po, chl, epid, mag qtz, chl, epid, Po, mag poss extremely silicified andesite sulphides appear to be remobilized moderately to strongly magnetic sharp lower contact at 40 degrees to the CA	IF	4	Po, Cp	v	AS	543	88.15	89.50	
89.50	94.50	Iron Formation	medium green to black, aphanitic to f.g., massive and banded at 65 degrees to the CA chl, trem, mag, Po, qtz contains whar appears to be clasts of chert sulphides and magnetite have remobilized appearance	IF	4	Po, Cp	v,d	AS AS AS AS	544 545 546 547 548	89.50 90.50 91.50 92.50 93.50 94.50		

DDH E13-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			Po and Cpy occur as veins and diss. Cpy is in trace amounts gradational lower contact moderately to strongly magnetic									
94.50	96.48	Iron Formation	medium green to black, aphanitic to f.g., massive and banded at 65 degrees to the CA chl, trem, mag, Po, qtz contains what appears to be clasts of chert sulphides and magnetite have remobilized appearance Po and Cpy occur as veins and diss. Cpy is in trace amounts gradational lower contact moderately to strongly magnetic	IF	8	Po, Cp	v,d	AS AS	549 550	94.50 94.50	95.50 96.48	
96.48	119.91	Andesite	light to medium grey, aphanitic to f.g., massive, mottled texture moderately to strongly silicified chl, qtz, plag non-magnetic qtz-carb veining sharp lower contact at 70 degrees to CA	Ad								
119.91	120.55	Iron Formation	medium green to black, aphanitic to f.g., massive and veined chl, trem, mag poss. sulphide silicate iron formation or remobilized Po and Cpy weakly to moderately magnetic sharp lower contact with massive magnetite at 90 degrees to the CA	IF	3	Po,Cpy	v,d	AS	551	119.91	120.55	
120.55	121.12	Iron Formation	black to medium green, aphanitic to f.g., massive and veined	IF	2	Po	v,d	AS	552	120.55	121.12	

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			mag, chl, trem, Po massive to semi-massive magnetite with chl and trem bands mag and Po appear to be remobilized strongly magnetic sharp lower contact at 50 degrees to the CA								
121.12	156.42	Andesite/Basalt	medium grey, aphanitic to f.g., massive poss. a tuff with intermediate lapilli chl, plag, qtz more chl altered towards upper contact sharp lower contact non-magnetic more massive zones appear to be amygduloidal	Ad/Ba							
156.42	157.13	Mafic Dyke/ Diabase	dark grey, massive, f.g. chl, plag, pyrox, qtz sharp contacts non magnetic	Md/Db	2	Py	d				
157.13	159.85	Andesites	medium grey, aphanitic to f.g., massive poss. a tuff with intermediate lapilli chl, plag, qtz more chl altered towards upper contact sharp lower contact non-magnetic more massive zones appear to be amygduloidal	Ad							
159.85	161.40	Mafic Dyke/ Diabase	medium to dark grey, aphanitic to f.g., massive plag, chl, trem, qtz non-magnetic quenched contacts	Md							

DDH E13-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
161.40	164.42	Felspar Porphyry	brown-grey, aphanitic to f.g., massive plag, qtz, chl quenched contacts qtz-plag veining	Por							
164.42	167.90	Mafic Dyke	medium to dark grey, f.g., massive strong chl alteration chl, trem, carb, plag quenched contacts non-magnetic chl-carb veining	Md							
167.90	259.63	Andesite	light to dark grey, f.g. to aphanitic, massive to brecciated strongly silicified lower portion chl, qtz, plag, carb qtz-carb veining sharp lower contact non-magnetic	Ad							
259.63	263.00	Mafic Dyke	dark grey-green, aphanitic to f.g., massive contains blue qtz veins near the upper contact quenched upper contact chl, plag, qtz, pyrox tr to 1% Po, Py carb-chl veining	Md	1	Po,Py	d				
263.00		End of Hole									

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-6	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	4-95	000	000

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
6+00E	2+60S	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PAV <i>Paul Davis</i>	Dec 3, 1995	Bradley Bros	BQ	Nov 29, 1995	Dec2, 1995	388

Remarks:Core stored at Hollinger building; Claim #: 1181894

Paul

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0			13	49	000	20			30		027
40			50	50		60			70		
80			90			101	49		110		
120			130			140			150	50	
160			170			180			190		
200	49		210			220			230		
240			250	51		260			270		
280			293			300	51		310		
320			330			340			350	49	
360			370			386	51.5		390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
0.00	4.00	Casing	BW									
4.00	21.70	Pyroxenite	-unit is medium dark grey ortho-cumulate textured, 1-3mm -weakly to moderately magnetic -basal contact is masked in a 20 cm rubbly zone	Koc				WR	37151	17.0	20.0	
21.70	51.20	Gabbro	-greenish grey medium grained gabbroic texture -feldspars (white) eu/subhedral 30-40%, 1-5mm -chloritized pyroxene and amphibole 50-60%, 1-5mm -blue quartz 5%, 3-5mm -upper 2m grades from fine to medium grained, coarsening downhole -basal contact sharp at 55o to C.A.	Gb				WR	37152	44.0	47.0	
51.20	51.80	Feldspar Porphyry	-light grey, aphanitic matrix to 20% an/subhedral birds-eyed feldspars, 1-2mm -unit very hard (7) and massive -sharp up/downhole contacts	FPor								
51.80	61.70	Gabbro	-greenish grey medium grained gabbroic texture -feldspars (white) eu/subhedral 30-40%, 1-5mm -chloritized pyroxene and amphibole 50-60%, 1-5mm -blue quartz 5%, 3-5mm -upper 2m grades from fine to medium grained, coarsening downhole	Gb				WR	37153	53.0	56.0	

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			-basal contact sharp at 55o to C.A.									
61.70	76.30	Feldspar Porphyry	-light grey, aphanitic matrix to 20% an/subhedral birds-eyed feldspars, 1-2mm -basal 1m has a foliation 52o to C.A. -basal contact masked in shear	FPor				WR	37154	68.0	71.0	
76.30	107.80	Peridotite	-black, fine grained orthocumulate, strongly magnetic -upper 35cm strongly sheared at 40o to C.A. -unit grades into possible pyroxenitic phase at 104m to end of unit -trace disseminated pyrite at 104-107.8m -basal contact sharp at 45o to C.A.	Koc/mc	tr	py	d	WR AS	37155 0512	92.0 104.0	95.0 107.0	
107.80	108.20	Feldspar Porphyry	-light grey, aphanitic matrix to 5-10% an/subhedral birds-eyed feldspars, 1-3mm -very hard (7) -uphole and downhole contact sharp	FPor								
108.20	110.40	Pyroxenite/ Peridotite	-moderately grey, moderately magnetic basal 15cm moderately chloritized -orthocumulate texture -trace disseminated pyrite, euhedral throughout unit	Koc	tr	py	d	AS	0513	108.2	110.4	
110.40	123.50	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar, not birds-eyed like previous units of feldspar porphyry -matrix aphanitic, light grey, hard	FPor				WR	37156	119.0	122.0	

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			-up/downhole contacts sharp -an inclusion of andesite present at 118-118.8m									
123.50	125.10	Intermediate Dyke	-light grey, 30-40% anhedral mafic phenocrysts in a fine grained matrix -fairly soft (3-4), non magnetic	ID				WR	37157	123.5	125.1	
125.10	136.80	Andesite	-unit is light grey, aphanitic -strongly silicified for 3m at upper and lower contacts which are oriented at 60o and 65o respectively	Ad				WR	37158	131.0	134.0	
136.80	147.90	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar, not birds-eyed -matrix aphanitic, light grey, hard -up/downhole contacts sharp	FPor								
147.90	154.70	Andesite	-unit is altered, comprised of light greenish grey bands alternating with dark greenish (chloritic) bands -a zone 154.1-154.5m appears to have 30-40% relict feldspar 2-3mm in an altered sericitized and chloritized matrix -possibly a highly altered F.P. -upper contact is sharp -basal contact is sharp at fault gouge	Ad				WR	37159	148.0	151.0	
154.70	163.00	Pyroxenite	-unit is light to medium steel grey, moderately to strongly magnetic -mesocumulate textured -uphole 0.7m is altered to light green -unit comprised of 70-80% pyroxene,	Koc				WR	37160	159.0	162.0	

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			<ul style="list-style-type: none"> -20-30% olivine -upper 5cm is fault gouge -pyroxenes and olivine pseudomorphs are 2-7mm, eu/subhedral -basal contact gradational over 5-10m contact taken as a reduction in grain size and increase in olivine content 									
163.00	198.20	Peridotite/ Pyroxenite	<ul style="list-style-type: none"> -medium grey to dark grey to black orthocumulate textured comprised of 2-3mm potato-shaped olivine pseudomorphs -moderately to strongly magnetic -basal 20-30cm is chloritized and tremolitized and serpentinized 	Koc/mc				WR	37161	194.0	197.0	
198.2	198.70	Feldspar Porphyry	<ul style="list-style-type: none"> -30-50% white to weakly sericitized sub/euhedral feldspar, not birds-eyed -matrix aphanitic, light grey, hard -up/downhole contacts sharp and undulatory at 70-90o to C.A. 	FPor								
198.70	206.90	Peridotite/ Pyroxenite	<ul style="list-style-type: none"> -medium grey to dark grey to black orthocumulate textured -moderately to strongly magnetic -up/downhole contacts sharp 	Koc				WR	37162	203.0	206.0	
206.90	207.90	Mafic Dyke/ Lamprophyre	<ul style="list-style-type: none"> -olive green, non-magnetic, weakly foliated at 50o to C.A. -5-15% of unit is black 1-2mm anhedral phenocrysts of pyroxene. -5-10% xenoliths of angular to sub-rounded mafic dyke fragments with 1-2mm reaction coronas -5-10% is fine grained feldspar (<1- 	MD				WR	37163	206.9	207.9	

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			2mm) -remainder of unit is aphanitic light green chloritized matrix -upper 10cm is blocky, uphole and downhole contacts are sharp								
207.90	221.80	Peridotite/ Pyroxenite	-medium grey to dark grey to black -orthocumulate textured -moderately to strongly magnetic -basal 30cm sheared at 30-60o to C.A.	Koc				WR	37164	215.0	218.0
221.80	231.20	Intermediate Dyke	-hard (6 to 7) light green to light greenish grey -aphanitic to fine grained, 30-40% <1-1mm anhedral sericitized feldspar -up/downhole contacts sharp	ID				WR	37165	224.0	227.0
231.20	242.40	Peridotite/ Pyroxenite	-medium grey to dark grey to black -orthocumulate textured -moderately to strongly magnetic -upper 1.5m is variably bleached by carbonatization and serpentinization 231.2-23.6m and 231.8-232.7m and chloritized 231.6-231.8m -unit contains trace to 2% fine disseminated pyrite/pyrrhotite (<1mm) from 235-237.2m, 237.8-239.3m and 240.3-242m -strongly altered from 239.3-240.3m -basal 30-40cm is highly sericitized and carbonate altered -sulphide-bearing zones appear in strongly magnetic "least-altered" zones	Koc				WR AS AS AS	37166 0514 0515 0516	235.0 235.0 237.8 240.3	238.0 237.2 239.3 242.0

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
242.40	243.20	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar, not birds-eyed -matrix aphanitic with 10-20% fine grained mafics -basal contact sharp	FPor							
243.20	246.50	Feldspar Porphyry	-light grey, aphanitic matrix to 5-10% an/subhedral birds-eyed feldspars, 1-2mm -unit very hard (7) and massive -sharp undulatory up/downhole contacts	FPor							
246.50	251.40	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar, not birds-eyed -matrix aphanitic with 10-20% fine grained mafics -weak foliation at 60o to C.A. -basal contact sharp	FPor							
251.40	252.80	Pyroxenite	-unit appears to be an inclusion in feldspar porphyry -soft, non-magnetic -30-40% 3-10mm tremolite needles in plumose arrays in an aphanitic light brown matrix, unit appears moderately altered	FPor							
252.80	266.50	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar, 1-5mm -matrix aphanitic with 10-15% fine grained mafics (1-2mm) -basal contact sharp at fault zone -unit very hard (7)	FPor							

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
266.50	275.90	Fault Zone in Peridotite	<ul style="list-style-type: none"> -ultramafic host with particularly blocky core from 266.5-269.5 and 271.8-275.9 -peridotite fragments comprise 1% fine disseminated pyrite at 269.5-274.7 -basal contact masked in a highly rubbly zone 	Koc								
					1	py	d	AS	0517	269.5	272.0	
					1	py	d	AS	0518	272.0	274.3	
275.90	277.20	Mafic Dyke/ Lamprophyre	<ul style="list-style-type: none"> -olive green, non-magnetic, weakly foliated at 50o to C.A. -5-15% of unit is black 1-2mm anhedral phenocrysts of pyroxene -5-10% is fine grained feldspar (<1-2mm) -remainder of unit is aphanitic light green chloritized matrix -up/downhole contacts are rubbly 	MD								
277.20	290.90	Peridotite	<ul style="list-style-type: none"> -generally black with <1% to 2% fine grained (<1mm) disseminated pyrite/pyrrhotite -moderately magnetic -rubbly fault zone 280.6-281.1m and 281.4-282.6m -10cm wide talc magnesite vein at 277.8-277.9m -intervals containing above-mentioned sulphides are 277.9-277.8, 278.5-280.6, 282.5-286.8, and 289-290.8m -unit is highly bleached by tremolite, serpentine and carbonate from 286.7-289m -basal contact sharp at 80-90o to C.A. 	Koc/mc				WR	37167	283.0	286.0	
					1	py	d	AS	0519	277.3	277.8	
					1	py	d	AS	0520	278.5	280.6	
					1	py	d	AS	0521	282.5	284.0	
					1	py	d	AS	0522	284.0	286.8	
					1	py	d	AS	0523	289.0	290.8	

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
290.90	293.20	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar, not birds-eyed -matrix aphanitic with 10-20% fine grained mafics -upper 1m highly silicified -up/downhole contacts sharp	FPor								
293.20	306.50	Peridotite	-generally black with <1% to 2% fine grained (<1mm) disseminated pyrite/pyrrhotite from 294.3-300m and trace to 1% from 300-306.5m -a pyroxenitic zone from 303-303.1m may be a relict flow contact -basal 30cm highly tremolitized, carbonatized, and serpentinized, and may be relict flow breccia -moderately magnetic	Koc				WR	37168	296.0	299.0	
					1	py	d	AS	0524	294.3	296.0	
					1	py	d	AS	0525	296.0	299.0	
					1	py	d	AS	0526	299.0	300.0	
					1	py	d	AS	0527	300.0	303.0	
					1	py	d	AS	0528	303.1	306.5	
306.50	310.20	Pyroxenite	-light grey, strong undulating foliation and chloritized -possibly a pyroxenitic flow top that was chloritized, then strain recrystallized -foliation undulates from 0-60o to C.A. -upper contact has 10cm of rubble then 10cm of highly chloritized zone	Koc				WR	37169	307.0	310.0	
310.20	310.70	Mafic Dyke	-unit non-magnetic, 60-70% pyroxene (1-4mm) greyish brown, relict ortho-cumulate texture in a chloritized matrix -sharp upper contact at 40o to C.A. -unit has an alligator skin texture -basal contact masked in rubble	MD				WR	37170	310.2	310.7	

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
310.70	312.50	Fault Zone in Pyroxenite	-highly rubbly zone, protolith appears to be altered pyroxenite -basal contact is bleached, at 60o to C.A.	Koc fault								
312.50	319.70	Peridotite	-unit is black to dark grey, moderately to strongly magnetic -trace to 2% disseminated pyrite/ pyrrhotite, fine grained -basal contact bleached by feldspar porphyry fluids over basal 0.6m -basal contact sharp at 37o to C.A.	Koc/mc				WR	37171	315.0	318.0	
					tr-2	py/po	d	AS	0529	312.5	313.0	
					tr-2	py/po	d	AS	0530	313.0	316.0	
319.70	320.70	Feldspar Porphyry	-30-50% white to weakly sericitized sub/euhedral feldspar -matrix aphanitic with 10-20% fine grained mafics -downhole contact sharp	FPor								
320.70	360.30	Peridotite	-generally dark grey to black, strongly magnetic, meso/adcumulate texture -basal 0.6m is light grey, possibly metasomatized by gabbro -there are local patches of lighter grey zones within the peridotite, generally proximal to fractures -trace to 1% disseminated pyrite/ pyrrhotite 322-335m -downhole contact sharp	Koc/mc				WR	37176	323.0	326.0	
								WR	37177	356.0	359.0	
					1	py	d	AS	0531	322.0	323.0	
					1	py	d	AS	0532	323.0	326.0	
					1	py	d	AS	0533	326.0	329.0	
					1	py	d	AS	0534	329.0	332.0	
1	py	d	AS	0535	332.0	335.0						
360.30	388.00 EOH	Gabbro	-light grey, gabbroic textured -sub/anhedral feldspar, 2-5mm, 30-50% and white -mafics including biotite, amphibole,	Gb			WR	37178	377.0	380.0		

DDH E14-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			and pyroxene comprise remainder of section, and are chloritized, green to greyish black, <1-7mm -locally fine grained zones over 10cm -unit crosscut by quartz and quartz-carbonate veins (2-5% of unit)								

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-6	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	5-95	000	000

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
0+50 W	4+90 S	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PCD <i>Paul Lewis</i>	Dec 13, 1995	Bradley Bros	BQ	Dec 6, 1995	Dec 9, 1995	251.0

Remarks:Core stored at Hollinger building; Claim #: 1204506

Paul Lewis

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0	-50	000	10	-50		20			30		
40			50	-49		60			70		
80			90			100	-49		110		
120			130			140			150	-48.5	
160			170			180			190		
200	-50		210			220			230		
240			250	-51		260			270		
280			293			300			310		
320			330			340			350		
360			370			380			390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
0.00	4.00	Overburden		casing								
4.00	18.67	Andesite	medium grey, aphanitic to f.g., massive to weakly foliated at 65 degrees to CA qtz, chl, plag, serc, epid non-magnetic core is very hard qtz-chl-carb veining sharp lower contact with felsic dykes poss. silicified poss. amygduloidal	Ad	tr	Po,Py	d					
18.67	20.98	Felsic to Intermediate Dyke	medium grey-green, f.g. to m.g., massive feldspar-quartz porphyry qtz, plag, chl qtz and plag phenocrysts feldspars are zoned qtz veining sharp lower contact alteration halos extend from contacts	Fd/ld	tr	Py	d					
20.98	28.15	Andesite	medium grey-brown, aphanitic to f.g., massive to weakly foliated at 55 degrees to the CA, amygduloidal qtz, chl, carb, plag amygdules are filled with qtz-carb qtz-carb-chl veining gradational lower contact to massive unit	Ad	tr	Po	d					
28.15	37.20	Basalt/Andesite	medium green-grey, f.g., massive to weakly foliated at 40 degrees to the CA plag, chl, carb, pyrox non-magnetic variable chl alteration	Ba/Ad								

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			gradational									
37.20	40.55	Komatiitic Pyroxenite/ Peridotite	dark green-grey, f.g., weakly to moderately foliated at 40 degrees to the CA chl, trem, carb, serp, mag poss. folding shown in veins alteration halo around lower contact weakly to moderately magnetic	KPx								
40.55	41.40	Felsic to Intermediate Dyke	white grey to dark grey f.g. to m.g., massive feldspar-quartz porphyry qtz, plag, chl qtz and plag phenocrysts feldspars are zoned qtz veining sharp lower contact alteration halos extend from contacts sharp lower contact at 30 degrees to the CA	Fd/ld								
41.40	53.66	Gabbro	medium green-grey, f.g. to m.g., massive to weakly foliated at 40 degrees to the CA chl, plag, pyrox non-magnetic xenoliths of basalt and komatiite chl-carb-qtz veining sharp lower contact	Gb								
53.66	68.60	Komatiitic Pyroxenite/ Peridotite	light to dark grey-green, aphanitic to f.g., massive to weakly foliated at 25 degrees to the CA chl, trem, serp, carb, mag, talc weakly magnetic zones of intense carb alteration carb-chl veining	Koc/mc								

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			sharp lower contact alteration halo assoc. with feldspar porphyry									
68.60	69.58	Felsic to Intermediate dyke	medium grey-green, f.g. to m.g., massive feldspar-quartz porphyry qtz, plag, chl qtz and plag phenocrysts feldspars are zoned qtz veining sharp lower contact alteration halos extend from contacts xenoliths of komatiite	Fd/ld								
69.58	76.03	Komatiitic Pyroxenite/ Peridotite	medium grey-green, aphanitic strong chl-carb-talc alteration chl, trem, carb, talc, mag weakly magnetic blocky core with fault gauge very soft, high talc content gradational lower contact									
76.03	93.45	Komatiitic Peridotite/Dunite	medium to dark green-black, f.g., massive to veined at 40 degrees to the CA of meso-accumulate serp, chl, trem, carb, mag weakly to moderately magnetic serp-carb-chl-mag veining trace to 2% diss Py assoc. with chl and mag gradational increase in Py downhole	Kmc/ac	1	Py	d	WR AS AS AS AS AS	37187 553 554 555 556 557 558	86.0 77.0 80.0 83.0 86.0 89.0 92.0 93.5		
93.45	95.58	Felsic to Intermediate Dyke	medium grey-green, f.g. to m.g., massive feldspar-quartz porphyry qtz, plag, chl qtz and plag phenocrysts feldspars are zoned	Fd/ld								

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Type	Sample			
					%	Type	Mode		Tag #	From	To	
			qtz veining sharp lower contact alteration halos extend from contacts alteration halo towards upper contact									
95.58	121.63	Komatiitic Peridotite/Dunite	dark green-black, f.g., massive of meso-accumulate serp, mag, chl, trem, carb lightning textured serp veining serp-carb veining lower contact is more pyroxenitic poss alteration or contamination trace to 1% diss Py and Po	Kmc/ac	tr	Py,Po	d	WR	37188	104.0	107.0	
121.63	127.62	Andesite/ Intermediate Dyke	light brown-green, aphanitic to f.g., massive to weakly foliated at 50 degrees to the CA qtz, chl, plag non-magnetic xenoliths or clasts of komatiite sharp lower contact at 55 degrees to CA	Ad/ld								
127.62	146.13	Komatiitic Peridotite/Dunite	black to medium grey, f.g. to m.g., massive of meso-accumulate serp, mag, chl, trem, carb, stichtite moderately to strongly magnetic variable carb alteration serp-mag-chl-carb veining trace to 2% diss cubic Py alteration halo extending away from contact with intermediate dyke	Kmc/ac	1	Py	d	WR AS	37189 554	137.0 140.0	140.0 143.0	
146.13	150.28	Intermediate Dyke	medium green-grey to red-grey, f.g., massive contains xenoliths of strongly sheared talc- carb komatiites plag, chl, pyrox, qtz	ld	tr	Py	d					

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			non-magnetic qtz-carb veining trace diss cubic Py sharp contacts									
150.28	161.20	Komatiitic Peridotite	medium to light grey, f.g., weakly to strongly foliated at 45 degrees to the CA serp, carb, talc, chl, mag, chr very soft moderately magnetic carb-chl-serp-talc veining intense chl alteration obliterates contacts 151.25-152.0m: shearing, fault zone trace to 1% diss cubic Py	Kmc	tr	Py	d	WR	37190	155.0	158.0	
161.20	183.35	Gabbro	medium grey, spotted, f.g., massive, equigranular xenoliths of mafic volcanic plag, chl, pyrox, carb, qtz non-magnetic Cpy assoc. with plag-qtz veining qtz-plag-chl veining sharp lower contact	Gb	tr	Py,Cp	d,v					
185.35	192.00	Mafic Volcanics	medium green-grey, f.g. to aphanitic, massive to mottled texture chl, plag, pyrox non-magnetic mottled appearance assoc. with alteration sharp lower contact	Ba								
192.00	196.10	Gabbro	dark grey, f.g., massive, equigranular pyrox, plag, chl, qtz non-magnetic qtz-carb veining	Gb								

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			sharp lower contact								
196.10	198.58	Felsic Dyke	brown-grey, aphanitic, massive, siliceous qtz, plag non-magnetic weak chl alteration qtz-chl-plag veining sharp lower contact	Fd							
198.58	203.91	Basalt/ Pyroxenite Dyke	medium green-grey, f.g., massive, spotted soft almost entirely chl with minor plag could be strongly altered gabbro, pyroxenite or basalt non-magnetic carb-chl veining sharp lower contact with gabbro	Ba/Md							
203.91	230.50	Gabbro	medium grey, f.g. to m.g., massive, foliated xenoliths of mafic volcanic plag, chl, pyrox, qtz non-magnetic qtz-chl-plag veining sharp lower contact 226.1-226.4m: 1% vein assoc Cpy	Gb	tr	Cp	v,d				
230.50	233.72	Andesite	medium grey, aphanitic to f.g., weakly foliated at 35 degrees to the CA qtz-plag amygdules qtz, plag, chl non-magnetic qtz-plag veining trace diss Py sharp lower contact	Ad	tr	Py	d				

DDH E15-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
233.72	250.00	Gabbro	salt and pepper, f.g., massive to weakly foliated at 40 degrees to the CA xenoliths of mafic to intermediate volcanics plag, chl, pyrox, qtz, hem non-magnetic qtz-plag-hem veining veins have a ptigmatic nature	Gb							

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-6	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	6-95	000	000

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
4+00 E	1+40 S	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PCD <i>Paul Lewis</i>	Dec 19, 1995	Bradley Bros	BQ	Dec 9, 1995	Dec 13, 1995	263.0

Remarks:Core stored at Hollinger building; Claim #'s: 1181894, 1198994

Paul

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0	-50	000	10	-50		20			30		
40			50	-49		60			70		
80			90			100			110		
120			130			140			150	-50.5	
160			170			180			190		
200	-51		210			220			230		
240			250			260	-51		270		
280			293			300			310		
320			330			340			350		
360			370			380			390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

DDH E16-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
0.00	4.00	Overburden		casing								
4.00	20.00	Rhyolite to Andesite	light grey to dark grey, aphanitic to f.g., massive to weakly foliated at 60 degrees to the CA qtz, plag, chl numerous cross cutting mafic dykes plag phenocrysts non-magnetic poss strong silicification variable chl alteration sharp lower contact at 25 degrees to the CA	Rh/Ad								
20.00	23.20	Komatiitic Pyroxenite	light grey-green, aphanitic to f.g., massive chl, trem, qtz, plag quenched upper pyroxenite with occasional blue qtz grains gradational increase in grain size and MgO content downhole non-magnetic gradational lower contact	KPx								
23.20	37.90	Komatiitic Pyroxenite/ Peridotite	medium grey-green to dark grey, f.g., massive chl-trem schist to ol orthocumulate serp, chl, trem, mag, carb weakly magnetic composition varies throughout the unit serp-chl-carb veining sharp lower contact at 45 degrees to the CA	KPx/oc	tr 2 tr	Po,Cp Cp,Po Po	d d d	WR AS AS AS	37012 653 654 655	33.00 34.72 35.72 35.92	36.00 35.72 35.92 36.92	
37.90	41.22	Andesite	light grey, aphanitic, massive, mottled texture weakly foliated at 55 degrees to the CA poss an iron formation	Ad	tr	Po,Cp	d	WR	37013	38.00	41.00	

DDH E16-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			qtz, chl, plag? stretched trace Po, Cpy chl veining non-magnetic sharp lower contact									
41.22	57.90	Gabbro	medium grey and white, f.g. to m.g., massive weak hematite alteration assoc. with qtz plag, chl, pyrox, amph?, qtz, hem qtz-plag-hem veins non-magnetic sharp lower contact at 80 degrees to the CA	Gb								
57.90	62.10	Diabase	medium grey to grey-green, aphanitic to m.g., massive diabase cored by gabbroic texture weak to strong chl alteration chl, plag trace diss Py alteration obscurs lower contact non-magnetic	Db	tr	Py	d	WR	37014	58.00	61.00	
62.10	71.55	Komatiitic Peridotite/ Pyroxenite	dark grey to black, f.g. to m.g., massive ol orthro-mesocumulate serp, chl, trem, mag, carb moderately magnetic serp-chl-carb veining trace to 5% diss Po, Py sharp lower contact with intrusion	Koc/mc	tr 5 tr tr	Po,Py Po,Py Po,Py Po,Py	d d d d	WR AS AS AS	37015 656 657 658 659	65.00 62.15 62.70 63.15 64.15	68.00 62.70 63.15 64.15 65.00	
71.55	72.50	Intermediate to Mafic Dyke	brown-grey and white, aphanitic to m.g., massive, plag phenocryst chl, plag non-magnetic quenched contacts	ld/Md	tr	Py	d					

DDH E16-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
72.50	78.50	Komatiitic Peridotite/ Pyroxenite	dark grey, f.g., massive ol meso-orthocumulate serp, chl, trem, carb, mag moderately magnetic altered contacts to chl-trem serp-chl-carb veining trace diss Py sharp lower contact	Koc/mc	tr	Py	d				
78.50	80.18	Intermediate to Mafic Dyke	brown-grey to medium grey, aphanitic to f.g., massive, 5% plag phenocrysts quenched contacts chl, plag, qtz cored by coarser grained porphyry non-magnetic qtz-plag-chl veining contacts appear to have a more mafic in composition	ld/Md							
80.18	86.30	Komatiitic Peridotite/ Pyroxenite	dark grey, f.g., massive chl trem altered contacts serp, mag, chl, trem, carb weakly to moderately magnetic serp-chl-carb veining trace diss Py sharp lower contact	Koc/mc	tr	Py	d				
86.30	86.68	Mafic Dyke	dark brown, f.g., massive chl, plag, bio non-magnetic sharp contacts	Md							
86.68	102.20	Komatiitic Peridotite/	dark grey to green, f.g., massive chl-trem altered contacts	Kmc/oc	2	Py	d	WR AS	37016 660	95.00 87.02	98.00 89.00

DDH E16-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
		Pyroxenite	serp, mag, chl, trem, carb weakly magnetic serp-chl-carb veining sharp lower contact trace to 2% diss Py		1	Py	d	AS	661	89.00	91.30
102.20	104.68	Intermediate to Mafic Dyke	grey-brown, f.g. to m.g., massive plag phenocrysts plag, chl, qtz, leucoxene non-magnetic qtz-plag veining sharp contacts	ld/Md							
104.68	140.35	Komatiitic Peridotite/Dunite	black to dark green, f.g. to m.g., massive rubby sections with well developed fault gauge serp, mag, chl, carb, ol strongly magnetic serp-chl-carb veining relict olivine grains trace diss Py sharp lower contact marked by serp vein	Kmc/oc	tr	Py	d	WR WR	37017 37018	110.00 131.00	113.00 134.00
140.35	141.50	Intermediate to Mafic Dyke	medium grey, aphanitic to f.g., massive chl, plag non-magnetic sharp contacts	ld/Md							
141.50	169.20	Komatiitic Peridotite/Dunite	dark black-green to medium green, f.g. to m.g., massive, ol ad-mesocumulate serp, mag, chl, trem, carb, talc moderately to strongly magnetic increased chl-trem-talc-carb alteration towards gabbro contact serp-chl-carb veining	Kac/mc				WR	37019	152.00	155.00

DDH E16-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
			sharp lower contact								
169.20	240.43	Gabbro	medium grey-green and white, f.g. to c.g., massive plag. chl, pyrox, qtz, hem, epid highly variable grain size non-magnetic qtz-plag-chl-carb veining sharp lower contact 206.9-207.17m: granitic dyke 213.76-213.96m: granitic dyke	Gb	tr	Po,Cp	d				
240.43	241.54	Basalt Xenolith/ Sheared Gabbro	medium grey, f.g., moderately foliated at 55 degrees to the CA minor crenulation folding chl, qtz, plag non-magnetic 240.50m: 0.5cm wide vein of Cpy sharp lower contact qtz-carb veining	Ba/Gb	tr	Cp	v				
241.54	252.05	Gabbro	grey and white, f.g., massive plag, chl, qtz, pyrox, epid non-magnetic qtz-plag-epid veining sharp lower contact 244.14-244.60m: felsic dyke	Gb							
252.05	256.37	Felsic to Intermediate Dyke	white-grey, m.g., massive qtz, plag, chl non-magnetic qtz-chl veining trace diss cubic Py sharp lower contact clasts of chl-rich gabbro or basalt	Fd/ld	tr	Py	d				

DDH E16-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
256.37	263.00	Gabbro	medium grey-white, f.g., massive plag, chl, pyrox, qtz, epid non-magnetic qtz-plag-chl-epid veining trace diss cubic Py	Gb	tr	Py	d				
263.00		End of Hole									

Area/Township	N.T.S.	Year	Project
Eldorado/Langmuir Townships	42-A-7	1995	Abitibi Komatiite

Hole Sign	Hole No	Bearing Survey Grid °/Grad	Bearing N.T.S. Grid °/Grad
EL	7-95	000	330

Co-ordinates: X/M m cm	Co-ordinates: Y/L m cm	Co-ordinates: Z m cm
9+25 E	0+60 N	300

Logged By	Date	Drilled By	Core Size	Started	Finished	Hole Length
PCD <i>Paul Davis</i>	Dec 18, 1995	Bradley Bros	BQ	Dec 14, 1995	Dec 17, 1995	326.0

Remarks: Core stored at Hollinger building; Claim #: 1198994

Paul

Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth	Depth	Dip	Azimuth
0	-50	330	10			20	-50		30		
40			50	-48		60			70		
80			90			100	-50.5		110		
120			130			140			150	-48	
160			170			180			190		
200	-49.5		210			220			230		
240			250	-49		260			270		
280			293			300	-50.5		310		
320			330			340			350		
360			370			380			390		
400			410			420			430		
440			450			460			470		
480			490			502			510		
520			530			540			550		
560			570			580			590		
600			610			620			630		
640			650			660			670		
680			690			700			710		
720			730			740			750		
760			770			780			790		
800			810			820			830		

DDH E17-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
0.00	11.00	Overburden		casing								
11.00	49.30	Andesite	light to medium grey, f.g., massive to weakly foliated at 50 degrees to the CA 0-10% plag and qtz phenocrysts qtz, plag, chl, carb non-magnetic qtz-plag-carb veining trace cubic Py sharp lower contact	Ad	tr	Py	d					
49.30	66.30	Gabbro	medium grey-pink-white, f.g. to m.g., massive poss. xenoliths of andesite or f.g. gabbro plag, qtz, chl, pyrox, hem pink staining assoc. with weak hem alteration non-magnetic plag and qtz grains are well developed qtz-chl-plag veining gradational lower contact into pyroxenite or chl altered gabbro	Gb								
66.30	70.40	Komatiitic Pyroxenite	medium grey, f.g. to m.g., massive small veinlets of gabbro with a lot of qtz chl, trem, serp non-magnetic chl veining gradational lower contact	KPx								
70.40	82.30	Komatiitic Peridotite/ Pyroxenite	dark grey-green, f.g. to m.g., massive ol meso-orthocumulate serp, chl, trem, talc, mag, carb, bio moderately to non-magnetic talc-chl-serp-carb veining weak carb alteration	Kmc/oc	tr	Py	d	WR	37020	77.00	80.00	

DDH E17-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
			intense chl-trem-bio alteration near gabbro sharp lower contact									
82.30	84.10	Gabbro	dark green-black, f.g. to m.g., massive strong chl alteration plag phenocrysts plag, qtz, chl, pyrox non-magnetic xenoliths of chl-trem schist lower contact is highly altered	Gb								
84.10	102.57	Komatiitic Peridotite/ Pyroxenite	dark green-grey, f.g. to m.g., massive chl-trem alteration near gabbro contacts serp, chl, trem, mag, carb, talc moderately magnetic serp-chl-carb veining zones of chl-trem alteration trace diss Po and minor Py sharp lower contact at 15 degrees to the CA	Koc/mc	tr	Po,Py	d	WR AS AS AS AS AS	37021 630 631 632 633 634 635	92.00 86.00 89.00 92.00 95.00 98.00 101.00	95.00 89.00 92.00 95.00 98.00 101.00 102.57	
102.57	106.57	Diabase	light brown-grey, f.g., massive chl, plag, pyrox non-magnetic quenched contacts lower contact is 70 degrees to the CA	Db								
106.57	134.93	Komatiitic Peridotite/Dunite	dark black-green, f.g., massive of meso-accumulate moderately to strongly magnetic serp, chl, trem, mag, carb chl-trem alteration near contact with diabase difficult to identify sulphides due to the large quantities of magnetite sharp lower contact at 35 degrees to the CA	Kmc/ac	tr 1 1 1	Py,Po Py,Po Py,Po Py,Po	d d d d	WR AS AS AS	37022 636 637 638	131.00 122.00 125.00 131.00	134.00 125.00 128.00 134.00	

DDH E17-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
134.93	136.35	Intermediate Dyke	light grey-pink, f.g., massive qtz, plag, chl, hem plag phenocrysts non-magnetic weak hem alteration qtz-plag veining sharp lower contact at 80 degrees to the CA	ld								
136.35	206.01	Komatiitic Dunite/Peridotite	black to dark green, f.g. to m.g., massive apple green serp alteration near shears or contacts zones of rubbly core could be fault zones serp, mag, chl, carb occasional clast of andesite serp, ol, chl, talc, carb, mag weakly to moderately magnetic serp(asb)-chl-carb-mag veining carb development near lower contact	Kac/mc	tr	Py	d	WR WR WR	37023 37024 37025	143.00 179.00 197.00	146.00 182.00 200.00	
206.01	208.10	Intermediate Dyke	brown-grey, f.g., massive to banded at 60 degrees to the CA plag phenocrysts qtz, plag, chl non-magnetic sharp contacts qtz-plag-chl veins	ld								
208.10	214.85	Komatiitic Peridotite/ Pyroxenite	medium to light grey, f.g., massive talc-chl-carb schist talc, chl, carb, serp, mag weakly magnetic core very soft strong chl alteration at lower contact sharp lower contact at 30 degrees to the CA	Koc/mc								

DDH E17-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
214.85	217.00	Mafic to Intermediate Dyke	medium grey and green, f.g., massive cross cut by large bull qtz veins poss. xenoliths of komatiites qtz, plag, chl, bio, leucoxene trace diss cubic Py qtz-chl veining sharp lower contact at 40 degrees to the CA non-magnetic	Md/ld	tr	Py	d				
217.00	220.02	Komatiitic Peridotite/ Pyroxenite	light to medium grey, f.g., massive talc-chl schist talc, chl, serp, mag, chr, bio, carb weakly magnetic zones of intense chl alteration variable carb alteration core is very soft sharp lower contact at 35 degrees to the CA	Kmc/oc							
220.02	225.10	Intermediate to Mafic Dyke	light grey to grey-brown, f.g. to m.g., massive to weakly foliated at 50 degrees to the CA qtz, plag, chl, bio bio concentrated around contacts qtz-carb-chl veining trace diss Py with minor Cpy lower contact is chl altered	ld/Md	tr	Py	d				
225.10	226.08	Komatiitic Peridotite	medium grey, f.g., massive to weakly foliated at 30 degrees to the CA serp, chl, trem, carb, mag weakly magnetic strong chl alteration towards upper contact undulatory lower contact carb-serp-chl veining	Koc/mc							

DDH E17-95

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample				
					%	Type	Mode	Type	Tag #	From	To	
226.08	226.93	Rodingitized Peridotite or Mafic Dyke	dark green and light green, aphanitic to f.g., massive relict clasts of peridotite appears to be altered peridotite but could be anastomosing mafic dyke non-magnetic carb, mag, chl, serp carb veining sharp contacts with peridotite	Kmc/Md								
226.93	284.60	Komatiitic Dunite/ Peridotite	dark green-black, f.g., massive ol ad-mesocumulate serp, mag, carb, chl moderately magnetic serp(asb)-mag-carb-chl veining trace to 1% diss. Py sharp undulatory lower contact gradational decrease in MgO content poss assoc to changes in alteration	Kac/mc	tr	Py	d	WR WR WR AS AS AS	37026 37027 37028 648 649 650	230.00 257.00 278.00 233.00 236.00 239.00	233.00 260.00 281.00 236.00 239.00 242.00	
284.60	301.52	Komatiitic Pyroxenite/ Peridotite	light to medium gray, f.g. to m.g., massive soft core well developed carb grains talc-carb-chl schist weakly magnetic carb, chl, trem, talc, mag, serp talc-magnesite-carb-chl veining sharp lower contact with intense chl alter.	KPx/mc	tr	Po,Py	v	WR AS AS	37029 651 652	287.00 290.00 296.00	290.00 293.00 299.00	
301.52	301.74	Mafic Dyke or Lamprophyre	black, f.g., massive plag, pyrox, bio?, amph non-magnetic qtz-carb veining along contacts sharp contacts	Md/La								

From (m)	To (m)	Rock Type	Description	Legend	Sulphides			Sample			
					%	Type	Mode	Type	Tag #	From	To
301.74	305.60	Komatiitic Pyroxenite/ Peridotite	light grey to green, f.g. to m.g., massive chl-trem-talc schist chl, trem, talc, mag, serp, carb moderate carb development weakly to non-magnetic zones of intense chl alteration 304.32-304.41m: lamprophyre dyke	KPx/oc							
305.60	309.65	Basalt	medium grey-green, aphanitic to f.g., massive chl, plag, qtz, leucoxene zones of intense chl alteration assoc. with qtz veining non-magnetic qtz-chl veining sharp lower contact with strong chl alter.	Ba	tr	Po	d				
309.65	322.05	Komatiitic Pyroxenite/ Peridotite	dark to medium grey, f.g. to m.g., massive talc-chl-carb schist weakly to moderately magnetic chl, trem, carb, mag, serp becomes more pyroxenitic downhole sharp lower contact	KPx/oc							
322.05	326.00	Basalt/Andesite	light green-grey, aphanitic to f.g., massive chl, plag, qtz, epid qtz-chl-epid veining trace diss cubic Py has a calc-alkalic appearance	Ba/Ad	tr	Py	d				

Report of Work Conducted After Recording Claim

Transaction Number
W9660.00063

Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.



900

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for Recorder.
 - A separate copy of this form must be completed for each work group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s) <i>Outo Kumpan Mines Ltd.</i>		Client No. <i>178525</i>
Address <i>P.O. Box 1123, Suite 30a, 637 Algouqua Blvd. E., Timmins, Ontario, P4N 7H9</i>		Telephone No. <i>(705) 264-5024</i>
Mining Division <i>Porcupine</i>	Township/Area <i>Elaborado, Langmuir Townships</i>	M or G Plan No. <i>6-4001, G-3226</i>
Dates Work Performed From: <i>November 15, 1995</i>		To: <i>December 17, 1995</i>

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	
Physical Work, Including Drilling	<i>Diamond Drilling</i>
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

RECORDED
FEB 7 1996
Receipt

Total Assessment Work Claimed on the Attached Statement of Costs \$ *106,874*

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
<i>Bradley Bros. Limited</i>	<i>P.O. Box 485, Timmins, Ontario, P4N 7E7</i>
<i>Paul Davis Outo Kumpan Mines Ltd.</i>	<i>P.O. Box 1123, Timmins, Ontario, P4N 7H9</i>

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date <i>Jan 16/96</i>	Recorded Holder or Agent (Signature) <i>Paul</i>
--	--------------------------	---

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying <i>Paul Davis, Outo Kumpan Mines Ltd., P.O. Box 1123, Timmins, Ontario, P4N 7H9</i>		
Telephone No. <i>(705) 264-5024</i>	Date <i>Jan 16/96</i>	Certified By (Signature) <i>Paul</i>

For Office Use Only

Total Value Cr. Recorded <i>106,874</i>	Date Recorded <i>FEB 7/96</i>	Mining Recorder	Received Stamp <i>FEB 7 1996</i> 1/30 PORCUPINE MINING DIVISION
	Deemed Approval Date <i>MAY 7/96</i>	Date Approved <i>MAY 6/96</i>	
	Date Notice for Amendments Sent		

W9660.02
 Ministry of Northern Development and Mines
 Ministère du Développement et des Mines

Galata Property						
Work Report #	Claim #	Units	Value of Assessment	Value Applied	Value Assigned	Reserve Work
✓	1201228	12	0	14400	0	0
	1204292	8	0	3200	0	0
	1204293	7	0	2800	0	0
	1204294	1	0	400	0	0
✓	1204466	3	0	2400	0	0
✓	1204467	15	0	12000	0	0
	1204475	14	0	11200	0	0
✓	1204476	12	0	9600	0	0
✓	1204479	1	0	800	0	0
✓	1204489	2	0	1600	0	0
✓	1204490	1	0	800	0	0
✓	1204502	16	0	12800	0	0
✓	1204503	4	0	3200	0	0
✓	1204506	8	12553	0	10400	2153
✓	1204508	2	0	1600	0	0
✓	1204512	2	0	1600	0	0
✓	1181894	3	30802	0	28000	2802
✓	1198994	1.5	18059	0	16000	2059
✓	1204410	2	45460	0	24000	21460
		113	106874	78400	78400	28474

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1. Credits are to be cut back starting with the claim listed last, working backwards.
2. Credits are to be cut back equally over all claims contained in this report of work.
3. Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------

Statement of Costs
for Assessment Credit

État des coûts aux fins
du crédit d'évaluation

Transaction No./N° de transaction

W9660.00063

Mining Act/Loi sur les mines

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type Diamond Drilling	106,874	
			106,874
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs			106,874

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable indirect costs)		Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)	

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
	× 0.50 =

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
	× 0,50 =

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as a Project Geologist I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

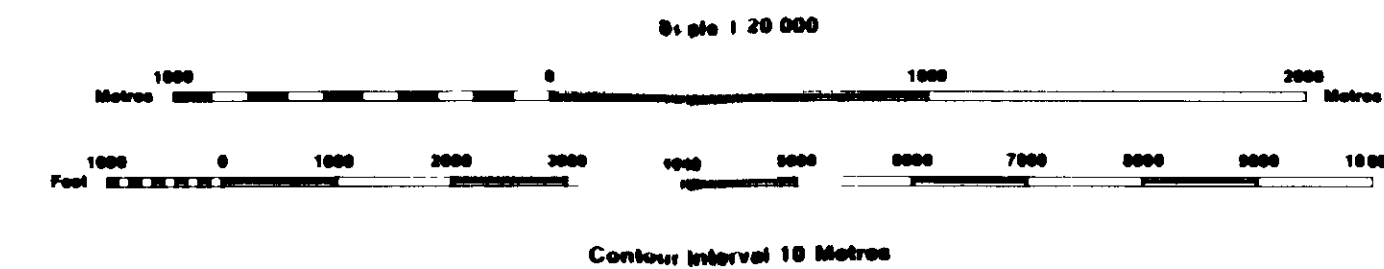
Signature _____ Date
Jan 14/96

INDEX TO LAND DISPOSITION

PLAN G-3226 TOWNSHIP

LANGMUIR

M. N. R. ADMINISTRATIVE DISTRICT TIMMINS MINING DIVISION PORCUPINE LAND TITLES/REGISTRY DIVISION COCHRANE



AREAS WITHDRAWN FROM DISPOSITION

- MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

SYMBOLS

- Boundary: Township Meridian, Baseline
Road allowance, surveyed shoreline
Lot/Concession, surveyed unsurveyed
Parcel, surveyed unsurveyed
Right-of-way, road railway utility
Reservation
Cliff, Pit, Pile
Contour: Interpolated Approximate Depression
Control point (horizontal)
Flooded land
Mine head frame
Pipeline (above ground)
Railway, single track double track abandoned
Road, highway, county, township access trail, bush
Shoreline (original)
Transmission line
Wooded area

NOTES

THIS TOWNSHIP LIES WITHIN THE MUNICIPALITY OF THE CITY OF TIMMINS
FLOODING RIGHTS ON NIGHT HAWK LAKE TO THE CONTOUR ELEVATION 913.5' RESERVED TO ONT. HYDRO

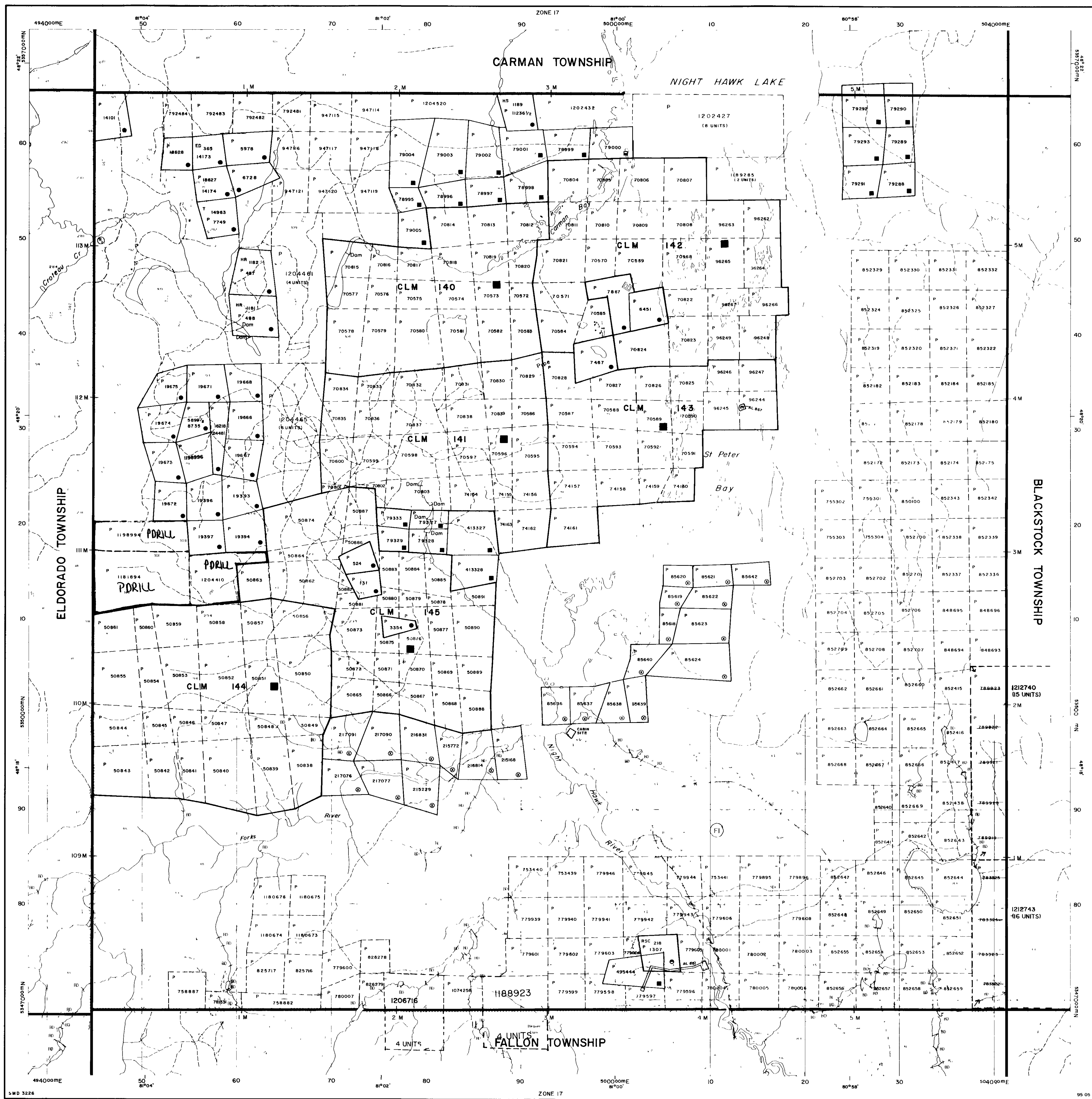
DISPOSITION OF CROWN LANDS

- Patent: Surface & Mining Rights Surface Rights Only Mining Rights Only
Lease: Surface & Mining Rights Surface Rights Only Mining Rights Only
Licence of Occupation
Order-in-Council
Cancelled
Reservation
Sand & Gravel

ACTIVATED JULY 18, 1995 BY:

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only



INFORMATION THAT APPEARS ON THIS MAP HAS BEEN OBTAINED FROM VARIOUS SOURCES. THE MINISTRY OF NORTHERN DEVELOPMENT AND MINES DOES NOT WARRANT THE ACCURACY OF THE INFORMATION SHOWN HEREON.

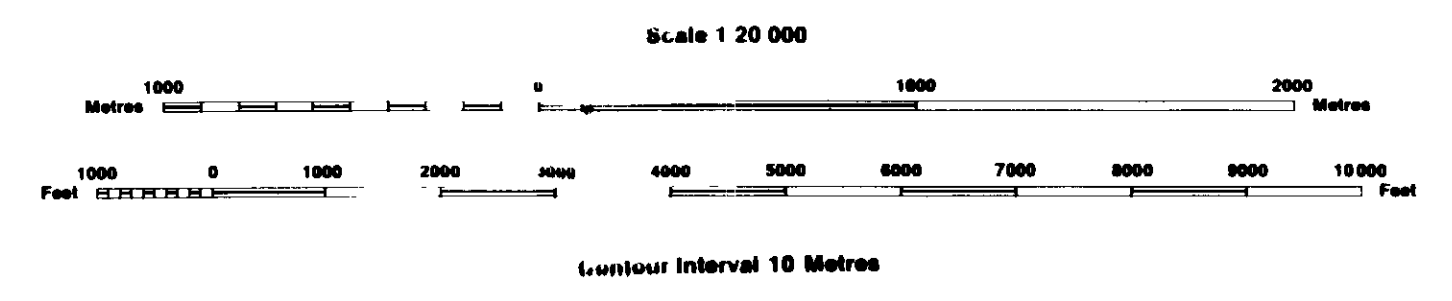


INDEX TO LAND DISPOSITION

PLAN
 G-4001
 TOWNSHIP

M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
 MINING DIVISION
PORCUPINE
 LAND TITLES/REGISTRY DIVISION
COCHRANE

ELDORADO



AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
 SRO - Surface Rights Only
 M + S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File
(G1)			GRAVEL, FILE 192287	
(G2)			GRAVEL, FILE 171598 AND FILE 172954	
(R1)			DUCKS UNLIMITED - PENDING APPLICATION UNDER THE PUBLIC LANDS ACT. S.R.O. WITHDRAWN	
(R2)			DUCKS UNLIMITED - PENDING APPLICATION UNDER THE PUBLIC LANDS ACT. S.R.O. WITHDRAWN	


SYMBOLS

- Boundary
- Township, Meridian, Baseline
- Road allowance, surveyed
- shoreline
- Lot/Concession, surveyed
- unsurveyed
- Parcel, surveyed
- unsurveyed
- Right-of-way, road
- railway
- utility
- Reservation
- Chf. Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway, single track
- double track
- abandoned
- Road, highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

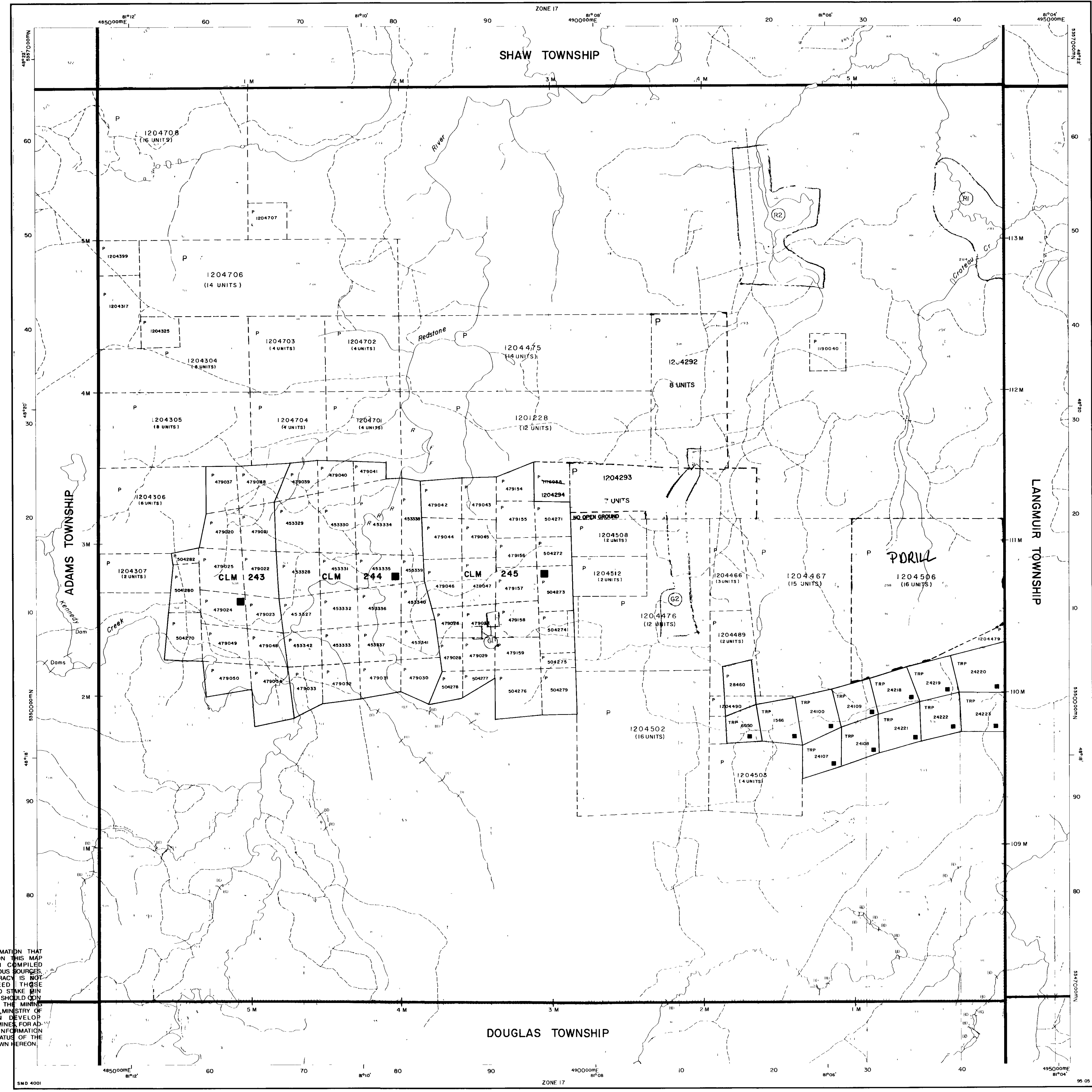
DISPOSITION OF CROWN LANDS

- Patent
 - Surface & Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Lease
 - Surface & Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Licence of Occupation
- Order-in-Council
- Cancelled
- Reservation
- Sand & Gravel

ACTIVATED JULY 11, 1995 BY

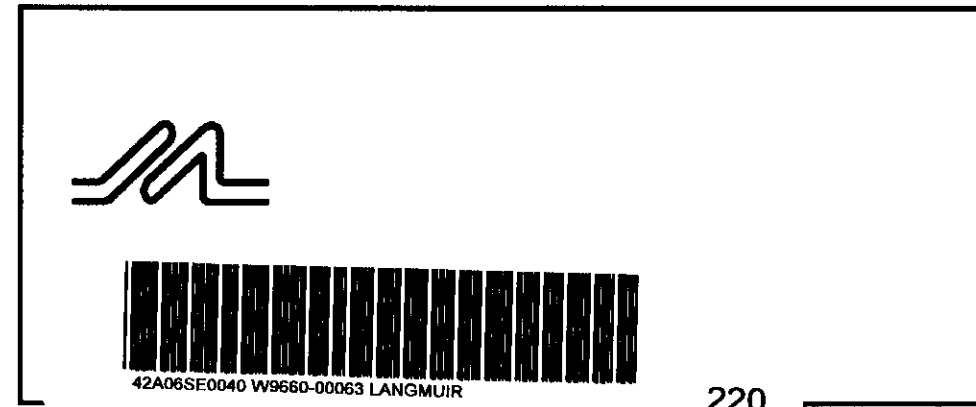
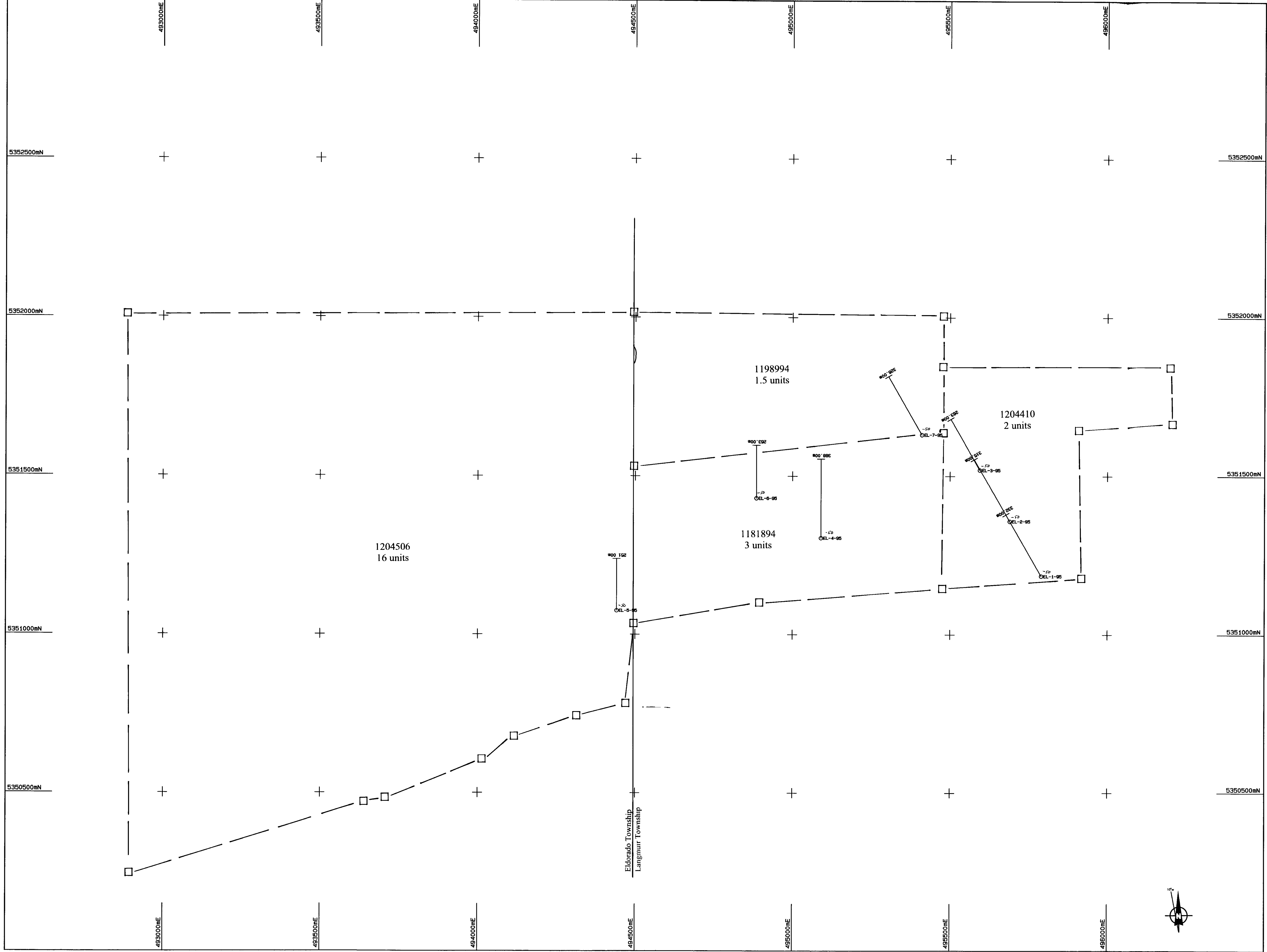

 Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only

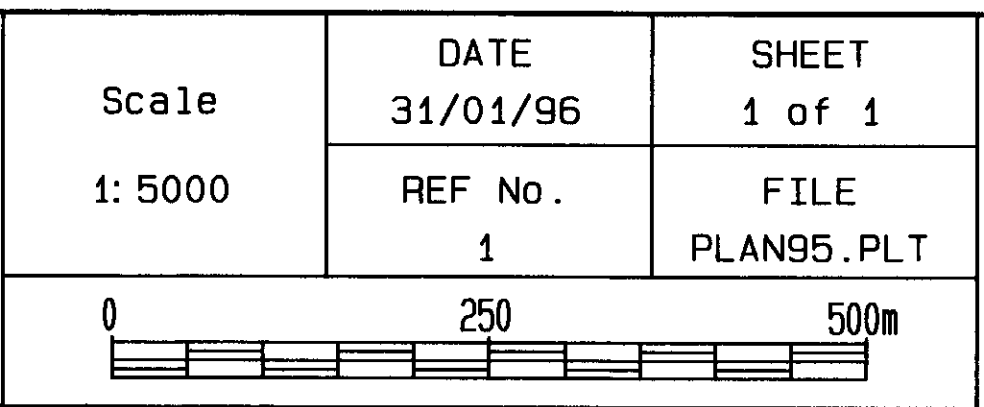


THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STRIKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.



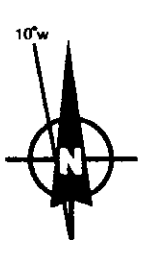


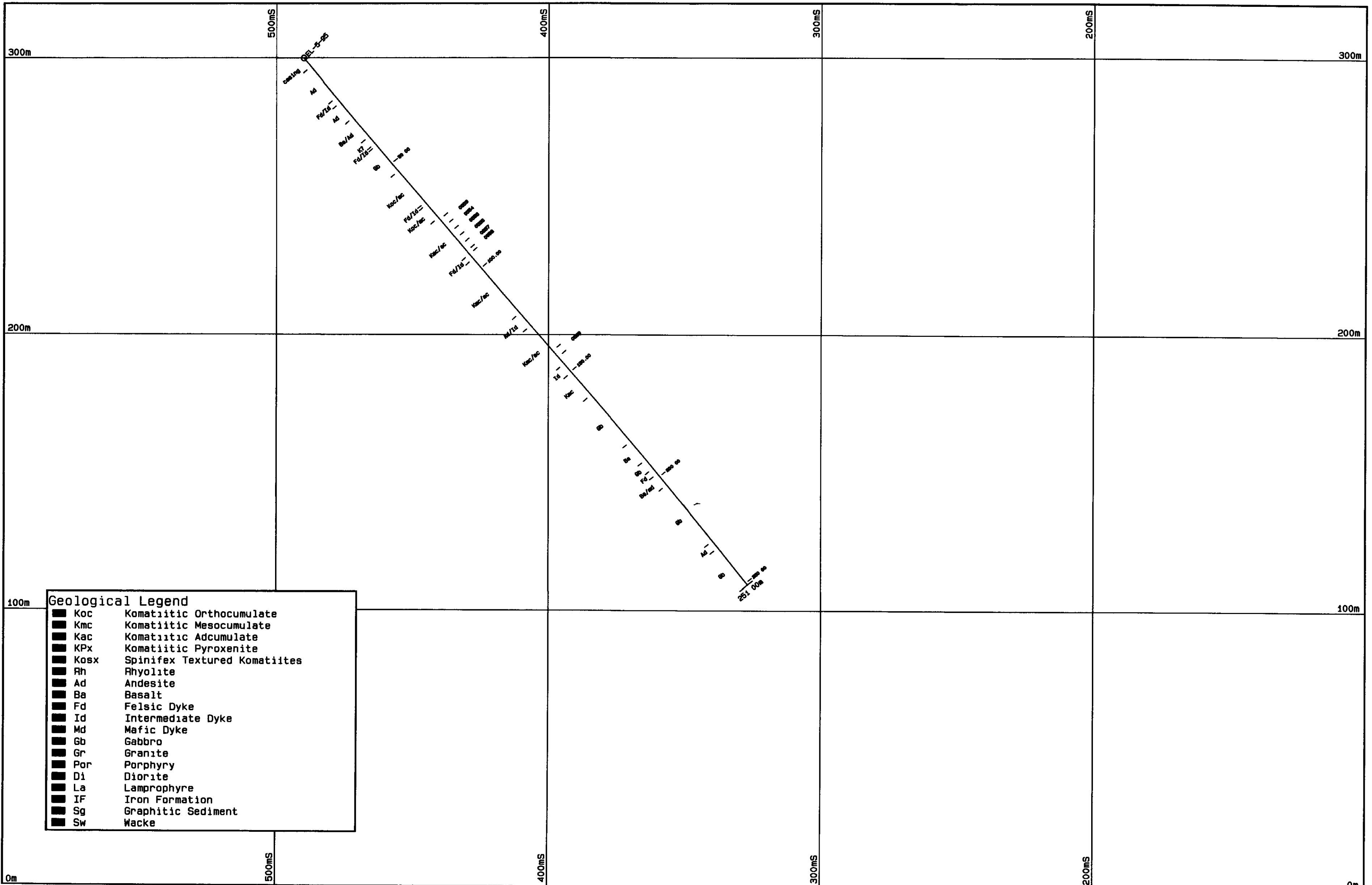
Scale	DATE	SHEET
1: 5000	31/01/96	1 of 1
	REF No.	FILE
	1	PLAN95.PLT



Diamond Drill Hole Plan Map

Outokumpu Mines Ltd.
Eldorado-Langmuir Project
Eldorado and Langmuir Townships





Geological Legend

■	Koc	Komatiitic Orthocumulate
■	Kmc	Komatiitic Mesocumulate
■	Kac	Komatiitic Adcumulate
■	KPx	Komatiitic Pyroxenite
■	Kosx	Spinifex Textured Komatiites
■	Rh	Rhyolite
■	Ad	Andesite
■	Ba	Basalt
■	Fd	Felsic Dyke
■	Id	Intermediate Dyke
■	Md	Mafic Dyke
■	Gb	Gabbro
■	Gr	Granite
■	Por	Porphyry
■	Di	Diorite
■	La	Lamprophyre
■	IF	Iron Formation
■	Sg	Graphitic Sediment
■	Sw	Wacke

NOTES:
 EL-5-95
 Azimuth: 000; Dip: -50
 Claim Numbers
 1204506

Scale 1: 1000	DATE 31/01/96	SHEET 1 of 1
	REF No. 1	FILE OMIPEL5.PLT

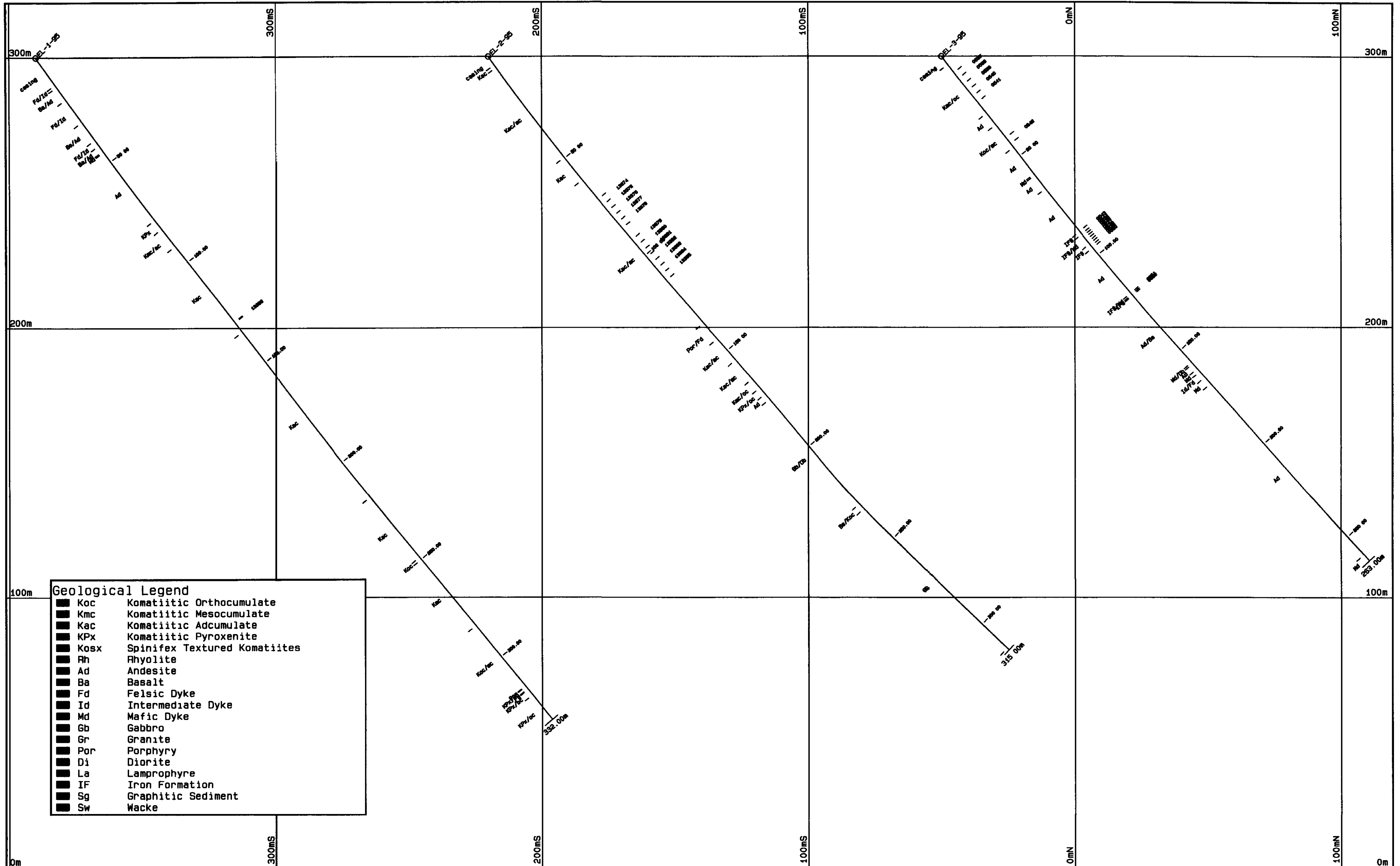


Diamond Drill Hole
 Section 50W

Outokumpu Mines Ltd.
 Eldorado-Langmuir Project
 Eldorado Township



42A06SE0040 W9660-0063 LANGMUIR



Geological Legend

■	Koc	Komatiitic Orthocumulate
■	Kmc	Komatiitic Mesocumulate
■	Kac	Komatiitic Adcumulate
■	KPX	Komatiitic Pyroxenite
■	Kosx	Spinifex Textured Komatiites
■	Rh	Rhyolite
■	Ad	Andesite
■	Ba	Basalt
■	Fd	Felsic Dyke
■	Id	Intermediate Dyke
■	Md	Mafic Dyke
■	Gb	Gabbro
■	Gr	Granite
■	Por	Porphyry
■	Di	Diorite
■	La	Lamprophyre
■	IF	Iron Formation
■	Sg	Graphitic Sediment
■	Sw	Wacke

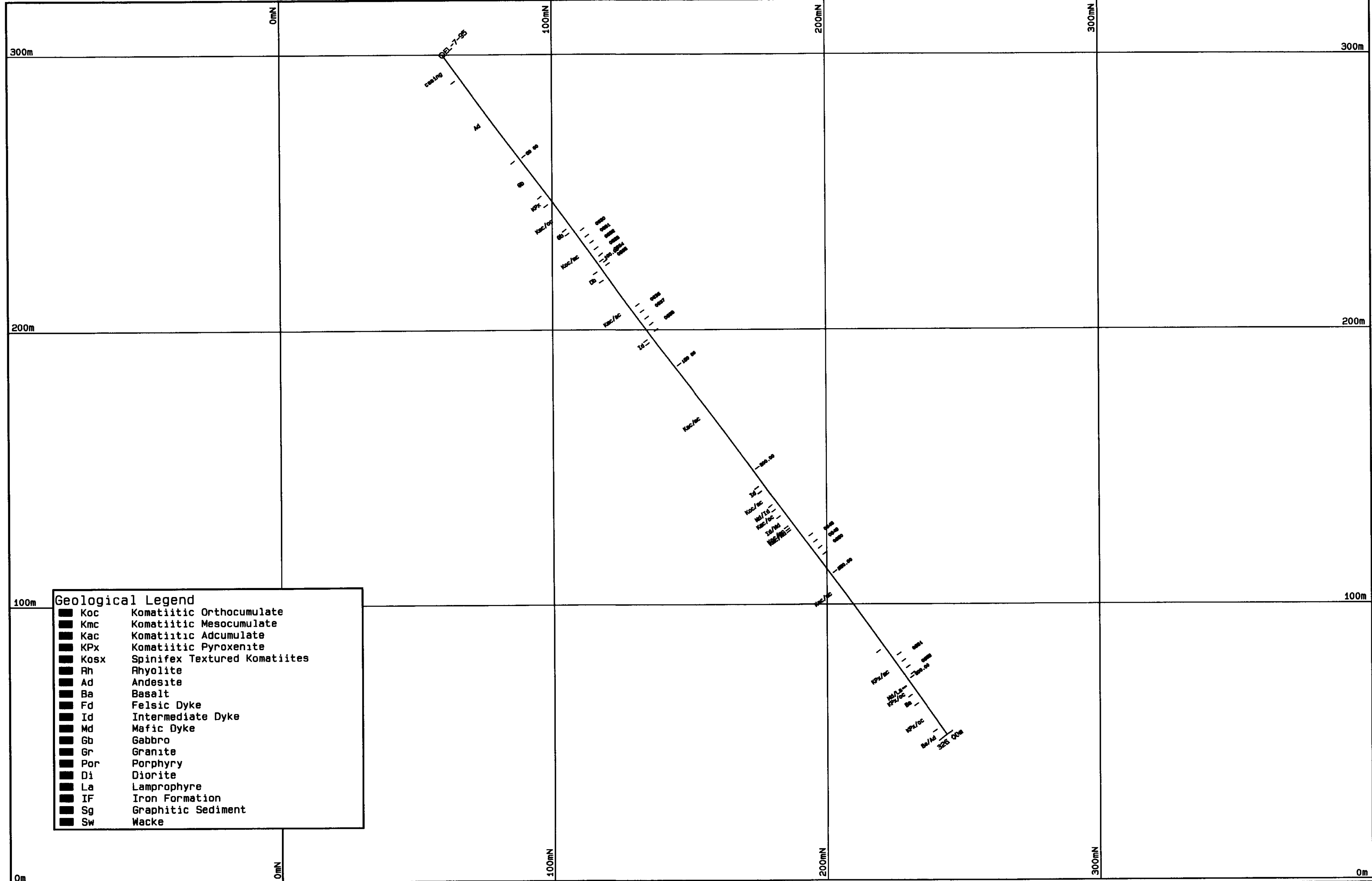
NOTES :
 EL-1-95
 Azimuth: 330; Dip: -50
 EL-2-95
 Azimuth: 330; Dip: -50
 EL-3-95
 Azimuth: 330; Dip: -50
 sim Numbers 1204410

Scale 1: 1000	DATE 31/01/96	SHEET 1 of 1
	REF No. 1	FILE OMIPE123.PLT

Diamond Drill Hole
 Section 1200E

Outokumpu Mines Ltd.
 Eldorado-Langmuir Project
 Langmuir Township



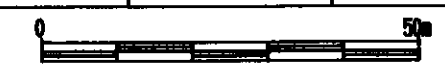


Geological Legend

■	Koc	Komatiitic Orthocumulate
■	Kmc	Komatiitic Mesocumulate
■	Kac	Komatiitic Adcumulate
■	KPx	Komatiitic Pyroxenite
■	Kosx	Spinifex Textured Komatiites
■	Rh	Rhyolite
■	Ad	Andesite
■	Ba	Basalt
■	Fd	Felsic Dyke
■	Id	Intermediate Dyke
■	Md	Mafic Dyke
■	Gb	Gabbro
■	Gr	Granite
■	Por	Porphyry
■	Di	Diorite
■	La	Lamprophyre
■	IF	Iron Formation
■	Sg	Graphitic Sediment
■	Sw	Wacke

NOTES :
 EL-7-95
 Azimuth: 330; Dip: -50
 Claim Numbers:
 1188884

Scale 1: 1000	DATE 31/01/96	SHEET 1 of 1
	REF No. 1	FILE OMIPEL7.PLT

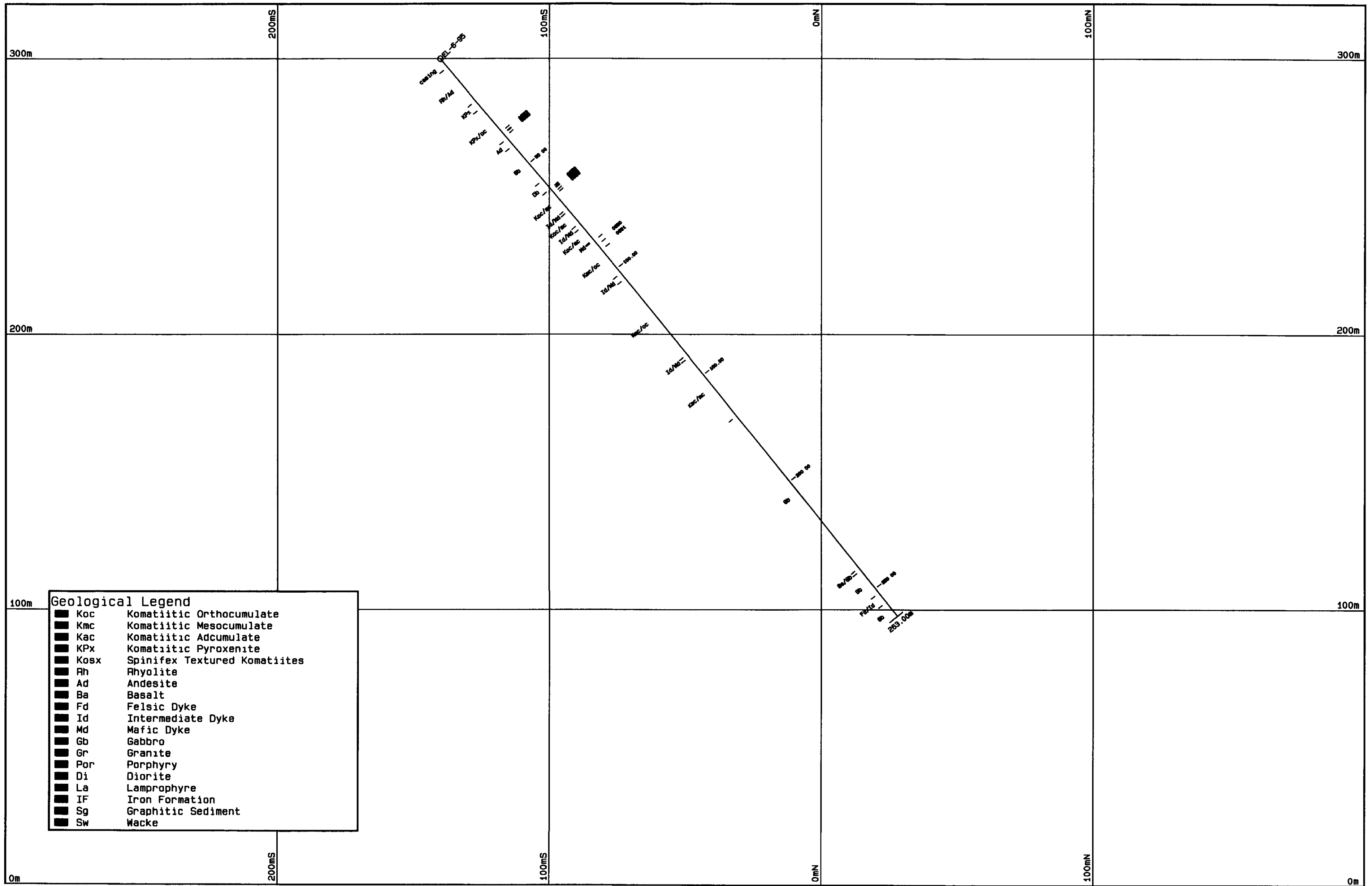


Diamond Drill Hole
 Section 900E

Outokumpu Mines Ltd.
 Eldorado-Langmuir Project
 Langmuir Township

Paul





Geological Legend	
■	Koc Komatiitic Orthocumulate
■	Kmc Komatiitic Mesocumulate
■	Kac Komatiitic Adcumulate
■	KPx Komatiitic Pyroxenite
■	Kosx Spinifex Textured Komatiites
■	Rh Rhyolite
■	Ad Andesite
■	Ba Basalt
■	Fd Felsic Dyke
■	Id Intermediate Dyke
■	Md Mafic Dyke
■	Gb Gabbro
■	Gr Granite
■	Por Porphyry
■	Di Diorite
■	La Lamprophyre
■	IF Iron Formation
■	Sg Graphitic Sediment
■	Sw Wacke

NOTES :
 EL-6-96
 Azimuth: 000; Dip: -50
 Claim Numbers:
 1181894, 1198904

Scale 1: 1000	DATE 31/01/96	SHEET 1 of 1
	REF No. 1	FILE OMIPEL6.PLT

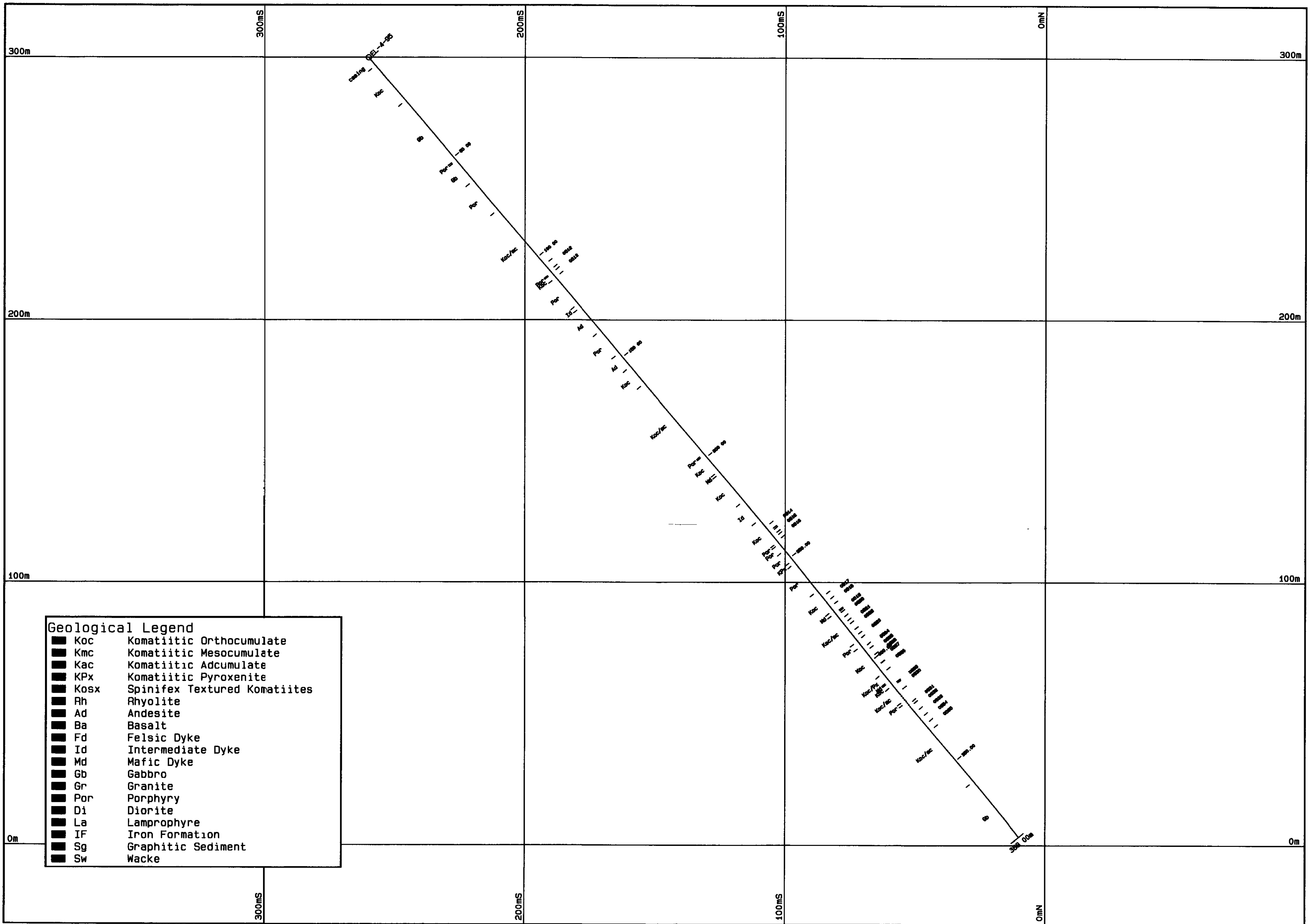


Diamond Drill Hole
 Section 400E

Outokumpu Mines Ltd.
 Eldorado-Langmuir Project
 Langmuir Township



Paul



Geological Legend

■	Koc	Komatiitic Orthocumulate
■	Kmc	Komatiitic Mesocumulate
■	Kac	Komatiitic Adcumulate
■	KPx	Komatiitic Pyroxenite
■	Kosx	Spinifex Textured Komatiites
■	Rh	Rhyolite
■	Ad	Andesite
■	Ba	Basalt
■	Fd	Felsic Dyke
■	Id	Intermediate Dyke
■	Md	Mafic Dyke
■	Gb	Gabbro
■	Gr	Granite
■	Por	Porphyry
■	Di	Diorite
■	La	Lamprophyre
■	IF	Iron Formation
■	Sg	Graphitic Sediment
■	Sw	Wacke

NOTES:
 EL-4-96
 Azimuth: 000; Dip: -50
 Claim Numbers:
 1181894

Scale 1: 1000
 DATE 31/01/96
 SHEET 1 of 1
 REF No. 1
 FILE OMIPEL4.PLT

Diamond Drill Hole
 Section 600E

Outokumpu Mines Ltd.
 Eldorado-Langmuir Project
 Langmuir Township



Paul