

92914

OCT 22 2 1980

92914  
92915

REPORT ON  
DIAMOND DRILL PROGRAM ON LOTUS PROSPECT  
ESSO RESOURCES CANADA LTD.  
R.S. HALL  
OCTOBER 20, 1980

TABLE OF CONTENTS

	Page No.
A      Summary and Recommendations	1
B      Introduction	2
C      Geology	3
D      Drill Results	5
E      Tonnage and Grade	6
F      Conclusions	8
G      Cost breakdown and timetable	11
H      Supervisor and author	12

Appendix I   Diamond Drill Logs

Illustrations	Page
TABLE 1 Results of Re-assay of split core MAP 1 English Brook Region - property plan and vein locations	in pocket
MAP 2 Surface plan - Lotus prospect	in pocket
MAP 3 Plan of 100 foot level of vein	in pocket
4 Longitudinal section - assay values (uncut)	in pocket
5 Longitudinal section - vein and shear zone widths	in pocket
6 Longitudinal section - assay-foot values	in pocket
7 Diamond drill sections 2+10 NW (LO-22) 1+00 NW (LO-20) 1+35 NW (LO-19) 0+90 NW (LO-18) 0+45 NW (LO-17) 0+15 NW (LO-2 and LO-3) 0+00 (LO-1 and LO - 14) 0+15 SE (LO-16) 0+30 SE (LO-12 and LO -13) 0+45 SE (LO-10 and LO -11) 0+60 SE (LO-8 and LO - 9) 0+75 SE (LO-4 and LO - 5) 0+90 SE (LO-6 and LO - 7) 1+50 SE (LO-21)	in pocket

LOTUS PROSPECT

A. Summary and Recommendations

The Lotus prospect is a gold bearing quartz vein system located in northeastern Manitoba. The prospect was channel sampled in the spring of 1979.

The drilling indicates the presence of at least four gold bearing "shoots" along the 1200 ft. (365 metres) strike length of the vein system. These shoots are up to 150 feet (46m) long, appear to pitch steeply NE, and two have been tested to a depth of 130 feet, (40m). The average uncut grade of these shoots is approximately 0.60oz Au/Ton (approximately 0.20oz Au/Ton cut). The vein system is truncated to the northwest and southeast by major east-west striking shear zones severely limiting tonnage potential.

No further work is recommended at this time but the property should be retained until Esso Minerals Canada has finished working in the district. It may prove profitable to ship ore from the property if a mill were set up nearby. A small company might also be able to mine this property profitably as a small scale operation, thus it would be beneficial to deal the property out.

B INTRODUCTION

The Lotus prospect is located approximately 95 miles northeast of Winnipeg, Manitoba and 8 miles east of Manigotagan, Manitoba. The property was relocated by prospectors in the summer of 1978, and, after examination of the old trenches, the property was staked for Esso Minerals Canada (CB 8344).

A preliminary channel sampling and mapping program was conducted during the fall of 1978, and was followed up by a more extensive sampling program in June, 1979. The channel sampling results gave an average of 0.29oz Au/ton in three exposed zones over a projected strike length of 900 feet. These results were sufficiently encouraging to warrant drilling to test continuity of mineralization along strike and at depth.

A total of 22 holes have been drilled on this property for a total of 3850 feet.

C GEOLOGY

The diamond drilling in conjunction with detailed surface mapping indicates the shear zone and quartz vein system contains single shear zone up to 21.0 feet in width which contains a gold bearing quartz vein up to 6 feet in width. The shear zone is a highly carbonated chlorite schist which grades out into the relatively unsheared quartz-hornblende gneiss countryrock and dips 43-65° to the northeast. The shear zone also contains zones of silicification which are usually adjacent of the quartz vein. There is a minor amount of disseminated pyrite in the shear, along with trace chalcopyrite, pyrrhotite and magnetite.

The gold is found in association with tellurides along fine fractures in the milky white quartz vein. This vein has an average width of 1.5 feet (46cm) but widens to 6.0 feet (1.8m) in the Wow shoot, and the grade of mineralization generally appears to be directly related to the width of the quartz vein. The gold occurs as fine flakes and needles of visible gold in the telluride-bearing fractures. The telluride minerals themselves, however, have a very low gold content.

An examination of polished sections of the ore shows the gold occurs as discrete fine grains within both the quartz and the telluride minerals adjacent to the fracture, and the gold mineralization itself postdates in the quartz veining.

There are many other smaller vein systems in the immediate vicinity of the Lotus vein, but are at differing attitudes, and have generally a low gold content. Two narrow (1-3") quartz veins to the west of the Lotus were located during mapping, and both contain visible gold and tellurides (one assayed 0.59 oz across 2"). This indicates that the Lotus vein is not a unique feature and further work will undoubtedly reveal more vein systems in the same area.

A narrow (8") telluride-bearing quartz vein was intersected in LO-20 ( 0.02oz Au/Ton over 1.0 feet). This vein system occurs at the margin of a major east-west striking shear zone immediately north of the Lotus vein. This lineament has a strike length in excess of 4000 feet and will be extensively prospected in the next field season.

D DRILL RESULTS

The drilling program has indicated the presence of four shoots of gold mineralization which occur at warps in the shear zone. These zones have been labeled the Southeast zone, the Wow shoot; the Main shoot; and the northwest zone. (Figure 1 & Table 1).

The southeast zone does not outcrop and occurs immediately north of the southerly east-west shear zone. It was intersected in hole LO-21 and contained abundant fine visible gold (3.51oz Au/Ton across 2.5 feet). The length of the zone is unknown but limited to less than 200 feet.

The Wow zone has a length of at least 60 feet and has been tested to a depth of 120 feet, with an uncut average grade of 0.50oz Au/Ton.

The MAIN zone has a length of 80 feet and has been tested to a depth of 90 feet. This zone has an average uncut grade of 0.64oz Au/Ton.

The northwest zone has a length in excess of 70 feet with an average grade of about 0.27oz Au/Ton, and is cut-off to the north by the east-west striking shear zone. There is a minor amount of molybdenite adjacent to the mineralized vein system.

All the shoots appear to be subparallel, plunging to the north-east at 65° in the plane of the vein.

The zone between the Wow and MAIN zones also contains gold mineralization, but has an average grade of only 0.08oz Au along a 180 foot length (uncut).

#### E TONNAGE AND GRADE

There is always a problem sampling and analyzing material containing discrete grains of visible gold, due to the fact that one or two 1X1mm flakes of gold on a 1 foot section of drill core will make the difference between ore and non-ore. If the gold does not become uniformly distributed when the sample is pulverized, assaying problems result. Because of this, certain core samples known to contain a small amount of visible gold have had extremely low assays. The other half of the split core has been reassayed for selected samples, and there is a significant difference in values for some of the samples. This improves the overall grade of the vein somewhat but the prospect still remains subeconomic.

There are many possible ways to calculate the grade of a gold-vein system, the variability due to the erratic nature of gold mineralization. In many mining camps, assay results in drill holes are "cut" to some lower value, due to the fact they have found the gold recovered is somewhat less than indicated by the actual drill results.

Similarly, when calculating tonnage and grade of a gold deposit, it is dangerous to extrapolate over any great distance between adjacent holes.

The tonnage and grades quoted are all based on uncut assay results except L0-21 which has been cut to 1.0 oz since it was a highgrade intersection without any adjacent drill information.

#### TONNAGE AND GRADE CALCULATIONS

CASE 1 Ore Shoots ( Southeast Wow, Main and Northwest) 18,900 tons  
@ 0.602 oz Au/Ton

CASE 2 South Zone (0+30NW to 1+60SE: Main Shoot to south shear zone)  
Weighted Calculation (to depth of 220')  
53,000 tons @ 0.224 oz Au/Ton

CASE 3 South Zone and NW Zone (0+30NW to 1+60SE plus 1+20NW to 2+10NW)  
Weighted Calculation (to depth of 220')  
71,500 tons @ 0.190 oz Au/Ton.

**CONCLUSIONS**

The drill results indicates an inferred tonnage of 71,500 tons of ore averaging 0.19 oz Au/Ton over a total strike length of 930 feet. The shoots alone average 0.60 oz Au/Ton for a total of 18,900 tons.

The final two holes drilled in 1979 have outlined the limits of the vein system with the shear zones on both boundaries.

Respectfully submitted,



Randy Hall  
October 20, 1980

FIGURE 1  
DIAMOND DRILL PLAN  
LOTUS VEIN SYSTEM

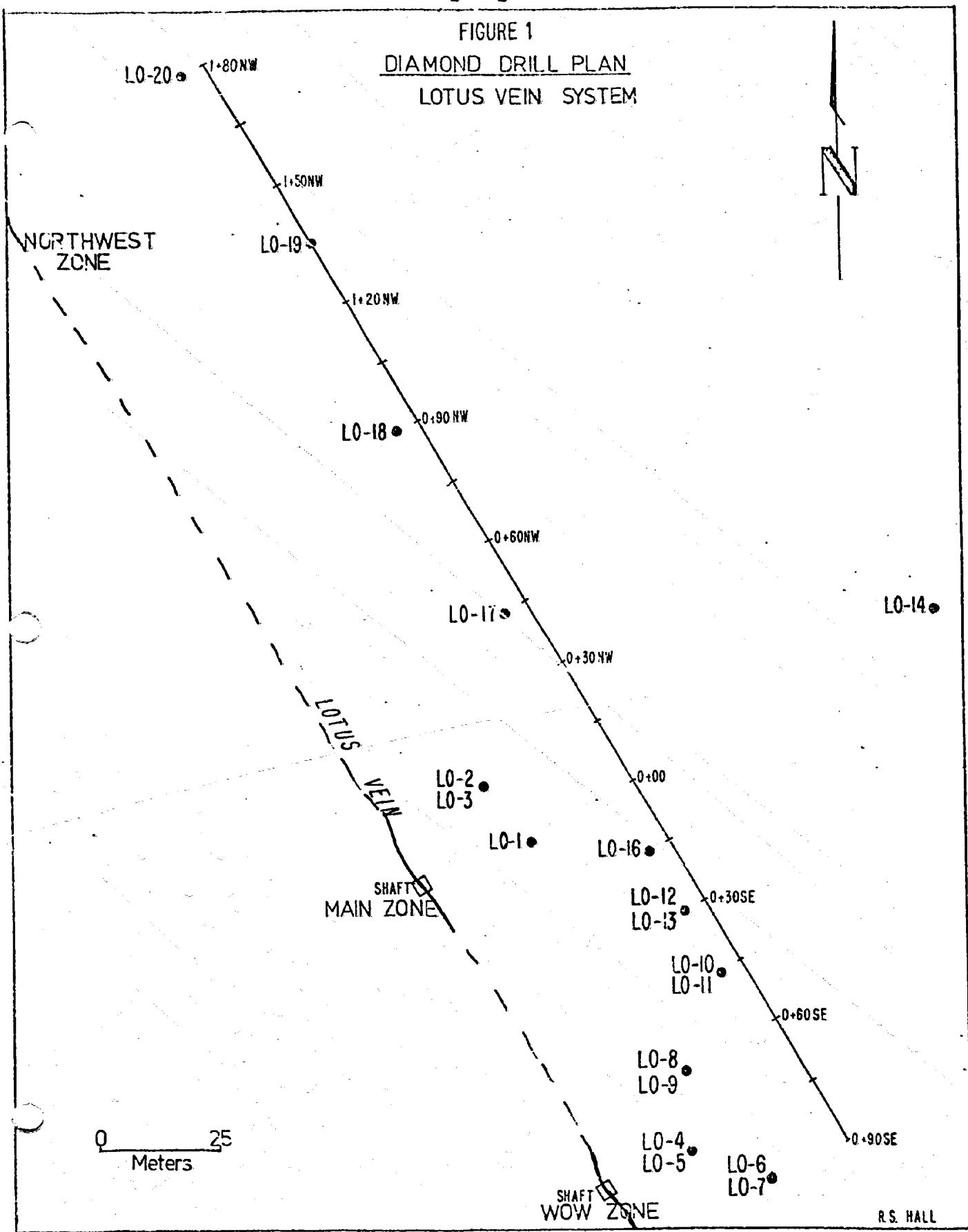


TABLE 1

	Diamond Drill Results Original Sample		Resample		Average across 1.52m(5.0ft)		Averag. (UNCUT)
	Assay (ozAu/T)	Width (ft)	Assay (ozAu/T)	Width (ft)	Original	Uncut Resample	
LO-1	7.51	1.0	-	-	1.52	-	1.52
LO-2	0.46	2.0	1.15	1.5	0.19	0.35	0.27
LO-3	0.11	0.8	0.005	1.5	0.03	0.001	0.02
LO-4	5.25	1.1	-	-	1.24	-	1.24
LO-5	0.29	1.1	0.37	2.8	0.07	0.21	0.14
LO-6	0.24	1.0	-	-	0.08	-	0.08
LO-7	0.01	1.0	0.015	2.0	.002	0.003	0.003
LO-8	0.26	2.0	-	-	0.11	-	0.11
LO-9	1.36	1.0	-	-	0.27	-	0.27
LO-10	0.45	0.7	0.31	1.7	0.07	0.11	0.09
LO-11	0.89	1.0	-	-	0.20	-	0.20
LO-12	0.36	1.1	0.27	2.1	0.08	0.11	0.095
LO-13	0.005	1.3	0.005	1.3	0.001	0.001	0.001
LO-14	0.26	0.7	0.32	0.7	0.04	0.05	0.045
LO-15	0.005	0.5	-	-	0.001	-	0.001
LO-16	0.41	0.8	-	-	0.07	-	0.07
LO-17	0.01	1.0	-	-	0.002	-	0.002
LO-18	0.002	1.0	0.002	1.2	0.001	0.001	0.001
LO-19	0.29	1.1	0.24	1.1	0.06	0.05	0.055
LO-20	0.04	0.9	0.19	1.9	0.02	0.07	0.045
LO-21	3.51	2.5	-	-	1.76	-	1.76

G Cost breakdown

Lotus drill program

Line cutting	\$ 2200.00
Geology	450.00
Transportation	700.00
Diamond Drilling (and assaying)	82,775.00
Supervision	8,000.00
	<hr/>
	\$94,125.00

Timetable

Linecutting July 4-5 September 5-10, 1979  
Diamond drilling August 15 - September 30, 1979  
October 29 - November 6, 1979

H Report written and worked supervised by

Randy S. Hall  
Project Geologist  
Esso Minerals Canada  
P.O. Box 4029 Terminal 'A'  
Toronto, Ontario  
M5W 1K3

HPESc (Geology) Lakehead University 1978  
Project Geologist, Esso Minerals Canada March 1979

**APPENDIX I**

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ... LOTUS ..... LOCATION .....  
NTS CODE ... 62P-1 ..... HOLE NO. ... Lo-1 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -45°	STARTED .....
ELEVATION .....	CORE ..... AQ .....	COMPLETED .....
SECTION .....		LOGGED BY R. Hell
REF. GRID .....		

CIP TESTS

HOLE NO. 40-1 .....  
PAGE ..... 1 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Avg(1)	Avg(2)	
0.0	1.22	CASING							
1.22	5.52	Qtz - hornblende - Kspar gneiss minor Qtz. stringers - 3mm sugary Qtz. trace cpy in fine Qtz. veins. gneissosity at 23° to c/a							
5.52	6.43	Qtz - hornblende - white - Kspar gneiss - finely diss. pyrrhotite - Qtz. conc. along gneissosity, not wavy - minor shearing							
6.43	6.46	Sugary Qtz vein and minor shearing in gneiss - fine vein of calcopyrite and pyrrhotite along fracture.	3585	5.94	6.25	0.31	n/i		
6.46	7.01	Qtz - hornblende gneiss, numerous fine Qtz. veinlets - highly fractured to Qtz along fractures - finely disseminated pyrrhotite throughout - veins ~30° to core axis	3586	6.46	6.77	0.31	.002		
			3587	6.77	7.01	0.24	n/i		
7.01	7.60	- Qtz. vein - white zoned Qtz. - Alternate white and smoky cherty Qtz. - Abundant platy pyrite along fractures - minor tellurides - vein @ 15° to c/a - fracture in vein II to c/a	3588	7.01	7.32	0.31	n/i		
			3589	7.32	7.68	0.36	n/i	.01	
7.60	8.94	- Gneiss - hornblende - Qtz gneiss - fine grained, sheared? - fine Qtz grains - disseminated pyrrhotite throughout	3590	7.60	7.99	0.31	n/i		
			3591	7.99	8.29	0.30	n/i		
			3592	8.29	8.60	0.31	n/i		
8.94	10.30	Qtz - feldspar hornblende gneiss - good gneissosity of hornblende and feldspar - layering - few narrow fractures of fine sugary Qtz + trace pyrite - gneissosity @ 19° to c/a							

HOLE NO. 40.1.....  
PAGE .....1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH	A <sub>x</sub> (mm)	A <sub>y</sub> (mm)	AVERAGES
0.0	1.22	CASING							
1.22	5.52	Qtz - hornblende - Kyanite gneiss minor gts. stringers - 3mm sugary Qtz. trace cpy in fine gts. veins. gneissosity at 23° to c/a							
5.52	6.43	Qtz - hornblende - biotite - Kyanite gneiss - finely disse. pyrrhotite - Qtz - conc. along gneissosity, not sugary - minor shearing							
6.43	6.46	Sugary Qtz vein and minor shearing in gneiss - fine vein of calcopyrite and pyrrhotite along fracture.	3585	5.94	6.25	0.31	n/i		
6.46	7.01	Qtz - hornblende gneiss, numerous fine Qtz. veinlets - highly fractured to Qtz along fractures - finely disseminated pyrrhotite throughout - veins ~ 3° to core axis	3586	6.46	6.77	0.31	.002		
7.01	7.60	- Qtz. vein - white zoned Qtz. - Alternate white and smoky cherty Qtz. - Abundant platy pyrite along fractures - minor tellurides - vein @ 15° to c/a - fracture in vein II to c/a	3588	7.01	7.32	0.31	n/i		
7.60	8.94	- Gneiss - hornblende - Qtz gneiss - fine grained, sheared? - fine Qtz grains - disseminated pyrrhotite throughout	3589	7.32	7.68	0.36	n/i	.01	
8.94	10.30	Qtz - feldspar hornblende gneiss - good gneissosity of hornblende and feldspar. - layering - few narrow fractures of fine sugary Qtz + trace pyrite - gneissosity @ 19° to c/a	3590	7.68	7.99	0.31	n/i		
			3591	7.99	8.29	0.30	n/i		
			3592	8.29	8.60	0.31	n/i		

HOLE NO. H-1  
PAGE 2

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Avg(ths)		
10.30	10.36	Qtz feldspar - hornblende gneiss, abundant qtz -not true veining -trace pyrrhotite							
10.36	13.66	Qtz feldspar - hornblende gneiss -med-grained -very minor sugary qtz veining ~ 12° to c/a							
13.66	14.94	Qtz hornblende feldspar gneiss -sheared feldspars appear to be stretched and oriented to ~ 30° to c/a -Very f.gr. hornblende mxt. -numerous sugary qtz veinlets 2mm-4mm wide at various angles to c/a -“bleached” appearance to feldspars (saponitized) -poor developed gneissosity							
14.94	17.53	Hornblende qtz feldspar gneiss -lesser am't of feldspar and more qtz. -minor sugary qtz veining (1mm-3mm) -gneissosity 27° to c/a -trace pyrrhotite in fractures							
17.53	17.98	Sheared matic gneiss - fine grained highly foliated and abundant fine qtz stringers + blebs -very minor pyrite along fractures -foliated @ 69° to qtz	3593	17.53	17.83	0.30	nil		
17.98	18.14	-Qtz vein and series of qtz stringers in foliated gneiss -erratic qtz lenses and veins -trace pyrite -trace telluride in qtz.	3594	17.93	18.14	0.31	.005		
18.14	18.35	-Sheared gneiss - numerous qtz stringers and lenses -Foliated @ 73° to c/a -trace pyrite	3595	18.14	18.35	0.21	nil		

HOLE NO. 401 .....  
PAGE 3

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH	$P_{U_{(ppm)}}$	$P_{Ag_{(ppm)}}$	AVERAGES $(\frac{ppm}{5m})$
18.35	20.94	Hornblende gtr. feldspar gneiss - mafic gneiss - poor developed gneissosity - minor gtr. staining and trace pyrite - foliated at 320 to c/a							
20.94	21.52	- Sheared mafic gneiss - numerous lenses and stringers of sugary gtr. throughout - trace pyrite and Kspar @ 60-80° to c/a	3596	20.94	21.24	0.30	n/i		
			3597	21.24	21.52	0.28	n/i		
21.52	21.67	Highly sheared mafic gneiss - Feldspars saussaritized and abundant gtr. - minor hematitic staining and trace pyrite @ 62° to c/a	3598	21.52	21.67	0.15	.002		
21.67	21.95	Sheared mafic gneiss - Abundant fine sugary gtr. veins and lenses - trace pyrite	3599	21.67	21.95	0.28	.002		
21.95	22.19	Quartz - fine grained mottled gtr. with abundant vein gold and telluride in clots throughout	3600	21.95	22.25	0.30	7.51	0.22	1.52
22.19	22.62	Qtr. - fine grained white, fairly dissemin. tellurides	3601	22.25	22.56	0.31	0.03	0.02	
22.62	22.68	Sheared gneiss, highly foliated of abundant gtr. lenses and veinlets @ 58° to c/a - abundant platy pyrite along fractures.	3602	22.56	22.77	0.21	0.04	0.02	
22.68	22.92	Qtr. Kspar veins - Zoned vein Kspar - qtr. - Kspar. with minor tellurides and trace pyrite - Kspar zone @ 73° to c/a (ll to contact of wallrock)	3603	22.77	22.92	0.15	0.04	0.01	
22.92	23.20	Sheared mafic gneiss - sheared zone - olive green discolouration - abundant fine sugary gtr. stringers throughout with trace pyrite @ 80° to c/a	3604	22.92	23.20	0.28	n/i		

HOLE NO. LO-1 .....  
PAGE ..... 4 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	AU (oz/ton)		
23.20	23.77	Sheared mafic gneiss - foliated with numerous fine qtz. stringers and lenses @ 60-75° to c/a - trace pyrophyllite	3605	23.20	23.47	0.27	nil		
			3606	23.47	23.77	0.30	.005		
23.77	24.48	Qtz. hornblende gneiss - minor gneissosity @ 20° to c/a							
24.48	24.66	Sheared gneiss - qtz feldspar hornblende - 7mm wide sugary qtz vein with hematite staining and trace pyrite @ 45° to c/a	3607	24.48	24.66	0.18	nil		
24.66	26.55	Qtz hornblende gneiss with minor qtz. lenses - glassy white qtz - erratic orientation.							
26.55	29.54	Qtz - feldspar - hornblende - gneiss - minor hematite staining of feldspars - minor fracturing - narrow qtz stringers and minor hematitic staining of wallrock - gneissosity @ 30° to c/a							
29.54	30.11	Fractured gneiss, minor Fe staining - qtz feldspar hornblende gneiss - carbonate vein @ 30° to c/a							
30.11	30.51	Qtz. hornblende gneiss							
30.51	30.69	Sheared gneiss - chlorite qtz. rich zone in gneiss - trace pyrite along fracture surface - shear @ 50° to c/a	3608	30.51	30.69	0.18	nil		
30.69	30.91	Qtz feldspar hornblende gneiss							

HOLE NO. 10-1 .....  
PAGE 5 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au'			
30.91	31.12	Sheared gneiss - qtz. hornblende with numerous narrow qtz. - carbonate veins and minor dissems. pyrite -vein @ 65° to c/a	3608	30.91	31.12	0.21	nil			
31.12	39.01	Qtz. hornblende gneiss - minor fracturing and fine qtz. veining -minor Fe staining along a few fractures -gneissosity @ 20° to c/a.								
		END OF HOLE								

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ... *Lotus* ..... LOCATION .....  
NTS CODE ... *62P-1* ..... HOLE NO. .... *Lo-2* .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -50° .....	STARTED .....
ELEVATION .....	CORE ..... AQ .....	COMPLETED .....
SECTION .....		LOGGED BY R.Hall
REF. GRID .....		

## DIP TESTS

HOLE NO. L.P.7.....  
PAGE 1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	$\Delta v$ (oz/in <sup>2</sup> )		
0.00	1.22	Casing							
1.22	3.47	Qtz-hornblende gneiss - & gneissosity @ 33° to 56° - variable grain size - fine to medium - trace pyrite and pyrrhotite							
3.47	3.63	Qtz-feldspar-hornblende gneiss - fracture zone - minor sericite and Fe staining	3610	3.47	3.63	0.16	nil		
3.63	5.30	Qtz-hornblende gneiss - & gneissosity @ 35° to 56°							
5.30	5.49	Qtz-hornblende gneiss - minor shearing of narrow quartz veining @ 35° to 56°							
5.49	5.85	Qtz-hornblende gneiss							
5.85	7.74	Qtz-hornblende gneiss with narrow fractures parallel to drill axis - qtz vein ~ 5mm with minor pyrite and trace chalcopyrite	3611	6.10	6.40	0.30	nil		
			3612	6.40	6.71	0.31	nil		
7.74	8.14	Gtz feldspar hornblende gneiss with shearing - minor disseminated pyrite and trace chalcopyrite and qtz veining	3613	7.74	8.08	0.34	nil		
8.14	10.70	Qtz-hornblende gneiss - minor gtz veining throughout - fractures @ 45° to 56°							
10.70	11.06	Qtz-feldspar-hornblende - numerous fractures throughout - minor Fe staining along fractures	3614	10.70	11.06	0.36	nil		
11.06	11.61	Qtz-hornblende gneiss							
11.61	11.80	Qtz-feldspar-hornblende gneiss							
11.80	12.01	Gtz-hornblende gneiss							
12.01	12.22	fracture in qtz-hornblende gneiss - chlorite-pyrite-chalcopyrite fracture @ 10° to 56°	3615	12.01	12.22	0.21	.002		
12.22	12.59	Qtz-feldspar-hornblende gneiss with minor fracturing and Fe staining along fractures							

HOLE NO. L-2 .....  
PAGE 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Av (oz/ton)		
12.59	14.32	hornblende gneiss - fine grained slate - hornblende possibly sheared and metamorphosed mafic gneiss with qtz stringers	3616	12.80	13.11	0.31	nil		
14.32	15.73	Qtz hornblende gneiss - poorly developed gneissosity							
15.73	16.73	sheared fine grained qtz-hornblende gneiss - chlorite with numerous fine qtz stringers - trace pyrite							
16.73	16.98	highly sheared qtz-hornblende gneiss - numerous qtz veinlets - abundant pyrite in veins - veins at 78° to 90°	3617	16.73	16.98	0.25	.002		
16.98	17.22	- shear zone - highly brecciated - chlorite, amphibole, qtz - highly silicified zone with qtz veins 5.08 cm wide with disseminated pyrite and trace - chalcopyrite - foliated at 79° to 90°	3618	16.98	17.22	0.24	.002		
17.22	18.56	- sheared qtz-hornblende gneiss - numerous fine qtz stringers - trace pyrite, chalcopyrite	3619	17.22	17.53	0.31	nil		
			3620	18.10	18.41	0.31	.005		
			3621	18.41	18.56	0.14	.002		
18.56	18.99	Qtz with abundant disseminated amphibole - fine qtz stringers - qtz has Fe staining	3622	18.56	18.99	0.43	nil		

HOLE NO. 40-2 .....  
PAGE 3 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES (cm)
FROM	TO		NO.	FROM	TO	WIDTH	D <sub>100</sub> (mm/km)		
18.99	21.37	Sheared qtz-hornblende gneiss -numerous fine qtz stringers thru disseminated pyrite and chalcopyrite	3623	19.66	19.96	0.30	nil		
			3624	19.96	20.27	0.31	nil		
			3625	20.27	20.57	0.30	nil		
			3626	20.57	20.88	0.31	nil		
			3627	20.88	21.18	0.30	nil		
			3628	21.18	21.37	0.19	nil		
21.37	21.46	-Highly sheared zone -qtz-hornblende - sericite -qtz has Fe staining	3629	21.37	21.46	0.09	.02		
21.46	22.37	White glassy qtz -fine tellurides along fractures -trace V.G. -minor sericite along fractures -22.28 - 22.34 -Heavy concentration of tellurides along fractures and V.G. throughout -fractures at 58° to G/A	3630	21.46	21.76	0.30	.02		
			3631	21.76	22.07	0.31	.24		
			3632	22.07	22.37	0.30	.68		0.19
22.37	22.71	Sheared hornblende-quartz gneiss -numerous fine qtz stringers	3633	22.37	22.71	0.34	.002		
22.71	23.26	Qtz vein and highly silicified wallrock -abundant pyrite on fractured surfaces throughout -qtz veins up to 12.7 cm wide, erratic -minor chalcopyrite -veining at 63° to G/A	3634	22.71	23.01	0.30	nil		
			3635	23.01	23.26	0.25	nil		
23.26	24.66	Highly sheared qtz - hornblende gneiss -fine qtz veinlets throughout -minor disseminated pyrite	3636	23.26	23.56	0.30	.005		
			3637	23.56	23.87	0.31	nil		
			3638	23.87	24.17	0.30	nil		
			3639	24.17	24.66	0.49	nil		

HOLE NO. 4:7 .....  
PAGE 4.....

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ..... Lotus ..... LOCATION .....  
NTS CODE ..... 62P-1 ..... HOLE NO. ..... LO-3 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -45° .....	STARTED .....
ELEVATION .....	CORE ..... AQ .....	COMPLETED .....
SECTION .....		LOGGED BY .....
REF. GRID .....		

## DIP TESTS

HOLE NO. LO-3 .....  
PAGE .....!

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	A	B	
0.00	0.91	Casing							
0.91	11.86	Qtz - hornblende gneiss - gneissosity @ 41° to c/a - minor fracturing throughout and Fe staining adjacent to fractures - few fractures    to c/a							
11.86	11.96	Qtz - feldspar hornblende gneiss - Iron staining of feldspar and minor fracturing @ 38° to c/a							
11.96	12.95	Qtz. hornblende gneiss							
12.95	13.11	Sheared qtz. - hornblende gneiss - more qtz veining @ 42° to c/a - minor pyrite and trace chalcopyrite							
13.11	19.62	Qtz. hornblende gneiss - Gneissosity @ 38° to c/a - Minor fracturing throughout with minor zones of iron stain adjacent to fractures - minor qtz. and qtz. carbonates in fractures							
19.62	19.11	Sheared qtz. hornblende feldspar gneiss - Fe staining of feldspars. Minor qtz. carbonate veining at 21° c/a. - trace pyrite.	3644 3645	18.62 18.81	18.81 19.11	0.19 0.30	nil nil		
19.11	19.42	Sheared qtz. hornblende gneiss - minor qtz veining at 65° to c/a	3646	19.11	19.42	0.31	nil		

HOLE NO. 40-3 .....  
PAGE ..... 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	BU (g/g)		
19.42	19.60	Qtz pyrite vein, sheared gneiss - erratic veining; abundant disseminated pyrite at 47° to c/a	3647	19.42	19.60	0.18	.03		
19.60	20.51	Sheared qtz. hornblende gneiss Q 50° to c/a - numerous qtz. lenses and stringers throughout. - finely disseminated pyrite	3648	19.60	19.90	0.30	nil		
			3649	19.90	20.21	0.31	nil		
			3650	20.21	20.51	0.30	nil		
20.51	20.70	Calcite qtz vein in sheared qtz hornblende gneiss - trace pyrite.	3651	20.51	20.70	0.19	nil		
20.70	20.88	Sheared qtz hornblende gneiss at 61° to c/a	3652	20.70	20.88	0.18	nil		
20.88	21.57	Qtz vein - mottled appearance w/ abundant disseminated hornblende - minor pyrite along fractures - vein 45° to c/a - minor iron staining	3653	20.88	21.12	0.24	nil		
			3654	21.12	21.37	0.25	nil		
21.37	21.67	Sheared qtz hornblende gneiss - minor qtz. lenses with trace pyrite.	3655	21.37	21.67	0.30	nil		
21.67	21.85	Sheared qtz hornblende gneiss in 15 cm white qtz vein. trace pyrite	3656	21.67	21.85	0.18	nil		
21.85	22.37	White qtz vein, minor sheared qtz hornblende gneiss. Main vein .35 m wide - minor pyrite along fractures - tellurites? - minor disseminated chalcopyrite	3657	21.85	22.16	0.31	nil		
			3658	22.16	22.37	0.21	nil		

HOLE NO. 40-3.....  
PAGE ....3.....

FOOTAGE		DESCRIPTION	CORE SAMPLES					
FROM	TO		NO.	FROM	TO	WIDTH	Au(alt)	AVERAGES
22.37	23.41	Sheared qtz. Hornblende gneiss -numerous qtz. veinlets and lenses -fine pyrite in quartz -shearing 64° to c/a	3659	22.37	22.68	0.31	.01	
			3660	22.68	22.98	0.30	.002	
			3661	22.98	23.41	0.43	.002	
23.41	24.57	Qtz vein -white milky qtz. w/ numerous fractures -fine veins of pyrite along fractures -vein gold and tellurides along fractures at 78.2' (23.84m) minor tellurides elsewhere -tellurides fracture at 52° to c/a -trace pyr at contact.	3662	23.41	23.71	0.30	.01	
			3663	23.71	24.02	0.31	.01	
			3664	24.02	24.32	0.30	.04	
			3665	24.32	24.57	0.25	.01	0.03
24.57	24.81	Qtz. - grey, black, cleary -iron staining present -minor pyrite disse. along fractures.	3666	24.57	24.81	0.24	.03	
24.81	25.27	Qtz - sugary, iron stained -minor and trace pyrite. -white qtz veinlets at 52° to c/a	3667	24.81	25.12	0.31	.002	
	25.27		3668	25.12	25.27	0.15	.002	
25.27	26.82	Gneiss - foliated and sheared -minor qtz throughout, minor carbonate throughout -minor dissociated pyrite throughout -veining and foliating @ 59° to c/a	3669	25.27	25.57	0.30	.002	
			3670	25.57	25.88	0.29	.01	
			3671	25.88	26.18	0.30	.002	
			3672	26.18	26.82	0.64	.01	
26.82	27.58	Qtz. hornblende gneiss.						
27.58	27.74	Qtz Kyanite vein cut by qtz veining -regular attitude.	3673	27.58	27.74	0.16	.01	
27.74	29.11	Qtz. hornblende gneiss.						

HOLE NO. LO-3.....  
PAGE ...4.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
29.11	29.16	Qtz veinlet 5 mm wide @ 25° to c/a -trace pyrite.							
29.16	35.05	Qtz hornblende gneiss -qtz vein @ 50° to c/a -10 mm dislocation along qtz vein fracture							
35.05	36.58	Qtz hornblende gneiss, minor fracturing throughout w/ chlorite and qtz. stringers.							
		END OF HOLE.							

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY . . . . . *Lotus* . . . . .

**LOCATION** \_\_\_\_\_

NTS CODE . . . . . 62P-1 . . . . .

HOLE NO. .... 48-4 .....

LATITUDE ..... AZIMUTH ..... PURPOSE .....

DEPARTURE ..... DIP ..... -45° ..... STARTED .....

ELEVATION ..... CORE ..... AQ ..... COMPLETED .....

LOGGED BY R.Kall.

BEE GBID: [XXXXXXXXXX](#)

## DIP TESTS

HOLE NO. LO-  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Aul/abs		
0.00	2.44	Casing							
2.44	4.62	Qtz. hornblende gneiss, poorly developed gneissosity, abundant fractures throughout							
4.62	4.85	Qtz. vein, sugary @ 53° to c/a							
4.85	7.68	Qtz. hornblende gneiss - numerous fractures with hornblende.							
7.68	7.71	Hornblende zone - trace pyrrhotite @ 24° to c/a.							
7.71	9.75	Qtz. hornblende gneiss - gneissosity @ 12° to c/a							
9.75	10.30	Qtz. hornblende gneiss w/ qtz. hornblende veins - veins @ 30° to c/a							
10.30	10.94	Hornblende gneiss f. gr., hornblende w/ numerous calcite veinlets along fractures - very minor disseminated subhedral pyrite.	3691	10.30	10.61	0.31	n/l		
10.94	11.12	Qtz. vein - glossy white qtz w/ clots and fractures full of amphibole veins @ 41° to c/a	3692	10.61	10.94	0.33	n/l		
11.12	13.26	Qtz. feldspar hornblende gneiss - good gneissosity, minor fracturing + fine qtz veinlets, gneissosity @ 29° to c/a	3693	10.94	11.12	0.18	n/l		
13.26	13.72	Qtz. hornblende gneiss, clots of qtz along gneissosity - Minor qtz veining (1 mm) w/ minor pyrrhotite and chalcocite. - Minor calcite @ 80° to c/a	3694	13.26	13.72	0.46	n/l		

HOLE NO. L.0. ....  
PAGE ... 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/lbm)		
13.72	17.98	QH G , numerous calcite veins (1-2 mm) throughout and minor qtz veining - abundant finely diss. po. and trace cpy. - greisosity @ 35° to c/a  - 16.34 shear zone - very narrow shear @ 53° to c/a - minor silicification and qtz. vein.	3695	14.94	15.24	0.30	.002		
			3696	15.24	15.54	0.30	nil		
			3697	15.54	16.15	0.61	.002		
			3698	16.15	16.50	0.35	nil		
17.98	18.23	GF H G w/ qtz along greisosity - minor finely disseminated pyrite. - few calcite stringers along fractures							
18.23	19.51	QH G , fine gr. and poorly developed greisosity, minor calcite veining (1-2 mm) throughout.							
19.51	19.63	QH G fractured, minor pyr and trace cpy in calcite. - Qtz. infilling of fractures - fractures @ 32-48° to c/a							
19.63	20.54	QH G w/ minor fine calcite veins at erratic angles to c/a - poorly developed foliations.							
20.54	20.88	QH G w/ minor shearing and a few erratic blue qtz veins and trace cpy - minor calcite veining.	3699	20.54	20.88	0.34	nil		
20.88	23.13	sheared QH G , f gr. and foliated 21.00 - qtz vein 10 mm wide, minor pyr. - finely diss pyr. in erratic qtz st. and lenses - trace cpy. - minor calcite throughout - foliate @ 70° to c/a	3700	20.88	21.18	0.30	.002		
			3701	21.18	21.49	0.31	nil		
			3702	21.49	21.79	0.30	nil		
			3703	21.79	22.04	0.25	.002		
			3674	22.04	22.34	0.30	.01		
			3675	22.34	22.65	0.31	.005		
			3676	22.65	22.95	0.30	.002		
			3677	22.95	23.13	0.18	.01		

HOLE NO. 40-2  
PAGE 3

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au(oz/t)	Ag(oz/t)	
23.13	23.44	sheared QHG with numerous fine qtz. lenses and stringers - minor vein gold in stringer @ 23.40	3678	23.13	23.44	0.31	.42	.06	
23.44	23.77	Qtz vein, mottled grey to milky qtz chlorite clots, abundant fine gr. vein gold and tellurides - abundant platy pyrite along fractures	3679	23.44	23.77	0.33	5.25	0.16	1.24
23.77	24.32	silicified and sheared QHG, highly silicified zones - abundant fine pyr. and numerous qtz stringers - trace tellurides	3680	23.77	24.08	0.31	.005	tr	
24.32	24.57	silicified and Fe stained, minor fine Kyan. - numerous qtz stringers - fine pyr. and minor cpy.	3682	24.32	24.57	0.25	.01		
24.57	25.30	sheared QHG - very fine gr. with numerous calcite veinlets throughout. - minor fracturing, trace pyrite.	3704	24.57	24.57	0.30	.002		
25.30	26.36	HFG, minor qtz., abundant finely disseminated pyr. and minor pyrite along fractures.	3705	25.39	25.85		nil		
26.36	27.28	GFG (granitic gneiss) - blue qtz. zones in gneiss - minor fracturing							
27.28	28.59	Quartz hornblende gneiss - poorly developed gneissosity - minor quartz veining w/ pyrite and chalcopyrite at 27.3 @ 90° to c/a - numerous calcite veins up to 3mm @ 59° to c/a - trace pyr. on calcite veins							

HOLE NO. LO: .....  
PAGE ..... 4 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au(ortho)		
28.59	29.69	Sheared Quartz hornblende gneiss, fine grained, hornblende rich - disseminated subhedral pyrite and trace cpy. - fine white milky Qtz. veins 10 mm wide w/ minor pyrite along contact @ 50° to c/a	3706	28.59	28.90	0.31	nil		
			3707	28.90	29.20	0.30	.002		
			3708	29.20	29.50	0.30	nil		
29.69	30.94	Quartz hornblende gneiss - medium grained Qtz. hornblende w/ numerous calcite veins and minor Qtz. veining -trace pyrite -gneissosity @ 39° to c/a							
30.94	31.33	Qtz feldspar hornblende gneiss -minor fine fracturing							
31.33	32.61	Qtz feldspar hornblende gneiss -minor fracture and minor shearing @ 21° to c/a -finely disse. pyr. and cpy along fractures -fine pyrite along fractures and trace cpy. -minor calcite and pyrite veining.							
32.61	32.98	Sheared hornblende Qtz. feldspar gneiss -finer grained and elongated feldspar. -narrow calcite-pyrite-chalcopyrite vein (4mm) @ 32° to c/a	3709	32.61	32.92	0.31	nil		
32.98	33.83	Hornblende Qtz feldspar gneiss - minor pyrite and calcite in fractures -gneissosity @ 32° to c/a							

HOLE NO. 10 .....  
PAGE ... 5 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Aux(1m)		
33.83	34.44	Sheared hornblende qtz. feldspar gneiss, very fine grained w/banded fine calcite - pyr - cpy. veins @ 37° to c/a - 10mm vein @ 34.4 m of cpy, pyr - calcite, qtz @ 44° to c/a	3710	33.83	34.14	0.31	.002		
			3711	34.14	34.44	0.30	.002		
34.44	37.89	Hornblende qtz gneiss - Abundant pyrite along fractures, trace cpy. @ 10-40° to c/a	3712	34.44	34.75	0.31	.002		
			3713	36.58	36.91	0.33	nil		
37.89	38.95	Sheared Quartz hornblende gneiss - very fine grained and minor foliation - abundant narrow (up to 8mm) calcite veins @ 50-60° to c/a - minor pyrite. - numerous qtz veins, erratic but average 70° to c/a - glassy quartz w/ chloritic blebs - trace pyr.	3714	38.04	38.34	0.30	.002		
			3715	38.34	38.74	0.40	nil		
38.95	42.06	Hornblende - qtz gneiss - minor calcite and qtz veining throughout - minor pyrite							
		END OF HOLE.							

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

**LOCATION** . . . . .

NTS CODE 62P-1

HOLE NO. .... 40-5 ....

LATITUDE ..... AZIMUTH ..... PURPOSE .....

DEPARTURE ..... DIP ..... -60° ..... STARTED .....

ELEVATION . . . . . CORE . . . . . AQ . . . . . COMPLETED . . . . .

LOGGED BY .....  
SECTION

REF ID: A1234567890

BIO-TESTS

HOLE NO. La. 5 .....  
PAGE 2 .....

FOOTAGE	DESCRIPTION	CORE SAMPLES						AVERAGES
		NO.	FROM	TO	WIDTH	Avg (ft)		
0.00	1.83	Casing						
1.83	8.05	Qtz-feldspar-hornblende gneiss -numerous fine fractures - trace calcite -gneissosity @ 24° to S <sub>a</sub>						
8.05	8.17	Qtz-feldspar-hornblende - fractured -minor Fe staining						
8.17	9.36	Qtz-hornblende-feldspar gneiss -minor banding -numerous fine fractures						
9.36	9.66	Shear zone - minor qtz veining -highly foliated quartz hornblende gneiss (QHG) @ 38° to S <sub>a</sub>	3716	9.36	9.66	0.30	nil	
9.66	9.78	Qtz vein - glassy white qtz <del>with</del> <sup>thin</sup> with with minor chlorite along fractures -trace pyrite	3717	9.66	9.78	0.12	nil	
9.78	10.15	Sheared QHG - hornblende rich fine grained and highly foliated -minor qtz lenses and veining -minor pyrite and trace chalcopyrite	3718	9.78	10.15	0.37	nil	
10.15	11.86	Qtz-Feldspar-hornblende gneiss -medium to fine grained -minor calcite veining @ 54° to S <sub>a</sub>						
11.86	11.92	Shear zone - highly silicified QFHG and minor Fe staining -zone @ 45° to S <sub>a</sub>						
11.92	16.55	QHG - very fine grained with minor qtz in gneiss -abundant fine calcite veining @ 72° to S <sub>a</sub> -minor qtz veining (up to 1 mm) -trace pyrite in calcite and qtz veins						

HOLE NO. 49-5 .....  
PAGE 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES					
FROM	TO		NO.	FROM	TO	WIDTH	Analcite Pg (wt%)	AVERAGES (-3m)
16.55	16.58	Silicified QHG - minor foliation - trace pyrite @ 90° to Sa						
16.58	17.86	QHG - minor calcite veining - fine grained - minor qtz rich segregation - trace pyrite and chalcopyrite						
17.86	20.36	hornblende-feldspar gneiss - minor calcite veining - minor qtz veining - "speckled" appearance - fractures @ 56° to Sa						
20.36	20.27	Sheared hornblende feldspar gneiss - qtz vein - medium grained qtz crystals along erratic fracture - sheared @ 44° to Sa - trace pyrite						
20.27	21.82	QHG - poorly developed gneissosity - calcite veins throughout 4-5 mm						
21.82	24.11	Hornblende gneiss sheared - very fine grained hornblende - rich with numerous calcite veins - minor subhedral pyrite in vein and disseminated in wallrock - trace pyrite - sheared zones - indistinct due to fine grains						
24.11	25.30	Highly sheared QHG - silicified zones qtz lenses and stringers throughout - minor pyrites along fractures foliated @ 69° to Sa - qtz veining at 24.93 - 24.99 m.	3719	24.11	24.41	0.30	nil	0.07
			3683	24.41	24.71	0.31	.005	
			3684	24.71	25.02	0.30	nil	
			3685	25.02	25.30	0.28	0.29	

HOLE NO. 4-5.....  
PAGE 3.....

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ..... *Latus* ..... . . . . .

NTS CODE 62P-1

HOLE NO. .... 40-6 ....

LATITUDE ..... AZIMUTH ..... PURPOSE .....

DEPARTURE ..... DIP ..... 50° ..... STARTED .....

ELEVATION ..... SPAN NO. .... CORE ... A.R. .... COMPLETED .....

LOGGED BY R. Hall

SECTION TWENTY-THREE

#### **SIR TESTS**

HOLE NO. L0-6 .....  
PAGE ..1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
0.00	2.44	Casing							
2.44	9.36	Feldspar - hornblende gneiss 'speckled' texture - minor fracturing - calcite veining @ 10° to S/a							
9.36	13.32	QFHG - minor fracturing of quartz and calcite veining - medium grained - narrow fractures/epidote @ 40° to S/a							
13.32	13.44	Sheared QFHG - very fine grained and abundant fine calcite veinlets - trace pyrite - veins @ 28° to S/a							
13.44	14.66	QHG - medium grained with minor fracturing parallel to S/a with minor subhedral pyrite - calcite							
14.66	15.00	Sheared OHG - fine grained + highly contorted - minor calcite lenses - abundant disseminated pyrite + trace chalcopyrite							
15.00	20.76	hornblende - feldspar - gneiss - fine grained - very minor calcite veining - trace pyrite gneissosity @ 27° to S/a							
20.76	21.64	HFG - medium grained with 'speckled' appearance - poorly developed gneissosity - trace pyrite							
21.64	21.79	Sheared HFG (@ shear zone) with qtz vein - subhedral qtz crystals - trace pyrite - shear @ 63° to S/a							
21.79	23.99	QHG - medium grained - very minor fracturing - gneissosity @ 25° to S/a							

HOLE NO. 40-6.....  
PAGE 2.....

FOOTAGE		DESCRIPTION	CORE SAMPLES							
FROM	TO		NO.	FROM	TO	WIDTH	Realty			AVERAGES
23.99	25.36	QFHG to QHG - well developed gneissosity - minor white qtz veining								
25.36	25.85	QHG - well developed gneissosity - increasingly less qtz toward bottom and more H + chlorite								
25.85	27.86	FHG - very fine grained → sheared? - finely disseminated pyrite - very minor calcite veining @ 28° to SA								
27.86	31.33	FHG - well developed gneissosity - trace pyrite - minor quartz along fractures and thin veneer of pyrite								
31.33	31.76	Sheared HFG - highly sheared with erratic calcite lensing - trace disseminated pyrite - shear ~ 90° to SA								
31.76	32.58	Sheared HFG - highly silicified with abundant qtz lenses & veins - zones of Fe staining - minor finely disseminated pyrite with thin pyrite along fracture surfaces - @ 80° to SA	3722	31.76	31.97	0.21	.002			0.08
			3723	31.97	32.28	0.31	.13			
			3724	32.28	32.58	0.30	.24			
32.58	32.86	Sheared HFG - abundant pyrite - calcite along fractures - @ erratic attitudes	3725	32.58	32.86	0.28	.02			
32.86	33.80	Sheared HFG - qtz lenses and abundant calcite veining - minor pyrite in calcite veins - trace chalcopyrite - foliated @ 75° to SA	3726	32.86	33.16	0.30	.002			
			3727	33.16	33.47	0.31	.02			
			3728	33.47	33.80	0.33	.002			
33.80	36.21	QHG - fine grained with indistinct qtz grains due to minor shearing - minor calcite veining throughout with pyrite								
36.21	42.06	QFHG - medium grained + good gneissosity @ 23° to SA - numerous calcite fractures with minor pyrite - veins up to 10mm with abundant calcite and pyrite	3729	37.70	38.07	0.37	.002			
			3730	38.59	39.20	0.61	.01			

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ..... Letus ..... LOCATION ..... 6 .....  
NTS CODE ..... 62P-1 ..... HOLE NO. ..... 4-7 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP .....	STARTED .....
ELEVATION .....	CORE .....	COMPLETED .....
SECTION .....		LOGGED BY R.H.II..
REF. GRID .....		

## DIP TESTS

HOLE NO. ....LQ-7.....  
PAGE .....

FOOTAGE	FROM	TO	DESCRIPTION	CORE SAMPLES						AVERAGES
				NO.	FROM	TO	WIDTH			
0	2.13		Casing							
2.13	8.78		Hornblende feldspar gneiss - speckled texture - gabbroic appearance - no gneissosity - minor shearing and trace pyrite							
8.78	8.99		Quartz hornblende gneiss - gneissosity @ 14° to c/a							
8.99	10.15		Hornblende feldspar gneiss - speckled texture - trace pyrite							
10.15	10.61		Quartz feldspar hornblende gneiss - minor quartz veins - well developed foliation @ 22° to c/a							
10.61	10.79		sheared Quartz feldspar hornblende gneiss - highly contorted - trace pyrite - shear @ 18° to c/a							
10.79	20.57		Quartz hornblende gneiss - very minor calcite-pyrite veining - minor narrow shear zones (4-10 mm) @ 52° to c/a @							
	14.75		- well developed gneissosity - minor quartz veining							

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
20.57	20.85	Quartz feldspar hornblende gneiss - medium grained - gneissosity @ 19° to c/a								
20.85	20.88	Shear zone - sheared Quartz hornblende gneiss - minor calcite - foliation @ 60° to c/a								
20.88	22.74	Quartz feldspar hornblende gneiss + Quartz hornblende gneiss - variable composition to gneiss grading from F bearing to F poor gneiss - minor calcite veining								
22.74	22.86	Sheared Quartz hornblende gneiss - minor disseminated pyrite. - narrow Fe stain Quartz vein @ 33° to c/a - trace pyrite								
22.86	25.66	Quartz hornblende gneiss - poorly developed gneissosity - minor fracturing and calcite veining @ 70° to c/a								
25.66	27.28	Quartz hornblende gneiss - very finely grained with minor gneissosity - erratic calcite veining throughout @ 15-18° to c/a								

HOLE NO. .... 7 .....  
PAGE ..... 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)		
27.28	28.93	Hornblende gneiss - very fine grained - abundant fine calcite veins with minor pyrite and trace chalcopyrite @ 22° to c/a							
28.93	31.64	Hornblende gneiss - very fine grained - calcite vein parallel to core axis - subhedral calcite variable amounts of pyrite and trace chalcopyrite - minor chlorite in HG							
31.64	32.13	Sheared Hornblende gneiss - silicified with numerous fine quartz stringers and lenses - abundant calcite in shear	3731 3732	31.64 31.82	31.82 32.13	0.18 0.31	nil .002		
32.12	32.43	Quartz vein and highly silicified host - cherty quartz with abundant disseminated pyrite and minor calcite @ 72° to c/a - Fe staining of calcite and silicified host	3733	32.13	32.43	0.30	.01		
32.43	34.38	Sheared hornblende gneiss - minor silicified - abundant calcite veining throughout and minor quartz veins and lenses. - trace pyrite - foliation @ 70° to c/u	3734 3735 3736 3737 3738	32.43 32.74 33.04 33.65 33.96	32.74 33.04 33.65 33.96 34.38	0.31 0.30 0.61 0.31 0.42	.002 .002 .002 nil nil		

HOLE NO. .... 47.....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
34.38	42.15	Quartz feldspar hornblende gneiss - abundant - quartz rich lamination - blue quartz - minor calcite veining throughout @ 50-56° to 1/4 - gneissosity @ 26° to c/a - trace pyrite in fractures								
42.15	-	Quartz vein 0.5 " wide (20 mm) - minor pyrite @ 46° to c/a								
42.15	43.43	Quartz feldspar hornblende gneiss - quartz rich zones and minor Kspor								
43.43	-	Quartz vein - 20 mm - trace pyrite								
43.43	43.59	Quartz feldspar hornblende gneiss								

**ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG**

PROPERTY ... *Lotus* ..... LOCATION .....  
NTS CODE ... 62P1 ..... HOLE NO. .... Lo-8 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -45° .....	STARTED .....
ELEVATION .....	CORE ..... A9 .....	COMPLETED .....
SECTION .....		LOGGED BY . R. Hall ..
REF. GRID .....		

## DIP TESTS

HOLE NO. 40-8 .....  
PAGE ...1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
0.00	3.66	CASING							
3.66	4.97	Hornblende gneiss - fine grained hornblende epidote - gneissosity? - trace pyrite - abundant fine calcite veins							
4.97	6.10	Qtz hornblende gneiss - abundant fine calcite veins @ 42° to c/a - trace pyrite in veins.							
6.10	6.74	Qtz hornblende gneiss - Fe staining of qtz along fractures - blocky - trace pyrite							
6.74	6.83	Sheared Qtz hornblende gneiss - minor qtz lenses 8mm wide - shear @ 45° to c/a.							
6.83	8.75	Qtz feldspar hornblende gneiss, minor epidote along fractures and iron staining of feldspars. - gneissosity @ 20° to c/a							
8.75	9.14	Qtz - calcite vein - fracture zone - trace pyrite @ 40° to c/a							
9.14	13.87	Qtz hornblende epidote gneiss - well developed gneissosity @ 21° to c/a - minor calcite veining - trace pyrite.							

HOLE NO. L.D.-9 .....  
PAGE ... 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDT			
13.87		Qtz. vein (12 mm), minor chlorite and pyrite @ 28° to c/a							
13.87	15.85	Qtz. hornblende gneiss - trace pyrite -gneissosity @ 13° to c/a							
15.85	16.28	Qtz. hornblende feldspar gneiss -vein ll to c/a w/calcite - epidote and trace pyrite. - Fe staining - abundant calcite fractures							
16.28	16.61	Qtz feldspar hornblende gneiss -minor calcite veining trace pyrite.							
16.61	17.95	Qtz hornblende gneiss, well developed gneissosity of integrated qtz. and hornblende -trace dissemin. pyrite. - minor calcite veining							
17.95	18.65	Hornblende gneiss - minor foliate -erratic calcite stringers - minor pyrite in fractures							
18.65	18.74	Qtz K spm vein, erratic veining -Hornblende gneiss matrix							
18.74	22.59	Qtz hornblende gneiss -numerous calcite fractures @ erratic angles - trace pyrite along fractures							

HOLE NO. 40 .....  
PAGE ... 3 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)		
22.59	23.44	Sheared hornblende gneiss - platy pyrite along fractures - fine calcite veining @ 62° to c/a - minor qtz. stringers	3739	22.59	22.89	0.30	nil		
			3740	22.89	23.20	0.31	nil		
			3741	23.20	23.44	0.24	nil		
23.44	24.05	Quartz veins w/ interlaminate schistose leaves, abundant pyrite in qtz. and schistose zones. - minor platy pyrite - trace chalcopyrite. - veins up to 9 cm wide, erratic with vein @ 84° to c/a	3742	23.44	23.74	0.30	nil		
			3743	23.74	24.05	0.31	.005		
24.05	24.41	- silicified zone w/ abundant qtz and minor calcite veins. - trace pyrite	3744	24.05	24.41	0.36	.002		
24.41	25.45	Qtz vein - milky qtz w/ telluride and vein gold on fractures 24.65 - v. gold and telluride on fracture 24.96 - v. gold and telluride on fracture - trace pyrite.	3745	24.41	24.72	0.31	.39		0.11
			3746	24.72	25.02	0.30	.13		
			3747	25.02	25.45	0.43	.002		
25.45	25.60	Carbonated and silicified zone - highly sheared, minor calcite veining - minor trace tourmaline - green discoloration - trace pyrite - foliation @ 72° to c/a	3748	25.45	25.60	0.15	.01		

HOLE NO. 40-  
PAGE ... 4 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)	Ag (oz/ton)		
25.65	26.33	Sheared hornblende gneiss - abundant calcite throughout - trace pyrite.	3749	25.60	25.94	0.34	nil			
			3750	25.94	26.24	0.30	.002			
26.33	26.46	Sheared hornblende gneiss - qtz lenses and stringers - 3.0 cm - minor tellurides - clots and disseus. pyrite and pyrrhotite - minor calcite vein.	3751	26.24	26.55	0.31	.07	.02		
26.46	27.40	Sheared hornblende gneiss - minor calcite veins and trace pyrrhotite.	3752	26.56	26.85	0.30	nil			
			3753	26.85	27.40	0.75	.002			
27.40	27.74	Qtz vein and sheared zone 15cm qtz vein and shear zone of abundant calcite stringers and minor qtz. stringers - pyrite and pyrrhotite along fractures and trace chalcopyrite.	3754	27.40	27.74	0.34	.002			
27.74	28.10	Sheared hornblende gneiss - fine grained minor foliation - narrow calcite veining	3755	27.74	28.10	0.36	nil			
28.10	33.32	QHG to QFHG - minor calcite veining - gneissosity @ 16° to c/a - trace pyrite in fractures								
33.32	33.50	Sheared qtz hornblende gneiss, 2 narrow qtz veins - minor pyrite and pyrrhotite - trace telluride @ 58° to c/a	3756	33.32	33.50	0.18	.002			

HOLE NO. L.O. ....  
PAGE ... 5 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
33.50	34.23	Hornblende gneiss, fine grained w/ minor fracturing -trace pyrite.								
34.23	35.97	Hornblende feldspar gneiss - speckled appearance w/ minor calcite vein @ 360 to c/a								
		END OF HOLE.								

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ... LOTUS ..... LOCATION .....  
NTS CODE ... 62.P-1 ..... HOLE NO. ... L9-9 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP .....	STARTED Sept. 2/79 .....
ELEVATION .....	CORE .....	COMPLETED Sept. 3/79 .....
SECTION .....		LOGGED BY R. H. H. ....
REF. GRID .....		

## DIP TESTS

HOLE NO. L0-9.....  
PAGE 1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
0.00	3.05	Casing							
3.05	7.65	Quartz - Feldspar - Hornblende - Gneiss - Fe staining of feldspar - minor calcite veinlets throughout @ 49° to S/a - narrow gte veining with trace pyrite							
7.65	8.11	fractured QFHG - abundant Fe staining of feldspar - minor shearing @ 42° to S/a							
8.11	9.24	QFHG - calcite fractures throughout - minor Fe staining - gneiss @ 26° to S/a							
9.24	11.83	QHG - fracturing @ 44° to S/a with minor calcite and epidote with trace tourmaline							
	11.83	calcite - tourmaline vein 4mm wide @ 21° to S/a - trace pyrite - minor Fe stain adjacent to vein							
11.83	12.47	fractured QHG - numerous fractures throughout - calcite veinlets							
	12.47	Qtz - calcite vein with pyrite - 8mm wide @ 44° to S/a							
12.47	16.00	QHG - minor calcite stringers throughout							
16.00	16.22	Qtz - calcite - Kspar - Hornblende vein abundant calcite in fractures - vein @ 12° to S/a							
16.22	17.16	Qtz - hornblende gneiss - fine calcite along fractures with trace pyrite							
17.16	18.01	Qtz - hornblende vein - fine grained white-pink gte with clots of hornblende throughout - mobilized from gneiss - trace chalcopyrite @ 9° to S/a							
18.01	19.08	Hornblende to QHG - minor fracturing throughout - very fine grained							

HOLE NO. L.O.:9 .....  
PAGE .2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES (m)
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/tion)	Ag (oz/tion)		
9.08	19.48	QFH vein or felsic mobilize - trace pyrite and chalcopyrite								
19.48	25.02	Hornblende-qtz to qtz feldspar hornblende - highly fractured with abundant calcite stringers - trace pyrite along fractures - portions sheared and silicified up to 10mm - minor quartz veining								
25.02	26.27	Silicified hornblende gneiss - highly altered - numerous fine calcite stringers - minor disseminated pyrite and trace chalcopyrite.	3757	25.36	25.66	0.30	.002	nil		
			3758	25.66	25.97	0.31	nil			
			3759	25.97	26.27	0.30	.002	nil		
26.27	27.89	Quartz vein - milky white qtz - minor pyrite along fractures 26.43 - clot of V.G. and telluride 26.52 - ground core - green telluride along fractures - minor tourmaline 58° to 62° to Sa	3760	26.27	26.58	0.31	1.36	0.11		
			3761	26.58	26.88	0.30	nil	.03		
			3762	26.88	27.19	0.31	nil	.01		
			3763	27.19	27.49	0.30	nil	nil		
			3764	27.49	27.89	0.40	.01	.05		
27.89	28.50	highly sheared hornblende gneiss - silicified - abundant erratic carbonate lenses and stringers - qtz lenses and veins at 49° to Sa	3765	27.89	28.50	0.61	nil			
28.50	28.65	Qtz vein - white milky qtz - minor carbonate - fuchsite along contact - minor pyrite veneer in fractures in qtz	3766	28.50	28.65	0.15	.005			
28.65	29.63	Sheared mafic gneiss - abundant fine grained calcite 64° to Sa - minor qtz stringers	3767	28.45	29.02	0.37	nil			
			3768	29.02	29.63	0.61	nil			
29.63	30.05	Silicified gneiss - Fe stained - trace pyrite and trace chalcopyrite	3769	29.63	29.93	0.30	.002			
30.05	30.24	Qtz vein and silicified gneiss - erratic qtz veins at 53° to Sa	3770	29.93	30.24	0.31	nil			

HOLE NO. 40-9.....  
PAGE 3.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
30.24	30.82	Sheared mafic gneiss - QHG - abundant fine calcite veinlets - minor pyrite and trace chalcocite	3771	30.24	30.54	0.30	nil		
30.82	31.70	HFG - speckled appearance - minor calcite veining							
	31.70	Calcite vein and fractures - 4mm at 13°SE							
31.70	36.97	Hornblende - feldspar gneiss - minor chlorite - minor pyrite along fractures - narrow calcite bearing fractures							
		End of Hole							

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ... LOTUS ..... LOCATION .....  
NTS CODE ... 62P-1 ..... HOLE NO. ... LO-10 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP .... 50° .....	STARTED ... Sept 3/78 ..
ELEVATION .....	CORE .... AQ .....	COMPLETED . Sept 3/78 ..
SECTION .....		LOGGED BY R. Hall ..
REF. GRID .....		

## DIP TESTS

HOLE NO. .... 100  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
0	1.22	Casing								
1.22	4.57	Quartz hornblende gneiss - minor epidote								
4.57	4.63	Quartz vein - glassy quartz with chlorite and trace pyrite @ 39° to 4/0								
4.63	6.68	Quartz hornblende gneiss - minor epidote and calcite veining								
6.68	12.95	Hornblende feldspar gneiss - speckled appearance - minor epidote and chlorite - minor fracturing - narrow quartz veining								
12.95	13.75	fractures and minor shear hornblende feldspar gneiss - epidote - carbonate along fractures @ 46°								
13.75	15.24	feldspar hornblende gneiss - minor epidote on fractures								
15.24	15.27	Quartz vein - glassy quartz @ 44° with trace pyrite - minor shearing adjacent to vein								

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
15.27	20.27	Quartz hornblende gneiss to feldspar hornblende gneiss - minor chlorite - trace calcite								
20.27	20.36	Quartz - Kspor vein - 20° to c/a								
20.36	21.37	Quartz hornblende gneiss - gneiss @ 21° to c/a								
21.37	23.32	Hornblende gneiss - fine grained - possibly sheared with abundant calcite veining								
23.32	23.50	Quartz Kspor vein - medium grained qtz. + felds. - minor calcite along contact @ 12° to c/a								
23.50	27.55	Sheared hornblende gneiss - fine grained hornblende and abundant fine calcite throughout and also calcite veining - minor quartz - Kspor veinlets and trace pyrite @ 27° to c/a								
27.55	30.91	Hornblende feldspar gneiss - medium to fine grained with few narrow quartz veins @ 48° to c/a - gneiss @ 42° to c/a - minor epidote on fractures								

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	REL(HGT)	DP (cm/min)		
30.91	33.22	Quartz hornblende gneiss -medium to fine grained -sheared appearance -minor calcite veining -minor Kspar								
33.22	33.41	Sheared Kspar quartz hornblende gneiss -Fe stain of Kspar -minor calcite								
33.41	35.97	Hornblende - Kspar gneiss -medium to fine grained with narrow calcite and epidote vein								
35.97	37.55	Silicified and sheared mafic gneiss -abundant fine calcite throughout -minor Fe staining -shear @ 80° to c/a	3772	36.42	37.03	0.61	.11			
			3773	37.03	37.31	0.28	.002			
			3774	37.31	37.55	0.24	.005			
37.55	37.76	Quartz vein - milky mottled quartz -fine telluride and v.g. -fine disseminated pyrite adjacent to wall rock @ 82° to c/a	3775	37.55	37.76	0.21	0.45	.04		0.07
37.76	39.17	Silicified and sheared -abundant fine calcite -minor quartz lenses -trace pyrite	3776	37.76	38.07	0.31	.02			
			3777	38.07	38.68	0.61	.002			

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
39.17	42.31	Quartz hornblende gneiss -minor fracturing - calcite veinlets 60-90° to %							
42.31	44.01	Hornblende feldspar gneiss -numerous calcite veins @ 38° to c/o							
44.01	44.41	Quartz feldspar hornblende gneiss -trace pyrite -calcite veining							
44.41	45.99	Quartz hornblende gneiss @ 40° to c/o -minor calcite vein							
45.99	47.67	Feldspar hornblende gneiss -medium to fine grained -minor calcite veining							
47.67	47.73	Quartz vein - glassy quartz with calcite along contact of wallrock -minor chlorite - @ 41° to c/o							
47.73	49.93	Quartz hornblende to hornblende gneiss -some very fine grained portions -minor calcite veining throughout							

HOLE NO. .... 17-10.....  
 PAGE ..... 5 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
49.93	51.12	Quartz feldspar hornblende gneiss -trace calcite -minor chlorite								
51.12	51.21	Quartz vein -glossy quartz @ 38° to % -trace pyrite								
51.21	54.25	Feldspar hornblende gneiss -speckled appearance -feldspars are altered to Koolinite -very minor calcite veining								
END OF HOLE										

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

**PROPERTY** LOTUS . . . . . **LOCATION** . . . . .

NTS CODE . . . . . 62P-1 . . . . . HOLE NO. . . . . 20-11 . . . . .

LATITUDE ..... AZIMUTH ..... PURPOSE .....

DEPARTURE ..... DIP ..... -60° ..... STARTED ... Sept 4/79.

ELEVATION 100' 0" COBE 100' 0" COMPLETED Sept 15/79

**SECTION** ..... **LOGGED BY** .....

**REF. GRID** [View Details](#)

DIP TESTS

HOLE NO. L.O. ....  
PAGE ...1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
0.00	1.83	CASING								
1.83	4.24	Qtz. hornblende gneiss to qtz feldspar hornblende gneiss @ 42° to c/a Minor calcite veining @ 47° to c/a (L to gneiss)								
4.24	4.27	Qtz. vein - glassy white qtz. @ 40° to c/a -trace pyrite. -minor iron staining at wall rock								
4.27	8.90	Qtz. feldspar hornblende gneiss, med. grain -minor calcite veining -some zones of speckled appearance								
8.90	10.03	Feldspar hornblende and minor qtz. -Very fine grain to fine grain -minor epidote along fractures								
10.03	10.42	Sheared qtz. feldspar gneiss @ 18° to c/a -Fe stained feldspar -calcite vein.								
10.42	10.94	Qtz. hornblende gneiss - trace calcite								
10.94	11.64	Sheared hornblende gneiss -abundant dissems. and veinlets of calcite -minor chlorite -minor Kspur quartz veining								

HOLE NO. LO-1 .....  
PAGE ... 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
11.64	14.75	Qtz. hornblende gneiss -calcite vein @ 30° to c/a							
14.75	14.78	Qtz. vein -glassy qtz. @ 20° to c/a (± to gneiss) w/ minor dissem. chlorite. -trace pyrite.							
14.78	15.18	Qtz. hornblende gneiss							
15.18	15.79	Sheared hornblende gneiss -fine grained chlorite and abundant calcite and epidote shear @ 52° to c/a							
15.79	15.82	Qtz. vein -glassy qtz. w/ trace pyrite							
15.82	20.45	Qtz. hornblende gneiss -minor epidote along fracture.							
20.45	20.51	Qtz. feldspar vein @ 28° to c/a -minor Fe stained feldspar. -trace pyrite.							
20.51	26.73	Qtz. hornblende gneiss -minor calcite veining @ 47° to c/a -trace pyrite and chalcopyrite in calcite -medium grain w/ fine grain zones							
26.73	27.13	Qtz feldspar hornblende gneiss -minor shearing and epidote in shear							

HOLE NO. L9.....  
PAGE ..3.....

FOOTAGE		DESCRIPTION	CORE SAMPLES					
FROM	TO		NO.	FROM	TO	WIDTH $\text{in} \text{ (mm)}$	AVG. $\text{in} \text{ (mm)}$	AVERAGES
27.13	29.44	Qtz. hornblende gneiss - fine grain w/ minor chlorite - abundant calcite - epidote vein @ 45° to c/a  29.44 - qtz. vein @ 48° to c/a - glassy qtz. 10 mm.						
29.44	32.00	Qtz.- feldspar hornblende gneiss - medium grain - minor fracturing.						
32.00	32.03	Qtz. vein - white glassy qtz @ 33° to c/a w/ minor chlorite - trace pyrite in vein and in adjacent wall rock.						
32.03	33.10	Qtz. hornblende gneiss - numerous calcite fracture - abundant finely disseminated pyrite - minor qtz. lens and veins	3778	32.03	33.10	1.07	nil	
33.10	38.16	Qtz. hornblende gneiss - epidote veining and discoloration along fracture. - trace pyrite.  38.16 - qtz. vein - 6 mm - glassy white qtz @ 12° to c/a						

HOLE NO. 10 .....  
PAGE ..1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES (1.5)
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)	Ag (oz/ton)		
38.16	39.96	Qtz. hornblende gneiss - minor feldspar - epidote along fractures - trace calcite								
39.96	41.00	Sheared hornblende gneiss - Abundant finely disseminated calcite and calcite veins - trace disseminated pyrite. - shear @ 71° to c/a	3779	40.39	40.61	0.30	.01			
			3780	40.69	41.00	0.31	.002			
41.00	41.48	Qtz. vein - 5.5 cm milky quartz - trace telluride @ 41.00 - Schistose w/ grey quartz vein - minor pyrite and Kspar. - minor calcite	3781	41.00	41.30	0.30	.89	.05		0.20
			3782	41.30	41.48	0.18	.13	.09		
41.48	42.31	Sheared hornblende gneiss - abundant calcite disseminated and on fracture - shear @ 65° to c/a	4223	41.48	41.88	0.40	.01			
			3783	41.48	41.88	0.40	.01			
42.31	43.04	Qtz. hornblende gneiss - minor shearing and minor calcite throughout.								
43.04	43.40	Fractioned and sheared quartz hornblende gneiss - abundant calcite along fractures - trace pyrite - shear @ 45° to c/a								
43.40	45.72	Qtz. hornblende to quartz hornblende feldspar gneiss - minor calcite veining in fractures								

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY .... *Lotus* ..... LOCATION .....  
NTS CODE .... *62P1* ..... HOLE NO. .... *La-12* .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ... -45° .....	STARTED ... Sept 5/70 ..
ELEVATION .....	CORE ... -AQ .....	COMPLETED .. Sept 6/70 ..
SECTION .....		LOGGED BY .. R. Hall ..
REF. GRID .....		

## DIP TESTS

HOLE NO. .... 63-12 .....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
0	2.44	Casing							
2.44	4.63	Quartz hornblende gneiss							
4.63	4.66	Sheared quartz hornblende gneiss @ 47° to c/a -minor epidote and calcite							
4.66	12.16	Quartz hornblende gneiss to QFHG -minor Fe staining of feldspars -minor calcite veining							
12.16	12.19	Sheared QFHG -minor epidote - @ 32° to c/a							
12.19	21.31	Quartz hornblende gneiss -medium grained -minor epidote along fracture -minor calcite veining							
21.31	22.13	Quartz feldspar hornblende gneiss -medium to coarse grained -minor epidote -calcite veining							
22.13	-	Quartz vein @ 45° to c/a - 6 mm wide							

HOLE NO. .... 12 .....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH			AVERAGES
22.13	24.41	Quartz feldspar hornblende -medium grained -minor Fe staining along fractures -blue quartz along gneissosity -minor calcite							
24.41	25.36	Quartz hornblende gneiss -minor fracturing							
25.36	25.57	Sheared Quartz hornblende gneiss -minor chlorite and Fe staining -shear @ 51° to c/a							
25.57	27.32	Quartz hornblende gneiss -minor calcite veining							
27.32	-	Quartz -calcite vein @ 32° to c/a -15 mm wide							
27.32	33.98	Quartz hornblende with minor QFH zones -minor calcite veining throughout @ 44° to c/a -epidote along fractures							
33.98	34.93	Quartz hornblende gneiss - fine grained -poorly developed gneissosity -minor shearing -minor calcite vein // to c/a and at erratic angles.							

HOLE NO. .... 12 .....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES (.15m)
FROM	TO		NO.	FROM	TO	WIDTH	AU (oz/ton)	Ag (oz/ton)		
34.93	35.81	Sheared hornblende gneiss -abundant disseminated and veinlets of calcite -very minor quartz lensing -shear 70-80° to c/a	3784	35.20	35.81	0.61	nil			
35.81	36.24	Quartz vein and narrow chloritic schistose zones -disseminated, subhedral pyrite and pyrite plate along fractures.	3785	35.81	36.24	0.43	.005	nil		
36.24	36.73	Silicified wallrock @ 60° to c/a -minor quartz lensing -Fe staining - orange - yellow	3786	36.24	36.73	0.49	.002			
36.73	37.03	Quartz lenses and chloritic schist -lenses up to 10mm @ 61° to c/a -minor subhedral pyrite and pyrite veneer on fractures	3787	36.73	37.03	0.30	.002	.01		
37.03	37.37	Quartz vein -milky quartz with smoky section -abundant disseminated tellurides and fine v.g. in 37.22-37.37	3788	37.03	37.37	0.34	.36	.06		0.08
37.37	-	ground core								
37.37	38.56	Sheared hornblende gneiss -abundant fine calcite disseminated and lenses -trace pyrite	3789	37.37	37.98	0.61	nil			

HOLE NO. .... 12 .....  
PAGE ..... 7 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
38.56	42.06	Quartz hornblende gneiss -minor Kspar -minor epidote and calcite veining							
		END OF HOLE							

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ... 6 PTY'S. .... LOCATION .....  
NTS CODE ... 62P-1. .... HOLE NO. .... LO-13.

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -60° .....	STARTED . Sept. 6/79 ..
ELEVATION .....	CORE .... AR .....	COMPLETED . Sept. 7/79 ..
SECTION .....		LOGGED BY . R.H.U.
REF. GRID .....		

## DIP TESTS

HOLE NO. .... 2-13.....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH			AVERAGES
0	1.22	Casing							
1.22	5.15	Quartz hornblende gneiss - abundant calcite veining and fracturing							
5.15	5.42	Sheared hornblende gneiss @ 54° to c/a - trace calcite							
5.42	17.98	Quartz hornblende gneiss - medium to fine grained - numerous calcite veins @ 59° to c/a - minor epidote on fractures - minor Fe stain of feldspar - minor quartz lenses along gneissosity at 26° to c/a							
17.98	-	Quartz vein - 6mm @ 19° to c/a - minor chalcopyrite - trace calcite							
17.98	25.45	Quartz hornblende gneiss - fine grained - minor shearing - abundant fine calcite - 19.54 - quartz vein - tourmaline - 8mm wide @ 11° to c/a							
25.45	25.51	Quartz lense parallel to c/a - minor calcite							

HOLE NO. .... 13 .....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)	Ag (oz/ton)		
25.51	27.04	Quartz hornblende gneiss -minor calcite veining -fracture @ 47° to c/a -epidote								
27.04	27.13	Sheared hornblende with quartz veining @ 64° to c/a -glassy quartz with minor pyrite								
27.13	38.50	Quartz hornblende gneiss to QFH gneiss -trace calcite @ 56° to c/a -medium to fine grained -minor Fe stain along fractures								
38.50	40.72	Shear hornblende gneiss -minor erratic calcite veining @ 40 to c/a -calcite lensing in highly sheared zone	3790	40.11	40.42	0.31	nil			
			3791	40.42	40.72	0.30	.002			
40.72	41.12	vein zone 40.72 - 40.96 - silicified and schistose zone -trace pyrite -erratic quartz lenses 40.96 - 41.03 - quartz vein with pyrite 41.03 - 41.12 - quartz Kspar with trace pyrite @ 68° to c/a	3792	40.72	41.12	0.40	.005	tr		.001
41.12	42.09	Sheared hornblende gneiss -abundant fine disseminated and veinlet calcite -Trace pyrite	3793	41.12	41.42	0.30	.002			
			3794	41.42	41.73	0.31	nil			
			3795	41.73	42.03	0.30	nil			

HOLE NO. .... 13.....  
PAGE ..... 3.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
42.09	45.26	Quartz feldspar hornblende gneiss - minor shearing - erratic calcite veins - minor Fe stain feldspars							
45.26	46.45	Feldspar hornblende gneiss - minor calcite @ 58 to % - trace pyrite							
46.45	46.48	Quartz vein - glossy white -trace pyrite - @ 32° to c/a							
46.48	47.46	Quartz feldspar biotite gneiss							
47.46	47.55	Quartz feldspar vein with abundant subhedral pyrite							
47.55	48.16	Quartz feldspar hornblende gneiss							
END OF HOLE									

**ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG**

PROPERTY ... *Lot 5* ..... LOCATION .....  
NTS CODE ... *6221* ..... HOLE NO. .... *A-14* .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -45° .....	STARTED ... Sep. 9, '79 ..
ELEVATION .....	CORE ..... AQ .....	COMPLETED .. Sep. 14, '79 ..
SECTION .....		LOGGED BY . R. H. U. .
REF. GRID .....		

## DIP TESTS

HOLE NO. 40-14  
PAGE 1

HOLE NO. LQ: 15 .....  
PAGE ...? .....

HOLE NO. L.O. 14 .....  
PAGE ... 3 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH			AVERAGES
28.50	28.53	Qtz. feldspar vein @ 48° to c/a -trace pyrite.							
28.53	31.36	Feldspar hornblende gneiss -minor fracturing and calcite rich zones adjacent to fractures							
31.36	39.61	Qtz. feldspar hornblende gneiss -minor disseminated pyrite. -Fe stained K-spar -chloritic zones along fractures and calcite. -minor qtz. rich zones -trace pyrite.							
39.81	40.90	Cte. hornblende gneiss -very silicic -minor chlorite -minor fracture @ 38° to c/a -pyrite along fracture, coarse subhedral pyrite in 3mm zone.							
40.90	42.00	Hornblende feldspar gneiss -minor shearing @ 16° to c/a -minor qtz. lenses and veining.							
42.00	42.98	Qtz. hornblende feldspar gneiss							
42.98	43.86	Qtz. feldspar gneiss @ 16° to c/a -narrow zone of abundant pyrophyllite -minor chloritic cles throughout.							



**HOLE NO. . LO-14** .....  
**PAGE .5** .....

HOLE NO. 49-14 .....  
PAGE ..6.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH (in/in)			
70.23	71.63	Qtz. hornblende - minor epidote along fractures - minor calcite veining							
71.63	71.90	Qtz K-spar gneiss - minor clots of hornblende. - trace pyrite along fractures							
71.90	77.91	Hornblende to feldspar hornblende gneiss - fine calcite stringers throughout and trace pyrite @ 45° to c/a 77.75 - minor qtz. vein (6-8 mm) @ 47° to c/a - minor chlorite.							
77.91	79.40	- highly sheared hornblende gneiss - abundant disseminated calcite and calcite along fractures - trace pyrite and chalcopyrite in calcite. - calcite @ 46° to c/a	3900	78.70	79.31	0.61	nil		
79.40	79.46	Qtz. calcite vein - disseminated chlorite - minor pyrite veneer along fracture.	3801	79.31	79.61	0.30	.002		
79.46	79.83	Sheared hornblende gneiss, abundant fine calcite stringers @ 70° to c/a							
79.83	81.34	Qtz. hornblende gneiss - numerous calcite veins - minor shearing @ 80° to c/a - epidote along fractures							
81.34	84.63	Qtz. hornblende gneiss - 2 qtz veins ~ 7mm wide @ 69° to c/a - no shearing							

HOLE NO. 49-14 .....  
PAGE ...7.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH	Ru		AVERAGES
84.43	87.72	Qtz. hornblende gneiss - minor fracturing - epidote. - minor K-feldspar bearing zones - qtz. vein @ 20° to c/a							
87.72	92.78	Qtz. hornblende gneiss @ 16° to c/a - minor epidote veining - minor qtz. along gneissosity.							
92.78	96.29	Fractured qtz. feldspar hornblende gneiss - minor shearing - Fe staining at feldspars - minor qtz. lenses - epidote along fractures.							
96.29		- Qtz. vein - minor calcite, trace pyrite. @ 12° to c/a							
96.29	110.34	Qtz. hornblende gneiss - minor epidote along fracture @ 50 to 90° to c/a - trace pyrite. - minor qtz. vein @ 46° to c/a							
10.34	111.22	Highly sheared qtz. hornblende gneiss @ 48° to c/a - abundant fine calcite veins - minor silicification. - numerous erratic qtz lenses	3802	110.34	110.95	0.61	n/i		
			3803	110.95	111.22	0.27	.002		
11.22	111.95	Qtz. vein and highly silicified. - trace pyrite - erratic qtz. lenses in silicified wall rock - minor fracturing.	111.22	111.53	111.95	0.31	.002		
			3804	111.22	111.53	0.42	.002		
			3805	111.53	111.95	0.42	.002		

HOLE NO. 10:14.....  
PAGE ...?

FOOTAGE	FROM	TO	DESCRIPTION	CORE SAMPLES							AVERAGES
				NO.	FROM	TO	WIDTH	Au (oz/ton)	Ag (oz/ton)		
111.95	112.17		Qtz. vein - milky white qtz. - fine telluride along fractures @ 112.01	3806	111.95	112.17	0.22	.26	.04		0.04
112.17	113.36		Sheared qtz. hornblende gneiss - abundant fine calcite vein and disseminated calcite. throughout - trace pyrite. - vein @ 80° to c/a	3807	112.17	112.96	0.79	.002			
				3808	112.96	113.36	0.40	.01			
113.36	115.03		Qtz. hornblende gneiss - fine grained - minor shearing.								
115.03	115.12		Sheared qtz. hornblende gneiss								
115.12	115.15		Milky to cherty grey qtz. vein at 72° to c/a - minor pyrite along fractures	3809	115.03	115.34	0.31	nil			
115.15	115.24		Sheared qtz. hornblende gneiss w/ minor calcite veining.								
115.24	120.06		Hornblende feldspar gneiss - minor shearing - calcite veining throughout - minor shearing								
120.06	121.04		Qtz. feldspar hornblende gneiss - medium grained - minor epidote.								
121.04	124.36		Hornblende feldspar gneiss - fine grained - minor calcite along fracture @ 10° to c/a - trace pyrite.								

END OF NOTE

**ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG**

PROPERTY . . . . . LOTUS . . . . . LOCATION . . . . .  
NTS CODE . . . . . 62P-1 . . . . . HOLE NO. . . . . LO-15 . . . . .

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -45° .....	STARTED .. <i>Sept. 28/75</i> ..
ELEVATION .....	CORE ..... <i>B9</i> .....	COMPLETED .. <i>Sep 4/4/75</i> ..
SECTION .....		LOGGED BY .. <i>R.H.N.</i> ..
REF. GRID .....		

## DIP TESTS

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)			
0	2.44	Casing								
2.44	4.85	QFH Gneiss -minor pyrite veining -minor shearing								
4.85	7.99	FH gneiss - fine grained -sheared portion @ 51° to c/a -minor calcite veining with pyrrhotite at erratic angles to c/a (35-50°)								
7.99	8.26	QH gneiss - med. grained								
8.26	10.27	Hornblende gneiss - fine grained -abundant fine calcite veinlets -trace pyrrhotite -erratic quartz vein at low angle to c/a (57°) -numerous fractures throughout								
10.27	15.64	Hornblende - feldspar gneiss -fine calcite veining -minor shearing @ 24° to c/a								
15.64	16.67	Quartz vein -mottled grey-white cherty to glossy quartz -minor pyrite along fractures (veiner) -at low angle to c/a - 13°	3810	15.64	16.25	0.61	nil			
			3811	16.25	16.67	0.42	nil			

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)			
16.67	17.01	Sheared chloritic with abundant quartz lenses and calcite throughout	3812	16.67	17.01	0.34	.002			
17.01	18.41	Quartz vein - glossy to black fine grained quartz - pyrite disseminated along fractures and as veneer - minor milky quartz zone	3813	17.01	17.50	0.49	nil			
			3814	17.50	17.80	0.30	nil			
			3815	17.80	18.41	0.61	nil			
18.41	25.02	Sheared hornblende gneiss - chloritic - abundant erratic calcite veining throughout and trace pyrrhotite - some veins @ 32° to c/o - 22.06 : quartz vein @ 72° to s/o - trace pyrite								
25.02	27.00	Hornblende - feldspar gneiss - chlorite throughout - minor shearing throughout - abundant calcite veining								
27.00	27.71	Quartz hornblende gneiss - medium grained - abundant calcite veining throughout								
27.71	34.11	Hornblende feldspar gneiss - fine grained - finely sheared zone - abundant calcite veinlets throughout - poorly developed gneissosity - trace pyrite								

HOLE NO. .... 45 .....  
PAGE ..... 2 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
34.11	34.17	Quartz vein - pyrite veneer along fracture - minor calcite along contact with wall rock @ 19° to c/a - trace pyrrhotite								
34.17	37.03	Hornblende gneiss - very fine grained - abundant calcite veins throughout - minor quartz veins throughout ~ parallel to c/a - disseminated pyrrhotite and trace pyrite								
37.03	41.33	Hornblende - feldspar gneiss - minor calcite veining @ 47° to c/a - minor epidote along fracture								
41.33	41.39	Quartz vein - highly carbonated in adjacent wallrock @ 55° to c/a								
41.39	44.07	Hornblende gneiss - fine grained - minor calcite veining								
44.07	46.06	Hornblende feldspar gneiss - minor shearing and calcite veining @ 38° to c/a - medium grained								
46.06	46.88	Hornblende gneiss - very fine grained - minor calcite veining								

HOLE NO. .... 15. ....  
PAGE ..... 1 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)			AVERAGES
46.88	49.84	Hornblende feldspar gneiss - medium grained - minor calcite veining and trace quartz veining								
49.84	49.90	Quartz vein - minor calcite at contact @ 46° to c/a								
49.90	58.89	Hornblende feldspar gneiss - medium grained - minor shearing @ 60° to c/a - narrow feldspar - quartz veining parallel to gneissosity								
58.89	59.28	Sheared hornblende gneiss - very fine grained - narrow quartz vein @ 52° to c/a								
59.28	60.23	Quartz feldspar hornblende gneiss - narrow calcite veinlets ~ 60° to c/a								
60.23	63.55	Sheared qtz. hornblende gneiss - very fine grained - fine calcite veining - minor silicification and erratic qtz. blebs.								
63.55	63.67	Sheared - minor epidote - erratic silicate	3816	63.55	63.67	0.12	.002			
63.67	63.70	Quartz vein - milky quartz @ 69° to c/a - trace chlorite	3817	63.67	64.01	0.34	nil			

HOLE NO. .... 15.....  
PAGE .....5.....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Avg (oz/ton)			
63.70	64.62	Silicified QHG - erratic qtz. lenses and silicified zones - disseminated pyrite in silicified zones - minor calcite veining throughout @ 60-80° to c/a	3818	64.01	64.31	0.30	nil			
			3819	64.31	64.62	0.31	.005			
64.62	75.16	Qtz. - feldspar - hornblende gneiss - minor calcite veining throughout @ 85° to c/a - minor fracturing throughout - epidote - 74.74 : calcite vein @ 10° to c/a - pyrite, chlorite								
75.16	75.93	Hornblende gneiss - fine grained with minor calcite veining								
75.93	81.44	Qtz - hornblende gneiss to QFHG - minor pyrite and epidote along fractures @ 30° to c/a								
81.44	82.69	Hornblende gneiss - fine grained with fine calcite veinlets								
82.69	82.72	Quartz vein - 15 mm wide - trace pyrite - @ 120° to c/a								
82.72	83.88	Hornblende gneiss - very fine grained - abundant fine calcite stringers and veinlets @ 65° to c/a								

HOLE NO. .... 45  
PAGE ..... 5

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Avg (m/km)		
83.88	84.31	Quartz vein @ 19° to c/a - milky white mottled quartz - abundant pyrite veneer along fracture - fine clots of chlorite	3820	83.88	84.31	0.43	.002		
84.31	84.70	Sheared and silicified zone - disseminated subhedral pyrite and along fractures	3821	84.31	84.70	0.39	nil		
84.70	87.45	Hornblende gneiss - very fine grained - fine calcite veinlets - 85.28 } Qtz. veins - 10 mm @ 13° to c/a - 86.01 }							
87.45	87.72	Qtz. - feldspar - hornblende gneiss - minor epidote							
87.72	97.81	Qtz. - hornblende gneiss - minor epidote and calcite in fractures 45-70% - medium to fine grained - erratic narrow quartz veining							
97.81	100.77	Qtz. - hornblende gneiss - medium grained - trace epidote veining							

HOLE NO. .... 5 .....  
PAGE ..... 1 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)	Ag (oz/ton)	AVERAGES
100.77	102.38	Qtz. - hornblende gneiss - medium to fine grained - narrow calcite veinlets - minor quartz veining with pyrrhotite @ 41° to c/o							
102.38	102.69	Highly sheared QHG @ 73° to c/o - abundant fine calcite stringers	3822	102.38	102.69	0.31	nil		
102.69	102.93	Silicified and carbonated - abundant gtz. lenses and stringers with fine pyrrhotite and chalcopyrite along fractures	3823	102.69	102.93	0.24	.002		
102.93	103.08	Calcite - chlorite schist - abundant subhedral pyrite to 4 mm. - minor quartz veining	3824	102.93	103.08	0.15	.002	h	
103.08	103.33	Quartz - calcite vein - brecciated - sugary texture with abundant fine chlorite - disseminated tellurides and pyrite - @ 52° to c/o	3825	103.08	103.33	0.25	.002	.01	
103.33	103.48	Quartz - erratic brecciated appearance - abundant fine calcite in fractures - minor disseminated pyrite	3826	103.33	103.48	0.15	.005	.01	
103.48	103.94	Sheared and brecciated, silicified and chloritic zone - fine pyrite and trace pyrrhotite - abundant erratic calcite throughout	3827	103.48	103.94	0.46	.002		

HOLE NO. .... 15 .....  
PAGE ..... 8 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)			
103.94	104.55	Sheared hornblende gneiss - chloritic schist - erratic calcite veinlet and gtz. calcite vein @ 45° to c/o - abundant disseminated pyrite especially in gtz. vein	3828	103.94	104.55	0.61	.002			
104.55	105.64	Sheared hornblende gneiss - abundant disseminated calcite and calcite veinlets - chlorite - trace pyrite in calcite	3829	104.55	105.16	0.61	.002			
105.64	106.31	Hornblende - feldspar gneiss - abundant disseminated calcite and calcite along fractures								
106.31	107.02	Sheared Qtz - hornblende gneiss - 106.47 - 106.53 - fine sugary calcite vein - shear @ 52° to c/o	3830	106.31	106.59	0.28	nil			
107.02	110.00	Hornblende feldspar gneiss - minor chlorite throughout - trace disseminated pyrite and pyrite along fracture - minor fracturing	3831	106.59	107.02	0.43	.002			
110.00	112.68	Quartz hornblende to Q.FH gneiss - fine pyrite in fractures and disseminated								

HOLE NO. .... 15 .....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						
FROM	TO		NO.	FROM	TO	WIDTH	Avg (oz/ton)		AVERAGES
112.68	-	Quartz epidote vein -pyrite veneer along fractures - 12 mm wide - @ 42° to c/a							
112.68	113.26	QHG - minor fracturing							
113.26	-	Quartz vein - milky quartz @ 61° to c/a - trace pyrite - minor calcite along contact of wall rock							
113.26	114.60	QFHG - minor qtz. rich zones in gneissosity							
114.60	-	Pyrite - calcite vein - abundant fine pyrite in calcite matrix ~ 13 mm wide - @ 50° to c/a							
114.60	117.93	QFHG - minor fracturing throughout -epidote and calcite							
117.93	117.96	Calcite-pyrite vein -medium grained subhedral pyrite in calcite matrix							
117.96	118.90	Qtz. Hornblende Gneiss -minor fracturing throughout							
118.90	119.21	Sheared QHG -abundant calcite vein and stringer and disseminated pyrite @ 56° to c/a	3832	118.90	119.21	0.31	n/a		
119.21	121.31	QHG - minor fracture throughout - trace calcite							

ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG

PROPERTY ... LOTUS..... LOCATION ... 155E... 005SW....  
NTS CODE ... 62P/1..... HOLE NO. .... 20-14.....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ... -50° .....	STARTED ... Sept 15/73 ..
ELEVATION .....	CORE ... AQ .....	COMPLETED ... Sept 16/73 ..
SECTION .....		LOGGED BY ... R. Hill ..
REF. GRID .....		

DIP TESTS

HOLE NO. L0:16 .....  
PAGE .4 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH <i>(in/in.)</i>	DW <i>(oz/ton)</i>			
0.00	1.22	Casing								
1.22	2.32	Quartz Hornblende Gneiss - minor fracturing								
2.32	2.38	Qtz vein - trace pyrite								
2.38	12.38	QHG - minor fracturing - trace epidote fractures at 54° to S6								
12.38	12.74	QFG - trace pyrrhotite in fractures - minor calcite								
12.74	14.30	Hornblende Feldspar Gneiss - fine grained - fine calcite veinlets at 52° to S6								
14.30	21.76	QFHG - minor epidote in fractures								
21.76	23.38	QFHG - Fe staining of feldspars - erratic calcite clots and veining - minor shearing @ 42° to S6								
23.38	30.97	QHG @ 12° to S6 - trace epidote along fractures - minor shearing @ 32° to S6								
30.97	31.36	QFHG - minor shearing - Fe staining of feldspars - minor calcite veining in shears @ 45-60° to S6								
31.36	32.52	QFHG - abundant fine fracturing with epidote								
32.52	32.58	Shear zone with 15 m.m. qtz vein @ 30° to S6								
32.58	35.51	FHG - abundant fractures - epidote and calcite and minor qtz on gneissosity								
35.51	36.12	Sheared Hornblende Gneiss - fine calcite along fractures - erratic qtz lenses	3833	35.51	36.12	0.61				
36.12	36.15	Silicified zone - fine pyrite veneer along fractures	3834	36.12	36.42	0.30	.002			
36.15	36.76	Highly sheared mafic chlorite - abundant disseminated calcite and calcite veining - erratic qtz lenses	3835	36.42	36.76	0.34	.005			

HOLE NO. 40-16.....  
PAGE 2.....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES (oz)
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)	A <sub>1</sub> (oz/ton)		
36.76	36.97	Qtz vein fuchsite schist and silicified wallrock -glassy qtz lensing throughout -trace muscovite -fine crenulations in fuchsite	3836	36.76	36.97	0.21	.01	.01		
36.97	37.22	Qtz vein - black to grey cherty quartz of mottled appearance -fine telluride and V.G. in fractures at 37.06m -pyrite veneer in fracturing	3837	36.97	37.22	0.25	.41			.07
37.22	37.34	Highly sheared -Fe staining -minor calcite, disseminated and in veinlets	3838	37.22	37.40	0.18	.002			
37.34	37.40	Qtz-Kspar veins - mottled grains -fine pyrite veneer and along fractures								
37.40	38.40	Highly sheared mafic -abundant fine calcite disseminated and in veinlets throughout -minor + silicification -shear @ 66° to S6	3839	37.40	38.01	0.61	.005			
38.40	39.35	Hornblende feldspar - very fine grained and minor shearing -fine calcite veining	3840	38.01	38.40	0.39	.005			
39.35	45.11	QFHG - medium grained -fine epidote on fractures -minor Kspar - qtz veining								
	45.11	End of Hole								

**ESSO MINERALS CANADA - DIAMOND DRILL HOLE LOG**

PROPERTY ... LOT 45 ..... LOCATION ... 0+45. NW ... 0+05. SW ...  
NTS CODE ... 62P1 ..... HOLE NO. .... 40-17 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP .... -50° .....	STARTED .. Sep 16/71 ..
ELEVATION .....	CORE .... AQ .....	COMPLETED .. Sep 17/71 ..
SECTION .....		LOGGED BY .. R. H. II ..
REF. GRID .....		

## DIP TESTS

HOLE NO. 40-17 .....  
PAGE .1.....

FOOTAGE		DESCRIPTION	CORE SAMPLES					
FROM	TO		NO.	FROM	TO	WIDTH	Avg (oz./ton)	
0.00	1.22	Casing						
1.22	1.86	Quartz Hornblende Gneiss						
1.86	1.98	Sheared QHG - minor qtz veins with chalcopyrite and pyrrhotite @ 62° to S6						
1.98	5.88	QFHG - minor fracturing - epidote and minor calcite						
5.88	6.04	Qtz vein - glassy white qtz with disseminated chlorite - trace calcite @ 59° to S6						
6.04	9.97	QHG - fine fracturing - trace epidote and calcite at 38° to S6						
9.97	10.42	Sheared QFHG - Fe staining of feldspars - minor epidote - shear at 24° to S6						
10.42	11.22	QHG - fine fracturing						
11.22	11.55	Sheared QFHG @ 11° to S6 - Fe staining - fine calcite in fractures - minor epidote and trace chlorite						
11.55	14.60	QFHG - minor fracturing and Fe staining - trace epidote						
14.60	14.66	Sheared QHG - fine qtz vein @ 47° to S6 - trace epidote						
14.66	15.18	QHG - fine fractures - minor qtz - Kspar clots						
15.18	18.29	HFG - speckled appearance - fine calcite						
18.29	18.78	Sheared HFG - Fe stained - fine fracturing at angle to shear						
18.78	19.17	Chlorite schist @ 68° to S6 - fine grained with abundant disseminated subhedral pyrite - fine calcite throughout	3841	18.78	19.17	0.39	.005	

HOLE NO. L6-17 .....  
PAGE 2.....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)	Ag (oz/ton)		
19.17	19.93	Qtz vein -glassy white qtz with disseminated chlorite and mottled grey-white portions -minor chlorite schist zones @ 46° to Sa	3842	19.17	19.63	0.46	nil			
			3843	19.63	19.93	0.30	nil			
19.93	23.38	Sheared hornblende gneiss ~ 55° to Sa -abundant disseminated calcite and fine calcite veinlets -minor Fe staining -minor zones of silicification -erratic qtz lensing and veinlets	3844	19.93	20.54	0.61	.002			
			3845	20.54	21.15	0.61	nil			
			3846	21.15	21.55	0.40	nil			
			3847	21.55	22.16	0.61	.002			
			3848	22.16	22.77	0.61	.002			
			3849	22.77	23.38	0.61	.002			
23.38	24.08	Qtz vein @ 51° to Sa -mottled grey white qtz - cherty to glassy -fine pyrite veneer along fractures -minor Kspar -minor fuchsite	3850	23.38	23.68	0.30	.002	.02		
			3851	23.68	24.08	0.40	.002	.005		
24.08	25.18	Sheared mafic -abundant fine calcite veins -minor silicification -trace disseminated pyrite	3852	24.08	24.69	0.61	nil			
25.18	31.79	QHG - fine fracturing -minor epidote along fractures								
31.79	32.25	Mafic dyke @ 38° to Sa -chlorite + ? - Fe staining -minor calcite veining								
32.25	35.88	QFHG - abundant fracturing -minor Fe staining of feldspars								
35.88	36.12	Sheared QHG -fine epidote along fractures @ 32° to Sa								
36.12	37.64	Qtz-feldspar gneiss  -fine grained sugary texture with disseminated pyrite -sheared? -disseminated chlorite throughout -narrow HG zones 3mm wide @ 08° to Sa								

HOLE NO. LQ:17.....  
PAGE .3.....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/L)		
37.64	38.07	Hornblende dyke @ 32° to Sg - fine grained sugary texture - narrow calcite veins							
38.07	38.59	Qtz-feldspar-chlorite - sugary texture - slightly sheared granite - pyrite veneer on fracture							
38.59	39.41	Chlorite shist and hornblende-feldspar - slightly sheared mafic gneiss - fine calcite veining							
39.41	44.17	QFHG - numerous fractures - narrow Qtz veins at 14° to Sg - 12mm at 41.30m - 15mm at 42.09m - minor calcite veining							
44.17	44.65	Sheared mafic gneiss - abundant disseminated calcite and calcite in fractures - minor silicification	3853	44.17	44.47	0.30	.005		
44.65	44.78	Qtz - calcite vein - sugary textured	3854	44.47	44.78	0.31	.01	.02	
44.78	45.08	Silicified shear - Fe staining - abundant erratic calcite along fractures @ 42° - trace pyrite veneer	3855	44.78	45.08	0.30	nil	.04	
45.08	45.69	Sheared mafic @ 61° to Sg - minor Fe stains - abundant calcite along fractures and disseminated	3856	45.08	45.69	0.61	nil		
45.69	48.16	QHG - abundant fine fracturing							
	48.16	End of Hole							

IMPERIAL OIL LIMITED - DIAMOND DRILL HOLE LOG

PROPERTY ... *Lotos* . . . . .

**LOCATION** ..... .

NTS CODE 62P-1

HOLE NO. .... 20-18 ....

LATITUDE ..... AZIMUTH ..... PURPOSE .....

DEPARTURE ..... DIP ..... -50° ..... STARTED .....

..... ELEVATION COBE *AQ* ..... COMPLETED .....

SECTION ..... LOGGED BY .X.H.V..

**REF. GRID**

DIP TESTS

HOLE NO. .... 10-18. ....  
PAGE ..... 1

FOOTAGE		DESCRIPTION	CORE SAMPLES					AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH		
0	1.98	Casing						
1.98	12.92	Quartz feldspar hornblende gneiss - medium grained - narrow quartz veining and fracturing throughout @ 62° to c/a - minor pyrite in fractures - minor calcite veining						
12.92	12.98	Sheared Quartz feldspar hornblende gneiss - calcite vein in shear - trace pyrite @ 29° to c/a						
12.98	15.12	QFH gneiss - medium grained - minor shearing @ 55° to c/a - fine calcite - minor epidote along fracture						
15.12	15.18	Calcite-chlorite vein 50 mm - Fe stain and trace pyrite @ 42° to c/a						
15.18	17.07	QFH gneiss - medium grained - minor fracturing throughout - minor shearing @ 18° to c/a						

HOLE NO. .... 40-18 .....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Au (oz/ton)		
17.07	-	Quartz vein - milky gtz. with minor Kspor ~10mm @ 55° to c/a							
17.07	19.36	QFH gneiss - minor fracturing - slight shearing and more abundant fracture over 19.23 - 19.36							
19.36	19.38	Qtz. vein - white glassy quartz - minor tourmaline - very fine grained in veinlet - trace fuchsite @ 35° to c/a	3857	19.23	19.54	0.31	nil		
19.38	20.79	Qtz. feldspar hornblende gneiss - minor fine epidote on fracture - minor Fe stain feldspar							
20.79	20.94	Sheared QFH gneiss - narrow (10 mm) Fe stain gtz. lens - Fe staining throughout - shear @ 73° to c/a							
20.94	22.37	QFH gneiss - minor chlorite - narrow fracture @ 62° to c/a							

HOLE NO. .... 40-18 .....  
PAGE ..... 1 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
22.37	22.89	Monzonite to gtz. monzonite @ 47° to c/a - fine grained - trace pyrite in fracture @ 10° to c/a							
22.89	31.24	QFH gneiss - medium grained with minor fracturing throughout - minor shearing @ 72° to c/a - epidote and trace gtz. and fine calcite - minor chlorite							
31.24	31.39	Slightly sheared QFH gneiss - minor narrow gtz. vein 10 mm wide @ 28° to c/a - trace pyrite along edge - minor calcite in fractures							
31.39	35.17	QHG and QFH G - medium grained - minor fract. with fine calcite veinlets and Fe stain of feldspar in adjacent wallrock							
35.17	35.51	Feldspar hornblende gneiss - gabbroic - minor calcite fracture							
35.51	40.23	Gtz-feldspar-horn gneiss - medium grain - trace pyrite in fractures with epidote and calcite - iron staining adjacent to fractures							

**HOLE NO.** ..... 4-8 .....  
**PAGE** .....

IMPERIAL OIL LIMITED - DIAMOND DRILL HOLE LOG

PROPERTY ..... *Lotos* ..... LOCATION .....  
NTS CODE ..... 62P-1 ..... HOLE NO. ..... 40-19 .....

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... $-50^\circ$	STARTED .....
ELEVATION .....	CORE .... AQ .....	COMPLETED .....
SECTION .....	LOGGED BY R. Hall	
REF. GRID .....		

## DIP TESTS

HOLE NO. ... 10-19 .....  
PAGE ..... 1 .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Avg (oz/tm)		
0	1.83	Casing							
1.83	8.72	Quartz feldspar hornblende gneiss -minor shearing @ 28° to c/a with quartz and epidote (Box dropped by drillers and core) Mixed to 7.92							
8.72	8.75	Quartz vein 15 mm -with abundant pyrite along contact @ 19° to c/a	3867	8.63	8.93	0.30	.002		
8.75	14.97	Quartz feldspar hornblende gneiss -gneiss @ 22° to c/a -minor calcite in fracture -minor fracturing throughout -minor quartz veining 2-4 mm at irregular attitude -minor shearing							
14.97	15.45	Quartz Kspar vein or dyke @ 46° to c/a with minor chloritic clots. -very fine grained -Fe staining throughout							
15.45	16.03	Quartz feldspar Hornblende gneiss -minor shearing -trace pyrite							



HOLE NO. . . . . 40-19  
PAGE . . . . . 3

FOOTAGE		DESCRIPTION	CORE SAMPLES					AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH		
26.09	26.79	Sheared QFH gneiss - highly foliated - Fe stain gts. lenses in shear - fine calcite stringers throughout - trace pyrite						
26.79	31.21	QFH gneiss - medium grained - minor chlorite - minor fracturing with calcite veinlets						
31.21	31.36	QFH gneiss - Fe stain of feldspars - fractured throughout - fine gts. vein (1 mm) @ 62° to c/o						
31.36	32.25	QFH gneiss - medium grained - granitic						
32.25	32.34	Qtz. epidote - calcite vein - bladed calcite with fine epidote and interstitial gtz. @ 32° to c/o						
32.34	32.77	QFH gneiss - minor fracturing - calcite veinlets						

HOLE NO. ....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Ay (oz/ton)	Ag (oz/ton)	Mn (%)	
32.77	32.89	Qtz. calcite vein -bladed calcite 2 mm with gtz. matrix -trace pyrite -minor epidote - lime green @ 50° to c/a								
32.89	34.72	Qtz. feldspar hornblende gneiss								
34.72	34.81	Gt vein -abundant pyrite as veneer in fracture -vein @ 69° to c/a -minor pyrite	3869	34.66	34.96	0.30	.002			
34.81	36.85	Qtz. feldspar hornblende gneiss -poorly developed gneissosity								
36.85	37.09	Monzoite -gtz. feldspar hornblende -abundant clots of molybdenite	3870	36.85	37.09	0.24	.002		0.09	
37.09	37.92	Feldspar hornblende gneiss to -poorly developed gneissosity								
37.92	38.10	Quartz vein -3 vein ~ 35 mm wide @ 65° to c/a -milky to glassy qtz.	3871	37.92	38.10	0.18	.002			

HOLE NO. ... 40-19 .....  
PAGE .....

HOLE NO. .... 40-19.....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
50.81	50.96	Mafic dyke -fine grained chlorite - amphibole -minor calcite veining @ 53° to 90°							
50.96	51.33	QFH - monzonite - medium to coarse grained.							
51.33	51.97	Mafic dyke - fine grained chlorite - amphibole @ 27° to c/o - trace pyrite							
51.97	54.25	QFH gneiss -minor Fe stain							
		End of Hole							

**IMPERIAL OIL LIMITED - DIAMOND DRILL HOLE LOG**

PROPERTY . . . . . LOTUS . . . . . LOCATION . . . . .  
NTS CODE . . . . . G2P/ . . . . . HOLE NO. . . . . 20-20 . . . . .

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -50° .....	STARTED . Sept 21/79 ..
ELEVATION .....	CORE .... -1089 . A.Q .....	COMPLETED . Sept 22/79 ..
SECTION .....		LOGGED BY . R. Hall ..
REF. GRID .....		

## DIP TESTS

HOLE NO. .... 10-20.....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH	Ag (oz/ton)	Ag (oz/ton)		
0	7.32	Casing								
7.32	11.89	Highly sheared mafic gneiss - abundant calcite veinlets // to foliation - variable amount disseminated subhedral pyrite - minor erratic gtz. lenses throughout @ 43° to c/a  - 11.25 gtz. vein - 9mm - pyrite - @ 52° to c/a	3879	7.32	7.92	0.60	.002			
			3880	7.92	8.53	0.61	.002			
			3881	8.53	9.17	0.64	.002			
			3882	9.17	9.82	0.65	.001			
			3883	9.82	10.46	0.64	.002	.02		
			3884	10.46	11.10	0.64	.002			
			3885	11.10	11.74	0.64	.002			
11.89	-	Qtz. vein - fine calcite along margin - abundant fine telluride and trace v.g. @ 51° to c/a	3886	11.74	12.13	0.39	.002	.03		
11.89	17.68	Highly sheared mafic gneiss - abundant fine calcite - minor gtz. lenses - zones of abundant pyrite in fracture and trace chalcopyrite 17.22 - gtz. vein @ 32° to c/a	3887	12.13	12.68	0.55	.002	.03		
			3888	12.68	13.29	0.61	.002	.03		
			3889	13.29	14.02	0.73	.002			
			3890	14.02	14.63	0.61	.002			
17.68	17.71	Highly silicified zone - Fe stain - pyrite veneer in fracture 55° to 58° to c/a	3891	17.56	17.86	0.31	.002			

HOLE NO. .... 40-20 .....

HOLE NO. .... 20-20 .....  
PAGE .....

HOLE NO. .... 40-20 .....  
PAGE .....

**IMPERIAL OIL LIMITED - DIAMOND DRILL HOLE LOG**

PROPERTY .... Lotus .....

**LOCATION** . . . . .

NTS CODE . . . . . G2P-1 . . . . .

HOLE NO. .... 40-21 ....

LATITUDE ..... AZIMUTH ..... PURPOSE .....

DEPARTURE ..... DIP ..... -45° ..... STARTED November 5/99 ..

ELEVATION ..... CORE ..... AQ ..... COMPLETED Number 6/79.

LOGGED BY R.Hall

REF. GRID . . . . . , . . .

## DIP TESTS

HOLE NO... 20-21.....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
0	1.83	Coring							
1.86	6.77	Hornblende gneiss - fine grain hornblende gneiss with numerous fine calcite veinlets c 29° to cleavage							
6.77	7.80	Otz-felsic-hornblende gneiss - blei gte and Kspar - poorly developed gneissosity - trace calcite							
7.80	19.87	Otz-hornblende - plagioclase gneiss - "spotted" appearance - minor shearing and calcite c 42° to cleavage - meta diorite							
19.87	23.59	Otz-Lorn - plagioclase gneiss - sheared - very fine grain with erratic blei gte lenses parallel to shear c 43° to cleavage - minor silicification							
23.59	23.84	Highly sheared and silicified zone c 78° to cleavage - iron stain gte - minor muscovite in fractures							
23.84	26.82	Hornblende-actinolite - calcite gneiss - very fine grain - numerous fine calcite veinlets							
26.82	27.16	Otz-hornblende-actinolite - calcite gneiss - narrow fractures parallel to cleavage - minor pyroxenite and chalcocite (1 mm wide)							
27.16	33.50	Otz-hornblende gneiss - fine calcite veinlets with minor gte lenses and bleis - trace pyrite and chalcocite in fractures of calcite - very fine grain							

HOLE NO. ... 20-21 .....  
PAGE ..... 4

HOLE NO. ... 21 .....  
PAGE ..... 2

FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
57.94	58.16	Quartz vein at 10° to c/a true width approx 4 cm wide							
58.16	58.23	Mafic gneiss - highly sheared - trace pyrite							
58.23	58.37	Quartz vein - milky white at 26° to c/a - fine gold and telluride throughout	NOT SAMPLED						
58.37	73.27	Mafic gneiss - fine grain and sheared with dissem. pyrite - abund. calcite stringers - sugary and massive - foliated at 80° to c/a							
73.27	74.83	Mafic schist - silicified chlorite schist - numerous wide calcite veins, parallel to cleavage - very fine matrix							
74.83	75.32	Mafic gneiss - highly sheared - numerous calcite veins - dissem. pyrite and along fractures c18° to c/a							
75.32	77.82	Chlorite schist - very fine grain with abundant calcite stringers	*						
77.82	79.25	Fault gouge - chlorite-serpentine schist - intensely foliated at 28° to c/a - trace pyrite							
	79.25	END OF HOLE							

**IMPERIAL OIL LIMITED – DIAMOND DRILL HOLE LOG**

PROPERTY . . . . . LOTUS . . . . . LOCATION . . . . .  
NTS CODE . . . . . 62P-1 . . . . . HOLE NO. . . . . LO-22 . . . . .

LATITUDE .....	AZIMUTH .....	PURPOSE .....
DEPARTURE .....	DIP ..... -45° .....	STARTED . Oct. 31/79 .
ELEVATION .....	CORE ..... AQ .....	COMPLETED . Nov. 1/79 .
SECTION .....		LOGGED BY . R.S.Hall.
REF. GRID .....		

DIP TESTS

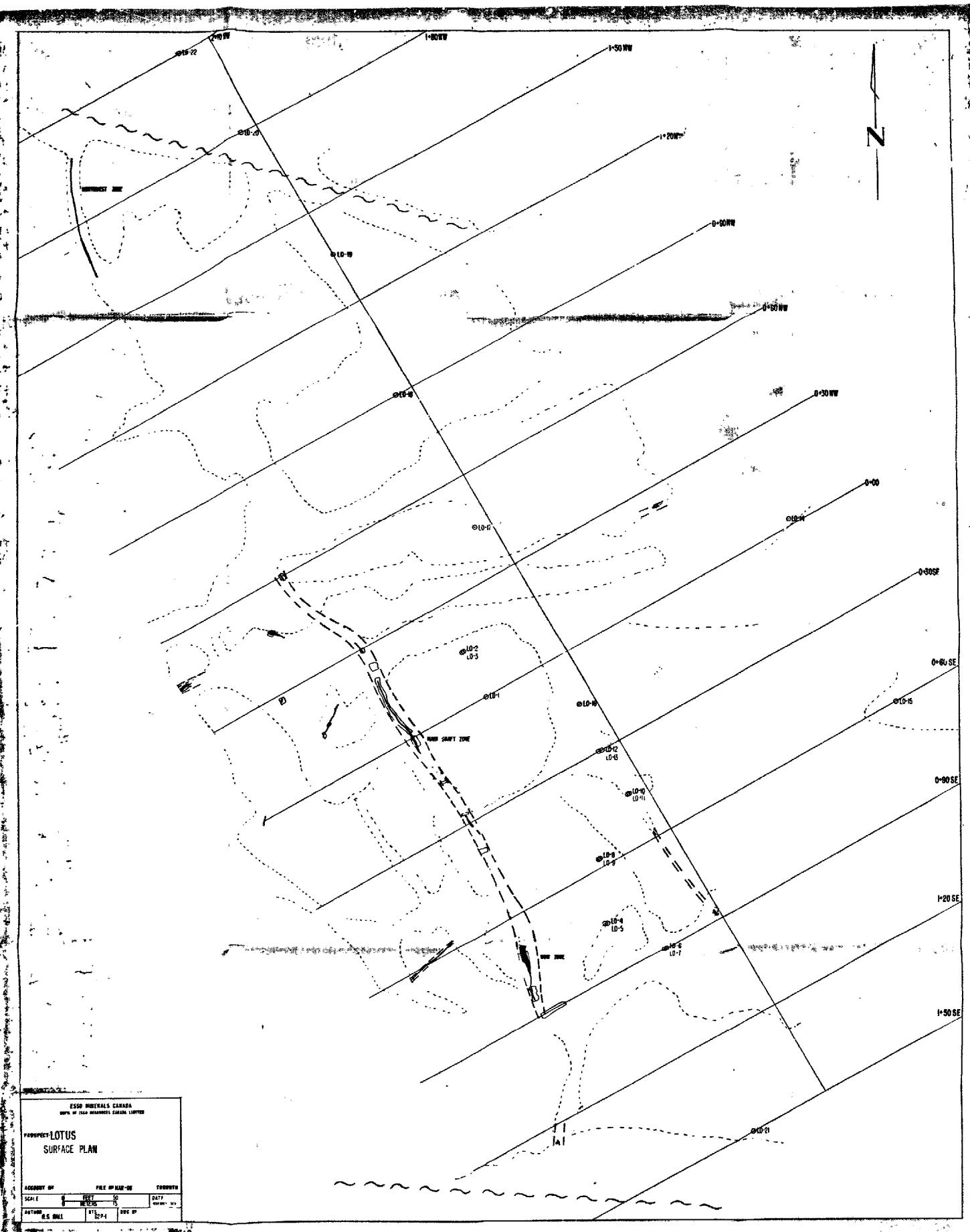
HOLE NO. .... 4-22.....  
PAGE .....

FOOTAGE		DESCRIPTION	CORE SAMPLES							AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH				
0	14.02	Casing								
14.02	19.60	Chloritic hornblende gneiss - very fine grain with abundant calcite lenses - dark siderite/biotite throughout - minor subhedral pyrite - narrow quartz lenses								
19.60	24.72	Chlorite schist - highly shaned and very fine grain - abund. iron stained calcite - irregular foliation but generally subparallel to cleavage - minor pyrite throughout								
24.72	25.08	Quartz vein - sub parallel to core axes (5-7°) - milky grey cherty quartz - trace pyrite								
25.08	26.40	Chlorite-carbonate schist $\approx 10^\circ$ to cleavage								
26.40	27.43	Quartz stringers - - erratic quartz lenses in chlorite schist $\approx 29^\circ$ to cleavage								
27.43	29.90	Chlorite-carbonate schist - very fine grain with abundant carbonate								
29.90	30.44	Quartz vein $\approx 25^\circ$ to core axes - milky grey quartz with minor K-feldspar - abundant calcite in fractures - trace pyrite								

HOLE NO. .... 40-22.....  
PAGE .....

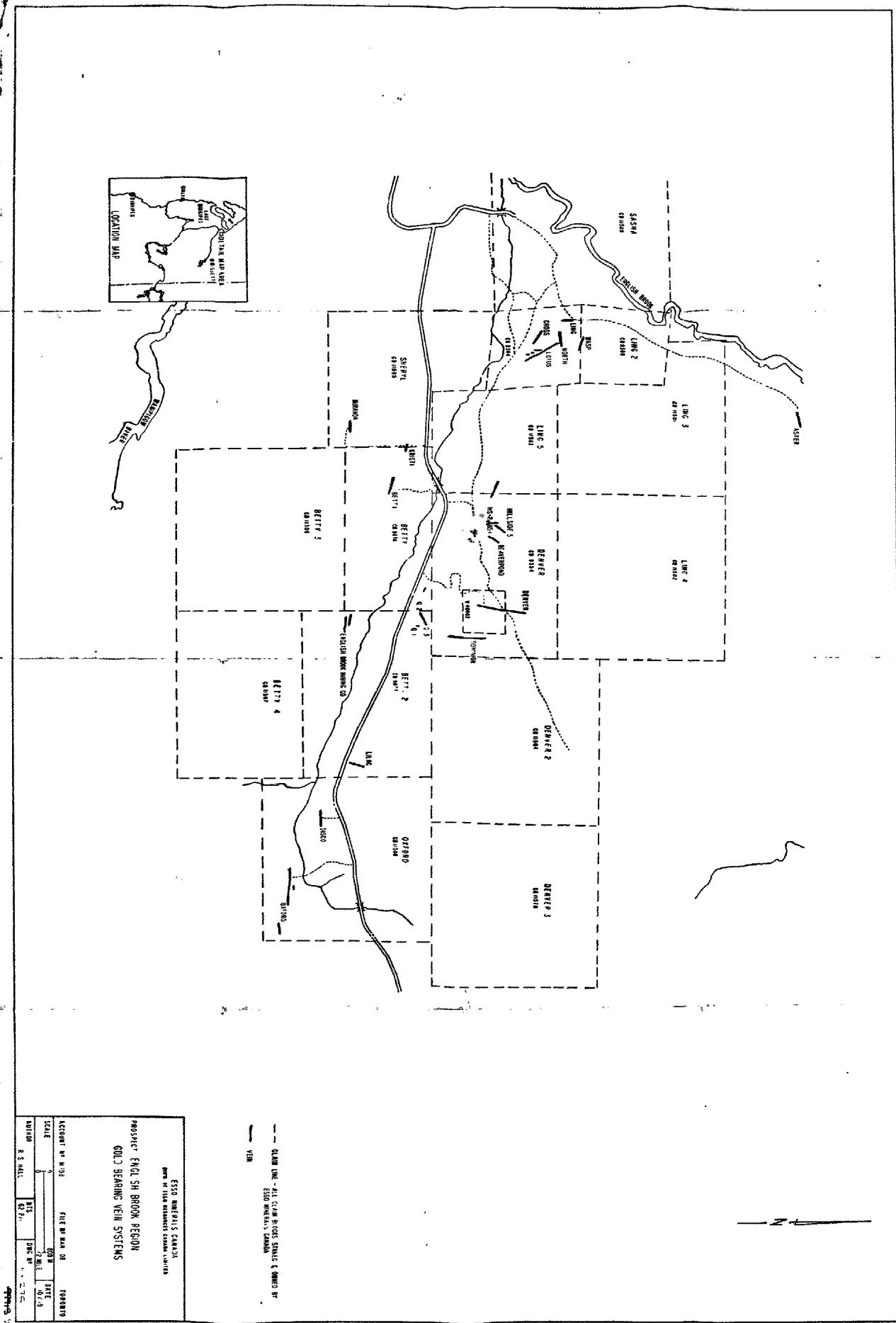
FOOTAGE		DESCRIPTION	CORE SAMPLES						AVERAGES
FROM	TO		NO.	FROM	TO	WIDTH			
30.44	35.66	Chlorite-carbonate schist e 24° to cl9 - zones of Fe stain on fractures							
35.66	36.30	Quartz veining in chlorite schist - irregular, sheety quartz veins at 36° to cl9 - abundant fine calcite adjacent to contact - trace pyrite							
36.30	57.82	Chlorite - carbonate schist - abundant fine calcite throughout - zones of intense Fe stain - granular texture - erratic fine gtz veins throughout							
57.82	55.66	Chlorite gneiss - very fine grain - abundant fine calcite veinlets - erratic gtz - Kyanite e 18° to cl9 - fine disseminated pyrite							
55.66	63.52	Chlorite - carbonate schist - interfoliated chlorite schist and sugary calcite parallel to core axis - numerous fine quartz lenses - trace pyrite - zones of intense Fe staining							
63.52	63.95	Chlorite schist with wide erratic sheety quartz lenses at low angle to core axis trace pyrite - fine calcite on contacts							
63.95	66.23	Chlorite-carbonate schist - abundant Fe staining - granular and ground core							

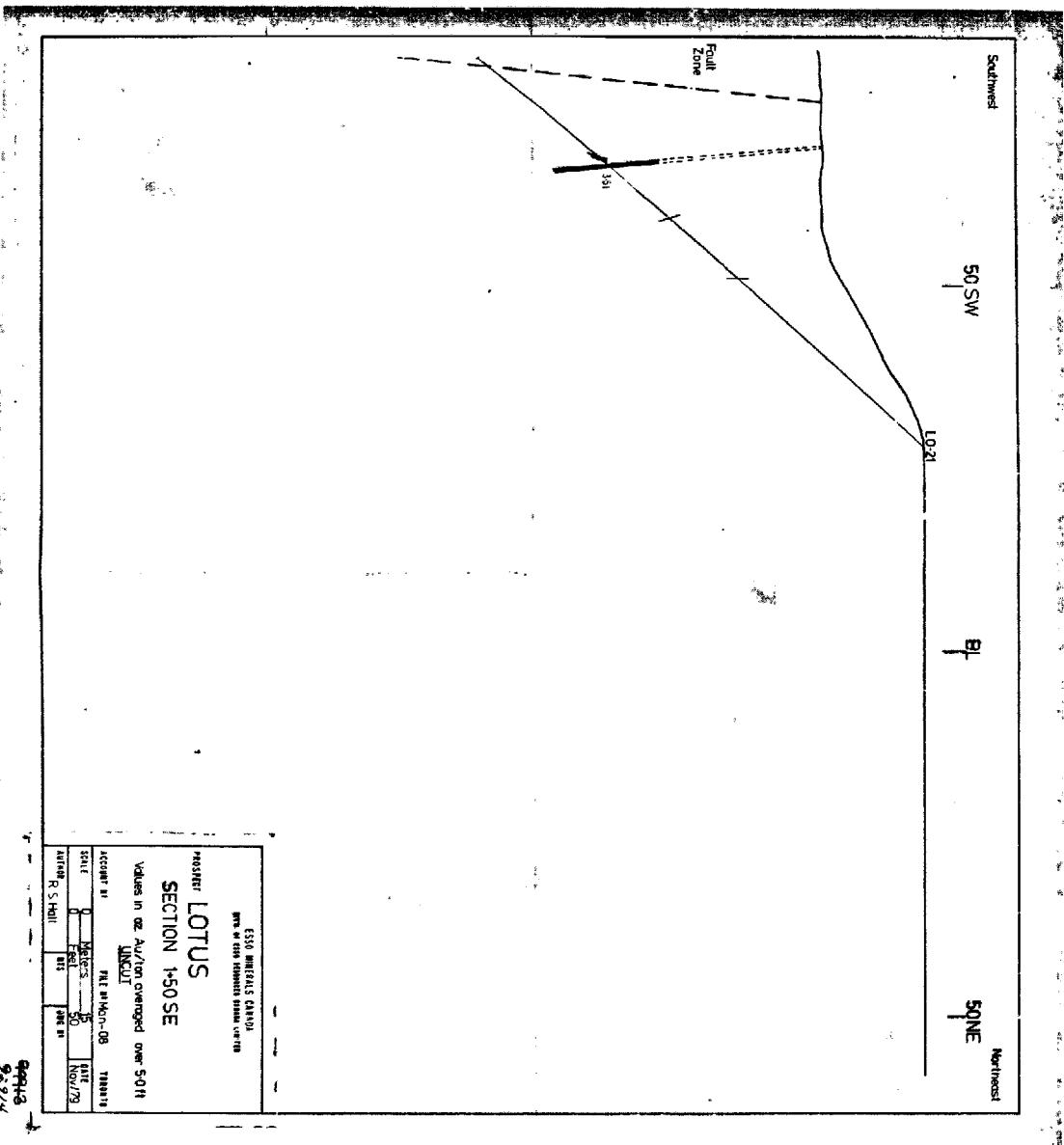




**ESSO MINERALS CANADA  
DEPT OF ESSO MEASURERS CANADA LIMITED**

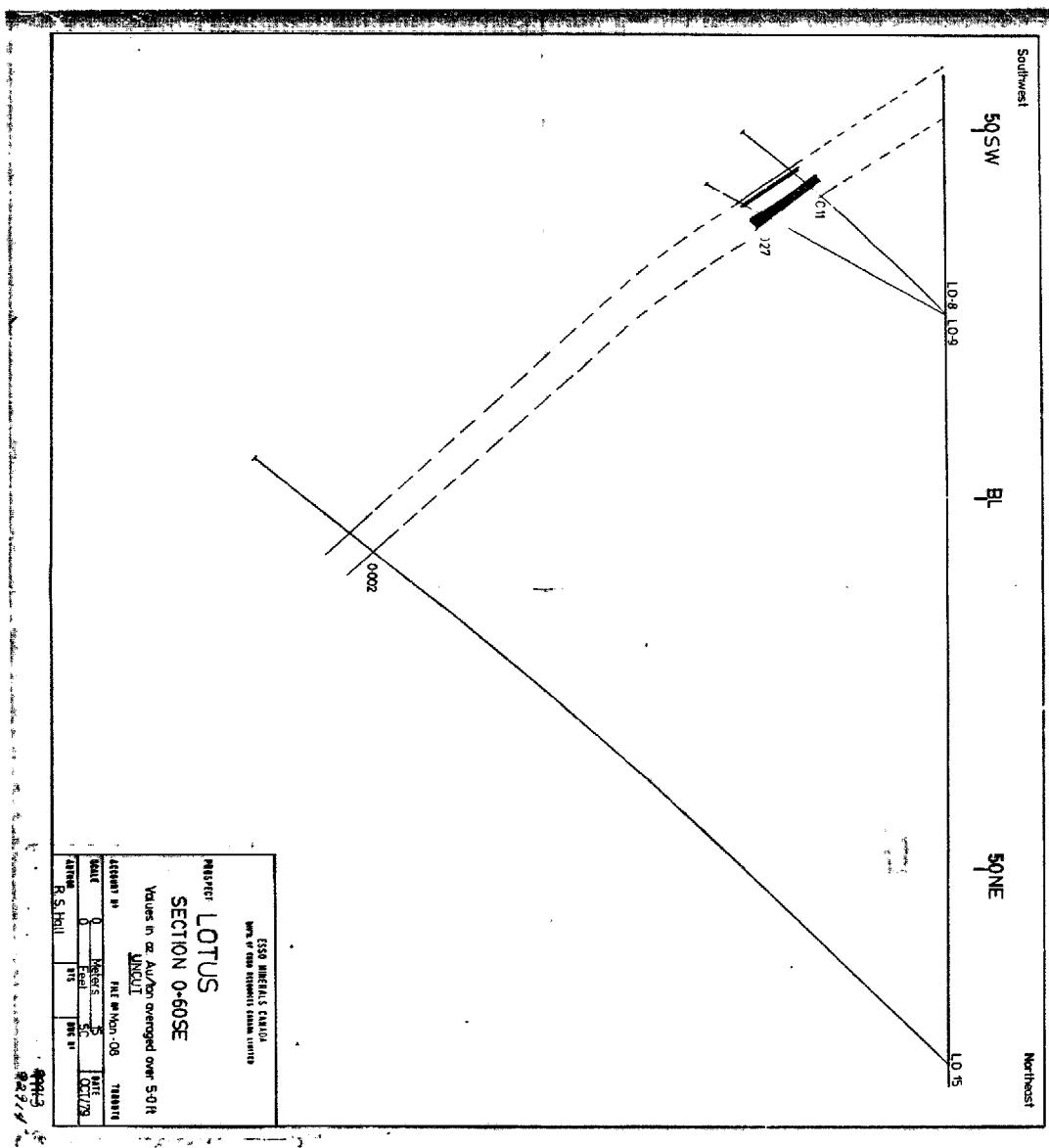
**PROSPECT: LOTUS  
SURFACE PLAN**



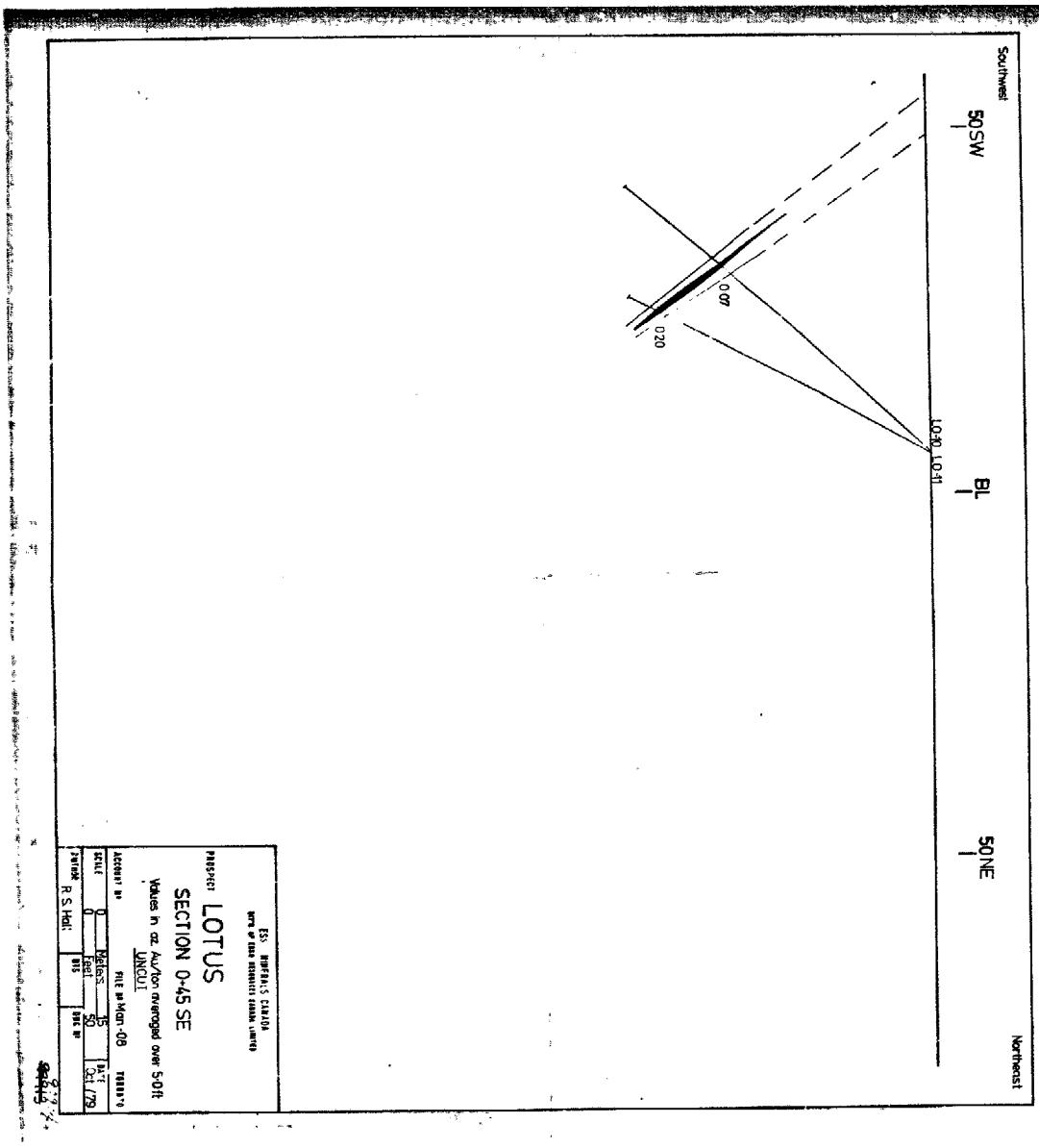


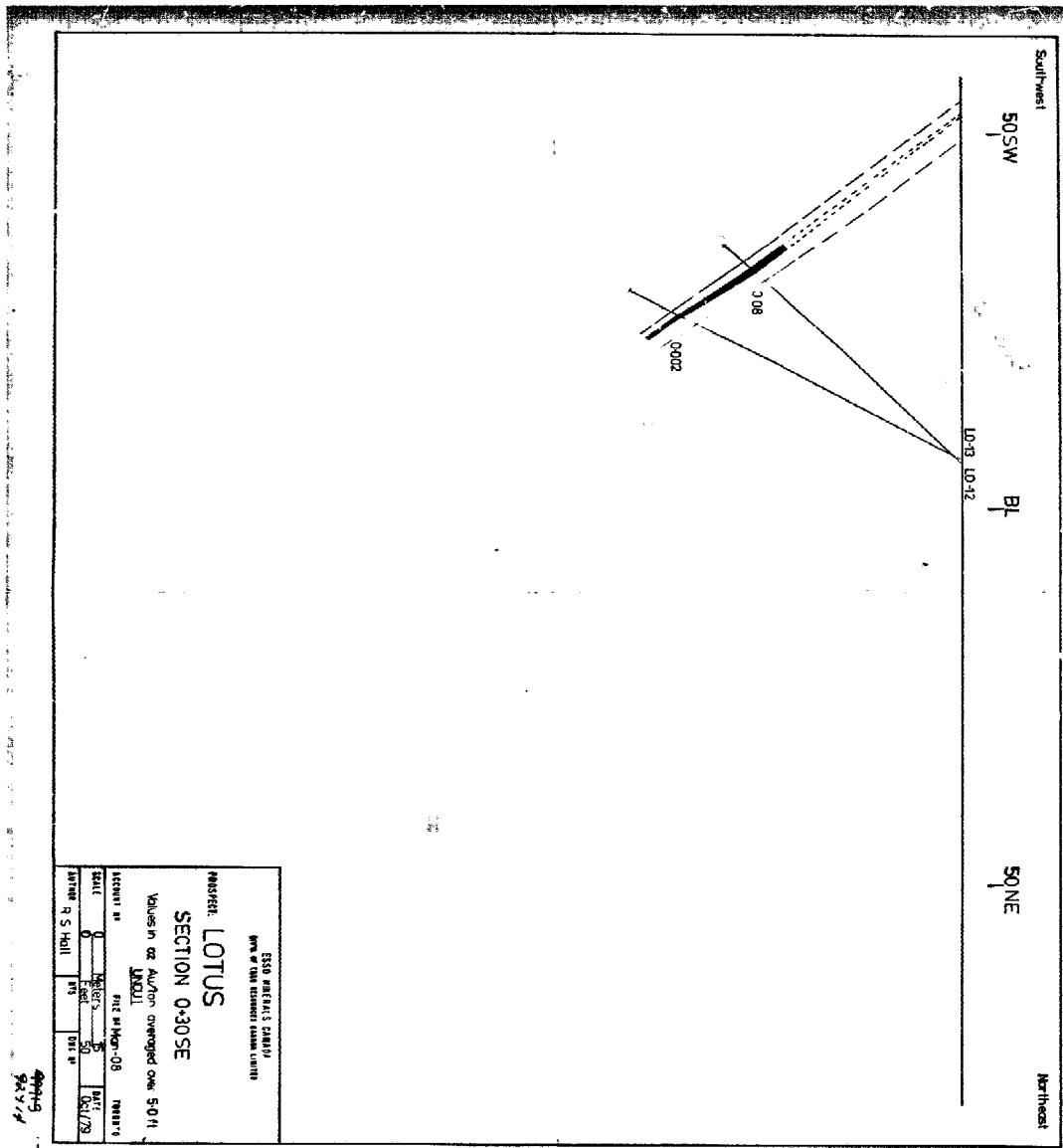
**20K**

ESSO MINERALS CANADA www.essominerals.ca/mines			
PROSPECT LOTUS			
SECTION 0-75SE			
Values in \$ US Auction averaged over 50 ft			
UNCUT			
ASSTN#	PIR #	Min - 98	Max - 98
11	Q	100	100
12	Q	100	100
13	Q	100	100
14	Q	100	100
15	Q	100	100
16	Q	100	100
17	Q	100	100
18	Q	100	100
19	Q	100	100
20	Q	100	100
21	Q	100	100
22	Q	100	100
23	Q	100	100
24	Q	100	100
25	Q	100	100
26	Q	100	100
27	Q	100	100
28	Q	100	100
29	Q	100	100
30	Q	100	100
31	Q	100	100
32	Q	100	100
33	Q	100	100
34	Q	100	100
35	Q	100	100
36	Q	100	100
37	Q	100	100
38	Q	100	100
39	Q	100	100
40	Q	100	100
41	Q	100	100
42	Q	100	100
43	Q	100	100
44	Q	100	100
45	Q	100	100
46	Q	100	100
47	Q	100	100
48	Q	100	100
49	Q	100	100
50	Q	100	100
51	Q	100	100
52	Q	100	100
53	Q	100	100
54	Q	100	100
55	Q	100	100
56	Q	100	100
57	Q	100	100
58	Q	100	100
59	Q	100	100
60	Q	100	100
61	Q	100	100
62	Q	100	100
63	Q	100	100
64	Q	100	100
65	Q	100	100
66	Q	100	100
67	Q	100	100
68	Q	100	100
69	Q	100	100
70	Q	100	100
71	Q	100	100
72	Q	100	100
73	Q	100	100
74	Q	100	100
75	Q	100	100
76	Q	100	100
77	Q	100	100
78	Q	100	100
79	Q	100	100
80	Q	100	100
81	Q	100	100
82	Q	100	100
83	Q	100	100
84	Q	100	100
85	Q	100	100
86	Q	100	100
87	Q	100	100
88	Q	100	100
89	Q	100	100
90	Q	100	100
91	Q	100	100
92	Q	100	100
93	Q	100	100
94	Q	100	100
95	Q	100	100
96	Q	100	100
97	Q	100	100
98	Q	100	100
99	Q	100	100
100	Q	100	100
101	Q	100	100
102	Q	100	100
103	Q	100	100
104	Q	100	100
105	Q	100	100
106	Q	100	100
107	Q	100	100
108	Q	100	100
109	Q	100	100
110	Q	100	100
111	Q	100	100
112	Q	100	100
113	Q	100	100
114	Q	100	100
115	Q	100	100
116	Q	100	100
117	Q	100	100
118	Q	100	100
119	Q	100	100
120	Q	100	100
121	Q	100	100
122	Q	100	100
123	Q	100	100
124	Q	100	100
125	Q	100	100
126	Q	100	100
127	Q	100	100
128	Q	100	100
129	Q	100	100
130	Q	100	100
131	Q	100	100
132	Q	100	100
133	Q	100	100
134	Q	100	100
135	Q	100	100
136	Q	100	100
137	Q	100	100
138	Q	100	100
139	Q	100	100
140	Q	100	100
141	Q	100	100
142	Q	100	100
143	Q	100	100
144	Q	100	100
145	Q	100	100
146	Q	100	100
147	Q	100	100
148	Q	100	100
149	Q	100	100
150	Q	100	100
151	Q	100	100
152	Q	100	100
153	Q	100	100
154	Q	100	100
155	Q	100	100
156	Q	100	100
157	Q	100	100
158	Q	100	100
159	Q	100	100
160	Q	100	100
161	Q	100	100
162	Q	100	100
163	Q	100	100
164	Q	100	100
165	Q	100	100
166	Q	100	100
167	Q	100	100
168	Q	100	100
169	Q	100	100
170	Q	100	100
171	Q	100	100
172	Q	100	100
173	Q	100	100
174	Q	100	100
175	Q	100	100
176	Q	100	100
177	Q	100	100
178	Q	100	100
179	Q	100	100
180	Q	100	100
181	Q	100	100
182	Q	100	100
183	Q	100	100
184	Q	100	100
185	Q	100	100
186	Q	100	100
187	Q	100	100
188	Q	100	100
189	Q	100	100
190	Q	100	100
191	Q	100	100
192	Q	100	100
193	Q	100	100
194	Q	100	100
195	Q	100	100
196	Q	100	100
197	Q	100	100
198	Q	100	100
199	Q	100	100
200	Q	100	100
201	Q	100	100
202	Q	100	100
203	Q	100	100
204	Q	100	100
205	Q	100	100
206	Q	100	100
207	Q	100	100
208	Q	100	100
209	Q	100	100
210	Q	100	100
211	Q	100	100
212	Q	100	100
213	Q	100	100
214	Q	100	100
215	Q	100	100
216	Q	100	100
217	Q	100	100
218	Q	100	100
219	Q	100	100
220	Q	100	100
221	Q	100	100
222	Q	100	100
223	Q	100	100
224	Q	100	100
225	Q	100	100
226	Q	100	100
227	Q	100	100
228	Q	100	100
229	Q	100	100
230	Q	100	100
231	Q	100	100
232	Q	100	100
233	Q	100	100
234	Q	100	100
235	Q	100	100
236	Q	100	100
237	Q	100	100
238	Q	100	100
239	Q	100	100
240	Q	100	100
241	Q	100	100
242	Q	100	100
243	Q	100	100
244	Q	100	100
245	Q	100	100
246	Q	100	100
247	Q	100	100
248	Q	100	100
249	Q	100	100
250	Q	100	100
251	Q	100	100
252	Q	100	100
253	Q	100	100
254	Q	100	100
255	Q	100	100
256	Q	100	100
257	Q	100	100
258	Q	100	100
259	Q	100	100
260	Q	100	100
261	Q	100	100
262	Q	100	100
263	Q	100	100
264	Q	100	100
265	Q	100	100
266	Q	100	100
267	Q	100	100
268	Q	100	100
269	Q	100	100
270	Q	100	100
271	Q	100	100
272	Q	100	100
273	Q	100	100
274	Q	100	100
275	Q	100	100
276	Q	100	100
277	Q	100	100
278	Q	100	100
279	Q	100	100
280	Q	100	100
281	Q	100	100
282	Q	100	100
283	Q	100	100
284	Q	100	100
285	Q	100	100
286	Q	100	100
287	Q	100	100
288	Q	100	100
289	Q	100	100
290	Q	100	100
291	Q	100	100
292	Q	100	100
293	Q	100	100
294	Q	100	100
295	Q	100	100
296	Q	100	100
297	Q	100	100
298	Q	100	100
299	Q	100	100
300	Q	100	100
301	Q	100	100
302	Q	100	100
303	Q	100	100
304	Q	100	100
305	Q	100	100
306	Q	100	100
307	Q	100	100
308	Q	100	100
309	Q	100	100
310	Q	100	100
311	Q	100	100
312	Q	100	100
313	Q	100	100
314	Q	100	100
315	Q	100	100
316	Q	100	100
317	Q	100	100
318	Q	100	100
319	Q	100	100
320	Q	100	100
321	Q	100	100
322	Q	100	100
323	Q	100	100
324	Q	100	100
325	Q	100	100
326	Q	100	100
327	Q	100	100
328	Q	100	100
329	Q	100	100
330	Q	100	100
331	Q	100	100
332	Q	100	100
333	Q	100	100
334	Q	100	100
335	Q	100	100
336	Q	100	100
337	Q	100	100
338	Q	100	100
339	Q	100	100
340	Q	100	100
341	Q	100	100
342	Q	100	100



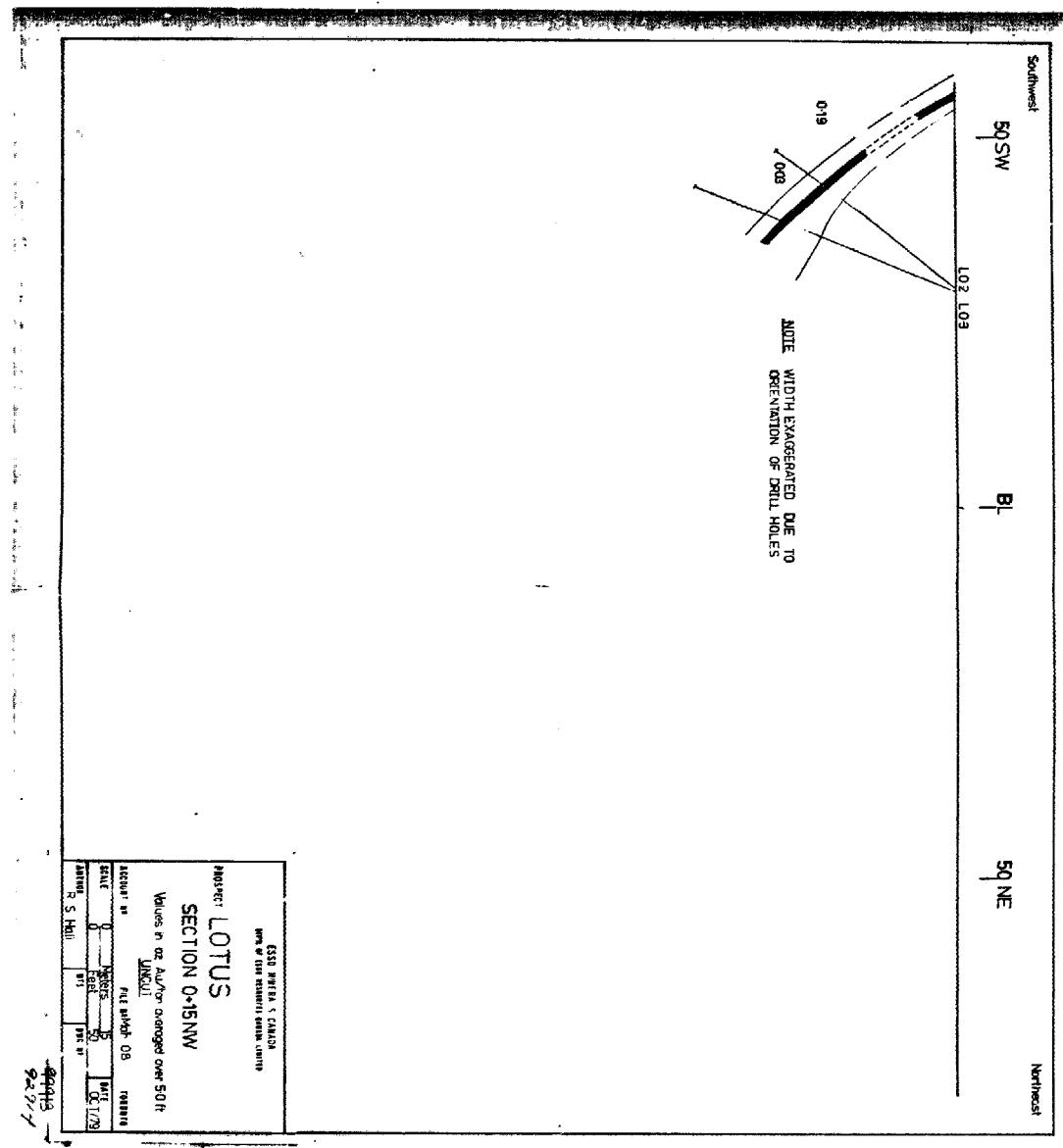
20K

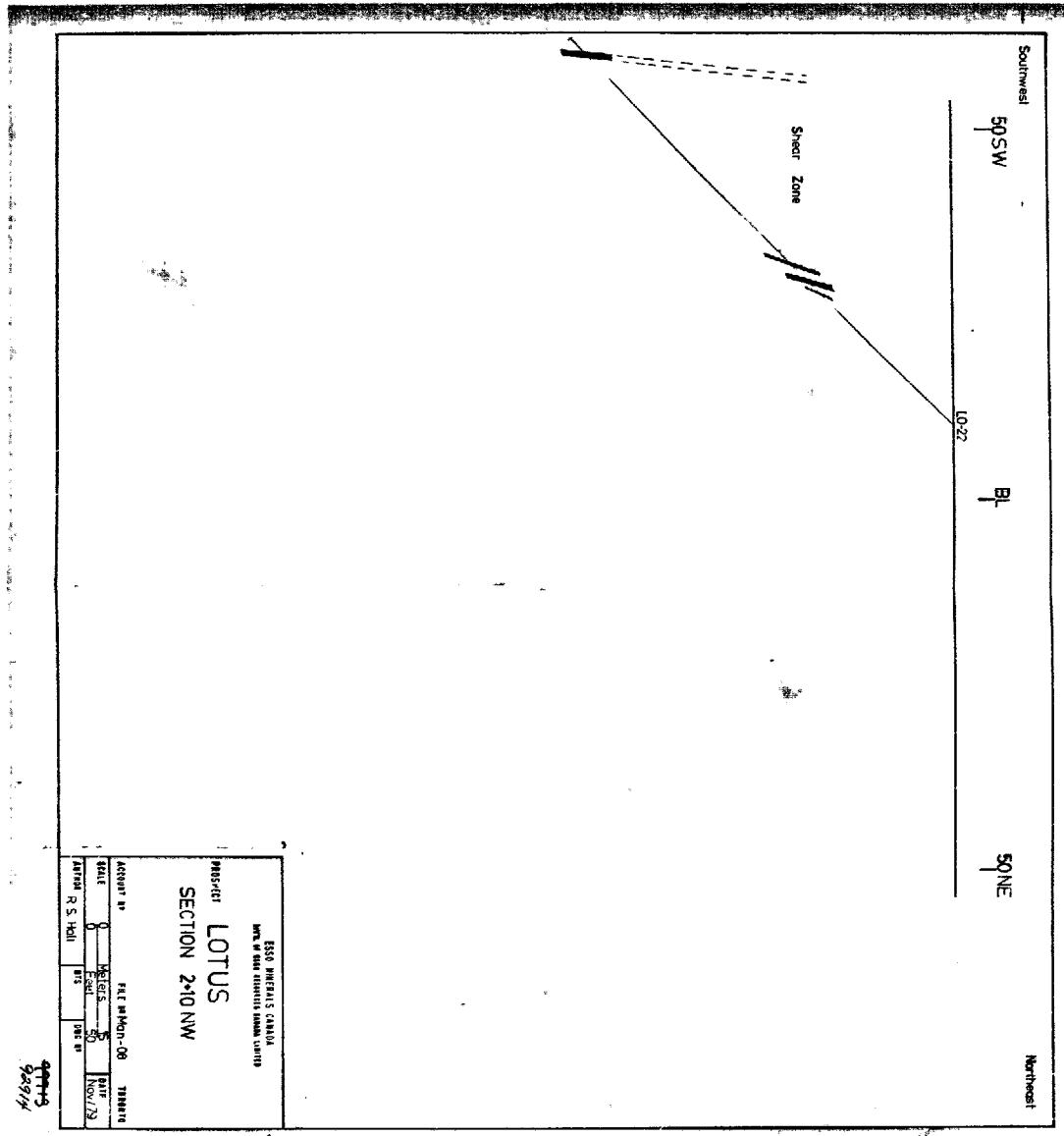




MON

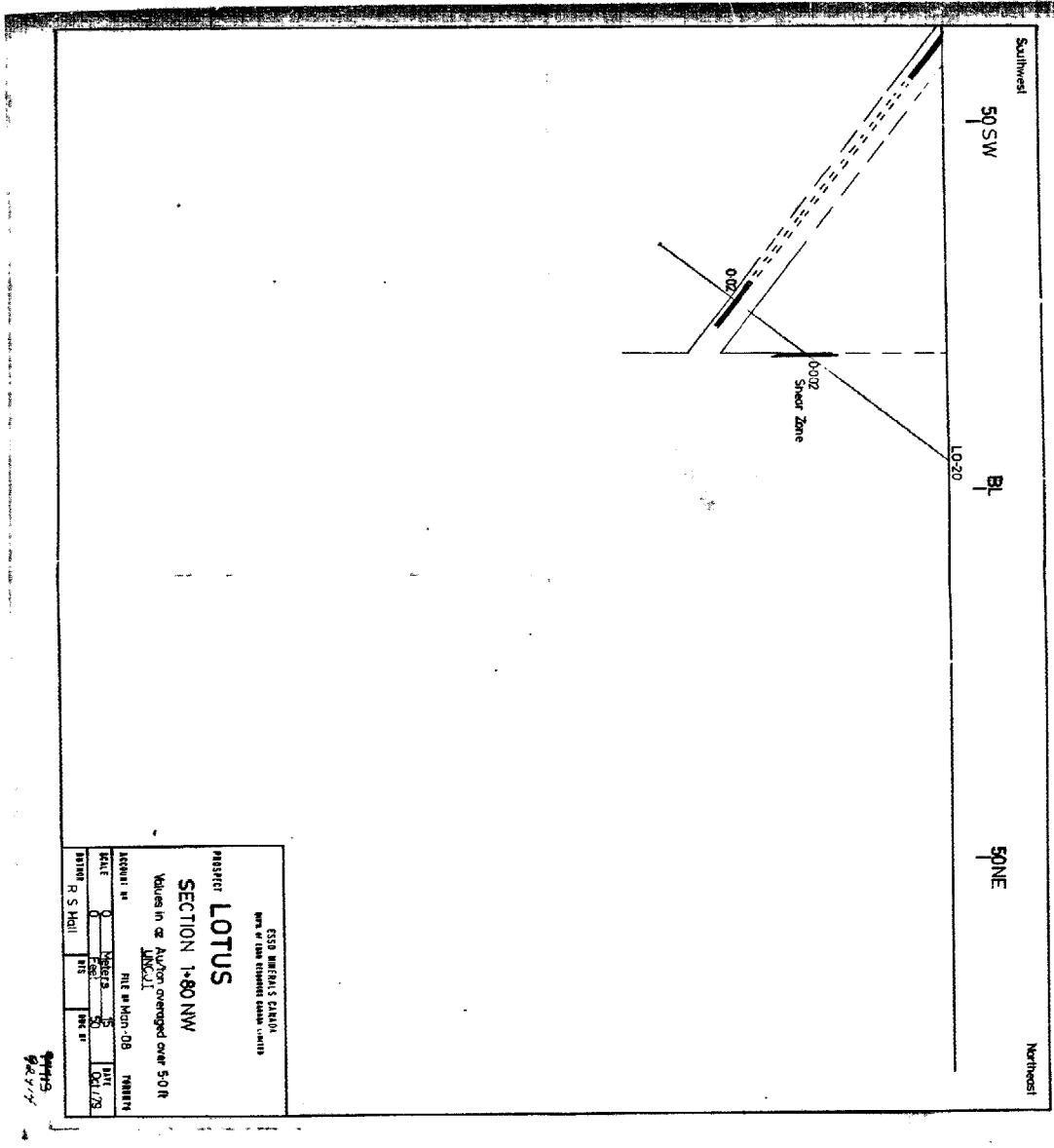
N  
O  
R

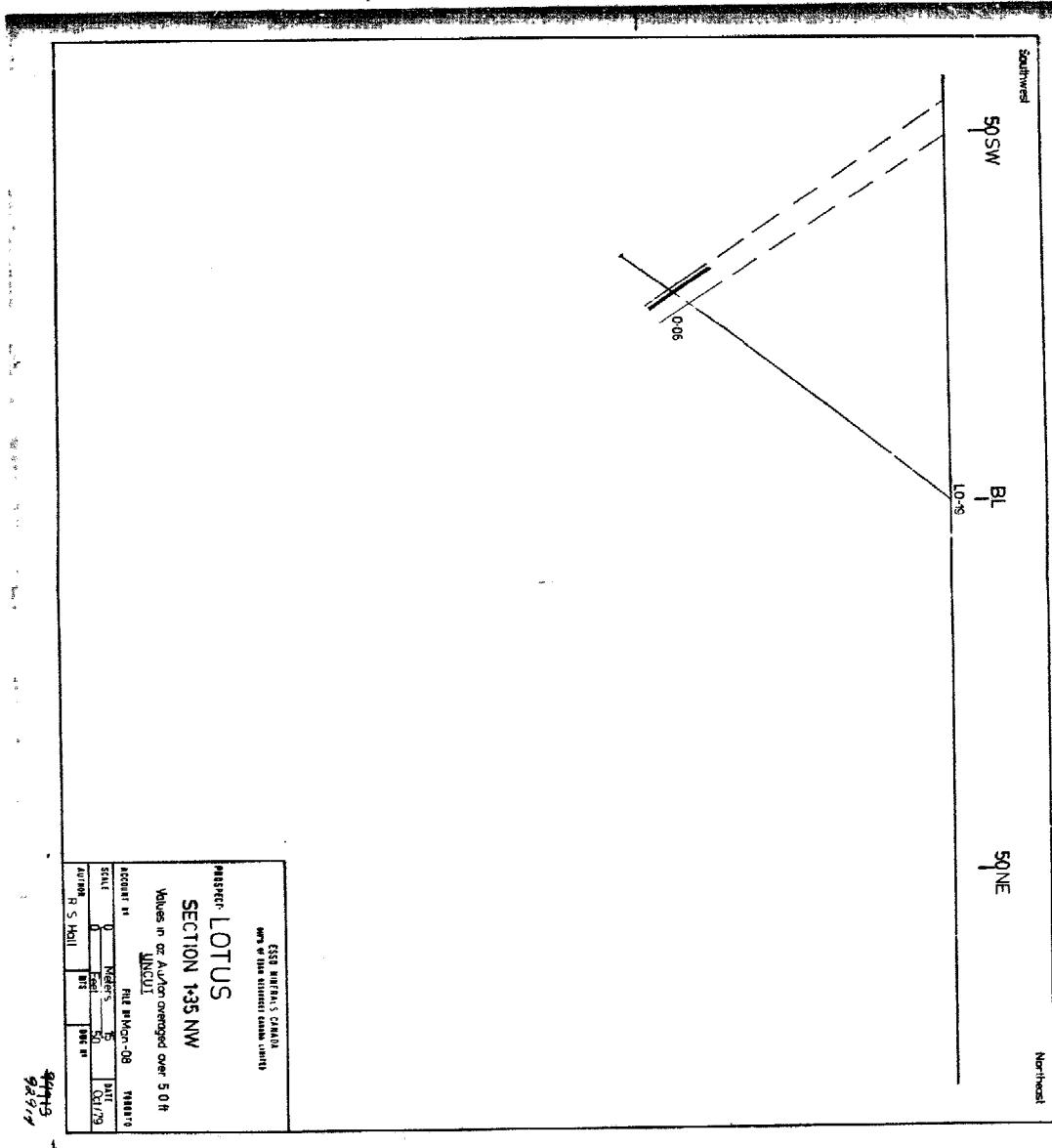


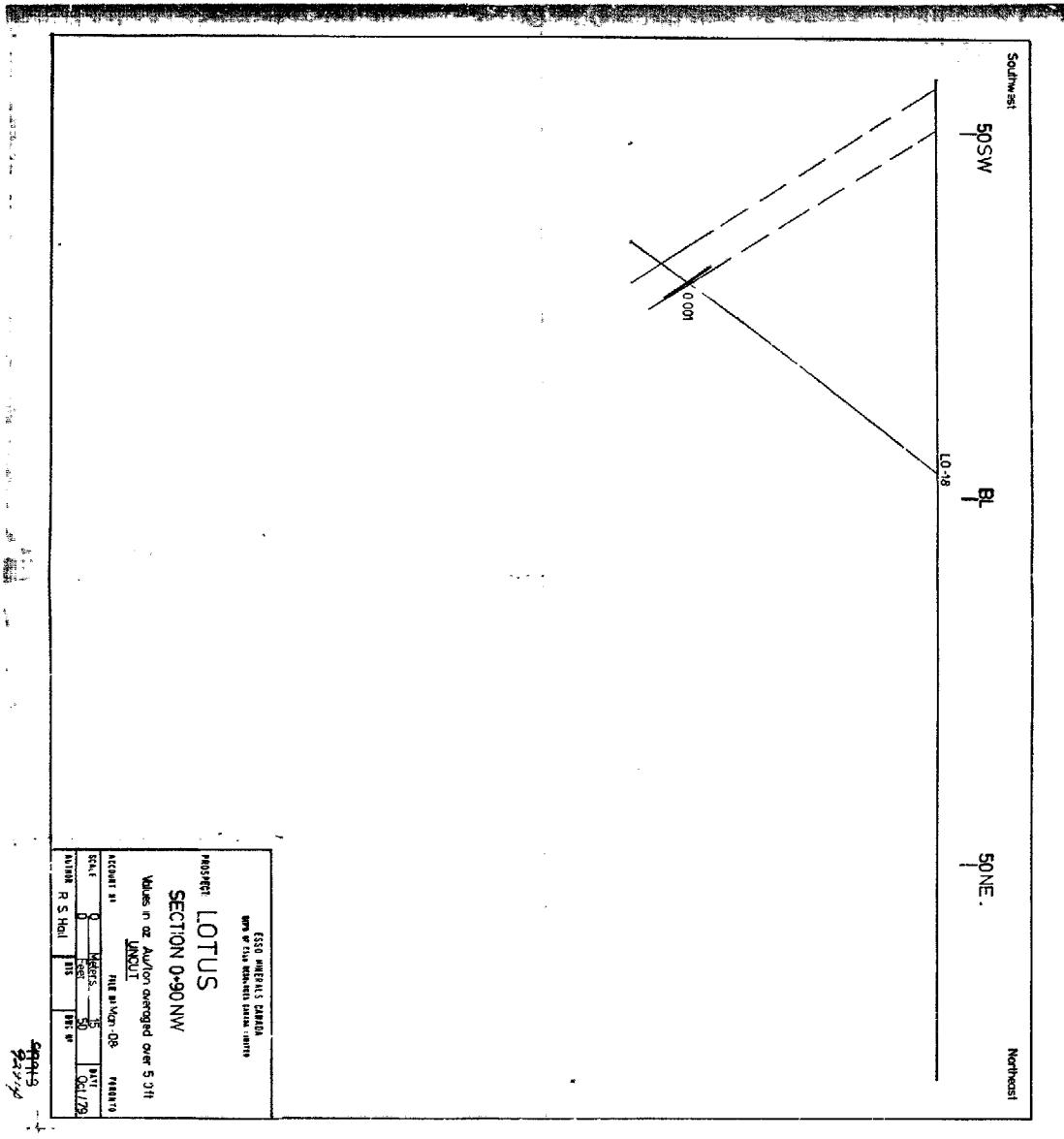


20X

99999  
022774

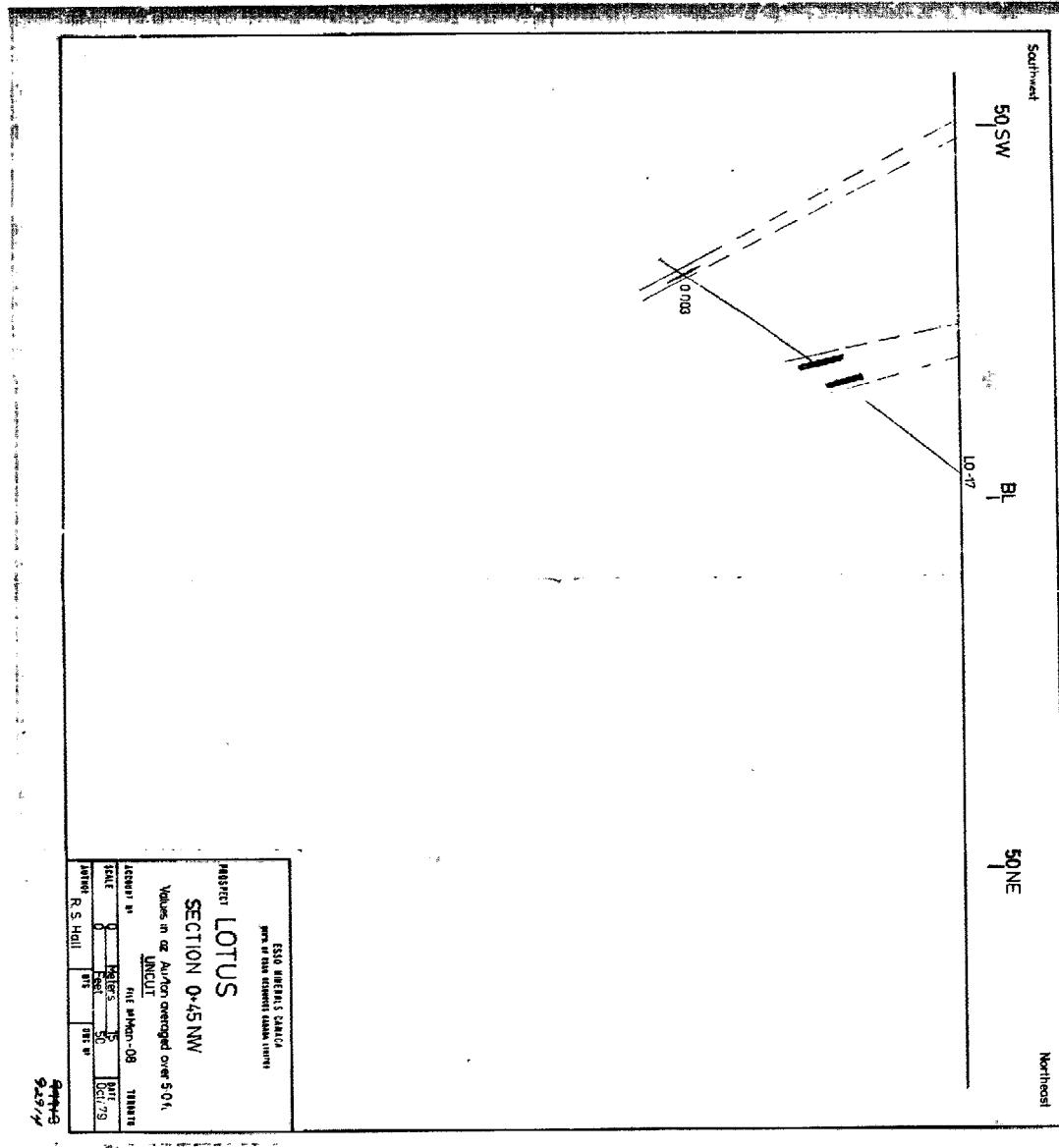


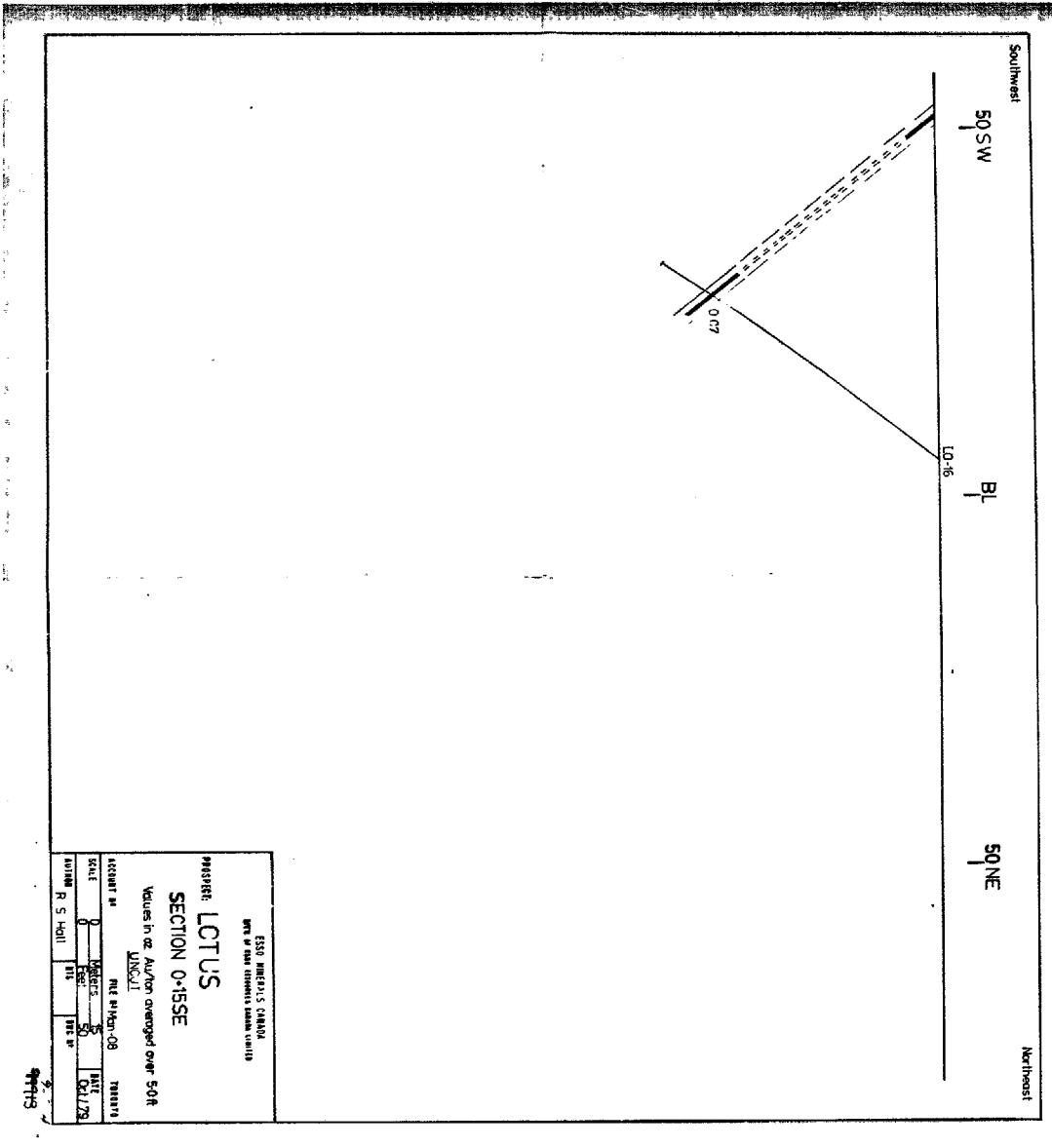




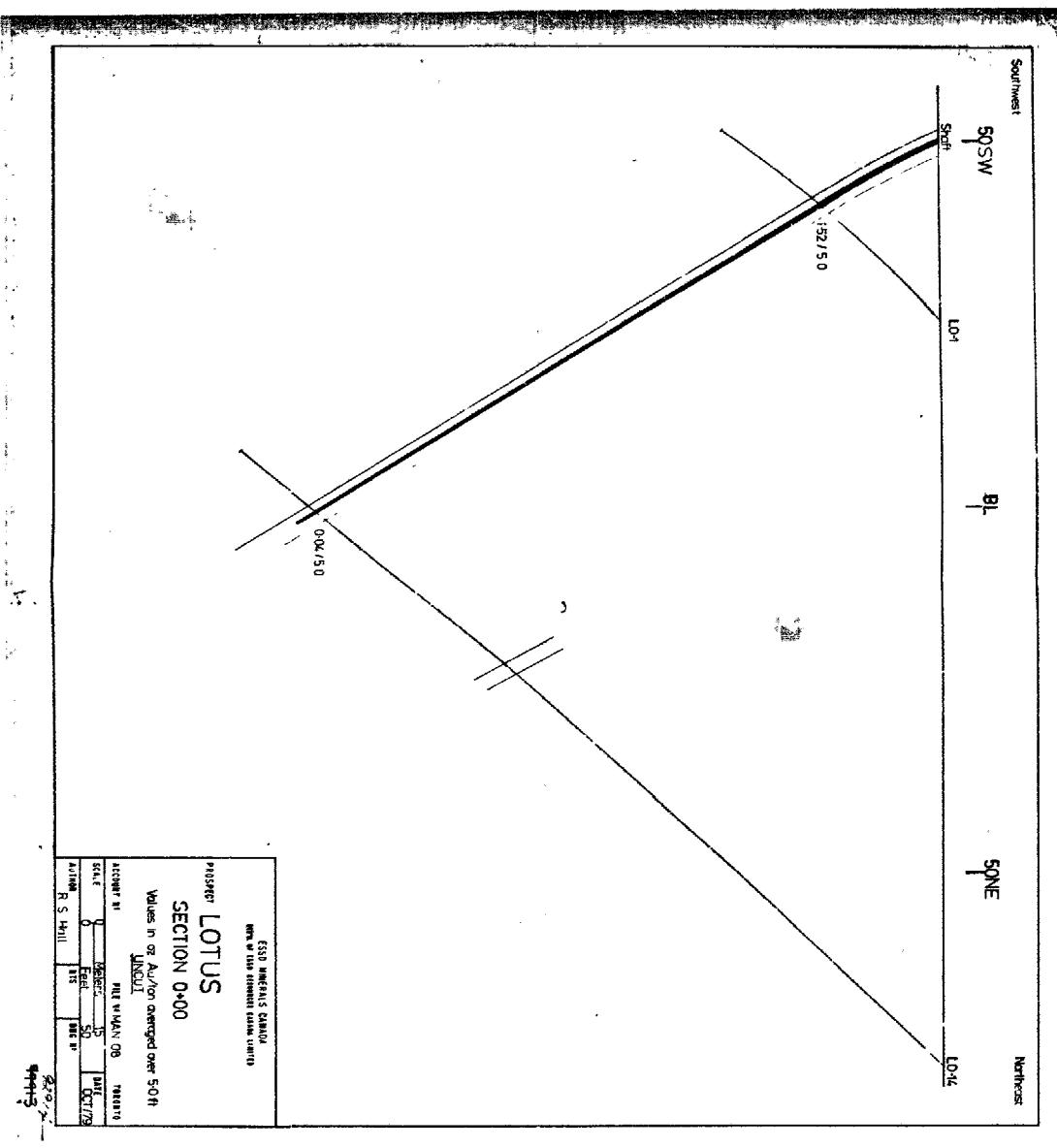
201

NOV

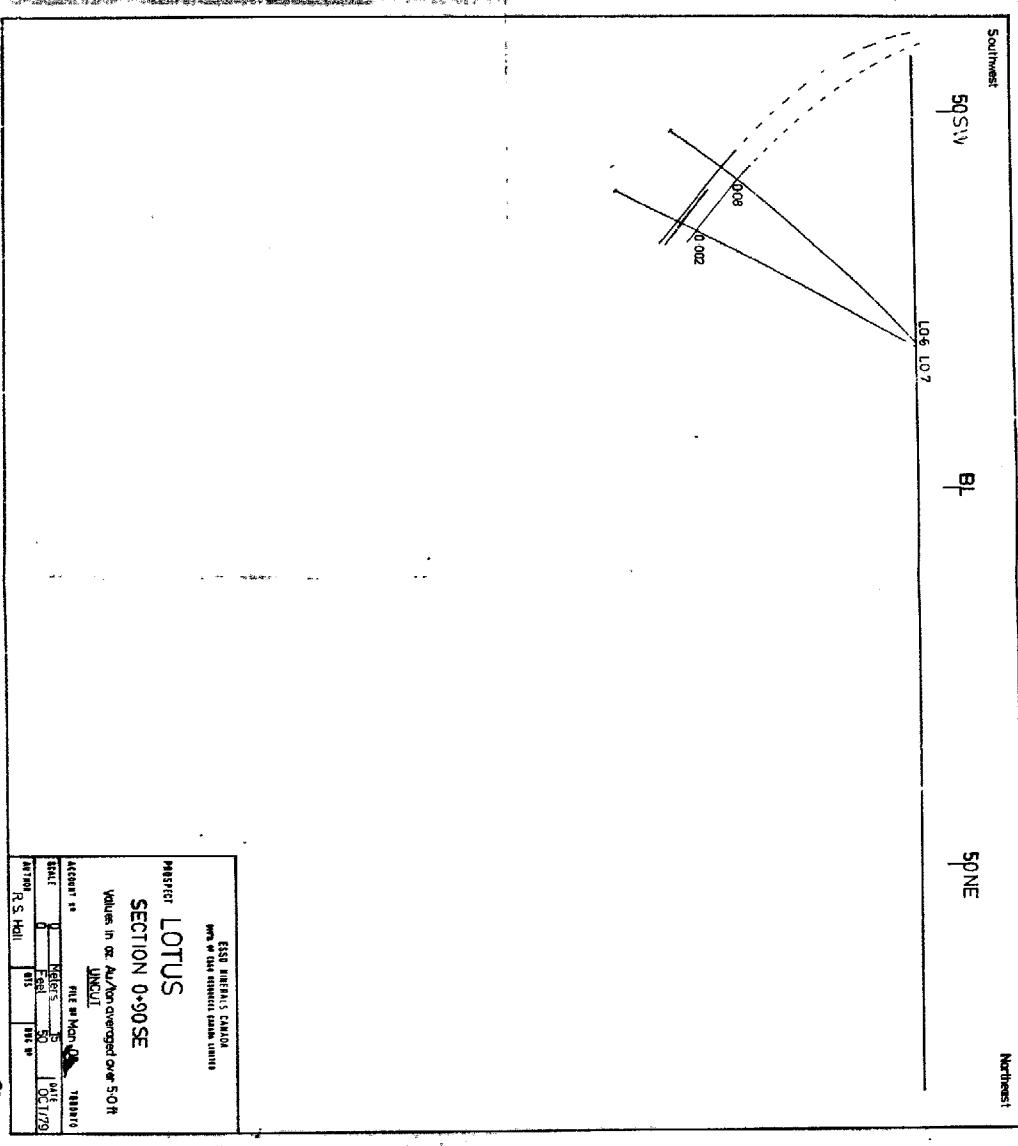




20K

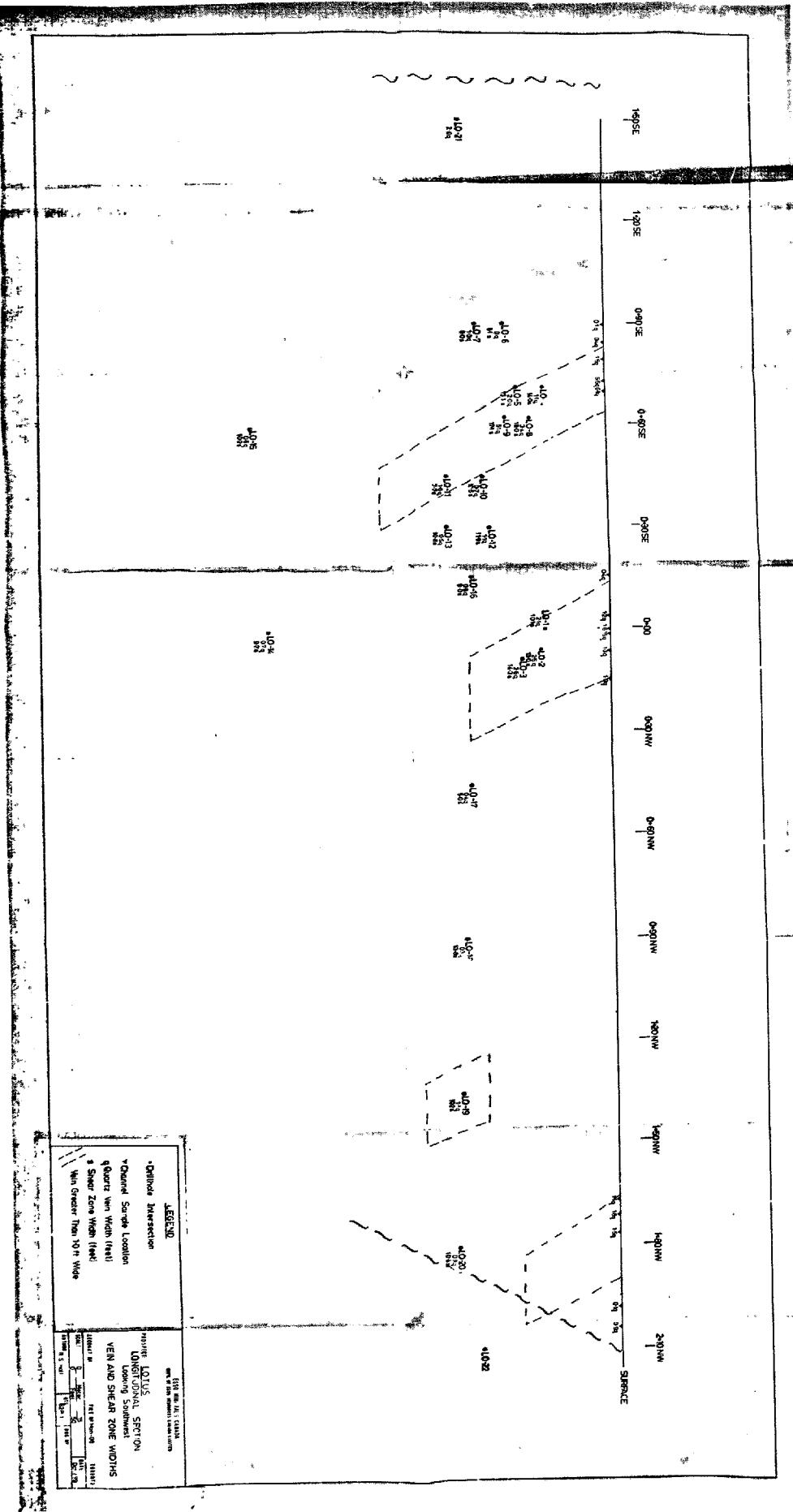


20K



NOOK

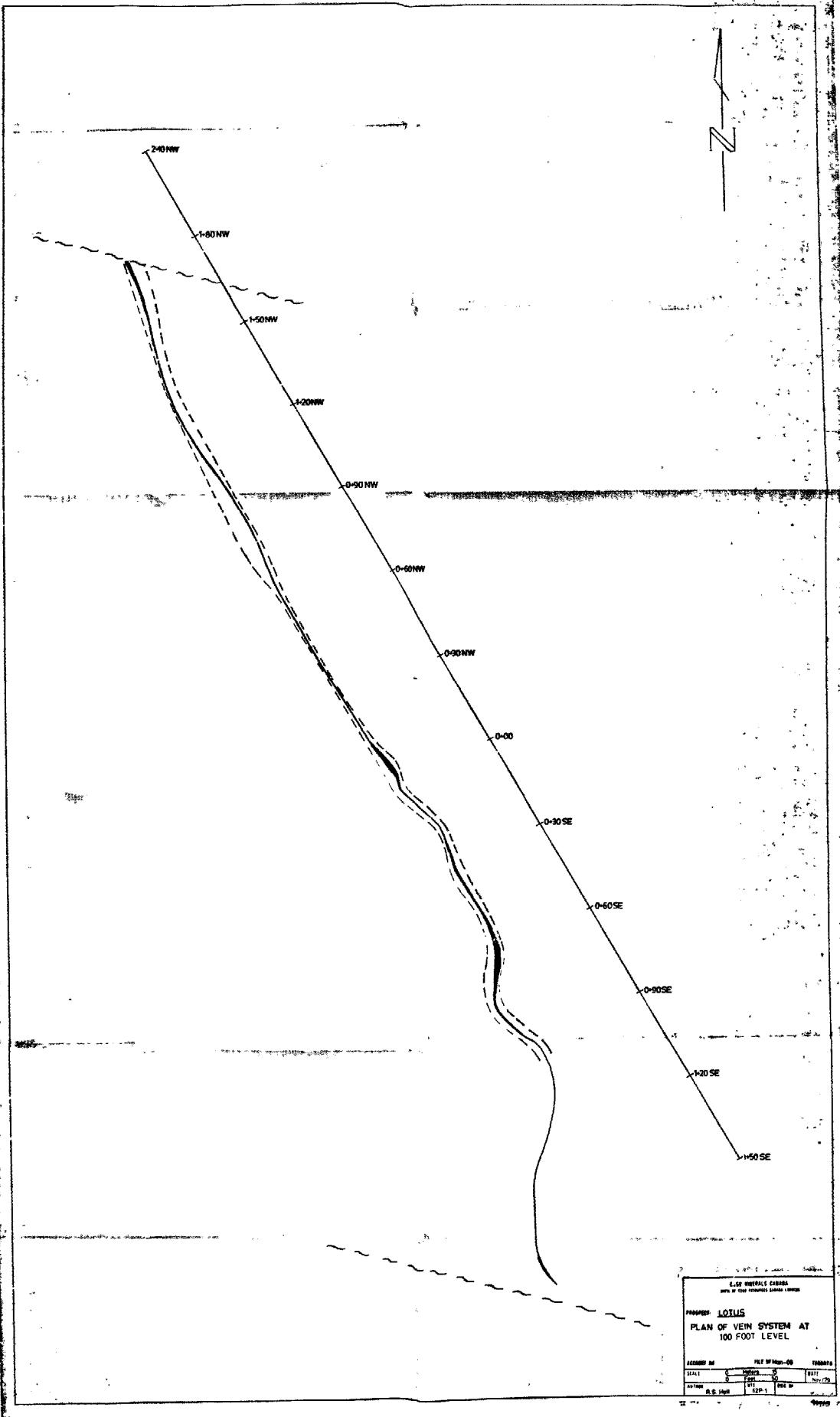
卷之三



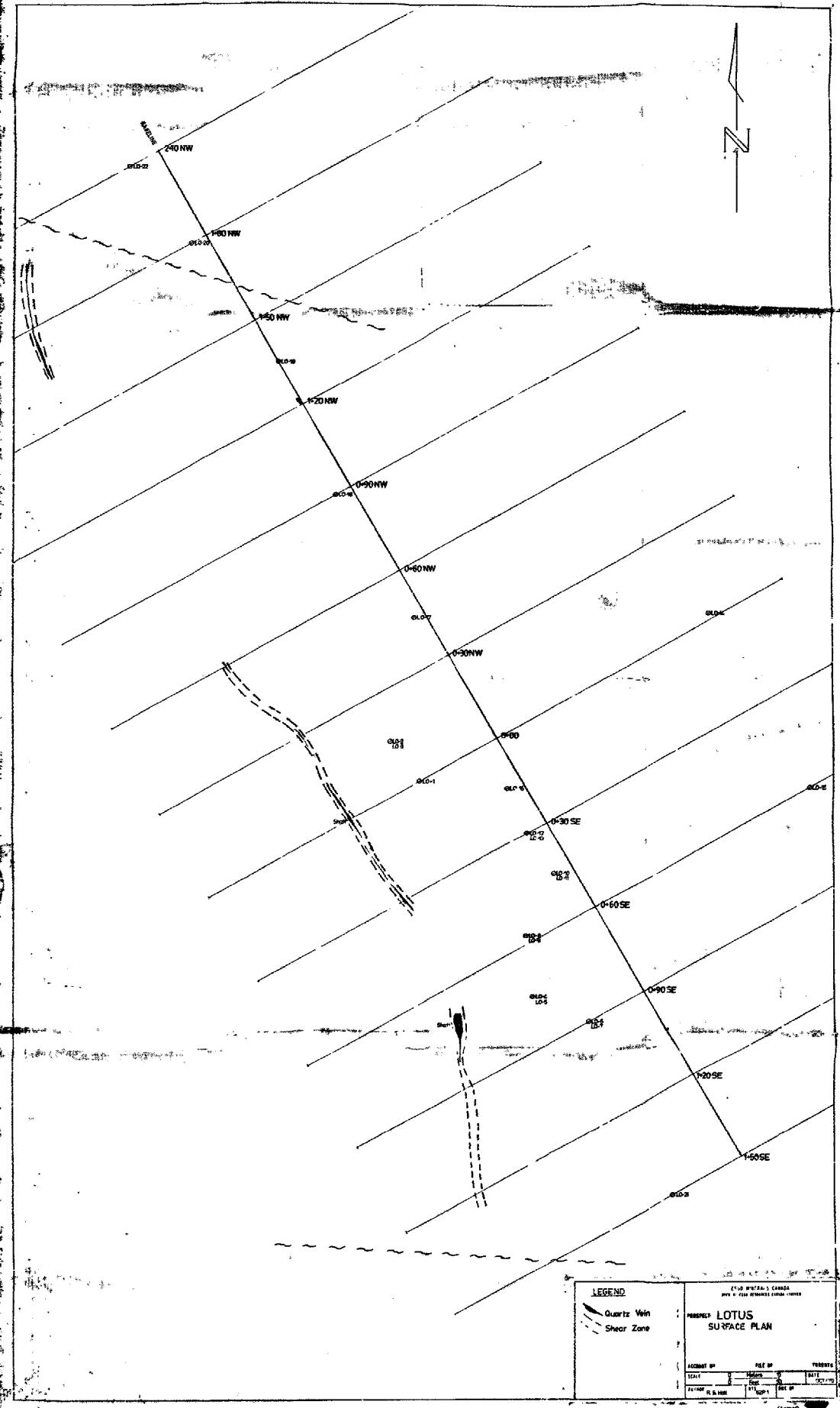
300



SEARCHED		INDEXED		SERIALIZED		FILED	
JULY 1 1965		JULY 1 1965		JULY 1 1965		JULY 1 1965	
FBI - MEMPHIS		FBI - MEMPHIS		FBI - MEMPHIS		FBI - MEMPHIS	
<i>(Large area for notes)</i>							



X93



६०