

82-#603 - 10655 9



**CASSIAR RESOURCES**  
(Division of Brinco Mining Limited)

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REPORT ON UNDERGROUND

DIAMOND DRILLING

for June - December, 1981

beneath the

CASSIAR MINE

Liard Mining Division

N.T.S. 104 P/5W

By M. Pennock, B. Sc.  
W. Pratt

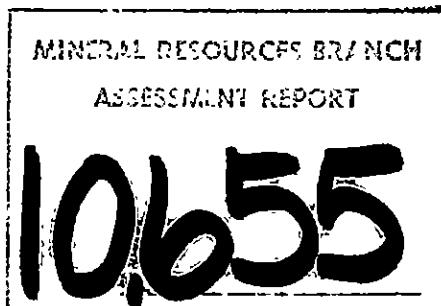
Date: August, 1982

A list of the three meridian four-post claims, the twelve crown granted mineral claims and one mining lease is given in Section 3, "Description of the Claims", as the "McDane Group".

Latitude: 59° 19' N.

Longitude: 130° 50.6' W

Owner: Cassiar Resources  
(Division of Brinco Mining Ltd.)





#### LIST OF APPENDICES

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## 1. INTRODUCTION

With approximatley 10 years of production left to the open pit operation of the Cassiar Mine, exploration for possible underground orebodies is currently being conducted.

An exploration adit has been driven beneath the current open pit and drilling has commenced to expand reserves. Favourable results have been obtained with the discovery of the southern orebody which at present is open-ended to the south and east and with depth.

This report describes one period of diamond drilling of the southern body and has been prepared for submission as assessment work for adjacent mineral claims.

## 2. LOCATION AND ACCESS

The Cassiar Mine is located in northern British Comumbia at latitude  $59^{\circ} 19'$  N., longitude  $130^{\circ} 50.6'$  W. in rugged mountainous terrain 80 kilometers (50 miles) south of the Yukon border, 1,177 air kilometers (735 miles) nothewest of Edmonton and 320 air kilometers (200 miles) southeast of Whitehorse. (See index map App. 1).

A 14 kilometer (9 mile) road branches off Highway No. 37 to the town of Cassiar. The mine road heads north from the Plant area and the exploratory adit can be reached by a well marked road which provides access to a tramline tower as well as the adit.



3. DESCRIPTION OF THE CLAIMS

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>ACRES</u>	<u>DATE RECORDED</u>
McDane 1	1580 (9)	9	556.02	5 Sept. 1980
McDane 2	1581 (9)	20	1,235.60	5 Sept. 1980
McDane 3	1582 (9)	18	1,112.04	5 Sept. 1980

CROWN GRANTED MINERAL CLAIMS

<u>CLAIM NAME</u>	<u>LOT NO.</u>	<u>CROWN GRANT NO.</u>	<u>ACRES</u>	<u>DATE OF CROWN GRANT</u>
Rugged #2	6432	5792/928	26.57	9 June 1952
Rugged #4	6434	5791/928	27.59	9 June 1952
Lookout #1	6499	5794/928	26.41	9 June 1952
Lookout #2	6500	5795/928	39.04	9 June 1955
Goat #1	6501	5798/928	43.29	9 June 1955
Goat #2	6502	5797/928	37.08	9 June 1955
Goat #3	6503	5798/928	51.65	9 June 1955
Goat #4	6504	5799/928	51.65	9 June 1955
Goat #5	6505	5800/928	51.65	9 June 1955
Goat #7	6507	5801/929	46.31	9 June 1955
Goat Fraction	6511	5802/929	17.93	8 June 1955
Sheep Fraction	6512	5803/929	37.86	9 June 1955
Mining Lease #4	3161		598.35	23 Aug. 1977

Total No. of Claims: 15 plus one mining lease.

Total Acreage: 3,959.04 or 64.1 units.

The above three meridian four-post mineral claims, twelve crown granted mineral claims and one mining lease have been grouped as the "McDane Group".

4. PREVIOUS HISTORY

Asbestos has been known in this area for many years before any development took place. In 1950, four prospectors staked the large deposit and in 1951 when transportation and economics improved, the Conwest Exploration Company Limited of Toronto formed Cassiar Asbestos Corporation Limited to develop the deposit. (This is currently the Cassiar Reosurces - (Division of Brinco Mining Limited) Operation).

The first ore was mined in the fall of 1952 and delivered to a mill rated at capacity of 250 tons per day. Many changes have happened since then with current production from the open pit operation at 4,000 tons per day with an annual recovery of approx-



imately 100,000 tons of fibre.

The open pit operation is estimated to have approximately nine years remaining. In light of this, an exploration program has been initiated to test the possibility of future underground mining of asbestos down dip from the current ore body.

An adit was driven at the 1578 meter (5127 foot) level to a length of 1334 meters (4375 feet) from May 1978 to April 1980. From this adit, a series of diamond drill holes have been initiated. 8928.9 meters (29,019 feet) were drilled up to the end of July 1980. This report concerns 2164 meters (7100 feet HQ, 793.4 meters (2603 feet) NQ and 130.8 meters (429 feet) BQ drilling during June - December 1981.

##### 5. PURPOSE OF THE DRILLING PROGRAM

The purpose of the drilling program from the adit was to prove up a sufficient tonnage of ore to warrant a feasibility study on mining methods and to explore for further down dip extensions of the ore-body.

The June - December 1981 underground drilling program consisted of 3,163.5 meters (10,379 feet) of core drilling in ten holes.

HOLE NO.	TYPE	DIP	FROM	TO	TOTAL CORING	AZIMUTH
U81-161	HQ	-69.0°	0'	987'	987'	90.3°
	NQ		987'	1567'	580'	
U81-162	HQ	-84.0°	0'	756'	756'	90.3°
	NQ		756'	1364'	608'	
U81-165	HQ	-71.2°	0'	976'	976'	86.3°
	NQ		976'	1257'	281'	
	BQ		1257'	1486'	229'	
U81-166	HQ	-86.9°	0'	996'	996'	107.3°
	NQ		996'	1196'	200'	
U81-168	HQ	-54.0°	0'	862'	862	91.13°
	NQ		862'	1076'	214'	
	BQ		1076'	1276'	200'	
<hr/>						
U81-170	TRICONE	-70.5°	0'	247'	247'	89.1°
	HQ	-70.5°	247'	771'	524'	89.1°
	NQ	-70.5°	771'	1491'	720'	89.1°
U81-163	HQ		0'	613'	613'	
U81-164	HQ		0'	797	797	
U81-167	HQ		0'	355'	355'	
U81-169	HQ		0'	234	234	

Total Drilling 10,379' (3,163.5 meters)



See App. 11 for the location of drill hole collars.

Drilling was carried out by Cameron McCutcheon Drilling Ltd. of Vancouver, B.C., under the supervision of M.R. Pennock and W.R. Pratt.

#### 6. INTERPRETATION OF THE RESULTS

The exploration holes drilled indicate a fibre body to the south of the presently mined ore body. The quality and grade of fibre intersected by these holes is encouraging and the present knowledge indicates a continuous body open ended to the south and east and increasing in size and grade with depth.

Because asbestos fibre is not amenable to normal chemical analysis, for valuation purposes, the following method is employed at Cassiar.

1. Fibre bearing zones of core are divided into five foot lengths (1.52 meters).
2. In each five foot section the length of every fibre seam is measured in 1/16th inch (1.587 mm) increments.
3. To obtain an estimate of the percent of fibre in each section, the total length of all fibre measured is divided by the length of recovered core, to obtain a Core Reading Grade (CRG). Because the Cassiar Orebody is considered a stockwork, all fibre seams are oriented randomly. To account for this randomness a correction factor (Cosecant 45° = 1.414) is applied to the CRG (CRG x 1.414) to give a Corrected Core Reading Grade (CCRG). At present a CCRG of less than 3% is not considered ore.  
In addition to CCRG, using the length distribution of the fibre seams and past performance of the mill an estimate of fibre product distributions can be made.

The Geological Resources inferred from drilling to date are 14,631,000 Tonnes of Possible Ore at a CCRG of 3% or greater.

#### 7. CONCLUSIONS AND RECOMMENDATIONS

Studies based on the drilling information indicate that there is sufficient tonnage and grade to warrant a feasibility study on economics for underground mining.

With this in mind a further drilling program has been recommended to coincide with the decision to begin underground development for



mining.

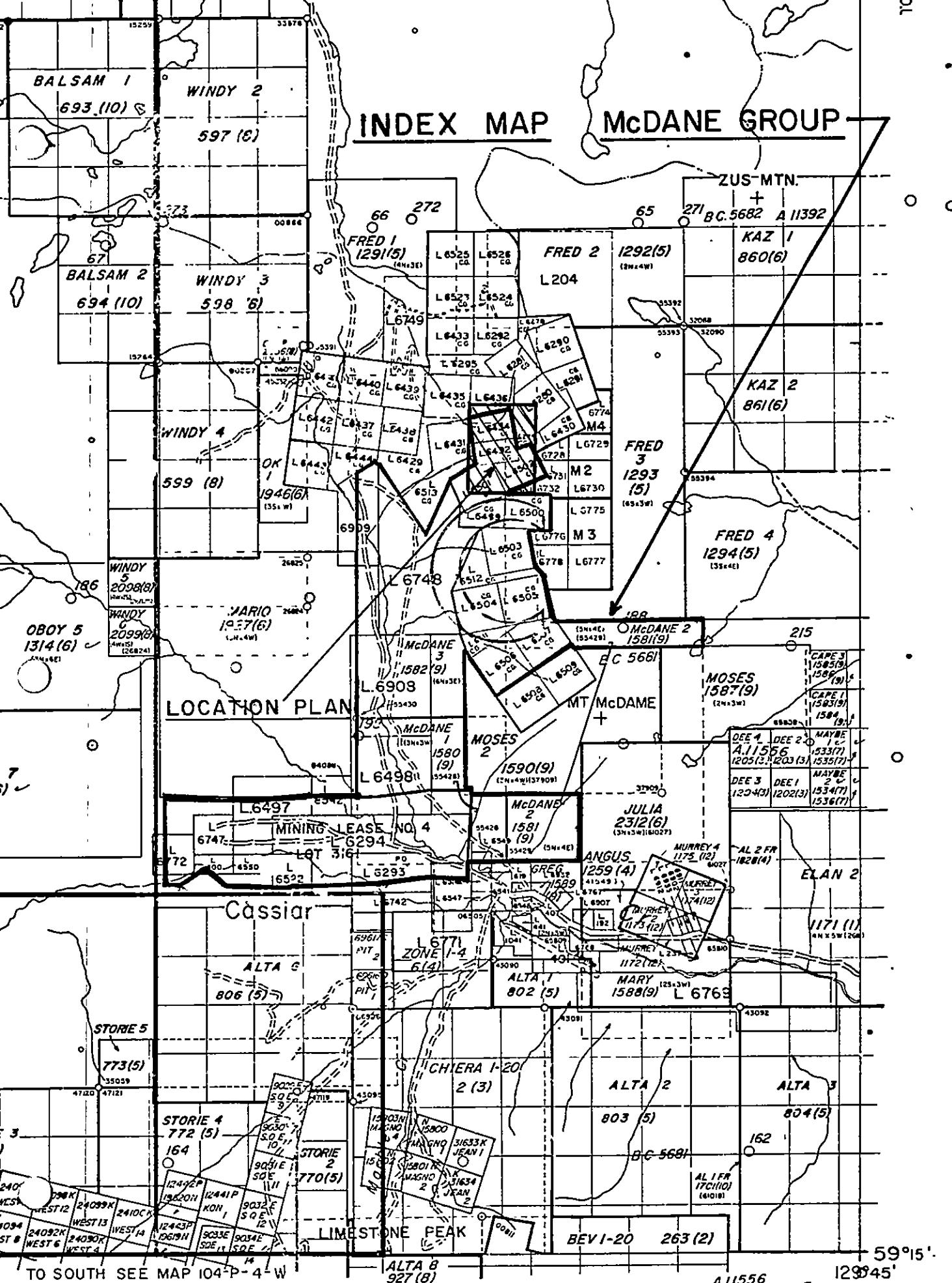
Stage 1 - 12,800 feet (3901.4 meters) drilling. To improve sample density in the fibre zone and provide necessary information in the footwall argillites. This will be carried out only if a decision to mine is made.

Stage 11 - 8,300 feet (2,529.8 meters) drilling. To prove up the inferred northern extension of the fibre body across the shear zone. To be drilled if a decision to mine is made.

8. REFERENCES

Pewsey, B.G.; Hewett, F.G.; Zimmer, G.S.; Leathley, G.L.; Jones, P.C.; Cook, D.C.; Taylor, M.S.; "The Cassiar Story", published in the CIM Bulletin, 1978.

Pennock, M.R.; Pratt, W.R.; McMaster, G.; "Cassiar mine, Ore Reserve Statement", unpublished, October 31, 1981.



## CASSIAR ASBESTOS CORPORATION LIMITED

FORM DD-3

## DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY Cassiar HOLE U81-161 DEPTH 1567 ft  
 AZIMUTH 090.27 INCLINATION -69° SECTION 22000N  
 LATITUDE 22016.42 DEPARTURE 24804.89 ELEVATION 5144.99  
 STARTED FINISHED 81-7-11 LOGGED by R. Savage  
 date June 1981

LEGEND	
T	TAUCITE
IR	IRON RUST
MT	METAVOLCANIC
GS	GRANULITE
V	VERTECTIC
S	SULFIDE
Z	ZINCITE
SCALE	

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
0	4		CASINING	
4	136		VOLCANICS - green to grey fine to medium grained some banded grey arg throughout; minor white qtz stringers massive, weel sn't; very compt; hard;	
136	213		ARGILLITE: grey to black; blcky massive; some pyrites on fractures; minor qtz/calc stringers throughout 185 to 213 slightly graphitic blcky to broken minor bands of volcs;	
213	227		ALTERATION ZONE - talcy alt. serp. med. green; some dark green banding blcky to brkns; compt; 226-227 - grey white rodingerite; very hard; minor pink/green banding;	
27			Serp: dark green; blcky to hrkn; minor pale green amorphous serp and talc with some calcite on fractures; some basities; most fracts are polished with some slickensides; minor shears @ 261-261; 275-277; 295-297; 297 on - serp is apple to med green with some dark green inclusions trace fibre starts here; 17.	

## CASSIAR ASBESTOS CORPORATION LIMITED

FORM 101-3

## DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY Cassiar HOLE U81-161 DEPTH \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_ INCLINATION \_\_\_\_\_ SECTION \_\_\_\_\_  
 LATITUDE \_\_\_\_\_ DEPARTURE \_\_\_\_\_ ELEVATION \_\_\_\_\_  
 STARTED \_\_\_\_\_ FINISHED \_\_\_\_\_ LOGGED by R. Savage  
 date June 22/81

LEGEND					
T	TAUS	DEFORMATION			
AK	ANGULAR	SHRINKAGE			
AL	ALTRATE	EXPANSION			
GS	GRANULAR	HIGH			
V	VERMICULITE	MEDIUM			
S	STRUCTURE	LOW			
		SHRINKAGE			
		EXPANSION			

SCALE :

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
227	439		Minor shears @ 304-306; 323-324.5; 419½ - 421.5; badly broken 327-336; 404-406; 415-417;	
440	453		Serpentine w/veinlets of fiber and calcite 440-453.	
453	465		Serpentine w/veinlets of fiber 453-465;	
465	478		Serpentine-minor shear @ 467-471	
478	495		Serp., talc and amor. serp. throughout @ 481-495	
495	504		Minor shear zone 495-496, 500-502	
504	517		Serp. dark green. shear zone @ 505-506. veinlets of fiber 514-517	
517	530		Serpentine - dark green fiber @ 518-523, 528-530 badly broken 518-520	
530	545		Serpentine - dark green to light green veinlets of fiber 530-531, 540-543	
545	558		Serpentine - dark to light green shear zone @ 546-547 badly broken 554-558 fiber 5/8" to 3/8" 547-548, 552-554	

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

FORM DD 3

PROPERTY Cassiar	HOLE U81 - 161	DEPTH
AZIMUTH	INCLINATION	SECTION
LATITUDE	DEPARTURE	ELEVATION
STARTED	FINISHED	LOGGED by R. Savage date June 22/81

LEGEND	
T	TAUCITE
AN	ANASITE
AT	ALTERED
GS	GRANULITE
V	VERTEBRAL
S	SHEARING
	SCALE :

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
558	571		SERPENTINE  Shear zone @ 561-567,  fibers $\frac{1}{4}$ " - 3/8" @ 564-571	
571	583		SERPENTINE, dark to light green  fibers $\frac{1}{4}$ " - 3/8" 571-582	
583	597		SERPENTINE, dark green  veinlets of fiber 583-597  broken 586-587	
597	611		SERPENTINE.  veinlets of fiber 597-601, 609-601  minor shear zone - 603-604, 606--608	
611	623		SERPENTINE  veinlets of fiber @ 611-621  shear zone @ 617-619, 620--622	
623	635		SERPENTINE dark to apple green  veinlets of fiber 623-627,  fiber $\frac{1}{4}$ " -- 3/8", 627-628, 631-636  shear zone @ 628-636	
635	648		SERPENTINE dark to apple green  fiber $\frac{1}{4}$ " - 7/8", throughout  shear zone 635-637	
648	661		SERPENTINE -- dark to apple green  fiber 1/8" - 3/4" 648-661  broken 659-660	

## CASSIAR ASBESTOS CORPORATION LIMITED

FORM DD-3

## DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY Cassiar      HOLE U81-161      DEPTH \_\_\_\_\_  
 AZIMUTH      INCLINATION      SECTION \_\_\_\_\_  
 LATITUDE      DEPARTURE      ELEVATION \_\_\_\_\_  
 STARTED      FINISHED      LOGGED by R. Savage  
 date June 25, 1981

LEGEND	
I	VOLCANIC
AH	ANHYDITE
AL	ALUMINITE
AS	ASBESTOS
GS	GRAPHITE
V	VEIN
S	SHEAR ZONE
/	SHEARING
	SCALE.

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
661	674		SERPENTINE fiber 661-674 (1/8" - 3/4") shear zone 670-672	
674	691		SERPENTINE dark to apple green fiber 1/8" - 1" throughout minor shear zone @ 686-687	
691	700		SERPENTINE fiber 1/8" - 3/4" throughout minor shear zone 695-696	
700	713		SERPENTINE fiber throughout	
713	726		SERPENTINE dark to apple green fibers throughout shear zone @ 719-722	
726	734		SERPENTINE good fiber	
734	751		SERPENTINE minor shear zone @ 749-750 good fiber throughout	
751	919		SERPENTINE minor shear zone @ 764-765, 865-866, 880-882, 892-894, major shear zone @ 896-919 good mineralization 751-897	

**CASSIAR ASBESTOS CORPORATION LIMITED**  
**DIAMOND DRILL CORE GEOLOGY LOG**

<u>PROPERTY</u>	Cassiar	<u>HOLE</u>	U81-161	<u>DEPTH</u>	
<u>AZIMUTH</u>		<u>INCLINATION</u>		<u>SECTION</u>	
<u>LATITUDE</u>		<u>DEPARTURE</u>		<u>ELEVATION</u>	
<u>STARTED</u>		<u>FINISHED</u>		<u>LOGGED</u>	by R. Savage date 81-07-08

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
920	973		SERPENTINE  shear zone @ 920-927, 932-938, 953.5-957, 958-959  good fiber throughout	
973	1067		SERPENTINE  shear zone @ 979-980.5, 991.5-995, 924, 925.  brk core - 1023-1036  no recovery from 982-987 - changed size of core barrel HQ to NQ	
1067	1117		SERPENTINE  shear zone @ 1070-1071, 1076.5-1078, 1098-1099  good fiber 1067-1102  from 1102-1117, fiber is lower	
1117	1165		SERPENTINE  shear zone @ 1035.5-1136.5, 1143-1146, 1149-1152  fiber throughout	
1165	1248		SERPENTINE - bastites 1197-1199  shear zone @ 1219-1222, 1230-1236, 1241-1247  fiber 1165-1199  amorphous serp. and talcy fillings 1199-1248 (few veinlets of fiber)	
1248	1337		SERPENTINE - barren 1248-1270  veinlets from 1270-1325, 3% 1325-1337  shear zone 1271-1272, 1287-1289, 1301-1311	

**CASSIAR ASBESTOS CORPORATION LIMITED**  
**DIAMOND DRILL CORE GEOLOGY LOG**

**FORM 11D-3**

<u>PROPERTY</u>	Cassiar	<u>HOLE</u>	U81-161	<u>DEPTH</u>	
<u>AZIMUTH</u>		<u>INCLINATION</u>		<u>SECTION</u>	
<u>LATITUDE</u>		<u>DEPARTURE</u>		<u>ELEVATION</u>	
<u>STARTED</u>		<u>FINISHED</u>		<u>LOGGED</u>	by R. Savage date

	DATA NUMBER
1	SALUS
AR	ARCHITECTURE
ALT	ALTERATION
GS	GRAPHIC DESIGN
V	VERBAL INPUT
S	SUPERVISION
	SUPERVISING

**SCALE:**

## TOREHOLE No. 81 / 161

Frac.	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
250	255	4.5		1											45	0.17	[ ] G
255	260	4.5													0	0.00	[ ] G
260	265	3.5													0	0.00	[ ] G
265	270	2.0													0	0.00	[ ] G
270	275	4.5													0	0.00	[ ] G
275	280	4.5													0	0.00	[ ] G
280	285	4.5													0	0.00	[ ] G
285	290	5.0	6	2											45	1.17	[ ] Y
290	295	5.0	3	2											45	0.74	[ ] G
295	300	4.5	1												45	0.17	[ ] G
300	305	5.0	3												45	0.44	[ ] G
305	310	4.5	2												45	0.33	[ ] G
310	315	5.0	1												45	0.14	[ ] G
315	320	5.0	5	2											45	1.03	[ ] Y
320	325	4.5													0	0.00	[ ] G
325	330	4.5	1												45	0.17	[ ] G
330	335	4.5													0	0.00	[ ] G
335	340	4.5	1												45	0.17	[ ] G
340	345	5.0	5												45	0.74	[ ] C
345	350	5.0	8	2											45	1.47	[ ] Y
350	355	5.0	3	6											45	1.33	[ ] Y
355	360	4.5	4	2											45	0.98	[ ] G
360	365	4.5	7	4	3										45	2.12	[ ] Y
365	370	5.0	C	4	6										45	2.36	[ ] Y
370	375	4.5	7	6											45	1.71	[ ] Y
375	380	5.0	3	5	6	2			6						45	3.24	[ ] O
380	385	5.0	5	2											45	0.96	[ ] G
385	390	5.0	6	3	5	2			3	6					45	3.24	[ ] O
390	395	5.0	8	7	3	2									45	2.87	[ ] Y
395	400	5.0	5	2		6									45	1.77	[ ] Y
400	405	4.5	7	6	9	4									45	3.68	[ ] O
405	410	5.0	6	7	2										45	2.14	[ ] Y
410	415	5.0	P	1											45	1.26	[ ] Y
415	420	4.0	3	1											45	0.47	[ ] G
420	425	4.5	4	3											45	1.06	[ ] Y
425	430	5.0	3	4	3	4									45	1.98	[ ] Y
430	435	5.0	6												45	0.98	[ ] G
435	440	4.5	9	3	2				6						45	2.79	[ ] Y
440	445	4.5	4	1											45	0.74	[ ] G
445	450	4.5	4	1	2										45	0.98	[ ] G

450	455	5.0	7	2	3								45	1.70		y
455	460	5.0	3	7	2	2							45	1.70		v
460	465	5.0	2	2									45	0.52		c
465	470	4.5	1										45	0.17		c
470	475	4.5											0	0.00		c
475	480	5.0											0	0.00		c
480	485	5.0											0	0.10		c
485	490	5.0											0	0.00		c
490	495	5.0	3										45	0.37		g
495	500	4.5	8	2	2								45	1.39		y
500	505	5.0	6										45	1.10		y
505	510	5.0	3										45	0.37		c
510	515	5.0	2										45	0.52		c
515	520	5.0	3										45	0.66		c
520	525	5.0	6	5	3	4							45	2.66		y
525	530	5.0	6	6	6								45	2.57		v
530	535	5.0	3										45	0.44		c
535	540	4.5	2										45	0.41		c
540	545	4.5	9	3	3	6	4	6	6				45	3.93		o
545	550	5.0	3	9	3	3	6	6	3				45	3.39		o
550	555	5.0	10	1	2	4	4						45	3.54		o
555	560	4.5	6										45	0.82		c
560	565	4.5	2										45	1.32		y
565	570	5.0	11	5	9	14	13		6				45	8.40		p
570	575	5.0	10	8	11	6	3		9				45	6.77		p
575	580	4.5	7	6	7	2	6						45	3.85		o
580	585	5.0	5	1	3	4	5						45	2.59		y
585	590	5.0	11	3	5								45	2.66		y
590	595	5.0	10	3	2	4	5						45	3.39		o
595	600	4.5	11	6	6								45	3.11		o
600	605	5.0	5	10	2	4	13						45	4.86		y
605	610	4.5	3	1	3								45	1.06		y
610	615	4.5	12	6	3	11							45	4.67		o
615	620	5.0	7	2	2	4							45	2.06		y
620	625	4.5	11	3	2	9							45	4.43		o
625	630	4.0	6	6	3	5							45	2.86		y
630	635	4.5	6	8	10	13	6						45	10.39		r
635	640	5.0	5	6	3	4							45	7.44		r
640	645	5.0	8	5	3	8	15	15					45	7.95		r
645	650	5.0	12	11	11	36		9	4	20			45	13.25		r

650	655	5.0	10	8	11	6	3	3	4	25	10	19	7	9	45	10.17	R
655	660	5.0	10	13	2	6	13	12	4	10	19	18			45	14.88	R
660	665	5.0	8	12	12	16	5	12				12			45	13.19	F
665	670	5.0	14	11	5	4	8	6							45	8.70	P
670	675	5.0	25	11	12	6	13								45	0.73	P
675	680	5.0	10	15	8	20	5	9	20		12				45	14.44	P
680	685	4.5	11	9	10										45	5.73	R
685	690	5.0	5	7	3	8	5					12			45	5.83	P
690	695	4.5	14	21	19	9									45	10.56	R
695	700	5.0	13	15	8	18	8	9	8	10					45	12.97	F
700	705	5.0	9	13	12	2	10	9							45	8.03	R
705	710	5.0	9	7	5	12	5				10				45	7.00	F
710	715	4.5	12	21	7	24	6								45	10.24	R
715	720	5.0	5	12	3	4									45	3.54	O
720	725	5.0	7	12	6	8	3	6		16					45	10.83	F
725	730	5.0	7	10	6	6	3	3			5				45	8.17	R
730	735	5.0	11	18	6	12	5	9							45	8.98	R
735	740	5.0	10	16	8	6	6	6	12	5	6				45	10.08	F
740	745	5.0	9	9	17	6	5	9	16						45	10.38	R
745	750	5.0	6	17	5	2	15								45	7.67	R
750	755	4.5	11	14	2	9	3	3	9						45	10.07	R
755	760	4.5	11	8	16	7	3	7							45	9.98	R
760	765	5.0	4	5	5	4									45	5.23	P
765	770	5.0	3	1	5	6	13	21							45	8.84	R
770	775	5.0	5	7	17	8	3	3	20						45	11.12	R
775	780	5.0	8	5	9	4	3	3	16						45	6.93	P
780	785	5.0	9	6	4	4	3	9	8						45	6.77	P
785	790	5.0	11	5	2	4									45	4.27	O
790	795	4.5	8	4	12	2	6								45	4.58	O
795	800	5.0	11	11	5	10	5								45	7.28	R
800	805	5.0	11	6	3	8	5	3	4						45	5.83	P
805	810	5.0	14	11	3	2	3	21							45	7.88	R
810	815	5.0	13	16	6	6	3	0							45	8.03	F
815	820	5.0	5	6	6	1	8	3							45	4.13	O
820	825	5.0	9	22		4	5			10					45	7.30	R
825	830	5.0	13	11	5	12	8	3	8		12				45	10.38	R
830	835	5.0	14	11	3										45	4.04	O
835	840	5.0	13	20	14	10									45	8.24	R
840	845	5.0	7	11	11	4									45	4.71	O
845	850	5.0	11	11	11	4	5	6	8						45	8.10	R

850	855	5.0	15	13	6	4	11	7	8	11	14	16	45	11.13		P
855	860	4.5	17	17	9	9	10	6					45	11.62		P
860	865	5.0	4	3	6	4	10						45	4.79		O
865	870	4.5	7	2	7	4							45	2.86		Y
870	875	5.0	5	3	3	8	5						45	3.54		O
875	880	5.0	7	6	17	14	10	18					45	10.47		R
880	885	5.0	3	2	5	2	5						45	2.36		Y
885	890	4.5	3	8	2	4							45	2.55		Y
890	895	4.0	3	5	1	8	6		20				45	6.60		P
895	900	4.5	3		3	7		3	9	6	7		45	5.57		P
900	905	4.0	9										45	1.10		Y
905	910	4.5	10	7	2	11	6	7					45	6.14		P
910	915	4.5	7	10	7	4							45	4.09		O
915	920	5.0	7	10	6								45	3.32		O
920	925	5.0	5	4	5	18							45	4.64		O
925	930	4.5	8	14	6								45	4.00		O
930	935	5.0	12	10	3	4							45	4.20		O
935	940	4.5	7	10	10	7	9						45	8.43		P
940	945	4.5	14	1	3	9	9	3	18		13	16	45	12.60		P
945	950	5.0	6	11	12	6	8	12	8				45	9.14		R
950	955	5.0	13	12	5	2							45	4.57		O
955	960	5.0	6	3	9	4		6	4		12		45	6.41		P
960	965	5.0	7	2	2	10	3	3	4				45	4.41		O
965	970	5.0	5	6	12	2							45	3.69		O
970	975	4.5	6	4	3	4	3	3					45	3.52		O
975	980	5.0	11	4	8	6	3	6		5			45	6.11		P
980	985	4.0	4								8		45	2.21		Y
985	990	3.5	10	6		3							45	3.37		O
990	995	5.0	5	5	2								45	2.57		Y
995	1000	5.0	9	4	8	2		12	8				45	6.19		P
1000	1005	5.0	7	6	8			9	12		5		45	6.84		P
1005	1010	4.5	7	1	6	4		3					45	2.94		Y
1010	1015	5.0	11	8	5	6	8						45	5.37		P
1015	1020	5.0	7	10	3	2	8	9	4				45	6.26		P
1020	1025	5.0	11	7	3	8	3	3					45	5.01		P
1025	1030	5.0	10	3	2	4	8	18	4	10			45	7.88		R
1030	1035	5.0	7	3	5	4	5	9					45	4.78		O
1035	1040	5.0	7	11	11								45	4.94		O
1040	1045	5.0	6	3	6	2							45	5.83		P
1045	1050	5.0	4	7	5	8	3			5	6		45	5.37		P

1250	1255	5.0								0	0.00	G
1255	1260	5.0		1						23	0.11	G
1260	1265	5.0								0	0.00	G
1265	1270	5.0	4							45	0.51	G
1270	1275	5.0	11	6	2					45	2.56	Y
1275	1280	5.0	5		2					45	0.96	C
1280	1285	5.0	1							45	0.14	G
1285	1290	5.0	2							45	0.30	G
1290	1295	5.0	4	1	2					45	0.66	G
1295	1300	5.0	1	1						45	0.51	G
1300	1305	4.5	4	4	7					45	2.29	Y
1305	1310	4.5	3		2					45	0.65	C
1310	1315	4.5	6	7						45	1.80	Y
1315	1320	5.0	8	1	2					45	1.47	Y
1320	1325	5.0	9	5						45	2.06	Y
1325	1330	5.0	12	7	3	12		12		45	6.77	P
1330	1335	5.0	7	9	2	2	5	12		45	5.37	P
1335	1340	5.0	3	6	9		3	3		45	3.38	O
1340	1345	5.0	4	4	5	2				45	2.06	Y
1345	1350	5.0	3	2						45	0.74	G
1350	1355	5.0	2							23	0.17	C
1355	1360	5.0	5							45	0.66	G
1360	1365	5.0	6	2						45	1.17	Y
1365	1370	5.0	9	6	2	2	10	6		45	5.08	P
1370	1375	5.0	6	5	2	4	10	6	4	45	5.30	P
1375	1380	5.0	15	13	21	2	5	3		45	8.63	F
1380	1385	4.5	12	16	2	2				45	4.58	O
1385	1390	5.0	8	20	5	4	3	3		45	6.11	P
1390	1395	5.0	3	8	6	2				45	2.80	Y
1395	1400	5.0	10	6	3	2				45	3.03	O
1400	1405	5.0	7	8	5					45	2.87	Y
1405	1410	5.0	6	7	3	4				45	2.87	Y
1410	1415	5.0	9	7	3	2		6	8	45	5.00	P
1415	1420	5.0	4	6	6	2	3	6		45	3.90	O
1420	1425	5.0	10	9	5	4		6		45	4.86	O
1425	1430	5.0	8	7	5	6	3	6	4	45	5.53	P
1430	1435	4.5	11	4	3	2				45	3.03	O
1435	1440	5.0	11	6						45	2.43	Y
1440	1445	5.0	9	8	9	8		9		45	6.26	P
1445	1450	5.0	4	3	5		8	9	4	45	5.60	P

1050	1055	5.0	3	4		2	5	3	4			45	2.50	v
1055	1060	5.0	6	8	3	4	5	3	4			45	4.27	O
1060	1065	5.0	11	9	6	4						45	4.34	O
1065	1070	5.0	10	10	6	12	3	3	12			45	8.10	R
1070	1075	5.0	12	14	9	4	8	3				45	7.21	R
1075	1080	5.0	3	1								45	0.59	G
1080	1085	5.0	13	3	12	6	3	3		5		45	6.4R	P
1085	1090	5.0	8	10	12	12	3		4			45	7.07	R
1090	1095	4.5	8	9	3	2						45	3.20	O
1095	1100	4.5	6	6	3	4						45	2.79	Y
1100	1105	5.0	6	13	8	6	3					45	5.15	P
1105	1110	5.0	5	2								45	1.03	Y
1110	1115	5.0	7	5	8	2	8	3	4			45	5.23	P
1115	1120	5.0	10	10								45	4.04	O
1120	1125	4.5	8	12	12	4		3	4		9	45	7.78	P
1125	1130	5.0	7	8	12	2	8	15	4	18		45	10.83	R
1130	1135	5.0	8	6	12	12	10					45	8.63	R
1135	1140	5.0	14	17	8	18	15	21	4	5	6	45	14.95	R
1140	1145	5.0	16	11	9	8	13	6	4			45	9.80	P
1145	1150	5.0	11	8	11	12	3					45	6.48	P
1150	1155	4.5	11	14	10	11	3	3				26	6.83	P
1155	1160	5.0	8	15	8	10	5	6				45	10.83	P
1160	1165	5.0	9	3	14	6	10	3	12	10		45	9.80	R
1165	1170	5.0	15	11	11	8	8	9	24			45	12.45	R
1170	1175	5.0	5	8	12	8	3	12	8	5	6	45	8.84	P
1175	1180	5.0	13	11	6	4		12		5	6	45	8.33	R
1180	1185	5.0	11	5	6	6	8					45	5.15	P
1185	1190	5.0	10	8	8	4	5	3				45	5.46	P
1190	1195	5.0	9	8	5	2						45	3.39	O
1195	1200	5.0	13	11	3							45	3.90	O
1200	1205	5.0	4	1	2							45	0.96	G
1205	1210	5.0	2	1	2	2						45	0.89	G
1210	1215	5.0										0	0.00	C
1215	1220	5.0										0	0.00	G
1220	1225	5.0	4	5	2							45	1.47	Y
1225	1230	5.0	3	2								45	0.66	G
1230	1235	5.0	1									45	0.07	G
1235	1240	5.0										0	0.00	G
1240	1245	5.0	3	1								45	0.59	G
1245	1250	5.0	3	2								45	0.74	G

1450	1455	5.0	5	2				
1455	1460	5.0	5	5	6	2	8	3
1460	1465	5.0	7	3	2	2		
1465	1470	5.0	5	5	5	2		
1470	1475	5.0	7	3	2	4	3	3
1475	1480	5.0	9	7	3			
1480	1485	5.0	9	7	2	4	5	
1485	1490	5.0	8	3				
1490	1495	5.0	3	4	2			
1495	1500	5.0	5	3				
1500	1505	5.0	3	5	2			
1505	1510	5.0	4	1				
1510	1515	5.0	2	4	5	4		
1515	1520	5.0	1	4		6		
1520	1525	5.0	1	1				
1525	1530	5.0	3					
1530	1535	5.0	8	3	2			
1535	1540	5.0	8	6	9	2		
1540	1545	5.0	4				5	
1545	1550	5.0	4					
1550	1555	5.0						
1555	1560	5.0	1	3				
1560	1565	1.5						

10

45	0.96	□ G
45	4.13	□ O
45	1.98	□ Y
45	2.43	□ Y
45	3.03	□ O
45	2.73	□ Y
45	5.37	□ P
45	1.63	□ V
45	1.17	□ V
45	1.17	□ V
45	1.40	□ Y
45	0.66	□ G
45	2.14	□ V
45	1.54	□ V
45	0.21	□ C
45	0.44	□ C
45	1.84	□ V
45	3.69	□ O
45	1.33	□ Y
45	0.51	□ G
0	0.00	□ G
45	0.52	□ G
0	0.00	□ G

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

FORM NO. 3

PROPERTY Cassiar U/G HOLE UB1-162 DEPTH 1364  
 AZIMUTH 090.27° INCLINATION -84° SECTION 2200N  
 LATITUDE 22016 DEPARTURE 24803 ELEVATION 5145  
 STARTED 81-07-12 FINISHED 81-07-27 LOGGED b<sub>1</sub> R. Savage  
 date July 14/81

LEGEND	
T	TRIMBLE
AT	ANALOGUE
AL	ALTERED
CS	CALCITE
V	VOLCANIC
S	SERPENTINE
SHEAR ZONE	
SCALE .	

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
4	100		VOLCANIC w/traces of ARGILLITE - light to dark gray, Traces of pyrite, throughout Calcite (traces 92 - 96)	
102	135		Interbedded VOLCANICS & ARGILLITES	
135	184		ARGILLITES - black	
184	205		ALTERATION ZONE (Traces of Talc) light gray	
205	279		SERPENTINE (AMORPHOUS) dark green shear zone @ 222-224 230-233, 242-244, 255-267	
279	433		SERPENTINE - Veinlets are appearing throughout/good fibres @ 286-287 Shear zone @ 299-301, 345-407, 418-427, 428-433, Badly broken @ 316-321, 331-345, 407-418	
433	547		FIBROUS SERPENTINE - dark to apple green + 1" fibers @ 472-473, 489-490, minor shear @ 482-487	
547	744		Fibrous SERPENTINE - dark to apple green major shear @ 560-580, 600-606, 625 -627 + 1" fibers @ 581, 578, 583, 662-663 very little fiber @ 605-622, 666-687 Traces of Magnetite ? 610-610 (Copper - native?) Gold?	

11-245 5 -3

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY Cassiar U/G HOLE U81-162 DEPTH \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_ INCLINATION \_\_\_\_\_ SECTION \_\_\_\_\_  
 LATITUDE \_\_\_\_\_ DEPARTURE \_\_\_\_\_ ELEVATION \_\_\_\_\_  
 STARTED 81-07-12 FINISHED \_\_\_\_\_ LOGGED by R. Savage  
date July 20/81

FACIES		STRUCTURE	MINERALS	ROCK TYPE	SCALE
T					
AR					
A.F.					
GS					
V					
S					

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
744	826		FIBROUS SERPENTINE - Dark to Apple Green	
			Shear Zone 740 - 757-760, 773-778, 785-787	
			756 - Changed to N.Q. core from H.Q.	
826	910		FIBROUS SERPENTINE - Dark to Apple green	
			Shear Zone @ 836-837, 840-844, 880-884	
910	963		SERPENTINE Dark to light	
963	1006		ALTERATION ZONE	
			Pyrite throughout	
1006	1200		SERPENTINE Dark to light green	
			Fiber very tightly packed	
			Bastites - 1050-1052,	
			Calcite - most joints filled up 1088 - crystallization	
			Pyrite - inclusions on joint SURFACES	
			OILIVINE 11735	
			Minor Shear @ 1180.5-1181.	
1200	1215		ALTERATION ZONE Light to dark gray	
			Talc @ 1208-1209	
			APATITE @ 1214-1215 ?	
			Calcite throughout	
1215	1228		SERPENTINE Apple to dark green	
			very little fiber	
			VUG/W. calcite crystallization @ 1216	
1228	1273.5		ALTERED SERPENTINE	
			Hematite? Chalcopyrite, Pyrite, inclusions throughout	

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

FORM 101-3

<u>PROPERTY</u>	<u>Cassiar U/G</u>	<u>HOLE</u>	<u>U81-162</u>	<u>DEPTH</u>	
<u>AZIMUTH</u>		<u>INCLINATION</u>		<u>SECTION</u>	
<u>LATITUDE</u>		<u>DEPARTURE</u>		<u>ELEVATION</u>	
<u>STARTED</u>		<u>FINISHED</u>		<u>LOGGED</u>	by <u>R. Savage</u> <u>date July 27/81</u>

LEGEND	
-	OVERTHROWN
T	TALUS
AR.	ARGILLITE
ALT.	ALTSHORN-ON
GS.	GRAPHITIC S. SH. T.
V	VOLCANICS
S	SHEETING
/	SHEARING

670	675	4.0	8	9	14	10		15	10	13		45	11.33	[ ]R
675	680	5.0	6	3	8	8	4	5	6	8	5	45	3.61	[ ]O
680	685	5.0	4	9	9	8	4	3	9	4	5	45	6.41	[ ]P
685	690	5.0	4	11	9	5	12	5	12	6	10	45	7.74	[ ]R
690	695	5.0	3	6	5	12	3	3	3	4	11	45	10.10	[ ]R
695	700	5.0	9	11	8	12	2	3	4	10		45	8.91	[ ]R
700	705	4.5	3	7	6	2	3	3	4	11		45	5.73	[ ]P
705	710	5.0	8	12	15	10	3	8	8			45	8.10	[ ]P
710	715	4.5	12	8	13	7	17	13	4			45	11.13	[ ]F
715	720	5.0	8	16	12	8	10	6	12	5	5	45	11.34	[ ]P
720	725	5.0	5	10	11	2	5	5	8			45	6.63	[ ]P
725	730	5.0	8	12	15	2	2	9				45	6.70	[ ]P
730	735	5.0	8	8	21	3	4	8				45	7.44	[ ]R
735	740	5.0	14	7	3	4	2					45	4.04	[ ]O
740	745	5.0	12	13	6	2	1					45	4.96	[ ]O
745	750	5.0	8	8	5	8	3					45	4.13	[ ]O
750	755	5.0	10	4	6	4	3	7	4			45	5.53	[ ]P
755	760	5.0	7	9	6	2	3					45	3.83	[ ]O
760	765	5.0	4	2	2	2						45	1.92	[ ]Y
765	770	5.0	6	5	8	2						45	2.73	[ ]Y
770	775	5.0	5	4	5	2						45	2.28	[ ]Y
775	780	5.0	17	6	5	2	5					45	5.97	[ ]F
780	785	4.5	11	10	3	4	3					45	4.58	[ ]O
785	790	5.0	6	7	3	6	3	6				45	4.06	[ ]O
790	795	4.0	8	5	8	8	4					45	5.25	[ ]P
795	800	4.5	9	6	9	9	4					45	3.28	[ ]O
800	805	5.0	10	5	8	8	4	6				45	4.79	[ ]O
805	810	5.0	8	6	3	4	3					45	3.39	[ ]C
810	815	5.0	8	6	3	3	10					45	2.80	[ ]Y
815	820	5.0	10	9	3	3						45	4.64	[ ]O
820	825	5.0	5	1	2	2						45	1.17	[ ]Y
825	830	4.0	5	4	4	5	4	8				45	1.84	[ ]Y
830	835	4.0	6	3	4	5	4					45	4.04	[ ]O
835	840	3.5	3	1	2	4						45	0.64	[ ]C
840	845	4.5	4	2		4						45	0.89	[ ]G
845	850	5.0	4	3		4						45	1.56	[ ]Y
850	855	5.0	12	3								45	2.14	[ ]Y
855	860	5.0	8	7	8	8	3					45	5.97	[ ]P
860	865	5.0	8	4	4	4	5	15	12	15	6	45	3.54	[ ]O
865	870	5.0	11	5								45	11.20	[ ]R

## FORM 10F NO. 81 / 162

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCPC	
270	275	4.0	3												45	0.37	I   C
275	280	4.5	6	6											45	1.64	□   Y
280	285	5.0	9	1											45	1.40	□   Y
285	290	5.0	7	6	5	2									45	2.80	□   Y
290	295	4.5	3	3											45	0.91	□   G
295	300	5.0	6												45	0.88	□   G
300	305	4.5	6	2											45	1.06	□   Y
305	310	4.5	4	6	2										45	1.64	□   Y
310	315	4.5	6												45	0.74	□   G
315	320	4.0	4	1											45	0.74	□   C
320	325	4.0	5	1											45	0.92	□   C
325	330	4.5	3												45	0.41	□   C
330	335	5.0	1												45	0.14	□   C
335	340	4.0	1												45	0.18	□   C
340	345	3.5	1												45	0.21	□   C
345	350	4.0	5	3											45	1.10	□   Y
350	355	3.0													0	0.00	□   C
355	360	3.0													0	0.00	□   C
360	365	3.5	1												23	0.08	□   C
365	370	5.0													0	0.0	□   C
370	375	4.5													0	0.00	□   C
375	380	3.5	1												23	0.08	□   C
380	385	3.5													0	0.00	□   C
385	390	3.5	1												45	0.21	□   C
390	395	4.0													0	0.00	□   C
395	400	4.5	1	2											45	0.49	□   C
400	405	5.0		4											45	0.59	□   C
405	410	3.5	4	3											45	0.95	□   G
410	415	2.5	2												45	0.30	□   C
415	420	4.0	3												45	0.37	□   C
420	425	4.5	1												45	0.17	□   C
425	430	5.0	2												45	0.30	□   C
430	435	5.0	3	5	5	7	5	6	3						45	2.94	□   Y
435	440	4.5	9	8	13		7	6							45	6.22	□   P
440	445	4.5	7	12	9	2	3	7	9						45	7.03	□   P
445	450	4.0	11	8	8	8	10	3	6						45	4.98	□   O
450	455	5.0	11	14	5	10	3	15	8	5					45	7.00	□   R
455	460	5.0	10	9	2	11	3	7	4						45	8.91	□   R
460	465	4.5	14	8	3	11	3	6							45	7.44	□   R
465	470	5.0	5	3											45	2.06	□   Y

470	475	5.0	4	12	11	6	5	3	9	6	40	45	12.97	[ ]F
475	480	4.0	6	3	10	5	6	11	9	11		45	8.47	[ ]R
480	485	4.5	4	8	10	2	6	7	4	6		45	8.02	[ ]P
485	490	5.0	5	10	8	12	10	6	10			45	3.61	[ ]O
490	495	5.0	6	2			5	12	10	16		45	7.44	[ ]R
495	500	5.0	6	1	6	12	3	2	10			45	4.79	[ ]O
500	505	5.0	5	4	5	4	5	6	10	8		45	7.74	[ ]P
505	510	5.0	6	3	3	2	3	6	12	16		45	9.34	[ ]R
510	515	5.0	3	3	9	8	3	15	20			45	3.31	[ ]C
515	520	5.0	7	10	5	3	10	15	15			45	9.70	[ ]R
520	525	4.0	3	11	3	8	10	8	5			45	7.00	[ ]R
525	530	5.0	9	4	2	8	8	6	24			45	9.50	[ ]R
530	535	5.0	6	3	6	4	3	3	8	6		45	5.67	[ ]P
535	540	4.5	10	11	6	2	5	18	4	11		45	5.73	[ ]F
540	545	5.0	8	5	6	3	5	18	6	7		45	6.77	[ ]P
545	550	3.5	7	4	4	3	6	3	12	5		45	4.53	[ ]O
550	555	5.0	11	6	5	4	4	6	7	6		45	3.10	[ ]O
555	560	5.0	10	5	6	4	6	3	12	5		45	7.00	[ ]R
560	565	5.0	5	5	3	2	8	9	9	5		45	3.97	[ ]O
565	570	5.0	9	10	8	2	8	9	15	10		45	6.55	[ ]P
570	575	5.0	4	6	5	4	5	10	4	12		45	10.10	[ ]P
575	580	5.0	9	8	9	8	8	10	4	5		45	10.97	[ ]P
580	585	4.5	3	3	3	9	9	3	4	6		45	11.21	[ ]R
585	590	5.0	4	5	6	9	9	3	4	13		45	5.60	[ ]P
590	595	5.0	11	4	9	4	3	3	4	5		45	6.04	[ ]P
595	600	5.0	9	13	5	6	3	3	12			45	5.15	[ ]P
600	605	5.0	6	11	2	8	3	21	12	6		45	11.05	[ ]R
605	610	5.0	5	8	6	4	3	3		7		45	6.56	[ ]P
610	615	5.0	6	4	8	6	5	3				45	4.57	[ ]O
615	620	5.0	10	3	5	2	3					45	3.38	[ ]O
620	625	5.0	8	10	8	8	8	3	16	15		45	10.97	[ ]R
625	630	5.0	10	4	6	10	5	9	4	30		45	13.48	[ ]P
630	635	5.0	5	13	12	2	5	9				45	6.77	[ ]P
635	640	5.0	8	3	14	4	8	6				45	6.12	[ ]P
640	645	5.0	8	10	9	6	6	8	10			45	8.33	[ ]F
645	650	5.0	13	11	3	8	13	15	8	22		4	10.31	[ ]R
650	655	4.5	9	9	10	4	5	12	20	20		45	13.27	[ ]F
655	660	5.0	8	7	3	4	5	13	8	10		45	10.17	[ ]P
660	665	5.0	9	6	11	8	13	3		12		45	10.10	[ ]R
665	670	5.0	4	7	3	3						45	2.36	[ ]Y

870	875	3.5	1	3	3	3	9		20	45	5.15	P
875	880	5.0	3	1	2		3			45	0.37	G
880	885	5.0	8	2	2					45	1.99	Y
885	890	4.5	4	2	2					45	0.91	G
890	895	5.0	3	2	2					45	0.89	C
895	900	5.0	5	2	3					45	5.15	P
900	905	5.0	5	8	8					4	4.20	O
905	910	5.0	5	8	4	5	15			45	1.77	Y
910	915	5.0	6	2	2		3			45	2.36	Y
915	920	5.0	6	2	6					45	2.43	Y
920	925	5.0	4	5	6					45	3.31	O
925	930	4.5	4	3	5	2	3	4		45	1.40	Y
930	935	5.0	4	4	2					45	1.40	Y
935	940	5.0	4							0	0.00	C
940	945	5.0	3	5						45	1.17	Y
945	950	5.0	2							45	0.30	G
950	955	5.0								0	0.00	C
955	960	5.0	4	3	3					45	1.40	Y
960	965	5.0								0	0.00	C
965	970	1.5								0	0.00	C
970	975	5.0	3	1						45	0.51	G
975	980	5.0	4							45	0.51	G
980	985	5.0								0	0.00	G
985	990	5.0	1		3					45	0.59	G
990	995	5.0	2	1	2					45	0.59	G
995	1000	5.0	1	2						45	0.44	G
1000	1005	5.0								0	0.00	G
1005	1010	5.0	4							45	0.59	C
1010	1015	4.5	3	2						45	0.74	G
1015	1020	5.0	4	2						45	0.88	G
1020	1025	5.0	6	8						45	3.31	O
1025	1030	5.0	3	5	2		3	6		45	2.14	Y
1030	1035	5.0	4	4			5			45	1.10	Y
1035	1040	5.0	3	3						45	0.82	G
1040	1045	5.0	6	3						45	1.24	Y
1045	1050	5.0	6							45	1.40	Y
1050	1055	5.0								0	0.00	G
1055	1060	5.0	4	2						45	0.89	G
1060	1065	5.0	3	2			2	3		45	1.63	Y
1065	1070	4.5	6	2						45	1.06	Y

1070	1075	4.5	2	1	2					45	0.74	[ ]C
1075	1080	5.0	5	2	3					45	0.96	[ ]G
1080	1085	5.0	3	3	5	2				45	1.17	[ ]Y
1085	1090	5.0	7	5	6	4				45	2.21	[ ]V
1090	1095	5.0	8	4	9	4				45	2.90	[ ]V
1095	1100	5.0	5	2	8	4				45	2.66	[ ]Y
1100	1105	5.0	6	4	8	8	5	9		45	5.76	[ ]P
1105	1110	5.0	4	4	2					45	1.3.	[ ]Y
1110	1115	5.0	5	3	3	4				45	2.14	[ ]Y
1115	1120	5.0	5	4	2					45	1.47	[ ]Y
1120	1125	5.0	5	5						45	1.47	[ ]Y
1125	1130	5.0	5	1		2	3	6		45	2.43	[ ]V
1130	1135	5.0								0	0.00	[ ]G
1135	1140	5.0	2							45	0.30	[ ]C
1140	1145	5.0	1							45	0.14	[ ]G
1145	1150	4.5								0	0.00	[ ]G
1150	1155	4.0	4							45	0.55	[ ]C
1155	1160	5.0	2	1	2					45	0.59	[ ]G
1160	1165	5.0	5	2	2					45	1.17	[ ]Y
1165	1170	5.0	4	10	5	3				45	3.10	[ ]O
1170	1175	5.0	5	4	8	8	3	6		45	4.79	[ ]O
1175	1180	5.0	2							45	0.23	[ ]G
1180	1185	5.0	4	2						45	0.82	[ ]G
1185	1190	5.0	4	5						45	1.26	[ ]Y
1190	1195	5.0								0	0.00	[ ]C
1195	1200	5.0		2						45	0.30	[ ]G

CASSIAR, BRITISH COLUMBIA, CANADA

DIAMOND DRILL LOG SHEET

Cassiar Hole US1-163 Depth 613  
 Azimuth 095.21° Inclination -66.9° Section 22,200 N.  
 True 22208.75° Departure 24744.10° Elevation 5143.40  
 Started 81/08/07 Finished 81/08/16 Logged by R. Savage  
 Aug. 10/81 Scale

FROM	TO	DEPTH	DESCRIPTION	VISUAL LOG
0	27	27	<u>VOLCANICS</u> - light grey, fine grained	
27	78	51	<u>VOLCANICS &amp; ARGILLITE</u> - pyrite throughout the argillites - dominated with argillite - black to light grey - shear @ 68	
78	129	51	<u>ALTERATION ZONE</u> - light grey - @ 77 calcite with pyrite - bands of amorphous serpentinite 1/8" to 1/2" wide @ 112" - pyrite @ 115 (may be assayed for precious metals)	
129	402		<u>SERPENTINE</u> - dark green, dark apple green @ 177-188 - shear zone @ 157; 287-402 - core washed away @ 157, 165, & 175 - bastites @ 220-285, lighter green	
402	505		<u>SERPENTINE FIBROUS</u> - grade picking up @ 408 - +1" - shear @ 486-487; 504-505	
505	519		<u>SERPENTINE</u> - shear @ 515-519	
519	613		<u>FIBROUS SERPENTINE</u> - dark to light green - shear zone @ 518-519; 534-552; 555-556; 612-613 - @ 613 rods stuck and left in the hole	
			END OF HOLE	

## BOREHOLE No. 81 / 163

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
385	390	3.5	6												45	0.83	I G
390	395	4.0	3	1	15										45	2.76	Y
395	400	4.5	3	6	10	2	6	3	9						45	5.73	P
400	405	3.5	9	11	3	11			13	11					45	8.41	R
405	410	4.5	6	6	6	9			7	9					45	5.88	P
410	415	5.0	7	3	5	2	5	9	4						45	8.91	R
415	420	4.0	9	8		13	4	19			12	14			45	7.37	R
420	425	5.0	11	9	8	8	5	15	8						45	9.35	R
425	430	5.0	7	9	3	10	3	9	4						45	6.48	P
430	435	4.5	8	6	3		3		18						45	5.49	P
435	440	5.0	11	8	8	4	3	6							45	5.74	P
440	445	5.0	13	13	17	10	8	12							45	11.50	R
445	450	5.0	11	10	14	10	11								45	10.17	R
450	455	4.0	6	1		8									45	2.12	Y
455	460	5.0	10	5	9	2	10	3							45	7.44	R
460	465	5.0	7	12	6	8	3		4	5					45	6.48	P
465	470	5.0	5	5	2	8									45	4.86	O
470	475	4.5	11	4	12	4	3	7	4						45	6.63	P
475	480	5.0	5		5	6	8	3							45	5.23	P
480	485	4.0	9		4	3	6								45	5.93	P
485	490	5.0	11	5	6	7	13	21	28	10	12				45	16.57	R
490	495	5.0	6	3				5	6						45	2.87	Y
495	500	4.5	11	2	6	4	9	3	13	6					45	7.78	R
500	505	4.5	3	8	6	4	11		4						45	5.32	P
505	510	4.5	1												45	0.17	G
510	515	4.5		3	2	7									45	1.71	Y
515	520	4.0	6	6	3										45	2.12	Y
520	525	4.0	5	5	10	3	10	11							45	6.26	P
525	530	4.5	3	8	2	4	3	3	13						45	7.44	R
530	535	4.5	6	3	3	4	6	13							45	6.87	P
535	540	3.0	3	5	5		17		7						45	5.40	P
540	545	2.5	6	6	6	8		24							45	7.37	R
545	550	2.5	8	8	10	12	6		16						45	8.54	R
550	555	2.0	10	23	23	5									45	8.84	R
555	560	4.0	6	10	3	5	4	8							45	5.90	P
560	565	4.0	8	3	8	10									45	4.04	O
565	570	5.0	6	6	8		3	3							45	5.08	P
570	575	5.0	10	8	3	6	3	9							45	3.03	R
575	580	4.0	3	4	6	3			4	10	6	6	8		45	6.82	P
580	585	4.0	6	15	14	5	10	4	10	6					45	10.13	R

535	590	5.0	6	6	9	2			45	3.38	<input type="checkbox"/> IO
590	595	2.5	8	10	16	8	6	6	45	7.51	<input type="checkbox"/> R
595	600	5.0	11	4	2	10			45	3.90	<input type="checkbox"/> O
600	605	4.5	6	2	3	11	6	3	45	5.15	<input type="checkbox"/> P
605	610	2.0	3		5	10		8	45	3.51	<input type="checkbox"/> O
610	615	1.5							0	0.00	<input type="checkbox"/> G

## CASSIAR AND SONS CORPORATION - LIMITED

## DIAMOND DRILL CORE GEOLOGY LOG

PROJ. TY Cassiar HOLE U81-164 DEPTH 797  
 AZIMUTH  $95.11^\circ$  INCLINATION  $-84.27^\circ$  SECTION 22,200.N.  
 LATITUDE 22209.12 DEPARTURE 24747.12 ELEVATION 5145.31  
 STARTED Aug. FINISHED LOGGED by R. Savage  
 SCALF

FROM	TO	LENGTH M.	DESCRIPTION	VISUAL LOG
0	5	5	VOLCANICS  - grey and fine grained (pyroxine, olivine)  - pyrite and argillite on joints	
5	12	7	ARCILLITE  - grey to black  - pyrite throughout	
12	13	1	VOLCANICS  - grey and fine grained	
13	60	55	AROILLITE  - grey to black  - pyrite throughout @ joints	
60	102	34	ALTERATION ZONE  - light grey  - quartz 69-70, talcy @ joints	
102	380	278	SERPENTINE  - dark green  - shear zone @ 135-136; 201-203; 220-242; 261-262; 276-280; 290-313; 359-362; 376-387  - few veinlets of fiber 1/16"	
380	585		FIBEROUS SERPENTINE  - light to dark green  - fibers 1/16"  - shear @ 380-387; 454-457; 493-498  - badly broken 471-587	
585	797		FIBEROUS SERPENTINE  - light to dark green  - fibre throughout  - shear @ 585-592; 640-641; 713-746; 795-797  - twisted of rods, unable to complete	
END OF HOLE				

## BOREHOLE NO. 81 / 164

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
330	385	3.5	4	7	4	3		9							45	3.89	I O
335	390	3.5	10	6	3										45	2.52	I Y
390	395	4.0	19	13	10	3			15						45	3.47	I R
395	400	4.0	10	1	3	3			11	15					45	6.08	I P
400	405	5.0	8	12	12	4			3	4					45	6.26	I P
405	410	4.5	4	10	2										45	2.38	I Y
410	415	3.0	10	17	15	7	8	10							45	9.81	I R
415	420	5.0	9	17	20	4	3	3	4						45	3.70	I R
420	425	5.0	11	5	2	6			3						45	3.83	I O
425	430	3.5	4	9		3			9	11					45	5.26	I P
430	435	4.0	3	10	6	5									45	4.14	I O
435	440	3.5	7	14	17										45	5.69	I P
440	445	3.5	10	4	3	6									45	3.15	I O
445	450	5.0	5	2	2										45	1.33	I Y
450	455	4.5	6	1	3										45	1.47	I Y
455	460	4.0	3	3				8							45	1.84	I X
460	465	4.5	4	4	2	11	3	7							45	4.50	I O
465	470	4.5	11	6	6	2			7						45	4.43	I O
470	475	4.5	8	7	4			6	3	18					45	6.55	I P
475	480	4.5	3	6	3	7	3	7	9	6					45	6.96	I P
480	485	4.0	10	4	4	5	4	4		6	8				45	6.35	I P
485	490	4.5	3	8	9	2	3			7					45	5.90	I P
490	495	4.0	4	3	6	5				8	9				45	4.88	I O
495	500	2.5	4	2	4	4			6	16					45	5.01	I P
500	505	4.0	11	5	3	3	6	4	5	25					45	10.96	I R
505	510	3.5	3	4	7	3	7	9	11						45	6.31	I P
510	515	4.0	5	10	6	5	4	4	15						45	7.00	I R
515	520	4.5	12	1	3	2									45	3.44	I O
520	525	3.5	7	7	9	6			4	4					45	4.74	I O
525	530	4.0	8	10	11	8	6	4	5						45	7.55	I R
530	535	3.0	8	10	10	10	8	10							45	8.34	I R
535	540	4.0	4	5	4	5			8	5	6				45	5.53	I P
540	545	4.0	4	10	3	5			8	20					45	7.92	I R
545	550	5.0	2	6	6	4	5	13	12						45	9.73	I R
550	555	4.5	4	4	6	2		7		6					45	5.32	I P
555	560	2.5	2	2	6			6							45	2.06	I Y
560	565	4.0	4	4		5	13			5	6				45	5.35	I P
565	570	4.0	3	4	3	3			4	10					45	3.59	I O
570	575	3.0	5	3	3		5	5			25				45	6.51	I P
575	580	3.5	3	6	7	9		9	11						45	6.42	I P

580	585	3.5	3	3	7	7	10		14		45	3.79	I	O	
585	590	1.5	10	7	17	7	10				45	6.63	I	P	
590	595	4.0	8	5	3	3					45	2.21	I	Y	
595	600	4.0	8	10	10	10	4	11			45	3.39	I	R	
600	605	5.0	5	3	8	4	3	9			45	7.51	I	R	
605	610	4.5	7	7	7	2	9	20	4	6	45	9.90	I	R	
610	615	5.0	4	4	6	2		12	4	10	45	10.33	I	R	
615	620	4.5	6	6	9	7	9	13	9		45	8.19	I	R	
620	625	4.0	5	5	3	8	6				45	4.61	I	O	
625	630	4.0	6	15	14	8		11	5		45	8.57	I	R	
630	635	3.5	10	3	7			4	6		45	4.21	I	O	
635	640	5.0	9	8	2		2	5	3		45	4.20	I	O	
640	645	5.0	3	2					8		45	3.31	I	O	
645	650	4.0	4	4	8	3	10	11		6	45	8.92	I	R	
650	655	3.5	4	3	4	3	4	9	11		45	10.10	I	R	
655	660	5.0	4	6	6	4	5	12	8	5	45	9.35	I	R	
660	665	4.5	2	3	3	4	3				45	2.38	I	Y	
665	670	4.5	4	9	7	11	6	10			45	6.79	I	P	
670	675	4.0	5	10	11	10	6				45	15.47	I	R	
675	680	4.5	4	7	7	11	3	17	9	17	45	11.79	I	R	
680	685	4.0	4			10	10	4		13	45	7.92	I	R	
685	690	4.0	8	6	14	13	19	8			45	9.57	I	R	
690	695	4.5	3	2	7	9	11				45	5.97	I	P	
695	700	4.5	6	9	9	2	11	13			45	7.28	I	R	
700	705	4.0	6	9	3	8	16	23	20			45	13.17	I	R
705	710	3.0	2	2	3	17	8	5	13		45	10.80	I	R	
710	715	3.0	5	3	5	3		10	20	8	45	9.94	I	R	
715	720	1.5	3	3	7		10	20			45	5.64	I	P	
720	725	1.5									45	0.00	I	G	
725	730	3.5									45	0.00	I	G	
730	735	3.0	8	7	5						45	2.81	I	Y	
735	740	3.5	5	7	4			4			45	3.05	I	O	
740	745	3.5	7	6	4	3	4	9			45	4.62	I	O	
745	750	4.0	11	3	6		10				45	4.93	I	O	
750	755	4.0	3	9	14	5	6	8	5		45	7.92	I	R	
755	760	4.0	5	5	10	10					45	6.90	I	P	
760	765	5.0	14	10	3	4					45	5.52	I	P	
765	770	5.0	7	6		2	3				45	2.57	I	Y	
770	775	5.0	5	7	14	6	3	3			45	5.37	I	P	
775	780	5.0	7	5	11	2					45	4.72	I	O	

780	785	5.0	7	1	2	2		45	1.70	<input type="checkbox"/> Y
735	790	4.5	7	3	6	2		45	2.55	<input type="checkbox"/> Y
790	795	4.5	4	3				45	1.06	<input type="checkbox"/> Y
795	800	2.0					0	0.00	<input type="checkbox"/> G	

C/ 1/7 100

WAMGOD, E. C. GY LO.

PROPERTY CASSIAR IP4 U81-165 DEPT 1,486

AZIMUT 86.31 (19) INCLINATION -71.19(11) N 22,200 N.

LATIT 22,209.12 DEPTING 24,747.95 DEPTN 5,144.70

STARTED Sept. 2/81 FINISHED Sept. 23/81 LOCATED by R. Savage  
date Sept. 3/81

FROM	TO	DEPTH FT.	DESCRIPTION	VISUAL LOG
7	19		VOLCANICS	
			- gray to light green	
			- pyrite from 7 to 13	
			- fine grained	
19	29		VOLCANICS/ARGILLITE	
			- gray to black	
			- pyrite throughout the argillite	
20	24		VOLCANIC & ARGILLITE	
			- contact along center of core	
24	31		VOLCANICS	
			- gray, fine grained	
31	55		VOLCANICS/ARGILLITE	
55	73		ARGILLITE .	
			- black	
			- pyrite throughout	
73	92		ALTERATION ZONE	
			- gray to light green, greasy feel	
			- fine grained	
			- quartz @ 78'	
92	106		ALTERED SERPENTINE	
			- dark green	
			- pyrite throughout	
			- soapy feeling	
106	121		ALTERATION ZONE	
			- light gray to light green	
			- very fine grained	
			"	
			"	
			"	
			"	
			"	
			"	
			"	
			"	
			"	

CASSIAR AS. LTD'S EXPLORATION LIMITED  
DIAMOND DRILL CORE LOGOLOGY LOG

PROPERTY CASSIAR     HOLE U81-165     DEPTH \_\_\_\_\_  
AZIMUTH     INCLINATION     SECTION 22,200 N.  
LATITUDE     DEPARTURE     ELEVATION  
STARTED Sept. 2/81 FINISHED Sept. 22/81 LOGGED by R. Savage  
date Sept. 3/81

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
121	359		SERPENTINE - dark green - badly broken @ 131-136 - gauge @ 141-146, 231-261 - amorphous serpentine @ 208 - veinlets of fiber appearing @ 151 > 1/16"	
359	965		FIBROUS SERPENTINE - apple to dark green - shear @ 394-396, 409-410, 504-531, @ 589 - fiber > 1/4" - > 1" @ 416, 437, 439 - magnetite throughout Sample @ 421' - 504-551 badly broken & sheared 630-660, 792-803	
965	1237		SERPENTINE - light to apple green - major shear from 966-978, 985-1090, from HQ to NQ @ 976 - dark green from 1030 - major shear from 1105-	
1237			ALTERATION - gray, very fine grained	
1237	1253		ALTERATION - light gray - very fine grained - hematite coating on surfaces @ 1239.5 - should be sampled for gold - galena? No distinct cubes, Arsenides? 1240.5-1243 - pyrite throughout this zone	

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY CASSIAR HOLE U81-165 DEPTH \_\_\_\_\_  
 AZIMUTH \_\_\_\_\_ INCLINATION \_\_\_\_\_ SECTION 22,200 N.  
 LATITUDE \_\_\_\_\_ DEPARTURE \_\_\_\_\_ ELEVATION \_\_\_\_\_  
 STARTED Sept. 2/81 FINISHED Sept. 22/81 LOGGED by R. Savage  
 date Sept. 81

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VISUAL  
LOG

## BOREHOLE No. 81 / 165

From	'D	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	OCRG	
355	360	4.5	1												45	0.17	I
360	365	5.0	7	16	5	6									45	4.94	O
365	370	4.0	11	14	21	8									45	7.82	R
370	375	5.0	5	11	9	12	5	9							45	7.44	R
375	380	4.5	10	10	9	18	3								45	7.11	R
380	385	5.0	10	10	8	8	3	6							45	6.41	P
385	390	4.5	11	1	3										45	2.21	Y
390	395	4.0	10	6	3	3									45	2.94	Y
395	400	4.0	8	15	18	3	4							20	45	9.57	R
400	405	5.0	8	7	8	6	13	9							45	7.30	R
405	410	4.5	7	7	7	4	3	7							45	4.99	O
410	415	4.5	11	17	12	7	9	10	13	6					45	12.20	R
415	420	5.0	6	7		6	3	12	12	5				15	45	9.73	R
420	425	5.0	5	4	3	4	3								45	3.39	O
425	430	4.5	9	10	19	7	17	7	4	6					45	11.30	R
430	435	4.5	8	7	6			10			7		9		45	6.63	P
435	440	5.0	4	13	9	12	3	3				14	16		45	10.76	R
440	445	4.5	2		2	2									45	0.89	G
445	450	4.0	5	5	6	5			4	10				20	45	8.19	R
450	455	4.5	4	2	6			3	4	6	7				45	4.58	O
455	460	4.5	4	2	3			3	18	6	7	8			45	7.54	R
460	465	4.5	7	3	9	2	6	10	4	11					45	8.26	R
465	470	5.0	6	7	3		3	12							45	4.50	O
470	475	4.5	9	3	7	4	3	7				8	9		45	7.28	R
475	480	5.0	9	12	14	6	5	3							45	7.07	R
480	485	4.5	9	4	6		6	17							45	5.90	P
485	490	4.5	13	4	10	4	6	7	4						45	7.13	R
490	495	5.0	8	8	9	12	3	6							45	6.63	P
495	500	4.5	7	9	7	20	14	17							45	10.65	R
500	505	4.5	9	12	10	11	9	13							45	9.33	R
505	510	4.0	9	6	3	3	6	8	10		8				45	7.45	R
510	515	4.0	5	4	4	3	10	19							45	6.26	P
515	520	4.0	1		3	3	4								45	2.94	Y
520	525	4.5	7	10	2	2			7	4	11				45	6.29	P
525	530	4.5	7	4	6	7	3	7							45	4.67	O
530	535	4.0	9	4	4		4	4	25	13					45	8.92	R
535	540	5.0	5	3	6		3	6	4	5	6	7			45	6.49	P
540	545	4.5	6	10	12	7		3				13			45	7.37	R
545	550	5.0	6	6	11	6									45	4.20	O
550	555	5.0	7	3	3			3	6	12					45	4.94	O

555	560	4.5	7	4	2	9	6	3	9	6		45	6.55	I	IP
560	565	5.0	5	6	12	14	3	7	12			45	7.51	I	IR
565	570	4.5	7	12	2	9	4					45	4.58	I	O
570	575	5.0	6	12	9	2						45	4.57	I	O
575	580	4.5	8	7	10	2		10				45	5.40	I	IP
580	585	4.5	6	2		2	3	13	4			45	4.43	I	IP
585	590	4.5	6	10	12	2	3	17				45	7.11	I	IR
590	595	4.5	7	10	17	13	9	7	9			45	10.31	I	IR
595	600	4.5	16	17	12	7	3					45	7.85	I	IR
600	605	5.0	13	11	5	6		3	4	5		45	6.77	I	IP
605	610	5.0	6	10	8	12	10					45	6.70	I	IP
610	615	5.0	12	9	11	6	5	5	6			45	7.14	I	IR
615	620	4.5	4	9	12	2	3					45	4.43	I	O
620	625	4.5	9	11	10	4						45	5.08	I	IP
625	630	4.0	10	6	10	3	4					45	4.61	I	O
630	635	4.5	8	2	6		3	17	18		7	45	8.60	I	IR
635	640	4.5	5	3	7	4	3	3			13	45	5.81	I	IP
640	645	4.5	4	3	2	7	6	3	4			45	4.26	I	O
645	650	4.5	2	2	16	2	6	9				45	5.23	I	IP
650	655	4.5	6	9	9	9	11	7				45	7.20	I	IR
655	660	4.5	6	1	6	7						45	4.26	I	O
660	665	5.0	5	6	8	4	3	3				45	5.53	I	IP
665	670	5.0	3	1	2	2	3	3				45	4.06	I	O
670	675	5.0	7	7	11	6	5	9				45	8.17	I	IR
675	680	5.0	4	6	15	14	8	6	20	10		45	12.15	I	IR
680	685	4.5	4	4	16	8	3	3				45	5.57	I	IP
685	690	4.5	8	6	7	4	3	20	4		7	45	8.51	I	IR
690	695	5.0	6	9	3	4	3	3				45	3.97	I	O
695	700	5.0	6	7	9	2	5	3		5		45	5.44	I	IP
700	705	5.0	8	12	12							45	4.64	I	O
705	710	5.0	9	9	6	6		3				45	4.86	I	O
710	715	5.0	3	7								45	1.40	I	X
715	720	5.0	5	10	8	6		6		5		45	5.74	I	IP
720	725	5.0	5	7	8	4		3				45	4.50	I	O
725	730	4.5	11	8	12	7	3	10				45	7.37	I	IR
730	735	1.5	13			13						45	3.68	I	O
735	740	4.5	6	3	6	4	9	3				45	4.43	I	O
740	745	4.2	1		2	7						45	1.50	I	X
745	750	4.5	3		3							45	0.98	I	G
750	755	5.0	5	3	2	9						45	2.66	I	Y

755	760	5.0	8	4	2	6	3	9		45	4.50	I IO
750	765	4.5	10	8	9	4	3	3	4	45	5.64	I IP
765	770	5.0	9	2	3	2	3			45	2.73	I Y
770	775	5.0	10	4	3	4				45	1.99	I Y
775	780	4.5	2	2	3	4				45	1.73	I Y
780	785	5.0	6	6	2	4		12	4	45	4.94	I O
785	790	5.0	2	2			2	5	3	45	1.10	I Y
790	795	5.0	7	9	6	7		17		45	4.41	I O
795	800	4.5	7	8	4	4			6	45	7.13	I R
800	805	4.5	10	9	13	4	6	13	13	45	10.15	
805	810	5.0	7	4	5		8	3		45	3.83	I O
810	815	5.0	7	6	6			3		45	3.24	I O
815	820	5.0	8	6	8	4	8	9	4	45	6.70	I P
820	825	5.0	12	6	5	4	8	6	16	45	8.17	I R
825	830	4.0	13	19	10	8	6	4		45	8.47	I R
830	835	3.0	7	5	13	3				45	3.93	I O
835	840	4.0	8	6		8	4	8	10	45	6.08	I P
840	845	5.0	12	6	5	2	5	18	8	45	8.10	I R
845	850	5.0	7	5	3	12	5	6		45	6.26	I P
850	855	4.5	6	8	3	2	6	10	4	45	9.01	I R
855	860	4.5	8	7	13	11				45	7.52	I R
860	865	5.0	4	4	9					45	5.97	I P
865	870	4.5	10	2	2	4	9	3		45	6.05	I P
870	875	4.5	6	9	12	9	6	13	9	45	9.16	I R
875	880	3.0	7	3	3	10	5		13	45	13.87	I R
880	885	4.5	8	8	9		6	7	4	45	5.90	I P
885	890	4.5	2	4	7		6	3		45	3.20	I O
890	895	4.0	4	5	3	8	13	11	5	45	8.10	I R
895	900	4.5	6	12	13	13		10		23	6.79	I P
900	905	4.5	8	4	2	4	9	3		45	9.81	I R
905	910	4.5	9	10	6		3	10		45	5.32	I P
910	915	4.0	4	11	11	5	4	4	5	45	10.59	I R
915	920	4.5	10	7	2	7	6	3	6	45	4.91	I O
920	925	4.5	7	4	2	2	9		11	45	6.38	I P
925	930	4.0	8	11	10		4	4		45	5.06	I P
930	935	5.0	7	3	6		3		8	45	7.07	I R
935	940	4.5	9	3	3	4	3	10		45	4.84	I O
940	945	5.0	10	7		4	3	12		45	5.97	I P
945	950	5.0	11	11	6	10			5	45	5.60	I P
950	955	5.0	7	2	11	10	8	6	8	45	10.31	I R

955	960	5.0	7	9	9	12	3	6	45	6.70	IP
960	965	4.5	10	2	7	7			45	3.76	IO
965	970	4.5	8	7	3	7			45	4.09	IO
970	975	5.0	6	4	5			3	45	2.14	IY
975	980	5.0	4	1					45	0.66	IG
980	985	4.5	7	2					45	1.23	IY
985	990	4.5							0	0.00	IG
990	995	4.0		5	5	6			45	2.39	IY
995	1000	4.0		6	4		3	4	45	2.86	IY
1000	1005	4.0	10	13	15	10			45	7.00	IR
1005	1010	5.0	2	5					45	1.17	IY
1010	1015	4.5	6	2					45	1.15	IY
1015	1020	4.0	3						45	0.37	IG
1020	1025	5.0	5						45	0.74	IG
1025	1030	5.0	4		2	3			45	1.33	IY
1030	1035	5.0	2			3			45	0.74	IG
1035	1040	5.0	1			3			45	0.59	IG
1040	1045	5.0	2			3			45	0.74	IG
1045	1050	5.0							0	0.00	IG
1050	1055	4.5							0	0.00	IG
1055	1060	4.0							0	0.00	IG
1060	1065	4.5	1	2					45	0.49	IG
1065	1070	4.5							0	0.00	IG
1070	1075	4.5							0	0.00	IG
1075	1080	4.0	1						45	0.18	IG
1080	1085	4.0							0	0.00	IG
1085	1090	5.0							0	0.00	IG
1090	1095	4.0							0	0.00	IG
1095	1100	5.0							0	0.00	IG
1100	1105	4.5							0	0.00	IG
1105	1110	4.0							0	0.00	IG
1110	1115	4.5							0	0.00	IG
1115	1120	4.5							0	0.00	IG
1120	1125	2.5							0	0.00	IG
1125	1130	3.5							0	0.00	IG
1130	1135	5.0							0	0.00	IG
1135	1140	5.0							0	0.00	IG
1140	1145	3.0							0	0.00	IG
1145	1150	3.5							0	0.00	IG
1150	1155	4.5							0	0.00	IG

1155	1160	5.0	2	4			45	0.89	I	G
1160	1165	5.0					0	0.00	I	G
1165	1170	5.0	1				45	0.14	I	G
1170	1175	4.5					0	0.00	I	G
1175	1180	5.0	3				45	0.44	I	G
1180	1185	4.5	2				45	0.33	I	G
1185	1190	4.5	1	2			45	0.49	I	G
1190	1195	5.0	2	2			45	0.59	I	G
1195	1200	4.5	2				45	0.59	I	G
1200	1205	5.0	1				45	0.00	I	G
1205	1210	5.0					0	0.00	I	G
1210	1215	4.0	3				45	0.37	I	G
1215	1220	4.0	4	3	5		45	2.76	I	Y
1220	1225	4.0	5	5			45	1.47	I	Y
1225	1230	4.0	1	3	10		45	2.02	I	Y
1230	1235	5.0	5				45	0.74	I	G
1235	1240	5.0	1	3			45	0.59	I	G
1240	1245	4.5					0	0.00	I	G
1245	1250	4.5					0	0.00	I	G
1250	1255	4.5					0	0.00	I	G
1255	1260	4.5	1				45	0.17	I	G
1260	1265	4.5	2				45	0.33	I	G
1265	1270	4.0	1				23	0.08	I	G
1270	1275	4.0					0	0.00	I	G
1275	1280	4.0	1				45	0.18	I	G
1280	1285	4.0	3				45	0.37	I	G
1285	1290	4.5					0	0.00	I	G
1290	1295	5.0					0	0.00	I	G
1295	1300	5.0	1				45	0.14	I	G
1300	1305	5.0	1				45	0.14	I	G
1305	1310	4.5	3				45	0.49	I	G
1310	1315	4.5	4	4			45	1.32	I	Y
1315	1320	4.5	1	3			45	0.65	I	G
1320	1325	5.0	3	6			45	2.06	I	Y
1325	1330	5.0	3	3		6	45	2.94	I	Y
1330	1335	4.5	2				45	0.33	I	G
1335	1340	4.5					0	0.00	I	G
1340	1345	4.5	2				45	0.33	I	G
1345	1350	5.0			3		45	0.44	I	G
1350	1355	4.5	1	2			45	0.49	I	G

1355	1360	4.0							0	0.00	I	G
1360	1365	4.0							0	0.00	I	G
1365	1370	4.0	3						45	0.37	I	G
1370	1375	4.5		4	3	4		7	7			
1375	1380	4.5	1	2					45	3.76	I	O
1380	1385	4.5	2						45	0.49	I	G
1385	1390	3.5	4						45	0.33	I	G
1390	1395	4.5	1	2					45	0.64	I	G
1395	1400	4.0							45	0.49	I	G
1400	1405	5.0							0	0.00	I	G
1405	1410	5.0							0	0.00	I	G
1410	1415	5.0	3						45	0.44	I	G
1415	1420	4.5	1						45	0.17	I	G
1420	1425	4.5							0	0.00	I	G
1425	1430	4.5	1	2	3				45	0.98	I	G
1430	1435	5.0	1						45	0.14	I	G
1435	1440	4.5							0	0.00	I	G
1440	1445	4.5	1						45	0.17	I	G
1445	1450	3.5							0	0.00	I	G
1450	1455	4.5	1						45	0.17	I	G
1455	1460	4.0							0	0.00	I	G
1460	1465	4.0							0	0.00	I	G
1465	1470	4.0							0	0.00	I	G
1470	1475	3.5							0	0.00	I	G
1475	1480	3.5							0	0.00	I	G
1480	1485	3.0							0	0.00	I	G
1485	1490	0.5							0	0.00	I	G

## CASSIAR MINERALS CORPORATION LTD. HFD

## DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY CASSIAR      HOLE U81-166      DEPTH 1196  
 AZIMUTH 107 18 36      INCLINATION -86°56' 33" SECTION 22,200 N.  
 LATITUDE 22,209.41      DEPARTURE 24,746.26 ELEVATION 5144.63  
 STARTED Sept. 24/81      FINISHED      LOGGED by R. Savage  
 date

SCALE

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
0	68		VOLCANICS/ARGILLITES - fine grained - light gray to black - some pyrite on joints	
68	99		ALTERATION - light gray to green - fine grained - talcy on joints & veinlets	
99	393		SERPENTINE - very dark green - shear @ 114-115, @ 149, 164-166, @ 193, 200-252 - talc carbonate @ 261-262 - sheared from 270-277, 280-309(Cougy), 328-333, 355-393	
393	856		FIBROUS SERPENTINE - dark to apple green - +1/2" @ 407 - shear @ 403.5-405, 418-421, 424-427, 452-457, 493-494, 503-504, 508-512, 525-536, 539-572, 658-679 - fiber grade down from 690 - bastites, magnetite - shear @ 735-776, 799-801, 809-811, 816.5-830, 842-856 - pyrite samples @ 1136	
856	1046		SERPENTINE - dark to light green - bastites & magnetite - some fiber - badly broken & sheared - rouge @ 878-880, 881-889, 896-900, 919-921, 966-1046 - changed from HQ to SQ @ 996	

STOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY CASSIAR    HOLE U81-166    DEPTH 1196  
 AZIMUTH 107.31    INCLINATION -86.942    SECTION 22,200 N.  
 LATITUDE 22,209.41    DEPARTURE 24,746.26    ELEVATION 5144.63  
 STARTED Sept. 24/81    FINISHED Oct. 7/81    LOGGED by R. Savage  
date Oct. /81

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## BOREHOLE NO. 81 / 166

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
360	365	4.5	6	4	3		3								45	2.29	I Y
365	370	4.5	13	10	9										45	4.67	I O
370	375	4.5	6	8	3										45	2.38	I Y
375	380	4.5	7	2											45	1.23	I Y
380	385	4.5	7	10											45	2.38	I Y
385	390	4.5	7	5	10	2		6	3						45	3.52	I O
390	395	4.5	7	15	6	7		6	3						45	6.31	I P
395	400	5.0	6	3	2	2	3								45	2.14	I Y
400	405	5.0	7	3	3	2	3	6							45	3.46	I O
405	410	5.0	3	7		4	3	3							45	6.48	I P
410	415	4.5	8	3	10	9	6		9						45	7.11	I R
415	420	5.0	6	8	11	8	3	18							45	7.81	I R
420	425	5.0	3	7	11	10			15	4					45	7.30	I R
425	430	5.0	12	10	3	6	3	3							45	5.97	I P
430	435	5.0	15	6	3	2	13	9	4	5	6				45	9.14	I R
435	440	5.0	10	8	5	4									45	3.83	I O
440	445	4.5	6	3		4									45	1.97	I Y
445	450	4.5	3	11	6	13	6	7							45	7.20	I R
450	455	5.0	12	10	8	4		6							45	5.81	I P
455	460	5.0	17	10	18	4	3	6	4						45	8.93	I R
460	465	5.0	3	5	11	12	3	9							45	6.93	I P
465	470	5.0	7	6	11	6	13	3							45	6.63	I P
470	475	5.0	9	8	11	2	5	12							45	6.84	I P
475	480	5.0	10	7	14	8	13	21	8	5	18				45	15.10	I R
480	485	4.5	3	7	10	4		10	9						45	7.11	I R
485	490	4.5	12	9	12	13	6		4						45	8.19	I R
490	495	4.5	3	2	2	11	9	7							45	4.84	I O
495	500	4.5	6	6	6	9	3	13		11	13	3	9		45	12.03	I R
500	505	5.0	9	3	5	12	10	12							45	8.33	I R
505	510	4.5	6	7	6	7		3	13	17	7				45	9.40	I R
510	515	5.0	7	4	2	6	5	3							45	3.83	I O
515	520	4.5	6	8	5	13	6	3	9	6					45	8.02	I R
520	525	4.5	7	3	9	7	6	3							45	5.64	I P
525	530	5.0	4	6	9	10	5	3							45	5.37	I P
530	535	4.5	6	8	20	11	3	13	13						45	10.89	I R
535	540	4.5	3	7	9				3	4					45	6.87	I P
540	545	4.5	7	10	3	2	6	3							45	4.50	I O
545	550	3.0	5	2	3	3			5	7					45	3.44	I O
550	555	4.0	5	9	4	13	10	8	10	6					45	9.29	I R
555	560	5.0	7	7	2	2	3	9	3						45	5.46	I P

560	565	5.0	3	2	5	6	6	4	12	10	6	45	3.76	I	O
565	570	5.0	7	2	5	6	4	3	3	12	10	45	6.12	I	P
570	575	5.0	6	11	12	5	6	8	9	4	10	45	5.30	I	P
575	580	5.0	7	10	5	6	6	5	3	8	6	45	0.34	I	R
580	585	5.0	9	11	5	8	13	15	8	10	6	45	6.17	I	R
585	590	5.0	7	9	6	6	3	3	3	15	5	45	9.94	I	R
590	595	5.0	7	12	6	8	10	18	5	5	7	45	7.14	I	R
595	600	5.0	6	5	5	5	2					45	9.57	I	R
600	605	5.0	4	3	5	2						45	2.57	I	Y
605	610	5.0	2	1	2	2						45	1.70	I	Y
610	615	5.0	7	5	5	10		5				45	0.96	I	G
615	620	5.0	4	4	9	3		9				45	7.00	I	R
620	625	5.0	4	4	9	5		3				45	3.38	I	O
625	630	5.0	4	5	9	3		5	12			45	3.75	I	O
630	635	5.0	4	5	14	4		5	6			45	6.41	I	P
635	640	5.0	6	7	5	4		3	21	12		45	10.31	I	R
640	645	5.0	6	7	2	2		6	6	12		45	6.12	I	O
645	650	4.5	9	7	6	2		7				45	3.85	I	O
650	655	5.0	5	7	6	2		3				45	3.24	I	C
655	660	5.0	1					3	4			45	1.10	I	Y
660	665	4.5	4	4	12	4		6				45	3.59	I	O
665	670	4.5	5	7	5	7		6				45	4.99	I	O
670	675	5.0	4	5	8	2		3				45	2.36	I	Y
675	680	5.0	3	4	14	2		6				45	4.57	I	O
680	685	5.0	7	9	9	6		3				45	5.90	I	P
685	690	4.5	0	10	2	6		3	3			45	4.26	I	O
690	695	5.0	9	2	3	3		5				45	2.73	I	Y
695	700	5.0	4									45	0.36	I	G
700	705	5.0	8	5	3	4		5				45	4.73	I	C
705	710	5.0	5	7	3	2		3				45	2.21	I	Y
710	715	5.0	6	7	3	2		3				45	4.50	I	O
715	720	5.0	4	5	14	11						45	3.24	I	O
720	725	4.5	3	3	19	2		5				45	5.57	I	P
725	730	5.0	15	4	5	2		5				45	4.04	I	O
730	735	5.0	6	2	3	18		15				45	7.14	I	R
735	740	4.5	7	6	10	3		3	3			45	4.17	I	C
740	745	4.5	4	1								45	0.74	I	O
745	750	5.0	2			3						45	1.74	I	;
750	755	4.5	4	1	2							45	1.06	I	;
755	760	5.0	3									45	1.10	I	Y

760	765	5.0	2										45	0.30	I	IG
755	770	5.0	3										45	0.37	I	IG
770	775	5.0	9	2	4	5	3	2	6	8	5		45	1.91	I	Y
775	780	5.0	10	9	7	3	2						45	2.87	I	Y
780	785	5.0	10	4	6	3	2						45	5.52	I	P
785	790	5.0	9	7	3	2							45	2.30	I	Y
790	795	4.5	4										45	1.71	I	Y
795	800	4.0	6	3									45	1.20	I	X
800	805	5.0	8	5	3	3							45	1.98	I	Y
805	810	5.0	10	2									45	1.77	I	Y
810	815	4.5	3										45	0.41	I	G
815	820	4.5	2	1									45	0.49	I	G
820	825	5.0	4	1									45	0.74	I	G
825	830	5.0	1										45	0.07	I	G
830	835	5.0	4	3		2							45	1.26	I	X
835	840	4.5	3	1									45	0.57	I	G
840	845	5.0	5	7		2							45	1.99	I	Y
845	850	4.5	2										45	0.33	I	G
850	855	4.5	6	8	6	6							45	3.52	I	O
855	860	5.0	6	3	2	2							45	2.21	I	Y
860	865	5.0	6	2	3	3	4						45	2.14	I	X
865	870	4.5	2			3							45	1.56	I	X
870	875	4.5	3	4									45	1.15	I	X
875	880	5.0											0	0.00	I	G
880	885	5.0	1	1		3	4						45	1.26	I	X
885	890	5.0	5	2									45	0.96	I	G
890	895	5.0	5	1		2							45	1.10	I	Y
895	900	5.0	2	2									45	0.59	I	G
900	905	5.0	3	4		3							45	1.40	I	X
905	910	5.0	1	2									45	0.44	I	G
910	915	4.5	3										45	0.41	I	G
915	920	4.5	7	1									45	1.06	I	X
920	925	4.5	7	3		6							45	2.12	I	X
925	930	5.0	5	2		3							45	1.47	I	X
930	935	5.0	0	2			2			3			45	1.84	I	O
935	940	5.0					5	4					45	1.40	I	X
940	945	4.5	4	7	7	7	9		3				45	4.99	I	O
945	950	5.0	1	1		5							45	0.96	I	G
950	955	5.0	2	2									45	0.52	I	G
955	960	5.0											0	0.00	I	I

960	965	5.0	3					45	0.37	I	G
965	970	4.5	6	3				45	1.23	I	Y
970	975	5.0	2	2	2	5		45	1.47	I	Y
975	980	5.0	6					45	0.89	I	G
980	985	4.5	3					45	0.41	I	G
985	990	4.5						0	0.00	I	G
990	995	4.5						0	0.00	I	G
995	1000	3.0	3	2	10			45	2.21	I	Y
1000	1005	4.5	6	2	3			45	1.56	I	Y
1005	1010	4.5	1	2				45	0.49	I	G
1010	1015	5.0	5	1	8			45	1.91	I	Y
1015	1020	5.0	2	2				45	0.59	I	G
1020	1025	4.5						0	0.00	I	G
1025	1030	5.0	1	2				45	0.44	I	G
1030	1035	5.0						0	0.00	I	G
1035	1040	5.0	2					45	0.30	I	G
1040	1045	5.0	1	1				45	0.23	I	G
1045	1050	5.0	1		2			23	0.23	I	

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

**FORM B-3**

PROPERTY	Cassiar	HOLE	U81-167	DEPTH	355
AZIMUTH	91.13°	INCLINATION	-57.48	SECTION	22,400 N.
LATITUDE	22,400.04	DEPARTURE	24,690.05	ELEVATION	5144.33
STARTED	Oct. 10/81	FINISHED	Oct. 15/81	LOGGED by	R. Savage date Oct. 13/81

OVERVIEW  
 T 14.65  
 AH ANALYSIS  
 ALY ALY COTTER  
 GS QUADRATIC COUL.  
 V 10.00  
 S 1.00  
  
 SCALE

## BOREHOLE NO. 81 / 167

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
200	205	5.0	1												45	0.07	I G
205	210	4.5		3											45	0.41	I G
210	215	5.0	2												45	0.30	I G
215	220	5.0		5	1										45	0.81	I G
220	225	5.0		2	2	2									45	0.74	I G
225	230	5.0													0	0.00	I G
230	235	4.5													0	0.00	I G
235	240	5.0													0	0.00	I G
240	245	4.5													0	0.00	I G
245	250	5.0	1												45	0.07	I G
250	255	5.0		2	1										45	0.37	I G
255	260	4.5	1	1											45	0.33	I G
260	265	5.0		4	1										45	0.66	I G
265	270	5.0		7	4	3									45	2.36	I Y
270	275	4.5		3	3	2	2								45	1.56	I Y
275	280	3.5	1												23	0.08	I G
280	285	5.0	1												45	0.07	I G
285	290	4.5		2		2									45	0.49	I G
290	295	5.0		3	1										45	0.52	I G
295	300	5.0		1	2	8	2								45	1.84	I Y
300	305	4.5	1	1											45	0.33	I G
305	310	5.0		2	1										45	0.44	I G
310	315	5.0		3	3	5	2								45	1.77	I Y
315	320	5.0	1												45	0.14	I G
320	325	5.0		2	2										45	0.44	I G
325	330	5.0	1												45	0.14	I G
330	335	4.5		2											45	0.25	I G
335	340	4.0													0	0.00	I G
340	345	4.0													0	0.00	I G
345	350	4.0													0	0.00	I G
350	355	2.0													0	0.00	I G
355	360	1.5													0	0.00	I G

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY CASSIAR HOLE U81-168 DEPTH 1276  
AZIMUTH 91.13 INCLINATION -54 SECTION 22,490 N  
LATITUDE 22,400.04 DEPARTURE 24,690.05 ELEVATION  
STARTED Oct. 19/81 FINISHED Nov. 11/81 LOGGED by R. Savage  
SCALE.

LEGEND	
Y	Overburden
N	Bedrock
A	Asbestos
L	Leucite
S	Serpentine
V	Vein
Z	Zonality
W	Welded

FROM	TO	LENGTH FT.	DESCRIPTION	VISUAL LOG
02	236	236	SERPENTINE  - very dark green - talcy on joints - banded with calcite 27-29 - gouged, 50-60, 83.5-85 - sheared, 60-70, 116-159, 178,199,227-230 - fiber + 1/16"(1)	
236	383	147	SERPENTINE..  - light to dark green - talcy on joints and gouge on some - fiber veins at random - sheared @ 236-251, 260-261, 240-327, 292-379 - gouge @ 263 - calcite @ 308	
383	897	514	FIBROUS SERPENTINE  - apple green - bastites throughout - talcy on joints - very good fiber throughout - sheared @ 387-406, 465-470, 479-481, 486-488, 501-542. 630-650, 682-696, 700-706 - magnetite on fiber seams - gouge @ 721, 859, 862, 892-897 - changed to NQ @ 862'	
897	1015	118	FIBROUS SERPENTINE  - light to dark green - magnetite throughout and bastites - talc on joints - good fibers - amorphous serpentite @ 957.5 - sheared @ 994-1001, 1004-1021	

CASSIUS ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

PROPERTY	CASSIAR	HOLE	U81-168	DEPTH	1,276
AZIMUTH	91.13	INCLINATION	-54	SECTION	22,400 N.
LATITUDE	22400.04	DEPARTURE	24690.05	ELEVATION	5144.33
STARTED	Oct. 19/81	FINISHED	Nov. 4/81	LOGGED	by R. Savage d218

## BOREHOLE NO. 81 / 168

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
380	385	5.0	7	3	3		4	14	7	4					45	1.84	IY
385	390	4.5	2	6	7	4	15		15						45	6.39	IP
390	395	2.0	10	5	5										45	7.18	IR
395	400	4.0	9	5	4	5	4	4							45	4.51	IO
400	405	5.0	7	13	8	6	8	3							45	6.41	IP
405	410	5.0	6	14	11	4	3	12	4						45	8.70	IR
410	415	5.0	7	10	2	12	8	18			5				45	8.93	IR
415	420	4.5	2	8	7	2	9	3							45	4.50	IO
420	425	5.0	12	5	12	4		3	4						45	5.90	IP
425	430	5.0	7	8	8	2	8	3							45	5.15	IP
430	435	5.0	11	9	21	9	5	15	4		5				45	11.57	IR
435	440	4.5	7	11	13	11	6	17	13						45	11.46	IR
440	445	4.5	8	12	9	9	9	10	13	11					45	12.69	IR
445	450	4.5	8	12	9	4	14	13	13						45	10.72	IR
450	455	5.0	5	6	5	2	5		4		10				45	5.30	IP
455	460	5.0	9	19	14	14	10	3							45	10.10	IR
460	465	4.5	9	20	10	18	3	7	4						45	10.31	IR
465	470	5.0	6	13	12	12	23	24	4						45	13.70	IR
470	475	4.5	9	21	22	18	14	20	9	6					45	17.27	IR
475	480	4.5	20	11	12	13	11	17	31	22	7	8			45	22.34	IR
480	485	4.5	13	6	16	13	6	7	9						45	10.07	IR
485	490	5.0	10	14	6	2	8	6							45	7.52	IR
490	495	4.5	10	19	7	13	3	7		6					45	9.33	IR
495	500	4.5	12	6	6	2	6	7	4						45	6.05	IP
500	505	5.0	10	7	21	6	15								45	10.47	IR
505	510	5.0	15	9	11	8	3	6							45	7.51	IR
510	515	5.0	7	13	11	2	8		4		5				45	7.21	IR
515	520	5.0	11	14	21	8	10	6	4						45	10.83	IR
520	525	5.0	10	10	6		3	6	4		5				45	6.41	IP
525	530	4.5	7	10	13	13	11	7	18						45	11.62	IR
530	535	4.5	7	4	19	2	11		9						45	7.61	IR
535	540	5.0	4	2	8		3								45	2.29	IY
540	545	5.0	11	10	5	12	8								45	6.56	IP
545	550	4.5	11	12	12	2	9		17						45	9.09	IR
550	555	5.0	13	7	9	14	3	12	4						45	10.83	IR
555	560	5.0	9	3	5	8	5								45	5.01	IP
560	565	5.0	9	6	5										45	2.87	IY
565	570	4.5	9	14	9	9			3						45	8.10	IR
570	575	5.0	10	5	3				3						45	3.10	IO
575	580	5.0	3	8	14	10	8	9							45	8.26	IR

580	585	5.0	12	8	6	12	5	3	5			45	7.51	I	R
590	595	5.0	9	5	5	6	15	19	12	10		45	11.85	I	R
590	595	5.0	14	14	12	12	8	15	16			45	13.34	I	R
595	600	5.0	7	9	6	6	5				5	45	6.70	I	P
600	605	5.0	11	12	12	12	10		6		7	45	9.28	I	R
605	610	5.0	10	6	9	2	8	9				45	6.34	I	P
610	615	4.5	13	11	7	13	11	7	13	6	20	45	14.81	I	R
615	620	5.0	7	10	9	5	5	21	4	5		45	9.80	I	R
620	625	5.0	14	14	14	8	3	3	4			45	8.63	I	R
625	630	4.5	8	4	9	4	9	3	4			45	6.05	I	P
630	635	5.0	7	6	3	8	10	6		5		45	6.56	I	P
635	640	5.0	6	4	6	4	3	3				45	3.75	I	O
640	645	5.0	3	5	8	8	8	3				45	5.01	I	P
645	650	5.0	6	7	5	6	5	3	4			45	5.23	I	P
650	655	4.5	10	18	19	7	9	9				45	8.92	I	R
655	660	5.0	6	7	5	4	5	3				45	4.36	I	O
660	665	5.0	1	2								45	0.44	I	G
665	670	5.0	9	5	3	8	5					45	4.34	I	O
670	675	5.0	6	12	5				10	3		45	5.15	I	P
675	680	4.5	7	3			2	9				45	3.03	I	O
680	685	5.0	5	3	3	4						45	2.21	I	Y
685	690	5.0	7	8	8	6	8		12			45	7.07	I	R
690	695	5.0	12	21	12	4						45	7.14	I	R
695	700	5.0	6	8	12	12	5	3	4			45	7.30	I	R
700	705	5.0	10	6		6		3				45	3.54	I	O
705	710	5.0	3	5	3							45	2.36	I	Y
710	715	5.0	2	2	5	4		13				45	3.69	I	O
715	720	5.0	7	8	15	4						45	4.94	I	O
720	725	5.0	3	3	15	8						45	4.94	I	O
725	730	5.0	5	12	23	10	3	9	4	5		45	11.41	I	R
730	735	5.0	14	13	15	10	5					45	8.32	I	R
735	740	5.0	11	13	20	10						45	7.88	I	R
740	745	5.0	7	11	15	12	5	6				45	3.24	I	R
745	750	5.0	4	5	8	8						45	4.44	I	O
750	755	4.5	6	4	7	7						45	3.44	I	O
755	760	5.0	5		9	6	5					45	2.80	I	Y
760	765	5.0	3	6	21	6	3					45	8.10	I	R
765	770	5.0	4	6	3	10	3					45	6.41	I	P
770	775	5.0	12	7	11	3						45	5.44	I	P
775	780	5.0	11	11	3	10	13	9	4			45	9.57	I	R

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780	785	5.0	12	15	3	2	3	18	8		45	8.91	I R
735	790	5.0	7	13	2	4	5	6			45	5.37	I P
790	795	5.0	10	2	6	2	5				45	3.61	I Y
795	800	5.0	6	5	2						45	1.77	I Y
800	805	4.5	9	3	2	13	6		9		45	6.14	I P
805	810	4.5	8	10	2	9					45	4.09	I O
810	815	5.0	12	3	2	12	3	3			45	6.48	I P
815	820	5.0	5	1	3						45	2.80	I Y
820	825	5.0	11	5	17	4	10	6	3		45	3.34	I R
825	830	5.0	10	2							45	2.50	I Y
830	835	5.0	3	3	8	2	8	6			45	5.90	I P
835	840	5.0	11	10	3	4					45	4.04	I O
840	845	4.5	11	10	16	7	11				45	7.86	I R
845	850	5.0	5	10	12						45	3.90	I O
850	855	5.0	6	3	12						45	3.01	I O
855	860	4.0	3	1	14	3					45	5.98	I P
860	865	4.0	5	8	4	5	6				45	4.04	I O
865	870	5.0	3	7	12	8	3	3			45	6.41	I P
870	875	5.0	6	4	8	4					45	4.06	I O
875	880	5.0	4	2	5	12	15				45	7.44	I R
880	885	5.0	11	10	11	2	8	3			45	6.48	I P
885	890	5.0	7	11	23	4					45	6.43	I P
890	895	5.0	10	3	9						45	4.94	I O
895	900	5.0	6	10	5	6	5	9			45	6.04	I P
900	905	4.0	11	9	3	3	2	5	9		45	3.96	I O
905	910	5.0	9	3	3	5					45	5.23	I P
910	915	5.0	11	3	17	12	3				45	6.63	I P
915	920	5.0	13	9	9						45	4.57	I O
920	925	5.0	5	3	8	2	5	12			45	5.15	I P
925	930	4.5	5	3	2	4					45	2.21	I Y
930	935	5.0	7	10	5						45	3.17	I O
935	940	5.0	9	8	6	6	3	3			45	5.08	I P
940	945	5.0	4	7	9	4	3	3			45	4.34	I O
945	950	5.0	5	4	3	4					45	2.28	I Y
950	955	5.0	10	8	5	4	5	5			45	6.19	I P
955	960	5.0	7	7							45	1.93	I Y
960	965	5.0	12	13	2	2					45	5.30	I P
965	970	5.0	9	5	2	4					45	4.20	I O
970	975	5.0	9	7	8	8	10				45	6.11	I P
975	980	4.5	13	11	6	4					45	6.46	I P

980	985	5.0	14	8		3	9			45	4.86	I	IO	
990	995	5.0	3	9	8	4	3	12	5	45	6.26	I	IP	
995	995	5.0	7	4	9	8	6		6	45	5.67	I	IP	
995	1000	5.0	6	4	3	8	5		8	45	6.48	I	IP	
1000	1005	4.5	8	13	13	7	9	17	9	5	45	11.62	I	IR
1005	1010	5.0	9	4	6	2	3			45	3.39	I	IO	
1010	1015	5.0	7	3	8	2				45	3.54	I	IO	
1015	1020	5.0	3	1	2					45	0.81	I	G	
1020	1025	5.0	9	6	6	2				45	3.32	I	IO	
1025	1030	5.0	11	4	2	4	3			45	3.31	I	IO	
1030	1035	5.0	7	9	9	4				45	4.27	I	IO	
1035	1040	5.0	3	1	5	2			4	45	2.14	I	Y	
1040	1045	5.0	5	7	8	6			6	45	5.23	I	IP	
1045	1050	5.0	9	1	11	4			4	45	3.54	I	IO	
1050	1055	5.0	6	2	3	10				45	3.03	I	IO	
1055	1060	5.0	4	3	3					45	1.40	I	Y	
1060	1065	5.0	4	3	5					45	1.70	I	Y	
1065	1070	5.0	4	1	2					45	0.89	I	G	
1070	1075	5.0	6	2						45	1.10	I	Y	
1075	1080	2.0								0	0.00	I	G	
1080	1085	2.5								0	0.00	I	G	
1085	1090	3.5								0	0.00	I	G	
1090	1095	4.5	1							45	0.08	I	G	
1095	1100	3.0	2							45	0.24	I	G	
1100	1105	4.0	1							23	0.08	I	G	
1105	1110	5.0	2							45	0.30	I	G	
1110	1115	4.5								0	0.00	I	G	
1115	1120	4.5								0	0.00	I	G	
1120	1125	5.0	1							45	0.14	I	G	
1125	1130	5.0	2							45	0.30	I	G	
1130	1135	5.0	6	2	2					45	1.10	I	Y	
1135	1140	5.0	2	2						45	0.52	I	G	
1140	1145	5.0	3							45	0.44	I	G	
1145	1150	5.0	2							45	0.30	I	G	
1150	1155	5.0	3							45	0.37	I	G	
1155	1160	5.0								0	0.00	I	G	
1160	1165	5.0								0	0.00	I	G	
1165	1170	5.0	4	2						45	0.89	I	G	
1170	1175	5.0	4	2						45	0.81	I	G	
1175	1180	5.0								0	0.00	I	G	

1180	1185	5.0	2		45	0.30	I	G
1193	1190	5.0			0	0.00	I	G
1193	1195	5.0			0	0.00	I	G
1195	1200	4.5			0	0.00	I	G
1200	1205	5.0			0	0.00	I	G
1205	1210	4.0			0	0.00	I	G
1210	1215	4.0			0	0.00	I	G
1215	1220	3.5			0	0.00	I	G
1220	1225	4.5			0	0.00	I	G
1225	1230	5.0			0	0.00	I	G
1230	1235	4.0			0	0.00	I	G
1235	1240	4.0			0	0.00	I	G
1240	1245	2.5			0	0.00	I	G
1245	1250	2.0			0	0.00	I	G
1250	1255	3.5			0	0.00	I	G
1255	1260	1.5			0	0.00	I	G
1260	1265	3.0			0	0.00	I	G
1265	1270	3.0			0	0.00	I	G
1270	1275	1.0			0	0.00	I	G
1275	1280	0.2			0	0.00	I	G

CASSIAR ASBESTOS CORPORATION LIMITED  
DIAMOND DRILL CORE GEOLOGY LOG

卷之五

## CASSIAR / TSFOS CORPORATION LIMITED

## DIAMOND DRILL CORE LOGOLOGY LOG

PROPERTY CASSIAR    HOLE U31-170    DEPTH   
 AZIMUTH     INCLINATION     SECTION 22,400 N.  
 LATITUDE     DEPARTURE     ELEVATION   
 STARTED Nov. 17/81    FINISHED Nov. 28/91    LOGGED By R. SAVAGE  
date NOV

TOKO 10

TICKET

CASHIER

STOCKS

INVENTORY

GENERAL

RECEIVED

SHIPPING

TRANSPORT

GENERAL

C. & J. BARR / CTSOS CORPORATION LIMITED

Digitized by srujanika@gmail.com

**DIAMOND DRILL CORE GEOLOGY LOG**

1	100	40	5
2H	68	33	5
AV-1			
3	100	40	5
V	68	33	5
4	100	40	5
5	100	40	5
SCAII			

## BOREHOLE No. 81 / 170

From	To	Rec'd	1's	2's	3's	4's	5's	6's	8's	10's	12's	14's	16's	18+'s	Core/S	CCRG	
245	250	3.0	2				5								45	0.86	I G
250	255	5.0	4	3											45	1.03	I Y
255	260	5.0	7	3	3										45	1.84	I Y
260	265	5.0	5	2											45	1.03	I Y
265	270	5.0	2	1	3										45	0.89	I G
270	275	3.0	3			5									45	1.10	I Y
275	280	4.5	2	1	2										45	0.65	I G
280	285	4.5	1				4								45	0.82	I G
285	290	5.0	2	3											45	0.66	I G
290	295	5.0	2												45	0.30	I G
295	300	5.0	2												45	0.30	I G
300	305	4.0	3	1	3										45	0.74	I G
305	310	5.0	3	2											45	0.66	I G
310	315	5.0	2	2	3										45	1.03	I Y
315	320	4.5	1												45	0.17	I G
320	325	5.0	5												45	0.66	I G
325	330	4.5	1												45	0.17	I G
330	335	5.0	1												45	0.14	I G
335	340	5.0	2	2											45	0.51	I G
340	345	4.5	13	12	16	4	3								45	6.96	I P
345	350	5.0	10	6	5	2		3	8						45	4.86	I O
350	355	5.0	13	14	12	24	18								45	13.70	I R
355	360	4.5	15	8	12	9	20	10	13						45	12.69	I R
360	365	4.5	12	16	16	11	9	7	9						45	11.46	I R
365	370	5.0	7	7	8	8	13	6		10					45	8.47	I R
370	375	5.0	16	12	26	12	25	6	8	5					45	16.14	I R
375	380	5.0	14	15	11	10	13		16						45	11.48	I R
380	385	5.0	7	6	5	10	3	15	12	20					45	11.27	I R
385	390	5.0	6	17	2	4	5	3	12						45	7.14	I R
390	395	5.0	7	7	17	14	13	15	12	20					45	16.07	I R
395	400	5.0	9	9	8	18	10	3	12	5	12				45	12.60	I R
400	405	4.0	11	11	15	20	16	11							45	12.43	I R
405	410	5.0	11	13	9	14	8	12							45	10.45	I R
410	415	5.0	3	9	9	2	3	6							45	5.30	I P
415	420	4.5	12	4	9										45	4.67	I O
420	425	5.0	7	4	5	10	10	9							45	6.48	I P
425	430	4.5	4	10	17	2	11	7	4						45	8.19	I R
430	435	4.5	8	9	12	2	14	3		6					45	7.85	I R
435	440	5.0	6	7	6	2	5	6		10					45	6.11	I P
440	445	5.0	4	2	3	6	5	12	8	15					45	3.10	I R

445	450	5.0	7	4	5	2	5	6	4	15	6	45	4.71	I	O
450	455	5.0	5	1	17	4	3	3	8			45	10.54	I	IR
455	460	5.0	5	3	2	2	10					45	1.53	I	IY
460	465	5.0	9	6	6	10						45	5.97	I	IP
465	470	5.0	1	2	3	2	3					45	4.71	I	O
470	475	4.5	2	3	3	4	5	3	16	10		45	1.97	I	IY
475	480	5.0	7	5	8	6	12	8	4	5		45	6.11	I	IP
480	485	5.0	5	5	9	6	3	6	16	5		45	6.49	I	IP
485	490	5.0	6	6	5	10	10	8	5			45	7.58	I	IR
490	495	4.0	4	8	10	10	10					45	10.22	I	IR
495	500	5.0	2	4	8	6						45	3.39	I	O
500	505	5.0	4	9	12	10						45	8.32	I	IR
505	510	5.0	3	6	11	6	3	3		15		45	3.10	I	R
510	515	5.0	10	8	12	12	5					45	10.17	I	R
515	520	5.0	8	5	12	8	3					45	7.00	I	R
520	525	5.0	8	13	6	2	3	3				45	5.08	I	P
525	530	4.5	4	3	9	7	6	10				45	5.56	I	IP
530	535	5.0	11	10	5	8	3	3				45	7.74	I	IR
535	540	5.0	13	6	11	10						45	5.74	I	IP
540	545	5.0	9	6	11	6	5					45	5.37	I	IP
545	550	5.0	10	11	8	6	8					45	7.51	I	IR
550	555	5.0	5	3	3	6	5					45	4.13	I	O
555	560	5.0	8	5	2							45	2.94	I	IY
560	565	5.0	7	8	11	12	8	3				45	8.40	I	IR
565	570	4.5	4	2	2	7	6					45	4.50	I	O
570	575	4.5	3	10	12	7	11					45	6.87	I	IP
575	580	4.5	16	3	12	4						45	5.15	I	P
580	585	5.0	9	17	3	10	3					45	7.00	I	IR
585	590	5.0	11	5	3	6	3					45	4.86	I	O
590	595	5.0	15	10	11	6	5					45	6.84	I	IP
595	600	5.0	11	6	2	8	5					45	4.64	I	O
600	605	5.0	3	7	3	10	5					45	4.86	I	O
605	610	5.0	10	2		6	3					45	2.94	I	IY
610	615	5.0	14	9	6	2	5					45	3.16	I	P
615	620	5.0	8	9	5	4	8	3				45	4.13	I	O
620	625	5.0	8	9	12	8	6					45	6.41	I	P
625	630	5.0	15	5	8	6						45	6.04	I	P
630	635	5.0	11	17	8	2						45	6.63	I	P
635	640	5.0	14	11	8	2	5	9	8			45	9.73	I	IR
640	645	5.0	5	4	9	6	5	12	8			45	7.14	I	R

645	650	5.0	7	9	8	2										45	3.68	I	IO
650	555	5.0	7	5	2	6										45	2.87	I	Y
655	560	5.0	12	5	5	2										45	4.43	I	IO
660	665	5.0	3	3	8	6										45	11.34	I	R
665	570	5.0	10	9	3	2										45	6.26	I	P
670	575	5.0	7	2	2	2										45	1.84	I	Y
675	580	5.0	5	5	3											45	1.99	I	Y
680	585	5.0	11	9	6	4										45	7.88	I	R
685	590	5.0	10	5	6	10										45	10.75	I	R
690	595	5.0	4	5	17	4										45	4.27	I	O
695	700	4.5	3	2	3											45	2.21	I	Y
700	705	5.0	6	1	3	4										45	2.87	I	Y
705	710	5.0	6	7	2	6										45	3.39	I	O
710	715	5.0	3	3	2	4										45	4.06	I	O
715	720	5.0	10	7	17	10										45	5.41	I	P
720	725	5.0	9	1	5	8										45	3.32	I	O
725	730	5.0	7	5	6	8										45	4.34	I	O
730	735	5.0	6	9	3	2										45	3.32	I	O
735	740	4.0	1	1	3	4										45	1.10	I	Y
740	745	5.0	2	4	3	4										45	1.91	I	Y
745	750	5.0	3	3	8	2										45	3.01	I	O
750	755	5.0	9	5	6	6										45	6.41	I	Y
755	760	5.0	3	2		4										45	1.26	I	Y
760	765	5.0	2	3	2	6										45	1.70	I	O
765	770	5.0	4	1	5	5										45	4.27	I	O
770	775	5.0	7	7	6	4										45	4.20	I	O
775	780	5.0	5	4	2	4										45	4.27	I	O
780	785	5.0	10	11	6	4										45	6.26	I	P
785	790	5.0	4	1	8	6										45	3.90	I	O
790	795	5.0	12	3	6											45	5.23	I	P
795	800	4.5	3	6	7	2										45	5.40	I	P
800	805	5.0	4	4	5	4										45	4.79	I	O
805	810	4.5	7	4												45	1.64	I	Y
810	815	5.0	3	3	6	2										45	3.75	I	O
815	820	5.0	2	5	2	4										45	5.37	I	P
820	825	5.0	10	12	8	10										45	9.66	I	R
825	830	5.0	3		2	6										45	3.47	I	R
830	835	5.0	2	7	3											45	3.31	I	O
835	840	5.0	5	4	6	3										45	3.83	I	O
840	845	5.0	10	4	8	2										45	6.04	I	P



1045	1050	5.0	1				45	0.14	1	IG
1050	1055	5.0	1				45	0.14	1	IG
1055	1060	5.0	4				45	0.59	1	IG
1060	1065	5.0	3				45	0.17	1	IG
1065	1070	4.0	1				-	0.17	1	IG
1070	1075	4.0	1				-	0.17	1	IG
1075	1080	5.0	1				-	0.17	1	IG
1080	1085	5.0	2				0	0.00	1	IG
1085	1090	5.0	1				45	0.21	1	IG
1090	1095	4.0	3				0	0.00	1	IG
1095	1100	5.0	1				45	0.28	1	IG
1100	1105	5.0	1				0	0.00	1	IG
1105	1110	5.0	2				0	0.00	1	IG
1110	1115	4.5	1				45	0.23	1	IG
1115	1120	5.0	1				0	0.00	1	IG
1120	1125	5.0	1				0	0.00	1	IG
1125	1130	5.0	1				0	0.00	1	IG
1130	1135	4.5	1				0	0.00	1	IG
1135	1140	5.0	1				0	0.00	1	IG
1140	1145	4.0	1				0	0.00	1	IG
1145	1150	4.5	1				0	0.00	1	IG
1150	1155	5.0	1				0	0.00	1	IG
1155	1160	4.5	1				0	0.00	1	IG
1160	1165	5.0	1				0	0.00	1	IG
1165	1170	4.0	1				0	0.00	1	IG
1170	1175	4.5	1				45	0.03	1	IG
1175	1180	4.5	1				45	0.08	1	IG
1180	1185	4.5	1				0	0.00	1	IG
1185	1190	5.0	1	3			45	0.59	1	IG
1190	1195	5.0	3				45	0.37	1	IG
1195	1200	5.0	1				45	0.07	1	IG
1200	1205	4.5	1				0	0.00	1	IG
1205	1210	4.0	1				0	0.00	1	IG
1210	1215	5.0	1	5	2		45	1.03	1	IX
1215	1220	5.0	1				23	0.11	1	IG
1220	1225	5.0	1				0	0.00	1	IG
1225	1230	5.0	1				23	0.11	1	IG
1230	1235	4.5	2				45	0.25	1	IG
1235	1240	4.5	3				45	0.49	1	IG
1240	1245	5.0	1				45	0.14	1	IG

1245	1250	5.0								0	0.00	I G
1250	1255	5.0								0	0.00	I G
1255	1260	5.0								0	0.00	I G
1260	1265	5.0								0	0.00	I G
1265	1270	5.0								45	1.23	I Y
1270	1275	4.5	3	1	2	4				45	4.13	I O
1275	1280	5.0	10	5	3	2	3			45	1.77	I Y
1280	1285	5.0	3	2	3	2	2	3		45	1.03	I Y
1285	1290	5.0	3	3	2	2				45	0.96	I G
1290	1295	5.0	4	1	2					45	0.44	I G
1295	1300	5.0	2	1						45	0.37	I G
1300	1305	5.0	1	2						45	0.66	I G
1305	1310	5.0	5							45	0.37	I G
1310	1315	5.0	1	2						0	0.00	I G
1315	1320	5.0								45	0.44	I G
1320	1325	5.0	1	2						45	0.14	I G
1325	1330	5.0	1							45	0.14	I G
1330	1335	5.0	1							0	0.00	I G
1335	1340	5.0								0	0.00	I G
1340	1345	5.0								45	0.21	I G
1345	1350	5.0	2							45	0.16	I G
1350	1355	5.0	1							0	0.00	I G
1355	1360	5.0								0	0.00	I G
1360	1365	5.0								45	0.30	I G
1365	1370	5.0								0	0.00	I G
1370	1375	5.0	2							0	0.00	I G
1375	1380	5.0								0	0.00	I G
1380	1385	5.0								45	0.14	I G
1385	1390	5.0	1		1	5				45	0.96	I G
1390	1395	5.0	1	1						0	0.00	I G
1395	1400	4.5								0	0.00	I G
1400	1405	4.0								45	0.17	I G
1405	1410	4.5	1							0	0.00	I G
1410	1415	4.5								45	0.59	I G
1415	1420	5.0	2	2		2	2			45	0.96	I G
1420	1425	5.0	3		2					0	0.00	I G
1425	1430	5.0								0	0.00	I G
1430	1435	5.0								23	0.05	I G
1435	1440	5.0	1							45	0.14	I G
1440	1445	5.0	1									

1445	1450	5.0	0	0.00		G
1450	1455	5.0	0	0.00		G
1455	1460	4.5	0	0.00		G
1460	1465	4.5	0	0.00		G
1465	1470	3.5	0	0.00		G
1470	1475	5.0	0	0.00		G
1475	1480	5.0	0	0.00		G
1480	1485	5.0	0	0.00		G
1485	1490	5.0	0	0.00		G
1490	1495	0.5	0	0.00		G



**CASSIAR RESOURCES**  
(Division of Brinco Mining Limited)

Cassiar Mine, Cassiar, B.C. V0C 1E0

Telephone: (604) 778-7435  
Telex: 036-88533

**STATEMENT OF QUALIFICATIONS**

I, Michael R. Pennock, with business and residential addresses in Cassiar, British Columbia, do hereby certify that:

- a) I am a graduate of the University of British Columbia in 1971 with a Bachelor of Science degree in Geology.
- b) I am a member of the Canadian Institute of Mining and Metallurgy.
- c) From 1971 to 1974 I held positions with Texas Gulf Inc., as an Exploration Geologist.
- d) From 1974 to 1978 I held positions both in production and engineering with Wesfrob Mines Limited.
- e) From 1978 to 1980 I held positions in engineering with Union Miniere Explorations and Mining Corporation.
- f) From June 1980 until the present I have been employed as Mine Geologist and Senior Geologist at the Cassiar Mine of Cassiar Resources (Division of Brinco Mining Limited).

Dated: 30 August, 1982

In: Cassiar, B.C.

Michael R. Pennock  
Senior Geologist

MP/as



**CASSIAR RESOURCES**  
(Division of Brinco Mining Limited)

Cassiar Mine, Cassiar, B.C. V0C 1E0

Telephone: (604) 778-7435  
Telex: 036-88533

**STATEMENT OF QUALIFICATIONS**

I, William R. Pratt, with business and residential addresses in Cassiar, British Columbia, do hereby certify that:

- a) I completed two years of studies at the Southern Alberta Institute of Technology in 1969, in Petroleum Geology.
- b) From 1969 to 1972, I held the position of Geological Technician with Cassiar Asbestos Corp. Ltd. Clinton Creek Mine.
- c) From 1973 to 1974, I held the position of Geological Technician with Cassiar Asbestos Corp. Ltd., Pyke Property, New Zealand.
- d) From 1974 to 1975, I held the position of Mine Technologist with Great Canadian Oil Sands Ltd., Fort McMurray.
- e) From 1975 until present time, I have been employed as Geological Technician and Mine Geologist at the Cassiar Mine of Cassiar Resources, Division of Brinco Mining Limited.

Dated; 24 August, 1982

In; Cassiar, B.C.

*William R. Pratt*  
William R. Pratt  
Mine Geologist

WP/as

STATEMENT OF COSTS

A. SALARIES AND WAGES

M. Pennock - Supervision	98 days @ \$90/day	= \$ 8,820.00
W. Pratt - Supervision	100 days @ \$79/day	= 7,900.00
	TOTAL	= \$16,720.00

B. FOOD AND ACCOMMODATIONS

M. Pennock	98 days @ \$35/day	= \$ 3,430.00
W. Pratt	100 days @ \$35/day	= 3,500.00
	TOTAL	= \$ 6,930.00

C. CONTRACTS & SERVICES

Underground Diamond Drilling by:

Cameron McCutcheon Drilling Ltd.

1. Hole Costs

June to December	HQ 7100 @ 36.68	= \$260,392.47
	NQ 2603 @ 33.71	= 87,747.34
	BQ 429 @ 34.93	= 14,983.15
	TOTAL Hole Costs	= \$363,122.96

2. Site Costs

June to December Labour	4194.0 hrs. @ 24.29/hr	\$101,888.59
Equipment Standby	260.5 hrs. @ 14.30/hr	3,725.15
Equipment Operating	911 hrs. @ 20.90/hr	19,039.90
	TOTAL Site Costs	= \$124,654.08

3. Supply of Materials

Bits - rodshoes, drilling mud, etc.	
June to December	= \$ 85,848.81

4. Support Service

June to September 7, incl.	
Camp operation & (Room & Board)	= \$ 64,628.30
Fuel Allowance	

5. Power Plant Rental, Electrical Fan; Mine Support Equip. Rental, Compressor Rental = \$ 85,848.81

6. Mobilization and Demobilization  
Lump Sum = \$ 24,427.25

TOTAL CONTRACTS AND SERVICES TO  
CAMERON McCUTCHEON DRILLING LTD. = \$976,891.27

D. CORE LOGGING AND SAMPLE PREPARATION

Two core loggers - June to December = \$ 26,992.39

E. ROOM AND BOARD FOR CAMERON McCUTCHEON DRILLING PEOPLE

Provided by United Hearne Resources  
September 7 to December 20 = \$ 29,862.00

F. DRILLING MUD & FUEL SUPPLIES

Supplied for drilling, shop costs, (Owner cost) = \$132,634.84

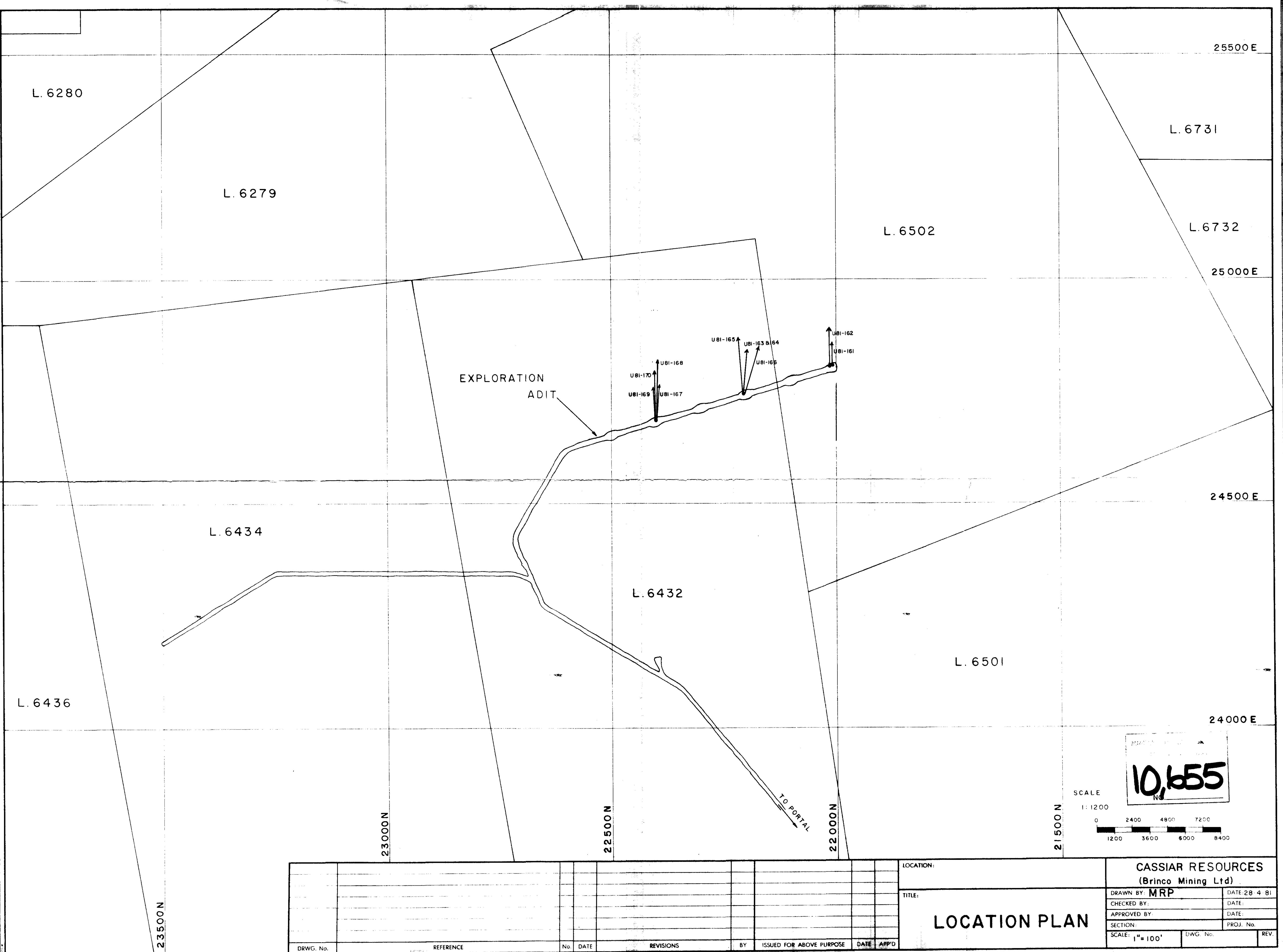
SUMMARY OF EXPENDITURES

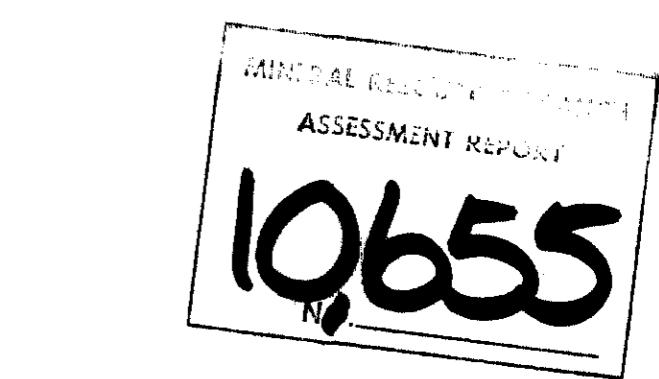
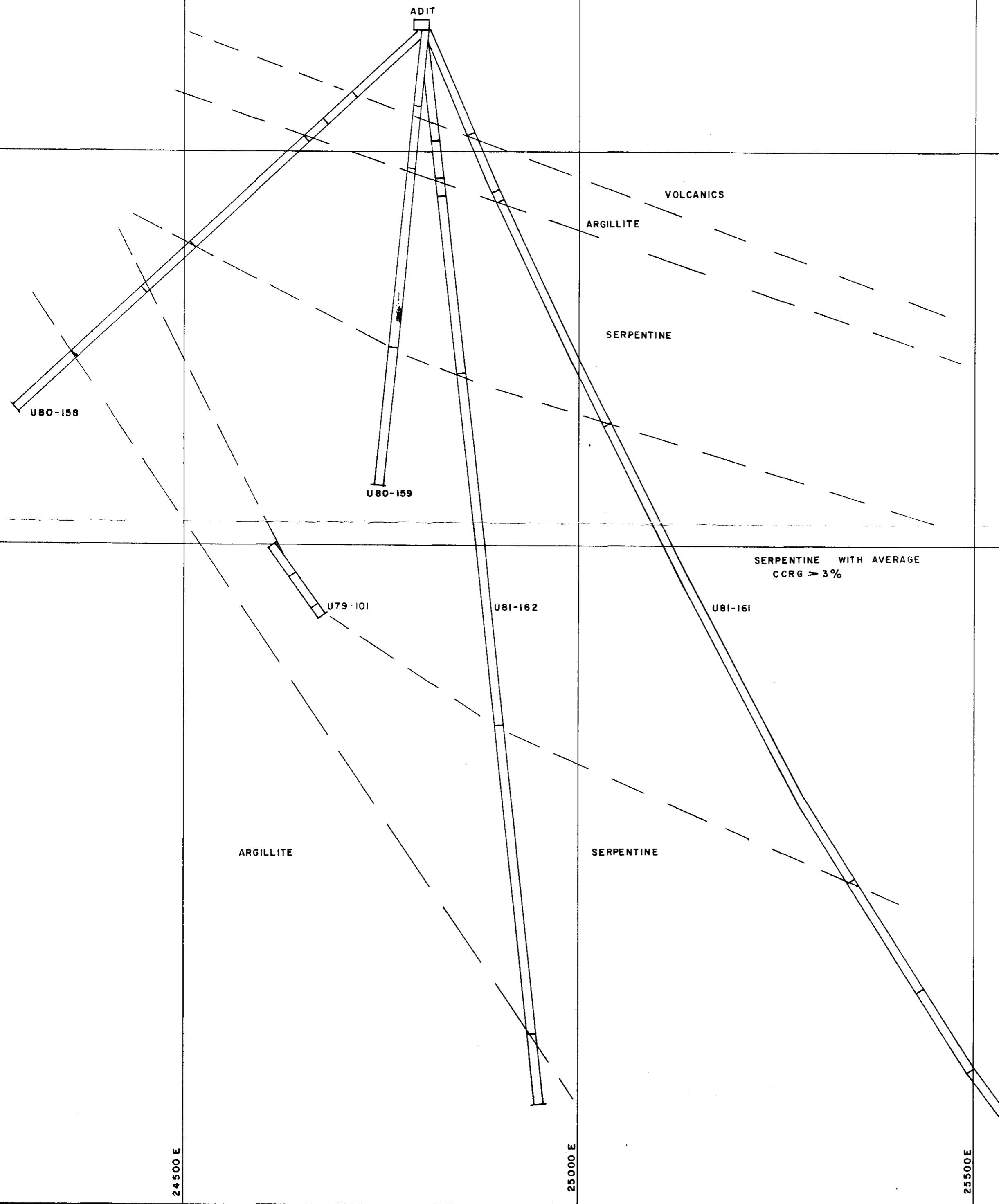
A. Salaries and Wages	\$ 16,720.00
B. Food and Accommodations	6,930.00
C. Contracts and Services (Cameron McCutcheon Drilling)	976,891.27
D. Core Logging and Sample Preparation	26,992.39
E. Room and Board (Cameron McCutcheon Drilling board provided by United Hearne Resources)	29,862.00
F. Drilling Muds, Fuel Supplies, Shop Costs, etc.	<u>132,634.84</u>
TOTAL COSTS	\$1,190,030.50

Taxes are paid on the crown granted mineral claims on the 2nd of July accounting.

This work is hereby files as assessment fot the McDane 1 - 3 mineral claims consisting of 47 units.

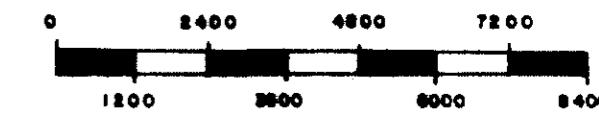
2 years @ \$100.00/unit/year x 47 units	\$ 9,400.00
8 years @ \$200.00/unit/year x 47 units	75,200.00
Total applied for assessment	84,600.00
Total applied for P.A.C.	1,105,430.50
BALANCE	\$ 0





SCALE

1: 1200



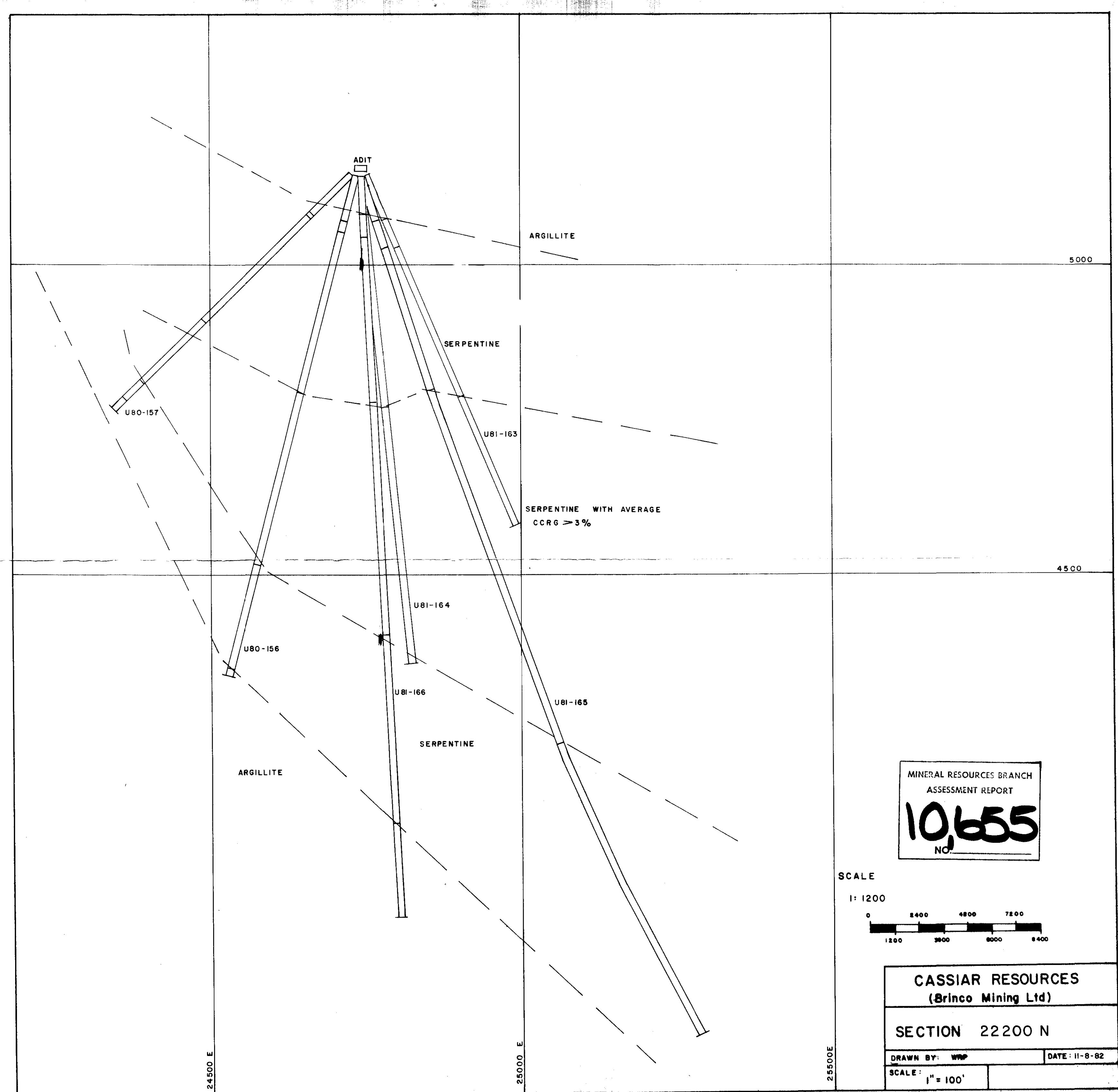
CASSIAR RESOURCES  
(Brinco Mining Ltd)

SECTION 22000 N

DRAWN BY: WRP

DATE: 11-8-82

SCALE: 1" = 100'



ADIT

U80-154

ADIT

ARGILLITE

5000

SERPENTINE

SERPENTINE WITH AVERAGE  
CCRG > 3%

U80-155

U81-167

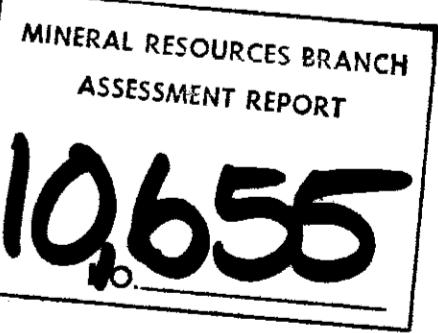
4500

ARGILLITE

SERPENTINE

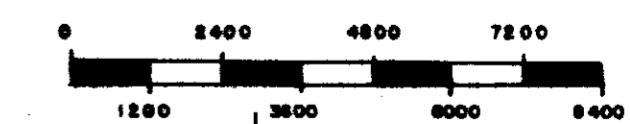
U81-168

U81-170



SCALE

1: 1200



CASSIAR RESOURCES  
(Brinco Mining Ltd)

SECTION 22400 N

DRAWN BY WRP

DATE: 11-8-82

SCALE: 1" = 100'