

MAP NO.

ASSESSMENT REPORT
PROSPECTUS
CONFIDENTIAL
OPEN FILE

DOCUMENT NO.:
MINING DISTRICT:
TYPE OF WORK:

091991
Whitehorse
Diamond Drilling

105 D 2

REPORT FILED UNDER: Island Mining and Exploration Ltd.

DATE PERFORMED:	July 1987	DATE FILED:	December 30, 1987
LOCATION: LAT.:	60°10'N	AREA:	Midnight Gulch
LONG.:	135°10'W	VALUE \$:	17,600.00

CLAIM NAME & NO.:

- TON 1-16 YA78181-196
- JL 1-80 YA59033-056
- GRAY 1-4 YA78743-745
- AFI 225-296 YA85877-948
- ISLAND 1FR - 2FR YA93380-381

WORK DONE BY: A. Montgomery

WORK DONE FOR: Island Mining and Exploration Co. Ltd.

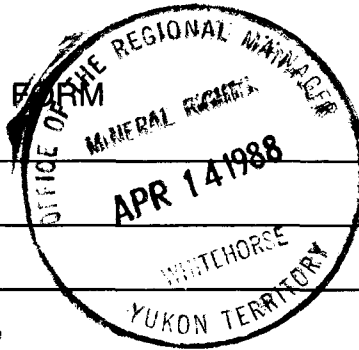
DATE TO GOOD STANDING	REMARKS:
	#13 COLLEGE GREEN (GRAY)
	#32 MT. STEVENS
	#19 CHARLESTON
	See EIP report 092144



092138

M.R. file no.	340-132
R.M.M.R. file no.	
Date forwarded	14 April 1988

TRANSMITTAL FORM



From Mining Recorder at: Whitehorse

To Regional Manager, Mineral Rights at Whitehorse, Y.T.

For action are:

<input type="checkbox"/> NEW APPLICATION FOR PLACER LEASE TO PROSPECT	Name	
<input type="checkbox"/> RENEWAL APPLICATION PLACER LEASE TO PROSPECT	Name	Lease no.
<input type="checkbox"/> AFFIDAVIT OF EXPENDITURE ON PLACER LEASE	Name	Lease no.
<input type="checkbox"/> SECURITY DEPOSIT		
<input type="checkbox"/> FINANCIAL ABILITY		
<input type="checkbox"/> ASSIGNMENT OF PLACER LEASE NO.	From	To
<input type="checkbox"/> GROUPING APPLICATION UNDER SEC. 52(2) PLACER MINING ACT.	Owner	
<input checked="" type="checkbox"/> DIAMOND DRILL LOGS	Claims	Claim sheet no.
	<u>Ho 1-20, Island 1-13, Tex 1-22, Kid 102eb</u>	<u>105-D-3</u>
<input type="checkbox"/> QUARTZ ASSESSMENT REPORT	Claims	Claim sheet no.
	Type of report	Submitted by
		<u>Island Mining</u>
	Cls. work performed on	\$ req. for ren. application
	<u>Ho 2 Ho 18 YA82048 - YA83994</u>	<u>48,200</u>

For your info.

Signature

Date returned

REPLY ACTION

091991
Signature

DIAMOND DRILL REPORT

Island Mining & Explorations Co. Ltd.

Midnight Gulch Project

CLAIMGRANT NUMBERS

TON 1-16

YA78181 - 196

JL 1-80

YA59033 - 056, YA85597 - 652

GRAY 1-4

YA78743 - 745

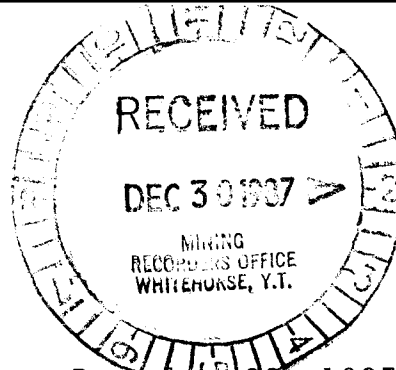
AFI 225-296

YA85877 - 948

ISLAND 1fr-2fr

YA93380 - 381

09 1991



December 23, 1987

MIKE FISH
MINING RECORDER
WHITEHORSE MINING DISTRICT
ROOM 201, FEDERAL BUILDING
WHITEHORSE, YUKON
Y1A 2B5



Dear Mike:

Enclosed is a second copy of drill logs etc. as part of the application to renew the TON, AFI, JL, and ISLAND fr claims (Whitehorse Mining District).

My apologies for the delay.

Yours Truly,

A handwritten signature in cursive script that reads "Allan Montgomery".

Allan Montgomery
Island Mining & Explorations Co. Ltd.

09 1991

AM/am

Core is stored in the Whitehorse Core Library.

09 1991

ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 14 1987
DATE REPORT MAILED: *July 22/87*

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: Core AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT-MIDNIGHT GULCH File # 87-2426

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
F8366	24	13	59	.1	3	3
F8367	26	12	92	.1	2	5
F8368	5	6	64	.1	5	3
F8369	23	10	83	.1	4	1
F8370	4	5	59	.1	2	3
F8371	11	6	65	.1	4	1
F8372	11	9	63	.1	3	1
F8373	68	29	81	.1	2	1
F8374	18	13	70	.1	2	2
F8375	30	11	79	.2	6	3
F8376	11	22	23	.3	7	3
F8377	3	23	7	.3	7	4
F8378	90	18	119	.2	2	1
F8379	4	39	8	.2	4	5
F8380	11	13	22	.4	5	2
F8381	18	21	32	.2	33	8
F8382	22	68	86	.1	56	4
STD C/AU-R	57	41	123	7.4	42	495

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
F8383	46	49	93	.4	31	14
F8384	40	29	63	.3	39	7
F8385	32	32	21	.8	46	<u>58</u>
F8386	25	31	24	.4	32	5
F8387	34	48	20	.6	23	10
F8388	20	85	21	.9	43	19
F8389	28	37	38	.5	26	12
F8390	37	32	42	.7	62	13
F8391	25	<u>238</u>	49	<u>1.0</u>	16	17
F8392	24	34	25	.3	13	11
F8393	25	25	86	.4	10	14
F8394	6	12	105	.4	9	3
F8395	5	7	94	.2	5	1
F8396	11	11	62	.4	3	1
F8397	15	10	90	.2	5	3
F8398	57	10	53	.4	9	2
F8399	28	6	74	.2	4	1
F8400	45	7	65	.6	7	1
F8401	51	8	62	.4	5	1
F8402	9	10	61	.2	3	3
F8403	24	10	90	.3	6	1
F8404	21	17	68	.3	5	2
F8405	46	3	77	.4	8	1
F8406	37	13	71	.4	8	1
F8407	47	18	76	.4	7	1
87 3 5 1 045	52	2	27	.1	6	2
87 3 5 2 046	22	327	75	2.7	37	<u>6840</u>
STD C/AU-R	62	39	132	7.6	40	490

091991

ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JUL 23 1987
DATE REPORT MAILED: *July 31/87...*

ASSAY CERTIFICATE

- SAMPLE TYPE: Core

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT-MIDNIGHT GULCH File # 87-2653A

SAMPLE#	AG OZ/T	AU OZ/T
8411	.01	.001
8412	.01	.001
8413	.01	.001
8414	.01	.001
8415	.05	.005
8416	.05	.001
8417	.02	.001
8418	.02	.001
8419	.02	.001
8420	.01	.001
8421	.01	.006
8422	.01	.001
8423	.01	.002
8424	.02	.002
8425	.01	.001
8426	.01	.001
8427	.02	.001
8428	.02	.001
8429	.03	.001
8430	.01	.001
8431	.01	.001
8432	.01	.001
8433	.01	.001
8434	.01	.001
8435	.01	.009
8436	.08	.013
8437	.01	.007
8438	.13	.003
8439	.03	.002
8440	.05	.009
8441	.03	.007
8442	.01	.002

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ACME ANALYTICAL LABORATORIES
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: JUL 23 1987

DATE REPORT MAILED: *July 31/87*

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-CORE P2-SOIL/ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye*. DEAN TOYE, CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT-MIDNIGHT GULCH File # 87-2653 Page 1

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
8408	35	13	83	.4	6	2
8409	13	14	78	.1	26	4
8410	18	16	192	.1	2	2

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ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS, VANCOUVER B.C.
 PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED JUL 29 1987
 DATE REPORTS MAILED Aug 10/87

ASSAY CERTIFICATE

SAMPLE TYPE : CORE/ROCK

ASSAYER D. Toye DEAN TOYE , CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT MIDNIGHT GULCH FILE# 87-2814A PAGE# 1

SAMPLE	Ag oz/t	Au oz/t	
P.O.D. 87-WB4 {	F-8443	.01	.010
	F-8444	.04	.011
	F-8445	.02	.001
	F-8446	.03	.001
87-WB2 {	F-8451	.02	.002
	F-8452	.01	.001
	F-8453	.03	.001
	F-8454	.04	.001
	F-8455	.05	.004
	F-8456	.01	.001
	F-8457	.03	.004
	F-8458	.04	.011
	F-8459	.04	.004
	F-8460	.01	.001
	F-8461	.03	.001
	F-8462	.03	.001
	F-8463	.01	.001
	F-8464	.02	.001
	F-8465	.02	.001
	F-8466	.04	.001
	F-8467	.01	.001
F-8468	.01	.007	
F-8469	.11	.335	
F-8470	.03	.006	
F-8471	.02	.001	
F-8472	.02	.001	
F-8473	.01	.001	
F-8474	.01	.003	
87-331-009	.48	.069	

* HAVE SPEC. P.O.D. ←

(ALLOWS ADIT)

407003

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED JULY 30 1987
DATE REPORTS MAILED *Aug 12/87*

ASSAY CERTIFICATE

SAMPLE TYPE : CORE - CRUSHED AND PULVERIZED TO -100 MESH.

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT MIDNIGHT GULCH FILE# 87-2868A PAGE# 1

87-2868A

87-2868A

SAMPLE	Ag oz/t	Au oz/t
8475	.05	.001
8476	.01	.001
8477	.03	.001
8478	.01	.001
8479	.01	.001
8480	.01	.001
8481	.03	.001
8482	.01	.001
8483	.01	.001
8484	.02	.001

091991

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. J. J. J.* DEAN TOYE, CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT-MIDNIGHT GULCH File # 87-3054 Page 1

SAMPLE#	CU PPM	FB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
F 8559	33	40	76	.4	2	1
F 8560	11	15	99	.2	8	2
F 8561	372	42	276	.6	8	3
F 8562	16	31	90	.3	8	1
F 8563	13	10	64	.1	4	1
F 8564	7	26	7	.6	4	45
F 8565	6	5	52	.2	5	1
F 8566	8	53	94	.1	2	2
F 8567	5	23	437	.5	6	1
F 8568	38	447	276	<u>3.0</u>	25	<u>168</u>
F 8569	27	397	116	<u>1.7</u>	<u>25</u>	<u>159</u>
F 8570	15	868	70	<u>3.6</u>	36	<u>220</u>
F 8571	40	246	290	<u>1.3</u>	52	<u>147</u>
F 8572	46	666	196	<u>2.3</u>	63	<u>430</u>
F 8573	28	1597	193	<u>6.1</u>	44	<u>340</u>
F 8574	6	68	1128	.5	7	1
F 8575	3	3	18	.2	8	3
F 8576	2	4	58	.1	4	1
F 8577	3	4	11	.2	6	5
F 8607	3	76	83	.6	5	24
F 8608	9	88	96	.8	6	3
F 8609	16	138	211	.6	8	25
F 8610	15	175	149	.6	5	1
F 8611	4	114	88	.4	16	<u>270</u>
F 8612	8	31	77	.3	3	40
F 8613	16	46	93	.3	7	4
F 8614	3	1293	207	<u>2.1</u>	11	<u>380</u>
F 8615	4	1207	176	<u>2.4</u>	15	<u>700</u>
F 8616	6	41	125	.3	6	8
F 8617	6	116	231	.4	7	10
F 8618	19	417	508	1.3	3	5
F 8619	16	173	140	.9	8	1
F 8620	20	14	46	.2	7	2
F 8621	6	172	189	.5	11	37
F 8622	6	345	177	1.0	9	<u>250</u>
F 8623	7	42	53	.3	12	4
STD C/AU-R	59	39	132	7.4	39	470

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
F 3624	7	24	37	.7	2	2
F 3625	7	28	41	.2	2	1

ACME ANALYTICAL LABORATORIES
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 07 1987

DATE REPORT MAILED: *Aug 18/87*.....

GEOCHEMICAL ICP ANALYSIS

.300 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-CORE P2 TO P3-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT-MIDNIGHT GULCH File # 87-3112 Page 1

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
F-8485	27	6	81	.4	5	1
F-8486	13	6	21	.3	2	1
F-8487	9	9	36	.1	4	1
F-8488	7	9	26	.2	2	1
F-8489	13	9	23	.1	2	2
F-8490	159	6	109	.5	6	1
F-8491	156	10	130	.1	2	1
F-8492	87	5	124	.1	8	2
F-8493	303	7	136	.1	8	3
F-8494	29	10	67	.4	8	11
F-8495	26	10	64	<u>1.8</u>	22	34
F-8496	7	6	18	.6	6	13
F-8497	14	5	26	.5	3	6
F-8498	9	6	21	.3	5	4
F-8499	13	11	32	.5	7	17
F-8500	4	11	30	.3	2	12
F-8501	5	16	30	.3	5	20
F-8502	4	7	31	.2	7	6
F-8503	4	10	24	.3	2	2
F-8504	4	10	25	.4	4	2
F-8505	6	11	20	.3	8	4
F-8506	5	177	39	.7	11	13
F-8507	4	2	24	.1	4	1
F-8508	5	15	34	.2	6	4
F-8509	4	20	43	.3	11	2
F-8510	10	41	90	.5	5	4
F-8511	61	7	68	.2	2	1
F-8512	23	9	70	.1	6	2
F-8513	7	10	59	.1	9	3
F-8514	33	6	37	.2	7	3
F-8515	6	9	87	.3	8	2
F-8516	6	14	102	.1	15	14
F-8517	12	6	36	.3	3	2
F-8518	22	25	131	.2	11	2
STD C/AU-R	62	41	133	7.8	43	510

87-I1

87-I2

ACME ANALYTICAL LABORATORIES
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 10 1987
 DATE REPORT MAILED: *Aug. 18/87.....*

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT-MIDNIGHT GULCH File # 87-3143 Page 1

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB	
<i>87-156</i>	F-8447	25	18	71	.4	4	1
	F-8448	13	20	75	.1	5	1
	STD C/AU-R	57	42	130	6.9	38	490
	F-8449	33	17	62	.5	7	2
	F-8450	108	17	92	.4	2	2
<i>87-12</i>	F-8519	168	11	110	.5	4	1
	F-8520	58	58	72	.5	7	2
	F-8521	101	23	111	.8	14	1
	F-8522	90	11	128	.7	5	1
	F-8523	35	12	83	.4	9	1
	F-8524	254	11	107	<u>1.3</u>	8	4
	F-8525	326	14	94	<u>1.0</u>	6	1
	F-8526	20	7	78	.3	8	1
	F-8527	88	9	80	.7	2	4
	F-8528	38	17	73	.6	9	1
	F-8529	14	9	85	.4	2	1
	F-8530	81	13	101	.5	6	2
	F-8531	5	8	71	.2	4	1
	F-8532	76	10	43	.6	2	1
	F-8533	40	14	39	.4	2	1
<i>87-C1</i>	F-8534	33	11	48	.5	4	2
	F-8535	10	9	85	.3	6	1
	F-8536	22	8	84	.4	2	2
	F-8537	42	13	72	.4	8	2
	F-8538	9	11	71	.3	2	3
	F-8539	9	9	69	.3	2	1
	F-8540	5	18	95	.4	6	2
	F-8541	18	14	81	.3	6	3
	F-8542	24	13	86	.3	2	1
	F-8543	37	16	87	.2	5	2
	F-8544	5	9	77	.4	4	1
	F-8545	10	11	75	.3	5	2
F-8546	24	10	76	.5	2	1	
F-8547	10	6	62	.4	3	1	
F-8548	12	6	65	.3	2	2	
F-8549	19	17	57	.6	2	2	
F-8550	10	11	39	.6	4	1	

8F-CI

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
F-8551	23	12	23	.4	3	1
F-8552	10	11	62	.1	4	4
F-8553	10	11	35	.5	5	1
F-8554	14	11	53	.2	7	1
F-8555	3	11	26	.5	5	2
F-8556	6	15	114	.2	7	1
F-8557	9	13	110	.4	7	18
F-8558	17	14	77	.3	6	1
F-8601	8	17	62	.3	9	1
F-8602	10	67	86	.7	10	<u>720</u>
F-8603	6	60	93	.4	2	14
F-8604	3	680	141	<u>1.7</u>	7	49
F-8605	17	161	217	<u>1.1</u>	6	<u>240</u>
F-8606	5	169	141	<u>1.1</u>	7	<u>112</u>
STD C/AU-R	58	41	131	7.1	40	500

STANDARD

ANALYTICAL RESULTS AND METHODS

DDH 87-A1

AURUM GEOLOGICAL CONSULTANTS INC. ADIT 2011E

Property: ISLAND MINING
JL CLAIMS

Sample Type	Sample No.	METRES Footage (first hole only)	Geochemical Analysis					
			Cu	PB	ZN	AG	AS	AU (ppb)
MIXED OVERBURDEN(?)	8366	14.63-16.15	24	13	59	.1	3	3
Gossanous SOIL	8367	16.15-18.35	26	12	92	.1	2	5
" 430% Q-Cal. vns	8368	18.35-18.65	5	6	64	.1	4	1
Gossanous SOIL	8369	18.65-19.20	23	10	83	.1	4	1
ALT'D TUFF & CLAY SOIL	8370	19.20-21.00	4	5	59	.1	2	3
"	8371	21.00-23.00	11	6	65	.1	4	1
"	8372	23.00-25.00	11	9	63	.1	3	1
"	8373	25.00-27.00	68	29	81	.1	2	1
"	8374	27.00-29.00	18	13	70	.1	2	2
"	8375	29.00-29.90	30	11	79	.2	6	3
ALTERED TUFF	8398	29.90-30.33	57	16	53	.4	9	2
ALT'D LAPILLI TUFF	8399	30.33-30.67	28	6	74	.2	4	1
"	8400	30.67-30.98	45	7	65	.6	7	.1
"	8401	31.48-31.78	51	8	62	.4	5	1
ALT'D INTERMEDIATE VOLCANIC	8402	44.86-45.13	9	10	61	.2	3	3
BRECCIATED LAPILLI TUFF	8403	74.20-74.53	24	10	96	.3	6	1
ALT'D & BRECCIATED TUFF	8404	78.16-78.83	21	17	68	.3	5	2
ALT'D TUFF & GOUGE	8405	89.61-90.21	46	3	77	.4	8	1
"	8406	90.7-91.81	37	13	71	.4	8	1
"	8407	92.0-93.0	47	18	76	.4	7	1
"	8408	93.0-94.18	35	13	83	.4	6	2
Q-Cal. Lim vns	8409	100.1-100.56	13	14	78	.1	26	4
ALT'D INTERMEDIATE VOLCANICS	8410	102.4-103.05	18	16	192	.1	2	2
ALT'D Q-VEINED RHYOLITE	8376	103.05-103.33	11	22	23	.3	7	3

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ANALYTICAL RESULTS AND METHODS

DDH 87-A1

AURUM GEOLOGICAL CONSULTANTS INC.		Property: ISLAND MINING						
		JL CLAIMS						
Sample Type	Sample No.	METRES Footage (FIRST HOLE ONLY)	Geochemical Analysis					
			Cu	PB	ZN	AG	AS	AU (ppb)
ALTD. Q. VEINED RHYOLITE	8377	103.33 - 104.20	3	23	7	.3	7	4
MJO WITH MAG. RT. FRAG.	8378	104.20 - 105.46	90	18	119	.2	2	1
ALTD RHYOLITE	8379	105.46 - 106.00	4	39	8	.2	4	5
"	8380	106.00 - 106.62	11	13	22	.4	5	7
ALTD - STRONGLY SHEARIZED RHYOLITE	8381	106.62 - 107.5	.18	21	32	.2	33	8
" "	8382	107.5 - 108.27	22	68	86	.1	56	4
"	8383	108.27 - 108.6	46	49	93	.4	31	14
"	8384	108.6 - 109.0	40	29	63	.3	39	7
Q. VEINED RHYOLITE	8385	109.0 - 109.4	32	32	21	.5	46	58
"	8386	109.4 - 109.88	25	31	24	.4	32	5
ALTD RHYOLITE	8387	109.88 - 110.7567	34	45	20	.6	23	10
"	8388	110.67 - 111.0	20	85	21	.9	43	19
"	8389	111.0 - 111.55	28	37	38	.5	26	12
"	8390	111.55 - 112.30	37	32	42	.7	62	13
"	8391	112.30 - 113.74	25	238	49	1.0	16	17
"	8392	113.74 - 114.07	24	34	25	.3	13	11
ALTD RHYOLITE & TUFF BRECCIA	8393	114.07 - 114.48	25	25	86	.4	10	14
SHEARED ANDESITIC XTAL TUFF	8394	114.48 - 115.21	6	12	105	.4	9	3
"	8395	115.21 - 115.66	5	7	94	.2	5	1
ANDESITIC XTAL TUFF	8396	115.66 - 116.65	11	11	62	.4	3	1
"	8397	116.65 - 117.45	15	10	90	.2	5	3

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ANALYTICAL RESULTS AND METHODS

DDH 87-WB #1

AURUM GEOLOGICAL CONSULTANTS INC. WHEEL-BARROW
ZONEProperty: ISLAND MINING
JL CLAIMS

Sample Type	Sample No.	Footage	Geochemical Analysis	
			Ag oz/t	Au oz/t
RHYOLITE w. Q. VEINS	8411	75.5-77'	0.01	0.001
FELDSPAR PORPHYRY	8412	85.5-90.5'	0.01	0.001
VEINED M.GR. GRANODIORITE	8413	145.5-150.5'	0.01	0.001
GRANODIORITE & RHYO. PORPH.	8414	150.5'-155.5'	0.01	0.001
RHYOLITE PORPHYRY	8415	155.5-160.5'	0.05	0.005
"	8416	160.5-165.5'	0.05	0.001
"	8417	165.5-170.5'	0.02	0.001
"	8418	221.5-226.5'	0.02	0.001
RHYO. PORPH. & GREEN ANDESITE	8419	226.5-229.7'	0.02	0.001
RHYOLITE PORPHYRY	8420	229.7-234.7	0.01	0.001
"	8421	234.7-238'	0.01	0.002
ANDESITIC TUFF	8422	238-243'	0.01	0.001
BRECCIATED RHYOLITE	8423	243-247'	0.01	0.002
CALCITE-VEINED ANDESITE	8424	247-252'	0.02	0.002
AUGITE ANDESITE	8425	252-257'	0.01	0.001
"	8426	257-262'	0.01	0.001
CALCITE-VEINED ANDESITE	8427	262'-267'	0.02	0.001
"	8428	267'-272'	0.02	0.001
"	8429	272'-275.9'	0.02	0.001

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ANALYTICAL RESULTS AND METHODS

07 WBA

AURUM GEOLOGICAL CONSULTANTS INC. WHEELBARROW ZONE

Property: JL CLAIMS - MIDNIGHT GULCH

Sample Type	Sample No.	Footage	Geochemical Analysis	
			Au (oz/ton)	Ag (oz/ton)
Pyrite in Qtz Monzonite Rhyolite Porphyry	8451	90' 10" - 91' 10"	.002	.02
	8452	136' 7" - 137' 7"	.001	.01
Quartz Veined Rhyolite Porphyry	8453	151' 2" - 154'	.001	.03
"	8454	154' - 156' 6"	.001	.04
"	8455	156' 6" - 158'	.004	.05
"	8456	158' - 163'	.001	.01
"	8457	163' - 168'	.001	.03
"	8458	168' - 169'	.001	.04
"	8459	169' - 173'	.004	.01
Qtz Monzonite Rhyolite Porphyry	8460	182' 6" - 185'	.001	.01
"	8461	191' - 196'	.001	.03
"	8462	196' - 199'	.001	.03
Alt Qtz Monzonite	8463	202' 4" - 207' 4"	.001	.01
Quartz Veined Alt Rhyolite Porphyry	8464	207' 4" - 210'	.001	.02
"	8465	210' - 213'	.001	.02
"	8466	213' - 216'	.001	.04
"	8467	216' - 219'	.001	.01
" w/galen	8468	219' - 221' 6"	.007	.01
" w/galen	8469	221' 6" - 223'	.335	.11
"	8470	223' - 226'	.006	.03
"	8471	226' - 229'	.001	.02
"	8472	229' - 230'	.001	.02
"	8473	230' - 231' 6"	.001	.01
"	8474	231' 6" - 235' 8"	.003	.01

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ANALYTICAL RESULTS AND METHODS

DDH 87-VB 3

AURUM GEOLOGICAL CONSULTANTS INC.

Property: ISLAND MINING
JK CLAIMS

Sample Type	Sample No.	Footage	Geochemical Analysis	
			Ag oz/t	AU oz/t
VEINED RHYO. PORPHYRY	8430	36-41'	0.01	0.001
GREEN TUFF?	8431	53-58'	0.01	0.001
"	8432	61-66'	0.01	0.001
SHEARED TUFF?	8433	66-71'	0.01	0.001
"	8434	71-76'	0.01	0.001
MINERALIZED RHYO. PORPH.	8435	114.5-118.5'	0.01	0.009
"	8436	118.5-122.5'	0.05	0.013
"	8437	122.5-126.5'	0.01	0.001
SHEARED QTZ w. Gn-Si-Py	8438	203-204'	0.13	0.005
SHEARED and SILIC. RHYO.	8439	204-206'	0.03	0.002
VEINED RHYO. PORPHYRY	8440	222.5-227.5'	0.03	0.004
"	8441	227.5-232.5'	0.03	0.001
"	8442	232.5-237.5'	0.01	0.002
8443				
8444				

ANALYTICAL RESULTS AND METHODS

DDH 87-084

AURUM GEOLOGICAL CONSULTANTS INC.

Property:

Sample Type	Sample No.	Footage	Geochemical Analysis					
			Au (oz/t)		Ag (oz/t)			
F. Gr. FELD. Porph.	8443	90'-95'	0.010					.01
"	8444	95'-100'	.011					.04
Fault Gouge	8445	100'-105'	.001					.02
"	8446	105'-110'	.001					.03
Green Andesite	8447	124'6" - 125'8"	25	18	71	.4	4	1
As above + fault gouge	8448	127'-128'6"	13	20	75	.1	5	1
Alt'd fault gouge	8449	128'8" - 129'8"	33	17	62	.5	7	2
Chloritized & foliated	8450	129'8" - 130'8"	108	17	92	.4	2	2
Limonite alt'd gouge to chlorite alt'd gouge	8601	132'6" - 134'6"	8	17	62	.3	9	1
Altered Brecciated Andesite To 1% galena	8602	124'6" - 136'	10	67	86	.7	10	720
"	8603	136'-137'	6	60	93	.4	2	14
"	8604	137'-138'	3	680	141	1.7	7	47
Elky + Broken	8605	138' - 142'	17	161	217	1.1	6	240
Moderate oxidation Fe alt'd	8606	143'-146'	5	169	141	1.1	7	112
5-8 mm 1/2 veins Fe alt'd	8607	146'-151'	3	75	83	.6	5	24
Brecciated w/ py Turquoise-ankerite veins & 5-8 py, fold. veins alt'd	8608	151'-152'	3	55	92	.5	5	5
"	8609	152'-154'6"	16	128	211	.6	5	25
"	8610	154'6" - 159'6"	15	135	149	.6	5	1
Or - Monazite	8611	159'6" - 162'	4	114	98	.	5	112
"	8612	162'-167'	5	31	72	.3	3	140
"	8613	167'-168'8"	10	40	33	.3	3	-
Gr in qtz- chlorite veins (2) veins	8614	168'8" - 170'6"	3	1293	207	2.1	1	350
"	8615	170'6" - 172'	4	127	173	2.5	5	700
to 1% Gr	8616	172'-174'	6	41	125	.2		

ANALYTICAL RESULTS AND METHODS

DDH 87-W34

AURUM GEOLOGICAL CONSULTANTS INC.

Property:

Sample Type	Sample No.	Footage	Geochemical Analysis					
			Zn	7N	AG	AS	AU	
Q2 Monzonite	8617	174'-176'	6	116	231	.4	7	10
Strongly chloritized T ₂ → 1% (m)	8618	176'-178'	19	417	505	1.3	3	5
	8619	178'-179'	16	173	140	.9	8	1
Slightly coarser t ₂ b	8620	179'-184'	20	17	46	.2	7	2
Pinkish Brown Rhyolite Porf.	8621	200'-203'	6	172	139	.5	11	32
"	8622'	203'-207'	6	345	172	1.0	9	35
Buff Brown Rhyolite Porf.	8623	251'-256'	7	-2	53	.3	12	4
"	8624	261'-266'	=	-2	53	-	:	2
"	8625	271'-276'	=	.5	2	.2	:	1

ANALYTICAL RESULTS AND METHODS

DDH 87-II

AURUM GEOLOGICAL CONSULTANTS INC. IVANI SHOWING			ISLAND MINING Property: JL CLAIMS					
Sample Type	Sample No.	Footage	Geochemical Analysis					
			Cu	Pb	Zn	Ag	As	Au (ppm)
Brecciated Tuff 8485	8485	22' - 24'	27	6	81	.4	5	1
Altid & q.v. Anvolite porphyry	8486	29' - 32'	13	6	21	.3	2	1
Altid & sheared porphyritic Andesite	8487	32' - 33'	9	9	36	.1	4	1
" "	8488	33'6" - 37'	7	9	26	.2	2	1
" " fault gouge	8489	39' - 39'6"	13	9	23	.1	2	2
Px Jasper clasts in lapilli tuff	8490	43' - 45'	159	6	109	.5	6	1
Tuff by & lapilli tuff. Tr. cov. py, mal, hornstone	8491	87' - 89'	156	10	130	.1	2	1
Amygdaloidal flow tr. cov. mal & py	8492	90' - 92'	87	5	124	.1	8	2
mottled lapilli tuff. Ep - carbons & br. Tr. mal & cov	8493	100' - 102'	352	7	136	.1	8	3
Sheared & Altid porphyritic flows & fault gouge	8494	129'6" - 135' (30% recry)	29	10	67	.4	8	11
Altid rhyolite	8495	135' - 140' (25% recry)	26	10	64	1.8	22	34
Altid RHYOLITE w/ q.v.	8496	151' - 154'	7	6	18	.6	6	13
" " sec. q.v. (5mm)	8497	154' - 156'	14	5	26	.5	3	6
" "	8498	156' - 161'	9	6	21	.3	5	4
" "	8499	161' - 166'	13	1	32	.5	7	17
" "	8500	189' - 190'	4	11	30	.3	2	12
" "	8501	207' - 210'	5	16	30	.3	5	20
" "	8502	210' - 212'	4	7	31	.3	7	6
" "	8503	222'6" - 213'6"	4	10	24	.3	2	2
sec. box	8504	216' - 217'	4	10	25	.4	4	2
" "	8505	222'6" - 224'	6	11	20	.3	8	4
" "	8506	224' - 227'	5	17	35	.7	11	13
Altid Rhyolite porphyry	8507	252' - 254'	1	2	24	.1	4	1
	8508	256' - 258'	5	15	34	.2	6	4

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ANALYTICAL RESULTS AND METHODS

DDH 87 - I1

ISLAND MINING

AURUM GEOLOGICAL CONSULTANTS INC. IVAN SHOWING Property: JL CLAIMS

Sample Type	Sample No.	Footage	Geochemical Analysis					
			Cu	Pb	Zn	Li	Ag	Au/100g
Altd rhyolite porphyry	8509	267' - 272'	4.20	43	.3	11	2	
Qtz veined Rhyolite	8510	300'6" - 302'6" <small>(35' core)</small>	10.4	90	.5	5	4	
Qtz-sp-cc-chl ve with py	8511	312'6" - 313'6"	61.7	68	.2	2	1	
Altd Andesitic Volcanics. Fault zone	8512	315'6" - 317'	23.9	70	.1	6	2	
" "	8513	325' - 326'	.7	10	59	.1	9	3
Altd Rhyolite	8514	329' - 330'	33	6	37	.2	7	3

ANALYTICAL RESULTS AND METHODS

DGH 87-12

AURUM GEOLOGICAL CONSULTANTS INC.

Property:

Sample Type	Sample No.	Footage	Geochemical Analysis					
			Cu	Pb	Zn	Ag	As	Au (ppb)
Andesitic Tuff	8515	11'-12'	6	9	87	.3	8	2
"	8516	16'-19'	6	14	102	.1	15	14
ALT'D + Sheared Porphy. Andesite(?) Amygdaloidal Flow	8517	47'-50'	12	6	36	.3	3	2
Andesitic Lapilli Tuff	8518	87.5'-98.5'	22	25	131	.2	11	2
Andesitic Tuff	8519	107'-109'	168	11	110	.5	4	1
epidotized epidote, chloropyrite & magnetite	8520	114'-115'	58	58	72	.5	7	2
Andesitic Lapilli Tuff	8521	15'-120'	101	23	111	.8	14	1
Andesitic Lapilli Tuff	8522	124'-129'	90	11	123	.7	5	1
Andesitic + Amygdaloidal Flow	8523	129'-130.5'	35	12	83	.4	9	1
"	8524	130.5'-133'	254	4	157	<u>1.3</u>	8	4
Andesitic Tuff + Cryst. Ashes Tuff	8525	134'-135.5'	326	14	94	<u>1.0</u>	6	1
Andesitic Tuff + Amygdaloidal Flows	8526	135.5'-138'	20	7	78	.3	8	1
ALT'D + Sheared Andesitic Volcanics	8527	139'-144'	88	9	80	.7	2	4
"	8528	145'-149'	38	17	72	.6	9	1
"	8529	160'6" - 161'6"	14	9	85	.4	2	1
Andesitic Lapilli Tuff + Tuff	8530	227'-229'	81	13	101	.5	6	2
ALT'D + Brecciated Flow + Febric Flows	8531	242'-243'	5	8	71	.2	4	1
Febric Flow	8532	243'-245'	76	10	43	.6	2	1
"	8533	245'-247'	40	14	39	.4	2	1
"	8534	247'-250'	33	11	48	.5	4	2

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ANALYTICAL RESULTS AND METHODS

DDH 87-C1

AURUM GEOLOGICAL CONSULTANTS INC.			Property:					
Sample Type	Sample No.	Footage	Geochemical Analysis					
			Co	Pb	Zn	As	Au (ppm)	
V. FINE GRAINED ALT' LAPILLI TUFF	8535	23'-285'	10	9	85	.3	6	1
V. FINE GRAINED ANDESITIC, CALIC. V.	8536	29'-35.0'	22	8	84	.4	2	2
" "	8537	35.0'-36.0'	42	13	72	.4	8	2
FeO _x + SERICITE ALTD Tuff	8538	36.0'-51.0'	9	11	71	.3	2	3
Rubby " "	8539	51.0'-62.5'	9	9	69	.3	2	1
Calicite Soil along FRACTURES of above	8540	68.5'-72.5'	5	18	95	.4	6	2
Clay/sericite zones along pop. & above	8541	74.6'-75.6'	18	41	81	.3	6	3
Broken, rusty soil with tuff frags	8542	86.0'-87.0'	24	13	85	.3	2	1
Gritty soil + as above	8543	88.5'-89.5'	37	16	87	.2	5	2
2% calcite stringers + as above	8544	89.8'-92.0'	5	9	77	.4	4	1
Calcite stringers + shearing	8545	95.0'-97.0'	10	11	75	.3	5	2
Brachiopods Fr. Gr. FeO _x Porp.	8546	97.0'-104.5'	24	10	76	.5	2	1
Broken sheared as above	8547	104.5'-107.0'	10	6	62	.4	3	1
Irregular calcite stringers to 1cm interbedded tuff + flow with sericite	8548	109.3'-111.0'	12	6	65	.3	2	2
" "	8549	113.1'-116.1'	19	17	57	.6	2	2
Qtz Fe CONT stringers	8550	125.5'-128.0'	10	11	39	.6	4	1
Monite, Qtz/Fe CONT	8551	146.5'-147.5'	23	12	23	.4	3	1
Tuff + siliceous Pop. Fls. + Anhydrite (white stringers)	8552	163.3'-167.5'	10	11	62	.1	4	4
Slightly fractured Tuff w/ Cr + Fe + base	8553	148.0'-149.0'	10	11	35	.5	5	1
Siliceous FeO _x PORPHYRY	8554	174.0'-175.0'	14	11	53	.2	7	1
" "	8555	183.5'-188.0'	3	11	26	.5	5	2
ALTD LAPILLI TUFF w/ MINOR FELSIC FLOW	8556	197.7'-200.0'	6	15	14	.2	7	1
Siliceous FeO _x PORP. in Gr. Porphyry?	8557	200.0'-203.7'	9	13	110	.4	7	18
D Green Andesitic Lapilli Tuff	8558	208.2'-210.4'	17	14	77	.3	6	1

ANALYTICAL RESULTS AND METHODS

DDH 37-C1

JRUM GEOLOGICAL CONSULTANTS INC.

Property:

Sample Type	Sample No.	Footage	Geochemical Analysis					
			Cu	Pb	Zn	As	Ag	Pb (ppm)
ALT'D LAPILLI TUFF n Porf. Flow	8559	231.0' - 237.4'	33	40	76	.4	2	1
Rusty LAPILLI TUFF w/ Qtz/Fe Carb Venets	8560	237.4' - 240.3	11	15	99	.2	8	2
Muddy Sand	8561	250.5 - 251.5	372	42	276	.6	8	3
Rubble (Pur. cen. rhyolite) to clay rich mud	8562	255.0' - 256.0	16	31	90	.3	8	1
Clay/cent. sand	8563	257.8 - 261.2'	18	10	64	.1	4	1
Pale Green Rhyolite	8564	262.8' - 267.0'	7	26	-	.6	4	45
Coarse Tuff	8565	267.0' - 271.6'	3	5	52	.2	5	1
Rusty w/ Fe Carb n Stringers	8566	315.2' - 320.0'	3	33	84	.1	2	2
Yellow Porphyritic Rhy w/ Iron Tuff frags.	8567	368.0' - 369.0'	5	23	45	.5	3	1
Pale Green Rhyolite	8568	369.0' - 374.0'	22	44	152	.1	25	108
"	8569	374.0' - 378.0'	27	34	116	.5	15	15
"	8570	378.0' - 379.0'	5	8	73	.1	1	1
"	8571	379.0' - 384.0	1	10	200	.2	52	147
"	8572	384.0' - 390.0'	1	10	76	.1	1	1
"	8573	390.0' - 395.0'	28	15	103	.1	1	1
ALT'D Lapilli Tuff/ Coarse Tuff	8574	395.0' - 396.5'	3	13	108	.1	1	1
Porp fasic Flow	8575	441.5' - 446.5'	3	3	18	.1	1	1
ALT'D Lapilli Tuff	8576	455.5' - 456.5'	2	1	57	.1	1	1
FELSIc PORP. Flow	8577	468.0' - 469.5'	2	1	7	.1	1	1

OMNI RESOURCES INC.

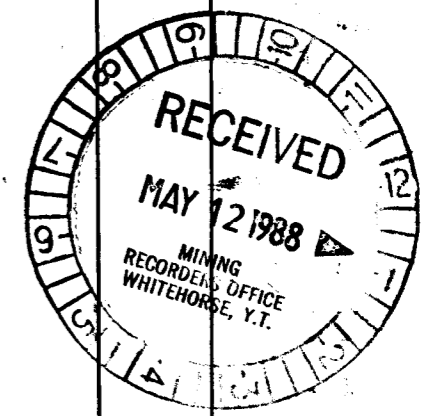
DIAMOND DRILL HOLE LOG

PROJECT	CHARLESTON	HOLE No:	87-51
COORDINATE N.	L0+505	DEPTH	
E.	L0+75E	AZIMUTH	235°
ELEVATION	6770'	INCLINATION	-66
DATE STARTED	AUGUST 8, 1987	DRILLED BY	CARON P.O.
COMPLETED	AUGUST 11, 1987	ASSAYED BY	Acme
HOLE SURVEY		LOGGED BY	WYAN MACKINNON

Reason for Drilling	TEST CHARLESTON MINERALIZED VEIN FOUND IN 1985 TRENCH #2	LEGEND <input checked="" type="checkbox"/> Granodiorite <input type="checkbox"/> Andesite <input type="checkbox"/> Rhyolite <input type="checkbox"/> Rhynchonite <input type="checkbox"/> Soap diorite <input type="checkbox"/> Qtz veins
Explanation of Results	MAIN CHARLESTON VEIN MAY PINCH OUT, OR BE LAUGHED OFF AT DEPTH	

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE		ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	GRF. Ag	GRF. Ag
1	1		0		FACING - OVERBUDED								
	4		86%		13.0' COARSE GR. HNBED GRANODIORITE (17.5' x 17.5') 1-6% biotite. 15-20% ± 8mm hornblende xtals, 1-4mm qtz & feldspar xtals, 1% magnetite. Predominantly fresh to weakly alt'd. Alteration of mafics & occasionally feldspars to chlorite & epidote. Alteration generally increases w/ depth. Occasional xenoliths. Fractures variable, commonly at 70°, 20°, & 100° to C.A.								
	5												
	4		80%										
	5												
	23												
	28		99%										

091981



BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL			
									Sample No.	INTERCPT	CORE LENGTH	GRAV Au	GRAV Ag	Pb (ppm)	
2	38	5			- 35.0-35.8': Epidotized granodiorite w/ weak K (pink) alteration			35							
	40	7	100	.50				40							
	43	3			- 41.8 - 42.7: moderately sheared d alt'd granodiorite, chloritized bands @ 23° to C.A. - 42.7 - 46.4: 2-6% biotite, weak to mod alt'd.			40 mod/weak	8578	41.8-42.8	1'	9	.1	7	
	45.6	5			Lower contact 40° to C.A. MIXED ALT'D GRANODIORITE + FN. GR. GD. Lower contact sharp at 25° to C.A.	tr-1% v. fn. gr. py diss'd in qtz-calcite vnlts. A.A.		45	8579	44.4 - 46.4	2'	1	.2	6	
	48	4			DARK GREEN TO BROWN FINEGRAINED DIORITE Weak to non magnetic; 50.5mm plagioclase laths in a v. fine grained matrix; "felt like" texture.				8580	46.4-47.4	1'	1	.1	7	
3	52	5	90	.31	- 47.4 - 49.3: 12% 1mm subhedral chlorite phenocrysts in an aphanitic matrix. 5% open space vesicles? or weathered out phenos. Chilled contact?	Tr v. fn. gr. py diss. d in qtz vnlts.		50							
	57	5						55							
	61.4	4						60							
	62	4	78	.19				65							
	66				66-69': Blocky & broken core										

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL					
									Sample No.	INTERCEPT	CORE LENGTH	G.P.T. Au	G.P.T. Ag	PL (ppm)			
	71	3															
	72	3															
4		5			Lower contact sharp at @ 5° to C.A.												
	77				75.1 LIGHT-BUFF GREEN RHYODACITE 1-3% euhedral feldspar (Kspar?), 1-3% qtz + 3% mafic (chlorite or hornblende) phenocrysts in an aphanitic matrix. Weak to moderate epidotization, predominantly along fractures. Weak carb along fractures. Slightly bleached. Fractures commonly 30° to C.A.												
	79	2			78.5 DARK GREEN ALT'D AUGITE (?) ANDESITE & ENCL. DIORITE 5% chlorite alt'd anhedral to euhedral augite (?) phenocrysts in a groundmass that grades from fine grained (at top) to aphanitic (at base). Weakly magnetic, w/ v. fine grained diss. magnetite. Weak pervasive carb alteration, occasional (1-2mm) carb vein (commonly at 20° to C.A.) + epidote-carb vns. or vults at base. Weak to moderate pervasive chloritization. 3' chilled margin at base.												
	83	5															
5			90	80													
	88				81.3 Lower contact sharp at @ 30° to C.A.												
	93	5			COARSE GRAINED HORNBLENDE GRANODIORITE White & black coloured w/ 20% euhedral 2-6mm hornblende, 30-40% plagioclase, 10-15% Kspar, 30-35% quartz, + 1-2% magnetite. Moderate but patchy propylitic alteration w/ hornblende → chlorite, plag → epidote ± sericite ± calcite. 1% epidote or sericite vults.												
	96				96.6 Lower contact sharp at @ 40° to C.A.												
					DARK GREEN ANDESITE Grades from fine to very fine grained w/ depth. Calcic vults increase to 3% at depth. Chloritic + sericitic alt around vults. -100.0-100.5- chlorite alt'd augite andesite w/ aphanitic matrix. Strongly chilled margins - Xenolith?												
100			94	54													
6					101.9 Lower contact sharp 40° to C.A.												
	103				COARSE GRAINED HORNBLENDE GRANODIORITE												

091991

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL			
									Sample No.	INTERCEPT	CORE LENGTH	G.P.T. Au	G.P.T. Ag	Pb (PPM)	
6					<p>10-15% 1-12mm predominantly chloritized euhedral to subhedral hornblende, 25-40% 1-4mm grey qtz xhls, 10-15% subhedral Kspar, 25-35% 2-5mm plagi. xhls, tr to 2% euhedral biotite & magnetite.</p> <p>Generally fresh w/weak pervasive chloritic alteration of mafic minerals. Minor</p> <p>2-10cm bands of moderate to strong propylitic to phyllitic alteration.</p> <p>Alteration bands commonly 75-90° to C.A.</p> <p>occasional xenolith of fin to med. gr mafic granodiorite</p> <p>Fractures commonly 50° to C.A. Occasional chlorite or hematite along fractures.</p>										
			100	.51											
					128.5-128.9' chloritic & sericitic alteration halo around a 6mm qtz-chlorite-wed vein. Vein at 75° to C.A.	Tr py		128.5	8581 -	128-129	1'	2	.1	11	
8		3	87	.6											
		3													
		3													
		3													
		3													

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BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			PPM ANALYTICAL			
									Sample No.	INTERCEPT	CORE LENGTH	C.P.T. Au	G.P.T. Ag	Pt (PPM)	
		3						145							
	145							145							
	149.7				-146.9 - 147.2; Strong chl alt'd band at 45° to CIA.			145							
	149	4						145							
	149				-149.0 - 150.7; 2 qtz-chlorite-ankerite(?) veins at 149 - 5cm & 149.8 - 4cm, both at 65° to CIA, chloritic alteration	5% gn, tr py in q.v. Gn as an aggregated mass in v. th/ py along margins.		145							
	153	4						150	8582	149'-150'	1'	28	6.9	2565	
	153		91	.65	-153.0 - 154.8; Partially sheared(?) & fractured at 15° to CIA.			150	8583	150'-151'	1'	4	.4	9	
	158	5						155							
	158				-158.0 - 159.5; Strong propylitic alteration, minor hematitic units.	Tr - 1% disspy		155							
	160	5						160	8584	158.0 - 159.5	1.5'	2	.2	12	
	162.7	5						160							
	163							165							
	168	5						165							
	170	5	100	.79				170							
	173				-171.7 - 172.1; Moderate propylitic alteration halo w/ minor hematite, around lens qtz-chl-Fe carb vein. Vn at 80° to CIA.	tr - 1% py.		170							
	173							170	8585	171.5 - 172.5	1'	1	.1	6	
	178	5			-175.8 - 176.1; A.A., but 4mm br.			175							
	180							180							

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BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	G.P.T. Ag
10		5											
	185												
11		5	79	74									
	188												
	189												
190		5											
	193												
	194												
198	198												
200		5											
	203												
12		4	77	57									
	207												
210		5											
	212												
214.5		7											

-188: Possible slickensides at @ 200 to CIA.

-189.4 - 189.8: As above, w/ 7mm q.v. at 300 to CIA. + minor argillic alt' of feldspar

-191.7 - 193: Weak propylitic & argillic alt'd; moderate ch. alt.

-194.6 - 196.4: Weak to moderate propylitic alt'd. w/ 8mm q.v. at 195.4.

-198.3: 2mm q.v. w/ minor alteration halo

-200.0 - 200.8: moderate propylitic grading to weak argillic alt'd.

-201.1 - 201.3: As before w/ 3mm q.v.

-208.0 - 211.0: weak to mod. alt'd w/ ch. & pervasive chloritization, + argillic alteration around small veins. Granodiorite still weakly magnetic. Weak pervasive carb. alt'd.

tr py

tr py

tr py

tr py

tr py

chl - ser - kcal

chl - ser - kcal

chl - ser - kcal

chl - ser - kcal

chl - ser - kcal

180

190

weak/mod

195

200

mod

210

weak/mod

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BCX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL					
									Sample No.	INTERCEPT	CORE LENGTH	PPB G.P.T. Au	PPM G.P.T. Ag	PPM Pb (PPM)			
	219				219.0 Lower contact broken												
	223	A	84	15	DARK GREEN ANDESITE V. fine grained to aphanitic, non porphyritic; non magnetic. Minor 2-4mm, Qtz veins near top of unit & 5mm calcite veins toward base of unit. Blocky & broken core			220									
13	225	2															
	228	3			Strong carbonatization, weak sericitization & partial bx for 15cm at lower contact												
230	230	2			229.3 COARSE GRAINED HORNBLLENDE GRANODIORITE			230									
	235	3			As before, weakly altered throughout. All hornblendes → chlorite, minor epidote, weak propylitic alt'd												
	235.5	2.5															
14		5	85	40	-236.9: clay & hematite filled fracture at 35° to CIA.												
240	240.5				-240.2: Fault gouge?			240									
	243	2.5			-241.0 - 243: slightly more alt'd, brownish tinged - Fe carbonate (?) Xenolith (?) at 241.												
	243				243.0 DARK GREY PORPHYRITIC ANDESITE												
	247	4			17-20% subhedral to euhedral zoned 3-8mm phenocrysts in an aphanitic matrix. Phenocrysts not readily visible against matrix. 3% 4-6mm calcite filled amygdules 247.0 Weakly magnetic. Contacts broken	Tr-1% py around altered phenocrysts & amygdules											
246.4	247									8586	245.5 - 247.0	1.5'	Geochron 6	.1	5		
	248.5	1.5			QTE VEINED & ALT'D GRANODIORITE					8587	247.0 - 248.1	1.1'	Assay 2360	2.5	16		
	248.5				247.0 - 248.1: Fe carb & chl alt'd fault gouge	Tr-1% v. fine gr. py				8588	248.1 - 249.1	1'	"560	.6	6		
	248.5				248.1 - 248.5: Qtz vein, w/ all alt'd gr.	Tr gn (?) v. fine gr py				8589	249.1 - 251.1	2'	"1390	2.6	19		
250	250.5	2	93	07	248.5 - 252.8: Qtz veined & fractured w/ ankerite(?) increasing w/ depth. Larger vns ⊥ to CIA. Moderate calcite along fractures. Broken core	Tr-1% v. fine gr py				8590	251.1 - 253.1	2'	"195	1.3	35		
15	253	2.5			252.8 - 253.1: chlorite alt'd; broken core												
	255	2			253.1 COARSE GRAINED HORNBLLENDE GRANODIORITE												
					As before, weak to moderate propylitic &												

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BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL					
									Sample No.	INTERCEPT	CORE LENGTH	GRAV Au	GRAV Ag	PL (PPM)			
		5			minor Fe carb at top. + Epidotized ± K alteration as bands up to 10cm wide thru core.												
260	260				-258.6-259.3; Fault gouge (?), ground up, weakly chloritized.			260									
261.5		5															
16	265				-264.2-264.7: mod chl alt'd halo around 5mm qtz-Fe carb vein at 5° to C.A.	Tr py		mod									
	266.5	1.5															
		5	91	.45													
270	271.5							270									
		5															
	276.5																
278.0		4.5			Alteration slightly stronger toward base.												
280	281				-281.2: 3cm qtz vein.			280									
		2			282.0 Core broken at contact												
17	283		85	.46	BROWN TO BUFF BROWN RHYOLITE PORPHYRY 5-7% ± 5mm phenocrysts in an aphanitic matrix. Grades from greyish brown weakly alt'd at contacts to moderately alt'd at centre of unit. Pervasive sericitic, silicic (?) + Fe (streaking bands + halos around phenocrysts) alteration. Wad along irregular fractures. V. hard.	Tr v. sh gr py		mod/ weak									
	288	5															
290								290									

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	G.P.T. Au	G.P.T. Ag	Pb (ppm)
18	297 301 303	2 2	87	.37	<p>298.6 - 306.0 : Larger phenocrysts still present but 10% very fine grained black specks in aphanitic groundmass giving it speckled texture.</p>		Fe-ser-sil							
19	300 310 311 313 316	5 3 2 3	95	.46	<p>309.3 Lower contact broken @ 80-85° to C.A. COARSE GRAINED HORNBLENDE GRANODIORITE As before ; weak to moderate propylitic alt'd. Fractures commonly at 25, 40, 65° to C.A. -313.5 : Calcite vlt - 1-2mm wide</p>									
20	320 326 328	5 2 3			<p>- 326.7 - 343.6 : moderate to strong propylitic & wide argillic alt'd particularly around qtz veins. - 329.3 : Qtz-hematite & Qtz-chlorite-ankerite vnlts. minor calcite ; 85-90° to C.A.</p>	Tr in gr. py								
								320						
								325						
								mod strong	8591	326-328	2'	6	.1	16 091991
								330	8592	328-330	2'	4	.2	6

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL			
									Sample No.	INTERCEPT	CORE LENGTH	Gr.F. Au	Gr.F. Ag	Pt (ppm)	
20	331	5	88	.44	- 331.0: 4-5mm qtz-hematite-ankerite(?) vn at 40° to C.A.	1% ± lam py euhedra	mod. propylitic	335	8593	330-333	3'	5	.3	12	
	332				- 332.9-334.6: 3cm qtz-ankerite vein at 35-40° to C.A. centred at 333.6. Strong surrounding alteration halo.	tr. v. fn. gr. py			8594	333-334	1'	460	.7	17	
	333					8595			334-336	2'	99	.5	10		
	334					8596			336-338	2'	8	.2	2		
	335					8597			338-339.5	1.5'	33	.4	4		
21	340	5	93	.43	- 338.9: 4cm qtz vein w/ chlorite-hematite & calcite rim; 65-80° to C.A.	tr. v. fn. gr. py	mod. propylitic	345	8598	339.5-341.5	2'	29	.3	2	
	341				- 340.8: 2.5cm qtz-ankerite-chlorite vein at 60° to C.A.	tr. v. fn. gr. py			8599	341.5-343.5	2'	23	.3	29	
	342				- 342.4: 2cm qtz-ankerite & chlorite vein at 80° to C.A.	tr. v. fn. gr. py									
	343														
	344														
22	346	5	93	.43	- 352.1 - 352.6: Alteration halo around ^{2mm} chlorite-ankerite-qtz-calcite vn. Oriented at 30° to C.A.	tr. v. fn. gr. py	mod. propylitic	350							
	347														
	348														
	349														
	350														
23	351	5	93	.43	≤ 1% Fractures commonly at 13, 35, 60, & 80° to C.A.		mod. propylitic	355							
	352														
	353														
	354														
	355														

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BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	PPB	PPM	PPM
										Q.P.T. Au	Q.P.T. Ag	PL (ppm)		
			96	.89				370						
					- 375.9 - 376.9 : strong propylitic alt'd around qtz-hematite & qtz-ankerite-chlorite veins.	TR PY		370						
			90	.89	- 378.6 - 379.3 : clay, talc, hematite alt'd fractures & surrounding area; at 10-30' to C.A.			380	8600	375.9-376.9	1'	62	4	66
					weak epidote & K alt'd toward base, 383' E.O.H.									

OMNI RESOURCES INC. (INCORPORATED MINING & EXPLORATIONS CO. LTD)

DIAMOND DRILL HOLE LOG

PROJECT	CHARLESTON	HOLE No.	87-S2
COORDINATE N.	0+50S	DEPTH	611'
E.	0+75E	AZIMUTH	235°
ELEVATION	~6770'	INCLINATION	-45° (DIP -42°)
DATE STARTED	AUG 11, 1987	DRILLED BY	CARON
COMPLETED	AUG 15	ASSAYED BY	ACME
HOLE SURVEY		LOGGED BY	A. MONTEGOMERY

Reason for Drilling	TEST MINERALIZED FLUIDS SOIL ANOMALY	LEGEND	DISTANCE NON-ANOMALY SITE)											
Explanation of Results	VEIN THAT FRACTURED FLUIDS POSSIBLY CUT BY POST MINERAL DYKE		<table style="font-size: small; border-collapse: collapse;"> <tr> <td style="border: 1px solid black;">SPAL</td> <td style="border: 1px solid black;">FINE GR.</td> <td style="border: 1px solid black;">SHEARING</td> <td style="border: 1px solid black;">EPIDOTE</td> </tr> <tr> <td style="border: 1px solid black;">EPIDOTE</td> <td style="border: 1px solid black;">SHEARING</td> <td style="border: 1px solid black;">FRACTURING</td> <td style="border: 1px solid black;">BIVOLITE</td> </tr> <tr> <td style="border: 1px solid black;">BIVOLITE</td> <td style="border: 1px solid black;">FRACTURING</td> <td style="border: 1px solid black;">GLUE</td> <td style="border: 1px solid black;">QZ UN</td> </tr> </table>	SPAL	FINE GR.	SHEARING	EPIDOTE	EPIDOTE	SHEARING	FRACTURING	BIVOLITE	BIVOLITE	FRACTURING	GLUE
SPAL	FINE GR.	SHEARING	EPIDOTE											
EPIDOTE	SHEARING	FRACTURING	BIVOLITE											
BIVOLITE	FRACTURING	GLUE	QZ UN											

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE		ANALYTICAL				
									Sample No.	INTERCEPT	CORE LENGTH	Gr. T. Au	Gr. T. Ag	Pt (ppm)	
1			97	.40	<p>ALT'D CRS GR. MIXED GRANODIORITE</p> <p>SPECKLED GREEN & WHITE CRS GRAINED GRANODIORITE W/ ~10-15% COARSE (1mm - 1cm) HORNBLONDE, ~20-30% PLAGIOCLASE & K-SPAR, AND ~60% INTERSTITIAL QZ. MAFICS PRESUMABLY ALT'D TO CHLORITE ± EPIDOTE; FELDSPARS ALTERED TO SERICITE ESP. AT FRACTURING. MINOR</p> <p>(0'-22.4' - CASING OVERBURDEN)</p> <p>DULL GREEN FINE GRAINED PORPHYRIC (SUBROUND - PLUG PHENOS. ~1mm) ANDESITE IN SHARP CONTACT W/ GRD. (40° TO C.A.)</p> <p>SHEARING COMMON TOWARDS TOP OF HOLE @ 35°-40° TO C.A.</p> <p>ALT'N @ PROPYLITIC</p>			5 10 15 20 25 30 35 40 45 50 55							
2			94	.45	<p>DARK GREEN FINE GRAINED ANDESITE</p>	<p><1% FINE DISS IN TOWARD UPPER CONTACT</p>									
3			87	.40	<p>DARK GREEN FINE GRAINED LEUCOGANULAR GROUNDMASS W/ 1% RED-BROWN TO BLACK (SOFT) - PLINIOCRYSTS (~1mm). GRITTY. FRACTURES LOCALLY COMMON; MINOR GYPSUM LIMED VES.</p>					8637	ANDESITE	3.5'			13

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BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag	
					WEAKLY MAGNETIC PALE GREY-GREEN PERHYDRIC DIABOLITE (~1% PINK K-SPAR MENOS, 1mm-2mm 1/2 FINE DARK MENOS.), SHARP CONTACTS AT 30°/45° TO C.A.			65						
4			99	.23	ALT'D CRS. GR. HNB'D GRANODIORITE SIMILAR TO 22.4'-48'; FELDSPAR ALT'N VARIES FROM INTENSE CLAY ALT'N (ROTEN) TO FRESH; MAFICS GENERALLY CHLORITE DEP. ALT'D; MINOR CALCITE ALONG FRACTURES LOCALLY; SERICITE ALT'N LESS PREVALENT.		BROKEN CORE @ CONTACT →	75						
5			89	.31	LOWER CONTACT ~ 35° TO C.A.			80						
6			99	.75	DARK GREEN ANDESITE V. FINE GRAINED W/ ~ 0.5% FINE GR. DISS. EPYRITE, AND MINOR CALCITIC STRINGERS, MINOR INCLUDED CRDL; CHLORITE ALT'N TOWARD LOWER CONTACT, LOWER CONTACT 35° TO C.A.; WEAK MAGNETISM	0.5% DISS. PIRITE		85						
					ALT'D CRS. GR. HNB'D GRANODIORITE AS ABOVE GRANODIORITE; MAFICS ALT'D TO CHLORITE, FELDSPARS COMMONLY FRESH, OR PINK (K-SPAR ALT'N?) OR PALE GREEN (SERICITE)			90						
7			100	.77	EPIDOTE ALONG FRACTURES, MINOR CALCITIC STRINGERS; WEAKLY MAGNETIC TO NON-MAGNETIC 110'-121' - FRACTURING @ 30°-40° TO C.A.			95						
								100						
								105						
								110						
								115						
								120						
								125						
								130						

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BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL		
									Sample No.	INTERSECT	CORE LENGTH	P.P.M. G.P.T. Au	P.P.M. G.P.T. Ag	P.P.M. Pb (P.M.)
8			100	.77	140.7 - 142.0 - MOTTLED QTE - SERICITE - (CHLORITE) VEINLET @ 45° TO C.A.; HEMATITE PATCHES < 1mm - 7mm			140	8638	140.7 - 142.0	1.3'	1	.3	14
9			96	.69	ALSO SERICITE AND/OR CLAY ALTH'N OF FELDSPARS BECOMING MORE APPARENT 159.8 - QTE / HEMATITE / Fe-CONT VEINLET < 1cm @ 45° TO C.A., MINOR SHALE STRING QTE - Fe-CONT STRINGERS / MOD SERICITE ALTH'N IN WALL ROCK CALCITIC STRINGERS MORE COMMON DOWN HOLE.			145 150 155						
					173.0 - 185.0 - SERICITE - CHLORITE ± CLAY, w/ CALCITIC STRINGERS MORE PROMINENT, ROCK MOD. TO STRONGLY FRACTURED. (CALCITIC FRACTURES COMMONLY < 20° TO C.A.); NON-MAGNETIC			160	8639	159.1 - 160.1	1.0'	19	.1	3
10			95	.42	181.5 - QTE / Fe-CONT(?) VEINLETS (< 1cm) 50° ± 25° TO C.A. 194.0' - 200.5 : STRONG SERICITE - CHLORITE ± CONT ALTH'N ACCOMPANYING STRONG FRACTURING ± QTE VEINING; 1			165 170 175 180 185						
11			100	.32	196.5 - 197.6 - QTE-CONT (RUSTY) VEINLET (.5cm) @ 5° TO C.A.; RUSTY STAINING ON FRACTURES CRACKLE GALECATION IMMEDIATELY DOWN HOLE. 198.5 - 199.0' - WHITE UGGY (LIMONITE/ CALCITIC) QTE 0° TO C.A.	MINOR (0.1%) DISSEMINATED FINE GRAINED PYRITE LOCALLY		190						
					200.5 - 202.4 - DARK GREEN, FINE GRAINED PERHYDRATE (WHITE GREEN-GREEN FELDSPAR) ~ EQUIVALENT TO G.POR. CONTACTS SHIP 30° ± 50° TO C.A.; MINOR QTE -			195	8640	196.5 - 200.5	4.0'	20	.2	19
12			96	.45				200 205						

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	Pb (PPM)	Ag (PPM)	Au (PPM)
13			95	48	<p>CALCITE - ALBITE? VEINETS; ~ PROPYLITIC/PHYLLIC 202.4 - ALT'N MOD - STRONG INCLUDING PULVASCINE SERICITE, CHLORITE; CLAY/CALCITE ALONG FRACTURES COMMON; RUSTY Fe-OXIDE ALONG FRACTURES. QZ CALCITE STRINGERS 20° - 50° TO C.A. MOD FRACTURED</p>	<p>0.1% DISSEMINATED F. CR. PYRITE</p>		215						
					220									
					225			8641	222.7' - 228.9'	9.0'	47	.5	10	
14			93	68	<p>222.7 - 226.4 - INTENSE BROWN Fe-CONT/SERICITE ALT'N ASSOCIATED WITH SHEARING? 50° - 80° TO C.A. (ALT'N BEGINS & ENDS ABRUPTLY)</p> <p>230.7 - WHITE/BROWN QZ / Fe-CONT? VEINETS < 1cm @ 35° TO C.A.</p> <p>236.0 - CRITTY CLAY, SERICITE, CALCITE FRACTURING DOWN HOLE TUNNELS DYKE 30°-40° TO C.A. LOWER CONTACT ~ 85° TO C.A.</p>	<p>TAN PYRITE?</p>		230						
					235									
					240			8642	237.2' - 242.9	5.7'	1	.1	7	
15			98	45	<p>TAN PROPYLITIC FLOW BANDS RHYOLITE TAN COOLED, FAINTLY FLOW BANDS (55° - 65° TO C.A.) ~ PROPYLITIC (CLAY ALT'D FELDSPARS & ROUND QZ AMYGDALE); MgO ASSOCIATED w/ PHENOS. CONTACTS SHARP LOWER CONTACT @ ~ 30° TO C.A.</p>	<p>PALE RUSTY PYRITE</p>		245						
					250									
					255									
16			96	37	<p>ALT'D CIS GR. HUBB'D GRANODIOLITE DARK OL (CHLORITE ALT'D), GENERALLY SIMILAR TO GRANODIOLITE UNITS UP HOLE; ALT'D MODERATE TO STRONG (CHLORITE/SERICITE / 1 CLAY? ALT'N OF MICA (MICA FRESH TO ALT'D)) QUARTZ & QUARTZ-CALCITE (or Fe-CONT) VEINETS & STRINGERS COMMON; WEAK CRACKLE BRUCIA LOCALLY; CORE BROKEN & BUDGY (ALT'N @ PROPYLITIC TO PHYLLIC)</p>	<p>PALE RUSTY PYRITE</p>		260						
					265			8643	259.9 - 264.9	5.0'	3	.2	25	
					270			8644	264.9 - 269.9	5.0'	2	.3	14	
								275						
								280	8645	284.0 - 289.0	5.0'	80	.8	98

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL			
									Sample No.	INTERCPT	CORE LENGTH	OPT. Au	GAT Ag	Pb (PPM)	
17		100	.75		<p>1cm wide QTR = BROWN COAR VEINLET @ 45° TO C.A. @ 268.8</p> <p>POPLIVIC ANDSITE DYKE</p> <p>(WEAKLY) ALT'D CRS GR. HINBLD GRANODIORITE</p> <p>DARK GREEN AMPHIBLE + ANDESITE W/ 1% FINE - MED. GR. PLAGIOCLASE PENCROVTS, CONTACTS SHARP @ 30° TO C.A., MAGNETIC, MUR CALCITE STRINGERS</p> <p>SIMILAR IN GENERAL TO ABOVE GRDR; SIGNIFICANTLY FRESHER; CHLORITE ALIN OF HINBLD. MOD; MICA FRESH; FELDSPAR FRESH TO WEAK SERICITE AT FRACTURING; MAGNETIC</p> <p>298.5 - 306' SUBROUND ZENOLITHS OF MICRO GRANODIORITE TONALITE</p> <p>309.6 - 317.0 - CALCITE/ZEOLITE? VEINLET <1cm - 2cm WIDE @ ~85° TO C.A., VUGGY IN PLACES, SURROUNDING GRDR. CLAY/CHLORITE ALT'D.</p> <p>317.0 - SERICITE - PALE TAN CENT? ALT'D V. STRONG ENVELOPING FRACTURES; QTR VEINETS LOCALLY</p>	0.1% DISSE FOR PY		290							
18		98	.74					305	3646	309.7 - 309.1	4.3'	2	.1	5	
19		97	.87					325							
20		99	.71					358.0							
					<p>358.0 - 359.0 - POPLIVIC ANDSITE; DARK GREEN V. FINE GRAINED W/ CALCITE ALT'D? PLAG PENCOS (<1/2cm) AND DARK ANDSITE? PENCOS. (<1/2cm)</p>			355							

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL				
									Sample No.	INTERCEPT	CORE LENGTH	PPB GPT Au	PPM GPT Ag	Pb (PPM)		
21			93	85	CONTACTS SHARP @ ~80° TO C.A.; W/ 1" SERICITE CBMT ALTN ENVELOPE; MAGNETIC.			365								
					371.0-371.6 - CALCITE VEINLET (0.5cm wide) @ 25° TO C.A.			370								
					376.0 - QTR VEINLET 4mm WIDE @ 70° TO C.A. W/ 2" SERICITE-PYRITE HALO (1% PY), ALSO ~ 0.1% FINE GRAINED GALENA. ASSOC'D W/ PYRITE.	1% CRS PYRITE & 0.1% FINE GALENA IN QTR STRINGER.		375	3647	375.5-376.5	1.0'	6	.1	17		
22			93	65	382'-398' ALTN VARIES FROM WEAK TO STRONG (SERICITE/SILICA/PYRITE) ADJACENT TO QTR VEINLETS. ALSO FRACTURING & CLAYEY PALE GREEN SERICITE ALONG FRACTURES COMMON (QTR VEINS @ 382.5' 386.8 @ 30° & 30° TO C.A.)			380								
								385	3648	382.1-387.8	5.7'	71	.1	13		
23			100	65	DARK GREEN MICRO-GRANODIORITE FINE GRAINED, DARK GREEN W/ MINOR CALCITE STRINGERS, APPEARS TO APPROX. GRANODIORITE COMPOSITION UNLN CONTACT SHARP @ 37° TO C.A., SLIGHT DIPA OF MICRO GRD. FRACTURE 50°-70° TO C.A. LOWER CONTACT BROKEN	1% CRS PYRITE PATCHES IN H.W.		390								
					WEAKLY ALTD CRS GR HNBLED GRANODIORITE SIMILAR IN GENERAL TO GRD ABOVE; GENERALLY FRESH W/ WEAK (SERICITE ALTN OF HNBLED), CALCITE STRINGERS W/ ASSOCIATED PYRITE - EPIDOTE & SERICITE/CHLORITE; WEAKLY MAGNETIC.	MINOR PYLITES, WEAKLY ALTD		400								
24			94	75				405								
								410								
								415								
								420								
								425								
25			100	88	430.5-431.5 - RUSTY FRACTURES W/ CHLORITE/CLAY ALTN & CALCITE VEINLET @ 15° TO C.A. (CGS)			430								

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL	
									Sample No.	INTERCUT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
26		97	84		450.0 - SERICITE / QTE / PY ALTN ± CHLORITE / ASSOCIATED W/ NARROW CALCITE / QTE STRINGS & VUGGY REOLITE? ENCRUSTED FRACTURES RUNNING TO C.A.	0.1% - 0.5% FINE-MED PYRITE ASSOC. W/ ALTN.		440 445 450 455 460 465 470 475 480 485 490 495 500 505					
27		98	65		469.0-469.0 - CALCITE / REOLITE? ENCRUSTED FRACTURE @ 10° TO C.A. 471.2 - QTE / HEMATITE VEINLET (0.5cm) @ 30° TO C.A. W/ ENCRUSTING SERICITE / QTE / PY ALTN 478.2 - SIMILAR W/ @ 35° TO C.A. 483.5 - GRDL. DISTINCTLY LESS ALTD AND FRACTURED DOWN HOLE (HEAVILY MAGNETIC)	0.5% PY AT VEIN							
28		98	84										
29		99	97										

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL						
									Sample No.	INTEREST	CORE LENGTH	PPB OPT. Au	PPM GFT Ag	Pb (PPM)				
								515										
					WHITE DARK GREEN ANDESITE: <small>MINORITE W/ MAX PLAG. PHENOS. 0.1% DISSEMINATED PYRITE, LATE QUARTZ STIPPLES TO C.A., LOWER CORE</small>			520										
30		98	80		WEAKLY ALTD CRS GR. HMBLD GRANODIORITE AS ABOVE; EPIDOTE FRACTURES			525										
					PORPHYRITIC MICROGRANODIORITE MED-DARK GREEN FINE GRAINED, W/ MED GRAINED WHITE <small>PLAGIOCLASE</small> & DARK GRN HMBLD PHENOCRYSTS - PHENOCRYSTS INCREASE IN NUMBER & SIZE AWAY FROM UPPER CONTACT. MINOR SHARP, THIN CALCITE STRINGERS, AND MINOR PYRITE PATCHES LOCALLY; (QZ CONTENT SEEMS TO ↑ WITH PORPHYRITIC TEXTURE) CALCITE STRINGERS & CHLORITE ACT'N AT UPPER CONTACT.			530										
								535										
31		98	77					540										
								545										
								550										
								555										
32		95	66		563.5 - CALCITE/ZEOLITE? WEINLET (R. 1cm) @ ~30° TO C.A. LOWER CNTC FAINT BUT SHARP @ 40° TO C.A.			560										
					FINE GRAINED GRANODIORITE MED COARSE, SPECIALLY FINE GRAINED, EQUIGRANULAR, WEAK CHLORITE ALTN; MINOR FINE GRAINED WHITE TRUSCHNET; MINOR CALCITE STRINGERS; EPIDOTE - CALCITE ALTN LOCALLY INTENSE			565	8649	566.0-568.3	2.3	8	.1	13				
								570										
33		100	57		566.0-568.5 - INTENSE EPIDOTE - CALCITE ALTN; CALCITE PATCHES UP TO 3cm DIA 571.0 - QZ-CHLORITE WEINLET (0.5cm) @ 50° TO C.A. 580.2-580.4 - QZ xenolith (?)			575										
								580										

Tr - 1%, 4mm rusty py at edges of xene.

09199

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
34			97	.84	becomes finer grained at depth.			590					
					- 598.3 - Epidote-calcite veinlet & stockwork at @ 40° to C.A. contact slightly bx & chloritized, at 55° to C.A.	1% \leq 0.5mm subhedral δ ss py		595					
35			97	.84	599.5 COARSE GRAINED HORNBLende GRANODIORITE As before. Predominantly fresh. Minor kalt & Epidote veins.			600					
								605					
					611.0 E.O.V.			610					
								611					

OMNI RESOURCES INC.

DIAMOND DRILL HOLE LOG

PROJECT <u>CHARLESTON</u>	HOLE No. <u>87-53</u>
COORDINATE N. _____	DEPTH _____
E. _____	AZIMUTH <u>295°</u>
ELEVATION _____	INCLINATION <u>-45°</u>
DATE STARTED <u>AUG. 15, 1987</u>	DRILLED BY <u>CARON D.D.</u>
COMPLETED <u>AUG. 17, 1987</u>	ASSAYED BY <u>ACME</u>
HOLE SURVEY _____	LOGGED BY <u>HUGH MACKINNON</u>

Reason for Drilling <u>TEST GEOCHEM SLAY S. OF TRENCH #2 ON CHARLESTON S. GRID</u>	LEGEND							
Explanation of Results <u>VEIN FAULTED OFF AT DEPTH ?</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"><u>Granodiorite</u> </td> <td style="width: 33%;"><u>Andesite</u> </td> <td style="width: 33%;"><u>Basite</u> </td> </tr> <tr> <td><u>Andesite</u> </td> <td><u>Basite</u> </td> <td><u>Basite</u> </td> </tr> </table>	<u>Granodiorite</u>	<u>Andesite</u>	<u>Basite</u>	<u>Andesite</u>	<u>Basite</u>	<u>Basite</u>	
<u>Granodiorite</u>	<u>Andesite</u>	<u>Basite</u>						
<u>Andesite</u>	<u>Basite</u>	<u>Basite</u>						

BOX	Run	Core	%R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. A ₈	O.P.T. A ₉
					0-10' CASING		CASING						
10					10' DARK GREEN ANDESITE		10'						
	13				V. fine to fine grained plagioclase xtals in a v. fine grained matrix; Non magnetic. Mostly blocky & broken w/ fractures at 10-20° & 45° to C.A. Minor calcite & epidote veins.								
		2.5											
	15.5				-15.8-16.9' Calcite breccia at 10-15° to C.A. w/ ±13mm angular andesite fragments.								
		4.5											
20	20				19.5' COARSE GRAINED HORNBLLENDE GRANODIORITE		20'						
		2			25-30% ±13mm hornblende ^{subhedral to subhedral} xtals, 15% 1-4mm Qtz xtals ~35-40% plagioclase & ~20% K spar. Minor biotite & magnetite.								
	22												
		2											
	24				Upper portion weak to moderate K & epidote alt'd, either pervasive or as alteration along fractures.								
24.8	27				-25.0-25.5' Intense epidotization along vein L21		24.8'						
		5											
30	30						30'						
		4											
	34				-33.8-35.4' moderate propylitic alt'd		34'						
		4											
					-37.0-38.1' Intensive epidotization, mostly as fine grained siliceous vein at 10-20° to C.A.		37.0'						

091991

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL					
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag				
2	38	1						40									
	40	4															
	43	5															
3	48	2			-47.1-48.2: mafic xenolith (magmatic segregation?)												
	50	5															
	55	2															
	57	3			-58.8-59.1: 3.5mm Qtz vein												
	60	5			-61.0-61.2: Small irregular shaped xenolith	tr cpy											
4	65	5															
	70	5			-66.3-66.7: mafic xenolith (?)												

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag	
		5			-76.4 - 77.3: Strongly epidotized grading to chloritized toward contact. Calcite-Qtz veins at contact. Contact broken @ 30° to C.A. 77.3 DARK GREEN ANDESITE As before, slightly magnetic toward base. Calcite veined & fractured at 30° to C.A. at top of unit. Fine grained at depth. 79.3 sharp contact 20-30° to C.A. minor xenoliths COARSE GRAINED HORNBLENDE GRANODIORITE As before									
		5			-83.7-84.5: Moderate K & weak epidote alt'd around Qtz un, at 20° to C.A.									
		5			-85.3-88.5: Dark gray strongly propylitic (?) alt'd. May be a xenolith or magmatic segregation.	Tr py								
		5.5			K alt'd at contact 92.2 Lower contact sharp 100° to C.A. DARK GREEN ANDESITE As before; becomes porphyritic at depth 93.0-94.3: Scleritic alt'd silicealt'd & brecciated 94.3 lower contact sharp 20° to C.A.									
		4			COARSE GRAINED HORNBLENDE GRANODIORITE As before 95.0-95.5: magtic xenolith or magmatic segregation 97.6-97.9: " "									
		6			Few fractures, 107.4 Sharp contact at 70° DARK GREEN PORPHYRITIC ANDESITE 10% 4mm plg phenos in an aphanitic matrix 108.0 sharp contact at 50° COARSE GRAINED HORNBLENDE GRANODIORITE As before									

Scale change 1"=10'

091991

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL			
									Sample No.	INTERCEPT	CORE LENGTH	P.P.T. Au	G.P.T. Ag	Pb (ppm)	
	119	5						120							
7	124	5			-124.0 - 125.0: K alt'd around 3mm epidote vein at 10 to 60.			120							
	125.5	5.5						130							
	134.5	5						140							
8	140	5.5			-142.2: Mod. propylitic alt'd band			140							
	143	3						mid							
	147.5	4.5						150							
	150	2.5			-149.6 - 158.6: Mod. propylitic alt'd w/ crumbly core. Weak argillic alt'd. minor g.v.			150							Scale change 1" to 5'
9	151	1						mid/weak	8626	150'-152'	2'	11	.5	24	
	153	2				tr py			8627	152'-154'	2'	8	2.1	342	
	155	2							8628	154-156.5	2.5	42	3.1	24	
	157	2													
	160	3			-159.4 - 160.0: Alt'd contact. Fe ²⁺ ox. & carbonate stringers, brecciated (?), sericitized & chloritized	tr py		160							
	162	2			160.0 DARK GREEN ANDESITE & FN. GR. DIORITE (?)			mid	8629	160-161.5	1.5	64	.6	22	
	163.8	4			-160.0 - 163.0: Chloritized & carbonatized w/ calcite &/or Qtz vein. Very broken core, some fault gouge?				8630	161.5-163	1.5	5	.4	6	
	166	3			-163.0 - 166.0: As above but w/ 1.5cm Qtz-chl veins. Dark brown coloration - wad?	1% subhedral 0.5mm py			8631	163-164.5	1.5	1	.8	7	
	169	3			-166.0 - 168.8: Fine grained diorite (may be an andesite), 40% 5.5mm plag. x'tals, 50% mafics < 10% Qtz.				8632	164.5-166	1.5	225	1.5	36	
170	168.8	1			168.8 COARSE GRAINED HORNBLANDIC GRANODIORITE			170							
					-169.6: Qtz-carb vein 3mm, K alt'd around vein										Scale change 1" to 10'

091991

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			PPM ANALYTICAL				
									Sample No.	INTERSECT	CORE LENGTH	Q.P.T. Au	Q.P.T. Ag	PL (PPM)		
10	185	5			As before, minor Kalt'd at top. Very few fractures; minor hematite along fractures											
11	185	5			-185.3 : Crumbly core along fracture at 70° to C.A.											
190	188.6-190.3	5			-188.6-190.3 : med to strong propylitic & weak argill. alt'd around 3.5 cm qtz-hematite-ankerite(?) chlorite vein at 30° to C.A.			180	8633	188.5-190.5	2'	3	.1	5		
200	198.3-198.6	3			-198.3-198.6 : Sericite-clay altered gouge(?) seam at 55° to C.A.			190								
210	206.0-207.3	5			-206.0-207.3 : Fe & chl alt'd around a sericite fracture at 15° to C.A. & a 1mm qtz-chl vein.	tr py		200								
210	208.4-208.6	5			-208.4-208.6 : Qtz-calcite un at 55° to C.A.	1% 605mm py		210								
212	214.0	5			-214.0 : 3mm calcite-sericite un at 50° to C.A.	tr py		220								
213	218.8-219.0	5			-218.8-219.0 : 5mm qtz-calcite un at 70° to C.A.	tr-1% 0.5-1mm py		220	8634	218-220	2'	4	.1	7		
216	220.0-220.1	5			-220.0-220.1 : 1.5cm qtz-albite(?) un ⊥ to C.A.	tr py		220 weak/mod	8635	220-224	4'	5	.2	5		
	220.5-223.4	5			-220.5-223.4 : Calcite-sericite, chlorite & qtz-chlorite veins & fracture fillings up to 2cm wide. Variable orientation. Weak to moderate propylitic alt'd.				8636	221-225.8	1.8'	6	.6	4		
	225.8	2			MIXED DARK GREEN ANDESITE & FN. GR. DIORITE			230								
230	230	3			Very fine grained to aphanitic & weakly porphyritic andesite & diorite w/ 5mm plagioclase inclusions in matrix.											
	231.3-231.6	5			-231.3-231.6 : calcite veined & Fe spotted in gr. diorite											
	233.3-235.2	5			-233.3-235.2 : Fe spotted & chl bleached diorite w/ vuggy calcite un at 234.8											
240	239.0-239.8	5			-239.0-239.8 : Lower contact calcite veined, bleached & weakly brecciated andesite.											
	239.8	5			Sharp but broken at 55° to C.A.											
	242.0-243.3	5			COARSE GRAINED HORNBLende GRANODIORITE											
	242.0-243.3	5			-242.0-243.3 : Propylitic alt'd around qtz-calcite hematite vein				8650	242-243	1'	2	.1	7		

091991

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
		5			Granodiorite as before; occasional epidote units & epidotization and kaalteration around unit. Minor weak to moderate propylitic alteration			250					
		5			minor calcite & chlorite veinlets. Few fractures & excellent recry			255					
		5						260					
		5						265					
		5						270					
		5						275					
		5						280					
		5			-278.0 - 281.0; chlorite stringers, of variable attitude, & weak to moderate propylitic alt'd.			285					
		5						290					
		4						295					
		2						300					
		5						305					
		5						310					
		4						315					
		4.5						320					
		4						325					

-278.0 - 281.0; chlorite stringers, of variable attitude, & weak to moderate propylitic alt'd.

-287.3 - 287.5; med grained mafic gd xenolith

-293.5 - 295.7; mafic gd xenolith (?) or prop. alt'd gd
-298.2; calcite epidote un w/ kaalteration halo

297.0 Sharp contact at 70° to C.A.
MIXED DARK GREEN PORPHYRITIC ANDESITE & DARK GREY DACITE PORPHYRY.
At upper & lower contact porphyritic andesite grades into dacite porphyry. Andesite has 5-7% euhedral to subhedral 0.5-3mm plagioclase laths in an aphanitic to fi. fr. gr matrix, dacite is hard w/ 226-6mm euhedral (weakly sericitized) plag. phenocrysts, 5% mafic (chlorite, biotite & magnetite) phenos. in an aphanitic matrix. Both weakly magnetic. Amygdaloidat & vesicular at lower contact.
309.2 Sharp at 70° to C.A.

COARSE GRAINED HORNBLENDE GRANODIORITE
Granodiorite predominantly fresh.

-309.5 itrop. alt'd around 2mm un.

1% subhedral to euhedral
diss. PY.

tr py

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE			ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
		5'			Occasional xenolith								
	325												
					330.0 E.O.H.		E.O.H.						

Property ISLAND MINE - JL CLAIMS. NTS 105 D/2 Claim JL Elevation 3700' Azimuth 219° Length 311' (94.8m) Dip -50°
 Coordinates 2725N/3710E Dip Tests - Advance 199.9' Depth 238.2' Date Collared July 7, 1987 Date Completed July 9/87
 Purposes Test Wheelbarrow Zone under old workings; ^{visible gold in} quartz on dump Drilled by CARON D.D. Assays by ACME LABS Logged by T.M.E.

Interval From To	Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	AGD + % Recovery by A.M.E.	
					From	To		Ag (oz/t)	Au (oz/t)
0 34' (10.36%)			CASING - pebbles and small pieces of core recovered.						
0 51	25	0	Mainly SILICIFIED GREEN ANDESITE Tuff.						
51 55	0	0	occasional 2-3mm carb (some calcite) veins; up to 5-10% lapilli (1cm frags)						
55 66	45	0	at 15' = Several fragments of rusty RHYOLITE						
34 66' (20.12%)			OVERBURDEN - pebbles and gravelly soil of mixed Andesitic Tuff and Rhyolite. 51-55' = no recovery → wasted hole						
66' 75.5' (23.01)	70	.20	FELSIC TUFF - rusty gray; 1-2mm sand-sized frags; occasionally lapilli to 1cm across. 71.5-73.2 = fault gouge; only minor fine dissem. py. From 73.2' - tuff becomes very fine and soft; medium brown colour. Lower contact is fault gouge for 0.15'; gouge is 65° to core axis						
75.5 77.0' (23.47)			LIGHT GRAY, QUARTZ-VEINED F.G.R. RHYOLITE	8411	75.5	77	1.5'	Assay Au, Ag	0.01 0.001
75.5 85.5	70	.15	- many hairline to 2mm Q vns w/ local dissem. pyrite (some cubic); also tension gashes filled w. quartz. Broken lower contact.						
85.5 97.0	75	.10							
77.0' 98.0'			RUSTY GRAY TO DARK GRAY FELDSPAR PORPHYRY						
97 104	70	.40	- 10-15% 1-4mm white feldspar pieces in an aphanitic groundmass. - very hard? silicified? - some hairline - 1mm Q vnlts 85½ - 89½' = bleached selvages along occas. Q - Py veins 90.5' = 0.1' of fault gouge at 80° to c.a. 92-98' = strongly fractured zone; some brecciation	8412	85.5	90.5	5'		0.01 0.001
					85.5	90.5			

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DIAMOND DRILL LOG

HOLE No. 87-WB #1

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Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width		
From	To					From	To		Ag (oz/t)	Au (oz/t)
98.0'	116'			MASSIVE, GRAY MEDIUM GR. GRANODIORITE - upper contact broken - 5% chloritized shabby matrix - grain size 1-2 mm 101.6 - 104' = BLUFF APHANITIC RHYOLITE - broken contacts w. granodiorite; 0.3' of fault gouge near lower contact. 104.3' = Q-Chl. vn. at 45° to c.a.; approx 2mm 114-115' - becomes bleached near lwr. contact.						
104	120	90	0.65							
116'	138'			LIGHT BROWN RHYOLITE PORPHYRY - 20-25% 1-2mm. white feldspar phenos in an aphanitic matrix - 116'-117.5' = several 2-4mm Q vn. w. minor pyrite near upper contact (? attitude of contact?) - 126-130' = brecciation w. minor rotation of frags. - rhyolite is locally f.g. (1-2mm) equigranular; i.e. texture is variable. - 135.7' = creme carb. vn. at 75° to c.a. (1-2mm across) - 137' = Q-Py vn. at 45° to c.a. (2-3 mm. vult.)						
120	145.25	70	0.22							
138'	140'			M. GR. GRANODIORITE - locally silicified - broken contacts; possibly an inclusion.						
140'	145.5'			LIGHT BROWN RHYOLITE PORPHYRY - as from 116-138'						
145.25	160.5	95	0.55	- 143' = 2 cm. fault gouge at 20° to c.a.						
145.5	154.5			M. GR. GRANODIORITE - 12 one to five mm Q - Carb ± Chl ± py vns 30-60° to c.a. Visible galena near lower contact at 45° to c.a. axis.	8413	145.5	150.5	5'	0.01	0.001
160.5	166	85	0.31		8414	150.5	155.5	5'	0.01	0.001
166	177	95	0.55							
154.5	186.5			LIGHT BROWN RHYOLITE PORPHYRY - 155.8' = 2mm-4mm Q vn w. Py - galena	8415	155.5	160.5	5'	0.05	0.005

DIAMOND DRILL LOG

HOLE No. 87-WB#1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Ag (oz/t)	Au (oz/t)
From	To					From	To			
177	179	65	0.27	160.5 - 165.5' = Five 1-3 mm. Q vns. mainly at 30° to c.a. Minor galena in 1 vein. 164' - 166' = Strong fracturing w. some fault gouge 165.5 - 170.5' = Four 1-4 mm. Q vns. w. some pyrite; one vein has minor galena. 170.5' on = occas. Q ± Py vnts. 183.5 - 184.5' = Brecciation & fault gouge; 4mm carb. vns in shear at 70° to c.a. 185.3' = dissem. py. in rhyo.	8416	160.5	165.5	5'	0.05	0.001
186.5'	199'	85	0.36	MEDIUM GRAINED GRANODIORITE - same as previously logged. - bleached to 194' - 2 Q-py vns (1-3 mm) at upper contact.						
199'	238'			GRAY RHYOLITE PORPHYRY - 10-15% 4mm feldspar laths (subhedral to euhedral). Feldspars are mainly fresh 20' - feldspar phenos become smaller → 1mm. (25-30% by vol.) ; aphanitic gdmass - commonly tiny Q - Py vnts. - 212.5' = bleached (1cm) fractures - 213' = "large" phenos again - 216' - 217' = fault gouge at 35° to c.a. - 221.5 - 226.5' = abundant Q - Py vns at 20-60° to core axis; overall 1% dissem. pyrite.						
215	229	97	0.32	* - 229.5' - DRILLERS REDUCED TO NQ core. - 228.5' - 228.7' = inclusion of green ANDESITE. After the inclusion, rhyo is strongly shattered and locally brecciated w. abund. tiny (hairline to 1mm) Q and Py vnts	8418	221.5	226.5	5'	0.02	0.001
229	247	70	0.34		8419	226.5	228.7'	3.2'	0.02	0.001
					8420	228.7'	234.7'	5'	0.01	0.001
					8421	234.7'	238'	3.3'	0.01	0.001
238'	243'			BANDED ANDESITIC THUF ctg. numerous carb. - Q vns parallel to foliation (45° to c.a.) - lwr. contact at 60° to c.a.; upper cont. 50° to c.a.	8422	238	243	5'	0.01	0.001
243'	247'									
247'	247'									
									0.01	0.002

DIAMOND DRILL LOG

HOLE No. 87-WB 1.

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Ag (oz/t)	Au (oz/t)
From	To					From	To			
				sheared at 60° to c.a.	8424	247'	252' 76.80	5'	0.02	0.002
247	255.7' (77.93)			GREEN MASSIVE ANDESITE -251.6' = 2cm. white to creme Q - Carb. in at 45° to c.a.	8425	252'	257' 76.33	5'	0.01	0.001
247	274	87	0.60	- abundant hairline to 1mm calcite vults throughout.						
255.7'	260.6' (71.43)			COARSE GRAINED AUGITE ANDESITE w. a "blotchy" texture. - UNIT 3e → blotchy texture caused by 40-50% 2-5mm glomeritic? feldspars? - irregular upper contact.	8426	257'	262' 78.32	5'	0.01	0.001
260.6'	275.9' (84.71)			FOLIATED GREEN ANDESITE - foliation 45° to c.a.	8427	262'	267' 81.38	5'	0.02	0.001
274	288	75	0.16	- abundant calcite veins parallel to foliation, perpendicular to fol'n and running down core axis.	8428	267'	272' 82.94	5'	0.02	0.001
275.9'	288' (87.73)			STRONGLY FRACTURED, PINKISH BROWN RHYOLITE PORPHYRY. - occasional hairline - 1mm Q ± Py vults. - broken contacts - ? attitude.	8429	272'	275.9' 84.07	3.9'	0.03	0.001
288'	295.9' (90.15)			GREEN ANDESITE - locally rusty - fol'n locally 35° to c.a.						
288	296	90	0.75	- abundant calcite stringers and gash vults from 292-295.9'; Assay if other similar And. "Kicks!"						
295.9'	302.7' (97.00)			RUSTY ALTERED RHYOLITE - fgn. texture						
296	301	65	0.09	- lower contact 60° to c.a.						
302.7'	311' (94.79)			CALCITE - VEINED GREEN ANDESITE - tuffaceous; foliation 45° to c.a.						
301	311	85	0.56							

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width		
From	To					From	To		Au (oz/ton)	Ag (oz/ton)
0	16'			Casing						
16'	72'			OVERBURDEN						
				Broken core of predominantly intermediate lapilli tuff w/ < 5% tuff breccia. Limeritization along fractures. 66-71' Core lost.						
72'	80'6"			INTERMEDIATE (ANDESITIC) LAPILLI TUFF						
		25	0.05	Dark brownish green, 7% fragments commonly < 6mm. Weak to mod. chloritization + limeritization. Lower contact broken.						
				Switch to NQ						
80'6"	111'			MEDIUM GRAINED QUARTZ MONZONITE						
		90	0.30	Brownish green to greenish grey, 3% mafics - chlorite, 7% 1-2mm Ksp phenocrysts, remaining xtls ave 1mm. Variable amount of limeritic alteration, either as pervasive up to 15%, or fracture filling. 1% fractures, commonly 5-10°, 40-45° and 80° to CIA. < 1% q.v., trace py. Minor carb and/or argillie alteration along fractures.						
				- 91' - 91'10", 101 - 101'5", 107'5" - 108'	8451	90'10"	91'10"	1'	.002	.02
				≅ 1cm qtz veins with albite(?) and calcite rims. ≅ 2mm subhedral to euhedral py in & adjacent to veins.						
93	118.5	90	0.20	- 109' - 109'6" Strong argillie + carb alteration + accumulation along fractures.						
				Lower contact broken						

DIAMOND DRILL LOG

HOLE No. 87-W32

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Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
111'	116'			RHYOLITE - FELDSPAR PORPHYRY Light pinkish brown, porphyritic with 5% 1mm plagioclase phenocrysts in an aphanitic matrix, moderately silicified; 2-5% fractures w/ thin white halo around + limonite + calc infilling fractures; variable fracture orientation. Trace py. Mostly broken core, contact broken				
116'	125'			MEDIUM GRAINED QUARTZ MONZONITE				
118.5'	121'	90	.35	As 80'6" - 111' but 50% of core is limonitically bleached + more stringy limonitized fractures. Lower contact limonitically altered + fine grained irregular 55-63° to C.A. 112'-112'6" @ 2 vein tension gash infilling with 20% chlorite trace py.				
125'	126'			RHYOLITE - FELDSPAR PORPHYRY Brownish grey, with 1-2mm plagioclase phenocrysts in an aphanitic matrix. 5-6% pervasive or fracture filling limonitization. 1% disseminated py.				
126'	131'3"			MEDIUM GRAINED QUARTZ MONZONITE As 80'6" to 111'. Contact with unit above + below broken. - 127'-127'3" 2-3mm quartz-chlorite vein 25-30° to C.A. w/ 5% subhedral py.				

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DIAMOND DRILL LOG

HOLE No. 87-WB2

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/t)	Ag (oz/t)
From	To					From	To			
131'3"	140'			RHYOLITE PORPHYRY	8452	136'7"	137'7"	1'	.001	.01
				Pinkish brown to light brown, 1mm subhedral plag. phenocrysts in an aphanitic matrix, 1% py along fractures & trace diss. py. Weak silicification & limonitization. Minor < 1mm gr. w/ 1% subhedral py. Lower contact broken.						
140'	151'2"			MEDIUM GRAINED QUARTZ MONZONITE						
				Greenish grey, with 35% 1-3mm feldspar phenocrysts in a matrix of 1mm aq. feldspar + qtz + chlorite. 2% 6 to 10mm chlorite patches. 2-10% limonite bleaching, increasing toward both contacts. Strong carb along fractures. Trace py. & 1% 5mm qtz + chlorite + calcite veins. Lower contact broken.						
151'2"	173'			QUARTZ VEINED RHYOLITE PORPHYRY	8453	151'2"	159'	2' 10"	.001	.03
					8454	154'	156'6"	2' 6"	.001	.04
					8455	156'6"	158'	1' 6"	.004	.05
151	165	100	0.222	Light greenish brown to pinkish brown, but variable w/ 10% 1mm aq. plagioclase phenocrysts, 1-2% qtz veins up to 2mm wide, with a band of silicification & pyritization (vete 5%) surrounding vein. Weak chloritization in places & pervasive weak to moderate or fracture filling limonitization. Minor 1% magnetite (?) in chloritic areas.	8456	158'	163'	5'	.001	.01
					8457	163'	168'	5'	.004	.03
					8458	168'	169'	1'	.011	.04
					8459	169'	173'	4'	.004	.04
165	179	82	0.75	- 157.5' + 168-169 3% galena (molybdenite?) 1% sphalerite, 5% pyrite qtz vein & fracture. Variable orientation 15-20° to CIA. Lower contact irregular, mostly broken core.						

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DIAMOND DRILL LOG

HOLE No. 87-WB2Page 4 of 10

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/t)	Ag (oz/t)
From	To					From	To			
173'	176'6"			MEDIUM GRAINED QUARTZ MONZONITE						
				Greenish grey, bleached (by limonite) pinkish brown toward contacts. Moderate to strong chloritization, with 2% 9mm chlorite patches, 3% disseminated biotite (magnetite?). Lower contact 42-47° to C.A.						
176'6"	185'			MIXED QUARTZ MONZONITE + ALT'D RHYOLITE						
177'	200'	95	020	Pinkish brown qtz monzonite + light greenish to pinkish brown rhyolite, moderate Fe carb, limonitic and/or sericitic alteration, Rhyolite moderately silicified, 2% py in fractures + ≤ 2 mm q.v. toward lower contact, weak carb in fractures	8460	182'6"	185'	2'6"	.001	.01
185'	199'			RHYOLITE PORPHYRY						
				Light pinkish brown turning to light greenish brown toward lower contact or buff light brown where strongly alt'd, 5% ≤ 1 mm alk. plag phenocrysts in an aphanitic matrix, 1% diss py, up to 2% py along fractures +/or q.v., Qtz veinlets comprise 5% of v. are commonly 0.5 to 2mm wide + 25° to C.A., Fractures + q.v. up to 10%ankerite(?) or limonite + surrounded by a silicification halo.	8461 8462	191 196	196 199	5' 3'	.001 .001	.03 .03
199'	207'4"			ALT'D MEDIUM GRAINED QUARTZ MONZONITE						
200'	213'	92	0.58	Dark green where strongly chloritized + pink to greenish brown where bleached (by Fe carb or limonite), 2% fractures or qtz veinlets, 1% diss py. Lower	8463	202'4"	207'4"	5'	.001	.01

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DIAMOND DRILL LOG

HOLE No. 87-W32Page 5 of 10

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/t)	Ag (oz/t)
From	To					From	To			
				contact irregular 15-70° to C.A.						
207'4"	212'			QUARTZ VEINED & ALTERED RHYOLITE PORPHYRY						
				Grades from dark pinkish brown to pinkish brown then brownish white toward lower contact. 5-10% plagioclase phenocrysts varying from $\leq 0.5\text{mm}$ to 4mm in an aphanitic matrix. 1-20% qtz veins & veinlets from 1mm to 25mm. Poor (1%) to very well (15%) fractured zones. Fe-carbonate (ankerite), calcite & chlorite accessory (up to 30%) minerals in veins & fractures. 1-2% diss py, up to 5% subhedral to euhedral $\leq 1-2\text{mm}$ py & trace gn in veins & fractures. Several sericitic alt'd, fault gouged & argillic alt'd gouge zones						
213	212	92	0.58							
				-207'4" to 213': Chloritized & limonitically bleached coarse ($\leq 4\text{mm}$) porphyry. Few veins, up to 3mm, 25-30° to C.A. weak to med carb alt. along fractures. 1-2% py.	8464	207'4"	210'	2'8"	.001	.02
					8465	210	213	3'	.001	.02
				-213' - 214': Broken core						
				-213' - 219': Pink to pinkish brown, QFP (?) w/ 3-7%, 1-5mm qtz of several generations. Sericitized toward base.	8466	213	216	3'	.001	.04
					8467	216	219	3'	.001	.01
				-219' - 221' 6": Pinkish dark brown, silicified (?) & fractured qtz-ankerite-chlorite & limonite veins up to 5mm. 5% py in veins, trace gn.	8468	219	221'6"	2'6"	.007	.01
				-221'6" - 223': $\leq 25\text{mm}$ qtz vein w/ 15% chlorite, 2-7% ankerite, 10% albite (?) 1-3% $\leq 4\text{mm}$ euhedral py, & trace gn	8469	221'6"	223'	1'6"	.335	.11
				-223' - 229': Pale reddish brown, well fractured, w/ small fractures 60-70° to C.A. & larger fractures & veins 10-40° to C.A. 2 or more generations of veins 5mm offset	8470	223'	226'	3'	.006	.03
					8471	226'	229'	3'	.001	.02

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DIAMOND DRILL LOG

HOLE No. 87-WB7

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/ton)	Ag (oz/ton)
From	To					From	To			
				of several gray veins by white qtz carbons. 2% VOS = 1cm, similar composition to above.						
				- 229' 1" sericitically altered band						
				- 229' 1" - 235' 8" : Grades from 6" sericitic schist (shear) at 70-80° to CIA, to	8472	229	230	1'	.001	.02
				pyritic (5%) fractured, silicified & Fe altered	8473	230	231' 6"	1' 6"	.001	.01
				2' band into a pinkish brown silicified porphyry w/ 1% pyx.	8474	231' 6"	235' 8"	4' 2"	.003	.01
				- 235' 8" - 239' 1" : Light brown, well silicified, < 1% py, few fresh plg phen.	8475	235' 8"	239' 1"	3' 4"	.001	.05
				- 239' 1" - 242' 1" : Weak carb + strong argillic altered particularly along fractures, lower contact irregular @ 40° to CIA, partially chloritized	8476	239' 1"	242' 1"	3'	.001	.01
242' 1"	248' 6"			INTERMEDIATE (ANDESITIC) TUFF (?)	8477	242	248	6'	.001	.03
248' 6"	249' 1"	79	0.80	Dark green, v. fine grained, 2-4% < 1-3mm fractures filled with calcite ± qtz. Moderately pervasive chloritization w/ chlorite ± limonite or ankerite (?) in veins or fractures,						
249' 1"	268' 1"			INTERMEDIATE (ANDESITIC) VOLCANICS						
				Dark green to green, aphanitic to fine grained (dioritic?) ground mass w/ 20-30% < 2mm augite phenocrysts. Moderately chloritized w/ 4% grading to 2% qtz or qtz + carbonate veins & fracture/tension gash fillings. Slightly foliated at 30°-40° to CIA at depth, w/ veins X cutting foliation.	8478	248' 6"	252' 1"	3' 6"	.001	.01
				- 248' 6" : 4" qtz (± chlorite) bx						
				- 253' 8" : strong carbonatization surrounding 1cm qtz ± carb vein						
				- 254' - 260' : "blotchy" texture light						

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DIAMOND DRILL LOG

HOLE No. BT-W32

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/t)	Ag (oz/t)
From	To					From	To			
				green feldspars (?) surrounded by augite (?) & chlorite x-tals; may be partially migmatized?						
				- 262'6" - 263'6" : Limonitically bleached surrounding a 1cm q.v. at 35° to C.A.	8479	262	265	3'	.001	.01
				- 265' : Well foliated & chloritized adjacent to 1cm q.v. at 20° to C.A.						
268'	271'			RHYOLITE PORPHYRY						
268	269	57	011	Dark purplish brown; 30% .5-2mm feldspar x-tals commonly altered in centre to sericite. Sericite & limonite along fractures. < 1% py. Blocky & broken, poor recovery.						
271'	280'6"	18	003	ALT'D & QUARTZ VEINED ANDESITE						
				Dark green for 60% of rx remainder is limonitically bleached. Quartz-calcite veins up to 2.5cm wide w/ largest to 20° to C.A. Very broken, only @ 18% recovery. Strongly carbonatized.	8480	271'	280'6"	9'6"	.001	.01
				(Only 18% rec'y)						
280'6"	285'			RHYOLITE PORPHYRY						
				As above; lower contact ^{sharp} @ 60° to C.A.						
285'	285'8"			ALT'D ANDESITE						
				As above; lower contact sharp 80° to C.A.						
289	314	98	0.44							

DIAMOND DRILL LOG

HOLE No. 87-WB2

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/t)	Ag (oz/t)
From	To					From	To			
285'3"	313'			FINE GRAINED GRANODIORITE (FELSITE)						
				- 285'3" - 300'6" : Buff pale yellowish green, more reddish for 40% where bleached by limonite, or greenish for 30% where chloritized. 25-30% \leq .5mm matrix minerals in chloritic zones @ 10% in silicified & sericitized parts. Few fresh feldspars 1% \leq 5mm fractures w/ calcite in filling. Trace py.						
				- 300'6" - 310 : N. fine grained, pale-green w/ occasional porphyritic phase. 6" m. gr. hornblende granodiorite at 301'6" vuggy, zoned - qtz - ankerite (?) - calcite fracture filling, occasional chloritic fracture. Fracture orientation commonly 10-30° to C.D. Trace diss py. mag, w/ 2% py in fractures.	8481	305	310	5'	.001	.03
				- 310 - 313' : Greenish white to greenish grey, w/ chloritized w/ depth; fine grained. Contact sharp 55-60° to C.A.						
313'	327'8"			ANDESITIC FLOW(?)						
				Dark green to green, moderately foliated at 70-80° to C.A. & moderately chloritized. Occasional (5%) bleaching, carbonatization (pervasive & fracture filling), and qtz veined.						
314	326	90	044	- 317-320' : Limonitically bleached, rubble core w/ poor rec'y						
				- 325'6" - 327'8" : Strongly foliated grading into a vuggy calcite vein then qtz veined unit. Qtz vns up to 25cm wide, white to dark grey. Becomes silicified at base. Foliation adjacent to q.v. 50° to C.A. Bx at 326' & lower contact. Lower contact sharp 70° to C.A.	8482	325'6"	327'8"	2" R"	.001	.01

001901

DIAMOND DRILL LOG

HOLE No. 87-W62

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	A ₀ (oz/t)	A ₅ (oz/t)
From	To					From	To			
323' 9"	348' 6"			RHYOLITE (felsite)						
326	348	97	0.14	Bluish light brown, v. fn. grained, 5-15% 1mm ic and/or feldspar pheno. weak sericitization chloritization & limonitic bleaching, 1% ≤ 2mm qtz & py vns. Lower contact sharp 70-75° to C.A.						
348' 6"	359'			INTERMEDIATE (ANDESITIC) VOLCANIC						
348	359	95	0.21	Green to dark green, "blotchy" texture, ≤ 15% hairline to 5mm carbonate vns & / fracture filling w/ occasional q.v. - 348' 6" - 350' : moderately foliated @ 60° to C.A. Lower contact sharp @ 60° to C.A.						
359'	369'			FINE-GRAINED GRANODIORITE (FELSITE) & QUARTZ PORPHYRY						
359	376	98	0.18	Greenish brown to buff brown; v. fn. grained, grades from chloritic altered to limonitically bleached qtz porphyry. 3% 1-2mm phenocrysts in an aphanitic to v. fn. grained matrix ≤ 1% qtz or py vns & fracture fillings. Limonitized along fractures. - 362' 6" & 368' 0" : 8mm bx bands at 65-85° to C.A. Lower contact sharp but irregular 30° to 65° to C.A.						
369'	375' 6"			RHYOLITE (PORPHYRY)						
				Dark purplish grey to greenish brown w/ 10-15% 1-2mm feldspar phenocrysts in an aphanitic matrix - 371' - 373' : moderately sericitized, with 5% ≤ 3mm quartz	8483	371'	373'	2'	.001	.01

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DIAMOND DRILL LOG

HOLE No. 07-WB2

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/t)	Ag (oz/t)
From	To					From	To			
				Core very broken.						
375'6"	385'6"			SHEARED INTERMEDIATE (ANDESITIC) VOLCANICS						
376	390	85	0.54	Dark green, sheared & contorted w/ most foliations at 30°-45° to C.A., 2% carbonate + qtz veins & fracture fillings. 2cm qtz at 377'. - 381' - 382' : Buff greenish grey rhyolite (may be silicified andesite?), well fractured w/ chlorite &/or limonite along fractures.	9494	376	378	2'	.001	.02
385'6"	393'			FINE GRAINED GRANODIORITE (FELSITE)						
390	408	94	0.15	Light greenish brown to buff brown, fine grained sub porphyritic to porphyritic - 3% .5 to 2mm chlorite laths or sericitized feldspars. - 389' - 389'6" : Purplish brown porphyritic rhyolite band.						
393'	406'			ALT'D AUGITE ANDESITE						
				Dark green, blotchy & contorted flow banded porphyritic textured, few fresh augite xtals moderate chloritization, 1% qtz &/or carb veins, 60-80° to C.A., Lim &/or hem along fractures, minor epidatization, - 403'6" - 404'6" : Strong carb alt'd, broken core - fault gouge?						
406'				E.O.H.						

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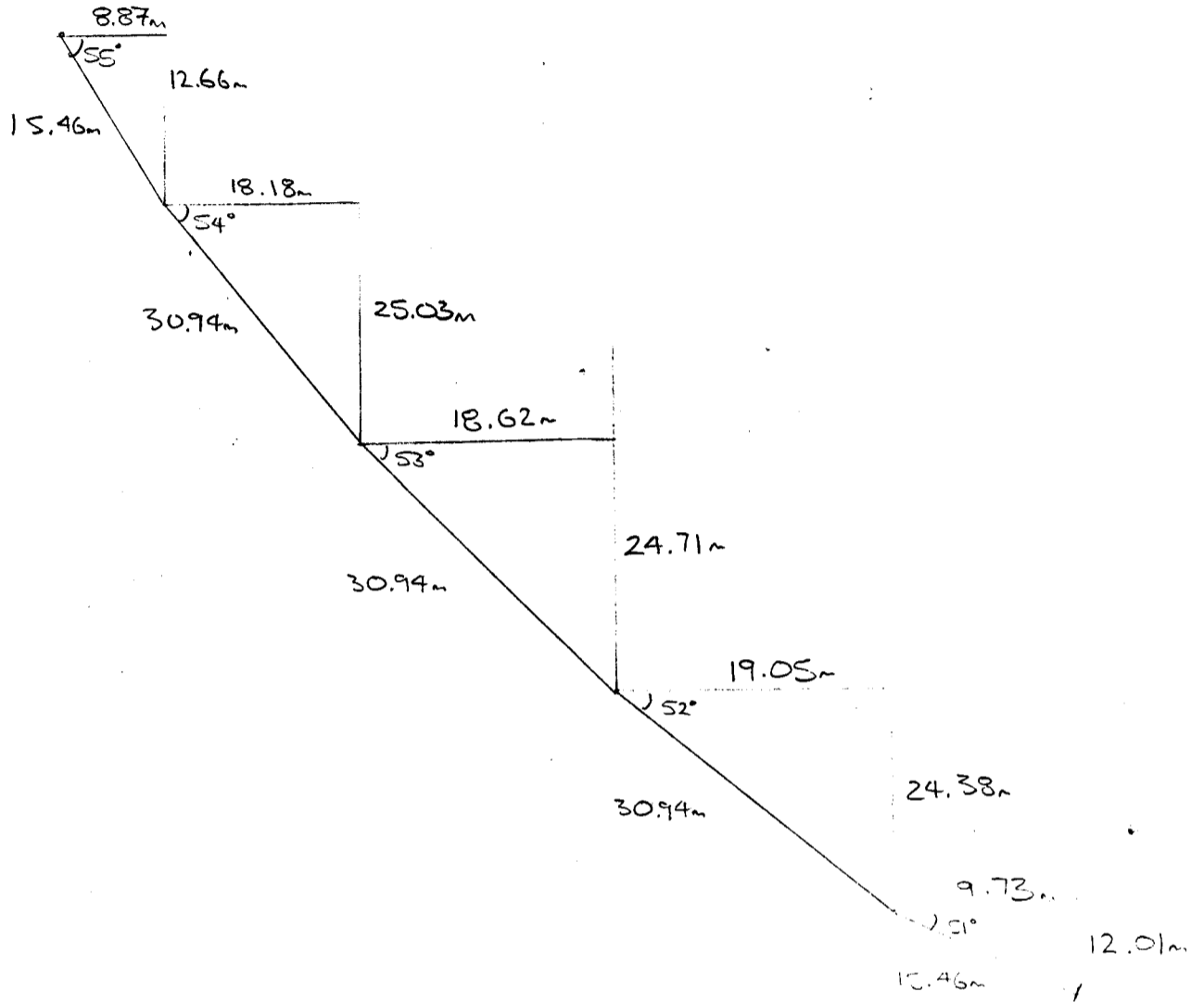
LENGTH 106'

DIP @
ECH 100

DIP @
ECH 51

ALTIMETER: 74.43m (244.3')

DEPTH: 98.79m (324.1')



Property ISLAND MINING - JL CLAIMS NTS 105 D/2 Claim JL Elevation 3760 Azimuth 155° Length 471' Dip -65°
 Coordinates 3+0SE / 1+95N Dip Tests - 60 (bad test) Advance 217.4' Depth 417.7' Date Collared JULY 13, 1987 Date Completed JULY 16/87
 Purposes TO CUT ACROSS VEINS NEAR WHEELBARROW ADIT. Drilled by CARON D.D. Assays by ACME LABS. Logged by TME

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Assays	
From	To					From	To		A ₀ (oz/ton)	A _g (oz/ton)
0	21'			OVERBURDEN						
21'	24'			FAULT GOUGE? or GOLDEN-BROWN SOIL?						
24'	53'			FINE GRAINED (1/2 mm) RUSTY GRAY RHYOLITE PORPHYRY - leucocratic; 2% 2mm Q. eyes - strongly broken ground. - 36.5' = 2mm. Q vs. w. minor pyrite - 36-41' = Many tiny Q vs. w. minor pyrite - 43-53' = Very poor recovery - 48-53' = Fault gouge - At 53' - good core to 58'	8430	36	41'	5'	0.001	0.01
0	53	32	0							
53	66	71	0.45							
53'	79'			FELSIC TO INTERMEDIATE TUFF? - reddish green where fresher surfaces - strong brown carbonate alteration - abundant Q - carb. vns up to 6mm across vns. 20-70° to c. axis. - 61-66' = Shear foliation ca. 30° to c.a. = intense Q - carb. ^(calcite) veining; 62.5-64.5' = 10% veins by volume. - 66-76' = Mainly fault gouge	8431	53	58	5	.001	.01
66	88	85	0.30		8432	61'	66'	5'	.001	.01
					8433	66	71'	5'	.001	.01
					8434	71'	76'	5'	.001	.01
79'	84'			BROWN, MASSIVE DACITE DYKE or SILL - soft; ? angle of contacts - excellent core recovery						
84'	114.5'			FELSIC TO INTERMEDIATE TUFFY LAPILLI TUFF and ANDESITIC FLOWS? - veined (Q - Carb) w. strong brown carb. alteration - fault from 84-86' - 1% calcite veins from hairline to 3mm. - moderate silicification - foliation 30° to c.a.						
88	118.5	86	0.38							

RQD + % Recovery by A.R.T.

1987

DIAMOND DRILL LOG

HOLE No. 87-WB 3

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Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width		
From	To					From	To			
				100' and 103' = Quartz lenses adjacent to shears; 7cm and 1-2cm, respectively; the latter lense or vein is 10-20° to the core axis. - last 1.3' = bleached light green; contact 45° to c.a.					Au (gr/m)	Ag (gr/m)
114.5'	151'			BUFF RHYOLITE PORPHYRY - MINERALIZED ^{to 1205'} - 10% 3-5 mm glassy feldspar laths in an aphanitic matrix. 114.5'-115.5' = contact brecciation with Q-py infilling between fragments; some veins 30° to c. axis. - hairline to 1mm carb. vns common; ^{COARSE GR. GALENA IN CHL. ALTR SECTION} - 118.5' = fig. GALENA? in Q. vn at 20° to c.a.	8435	114.5	118.5	4'	.009	.01
					8436	118.5	122.5	4'	.013	.08
					8437	122.5	126.5	4'	.007	.01
118.5	153	86	Q10	OVERALL 1-2% PYRITE and many Q vns. - 121-121.5' = a 4mm Q vn at 25° to c.a. and a 1-2cm Q vn at 30° to c.a. - 124' = a 1cm Q vn at 25° to c.a. - 126.1' = Brown weathered carb. w. galena(?) - 126.5' = mineralized zone ends. - 131.2' - 132.5' = Fault gouge & strongly fract. rhyo. porph. Strong fracturing to 156'						
151'	155'			ALTERED GREEN ANDESITE - fault gouge to 153' - abund. calcite vnlts. - lwr. contact 70° to c.a.						
155'	160'			MEDIUM GRAINED GRANODIORITE - 5% chloritized mafics - fresh feldspars only occas. sericitized						
		80	Q10	- 159-160' = fault breccia; lwr. contact ca. 45° to c.a.						
160	182.5			PINKISH BROWN RHYOLITE - becomes fig. 2' from contact after first 2' of an aphanitic glassy w. 5% 1-2mm anhedral feldspar phenoc.						

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DIAMOND DRILL LOG

HOLE No. 87-WB 3

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/ton)	Ag (oz/ton)
From	To					From	To			
				- hairline fract. w. dissem. py. common - very hard (nail won't scratch) - lower contact approx. 60° to c.a.						
182.5'	190.6'			MASSIVE MEDIUM GRAINED GRANODIORITE - 7-16% chloritized matrix - locally rusty brown carb. alt ⁿ especially near contacts - lower contact irregular and 45° to c.a.						
190.6'	198'			PINKISH BROWN RHYOLITE PORPHYRY - 15% anhedral to subhedral feldspars (1-2 mm) in an aphanitic glass						
178	201	90	0.25	- 194' = 2% dissem. PYRITE over 0.3' - lower contact 80° to c.a. (?) broken						
198'	202'			MASSIVE MEDIUM GRAINED GRANODIORITE - low. contact ca. 80° to c.a.						
201	237.5'	70	0.12	* REDUCED TO NQ CORE at 201'						
202'	239.5'			RUSTY BROWN RHYOLITE PORPHYRY 203-204' = Shear zone w. 0.5' of Gn-sl-py - bearing QUARTZ; 2% total sulphides of mainly gn and sl. 204'-206' = silicified rhyolite in fault zone w. minor PYRITE - poor recovery 208-222' = strongly fract.; local fault gouge 211.5' = fault gouge down core axis	8438	203	204	1'	.003	.13
				213.2' = 2-4 mm Q - Py vn. at 30° to c.a. 221.2' = 1 cm. wide piece of white Q vn. 223' = 4-6 mm Q vn. at 30° to c.a. 225.7' = 2 mm py vn. at 45° to c.a. 231-233' = fault zone ASSAYED SECTIONS CTG Q-Py vns; ca. 1-2 per foot of core length.	8439	204	206	2'	.002	.03
237.5'	266	80	0.30							
					8440	222.5	227.5'	5'	.009	.05
					8441	227.5	232.5	5'	.007	.03
					8442	232.5	237.5	5'	.002	.01
259.5'	261.5'			ALTERED MEDIUM GRAINED GRANODIORITE						

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DIAMOND DRILL LOG

HOLE No. 87-WB 3

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
				- lightly rusty and lightly bleached to 253'				
261.5'	271.5'			CARBONATE-VEINED GREEN ANDESITE				
				- upper contact foliation ca. 30° to c.a.				
266	307.5	80	0.0	- 267' - 271.5' = fault zone; lower contact is gouge; ca 30° to c.a.				
271.5'	308'			PINKISH BROWN RHYOLITE PORPHYRY				
				- occas. 1-2 mm. Q. vnt.				
				- 279' = fault gouge (2cm) w. 3cm. Q. vn. ctg.				
				1% pyrite at 70° to c.a.				
				- 281.2' = 3-4 mm. Q. vn. w. 2-3% PY. running down core axis at ca. 10°				
				- 286.5' = 3-4 mm Q - Chl - Py vn. at 10° to c.a.				
				- 288' = 2mm. Q - PY vn. at 30° to c.axis.				
				- the whole zone is STRONGLY FRACTURED.				
307.5	333	95	0.28	- 295.8' = 2-3mm Q. vn. w. minor PY at 5-10° to c.a.				
				- 301.6' = 1mm. Q. vn. running down core axis; pinches out				
				- 303 - 304' = fault gouge				
308'	312.5'			GREEN ANDESITE				
				- bleached for 1' from broken contact.				
				- creme to buff 1cm. Q - Carb. vn. in bleached zone at 20-25° to c.a.				
				- calcite vns 1-3mm. wide common.				
				FROM 308' on → rock is less fractured than before.				
312.5'	320.5'			ALTERED MEDIUM GRAINED GRANODIORITE				
				- upper contact ca. 60° to c.a.				
				- 313 - 314' = well fract. rhyolite dyke				
				- 318.4' - 319.1' = inclusion of foliated green andesite → upper contact 35° to c.a.				
320.5'	329.5'			BROWN RHYOLITE PORPHYRY				
				- 20% 1-3 mm. feldspars in oph. gdmans.				
				- lwr contact 45° to c.a.				

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DIAMOND DRILL LOG

HOLE No. 87-WB #3.

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
329.5'	332.5'			FOLIATED GREEN ANDESITE - fol'm 45° to c.a.				
333	343	90	0.05	- contact (lower) ca. 45° to c.a.				
332.5'	367.2'			RUSTY F. GR. to M. GR. GRANODIORITE - massive, unmineralized. - 347' = bleached light to medium gray. - 357.5' = Two 2-5 mm. Q. vns at 45° to c.a.				
343	388	95	0.35					
367.2'	387.5'			PINKISH-BROWN RHYOLITE PORPHYRY - upper contact ca. 45° to c.axis. - 371.5' = 2 - Two mm. Q. vns at 45° & 60° to c.o. - 25% 1-3mm. feldspar phenos. - 382' = Several hairline PY vnlts.				
387.5	464.0'			GREEN ANDESITE (TUFFACEOUS) - 1% hairline to 3mm. calcite or non-fizzing Carb vns; Vns 20-60° to c.axis. - dark green colour; massive; rel. high RQ.D. - broken upper contact.				
388	471	98	0.70	- several irregular lenses of Q - brown carb. up to 3cm. across. - locally brecciated and altered. - 431-432' = Brecciation w. calcite infilling at 60° to c.a. - lower contact foliated and bleached for 2 feet. - contact ca. 45° to c.a.				
464.8	471'			GRAY and BROWN RHYOLITES - 2 phases of rhyolites → a buff and a gray phase and vein py. - local dissem pyrite in brown rhyo. - contacts 30-80° to c.a. - 468' = hairline Q. vns cuts across both contacts - gray rhyo later. E.O.H. = 471'				

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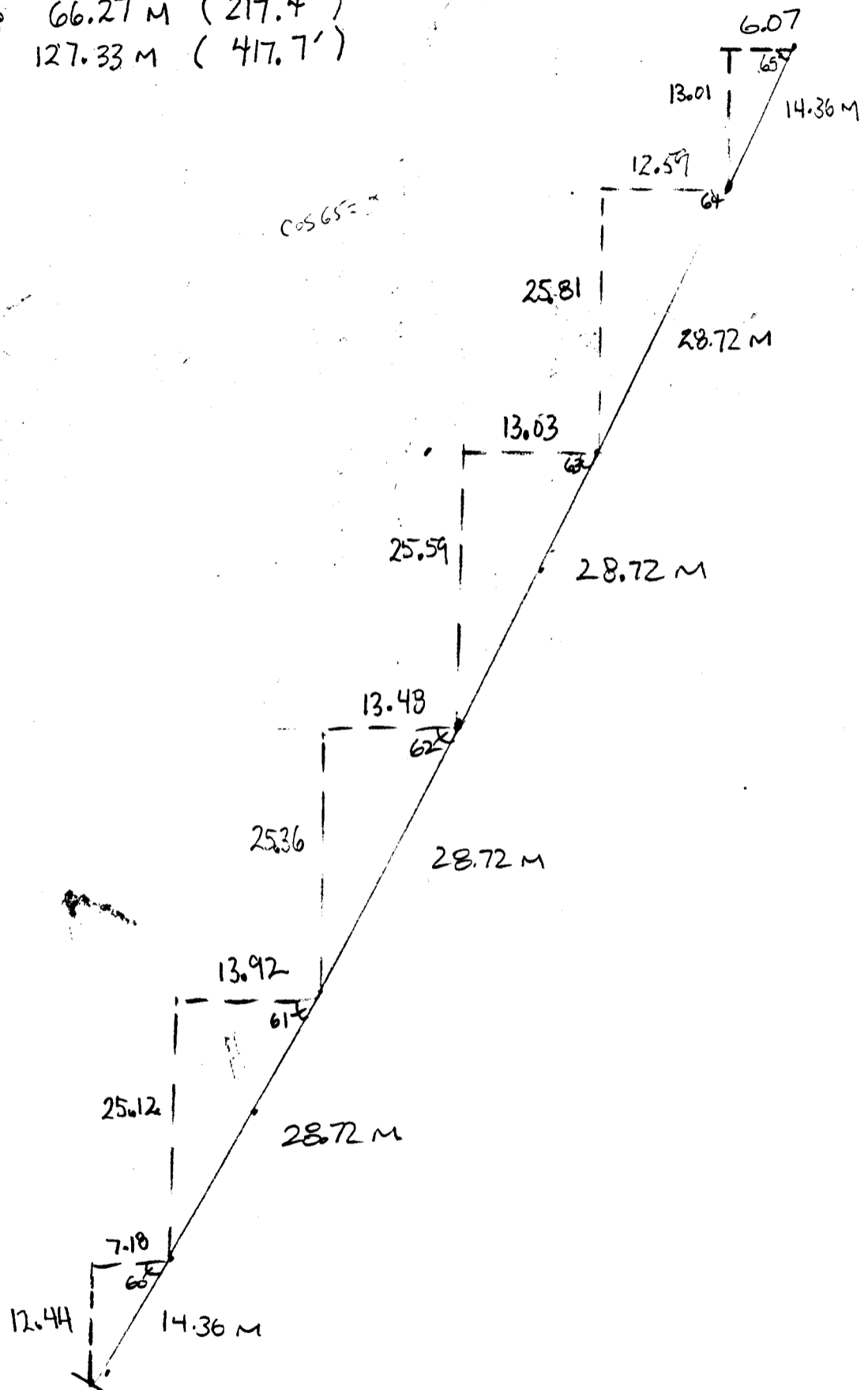
LENGTH : 471'

Dip @
Collar : -65°

Dip @
E.O.H : -60°

14.36, 28.72

Advance: 66.27 M (217.4')
Depth: 127.33 M (417.7')



DIAMOND DRILL LOG

HOLE No. 87-WB4

Property ISLAND MINING - JL CLAIMS NTS 105 D/R Claim JL Elevation Azimuth 135° Length 301' Dip -65°
 Coordinates Dip Tests -63 at EOH. Advance Depth Date Collared JULY 16/87 Date Completed JULY 18/87
 Purposes TEST STRIKE OF MINZ'N INTERSECTED IN 87-WB3 Drilled by CARON D.D. Assays by ACME LABS. Logged by HUGH FRACKINSON & TERRY M. BLISS

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/ft)	Ag (oz/ft)
From	To					From	To			
0	31'			OVERBURDEN - soil recovered from 21-27'						
31'	33.3'			RUSTY M. GR. to C. GR. INTRUSIVE - 5-7% altered mafics.						
33.3	37'			RUSTY DARK GREEN ANDESITE - hair line to 3mm. Q - Carb. vns. - sheared lwr. contact						
37'	63' (?)			LIGHT BROWN RHYOLITE PORPHYRY - 37.5' = fault gouge 4 cm. thick at 45° to c.a. - 5-10% 4-5 mm coarse feldspar phenos in an aphanitic groundmass - abund rusty carb alteration - rock is strongly fractured. w. narrow zones of fault gouge less than 1 cm across. - 43.7' = Q - Fe carb. vns w. minor py at 20° to c.a. - 54-56' - only pebbles of fig. Rhya recovered; minor dissem. & fract. PRITE. - gradational lwr. contact into lightly bleached Gd.						
63' (?)	69.5'			PORPHYRITIC GRAY F. GR. GRANODIORITE - 5-10% 4-6 mm feldspar phenos which are rusty and altered to clay (?)						
69.5	123.5'			BLUE-WEATHERING F. GR. FELDSPAR PORPHYRY - 5% 3-4mm. clay alt'd, but ^{to golden brown} feldspars in a F. gr. (<1mm) groundmass.	8443	90'	95'	5'	.010	.01
91	110	190	0	- 89.5' = breccia (0.5-1cm. frags) w. minor py & white Qtz infilling	8444	95'	100'	5'	.011	.04
110	124	200	0.29	- 90 to 95' = Abundant Q vns. 1mm - 1cm; minor pyrite - 95' - 100' = Fault gouge to 99' - 100 - 109.5' = " " " " - poor recovery						

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DIAMOND DRILL LOG

HOLE No. 87-WB 4

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au (oz/ton)					
From	To					From	To		Au (oz/ton)	Ag (oz/ton)	Cu	Pb	Zn	As
				100-105' = fault gouge	8445	100	105'	5'	.001	.02				
				105-109.5' = " "			32.5m'							
				112-113' = brecciated // core axis	8446	105'	110'	5'	.001	.03				
				-/w/ contact ca. 45° to c.a.			33.5m'							
123.5'	134.2'			GREEN ANDESITE										
	40.89m'			- abundant Q_{ANDESITE} up to 5mm wide.										
				- 125' = 7cm fault gouge	8447	124.6'	125.8'	1.2"	25	18	71	.4	4	1
124	136	100	0.25	- 125'8" - 127'6" : moderately to strongly limonitically bleached + chloritized w/ limonite, hematite or Fe carb along fractures										
				- Moderately foliated at 30° to C.A.										
				- 127'6" : 7cm fault gouge	8448	127'	128'6"	1'6"	13	20	75	.1	5	1
				- 127'11" - 128'8" : strong limonitic alteration, becoming more patchy at depth		38.71m'	39.17m'							
				- 128'8" - 129'8" : Variably altered fault gouge both contacts irregular	8449	128'8"	129'8"	1'	33	17	62	.5	7	2
				- 129'8" - 132'6" : moderately chloritized & foliated dark green, weakly porphyritic w/ 15mm Qtz-carbonate vein breccia at 130'. Vn may be 2 generations, & is weakly hematized (particularly along veins) & has tr py, cpy & baronite (?). Vn oriented @ 33° to C.A.	8450	129'8"	130'6"	1'	108	17	92	.4	2	2
				- 132'6" - 134'6" : Upper contact @ 15° to C.A. ; limonitically altered fault gouge grading into chlorite & Fe carbonate altered fault gouge ; lower contact sharp @ 30° to C.A.	8601	132'6"	134'6"	2'	8	17	62	.3	9	1
						40.79m'	40.00m'							
134.2'	162'			BUFF BROWN ALT'D & QUARTZ VEINED RHYOLITE PORPHYRY (MINERALIZED)										
	49.73m'													
136	159.5'	0	97	0.03										
				Buff brown to pinkish brown, w/ 7-15% 1mm feldspar phenocrysts in an aphanitic matrix. pervasive & fracture filling moderate to strong limonite & Fe carb alteration throughout. ≤ 2% hairline to 5mm qu; few stockworks.										

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DIAMOND DRILL LOG

HOLE No. 87-WB4

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	CU	PB	Zn	AG	AS	AU	
From	To					From	To								
				1-2% ≤ 1.5mm diss. q.v. or fracture filling py.											
				- 134'2" - 138' : Strongly altered & brecciated, w/ tr-1% galena either w/py in groundmass, or in q.v. main galena bearing up to 3mm grey quartz in at 65° to C.A.	8602	134'2"	136'	1'10"	10	67	86	.7	10	720	
					8603	136'	137'	1'	6	60	93	.4	2	14	
					8604	137'	138'	1'	3	680	141	1.7	7	49	
				- 138' - 143' : V. blocky & broken core. 3mm q.v. at 138'6".	8605	138'	143'	5'	17	161	217	1.1	6	240	
					8606	143'	146'	3'	5	169	141	1.1	7	112	
				- 143' - 148'6" : Mostly blocky & broken core, moderate sericitization, Fe ox & carb alt. Up to 5% euhedral py in veinlets	8607	146'	151'	5'	3	76	83	.6	5	24	
					8608	151'	152'	1'	9	88	96	.8	6	3	
				- 148'6" - 152' : Pinkish brown, moderate pervasive Fe ox & Fe carb altered, w/ 25% ≤ 1mm subhedral to euhedral feldspar xtals. Partially silicified w/ 1% ≤ 3mm q.v., either individual or as a collection of stringers. Tr py.											
154'5"	200'	93	0.45	- 152' - 159'6" : Brecciated, w/ py bearing carb-qtz-ankerite(?) - limonite veins.	8609	152'	159'6"	2'6"	16	138	211	.6	8	25	
					8610	159'6"	159'6"	5'	15	175	149	.6	5	1	
				- 159'6" - 162' : ≤ 5% diss fine grained py ; ≤ 30% ≤ 4mm feldspar xtals, may be a Q.F.P.; matrix alt'd as before. ≤ 2% hairline q.v., variable degrees of chloritic alteration. 160'8" 4mm qtz-chlorite-albite(?) vein at 15° to C.A. Lower contact gradational. May be a mix of rhyolite porphyry & altered granodiorite. 155" tr-1% gn.	8611	157'6"	162'	2'6"	4	114	88	.4	16	270	
162'	199'6" (60.8m)			DARK GREEN ALT'D MEDIUM GRAINED QUARTZ MONZONITE (W/ MINERALIZED VEINS)											
				Dark green to pink, Strong to moderate pervasive chloritization w/ mafics ≤ 30%. Strongly sericitized adjacent to qtz veins & vults, w/ ≤ 8% euhedral ≤ 15mm py in altered areas. Galena occurs only in graywhite veins & veinlets. 85 up to 4mm xtal											

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DIAMOND DRILL LOG

HOLE No. 87-WB4

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width											
From	To					From	To		Cu	PB	Zn	Ag	As	Au					
				aggregates. Pervasive moderate carbonatization (calcite & Fe carb) especially along fractures	8612	162'	167'	5'											
				-162'-168'8" moderately altered, patches of strong chloritization. 2% \approx 5mm qtz-chlorite vns.	8613	167'	168'8"	1'8"											
				-168'8"-170'6" 2% Gn in qtz-chlorite (10%) - albite (?) veins & vnts. at 70-80° to C.A.	8614	168'8"	170'6"	1'10"	Assay Au, Ag	3	1293	207	2.1	11	380				
				-170'6"-172' 1% As above but 15mm wide & 5-15° to C.A. & more chloritic. Albite (?) usually concentrated near centre of vein while chlorite occurs toward rims of vein. Very strong alteration adjacent to vein. Vn has many small splays.	8615	170'6"	172'	1'6"	" " + Special Prep.	4	1207	176	2.4	15	700				
				-172'-176' 1% to 1% gn, slightly more Fe alt'd & carbonatized than above, becomes more chloritized at depth.	8616	172'	174'	2'	Assay Au, Ag	6	41	125	.3	6	8				
				-176'-179' strongly chloritized particularly along qtz vns. Tr to 1% gn. END OF MINERALIZATION	8617	174'	176'	2'	" " "	6	116	231	.4	7	10				
				-176'-179' strongly chloritized particularly along qtz vns. Tr to 1% gn. END OF MINERALIZATION	8618	176'	178'	2'			19	417	508	1.3	3	5			
				-179' - 179'6" slightly coarser xtal size (\leq 3mm) better granitic texture, less altered. Strong carbonatization along vns & fractures. Chloritic alteration moderate to weak at depth; usually as a replacement of biotite (?). Lower contact strongly alt'd (Fe + chl), sharp but irregular at 5-15° to C.A.	8619	178'	179'	1'			16	173	140	.9	8	1			
				-	8620	179'	184'	5'			20	14	46	.2	7	2			
199'6"	207'			PINKISH BROWN RHYOLITE PORPHYRY															
				10% 1-2mm euhedral to subhedral sericite or clay alt'd feldspar xtls in an aphanitic matrix. Matrix commonly Fe carb or sericitically altered. 1% \leq 2mm q.v.; \leq 3mm euhedral rusty py cubes along fracture planes & veins.															

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DIAMOND DRILL LOG

HOLE No. 87-WB4

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au
From	To					From	To							
				-200'6" - 202' : Sericitically bleached minor q.v.	8621	200'	203'	3'	6	172	189	.5	11	37
				-202' - 207' : mostly broken core	8622	203'	207'	4'	6	345	177	1.0	9	250
207'	219'			GREENISH BROWN ALT'D MEDIUM GRAINED QUARTZ MONZONITE										
				Moderate to strongly alt'd to chlorite (up to 40% of core), Fe carbonate, limonite & calcite. Blocky & broken core 215' - 219'. Fractures commonly 40° & 70-80°										
219'	230'			PINKISH BROWN RHYOLITE PORPHYRY										
				As before. Fe carb & ox altered, calcite along fractures. Blocky & broken core poor rec'y.										
227'	230'			Switch to NQ core										
230'	245'6"			GREENISH BROWN MEDIUM GRAINED QUARTZ MONZONITE										
230'	260'	78	0.25	As before but less altered. 30-45% chlorite either pervasive alt (236'6" - 237'6") or as replacement of mafic minerals (biotite?). 1-2mm feldspars weakly to moderately altered to Fe carbonate. Tr py. Blocky & broken core 238' - 239' & 243' - 245'6"										
245'6"	286'			BUFF BROWN RHYOLITE PORPHYRY										
				BUFF to pinkish brown, w/ 7-12% 1-2mm subhedral feldspar phenocrysts in an aphenitic matrix. Weak to moderate Fe-carb & sericitic alteration.										
260	286'	70	0.09	Carbonate & limonite altered fractures w/ up to 10% ≤ 2mm subhedral py xtals.	8623	251'	256'	5'	7	42	53	.3	12	4
					8624	261'	266'	5'	7	24	37	.7	2	2

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DIAMOND DRILL LOG

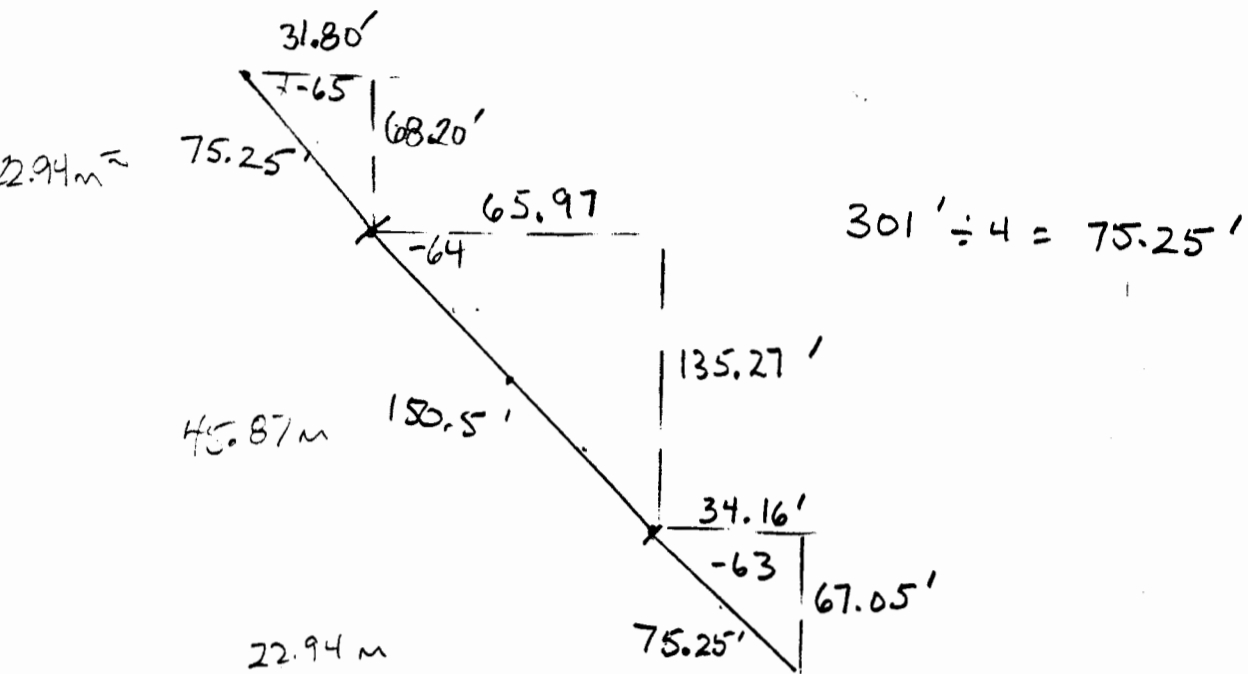
HOLE No. 87-W34

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au
From	To					From	To							
				minor py bearing veins $\leq 2mm$. Vn & fracture orientation commonly 50° to C.A. blocky & broken core; 255' - 256', 258' - 261', 262' - 265'; 272' - 286'.	8625	271	276	5'	7	28	41	.2	2	1
286'	301'			DARK GRN ALTD MEDIUM GRAINED QUARTZ MONZONITE										
286	301	93	0.48	Moderate to strong chloritic & carbonate alteration. mafic minerals comprise $\leq 40\%$ of rock & are altered to chlorite or Fe carbonate. Intensity of carbonatization & chloritization increases with depth. Minor argillitic alteration (illitization?) of Kspic(?) at depth. 10mm carbonate (calcite) - chlorite vns at 287'6". 1-2% fractures & vns at several generations commonly 70° & 10° to C.A., but variable.										

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LENGTH : 301'
 Dip @ Collar : -65°
 Dip @ E.O.H : -63°



Advance : 131.93'
 Depth : 270.52'

DIAMOND DRILL LOG

HOLE No. 87-I1

Page 1 of 2

Property MIDNIGHT GULCH NTS 105012 Claim TON Elevation 4900' Azimuth 220° Length 339' Dip -50
 Coordinates 4+40N/1+20W Dip Tests -50° at EOH Advance 217.9' Depth 259.7' Date Collared JULY 19, 1987 Date Completed JULY 22, 1987
 Purposes TEST JUNCTION OF 2 MAJOR UNIFORMS & MINERALIZATION AT TRAN SHOWING Drilled by CARON D. D. Assays by ACME Logged by WUGH MALIKINSON

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYSIS											
From	To					From	To		Co	Si	Fe	Ca	Mg	Al	Other					
0	4'			CASING.																
	(1.22m)																			
4'	29'			ANDESITIC LAPILLI TUFF & TUFF																
	(8.23m)																			
0	40.5'	22	0.18	4'-16' : Dark green lapilli tuff w/ 7% f-15mm angular fragments. Blocky & broken core. 6" flow w/ 10% fmm matrix (chlorite?) phenocrysts at 13'; flow contact @ 155° to CIA.																
				16'-17'6" : Dark greyish green moderately silicified lapilli tuff.																
				17'6" - 22' : Dark green lapilli tuff grading into fine grained tuff.																
				22' - 24' : Dark green to grey green, brecciated tuff, w/ some silicification of bx. Bx band variable thickness & orientation to CIA. Slightly vuggy w/ calcite infilling	8485	22'	24'	2'	27	6	81	.4	5	1						
						(6.71m)	(7.32')													
				24' - 26' : Brownish green to grey green, weakly porphyritic, 'chaotic' silicified to unsilicified tuffs.																
				26' - 27' : Brownish green, fine grained tuff, massive. lower contact broken																
29'	32'			FINE GRAINED ALT'D RHYOLITE PORPHYRY	8486	29'	32'	3'	13	6	21	.3	2	1						
	(9.75m)			Purplish brown, w/ 35% f-1mm feldspar xtal in an aphanitic matrix. 5-10% limonitization spalling, may also be silicified. Fracturing & q.v. increase with depth. Sericite & limonite along fractures, with up to 50% limonite in 8mm core & 1/2" py. mostly broken core.																
						(3.24m)														

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DIAMOND DRILL LOG

HOLE No. 87-I1

Page 2 of 7

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width												
From	To					From	To													
32'	38'6"			ALT'D & SHEARED PORPHYRITIC ANDESITE (?) FLOW																
	(11.73m)																			
				Buss orangish brown, w/ 10-15% 1-4mm elongate (lenticular) sericitically & carbonate altered feldspars in a fine grained limonite & carbonate (Fe+Ca) alt'd matrix. Foliation @ 50° to CIA.	8487	32'	33'	1"	9	9	25	.1	4	1						
				- 32' - 33': 2 = 1cm qtz - limonite vns with 1-3% 1mm py	8488	33'6"	37'	3'6"	7	9	26	-2	2	1						
				- 33' - 33'6" & 37' - 38': Rounded pebbles; overburden seam (?)																
				- 38' - 38'6": Carbonate alt'd fault gouge. Sharp contacts both roughly & to CIA.	8489	38'	38'6"	6"	13	9	23	-1	2	2						
38'6"	86'			ANDESITIC TUFF, LAPILLI TUFF AND FLOWS.																
	(26.21m)																			
40.5	95	98	0.70	- 38'6" - 41': Dark brownish green, v. Sa to fine grained tuffs. Strong sericitic alt. at top of unit, weak limonitization throughout rest. 1% carb fracture filling																
				- 41' - 45': 'mottled' lapilli tuff, moderately chloritized. 1% 2mm to 30mm jasper clasts (w/ 1% py). 3% hairline to 5mm carbonate fracture filling. Trace disc py.	8490	43'	45'	2'	159	6	109	.5	6	1						
				- 45' - 46': Dark green, amygdaloidal flow, w/ 1-2mm amygdules filled with calcite & chlorite.																
				- 46' - 52': Green to dark green, highly fractured; moderately epidotized & strongly carbonitized along fractures. Fractures most commonly 20-30° to CIA. Combination of tuffs & flows																
				- 52' - 53': 'mottled' lapilli tuff.																
				- 53' - 67': Dark green, principally mottled lapilli tuff with small flow units. Moderate chloritization weak epidotization																

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DIAMOND DRILL LOG

HOLE No. 87-T1

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Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width										
From	To					From	To											
				- 67' - 83' Dark green, principally weakly porphyritic flows w/ 3% 1-mm chloritized or epidotized mafic or feldspar phenocrysts. Several mottled sections; minor lapilli tuffs & flow breccias. Strongly epidotized at 78', <1% calcite filled tension fractures. Grades into fine grained non porphyritic tuffs at base. 81" x 8" amygdaloidal flow.														
				- 83' - 86' Dark green, mottled lapilli tuff, strongly epidotized at base.														
86'	87'			RYHOLITIC OVERBURDEN (?) 80% pinkish brown fine grained rhyolite & 20% andesitic volcanic core rubble fragments.														
87'	107' 4"			ANDESITIC VOLCANICS Dark green, green to greenish grey flows, tuffs & lapilli tuff. Scattered epidote vns & fracture fillings. Several generations of vns including qtz vnts, carb vnts & fracture fillings, & epidote. Py, chalcocite, malacite &/or bornite occur in trace amounts in amygdules, qtz vnts, along epidote & qtz vns & in fractures. Good recovery.														
95'	101'	94	0.33	- 87 - 90' Mottled lapilli tuff & tuff bx (?), 88' & 88' 6" 5 to 10 mm epidote vns at 50° - 60° to C.A. Trace sp, py, mal & bornite	8491	87'	89'	2'	156	10	130	.1	2	1				
				- 90' - 93' 6" moderate to strongly epidotized porphyritic & amygdaloidal flows (w/ py, mal & py) grading into fine tuffs.	8492	90'	92'	2'	87	5	124	.1	8	2				
				- 93' 6" - 94' 6" mottled lapilli tuff														

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DIAMOND DRILL LOG

HOLE No. 87-11

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width										
From	To					From	To											
				-94'6" - 100' : Porphyritic to amygdaloidal flows & tuffs. Chloritization of mafic phen.														
				-100' - 103'6" : mottled lapilli tuff w/ trace maldepy along fractures. minor epidate-calcite vns & bx vns at 50-60° to C.A.	8493	100'	103'	2'	303	7	135	-1	8	3				
				-103'6" - 107'4" : Grades from 1mm amygdaloidal flows into mottled lapilli tuff.														
107'4"	101'6"			ANDESITIC LITHIC TUFF														
				Sequence of finegrained dark green tuff or in some case may be flows grading into grey tuffite. 30% 1-2mm euhedral xstls, 15% ≤ 10mm lithic fragments in a silicified, chloritized & fractured matrix. Unit is repeated 7 times with each bed from 2cm to 9cm thick. Contacts commonly 75-85° to C.A.														
101'6"	126'			MIXED ANDESITIC VOLCANICS														
				Succession starting at top w/ tuff, mottled lapilli tuff, mottled xtal tuff then fine grained tuff.														
				Switch to NQ at 111'														
126'	150'			ALT'D ANDESITIC VOLCANICS + RHYOLITE														
				bleached -														
126	136	55	0.25	Buff orangish brown, carbonate (Fe & Ca), limonite & sericite tuff, lapilli tuff & porphyritic flows. Moderately foliated in places at 55-60° to C.A. 40% blocky & broken core. Sct. in gr py < 1%.														

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DIAMOND DRILL LOG

HOLE No. 87-11

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width						
From	To					From	To							
				- 129'6" - 135' ; sheared ^{dated} porphyritic flows & fault gouge - poor rec'y.	8494	129'6"	135'	5'6"	29	10	67	.4	8	11
				- 135' ; potential small rhyolite unit (41.15' v. poor rec'y)	8495	135'	140'	5'	26	10	64	1.8	20	34
				- 146' - 146'6" ; Greenish white sericitized & 3mm feldspars in a strongly silicified brilliant orange aphanitic matrix - rhyolite porphyry ?										
150'	218'			ALTO RHYOLITE + RHYOLITE PORPHYRY										
				Orangish to pinkish brown becoming greyish, at depth ; Fe carb, limonitized (?) bleached	8496	151'	154'	3'	7	6	18	.6	6	13
				silicified &/or sericitized -	8497	154'	156'	2'	14	5	26	.5	3	6
176	227.5	78	0.27	aphanitic matrix w/ sericitized &/or 'bleached' feldspars. Alteration & fracturing less intense with depth. Tr to 1% py.	8498	156'	161'	5'	9	6	21	.3	5	4
				1-2% hairline to 4mm q.v.s usually with an accompanying alteration halo. Limonite and/or Fe carb (ankerite) along 40% of fractures & veins. 1-2% carbonate vns & tension gash fillings. Upper core mostly broken. Trace of volcanic xenoliths. Qtz veining decreases w/ depth	8499	161'	166'	5'	13	11	32	.5	7	17
				- 151' - 154' ; Strong bleaching, 3% q.v., 2% fractures ; 1% py.	8500	188'	190'	2'	4	11	30	.3	2	12
				- 154' - 156' ; As above but 5mm sericitized q.v. at 155'	8501	207'	210'	3'	5	16	30	.3	5	20
				- 156' - 161' ; moderate to strong bleaching, sericitized & silicified around q.v.	8502	210'	212'	2'	4	7	31	.2	7	6
				- 161' - 166' ; mostly broken & blocky core										
				- 166' - 188' ; moderately altered rhyolite porphyry w/ 3-7% 1-2mm pheno										

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DIAMOND DRILL LOG

HOLE No. B7-I1

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Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width									
From	To					From	To										
				- 188' - 190' : 4% py fracture filling, 4mm qtz-carb va at 50° to C.A. & strongly altered 'cumby' core.													
				- 190' - 207' : Rhyolite porphyry as before, but most feldspar are rimmed w/sericitic centres.													
				- 207' - 212' : Strongly alt'd													
				- 213' : Q.v. with 2mm euhedral py	8503	212'6"	213'6"	1'	4	10	24	.3	2	2			
				- 216'6" : Sericitized 2cm bx	8504	216'	217'	1'	4	10	25	.4	4	2			
				- 217-219' : Core rubble													
218'	227'			MIXED ALT'D RHYOLITE & ANDESITIC TUFF													
				- 218' - 219' : Orangish brown fine gr. tuff													
				- 219' - 220'6" : Alt'd (as above) rhyolite, bx at top, porphyritic toward base													
				- 220'6" - 222'6" : Dark green fine grained xtal tuff w/ 10% 1mm chlorite phenocryst, unit orangish brown where bleached.													
				- 222'6" - 227' : Alt'd rhyolite; silicified, bleached (sericite, limonite & Fe carb), with 4mm qtz-ankerite (?) va & fracture filling. Lower contact @ 85° to C.A. (broken).	8505	222'6"	224'	1'6"	6	11	20	.3	8	4			
					8506	224'	227'	3'	5	177	39	.7	11	13			
227'	236'			ANDESITIC TUFF													
227.5	251	93	oss	Dark brownish green, fine grained, weakly foliated at @ 65° to C.A.; limonitically bleached at top, & weakly chloritized throughout remainder of section. <1% 1-3mm q.v. at 60-80° to C.A., in addition qtz-albite fracture fillings at @ 25° to C.A.													

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DIAMOND DRILL LOG

HOLE No. 87-11

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Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width										
From	To					From	To											
236'	245'			MIXED ANDREITIC LAPILLI TUFT & FELSIC LAPILLI FLOWS														
				- 235' - 237'6": As above but with lapilli fragments < 1cm & weakly bleached														
				- 237'6" - 239': Dark purplish grey, porphyritic w/ 5% 3mm phen in an aphanitic matrix.														
				5% 1-2mm qtz - Rhyolite flow														
				- 238' - 239': Lapilli tuft as above														
				- 239' - 239'6": Rhyolitic flow as above.														
				- 239'6" - 245': Lapilli tuft as above but slightly more bleached, becomes tuffaceous at depth. Lower contact sharp 55° to C.A.														
245'	252'			RHYOLITE PORPHYRY														
				Dark purplish grey to orangish brown, w/ 2% subhedral to anhedral 2-3mm plagioclase phenocrysts in an aphanitic & occasionally flow banded matrix. Slightly bleached.														
260'	272'			ALT'D RHYOLITE PORPHYRY														
				Orangish to light greenish brown, fc-carb, sericitized &/or silicified, w/ Mn & weak carb alteration along fractures. 1-5% qtz, w/ 1-2% subhedral py. 2-7 2cm irregular tuft bands near top of unit. Variable amounts of bleaching. 3-5% fractures at base with ankerite(?), py infilling. Variable orientation; commonly // 20° & 00° to C.A.	8507	252'	254'	2'	4	2	24	.1	4	1				
251'	266'	81	0.25		8508	256'	258'	2'	5	15	34	.2	6	4				
					8509	267'	272'	5'	4	20	43	.3	11	2				

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DIAMOND DRILL LOG

HOLE No. 87-11

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
272'	276'			RHYOLITE QUARTZ-FELDSPAR PORPHYRY Light greenish to orangeish brown, weakly Fe bleached w/ 8% (5% plagioclase, 3% qtz) 1-2mm euhedral to subhedral phenocrysts, in an aphanitic matrix. Becomes a purplish grey porphyry at base. Lower contact 50-60° to C.A.				
276'	277'6"			FINE GRAINED ALT'D ANDESITIC TUFF Light green where chloritized & brownish grey toward contacts where bleached w/ 2mm qtz-aplite vns/fracture fillings at 20° to C.A.				
277'6"	279'6"			RHYOLITE PORPHYRY Dark purplish grey porphyry, as before, grading into a flow banded rhyolite. - 278'6": 3cm lapilli tuff band				
279'6"	295'6"			ALT'D ANDESITIC LAPILLI TUFF				
286'	301'5"	52	0.08	Dark green w/ either limonitic or sericitic bleaching. - 287' - 294'6": Blocky & v. broken core				
295'6"	302'6"			MIXED ALT'D ANDESITIC VOLCANICS & RHYOLITE				
301'	316'	70	0.30	Very blocky & broken core w/ 80% rhyolite fragments, 30% quartz in rhyolite, 30% rec'y.	BS10	300'6"	302'6"	2' (35% rec'y) 10 41 90 .5 5 4
302'6"	315'			ANDESITIC CRYSTAL TUFF (OR PORPHYRIC FLOW) Dark green, w/ 30% 0.5-1mm chlorite (matrix) grading to 1-2mm feldspar xtals < 1% ≤ 2mm carbonate (calcite) vns.				

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DIAMOND DRILL LOG

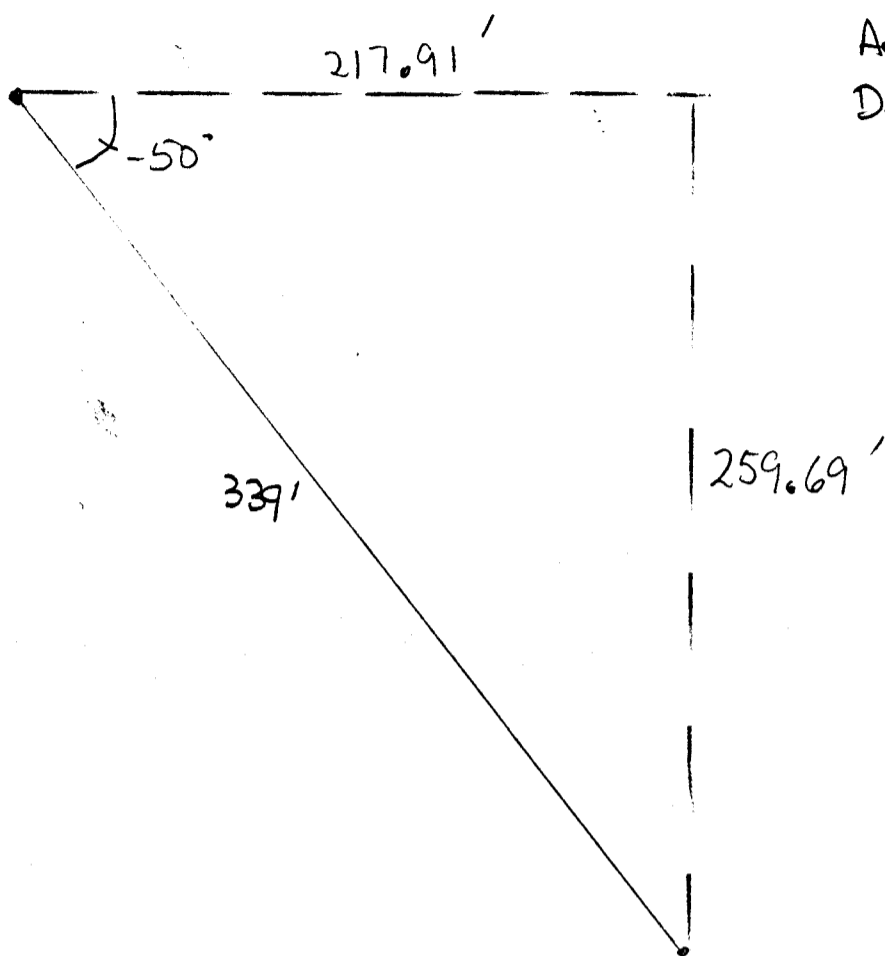
HOLE No. 87-11

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Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width								
From	To					From	To									
				- 309' : 2 cm qtz-chlorite-carbonate vn at 75° to CIA												
				- 311'-313' : v. blocky & broken core (rubble)												
				- 312'6" - 313'6" : Qtz-epidote-calcite- chlorite-mn oxide vn + fracture filling. Trace py	8511	312'6"	313'6"	1'	61	7	68	.2	2	1		
315'	328'6"			ANDESITIC VOLCANICS variably alt'd												
316'	339'	82	0.07	Dark green, A tuffs (lithic lapilli & crystal)												
				- 315'6" - 316' : Fault gouge, carb alt.	8512	315'6"	317'	1'6"	(Poor rec'y)							
				- 316' - 317' : Broken core v. poor rec'y					23	9	70	.1	6	2		
				- 317' - 325' : Broken core, lapilli tuff, 5% carbonate fracture filling												
				- 325' - 326' : v. poor rec'y, clay, limonite & carb alt'd tuff.	8513	325'	326'	1'	(Poor rec'y)							
				- 326' - 328'6" : Bleached-limonited calcite, & well foliated xtal tuff & lapilli tuff					7	10	59	.1	9	3		
328'6"	330'			ALT'D RHYOLITE												
				Grey to light green strongly sericitized & qtz veined, v. poor rec'y, broken core	8514	329'	330'	1'	(Poor rec'y)							
									33	6	37	.2	7	3		
330'	332'			FINE GRAINED FELSIC TUFF (?)												
				Pinkish grey, w/ 0.5mm angular qtz fragments, + 5% < 0.5mm diss magnetite (?). May be a frag. granodiorite?												
332'	339'			ANDESITIC XTAL TUFF												
				Dark green, fn to med. grained, 1% calcite fracture fillings (miner. bx). Mostly broken core												
				- 335' : 4cm, silicified & sericitized rhyolite porphyry.												
				E.O.H.												

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LENGTH: 339'
Dip @ Collar: -50°
Dip @ E.O.H: -50°



Advance: $217.9'$
Depth: $259.7'$

DIAMOND DRILL LOG

HOLE No. 87-I2

Property	MIDNIGHT GULCH	NTS	105D12	Claim	JL	Elevation	4900'	Azimuth	170°	Length	259'	Dip	-50°
Coordinates	4440N / 1+20W		Dip Tests	-50° at E.O.H.		Advance	166.48'	Depth	198.41'	Date Collared	JULY 22	Date Completed	JULY 24
Purposes	TEST E/W LIMEWENT & MINERALIZATION AT 100' SHOWN					Drilled by	CARON D.O.		Assays by	ACME	Logged by	HUGH MACKINNON	

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au (ppb)	
From	To					From	To								
0	6'			CASING											
6'	21'			ANDESITIC TUFF, LAPILLI TUFF & BRECCIAS											
0	16'	97	0.08	Dark green to brownish green, pervasive weak limonitization & chloritization											
16'	43'	96	0.23	- 6'-9': mostly blocky & broken core, strong Fe (limonitic) alt of lapilli tuff											
				- 9' : 6" Fault gouge zone											
				- 9'-13': more greyish colored, angular 'dirty' quartz (silicification) zones, w/ weak to strong silicification throughout lapilli tuff. trace py	8515	11'	12'	11'	6	9	87	.3	8	2	
				- 13'-15': Fine grained tuff, blocky fracture with white qtz infillings. Brecciated at 13', with non tuffaceous infillings.											
				- 15'-16': Blocky & broken core											
				- 16'-17': Lapilli tuff, weakly brecciated by sets of hairline to 4mm ankerite(?) & white qtz filled fractures. Fracture orientation commonly 20-90° w/ 2 nd set at 20° offsetting larger vns up to 8mm.	8516	16'	18'	21'	6	14	102	.1	15	14	
				- 17'-21': Lapilli tuff w/ 30% ≤ 10mm rounded to subangular volcanic fragments. Trace 17'6" ± 2.5cm breccia band at 30° to C.A. with 25-40% 2-5mm feldspar x'tals & 10-25% tuff fragments in a fine matrix. Intrusive breccia?											
21'	35'			ANDESITIC LAPILLI TUFF											
				Dark green to grey green; moderately chloritized. 40% broken & blocky core at top unit. Variable fragment size, generally ≤ 20cm. Weakly to moderately silicified toward top.											

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DIAMOND DRILL LOG

HOLE No. 81-12

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width											
From	To					From	To												
				≤ 10 cm crystal loss between 29' & 31'.															
38'	37'6"			ALT'D ANDESITIC LAPILLI TUFF															
				Dark green moderately chloritized w/ 35% light brownish white moderately argillic (clay) (?) & siliceous alt'd ≤ 15mm volcanic fragments. Core broken for lower half of unit.															
37'6"	43'			ANDESITIC LAPILLI TUFF															
				Green to greenish brown moderately chloritized, weakly limonitized. 39'-40' : Weakly foliated (at @ 5° to C.A.) Lower contact sharp 50-60° to C.A.															
43'	45'6"			ALT'D ANDESITIC TUFF															
43'	40'	80	0.10	Green at top of unit grading to brownish. Fine grained, w/ limonite & wad along fractures. Blocky core.															
45'6"	46'6"			RHYOLITE															
				Pinkish brown, felsic v. fine grained, broken core, poor rec'y															
46'6"	54'6"			ALT'D DISHEARED PORPHYRITIC ANDESITE (?) FLOW															
				Orangeish brown, w/ 3mm elongated sericitized feldspar (?). Foliation at @ 70° to C.A. Strong limonitic alteration.	8577	47'	50'	3'	12	6	36	.3	3	2					
						11.3/m	15.3/m												

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DIAMOND DRILL LOG

HOLE No. 87-12

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	
From	To					From	To		
57'6"	62'13.90"			Mixed bleached tuff & rhyolite lapilli					
				Fine grained dark green to brown, fairly massive, mixed pebble lithologies of rhyolite (A.A.), + tuff at 57'-58'6" & 59'-59'6". May be an overburden seam?					
62'	97'			ANDESITIC LAPILLI TUFF					
70'	86'	99	0.12	Grades from strongly limonitically bleached & weakly foliated (at 20-40° to r.a.) to weakly bleached (limonite spotting & 5% alt'd fragments) 1-2% ≤ 5 mm limonite & carbonate fracture filling on vns. weak carbonate all. Becomes mottled at depth, w/ moderate chloritization & weak epidotization 1-2% calcite fracture/tension gash fillings. - 75'-76'! Broken core rubble - 77'-80'6"!: Mostly broken core; strong limonitization along fractures - 2 bands of fault gouge? - 87'6"-88'6"!: Amygdaloidal flow w/ 7% 1mm chlorite + carbonate filled amygdules. Chloritized & hematized quartz & patch. - 96'!: 9 cm v.f. grained elast.	8518	87'6"	88'6"	1'	22 25 131 .2 11 2
				Lower contact irregular					
77'	122'			ANDESITIC TUFF					
86'	111'	88	0.55	Dark green f.a. grained, occasionally weakly mottled, moderately chloritized, v. weak epidotization. $\leq 10\%$ calcite tension gash & fracture filling generally increasing w/ depth; often as multi generation networks, minor epidote veining, & strong chloritization					
111'	139'	90	0.67						

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DIAMOND DRILL LOG

HOLE No. 87-12Page 4 of 8

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width						
From	To					From	To							
				along fractures at depth. - 107' - 109' : Patch of clay in a small - 111' - 113' : clay band	8519	107'	109'	2'	168	11	110	.5	4	1
				- 114' - 115' : Strongly epidatized w/ 3mm calcite vnsd vnlts, weak hematization.	8520	114'	115'	1'	58	53	72	.5	7	2
122'	129'			- 115' - 122' : Trace py, epidymal; ANDESITIC LAPILLI TUFF.	8521	115'	120'	5'	101	23	111	.8	14	1
	332'			Dark green, v. strongly mottled, w/ anastomosing calcite vns & fractures. Weak pervasive limonitization, moderate chloritization & limonitized fractures	8522	124'	129'	5'	90	11	128	.7	5	1
129'	134'			ANDESITIC AMYGDALOIDAL FLOW										
	422'			- 129' - 130' 6" : Dark orangish/brownish green grading to orangish brown, tuff w/ 10% 1cm chloritic filled amygdules grading into carbonate orqtz filled amygdules (may be a porphyritic flow?). 4cm qtz + ankerite? - carbonate vein at 130'. Flr surrounded by pervasive strong limonitic & weak carbonate & sericite (?) alteration	8523	129'	130' 6"	1' 6"	35	12	83	.4	9	1
				- 130' 6" - 134' 6" : Dark green, with slight orangish brown limonitic bleaching; 10% chloritic amygdules as above. 5mm & 2cm qtz veins at 131' + 132' 6" respectively Tr py, 3% carbonate vnlts & fracture fillings	8524	130' 6"	134' 6"	2' 6"	254	11	107	1.3	8	4
134'	135' 6"			ALTERNATING ANDESITIC TUFF & CRYSTAL/LITHIC TUFF										
				Dark green slightly mottled tuff & light grey crystal/lithic tuff w/ 10% 2-3mm white plagioclase xtals, 10% angular	8525	134'	135' 6"	1' 6"	326	14	94	1.0	6	1

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DIAMOND DRILL LOG

HOLE No. 87-12

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width										
From	To					From	To											
				lithic fragments in chloritized, siliceous matrix, well fractured & partially brecciated by hairline to 2mm carbonate ± qtz veins. Homotized 1cm fragments with spy & cpx-calcite-chlorite units at base of unit.														
135'6"	138'6"			MIXED ANDESITIC TUFFS & AMYGDALOIDAL FLOWS														
				Dark green, slightly mottled, w/ 1-5% amygdules, moderate to strongly fractured w/ qtz carb infilling fractures & vns. Minor limonite & Fe-carb in & adjacent to veins, -137' : 5cm band with carbonate filled amygdules & qtz-carb veins w/ tr cpx	8526	136'6"	138'	1'	20	7	78	.3	8	1				
						(41.1m)	(42.0m)											
138'6"	150'			ALT'D & SHEARED ANDESITIC VOLCANICS														
139'	150'	90	0.06	Orangish brown, strongly foliated at 20-26° to CIA.														
				-138'6" - 142'6" : Strongly Fe carb & limonite, & weak carbonate altered amygdaloidal flows.	8527	139'	144'	5'	88	9	80	.7	2	4				
				-142'6" - 145' : Alt'd & sheared lapilli tuff & tuff.		(42.27m)	(43.8m)											
				-145' - 149'6" : Sandy coarse rubble v. poor	8528	145'	149'	4'	38	17	73	.6	9	1				
				rec'y		(43.2m)	(45.12m)											
150'	151'			FINE GRAINED GRANODIORITE (?)														
150'	190'	60	0.04	Dark green w/ 30% mafics (chlorite)														
151'	182'			ANDESITIC LAPILLI TUFF														
				Green to dark green, moderate to weak foliation at between 10-50° to CIA.														
				3% ≤ 1cm qtz or carbonate vns & fracture filling. Occasional chlorite														

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DIAMOND DRILL LOG

HOLE No. 87-12

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Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width											
From	To					From	To												
				Fe carb or limonite w/ vns. Foliation decreases w/ depth. - 152'-153': Possible chloritized & grainy granodiorite. Upper contact @ 35° to C.A. Large calcite vein. Tr. py. - 154'-155': Limonitically bleached w/ 9mm gw - 160'-162': Broken core, +4cm gw. at 161' - 164-165': Strongly foliated, moderate bleaching - 165-182': Weak to non foliated, multi-lithic fragments, several small silicified bands, slightly mottled tr. py.															
182'	184'			ANDESITIC TUFF Green w/ 5% 1mm chlorite xtals Upper contact @ 45° to C.A.															
184'	242'			ANDESITIC LAPILLI TUFF + TUFF Dark green. Upper half: Fragments generally smaller than overlying lapilli tuff (ave < 5mm); weak (< 1%) limonitization of selected mafic minerals; moderately chloritized throughout & sporadically silicified; occasional crystal tuff & lithic tuff (< 15cm) bands. Lower half: Greater percentage of tuffaceous layers; weak to strong epidetization & chloritization, either pervasive or along fractures & vns. Scattered (1-3%) < 5mm carbonate vns. - Limonite & Fe carb altered < 10cm bands at 218' & 229' 6". - 227' 8"-228' 6": 1.5cm epidote-calcite ± qtz vn w/ a smaller epidote-calcite vnls. Smaller vns are fractured & offset by carbonate-chlorite vns & fractures.															
190	199	83	0.08																
199	221	89	0.51																
241	259	75	0.93																
					8529	160' 6"	161' 6"	1'	14	9	85	.4	2	1					
					8530	227'	229'	2'	81	13	101	.5	6	2					

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DIAMOND DRILL LOG

HOLE No. 87-12

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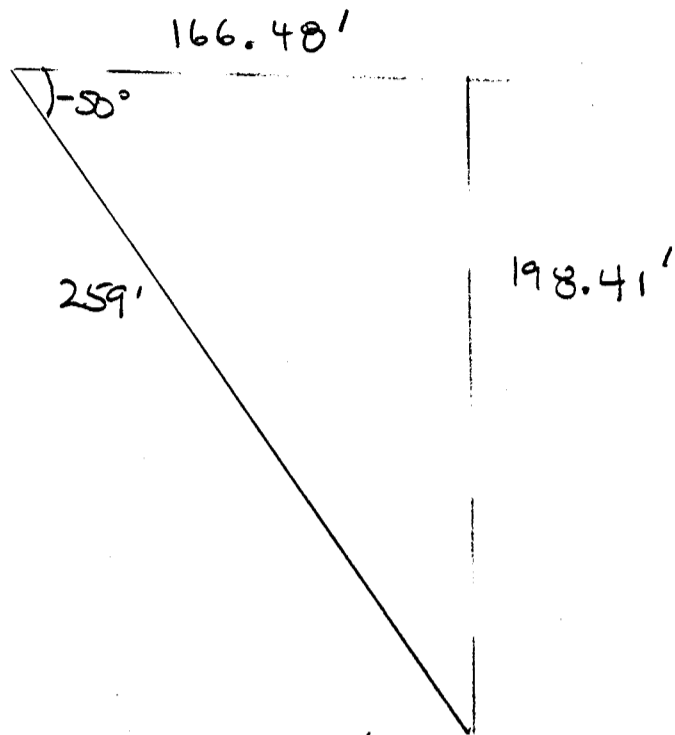
Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width										
From	To					From	To											
				- 231' - 237' : Crystal tuff (maybe a flow?) w/ 15-30% \leq 1.5mm slag xstls.														
				- 237' - 242' 1" : As above but becomes more alt'd w/ depth.														
242' 1"	250' 10"			ALT'D, BRECCIATED & STRAINED LAPILLI TUFF & FELSIC FLOWS														
				- 242' 1" - 242' 6" : Brown to brownish green lapilli tuff, moderately foliated at 70° to C.A. Lithic fragments partially stretched out & more strongly alt'd than matrix	8531	242' 1"	243' 1"	1'	5	8	71	.2	4	1				
				- 242' 6" - 243' : Yellowish brown, xtal tuff & lapilli tuff, less sheared than above unit.														
				- 243' - 250' : Grey to buff-brownish grey, strongly alt'd, porphyritic, flow banded, & weakly brecciated felsic (rhyolitic) flows, w/ 1% cl. alt'd 1mm cubed phenocrysts,	8532	243'	245'	2'	76	10	43	.6	2	1				
				at 243' - 244' 9", 247' - 247' 11" & 249' 8" - 250' . Brecciated & variably alt'd lapilli tuff. Angular, silicified, irregular shaped, orange brown to grey (often rimmed) altered fragments \leq 27mm in a grey, variably chloritized(?) Fe ⁺⁺ silicified matrix with < 10mm lithic fragments. Chaotic fragmental & matrix, pattern but roughly aligned 50° to 70° to C.A. Possible Sault breccia, w/ an alteration overprint. chlorite & quartz.	8533	245'	247'	2'	40	14	39	.4	2	1				
				Later stage (?) brecciation at 243' 11", 246' 9" - 246' 11", 247' - 247' 2" & 248' 7". 1-2% \leq 2mm quartz.	8534	247'	250'	3'	33	11	48	.5	4	2				
				- 250' - 250' 10" : less altered lapilli tuff.														
259'	259'			ANDESITIC LAPILLI TUFF														
				Dark green to grey, moderate to strongly chloritized, moderate silicification in places. 2% calcite														

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Length:

Dip @ Collar: -50

Dip @ EOH: -50



Advance: 166.48'

Depth: 198.41'

DIAMOND DRILL LOG

HOLE No. DDH 87-A1

Property MIDNIGHT GULCH NTS 105 D/2 Claim JL Elevation 4200' Azimuth 227° Length 387' Dip -51°
 Coordinates S42N 112E Dip Tests Advance 243.5' Depth 300.8' Date Collared JULY 1, 1987 Date Completed JULY 6
 Purposes TESTING RHYOLITE DYKE AT ADIT (412N, 0490E) Drilled by CARON Assays by ACME Logged by A. MCKINLEY

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	% PY	MUCH MACKINAW									
From	To (m)					From	To			Cu	Pb	Zn	Ag	As	Au				
0	25.9			CACING															
5.28	16.15	40%	0.03	OUTBURDEN(?) MIXED ROCK FRAGMENTS, REELS & SOIL; ROCK FRAGMENTS IDENTIFIED INCL'D: SILICIFIED ANDRESITIC LAPILLI TUFF, FE ALTERED & SHEARED LAPILLI TUFF, FLOW BANNED TUFF BRECCIA, MILKY QZ-Fe CARB VEIN FRAGMENTS OR (?) FE ALTERED RHYOLITE; MINOR GOSSANOUS CLAY RICH GRITTY SOIL (CARBONACEOUS) - MINOR QZ/CALCITE VEIN W/ 1% SUBEQUAL PY (FRAGMENT) @ 13.65m - FeCO ₃ ALTH COMMON IN ROCKS	8366	14.63	16.15	1.52	0%	24	13	59	.1	3	3				
16.15	19.2	45%	0	GOSSANOUS SOIL / MNR TUFF? FRAGMENTS YELLOW-BROWN CLAY RICH SOIL W/ ANGULAR ROCK FRAGMENTS - MAINLY FeCO ₃ /SERICITE ALTERED, FOLIATED TUFF?; SOIL FREEZES IN DILUTE HCL. 18.35-18.65: SIMILAR TO ABOVE W/ ~ 30% QZ- CALCITE VEIN FRAGMENTS W/ RUSTY LIMONITIC FRACTURES THROUGHOUT; VUGGY (APPEARS TO BE IN PLACE) FRAGMENTS OF FeCO ₃ ; ALTH RHYOLITE? AT 16.15 - POSSIBLE DYKE CONTACT?	8367	16.15	18.35	2.20	TRC	40% RECVY	26	12	92	.1	2	5			
				18.35-18.65: SIMILAR TO ABOVE W/ ~ 30% QZ- CALCITE VEIN FRAGMENTS W/ RUSTY LIMONITIC FRACTURES THROUGHOUT; VUGGY (APPEARS TO BE IN PLACE) FRAGMENTS OF FeCO ₃ ; ALTH RHYOLITE? AT 16.15 - POSSIBLE DYKE CONTACT?	8368	18.35	18.65	0.30			5	6	64	.1	5	3			
				FRAGMENTS OF FeCO ₃ ; ALTH RHYOLITE? AT 16.15 - POSSIBLE DYKE CONTACT?	8369	18.65	19.2	0.55			23	10	83	.1	4	1			
19.20	29.90	60%	0	ALTERNATING BLOCKY BROKEN ALT'D TUFF/GRITTY-CLAY RICH SOIL COMMONLY LIES GOSSANOUS GRITTY SOIL W/ ANGULAR RUSTY BROWN FeCO ₃ ALT'D TUFF FRAGMENTS, ALTERNATING W/ VARIABLY ALT'D (FeCO ₃ SERICITE), FOLIATED (50°-70° TO C.A.) TUFF, CARBONACEOUS LIMONITIC FRACTURES; FeCO ₃ MNR QZ FRACTURE FILLINGS. ← BLOCKY & BROKEN					TRC										
				COMMONLY LIES GOSSANOUS GRITTY SOIL W/ ANGULAR RUSTY BROWN FeCO ₃ ALT'D TUFF FRAGMENTS, ALTERNATING W/ VARIABLY ALT'D (FeCO ₃ SERICITE), FOLIATED (50°-70° TO C.A.) TUFF, CARBONACEOUS LIMONITIC FRACTURES; FeCO ₃ MNR QZ FRACTURE FILLINGS. ← BLOCKY & BROKEN	8370	19.20	21.00	1.80			4	5	59	.1	2	3			
				COMMONLY LIES GOSSANOUS GRITTY SOIL W/ ANGULAR RUSTY BROWN FeCO ₃ ALT'D TUFF FRAGMENTS, ALTERNATING W/ VARIABLY ALT'D (FeCO ₃ SERICITE), FOLIATED (50°-70° TO C.A.) TUFF, CARBONACEOUS LIMONITIC FRACTURES; FeCO ₃ MNR QZ FRACTURE FILLINGS. ← BLOCKY & BROKEN	8371	21.00	23.00	2.00			11	6	65	.1	4	1			
				COMMONLY LIES GOSSANOUS GRITTY SOIL W/ ANGULAR RUSTY BROWN FeCO ₃ ALT'D TUFF FRAGMENTS, ALTERNATING W/ VARIABLY ALT'D (FeCO ₃ SERICITE), FOLIATED (50°-70° TO C.A.) TUFF, CARBONACEOUS LIMONITIC FRACTURES; FeCO ₃ MNR QZ FRACTURE FILLINGS. ← BLOCKY & BROKEN	8372	23.00	25.00	2.00		(23.77-26.21)	11	9	63	.1	3	1			
				COMMONLY LIES GOSSANOUS GRITTY SOIL W/ ANGULAR RUSTY BROWN FeCO ₃ ALT'D TUFF FRAGMENTS, ALTERNATING W/ VARIABLY ALT'D (FeCO ₃ SERICITE), FOLIATED (50°-70° TO C.A.) TUFF, CARBONACEOUS LIMONITIC FRACTURES; FeCO ₃ MNR QZ FRACTURE FILLINGS. ← BLOCKY & BROKEN	8373	25.00	27.00	2.00		-25% RECVY	68	29	81	.1	2	1			
				COMMONLY LIES GOSSANOUS GRITTY SOIL W/ ANGULAR RUSTY BROWN FeCO ₃ ALT'D TUFF FRAGMENTS, ALTERNATING W/ VARIABLY ALT'D (FeCO ₃ SERICITE), FOLIATED (50°-70° TO C.A.) TUFF, CARBONACEOUS LIMONITIC FRACTURES; FeCO ₃ MNR QZ FRACTURE FILLINGS. ← BLOCKY & BROKEN	8374	27.00	29.00	2.00		(25% RECVY)	18	13	70	.1	2	2			

Property	NTS	Claim	Elevation	Azimuth	Length	Dip
Coordinates	Dip Tests	Advance	Depth	Date Collared	Date Completed	
Purposes			Drilled by	Assays by	Logged by	

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Assays										
						From	To		Cu	Pb	Zn	Ag	As	Au					
				-22.5 TO 22.8: MINOR DULL GREEN (SOLICITIC?) QZ VEIN FRAGMENTS; LOCALLY VUCCY W/ RUSTY HAIR LINE FRACTURES.															
				29.-29.5: MINOR QZ VEIN FRAGMENTS W/ RUSTY LIMONITE FRACTURES; SIMILAR IN APPEARANCE TO QZ @ 18.70-18.65. * NOTE - 28.35 - 29.87 ~ 30% RECOVERY	8375	29.00	29.70	0.90	(30% REC'Y)	30	11	79	.2	6	3				
				26.5-26.8: 2% subhedral py + possible sph in fractures + altered tuff contact fairly sharp ⊥ to 80° to CA.															
29.90	30.33	88	.35	ALTERED TUFF	8398	29.90	30.33	0.43		57	10	53	.4	9	2				
				Yellowish to reddish buff brown; fine grained, strongly limonitized ^{or Fe carbonatized} + weakly chloritized. Moderate foliation @ 75° to C.A., with 20% - 1mm chloritized plag (?) x'tals, @ 1% - 1mm py x'tals. Cloudy white gl' veins up to 8mm, often discontinuous & Z by foliation. Largest vein varies from 11 to 35° to C.A., dominant fracture 20° to CA; weak carb.															
				Gradational															
30.33	31.85	98	.31	FRACTURED + ALTERED LITHIC LAPILLI TUFF															
				Brownish green to dark green; grades from moderate limonitization into strong silicification, with weak carb along fractures. May be partially brecciated; moderate pervasive chloritization throughout. Lapilli fragments of heterolithic volcanics. Several glz-chl bands (26.5° to C.A.) one of which is 0.55 cm thick by a fracture. Lim prchl along most fractures. Trace py.															

Property		NTS		Claim		Elevation		Azimuth		Length		Dip			
Coordinates				Dip Tests		Advance		Depth		Date Collared		Date Completed			
Purposes						Drilled by				Assays by		Logged by			
Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Assays						
From	To					From	To		Cu	Pb	Zn	Ag	As	Au	
				- 30.33 to 30.67 : Up to 1cm white qtz veins, X cutting veins, probably 2 generations. Lim halos around fractures.	8399	30.33	30.67	0.34	28	6	74	.2	4	1	
				- 30.67 to 30.98 : Strong sil with qtz-carb veinlets & irregular fracture filling	8400	30.67	30.98	0.31	45	7	65	.6	7	1	
				- 31.48 to 31.78 : Chl-qtz-carb ± py bands. Gradational - - -	8401	31.48	31.78	0.30	51	8	62	.4	5	1	
31.85	44.86			LITHIC LAPILLI ANDESITIC TUFF											
31.85	33.6	90	.34	Dark green to grey green; heterolithic fragments - fine grained flows, & tuffs; porphyritic felsic volcanics											
33.6	36.2	82	.49	flows, & zoned bombs (up to 65mm). Occasional											
36.2	36.8	90	.60	qtz & carb vein, up to 6mm wide, commonly											
36.8	41.8	90	.64	20-30° to C.A. Carb & qtz tension											
41.8	44.86	85	.47	fracture filling. Minor lim &/or wad along fractures. Weak to moderate pervasive chloritization, occasional silicified or strongly chloritized band.											
				- 33.6- 33.75 : Blacky zone grading into limonitized & chloritized clayey fracture											
				- 35.3 - 35.81 : Siliceous band, with qtz-chl. Fractures (?) 80-85° to C.A. Upper contact @ 85° to C.A.											
				- 40.4 - 40.97 : Several 5cm felsic porphyritic to massive flows interbedded with lapilli tuff & a fine grained andesitic flow. Weak foliation & contact @ 45-50° to C.A.											

Property	NTS	Claim	Elevation	Azimuth	Length	Dip
Coordinates	Dip Tests	Advance	Depth	Date Collared	Date Completed	
Purposes			Drilled by	Assays by	Logged by <i>NM</i>	

Interval From	Interval To	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Assays							
						From	To		Cu	Pb	Zn	Ag	As	Au		
				- 41.46 to 41.55 + 43.58 to 43.8 (black rhyolite) Black to grey green, felsic perphyritic flows with plagioclase $\le 3mm$.												
				- 41.8 to 44.86 ; Becomes lighter green, & more limonitized (weak) toward base. Moderately foliated @ 53° to S.A.												
				Sharp												
44.86	45.13	65	0	SHEARED & ALTERED INTERMEDIATE VOLCANIC	8402	44.86	45.13	0.27	9	10	61	.2	3	3		
				Yellowish light to buff brown with green tint; contact 62° to S.A.; soft, very well foliated; moderate carbonatization, limonitization & sericitization(?) - potential argillic alt. as well?												
				Sharp												
45.13	47.93			ALTERED INTERMEDIATE TUFFS												
45.13	46.2	56	13	light or buff yellowish green; variably altered; grades from moderate limonitization, sericitization, into weak carbonatization, to weak to moderate chloritization. Patchy silicification occurs throughout. Relict lapilli tuff bands (45.95, 47ft) silicified flow breccias (47.95). Strong limonitization along fractures with fractures decreasing with depth												
46.2	47.93	86	37													
				Gradational												

DIAMOND DRILL LOG

HOLE No. 87-A1Page 5 of 12

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
47.9	50.59	73	.28	INTERMEDIATE (ANDESITIC) LAPILLI TUFF Green to dark green, moderately chloritized & in places silicified; fragments commonly ≤ 3 cm, heterolithic w/ @ 75% tuff, 20% porphyritic flows + 5% altered granitoids. Scattered tension fracture qtz veins & minor limonite along structures. — sharp? —				
50.0	52.4	59	.08	INTERMEDIATE (ANDESITIC) TUFF & LAPILLI TUFF Light brownish or yellowish green grading into pale green. Sheared & altered lapilli tuff grading into & interbedded with a fine grained tuff. Foliation at contact @ 55° to CIA. Most of unit blocky & broken. Occasional qtz vein(?) or sweat. Alteration grades from moderate limonitization into chloritization. Some of the tuffs may be non to weakly porphyritic flows. — Gradational —				
52.4	61.4	55	.07	INTERMEDIATE (ANDESITIC) LAPILLI TUFF Dark green, medium to fine grained lapilli; moderate chloritization $\leq 5\%$ granitoid fragments. Predominantly blocky core. Occasional qtz-carb & lim or hematite ≤ 2 mm vein usually as tension fracture filling. 52.6 - 53.1 56.84 - 59.0, 59.4 - 60.0 very block core.				
61.4	61.67	85	.59	INTERMEDIATE (ANDESITIC) PORPHYRITIC FLOW Dark green, fine grained 20% 1-2 mm plaq, 10% 1mm chlorite altered x'tals.				

DIAMOND DRILL LOG

HOLE No. B7-A1Page 6 of 12

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
61.67	67.84	96	.75	<p>INTERMEDIATE (ANDESITIC) LAPILLI TUFF</p> <p>sharp</p> <p>Contact @ 62° to CIA. Dark green, medium to coarse lapilli fragments w/ occasional bomb (upto 130mm). @ 1% generally coarse 1cm ^{altered} granitic fragments. Moderate chloritization throughout. Few fractures, qtz-carb &/or limonite infilling; \downarrow, 70°/20° most common.</p> <p>- 66.02 - 66.15 Feldspar porphyritic andesitic flow (as 61.4 - 61.7).</p>				
67.84	69.14	95	.81	<p>INTERMEDIATE (ANDESITIC) FLOWS & TUFF (?)</p> <p>sharp 72° to CIA.</p> <p>Dark green, fine grained porphyritic, 5% \leq 1mm plag laths, ~15% mafic-chlorite altered xtals. moderate to strong chloritization. Few scattered q.v. & fractures.</p>				
69.14	74.20	96	.52	<p>INTERMEDIATE (ANDESITIC) LAPILLI TUFF</p> <p>sharp ~80° to CIA.</p> <p>Dark green, moderately chloritized, in places weak epidatization & ^{moderate} silicification. Avg fragment size 8mm, with bombs upto 60cm; < 1% granitic fragments. Sparse fractures, \leq 1mm common, with qtz, qtz + carb or lim + carb infilling. Extent & orientation variable.</p> <p>- 70.05 to 70.23 moderately magnetic, amygdaloidal (?) andesite (basalt); amygdules epidote rimmed w/ chlorite \pm qtz centre</p>				

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DIAMOND DRILL LOG

HOLE No. 87-A1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width											
From	To					From	To		Cu	Pb	Zn	Ag	As	Au					
				-71.05' Epidote & albite(?) breccia dip 65° to CA															
				-71.33 - 71.64' Silicified lapilli tuff w/ 35% angular fragments. Fragments appear darker against matrix.															
74.20	74.53	92	0	Sharp 28° to CA. SHEARED & BRECCIATED LAPILLI TUFF	8463	74.20	74.53	.33	24	10	90	.3	6	1					
				Dark green broken core & mud grading into broken core. Moderate carb alt. especially along fractures. weak lim & hem.															
				Gradational															
74.53	77.40	87	.52	INTERMEDIATE (ANDESITIC) LAPILLI TUFF															
				Dark green; coarse lapilli fragments of perphyritic volcanist tuff. Weak to moderate chloritization, with qtz & carb ± lim along sparsely scattered fractures.															
				Gradational															
77.40	79.76	85	.30	FOLIATED TO UNFOLIATED INTERMEDIATE (ANDESITIC) TUFFS (AND FLOWS?)															
				Dark green to pale brownish green; grades into then out of stronger foliated bed. Fine grained, moderately chloritized w/ 10% q.v. and/or fractures. Trace to 2% py															
				-78.24 - 78.83' Moderately foliated - @60° to CA; moderate sericitic & chloritic alteration with irregular qtz-carb-chl hem ± lim veins up to 1cm wide. Weak, spotted argillitic alteration in strongest sericitic	8404	78.16	78.83	0.67	21	17	68	.3	5	2					

DIAMOND DRILL LOG

HOLE No. 87-A1

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Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
				altered zone, 2% py adjacent to 4 in veins. Sheared by at 78.30				
				— — Gradational — — — —				
79.76	81.8	81	.68	INTERMEDIATE (ANDESITIC) LAPILLI TUFF				
				Dark green with green matrix; 50% angular chloritized tuff fragments in a moderately chloritized matrix. Interbedded with up to 3m tuffs. Moderately well fractured, 35° & 65° to C.A. dominant, with chlorite & qtz & carb & lim infillings.				
				— — Gradational — — — —				
81.8	89.46			INTERMEDIATE (ANDESITIC) TUFFS & FLOWS				
81.8	87.0	95	.50	Dark green, fine to very fine grained, occasionally porphyritic with ≤ 7% ≤ 1mm plag phenocrysts. Moderate chloritization, & minor weak epidatization. Few fractures, usually limonite infilling.				
87.0	89.46	41	.21					
				86.3 - 86.7: Very fine grained, well fractured, with ≤ 3mm carb & qtz veins & occasional thin lapilli band				
				88.0: 1.5cm chloritized q.v. by.				
				87.0 - 89.46 blocky core				
89.46	89.61	100	.80	INTERMEDIATE (ANDESITIC) LAPILLI TUFF				
				Dark green, chloritized, 40% porphyritic lapilli fragments.				
				— Sharp 40° to C.A. —				

DIAMOND DRILL LOG

HOLE No. 87-A1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au
From	To					From	To							
89.61	96.35	53	0	FRACTURED CLAY RICH - BRECCIATED (?) INTERMEDIATE (ANDESITIC) LAPILLI TUFFS, CRYSTAL TUFF AND FLOWS	8405	89.61	90.21	0.60	46	3	77	.4	8	1
					8406	90.7	91.81	1.11	37	13	71	.4	8	1
					8407	92.0	93.0	1.00	47	18	76	.4	7	1
					8408	93.0	94.18	1.18	35	13	83	.4	6	2
				Dark green broken core often supported by clay mud or fragment matrix. Moderate chloritization, weak to strong carbonatization, weak-patchy limonitization. Scattered qtz $\leq 3\text{mm}$.										
				- 90.83: 2cm wuggy calcite vein										
				Gradational										
96.35	99.45	69	.54	INTERMEDIATE PORPHYRITIC FLOWS & CRYSTAL TUFF										
				Dark brownish green, moderate chloritization weak carb, weak limonitization, 1% carbonate veins or fracture filling										
				Gradational										
99.45	103.05	74	.24	MODERATE TO STRONGLY ALTERED INTERMEDIATE LAPILLI TUFF & TUFF										
				Brownish green to brown; moderate to strongly Fe carbonate altered; mod carb & lim along fractures, moderate pervasive chloritization. Generally highly fractured &/or broken core. Core rubble - 99.45 - 99.7, 99.8, 100.6-100.9, 102.41 - 103.05. Abundant (25%) qtz & carb & lim veins.										
				- 100.0 - 100.56 10% Qtz-carb & lim breccia "veins" ($\pm 1\text{cm}$ thick). Irregular orientation - 75° & 65° main "veins".	8409	100.1	100.56	.46	13	14	78	.1	26	4
				- 102.41 - 103.05 Altered hanging wall.	8410	102.41	103.05	.64	18	16	192	.1	2	2

Property		NTS		Claim		Elevation		Azimuth		Length		Dip		
Coordinates				Dip Tests		Advance		Depth		Date Collared		Date Completed		
Purposes						Drilled by				Assays by		Logged by		
Interval (m)		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width						
From	To					From	To		Cu	PB	Zn	Ag	AS	AU (ppb)
103.05	114.98			SHARP SILICIFIED & SERICITIZED RHYOLITE DYKE										
				LIGHT GREENISH GREY, PORPHYRITIC; 15% PLAG. PHENOCRYST IN A STRONGLY SILICIFIED & MOD. SERICITIZED APHYRITIC MATRIX. PHENOS. COMMONLY ALTD TO SERICITE, INCREASE IN SIZE (UP TO 2mm) AND NUMBER TOWARD F.W. QZ VEINS & VEINLETS UP TO 1cm OCCUR PREDOMINANTLY ADJACENT TO THE H.W. WELL FRACTURED W/ LIMONITE INFILLING & ALTN HALO. Minor (<1%) diss. & fine grained py										
		94	0.10	103.05 to 104.20; Light greenish grey to greenish grey strongly fractured, qtz veined &/or brecciated silicified rhyolite below sharp hanging wall contact. Brecciation defined by small x-tallic grey to white qtz (commonly <3mm) veinlets or variations in intensity of alteration. Silicification & sericitization pervasive, but sericitization often more intense along fractures & as halos around certain veinlets or in patches. Porphyritic texture weak. Lim and/or hem along fractures. Fractures commonly 25-45° to CIA, but variably, and often open space tension gashes.	8376	103.05	103.33	0.28	11	22	23	.3	7	3
					8377	103.33	104.20	0.87	3	23	7	.3	7	4
		56	0	104.20 to 105.46; Dark grey to brownish grey unconsolidated mud with dark green (often oxidized) diorite (?) rx frag. Weak carb.	8378	104.20	105.46	1.26	90	18	119	.2	2	1
		48	0	105.46 to 106.62; light greenish grey, porphyritic strongly silicified & sericitized; blocky recryst w/ lim infilling along fractures. Trace py within ch. or qtz. Qz. ve to 1cm, irregular.	8379	105.46	106.00	.54	4	39	8	.2	4	5
					8380	106.00	106.62	.62	11	13	22	.4	5	2

Property	MIDNIGHT GULCH	NTS	Claim	JL	Elevation	Azimuth	Length	Dip
Coordinates	Dip Tests		Advance		Depth	Date Collared		Date Completed
Purposes			Drilled by			Assays by		Logged by

Interval	Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Assays					
					From	To		Cu	Pb	Zn	Ag	As	Au
	67	0.05	- 106.62 to 109.00 : Greenish grey, more strongly sericitized than overlying rhy. Strong lim along & surrounding fractures; 5', 87°, 50°, 60' to C.A. dom dip. V. small q.v. generally increase in # with depth; \downarrow , 85°, 76 to C.A.	8381	106.62	107.5	0.88	18	21	32	0.2	33	8
				8382	107.5	108.27	0.77	22	68	86	0.1	56	4
				8383	108.27	108.6	0.33	(Not split, test for Au in fractures) 46, 49, 93, 4, 31, 14					
				8384	108.6	109.0	0.4	40	29	63	0.3	39	7
	80	0	- 109.00 to 109.88 : Greenish grey, qtz vein stockworked veins up to 1cm, ave. 5cm. 1% Py (6mm), mostly weathered away; few fresh all anhedral; subhedral relict pits	8385	109.0	109.4	0.4	32	32	21	0.8	46	58
				8386	109.4	109.88	0.48	25	31	24	0.4	32	5
	70	.19	- 109.88 to 113.74 : Pale greenish grey to greenish grey. Strong to moderate sericitization both pervasive & as feldspar alteration. Strong limonite alteration halos. Scattered <2mm q.v. generally at a low angle (10-20') to C.A. Very blocky fracture & broken core 111.0 to 111.55, & 112.1 to 112.40. 2% py diss + in 3mm q.v. & vuggy chy 110.67 to 111.0	8387	109.88	110.67	0.79	34	48	20	0.6	23	10
				8388	110.67	111.0	0.33	20	85	21	0.9	43	19
				8389	111.0	111.55	0.55	28	37	38	0.5	26	12
				8390	111.55	112.30	0.75	37	32	42	0.7	62	13
				8391	112.30	113.74	1.44	25	238	49	1.0	16	17
	95	.45	- 113.74 to 114.07 : Pale greenish grey, porphyritic with 2-3mm plag phenocrysts less sericitized than ^{thick} overlying. Up to 2% euhedral to subhedral py as diss or along fractures. Generally more massive than previous chy.	8392	113.74	114.07	0.33	24	34	25	0.3	13	11
	92	.29	- 114.07 to 114.48 : Pale greenish grey to pinkish brown or brown. Sharp but irregular contact marked by partially chloritized & strongly silicified porphyritic rhy. Qtz veinlets are sparse, lim & chlorite fill irregular vuggy fractures; -1% subhedral 1mm py. Contact b'w as indicated by several altered to unaltered 1-4cm mafic/intermediate angular volcanic clasts. Contact angle \perp to C.A. but variable	8393	114.07	114.48	0.41	25	25	86	0.4	10	14

Property	MIDNIGHT GULCH	NTS	Claim	JL	Elevation	Azimuth	Length	Dip
Coordinates	Dip Tests		Advance		Depth	Date Collared		Date Completed
Purposes			Drilled by			Assays by		Logged by A.M. & H.M.

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au
From	To					From	To							
114.98	115.66	66	0.49	SHEARED ANDESITIC CRYSTAL TUFF Sharp contact	8394	114.98	115.21	0.73	6	12	105	0.4	9	3
					8395	115.21	115.66	0.45	5	7	94	0.2	5	1
<p>Dark greenish brown, very well foliated 25° to C.A., pervasive moderate limonitization, silicification + chloritization. Fine grained to very fine grained with porphyritic or tuffaceous matrix becoming more apparent with distance from contact. Several (14.56 + 14.64) nearly pyritic carb-chl- -lim²⁰⁻⁴⁰ vein or fracture fillings, with trace py.</p> <p>- 114.78 - 114.92 : As 119.07 to 114.48</p> <p>— Gradational contact —</p>														
115.66	117.95	88	0.48	ANDESITIC CRYSTAL TUFF	8396	115.66	116.65	0.99	11	11	62	0.4	3	1
					8397	116.85	117.95	0.60	15	10	90	0.2	5	3
<p>Yellowish or brownish dark green to dark green. Variably altered & occasionally weakly sheared. Ave: crystal size 1mm, with no preferred orientation. Moderately chloritized, with slight increase in alteration with depth. Irregular fractures filled with carbonate and/or limonite or qtz. General fracture trends 45°, 35°, & 85° to C.A. Trace py in fractures. Slight (1mm) offset of some fractures.</p> <p>- 116.85 - 117.95 : Slightly more fractured & patchy altered, more limonitization</p>														
117.95	118.71			E.O.H.										

DIAMOND DRILL LOG

HOLE No. 87-C1

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Property ISLAND MINES - MONTGOMERY CLAIM NTS 105 D2 Claim JL Elevation Azimuth 180° Length 472' Dip - 55°
 Coordinates Dip Tests - 105' ADVANCE 270.7' Depth 336.6' Date Collared JULY 24 Date Completed JULY 31
 Purposes TEST COIL ADVANCE 270.7' (COIL FRAME) Drilled by CANON Assays by ARME Logged by A. MONTGOMERY

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au (ppb)		
From	To					From	To									
0	5'			O/B												
5'	23'	48%	.17	DARK GREEN LAPILLI TUFF												
		15%		DARK GREEN AMPHIBOLIC MATRIX ENCLOSED FRAGMENTS OF VARIOUS LITHOLOGIES, NOTED: BLACK AMPHIBOLIC & DARK GREEN W/ FELDSPAR LENS, 1mm - 40mm ON AVG; GENERALLY SILICIFIED; LOCALLY CHLORITIC; CALCIC/FeOx FRACTURE CONTINGE; MINOR CALCIC EPIDOTE STRINGERS.												
				5' - 7'; SERICITE ALT'D; SPINEL ELONGATION @ 45° (WELDING?) @ ~ 50° TO C.A.												
				* GROUND BROKEN CORE FROM 16 1/2' - 26 1/2'												
22'	72.5'	36%	.00	ALT'D DULL GREEN TO MLE BROWN LAPILLI TUFF												
		70%	.00	BROKEN BLOCKY SERICITE/FeOx, ALT'D TUFF; FRAGMENTS COMMONLY 1mm - 40mm OR NOT PRESENT, WHERE FRAGMENTS PRESENT ELONGATION (WELDING?) @ 40° - 50° TO C.A.; RARE DISSEMINATED PY (<0.1%)												
		17%	.15	23' - 27' - DULL BROWN V. FINE GRAINED W/ MINOR CR. P. PEBBLES <1mm, MINOR CALCIC	8535	23'	28.5'	3'	10	9	85	.3	6	1		
		78%	.13	24' - 27.0' BROKEN BLOCKY W/ ROUNDED FRAGMENTS												
				27' - 35.5' - LIGHT TO DULL GREEN CORE	8536	29'	35.0'	5.5'	22	8	84	.4	2	2		
				V. FINE GRAINED AMPHIBOLIC; FeOx STAINING												
		120%	.39	LOCALLY ABUNDANT X-CUTTING CALCIC MINULETS	8537	35.0'	36.0'	1'	42	13	72	.4	8	2		
				LOCALLY FINE GRAINED ROCK FRAGMENTS LOCALLY												
				30.0 MINOR BRX W/ CALCIC MATRIX												
		.14		35.5' - 72.5' BROWN TO BROWNISH-GREEN	8538	36.0'	51.0'	4' (LOST CORE)	9	11	71	.3	2	3		
				FeOx = SERICITE ALT'D. FRAGMENTS 1mm - 40mm; STAINING @ 30° - 50° TO C.A.; ABUNDANT RUSTY CALCIC												

091991

DIAMOND DRILL LOG

HOLE No. 87-C1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au (ppb)	
From	To					From	To								
				35.5 - 36.7 - COARSELY GRAINED CLAY SHALE W/ 1/2" QZ FRAGMENTS											
				+ N36-41' <20% REC'Y 41'-51' 17% REC'Y } GROUND CORE 51'-61' ~20% REC'Y											
				BETWEEN 51'-61.5' CORE LOCALLY RUBBLY W/ ROUNDED BLOBBLES	8539	51.0	62.5	5' (19.05m) LOST CORE	7	7	69	.3	2	1	
				61.5-62.5 - FELSIC PERALTTIC FLOW FRAGMENTS 1/2 TO 6cm											
				50.5 - ~ 0.5% IV STRINGERS ~ 40' TO C.A.											
				71.0 - 72.5 - GRITTY CALCTIC SOIL ALONG FRACTURE											
				ABUNDANT FeOx STRINGERS (FROM ~ 68.5' - 72.5')	8540	68.5	72.5	4' (20.88m) (22.10m)	5	18	95	.4	6	2	
72.5	79.5			ALTERNATING FELSIC PERALTTIC FLOW / ALT'D LAPILLI TUFF											
				DARK GREY FELSIC FLOW (FLOW BANDS MAY OR MAY NOT BE PRESENT) W/ ~ 4% WHITE FELDSPAR PHENOCRYSTS ~ 2mm DIA. IRRREGULARLY INTIMBEDDED W/ OIL GREEN-BROWN LAPILLI TUFF (SIMILAR TO ABOVE UNIT) LOCALLY SILICIFIED; MUDDY; CLAY/SILTITE GOUGE ZONES 10cm-15cm (BROKEN CORE) (74.6-75.6)	8541	74.6	75.6	1' (22.74m) (23.04m)	18	41	.81	.3	6	3	
				* NOTE CONTACTS SHOW FELSIC FLOW POST-DATES TUFF.											
79.5	97.0'	80%	.56	DARK GREEN (ANDESITIC) LAPILLI TUFF/MNR PERALTTIC ANDESITE (XSTLU TUFF?)											
				DARK GREEN TUFF W/ FRAGMENTS 1mm-60mm DIA. (DARK GREEN + DARK GREY ANANDITIC + PORPHYRITIC, MINOR SALMON ANANDITIC SILICIOUS FRAGMENTS); STRAIN ~ 50° TO C.A.; CALCTIC STRINGERS LOCALLY (28-30° TO C.A.); INTIMBEDDED PERALTTIC ANDESITE (BASICIZED MAG. PHENOS. TO 2mm) - SILICIFIED WEAKLY MAGNETIC.											

091901

DIAMOND DRILL LOG

HOLE No. 87-C1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au (ppb)	
From	To					From	To								
				79.5 - upper contact irregular ~20° to C.A.?											
				81.6 - 83.4 - silicified amygdalic porphyritic flow irregular contact w/ Tuff; upper contact irregular lower contact ~80° to C.A.											
				83.4 - 86.0 - Tuff											
				86.0 - 87' - broken/blocky rubble w/ gritty rusty soil; highly alt'd (sericite) tuff frags. (ground core - rdal recovery)	8542	86.0'	87.0'	1'	24	13	86	.3	2	1	
				87' - 88.5 - tuff w/ mm apl. felsic flow											
				~88.5 - 89.5 - gritty soil w/ lubby rock frags. alt'd	8543	88.5	89.5	1'	37	16	87	.2	5	2	
				89.5 - 97' - tuff											
				89.8 - 92.0 - 2% calcite stringers to 1cm (irregular)	8544	89.8	92.0	2.2'	5	9	77	.4	4	1	
				96.0 - 97.0 - calcite stringers & veining (~60° to C.A.)	8545	96.0	97.0	1'	10	11	75	.3	5	2	
97.0	109.5	60%	.11	Flow - weathered fine gr. felsic porphyry	8546	97.0	109.5	7.5'	24	10	76	.5	2	1	
		96-102	96-107.5												
				Flow grain to cream/brown v. fine - fine grained ± visible felsic & ml qtz phenos; no structure noted. minor rusty calcite stringers to 10' ± 20' (oblique to flow) to C.A.; minor FeOx along fractures; sericite & Fe-Cbnt(?) alt'd matrix. upper contact broken, lower contact ~ 50° to C.A.; locally rubble & broken.											
109.5	125.0	71%	.24	alt'd lapilli tuff w/ mm interbedded felsic porphyric flow											
		102-110	107.5-125.0												
			.56	dll buff-green shaly tuff w/ multi-litic frags <1mm-2cm strained @ 50° to C.A.; locally blocky & broken w/ mm gritty gouge. plastic sericite/FeCbnt alt'd; mm irregular calcite stringers, integrated flow-banded porphyritic felsic flow (rust tuff?); tau (Fe-Cbnt alt'd); grey w/ felsic phenos 2mm-3mm; irregular banding.											
				109.5 - 107.0 - broken shaly w/ FeOx on face; gritty gouge; minor FeOx calcite stringers.	8547	109.5	107.0	2.5'	10	6	62	.4	3	091091	
								70% Rec'y							

DIAMOND DRILL LOG

HOLE No. 87-C1

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Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au (ppm)
From	To					From	To							
172.0	174.0			ALT'D DULL GREEN-BROWN FAINTLY LAMINATED FINE GRAINED PYROCLASTIC (XSTL TUFF?) BROWN TO GREEN-BROWN FINE GRAINED HETEROGENEOUS MATRIX W/ 1% ELONGATE (ALT'D FELDSPAR?) P-ENOS. LAMINATION @ 70° TO C.A., CONTACTS BROKEN										
174.0	177.0			DULL BROWN SILICIOUS FELDSPAR PORPHYRY (SILICIFIED EQUIVALENT OF ABOVE?) BROWN FINE GRAINED MATRIX W/ SILICIFIED FRESH FELDSPAR P-ENOS (1-2mm) WEAKLY ORIENTED @ 60°-70° TO C.A.; MUDDY GOUGE VISIBLE @ UPPER CONTACT; CONTACTS BROKEN.	8554	174.0	175.0	1'	4	11	53	.2	7	1
177.0	178.0			DULL GREEN PYRO-CLASTIC (XSTL TUFF?) SIMILAR TO 172-174 BUT GREENER COLOR = P-ENOS. LESS VISIBLE.										
178.0	183.5	64%	.08	ALT'D LAPILLI TUFF W/ MINOR FELSIC PORPH. FLOW V. BLOCKY & BROKEN DULL GREEN-BROWN; FRAGMENTS (<1mm - 10mm) COMMONLY DULL BROWN Fe-CBN/Fe-OX. ALT'D. WEAK ALIGNMENT ~50° TO C.A. GREY FINE GR. MATRIX W/ 2mm-3mm SILICIFIED FELSP. P-ENOS. @ 50° TO C.A.										
180.0				* REDUCED TO NO CORE (BAD GROUND)										
183.5	188.0			DULL GREEN TO GREEN BROWN SILICIOUS V. FINE GRAINED MATRIX (ABUNDANT RUSTY FRAGMENT? ALT'D SPECS.) W/ 1mm-2mm WHITE FELDSPAR & PALE ORE P-ENOCYSTS; FINE LINE FRACTURED W/ MINOR SILICIC SHEARS, CONTACTS BROKEN, MINOR SHALE-STRING P-ENOS.	8555	183.5	188.0	4.5'	3	11	26	.5	.5	2

091991

DIAMOND DRILL LOG

HOLE No. 84-C1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Cu	Pb	Zn	Ag	As	Au (ppm)	
From	To					From	To								
38.0	200.0	40%		ACT'D LACCOLI TUFF W/ MINOR FELIC FLOWS	8556	177.7	200.0	2.3'	6	15	114	.2	7	1	
	(60.9m)	191-196 79%		DULL GREEN BROWN TUFF AS 178-183.5 w/ FAIR V.FINE GRAINED. DULL GREEN - BROWN SILICIOUS (FELSIC?), Fe-CBNT ALTD SPERS THROUGHOUT * CORE V. BROKEN & COMMONLY RUBBLE FROM 180'- 199' ABUNDANT (~1%-2%) IRREGULAR RUSTY QTZ + QTZ - CALCITE STRINGERS & PATCHES (<1cm) FROM ~197.7 TO LOCAL CONTACT; MINOR MUDDY SEALING.		(60.26m)									
200.0	203.7	95%	.63	SILICIOUS FELDSPAR RELATVLY/FINE GRAINED PROCLASTIC (XSL TUFF?)	8557	200.0	203.7	3.7'	9	13	110	.4	7	18	
	(62.9m)	198-223.9 227.9	199-227.9	SIMILAR UNITS RESPECTIVELY TO 174' & 177' 172-174'; LAMINATION & CONTACTS ~ 55° - 60° TO C.A.; MINOR CALCITE? QTZ-CALCITE STRINGERS (! RARE PV) ALONG BEDDING; LATER QTZ-Fe CBNT STRINGERS @ 60° TO C.A. ABUNDANT (~2%) TOWARDS UPPER CONTACT. UPPER CONTACT IS DEFINED BY SHEAR GOUGE; A 2cm QTZ-CALCITE VEINLET ALONG BEDDING. LOWER CONTACT GRADATIONAL.											
203.7	208.2			DARK GREEN ANDESITIC LAPILLI TUFF											
	(68.13m)			DARK GREEN V. FINE GRAINED MATRIX COMMONLY SILICIFIED W/ DARK GREEN-BLACK FRAGMENTS (<1mm - 40mm), STRAIN WEAK OR NOT NOTICEABLE @ 30° TO C.A.; MINOR INTERBEDDED DARK GREY FELSIC RELATIVITIC FLOW & DARK GREEN F. GRAINED ANDESITE; MINOR QTZ-CALCITE STRINGERS & VEINLETS THROUGHOUT, TUFF COMMONLY BROWNISH Fe-CBNT ALTD; MORE STRONGLY STRAINED. WHERE VEINING MORE ABUNDANT (>1%) EG. 208.2' - 209.4' 210.2' - 210.4' - BOXX W/ YELLOW QTZ-CBNT MATRIX 5TH PALE GREEN SERICITIC TUFF? SEARLED ON											
					8558	208.2	210.4	2.2'	17	14	77	.3	6	1	
						(63.46m)	(64.13m)								

DIAMOND DRILL LOG

HOLE No. 87-C1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width											
From	To					From	To		Cu	Pb	Zn	Ag	As	Au					
227.7	227.1	0%	.00	INTL BEDDED FELSIC PARAGENESIS / ALT'D LAPILLI TUFF															
	12.36m	227.7-231.0	227.7-231.0																
		65%	231-234	23															
		40%	234-236	23															
				231-236 - CORE V. BROKEN; LOCALLY RUBBLE & MUD	8559	231.0	237.4	6.4'											
				← ICE RELATIONSHIP BETWEEN FLOW; TUFF NOT CLEAR K. THAT ENCLOSES BULK FLOW YET FLOW ENCLOSES THE TUFF.		70.4m													
237.4	262.8	90%	.39	ALT'D FRESH LAPILLI TUFF															
	80.10m	237.4-271.0	237.4-271.0																
		.00	250.5-251.5																
		.52	251.5-259.0																
		.00	255-256																
		.09		237.4-240.3 - RUSTY WEATHERED LAPILLI TUFF w/ 1-2% Fe-CENT STRAINERS; RUSTY FRACTURE SPINES	8560	237.4	240.3	2.9'											
				250.5-251.5 - MUDDY SAND (GOOD RECY)	8561	250.5	251.5	1.0'											
				255.0-256.0 - RUBBLE (INCL'D PALE GREEN PHY) LEADING TO LIGHT BROWN CLAY RICH MUD (GOOD RECY)	8562	255.0	256.0	1.0'											
				258.0-258.3 - RUSTY CLAY/CENT SPHR. IN BROKEN CORE; SIMILAR @ 260.5-261.0	8563	257.8	261.2	2.4'											
				267.8 LCLL CONTACT @ 30' TO C.A. (STRAINING @ 30' TO C.A.)															

DIAMOND DRILL LOG

HOLE No. 37-C1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	CU	FE	Zn	Mg	AS	Pb	
From	To					From	To								
262.8	267.0			PALE GREEN PHYLITE (DYKE?)	8564	262.8	267.0	4.2'	7	26	7	.6	4	115	
	(81.38m)			PALE GREEN TO BUFF SILICIOUS "PHYLITE" w/ FINE FINE GRAINED WHITE "FLESHES"; DISTINCTIVE LIGHT YELLOW- BROWN FOX FEATURES THROUGHOUT; PALE Qtz VEINLETS ($<1mm$) = MINOR WOOLY FRACTURES			8.10								
267.0	369.0	88%	.44	COARSE TUFF											
	(112.47m)	272.0-317.0	272.0-316.0												
		50%	.31	NEELY GREEN (LOCALLY: ALSO PALE GREEN TO BUFF), COMMONLY SILICIFIED, HEAVILY MAGNETIC, DARK S&S-AGGREG. FRAGMENTS ($<4mm$) IN A DARK GREEN V. FINE GR. MATRIX w/ PALE COARSE FRAGMENTS; ABUNDANT PATCHES (FRAGMENTS?) + SECTIONS OF PORPHYRITIC XSTL TUFF or MED-FINE GRAINED GRANODIORITE, MINOR CALCITE/Qtz SPRINGERS THROUGHOUT; GENERALLY COMPACT, LOCALLY BLOCKY + BLOCKY.											
		95%	.05												
		279-276	314-311												
				267.0 - 271.6 - BUFF COLORED, STAINED (50°-60° TO C.A.) FRACTURED, FO. CONT. CALCITE? ALSO TUFF w/ MINOR CALCITE VEINLETS + PALE FINE GRAINED DISS. PY. BROWN CLAY RICH MUD FROM 267.0 - 267.6	8565	267.0	271.6	4.6'	6	5	52	.2	5	1	
				296.6 - 297.6 - 296.6 CALCITE VEINLET (1cm WIDE) 80° TO C.A. BROKEN SANDY CORE DOWN HOLE TO 299.6			(82.78m)								
				315.2 - 320.0 - RUSTY STAINED w/ ~ 1%-2% RUSTY Qtz/ CALCITE STRANDS, CALCITE ALSO RUBBLY, BROKEN LOCALLY	8566	315.2	320.0	4.8'	8	53	94	.1	2	2	
				329.0 - 331.5 - RUBBLY BROKEN, BLOCKY, MINOR GRIND CORE		(46.01m)	(91.91m)								
				* 331' - REDUCED TO BQ CORE											
		.83													
		331.0-369.0		347.0 - 369.0 - COMMONLY COARSE FRAGMENTS = LAPILLI TUFF; LESS SILICIOUS											
				368.3 - 369.0 - PATCHES OF VELVET APLASTIC RHY ENCLOSING TUFF FRAGMENTS; BEARING AT CONTACT @ 60° TO C.A., CONTACT BROKEN.	8567	368.0	369.0		5	23	437	.5	6	1	
						(12.17m)									

DIAMOND DRILL LOG

HOLE No. 87-01

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Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width											
From	To					From	To		Cu	Pb	Zn	Ag	As	Au					
350.0	395.0	35%	.15	PALE GREEN RHYOLITE (DYKE)															
	120.40	376.0-379.0	369.0-376.0																
		70%		PALE GREEN, SUBOPACIFIC (FAINT FELDSPAR KENOS (1.0)) SILICIOUS QTE-VEINED RHYOLITE W/ URY DISTINCTIVE BRIGHT YELLOW-BROWN LIMONITIC ALT'N ALONG & AS HALOS TO FRACTURES (ABUNDANT). DYKE IS BROKEN & BLOCKY THROUGHOUT; QTE VEINS GENERALLY SIDE-STRING & UP TO 2cm (RAPE); MINOR DISSEMINATED FINE GRAINED PY RHYOLITE & QTE & RAPE COARSE CR. PY IN VEIN & TIC GN IN VEINS, MINOR BOYLOCK & UUGS IN RHYOLITE & QTE VEIN THROUGHOUT CONTACT CRAP BUT BROKEN. * QTE VEINS WHITE TO YELLOW															
		70%																	
		70%																	
				369.5 1cm QTE VEIN w 1% CR & PY @ 40° TO C.A.	8568	369.0	374.0	5.0'	38	447	276	3.0	25	168					
				371.8 1cm QTE VEIN ~ 11 TO C.A.			(119.00)												
				372.7 1cm QTE VEIN ~ 5° TO C.A.	8569	374.0	378.0	4.0'	27	397	116	1.7	25	159					
				378.5 - QTE VEIN (W/TIC GN) FRAGMENTS TO 2cm WIDE	8570	378.0	379.0	1.0'	15	868	70	3.6	36	220					
				382.5 - 3 PARALLEL VEINS < 1cm, UGGY & MINOR PY, 30° TO C.A.	8571	379.0	381.0	5.0'	40	246	290	1.3	52	147					
					8572	384.0	390.0	6.0'	46	666	196	2.3	63	430					
					8573	390.0	395.0	5.0'	28	1597	193	6.1	44	340					
							120.80												
375.0	411.7	38%	.40	ALT'D LAPILLI TUFF/ COARSE TUFF															
	125.40	396.0-400.0	396.0-411.0																
		73%		RUSTY BUFF Fe-CRST & ESKITE ALT'D LAPILLI TUFF (TO 400') STRAINED 65° TO C.A. BROKEN & BLOCKY W/ MINOR LIMONITIC & CLAYEY FRACTURES NEAR UPR CONTACT. ANDESITIC COARSE TUFF, SIMILAR TO 367'-369', CALCITE STRINGERS @ ~ 50° TO C.A., WEAKLY MAGNETIC	8574	395.0	396.5	1.5'	6	68	1128	.5	7	1					
							120.85												
				400.0' - RUSTY ALT'N DISSAPARS DOWN HOLE AS CONCENTR OF TUFF IS REDUCED															
				411.0-411.7 ^{MUR} RUSTY QTE STRINGERS & CALCITE/Fe-ox ALT'N. IRREGULAR															
411.7	416.0		.89	TAN TO DULL GREEN ANDRITE (QFP)															
	126.80	411.0-416.0																	
				TAN TO DULL GREEN V. FINE GRAINED, MINOR															

DIAMOND DRILL LOG

HOLE No. 87-C1

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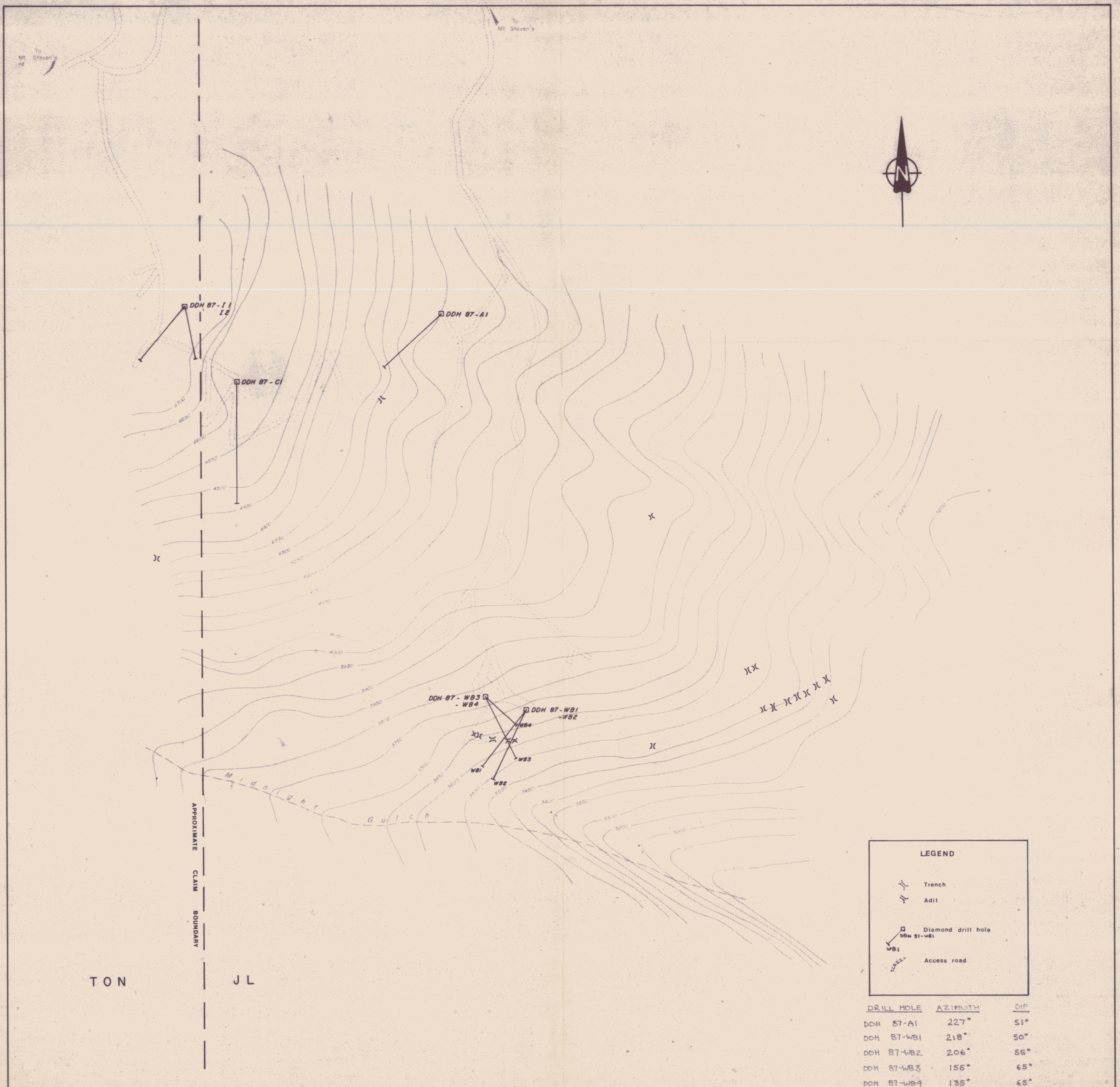
Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width												
From	To					From	To		Cu	PB	ZN	AG	AS	AU						
				PERLITIC (QZ + FELDSPAR MENOS. <1mm) BLENDED ROUND (Fe-ABSORBED QZ?) QZ EYES (1mm-2mm) LOCALLY FAINT BANDING SO TO C.A. RARE QZ/CALCITE STRINGERS. CONTACTS SHIP ALONG SHEAR PLANES ~ 50° TO C.A.																
416.0	438.5 (133.65m)		.50 416.0-445.0	ALT'D LAPILLI TUFF DARK GREEN TO BUFF (Fe-CONT; CHROME AG IN AT FRACTURES) LAPILLI TUFF SIMILAR TO UNITS ABOVE, MODERATELY FRACTURED (LIMONITE); MINOR WHITE CALCITE STRINGERS THROUGHOUT, WEAKLY DETECTABLE STRAIN 50°-60° TO C.A.; LOCALLY BLOCKY/BLOCKY, LOWER CONTACT GRADES IN/OUT OF PORPHYRIC FLOW @ ~ 60° TO C.A. CHL ~ 2'																
439.0	451.0 (137.46m)	74%	.27 444.0-461.0 445.0-453.0	POPPHYRITIC FELSIC FLOW GREY-BROWN APLAVIC SILICIOUS MATRIX W/ WHITE (RUSTY) FELDSPAR MENOS. (2mm) THROUGHOUT; ABUNDANT IRREGULAR FRACTURES OFTEN RUSTY; ABUNDANT RUSTY F. GRAINED SPECS, COMMONLY BROKEN/BLOCKY, MINOR QZ + Fe-CONT STRINGERS																
			.66 453.0-461.0	441.7 - IRREGULAR QZ-Fe-CONT STRINGER (2mm-4mm) 443.2 - QZ-Fe-CONT STRINGER (2mm) 50° TO C.A. 446.4 - X-CUTTING QZ-Fe-CONT STRINGERS 30° TO C.A.	8575	441.5 (134.57m)	446.5 (136.09m)	5.0	3	3	18	.2	8	3						
451.0	461.0 (140.51m)			ALT'D LAPILLI TUFF DARK GREEN TO BUFF LAPILLI TUFF, MINOR CALCITIC STRINGERS THROUGHOUT COMMONLY 50° TO C.A.; TUFF SIMILAR TO ABOVE LAPILLI TUFF (NOT SILICIOUS). 455.5-456.5 ~ 2% YELLOW-WHITE CALCITIC STRINGERS																
					8576	455.5 (138.84m)	456.5 (139.14m)	1.0'	2	4	58	.1	4	1						

DIAMOND DRILL LOG

HOLE No. 87-C1

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Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width												
From	To					From	To		Cu	Pb	Zn	Ag	As	Au						
461.0	472.0	13%	.11	FELSIC PORPHYRITIC FLOW																
	(142.57m)	461.0 -465.0	461.0 -472.0	BROWNISH-GREY MAGNETIC CROUCH MASS w/ FELSIC PLENOS. (2mm) ± PAINT FLOW BANDING (40°-50° TO C.A.); MINOR RUSTY PUGGY FRACTURES THROUGHOUT; MINOR QZ STRINGERS; VEINLETS THROUGHOUT (HAIR LINE TO 0.5cm) ± 0.1% ASSOCIATED DIS. PY OVERALL SIMILAR UNIT TO 438.5-451.0																
		85%																		
		465.0 -472.0																		
				461.0 - 465.0 - V. BROKEN RUBBLEY (13% REC'Y)																
				468.0 - 469.5 - 0.5cm QZ (Fe CONT) VEINLET @ 0° TO C.A.	8577	468.0	469.5	1.5'	3	4	11	.2	6	5						
						(142.65m)	(143.10m)													
472.0				E.O.H.																

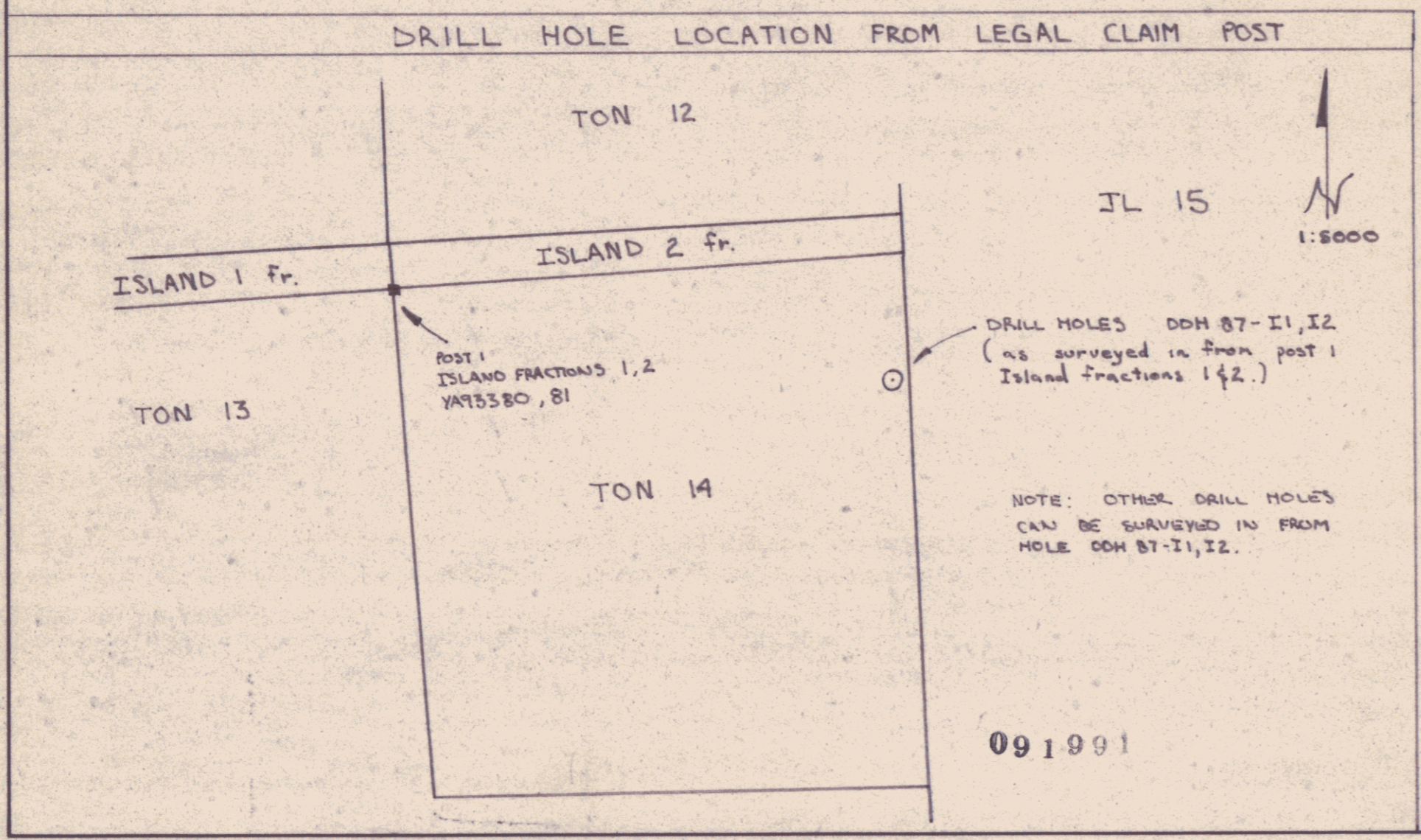


LEGEND

- Trench
- Adit
- Diamond drill hole
DDH 87-WB1
- Access road

DRILL HOLE	AZIMUTH	DIP
DDH 87-A1	227°	51°
DDH 87-WB1	218°	50°
DDH 87-WB2	206°	55°
DDH 87-WB3	155°	65°
DDH 87-WB4	135°	65°
DDH 87-I1	220°	50°
DDH 87-I2	170°	50°
DDH 87-C1	180°	55°

SCALE 1:2000



Note: grid slope corrected and installed with chain and compass

ISLAND MINING & EXPLORATION CO. LTD.

JL CLAIMS

MIDNIGHT GULCH

DRILL HOLE LOCATIONS

1176

DATE: JULY, 1987

NTS 105 D/2, D/3 DRAWN BY: FIGURE:



13 April, 1988

Your file Votre référence

Island Mining & Exploration Co. Ltd.
706 - 595 Howe Street
Vancouver, B.C.
V6C 2T5

Our file Notre référence

340-17-6

Attention: Allan Montgomery

Dear Sir:

I refer to your letter dated 5th April, 1988 in which you included diamond drill logs for three drill holes. With regard to those diamond drill logs, the Xerox copies of the logs which you sent are very difficult to read and some pages are not possible to read at all. As you are aware I sent one copy of the logs to our Geological Evaluation Unit for their information and evaluation. The information that you have supplied us with is mostly unreadable and therefore will be difficult for them to evaluate.

Therefore, I would request that you please send a further clearer copy of the drill logs for our records.

Yours truly,


M.A. Fish
Mining Recorder
Whitehorse Mining District

