

MINERAL RECORDS
Accession Number
NO. 6355

DRILLING REPORT

on the
SALAL CREEK PROPERTY
Salal 4 Mineral Claim (20 units)
owned and operated by
BP MINERALS LIMITED

Salal Creek Area
Lillooet Mining Division, B.C.

Located approximately 65 kilometers N.W.
of Pemberton, B.C.

(123° 16' Long., 50° 48' Lat.)



D.K. Mustard
July 28, 1977

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SCALE
 1 inch = 8 miles
 1 : 500,000

LOCATION MAP

Figure 1

SALAL CREEK DRILLING - 1976

INTRODUCTION

The Salal Creek Property is located approximately 105 miles north of Vancouver at the headwaters of Salal Creek.

The 1976 Salal drill program consisted of one angled diamond drill hole to a depth of 2896 feet, which was started on August 7 and was completed on October 6, 1976. The contractor was Connors Drilling Ltd. utilizing a Longyear 44.

Access to the property was by helicopter from a staging point at the Lillooet River, 30 miles northwest of Pemberton.

SUMMARY

Diamond Drill Hole (DDH-76-1)

Depth - 2896 feet (882.7 m)

Triconing -305 feet

HQ coring -805 feet

NQ coring -1786 feet

Collar elevation \pm 7,700 feet (\pm 2347 m) msl

Dip at collar - 60^o

Azimuth - 270^o

Core recovery 95%

Core logged by George C. Stephens, PhD.

All drill core was split and stored at the 1976 drill site.

Assessment work claimed on 1115 feet of DDH-76-1

totalling \$33,835.

Apportionment of assessment work

7 years work to Salal 2 (20 units) \$28,000

1 year work to Salal 4 (20 units) \$ 4,000

\$32,000

STATEMENT OF COSTS

Salal Creek Property

Salal Mineral Claim - Lillooet, M.D.

Salal 2, Salal 4 - Salal Group E

SUMMARY

A. Portion of direct drilling costs	\$21,435
B. Indirect drilling costs	12,400
C. Helicopter support costs	<u>none claimed</u>
Total	\$33,835.

A. Direct Drilling

Cost claimed for drilling 1115 feet of DDH-76-1

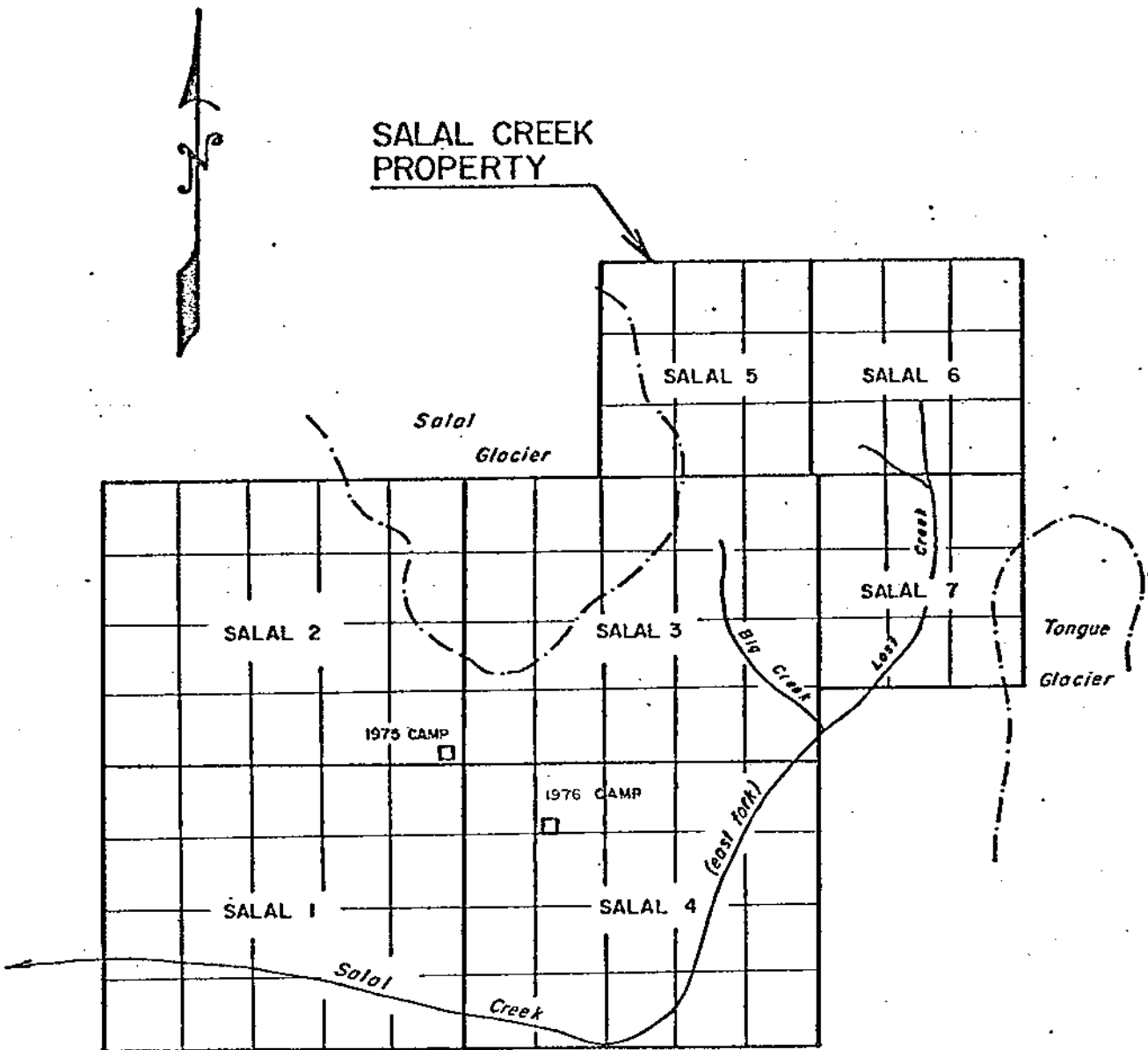
0 - 301 feet	301'	@ \$16.50	\$ 4,966
301 - 500 feet	199'	@ 18.35	3,651
500 - 1000 feet	500'	@ 20.45	10,225
1000 - 1115 feet	115'	@ 22.55	<u>2,593</u>
		Total	\$21,435

B. Indirect Drilling

Cost claimed for drilling 1115 feet, during the period of
7 Aug. - 28 Aug. 1976.

Connor's invoices - 7044, 7089.

Total	\$12,400
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BP Minerals Limited			
CLAIM BOUNDARIES			
SALAL CREEK			
SCALE	1" = 4000'	NTS 92 J / I+W	FIG. 2.
DRAWN	DATE	PROJ. 307	

Salal 2 - unit 1

Salal 3 - unit 1

LCP



Salal 1 - unit 1

Salal 4 - unit 1

unit 2

Drill hole collar

unit 2

unit 16

unit 15

unit 3

BP Minerals Limited

1976 DRILL LOCATION
SALAL CREEK

SCALE	1" = 500'	DATE	3/77	FIG. NO.	507	FIG.	4
T.S. accuracy noted							

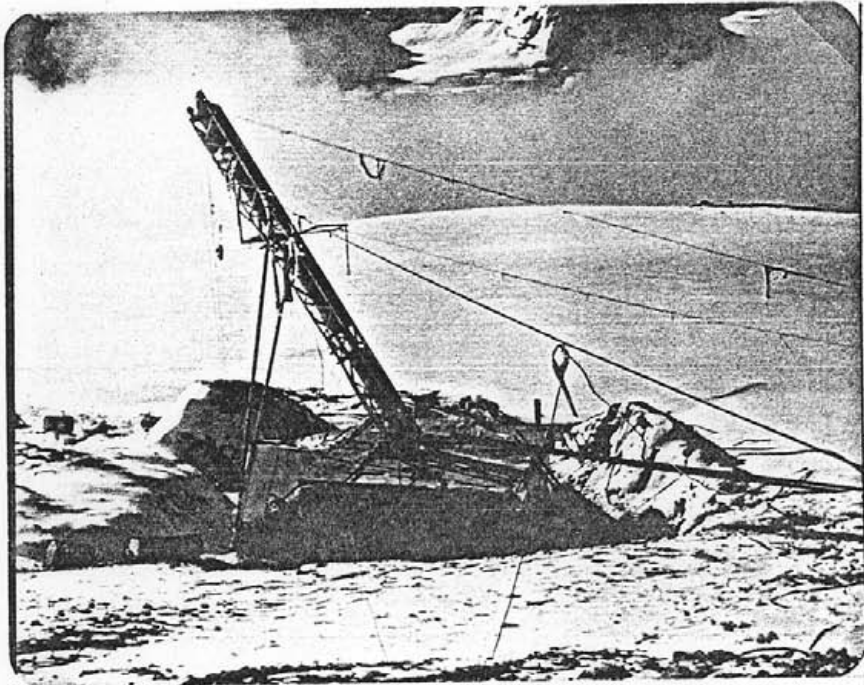


Plate I - Frontispiece: The 1976 drill site.
View looking south.

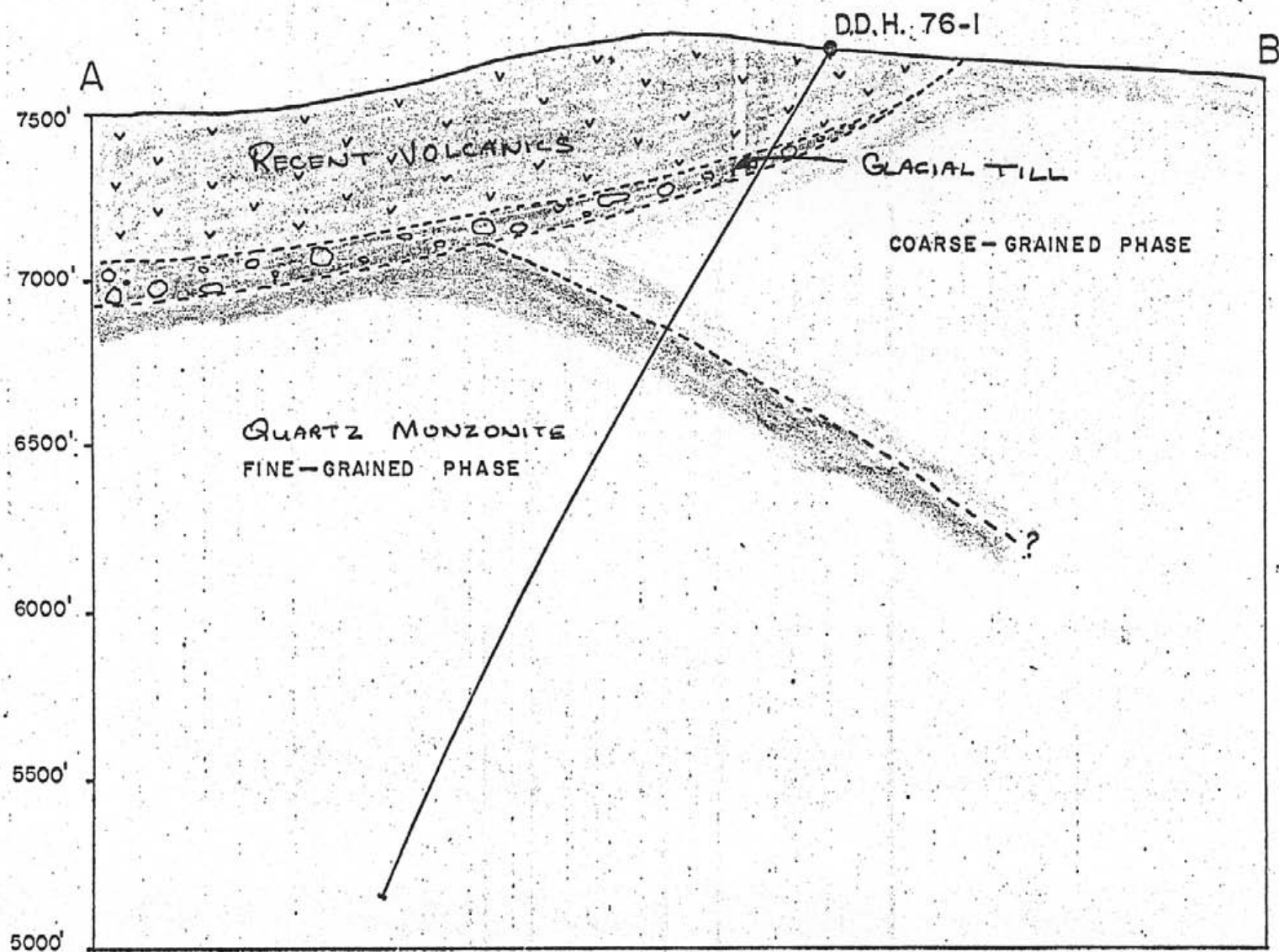


FIGURE: 5, D.D.H. 76-1 CROSS-SECTION

SCALE
 500 FEET

APPENDIX 1

DIAMOND DRILLING CONTRACT

THIS AGREEMENT made this 1st day of June, 1976

BETWEEN:

BP MINERALS LIMITED,
405, 1199 West Pender Street
Vancouver, British Columbia,
(hereinafter referred to as the "Company")

- and -

CONNORS DRILLING LTD.
205, 1201 West Pender Street
Vancouver, British Columbia,
(hereinafter referred to as the "Contractor")

WHEREAS the Company hereby requests that the Contractor carry out surface diamond drilling and other services, on the Company's property near Pemberton, B.C.;

AND WHEREAS the Contractor hereby agrees to perform said diamond drilling and other services requested, under the terms and conditions hereinafter contained:

1. SCOPE OF WORK

The work is to consist of series of drill holes, drilled at locations specified by the Company. A total minimum footage of 3000 feet shall be drilled, but total footage may be extended beyond that amount, by mutual consent. Holes shall be drilled with HQ, NQ, and BQ tools, producing approximately 2 1/2, 1 7/8, and 1 7/16 inch diameter core, as far as is reasonably practical. Maximum depth of any hole shall be around 4000 feet. Holes shall not be drilled at any angle less than 60 degrees.

2. COMMENCEMENT AND EXECUTION OF WORK

Work shall be commenced as soon as field conditions permit, during July, 1976. Work will proceed with two ten hour shifts per day, seven days a week, or as near that schedule as can be maintained.

3. THE CONTRACTOR HEREBY COVENANTS AND AGREES:

- (a) To provide all of the required drilling machinery and associated tools including, but not limited to: One diamond drill rig capable of drilling 4000 feet BQ, NQ, and HQ, pumps, rods, casing, and diamond set items. Contractor will maintain a full-time non-operating foreman on the project;
- (b) The drilling crews will follow good drilling practice and shall use due care and diligence as shall enable them to recover as high a percentage of core as the nature of the ground being drilled shall permit. All cores shall be delivered to the Company, in boxes provided by the Company at the drill sites;
- (c) That it shall be responsible for, and will pay, promptly all costs and charges, incurred by itself for labour, machinery, tools, and supplies used in completing the work hereunder so that no lien or other such charge relative to the Contractor, may be registered against the Company or the property. The Contractor shall be responsible for the payment of all assessments for Workmen's Compensation, Holiday Pay, Canada Pension, Unemployment Insurance, Sales Tax, or other such applicable charges relative to its own labour and supplies;
- (d) To, at all times, enforce strict discipline and maintain good order among its employees and shall not retain on the work any unfit person or anyone not skilled in the

work assigned to him. Any employee who is objectionable or unsatisfactory to the Company shall be removed from the work and replaced by an employee satisfactory to the Company;

- (e) To keep his camp and drill sites free from waste and rubbish, and at the completion of his work he shall leave the camp area and all drill sites in a clean condition as may be required by government authorities having jurisdiction in that regard; and
- (f) To not divulge any information concerning drilling results, or to permit access to, or examination of the drill core by any person not specifically authorized by the Company.

4. THE COMPANY HEREBY AGREES:

- (a) Should cavities, loose or caving ground or excessive water flows be encountered in a hole so that further drilling in that hole is deemed impracticable, that hole may by mutual consent, be abandoned, and the Contractor be paid at rates so specified herein for all footage completed in that hole. However, should the Company request that further work be carried out in the hole beyond this point, then the Contractor shall continue work in the hole but such continuing work shall be at Operating Field Cost Rates;
- (b) That it will provide access roads to as near all drill sites as is practical, and provide all air transportation

services required by Contractor for the duration of the job, at no cost to the Contractor; and

- (c) To provide, at no cost to the Contractor, all rights of way of ingress and egress to all lands that may be required to enable the Contractor to carry out the work as specified. The Contractor shall be permitted to cut and fell any timber on the Company's property as may be required in the course of the work hereunder, and the Company shall indemnify and save harmless the Contractor from any assessment for stumpage or other charges of every kind and nature.

5. THE COMPANY HEREBY AGREES to pay the Contractor for footage drilled and other services performed as follows:

- (a) Mobilization and demobilization: For Contractor's equipment and crews from base of operations to transport discharge point and return, a lump sum of \$2,500.00;
- (b) Drilling in bedrock

	<u>HQ</u>	<u>NQ</u>	<u>BQ</u>
0 to 500	\$18.35	--	--
501 to 1000	20.45	\$18.40	--
1001 to 1500	22.55	20.30	--
1501 to 2000	24.65	22.40	\$21.20
2001 to 2500	--	24.70	23.40
2501 to 3000	--	27.20	25.70
3001 to 3500	--	--	28.10
3501 to 4000	--	--	30.60

- (c) Overburden Penetration:

from 0 to 50 feet shall be at \$16.50 a foot, beyond 50 feet at Operating Field Cost if the cost of penetration exceeds \$16.50 a foot;

- (d) Reaming, casing, and mud circulation operations, if and when required, shall be at Operating Field Cost;
- (e) Dip-testing, or other time during which the Contractor's crews are performing services, for the Company not otherwise covered herein at Operating Field Cost;
- (f) Cementing of drill holes, and redrilling of cemented section of hole: At Operating Field Cost;
- (g) Water Supply: Contractor will provide 5,280 feet of waterline with pump capable of 800 foot lift. Installation and removal of waterlines shall be at Non-Operating Field Cost;
- (h) Moving of drill and equipment from site to site: Tearing down, moving and setting up of drill and equipment from transport discharge point to the first drill site between drill sites and from the last drill site to the truck loading point shall be at Non-Operating Field Cost;
- (i) Truck rental: If necessary, Contractor will provide a service truck for its crew at no cost to the Company. The cost of weekly service trips with groceries and supplies to the truck discharge point shall be for the Contractor's account;
- (j) Core boxes: Contractor will supply core boxes, if requested, at \$4.00 per box, lids at \$1.00 each;
- (k) Camp: Contractor will provide sleeping quarters for its crew, and a cook to provide meals to Company personnel for \$6.50 per meal. The Company will provide a suitable

prefab building which the Contractor will equip and operate as a cookhouse. Installation and removal of camp will be at Non-Operating Field Cost rates;

(1) Field Cost:

Operating Field Cost shall be \$18.00 per man hour (including supervision), drill and equipment rental at \$12.00 per shift hour, and the cost of down the hole tools and supplies, lost or consumed on the Operating Field Cost portion of the work, at cost plus 10%;

Non-Operating Field Cost shall be \$16.50 per man hour for all man hours worked, drill and equipment rental at \$12.00 per shift hour, plus the cost of materials and supplies lost or consumed on the Non-Operating Field Cost portion of the work, at cost plus 10%;

- (m) Travel time: If travel or walking time for Contractor's crews exceeds one half hour per man day, then all such walking time in excess of one half hour per man per day shall be at Non-Operating Field Cost rates;
- (n) Tropari rental: Contractor will provide two Tropari instruments for \$150.00 per month each. The cost of repairs to the instrument due to damage caused to the instrument on this project will be for the Company's account;
- (o) Radio telephone: Company will provide radio telephone communication for the camp at no cost to the Contractor; and
- (p) Standby or delay time for Contractor's crew while waiting

for instructions from the Company, or due to weather delays, shall be at 75% of Non-Operating Field Cost rates.

6. INSURANCE AND GENERAL

- (a) The Contractor, at its own cost, shall maintain insurance to the following limits; Liability and Property Damage \$2,000,000.00, Automobile Insurance coverage \$1,000,000.00 and shall provide evidence thereof when so requested;
- (b) Neither party shall be held liable for any loss or damage suffered by reason of any cause beyond its active control such as riots, strikes, lockouts, Acts of God, or failure of transportation;
- (c) Under the foregoing terms and conditions the Contractor does not guarantee to drill any hole to any specified depth. The Contractor will however, expend every reasonable effort to complete all holes to the satisfaction of the Company; and
- (d) The Contractor shall invoice the Company semi-monthly for footage drilled and other services performed. Such invoices shall be due and payable within 30 days of the invoice date.

IN WITNESS WHEREOF, the parties hereto have executed this

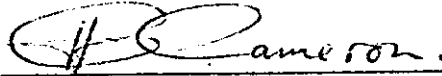
agreement as of the day and year first above written.

BP MINERALS LIMITED

Director

Secretary

CONNORS DRILLING LTD.

A handwritten signature in cursive script, appearing to read "H. Cameron", is written over a horizontal line. Below this line is another horizontal line.

APPENDIX 2.

CONNORS DRILLING INVOICES

B.P. Minerals
#405-1199 West Pender St.
Vancouver, B.C.

Job 21-701
INVOICE NO: 7044
DATE: August 25, 1976

SURFACE DIAMOND DRILLING
PEMBERTON, B.C.
AUGUST 1 - 15, 1976

FOOTAGE FEE

D.D. hole # 76-1	0' - 301'	301' @ 16.50	4,966.50	
	301' - 464'	163' @ 18.35	<u>2,991.05</u>	
		464'		7,957.55

FIELD COST WORK

<u>DATE</u>	<u>SHIFT</u>	<u>MAN HRS.</u>	<u>DRILL HRS.</u>	<u>REMARKS</u>
Aug. 1/76	Day	70 ✓	10	Laying 5000' waterline
2/76	"	67 ✓	10	Work on waterline
2/76	"	33½ ✓	-	Holiday @ overtime rate
3/76	"	72 ✓	10	Setting up med tanks & move in with chopper
4/76	"	50 ✓	10	Setting up drill
5/76	"	50 ✓	10	"
6/76	"	50 ✓	10	Finish setting up
		<u>392½</u>	<u>60</u>	

Total man hours	392½ @ 16.50	6,476.25	
" drill hours	60 @ 12.00	<u>720.00</u>	7,196.25

B P Minerals Limited
RECEIVED

AUG 26 1976

Vancouver, B. C.



Connors Drilling Ltd.

Subsidiary of
Bow Valley Industries Ltd.

205 - 1201 WEST PENDER STREET, V. VANCOUVER, B.C., CANADA V6E 2V2
AREA CODE 604/683-2222

To • B.P. Minerals
#405-1199 West Pender St.
• Vancouver, B.C.

• DATE August 25, 1976

• INVOICE NO. 7044

- 2 -

OPERATING FIELD COSTS

Aug. DATE	SHIFT	MAN HRS.	DRILL HRS.	REMARKS
Aug. 7/76	Day	2	1	Mixing mud
7/76	Night	4	2	"
8/76	Day	2	1	"
8/76	Night	2	1	"
9/76	Day	15	7½	Ream HW casing
9/76	Night	4	2	Mixing mud
9/76	"	16	8	Ream HW casing 90' - 94'
10/76	Day	4	2	Mixing mud
10/76	Night	6	3	"
11/76	Day	4	2	"
11/76	Night	4	2	"
12/76	Day	10	5	Lost circulation
12/76	"	4	2	Reaming HQ 335' - 415'
12/76	Night	10	5	Reaming HQ 419' - 439'
12/76	"	44	2	Mixing mud
13/76	Day	4	2	"
13/76	"	4	2	Pull HQ rods & HW casing
13/76	Night	20	10	Tricone 301' - 373'
15/76	"	20	10	Tricone 373' - 401'
		<u>139</u>	<u>69½</u>	

Total man hours 139 @ 18.00 2,502.00
 " drill hours 69½ @ 12.00 834.00

3,336.00

CORE BOX LIDS SUPPLIED

E.G. Whalley Inv. #7686 (Copy attached) 224.70 -

LUMBER FOR DRILL SET-UP ETC.

Lower Nicola Building Inv. #18842 (copy attached) 788.80 -
 Port Coquitlam Building Inv. #0684 (copy attached) 294.34 - 1,083.14

MUD SUPPLIES

Thiessen Equipment Inv. #506 (copy attached) 50.61 -

MISC. SUPPLIES (Copies attached)

Marpole Equipment Rental Inv. #1749 100.00 ✓
 Continental Explosives Inv. #06211 184.44 ✓
 Deakin Equipment Inv. #17954 49.37 ✓ 333.81

B.P. Minerals Limited
RECEIVED

AUG 26 1976 100.00 ✓
184.44 ✓
49.37 ✓

Vancouver, B.C.

MEALS SERVED YOUR PERSONNELS

July 1976 (Copy attached) ✓
67 meals @ 6.50 ✓

APPROVED FOR PAYMENT

CHARGE 80023 435.50
 DATE OCT 20 1976 20,617.56

Job 21-701

B.P. Minerals
#405-1199 West Pender Street
Vancouver, B.C.

INVOICE NO: 7089
DATE: September 9, 1976
B.P. Minerals Limited

SURFACE DIAMOND DRILLING
PEMBERTON, B.C.
AUGUST 16 - 31, 1976

RECEIVED

SEP 10 1976

FOOTAGE FEE

D.D. Hole #76-1	464' - 500'	36' @ 18.35	Vancouver, B.C.	
	500' - 1000'	500' @ 20.45	660.80	10,225.00
	1000' - 1115'	115' @ 22.55	2,593.25	13,478.85

FIELD COST WORK

DATE	SHIFT	MAN HRS.	DRILL HRS.	REMARKS
Aug. 16/76	Day	20	10	Ream & mix mud
"	Night	20	10	Ream & mix mud
17/76	Day	20	10	Ream & lay waterline
"	Night	20	10	Ream casing & mix mud
18/76	Day	14	7	Ream casing & mix mud
"	Night	20	10	"
19/76	Day	20	10	"
"	Night	20	10	"
20/76	Day	14	7	"
21/76	Night	20	10	Work on waterline
22/76	Day	8	4	"
"	Night	2	1	"
23/76	Day	10	5	"
24/76	"	10	-	"
"	Night	8	4	"
25/76	Day	14	2	"
"	"	4	2	Mix mud
"	Night	6	3	Work on waterline
26/76	Day	20	6	"
26/76	Night	8	4	Waterline & mix mud
27/76	Day	11	1/2	Hook up pump & waterline
"	Night	10	5	Work on waterline

7089

To • B.P. Minerals
 #405-1199 West Pender St.
 Vancouver, B.C.

DATE September 9, 1976
 INVOICE NO. 7089

- 2 -

DATE	SHIFT	MAN HRS.	DRILL HRS.	REMARKS
Aug. 28/76	Day	18	4	Work on waterline
29/76	"	8	4	Ream & wash hole
"	"	10	-	Work on waterline
30/76	"	8	4	Ream & wash hole
"	"	6½	-	Work on waterline
"	Night	8	4	Reaming hole
31/76	Day	14	7	Work on stuck rods
"	Night	16	8	"
"	Day	10	-	Haul chopper fuel
		<u>397½</u>	<u>161½</u>	

Total man hours 397½ @ 18.00 7,155.00
 " drill hours 161½ @ 12.00 1,938.00

9,093.00

SUPPLIES CONSUMED REAMING

1-4 7/8" Tricone bit	101.00
1-HW casing shoe #366	268.00
1-HW casing shoe #391	278.95
1-HQ core #169	478.30
	<u>1,126.25</u>
Plus 7%	78.84
	<u>1,205.09</u>
Plus 10%	120.51
	<u>1,325.60</u>

RECEIVED
 SEP 10 1976

CORE BOXES SUPPLIED

30-HQ Core Boxes @ 4.00	120.00
7% Tax	8.40
	<u>128.40</u>

MEALS SERVED YOUR PERSONNEL

August 1 - 31, 1976 (copy attached)
 295 meals @ 6.50 1,917.50

TRUCK RENTAL

Charger Transport Inv. #36963	210.30 ✓
(copy attached)	
Can Rentals Inv. #6111	79.57 ✓
(copy attached)	
A. Rosen Expense Account (copy attached)	<u>47.80</u> ✓
	337.67

MUD & CEMENT SUPPLIES

Thiessen Equipment Inv. #626	1,454.52 ✓
(copy attached)	
Thiessen Equipment Inv. #627	73.03 ✓
(copy attached)	
Thiessen Equipment Inv. #640	565.64 ✓
(copy attached)	
	<u>2,093.19</u>
	<u>28,374.21</u>

APPROVED FOR PAYMENT
 CHARGE 80023
 DATE OCT. 20 1976 NTL

Job 21-701

B.P. Minerals
#405-1199 West Pender Street
Vancouver, B.C.

INVOICE NO: 7089
DATE: September 9, 1976

SURFACE DIAMOND DRILLING
PEMBERTON, B.C.
AUGUST 16 - 31, 1976

FOOTAGE FEE

D.D. Hole #76-1	464' - 500'	36' @ 18.35	660.60	
	500' -1000'	500' @ 20.45	10,225.00	
	1000' -1115'	115' @ 22.55	2,593.25	13,478.85

FIELD COST WORK

<u>DATE</u>	<u>SHIFT</u>	<u>MAN HRS.</u>	<u>DRILL HRS.</u>	<u>REMARKS</u>
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"	Night	20	10	Ream & mix mud
17/76	Day	20	10	Ream & lay waterline
"	Night	20	10	Ream casing & mix mud
18/76	Day	14	7	Ream casing & mix mud
"	Night	20	10	"
19/76	Day	20	10	"
"	Night	20	10	"
20/76	Day	14	7	"
21/76	Night	20	10	Work on waterline
22/76	Day	8	4	"
"	Night	2	1	"
23/76	Day	10	5	"
24/76	"	10	-	"
"	Night	8	4	"
25/76	Day	14	2	"
"	"	4	2	Mix mud
"	Night	6	3	Work on waterline
26/76	Day	20	6	"
26/76	Night	8	4	Waterline & mix mud
27/76	Day	11	½	Hook up pump & waterline
"	Night	10	5	Work on waterline

7089

Jrs Drilling Ltd.

Subsidiary of
Bow Valley Industries Ltd.

205 - 1201 WEST PENDER STREET, VANCOUVER, B.C., CANADA V6E 2V2
AREA CODE 604/683-2222

To • B.P. Minerals
• #405-1199 West Pender St.
• Vancouver, B.C.

• DATE September 9, 1976

• INVOICE NO. 7089

- 2 -

DATE	SHIFT	MAN HRS.	DRILL HRS.	REMARKS	
Aug. 28/76	Day	18	4	Work on waterline	
29/76	"	8	4	Ream & wash hole	
"	"	10	-	Work on waterline	
30/76	"	8	4	Ream & wash hole	
"	"	6½	-	Work on waterline	
"	Night	8	4	Reaming hole	
31/76	Day	14	7	Work on stuck rods	
"	Night	16	8	"	
"	Day	10	-	Haul chopper fuel	
		<u>397½</u>	<u>161½</u>		
Total man hours 397½ @ 18.00					7,155.00
" drill hours 161½ @ 12.00					<u>1,938.00</u>
					9,093.00
<u>SUPPLIES CONSUMED REAMING</u>					
1-4 7/8" Tricone bit					101.00
1-HW casing shoe #366					268.00
1-HW casing shoe #391					278.95
1-HQ core #169					478.30
					<u>1,126.25</u>
Plus 7%					78.84
					<u>1,205.09</u>
Plus 10%					<u>120.51</u>
					1,325.60
<u>CORE BOXES SUPPLIED</u>					
30-HQ Core Boxes @ 4.00					120.00
7% Tax					<u>8.40</u>
					128.40
<u>MEALS SERVED YOUR PERSONNEL</u>					
August 1 - 31, 1976 (copy attached)					
295 meals @ 6.50					1,917.50
<u>TRUCK RENTAL</u>					
Charger Transport Inv. #36963 (copy attached)					210.30
Cana Rentals Inv. #6111 (copy attached)					79.57
A. Rosen Expense Account (copy attached)					<u>47.80</u>
					337.67
<u>MUD & CEMENT SUPPLIES</u>					
Thiessen Equipment Inv. #626 (copy attached)					1,454.52
Thiessen Equipment Inv. #627 (copy attached)					73.03
Thiessen Equipment Inv. #640 (copy attached)					<u>565.64</u>
					2,093.19
					<u>28,374.21</u>

APPENDIX 3

List of Qualifications

George C. Stephens

- | | | |
|-----------|------|---|
| BSc | 1967 | - George Washington University (Geology) |
| MSc | 1969 | George Washington University (Geology) |
| PhD | 1972 | Lehigh University (Geology) |
| 1969-1976 | | Consulting Geologist - Alrae Engineering,
Vancouver, B.C. |
| 1972-1975 | | Assistant Professor (Geology) - La Salle
College, Philadelphia, Penna. |
| 1975-1976 | | Assistant Professor (Geology) - Bryn Mawr
College, Bryn Mawr, Penna. |

Member: Geological Society of America, Geological
Association of Canada, Society of Explo-
ration Geophysicists, American Geophysical
Union.

TABLE 1

Abbreviations used in drill logs

Altered	- alt	K-feldspar	- K-spar
Alteration	- alt	Magnetite	- mag
Approximately	- approx	Manganese	- Mn
Biotite	- bi	Massive	- mass
Breccia	- bx	Medium-grained	- mg
Chalcopyrite	- cpy	Moderate(ly)	- mod
Chlorite	- chl	Moderate to strong	- mod-st
Chloritization	- chlor	Molybdenite	- Mo
Coarse-grained	- cg	Monzonite	- monz
core axis	- c.a.	Parallel	- //
Crystal(s)	- xtal	Phenocrysts	- phenos
Disseminations	- diss	Plagioclase	- plag
Disseminated	- diss	Porphyry	- porph
Envelope(s)	- env	Porphyritic	- porph
Epidote	- epid	Prevalent	- prev
Equigranular	- eq	Pyrite	- py
Evident	- evid	Quartz	- qtz
Feldspar	- feld	Secondary	- sec
Fine-grained	- fg	Sericite	- ser
Fluorite	- fl	Sericitized	- seric
Fractured	- fr	Sericitization	- seric
Fracture(s)	- fr	Silicified	- silic
Fracture-filling	- fr-fill	Silicification	- silic
Generally	- gen	Sphalerite	- sph
Groundmass	- gm	Strong(ly)	- st
Iron	- Fe	Trace	- tr
Irregular	- irreg	Very fine-grained	- vfg
Kaolinized	- kaol	Weak(ly)	- wk
Kaolinization	- kaol	Weak to moderate	- wk-mod



DRILL LOG

SHEET NO.

LOCATION		LOGGED BY G.C. STEPHENS		NORTH		EAST		ELEVATION		SHEET NO.	
SALAL CREEK		CO-ORDINATES		BEARING						1 of	64
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		HOLE NO.	
August 7, 1976				270° - 60°		HQ				D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE	
From	To	Length	% Rec							F	V/Ft
0	≈ 70'			overburden and broken volcs (triconed)							
≈ 70'	305'			basalt flows (triconed)							
305'	343'			broken and weathered, non-vesicular, aphanitic basalt (begin HQ core)							
343'	378'			glacial till - basalt & granite pebbles to 24" diam. in dark brown unconsolidated sandy clay							
378'	379'6"			coarse-grained equi granite, c.R. xenolith 18" near top, much mn stain on fractures 5-7% fresh (2°?) bio							
379'6"	388'			mass qtz. vein - highly fractured. med-lrge (5-10mm) K-spar pheno's at 383'6"							

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6355

DRILL LOG

SHEET NO.

SALAL CREEK LOCATION		CO-ORDINATES		NORTH BEARING		EAST		ELEVATION		HOLE NO.	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY	ALTERATION	MINERALIZATION	STRUCTURE			GRAPHIC LOGS	
From	To	Length	% Rec				F	V/FI	F/FI		LOS
379'6"	388'	7'6"		MASS Qtz VEIN OR SILIC ZONE; HIGHLY FRACTURED & BROKEN CORE MEDIUM-LARGE (8-10mm long) K SPAR PHENOS IN MASS Qtz. AT CORE VERY BROKEN & FRACTURED, TO 384' MG EQ Qtz MONZ. 5% Bi SLIGHTLY ALT TO CHL. TWO MAFIC XENOLITHS (15% Bi) AT 385 & 386'	WK - MOD KAOL OF K SPARS IN SILIC ZONE WK - MOD KAOL OF PLAC IN Qtz MONZ. 3% Bi ALT TO CHL.	>1% RUSTY LIMONITE STAINS. MANGANESE DENDROIDS ON FRACTURE PLANES IN Qtz.	85° 45° TGA	-	1 (W Qtz Monz)		
388'	398'	9'8"		Fg EQ Qtz Monz 5% Bi MOD SHARP CONTACT WITH Cg Monz AT 391' 3% Bi ZONE 8-12" WIDE OF Qtz Monz VERY FRACTURED AND WEATHERED TO KAOL AT 389'	WEAK - MOD KAOL OF PLAC. WEAK CHLOR OF BIOTITE.	RUSTY WEATHERING OF ROCK IN GM & ALONG FRACTURES. EXTENSIVE MANGANESE STRAINING / OXIDE ON FRACTURES.	30° 20° TGA	-	1		
398'	408'	9'6"		SAME ROCK TYPE. MOD-ST RUSTY WEATHERING IN GM & FORMING ENVELOPES ALONG FRACTURES. 5% Bi. DIFFUSE MAFIC INCLUSION/VENOLITHS OF ZONE OR SECONDARY Bi? 8" WIDE AT 400' 8"	MOD-STRONG PERVASIVE KAOL OF PLAC. 5-10% Bi-CHLOR.	HEMATITE & MANGANESE OXIDE ALONG FRACTURES & IN G.M. <<1% DISS MAG.	30° 45°	-	1		
408'	418'	9'8"		SAME ROCK TYPE - 3% Bi TO 410'; Bi CONTENT DECREASE <1%. MOD-ST RUSTY WEATHERING OF GM & ALONG FRACTURES. TWO FRACTURES CONTAIN PY WEATHERED TO LIMONITE WITH Qtz & TOURMALINE?	ST - PERVASIVE KAOL OF PLAC. 30-50% Bi ALT TO CHL.	TWO FRACTURES CONTAIN PY CRYSTALS ST WEATHERED TO LIMONITE; ST & MN STRAINING ON FRACTURES. <<1% DISS MAG.	30° (MIN) 45°	-	2		
418'	428'	8'6"		SAME ROCK TYPE <1% Bi; CORE VERY BROKEN BETWEEN 421'6" & 425' 3% Bi ALT TO CHL	MOD-ST PERVASIVE KAOL ALT IN 5% Bi ALT TO CHLOR	MOD RUSTY WEATHERING OF GM WITH MN STAINS ON FRACTURES. <<1% DISS MAG.	30° 45°		1 1		

2 of 64

DRILL LOG

SHEET NO. 3 of 6

SALAL CR. LOCATION		CO-ORDINATES		NORTH		EAST		ELEVATION		HOLE NO.	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		D.D.H.	
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE	
From	To	Length	%Rec							F	V/F/F/F
426'	438'	9'6"	95%	M.G. TO CG. EQ Qtz MONZONITE. APLITE DIKE WITH GRADATIONAL CONTACT 2' 6" WIDE AT 431' CONTACT 75° / T.C.A. 3% B; ALT TO CHL. DISCONTINUOUS SERIC ENVELOPE TO FRACTURE CONTAINING LIMONITE. AT 430'		MOD-ST PERVASIVE KAOL. OF PLAG 50% B; ALT TO CHL. SERIC ENVELOPE 2mm WIDE ON FRACTURE CONTAINING LIMONITE ABOVE PY. CHL ASSOCIATED WITH MAG.		MOD. RUSTY WEATHERING WITH LIMONITE IN GM OF MONT B ON FRACTURES. MN STAINING EXTENSIVE ON FRACTURES B AS DENDRITES. <1% MAG DISS IN GM.		30°	1
438'	448'	10'	100	SAME ROCK: 3% B; ST. ALT TO CHL. STRONGLY FRACTURED ZONE 2" WIDE FILLED WITH CLAY AT 439'		MOD-ST PERV KAOL OF PLAG 50% B; ALT TO CHL		MOD RUSTY WEATHERING & MN STAINING. <1% MAG DISS IN GM TR OF DISS PY.		30°	1
448'	458'	10'	100	SAME ROCK TYPE: 3% B; MOD-ST ALT TO CHL; VEINLETS CONTAINING KAOL OR PY OR CHL KAOL HORIZ SEQUENCE. 2mm to 5mm WIDE AT 452'		MOD-ST PERV KAOL OF PLAG. ALTN OF B; RANGES FROM 30° TO 100% DISS WITH VEINLET AT 452'		MOD-SPATCHY RUSTY WEATHERING. <1% DISS MAG. TRACE DISS PY ON ALTERED FRACTURES		10°	1
458'	468'	7'6"		SAME ROCK TYPE. ENVELOPE OF PERV SILIC ALTN? WITH SERIC & TARNISHED DISS PY FROM 458' 6" TO 459' 6" CORE STRONGLY FRACTURED & BROKEN FROM 465' TO 468'.		MOD-ST PERV KAOL OF PLAG. ALTN B; RANGES FROM 50% TO 100% CHL IN SILIC ZONE.		MOD-ST RUSTY WEATHERING IN FRACTURE PART OF CORE. 21% DISS MAG. <1% DISS PY.		30°	2
468'	478'	9'6"	95%	M.G. TO CG. EQ Qtz MONZONITE. 6" CLAY GOUGE ZONE AT 470.0' & 3% ZI. SMALL IRREG. HEALED FRACTURES TO 470.0' (UNFILLED)		BIO. IS FRESH TO WKL. CHL (<10%) MOD-ST PERV KAOL. OF PLAG		RUSTY WEATHERING FRACTURES. MOD TO EXTENSIVE BLK MN STAIN ON FRACTURES. MINOR DK RED HEM AS DECOMP. OF DISS MAG. <1% DISS MAG.		0°	1/10
478'	488'	10.0'	100%	M.G. TO CG. EQ Qtz MONZ. 2-5% BIO. ROCK IS MOD. SOLID		ALT. INTENSITY INCREASE (GRAD) AT 481' ABOVE 481' - FRAC SAME AS 468-478' BELOW 481' PLAG = DK GREEN STRONGLY KAOL. BIO = 95-100% CHL.		484'-487' = MOLY-FILLED QTZ. VEINLET II - CA. - MINOR PY + TR BORNITE ALSO PRESENT - 1/16" FRAC WIDE <1% DISS PY <1% DISS MAG. ONLY MINOR MN STAINING MUCH RUSTY WEATHERING ON FRACTURES		15°	1/5
										30°	1/2



DRILL LOG

SHEET NO.


LOCATION		CO-ORDINATES		NORTH	EAST	ELEVATION		HOLE NO.			
SALAL CREEK								4 of 64			
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE	TOTAL DEPTH	HOLE NO.			
				TRADAR1 at 500'				D.D.H. 76-1			
DEPTH		CORE		LITHOLOGY		ALTERATION	MINERALIZATION	STRUCTURE		Graph Log	
From	To	Length	%Rec					F	V/Ft	F/Ft	
488'	498'	9'6"	95%	C.G. equi., Q.M. - presumed 3% orig. bio content completely absent, 488'9" = 1/2" greenish clay zone trends 20° to C.A. - no miz. 6" white opitite dike at 494'3" - 45° to C.A.		plag = perv mod to strong kaol. bio. = 100% chl - absent over 50% of length	thin veinlet at 496' (1/16") containing py + cpy + bo 5" to ca 491.0" - 491.8" dry moly + py filled fracture to ca	0°	1/5	-	
498'	508'	10'0"	100%	C.G. equi, Q.M. - no bio - ruggy where alt. bio has been leached, numerous partly healed fractures - some slightly ruggy, rock is crumbly (weathered?) between 499.0' - 500.0'		plag = perv mod to strong kaol. bio. mostly absent above 504' when present, 100% CHL below 504' bio = 30-50% CHL, plag. below 504' = wk to mod kaol	TR. diss mag (<1%) no pyrite blk. Mn stain on some fractures, rusty stain on numerous fractures	15°	-	1	
508'	518'	9'3"	92%	m.g. to c.g. equi qm - bio = 3-5%		bio = 50-70% CHL plag = wk to mod kaol	thin bornite + py film (slicks) at 511'6" to C.A. (6" long) 2nd thin bornite + py seam at 517.0" - 4" long, rusty f Mn rich stains on fractures	0°	-	1-2	
518.0'	528'	10.0'	100%	uniform C.G. equi. Q.M. 3% bio. large dark grey, fine grained mafic inclusion cut 520.3" (9"-12" diam) sharp contact with surrounding Q.M.		bio. = 30% CHL (wk.) plag = wk kaol (perv.)	black dendritic Mn stains 1/2 wide along fractures less rusty stain than normal no pyrite tr. diss mag only	0°	-	1	
528'	537'	10.0'	100%	SAME ROCK TYPE AS ABOVE. RUGGY ZONE BETWEEN 531.6" - 532.0". SMALL 1"-2" SHEAR ZONE w/ CLAY GOUGE AT 537' - 15° TO C.A.		Bio = 70-100% CHL PLAG = MOD TO STRONG KAOL	TR. DISS. MAG & PY (LESS THAN 1% TOTAL) 1/4" Q+PY + Ser(?) veinlet @ 531' 15" + C.A.	15°	1/10	1	
537'	548'	12.0'	100%	SAME ROCK TYPE AS ABOVE. NUMEROUS RUSTY & CLAYEY FRACTURES;		Bio = 100% CHL PLAG = MOD KAOL.	544.6" - 545" = 1/16" MO FILLED VEINLET (DRY) 5" + C.A. <1% TRAL DISS PY + MAG.	15°	-	1-2	
								30°	-	1/2	

DRILL LOG

SHEET NO.

SALAL CREEK LOCATION		CO-ORDINATES		NORTH		EAST		ELEVATION		5 of 6		
DATE STARTED		DATE COMPLETED		SURVEYS				HOLE SIZE		TOTAL DEPTH		
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE		
From	To	Length	% Rec							F	V/FI	
548'	558'	10'	100%	M.G. TO C.G. EQUI. Qtz Monz. Bio = 3% 1-1/4" Q vein at 552'. 30° T.C.A. TR. Diss Mn in vein.		Bio = 70% CHL. PLAG = WIKLY KAOL		No Py. Fr Diss. MAG - mostly FROM ALT OF BIO.		0°	-	1
558'	568'	10'	100%	M.G. TO C.G. EQUI Q.M. Bio = 3.0%. Bio disappears below 565.6" (gradational change). Onset of diss py. coincides w/ disappearance of alt. bio. (chl) (?) - Zn becomes progressively chloritized (to 100%), then disappears.		Bio = 50% CHL. PLAG = FRESH TO WIKLY KAOL.		Rusty weathering on fractures. BLK Mn stain on fractures between 558' - 566' <1% Diss Mn <1% Diss py below 565.6"		0°	-	1
568'	578'	10'	100%	C.C. EQUI Q.M. Bio begins to reappear at 570'.		Remnant Thulite on 30° fracture @ 571' Bio. 70% - 100% CHL PLAG = FRESH TO WIKLY KAOL.		IRREG ZONES OF RUSTY WEATHERING THROUGHOUT SECTION. OFFTEN FIND FELDSPAR PHENOC. BLACK Mn stain on fr. - density 1/ft OPEN WITH Mn ENVELOPES TO 10mm WIDE. <1% Diss Mag. Tr py as fr-fill & Diss. AT 570.6"		0°	-	1
578'	588'	9'6"		CG EQUI. Q.M. Uniform bio content ≈ 3% 15° FRACTURES HAVE CHL-PY ON SURFACE.		Bio = 50-70% CHL. PLAG = FRESH TO WIKLY KAOL.		NO RUSTY-STAINING IN THIS INTERVAL. NO VEINING. 1mm Qtz vein with Tr Py fr-fill from 586 to 588 + 5° T.C.A.		15°	-	1
588'	598'	10'	100%	CG EQUI. Q.M. 3% Bi UNIFORM CONTENT. MOD-SHARP CHANGE AT 594' FROM FRESH BUT ST-CHLOR-KAOL MONZ. TO ST-RUSTY WEATHERED. RK. RUSTY WEATHERING DISAPPEARS AT 596'. Two 1mm Qtz veins at 5° & 45° T.C.A. BETWEEN 588 - 590' CONTAIN IRREGULAR PY-FR-FILL WITH FINE DISS-Mn. DRUZY Qtz WITH <1% Mn ON FRACTURE 5° T.C.A AT 593'		Bio = 100% ALT TO CHL BETWEEN 588 - 591 DECREASING TO 50-70% 591 to 598. PLAG - MOD-ST KAOL IN 588-591 INTERVAL. FRESH-WEAK ALTERATION 591-598. REMNANT THULITE ON 15° Fr at 588.6"		RUSTY STAINED INTERVAL 593 - 597 Mn stained fr AT 596.6' 3Qtz-py-Mn veins AT 588-590 & 593. <1% Diss MAG. <1% Diss py ASS WITH CHL 8 ON Fr-FILL WITH HEMATITE.		5°	1/5	1
										15°		2
										30°		2
										45°	1/10	1

DRILL LOG

LOCATION SALAL CREEK		CO-ORDINATES		NORTH	EAST	ELEVATION		6 of 64	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE	TOTAL DEPTH	HOLE NO.	
						HQ		D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY	ALTERATION	MINERALIZATION			STRUCTURE
From	To	Length	% Rec			F	V/F	F/F	L
598	608	10'	100%	Cr EQ Qtz Monz. SLIGHT RUSTY WETHERED BETWEEN. 598 & 601' 3% Bi ALT TO CHL WITH ZONE OF 5% SECONDARY Bi BETWEEN, 605' to 607' 6" - 1mm WIDE MASSIVE MAG VEIN AT 600' WITH RIM OF PY. 	FRESH - SLIGHT KAOH OF PLAG. UNALTERED K SPAR. 50-70% Bi - CHL. 5% FIBEROUS - DENDRITIC SECONDARY Bi? IN IRREG ZONE BETWEEN 605 & 607' 6" SCATTERED (<1%) EPIDOTE IN ZONE OF SEC - Bi OR PERVASIVE Mn THROUGH ROCK.	ST MN STAINS, IN RUSTY ZONE TO 601' ON FRACTURES. <<1% DISS MAG: MASSIVE MAG VEIN 1mm WIDE AT 600' RIMED WITH PY 15° T.C.A.	15		1/2'
608	618	10'	100%	SAME RK TYPE: IRREG ZONES OF SLIGHT RUSTY WEATHERING. 3% Bi ALT TO CHL WITH 5% SEC Bi IN 1' ZONE AT 613. OR POSSIBLY Mn DENDRITES.	FRESH - SL ALT KAOH OF PLAG UNALTERED K SPAR. 10-30% Bi ALT TO CHL. 5% SEC Bi OR Mn	ST MN STAINING ON SEVERAL FR <<1% DISS MAG <<1% PY WITH HEMATITE AS FR-FILL.	0		1/10'
618	628	10'	100%	SAME RK TYPE IRREG MOD-ST RUSTY WEATHERING FROM 619 TO 623. 3% Bi ALT TO CHL. FN DISS Mn ON DRY Fr AT 626' 6" 2mm Py-Mn - WHITE ALTN MINERAL AT 622' 6"	FRESH - MOD ALT OF PLAG TO KAOH 30-50% Bi TO CHL. INCREASING LOCALLY TO 50-70% IN 623-628 INTERVAL.	DISCONTINUOUS ZONES OF RUSTY WEATHERING WITH Mn ON FRACTURES THROUGH SECTION <1% FN DISS Mn ON DRY Fr 15° T.C.A AT 626' 6" <<1% FN DISS PY IN RK TYPE WITH LARGE CONCENTRATIONS AS FR-FILL ASSOCIATED WITH Mn & SERIC <<1% DISS MAG. TR RED HEMATITES OFTEN COATS FR-PLANES.	30°	1/10'	1
628	638	9' 6"		SAME RK TYPE. SOLID CORE TO 636' 6" FOLLOWED BY BROKEN, ALTERED ZONE. DISCONTINUOUS ZONES OF RUSTY WEATHERING THROUGH OUT SECTION: Mn - PY - Qtz - SERIC FR-FILL AT 628' 6" 3% Bi WHICH DISSAPERS AT 634' 9" & MAY BE REPLACED BY PY.	FRESH - WEAKLY KAOH OF PLAG. 20-30% Bi ALT TO CHL. FROM 636' TO 638 ROCK ST KAOH & SERIC ALTERED.	Mn ON 1mm WIDE DRY FRACTURE 30° T.C.A WITH DISCONTINUOUS PY AS FR-FILL TO DISS MAG. UP TO 10% DISS PY CUBES ~1mm SIZE IN DISCONTINUOUS BANDS THROUGH ST-ALT CLAY ZONE	30°	1/10'	1
							15°		1
							45°		2

DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH	EAST	ELEVATION		7 of 64		
DATE STARTED	DATE COMPLETED	SURVEYS			HOLE SIZE	TOTAL DEPTH	HOLE NO.			
					HQ			D.D.H. 76-1		
DEPTH		CORE		LITHOLOGY	ALTERATION	MINERALIZATION	STRUCTURE			
From	To	Length	% Rec				F	V/FI	F/FI	GRAPHIC
638	648	9'6"	95%	CORE ST - BROKEN-FRACTURED BETWEEN 644 & 647. ST ALT CLAY ZONE FROM 638 TO 640' C. GF QTZ MONZ WITH 3% BI FROM 640 TO 642. BI ABSENT AND ROCK ST FRACTURED & ALTERED. HIGH DENSITY OF FRS WITH PERVASIVE QTZ-SERIC ALT 645 TO 647.	WK-MOD ALT'N PLAG TO KAOL IN UNFR QTZ MONZ MOD-ST KAOL ASSOCIATED WITH FRS. PERVASIVE QTZ-SERIC ATN ASSOCIATED WITH FR AT 644' 4" & 646'. 70% BI ALT TO CHL WHERE PRESENT. MAY HAVE BEEN WEATHERED FROM OTHER PARTS OF SECTION.	ST - INTENSE RUSTY WEATHERING. LIMONITE OCCURS ON FR PLANES. Tr DISS MAG ONE FR WITH MN COATING <1% Py IN CLAY ZONE AT 638-639 Tr DISS PY THROUGHOUT SECTION.	30°		1	
648	658	9'	90%	SAME ROCK TYPE - SR RUSTY WEATHERING. <1% BI OR ABSENT WHERE WEATHERED TO LIMONITE. 20mm WHITE APLITE DIKE AT 652' 5" T, CA	FRESH OR WEAKLY ALT KAOL OF PLAG. 70% BI ALT TO CHL WHERE PRESENT OR COMPLETELY WEATHERED TO LIMONITE	SR - INTENSE RUSTY WEATHERING OF CM & ON FR. Tr DISS MAG Tr DISS PY	30 5 45		3 2 1	
658	668	10'	100%	SAME RK TYPE - SR RUSTY WEATHERING 1-3% BI OFTEN ABSENT DUE TO WEATHERING. QTZ-PY-SERIC ENVELOPE AT 664' 6" WHITE APLITE DIKE 2" WIDE AT 665' 6"	GEN WK-MOD KAOL ALN. OFTEN ST IN IRREG ZONES QTZ-SERIC ALTN AT 664' 6" 50% BI ALT TO CHLOR.	ST RUSTY WEATHERING. >1% DISS PY, IN QTZ-SERIC ALN. Tr MAG	60 45 10		3 1 1	
668	678	9'6"	95%	SAME RK TYPE - CORE BROKEN AND FRACTURES. ST-INTENSE RUSTY WEATHERING. 1% BI POSSIBLY ALT TO PY. APLITE DIKE AT 677-6" - 678' CHALCOHITE = CP ON ONE FR AT 675'	MOD-ST ALT PLAG - KAOL (PERVASIVE?) PY ST WEATHERED TO LIMONITE BI - 50% CHL. QTZ-SERIC-PY ENVELOPE AT 678 CONTINUES TO NEXT SECTION.	ST-INTENSE RUSTY WEATHERING OF CM & FR. <1% DISS PY WEATHERED TO LIMONITE. Tr OP WITH CHALCOHITE ON 45° FR AT 675'	45 30 0		8 2 1	

DRILL LOG

SHEET NO.

LOCATION		CO-ORDINATES		NORTH		EAST		ELEVATION		HOLE NO.		
SALAL CREEK										8 of 64		
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		D.O.H. 76-1		
						H Q.				76-1		
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE		
From	To	Length	% Rec							F	V/FI	
678	688	10'	100	CG EQ Qtz Monz. CORE VERY BROKEN SR RUSTY WEATHERING TR BI IN THIS SECTION APPEARS TO HAVE WEATHERED FROM RK. OR ALT TO PY. PY VEIN FROM 678 - 679 WITH 10mm WIDE ENVELOPE OF PY → Qtz → SERIC → KAOL MONZ. TR OF MO TR CHALCOHITE? OF FR AT 683' BARREN DILATIONAL Qtz VEIN 2mm WIDE 20° T.C.A AT 683' 6" WHITE APLITE DIKE FROM 678 TO 688		MOD KAOL OF PLAG. PERVASIVE ALT TO CLAYS WITHIN ENVELOPE OF PY VEIN		ST RUST WEATHERING OF GM & ON FR. PY 1% DISS & IRREG ALONG FR AS FILL TR MO WITH PY TR CHALCOHITE NO MAG.		70		5
										45		4
										30		2
										5	1/10	1
688	698	9'	90%	SAME RK TYPE. CORE VERY BROKEN & CRUSHED BETWEEN 691 & 696. ST FRACTURED WITH ST WEATHERING OF PY → LIMONITE. FN DISS MO & SERIC? ALONG FR AT 694 TR FLUORITE ON FR WITH CLAY GOUGE. AT 697' ASSOCIATED WITH 1mm WIDE VEIN OF FN DISS MO - PY. SURROUND BY ENVELOPE OF Qtz - SERIC AT 10mm WIDE.		WEAK - MOD KAOL ALTN PLAG. ST DERV KAOL WITH SERIC? ALN ASS WITH MO & PY.		MOST OF PY WEATHERED TO LIMONITE. PARTS OF SECTION RESEMBLE BOXWORK. TR PY: ORIGINAL CONTENT 1-2% FN DISS MO ASSOCIATED WITH KAOL ALN ON FRACTURE AT 694' TR FI AT 697 AS FR-FILL WITH MO - PY		45		5
										30		5
										5	1/3	2
698	708	9' 6"	95%	SAME RK TYPE. 3% BI. BETWEEN 703' - 703' 6" & FROM 705 TO 705' 6" FRACTURE ZONE WITH 210 FT/FT AT 694 TO 700' WHITE APLITE DIKE 4cm WIDE AT 50° T.C.A. SHARP CONTACT & OFFSET BY 5° FR TR CHALCOHITE - CHALCOHITE & PY ON 1mm Qtz FILL FR SURROUNDED 5mm SERICITE?/KAOL ENVELOPE. FR 45° T.C.A.		30-50% BI. ALT TO CHL WEAK - MOD KAOL OF PLAG OFFEN ST WHERE ASSOCIATED WITH PY - CPY.		<1% MOD-FN DISS PY TR MAG WHERE BI PRESENT. TR CPY WITH CHALCOHITE ON 45° 1mm Qtz VEIN.		45	1/10	2
										30		2
										5		1
708	718	9'	90%	SAME RK TYPE ST RUSTY WEATHERING THROUGH SECTION. CAVED SECTION AT 711'. ST FRACTURED BETWEEN 713 - 716' BI COMPLETELY WEATHERED FROM RK. WHITE APLITE DIKE UNKNOWN THICKNESS 35° T.C.A at 710' 9"		WR - MOD ALT PLAG - KAOL		ST RUSTY WEATHERING OF GM HEAVY LIMONITE COATING TO FRs IRREG MN STAIN TO SOME FRs. <<1% FN DISS PY.		5		5
										30		2
										45		2
										0		1
718	728	9'	90%	SAME ROCK TYPE & INTENSITY OF WEATHERING (ALTN. FROM 718 TO 720' SECTION 720 TO 723' 6" VERY BROKEN & CAVED TO PEBBLE SIZE FRAGS. CLAY FAULT GOUGE WITH PEBBLE FRAGS BETWEEN 723' 6" & 725' ENVELOPE OF ST PERVASIVE OLVY-CHL ALTN TO 726' WITH GRADUAL CHANGE TO RUSTY WEATHERED. MODERATLY FRESH Qtz MONZ. TR. FON FRACTURE BETWEEN CLAY GOUGE & ALT RK. MO ON CLAY FR WITH PY AT 727' 6"		ST PERV ALT PLAG - KAOL WITHIN ENVELOPE CLOSE TO FAULT GOUGH. 100% BI ALT TO CHL. POSSIBLE 1mm SERIC ZONE ADJACENT TO CLAY GOUGE AT 725' DECREASE IN ALTN TO 728': 30-50% BI ALT TO CHL MOD. KAOL ALTN.		ST RUSTY WEATHERING AND ACCUMULATION LIMONITE OF FR. 1% PY DISS IN CLAY ALN ZONE: MAY BE ASSOCIATED WITH CHLORITE. MO ON 30% FR WITH IRREG FILL OF PY 4mm SERIC SALVAGE TO VEIN.		30	1/10	1
										45		1

DRILL LOG

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		HOLE NO.	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY	ALTERATION	MINERALIZATION		STRUCTURE			
From	To	Length	% Rec					F	V/FI	F/FI	GRA
728	738	10'	100%	CR EQ Qtz Monz. 1 to 3% Bi ALT TO CHL. IRREG PATCHES OF RUSTY WEATHERING. SCATTERED DISC CPY-BRN-CHALCO OCCUR AT 730' 6", 731' 6" 734'	30-50% Bi ALT TO CHL WEAK-MOD ALT PLAG TO KAOL: LOCALLY ST-PERV AT 736' 6" TO 737' 6" WITH Bi: 80% ALT TO CHL.	IRREG RUSTY ZONES OF WEATHERING 8 ON FR. >1% FN DISS PY LOCALLY INCREASES TO 1%. ALSO OCCURS ON FR WITH CPY-BRN-CHALCO.	30		2		
							5		2		
							45		1		
							70		1/2		
738	748	9' 6"	95%	SAME RK TYPE. MOD-ST IRREG RUSTY WEATHERING: CORE CRUSHED & BROKEN BETWEEN 742' 6" & 745' 6" AND ALTERED TO CLAY WITH LIMONITE. DISS BRN-CHALCO-PY OCCURS AT ~1' INTERVALS THROUGH SECTION USUALLY IN ZONES WITH ST-ARGILLIC & POTASSIC? PERVASIVE ALTN. 1mm Qtz VEN 45° T.C.A. CONTAINS TR CPY & HAS HEMIPRITE (RED BRN VEN DISC MINERAL) SELVAGES. INTERSECTS ZONE OF ARGILLIC-POTASSIC? ALTN WITH 3% PY ~20cm WIDE AT 30° T.C.A. AT 741' 2"	MOD-ST ALTN PLAG TO KAOL & ALTN OF G.M. POSSIBLE POTASSIC ALTN AT 741' 2" ALONG 2mm FR WITH TR OF F.	IRREG MOD-ST RUSTY WEATHERING OF GM & ON FR. DISS PY WITH BRN-CHALCO & TR CPY OCCURS AT 1' INTERVALS IN SECTION ASSOCIATED WITH ST ARGILLIC ALTN.	30		5		
							45		1/10		
							50		1/5		
748	758	9' 0"	90%	SAME RK TYPE SR: RUSTY WEATHERING: CORE VERY BROKEN IN PART PROBABLY CAVED AT 751'. Bi COMPLETELY ALTERED & WEATHERED FROM RK. BRECCIATED ZONE BETWEEN 756 & 758 WITH PERVASIVE SILIC ALN.	WK-MOD KAOL OF PLAG PERVASIVE SILICIFICATION IN 756-758 INTERVAL SERIC ENVELOPE 1-5mm WIDE ON 25° FR	IRREG RUSTY WEATHERING OF G.M. THICK LIMONITE COATING ON FR. <1% DISS PY. PY ACCUMULATION ON FR IN ALTERED ZONE AT 756-758' ACTN AS LINING OF CAVITIES	25°		3		
							15°		1/2		
							40°		1		
758	768	10'	100%	SAME RK TYPE. VERY WEATHERED & BROKEN TO 767' Bi ABSENT TO 767'. FRESH RK TO 768 WITH 3% Bi & DISS PY.	80% Bi ALT TO CHL FRESH-WEAKLY ALT PLAG IN UNWEATHERED RK. MOD-SR KAOL IN WEATHERED SECTION.	ST RUSTY WEATHERING & LIMONITE COATINGS TO 767' UNWEATHERED RK CONTAINS 1% MAG ASS WITH PY IN G.M TR OF CPY	20°		5		
							30°		2		10
							5°		1/5		
							45				
768	778	10'	100	SAME RK TYPE. 3% Bi VARIABLE ALTN TO CHL: SPOTTY RUSTY WEATHERING THROUGH OUT SECTION. BRN-PY AT 773' 6" DISS THROUGH CORE AT SAME FOOTAGE K SPAR? VEIN 1mm WIDE 30° T.C.A WIDE 2mm SERIC ENVELOPE WHICH CONTAINS 2% MED GR DISS PY. FR PLANE TO VEIN SLIMEN SIDED, FR AT 775 HAS 10% BRN-CHALCO-PY -TR CPY AS COATING TO FR PLANE.	80% Bi ALT TO CHL 768 TO 775. WARE ALN DECREASES TO 30-50% WEAK-MOD ALTN PLAG TO KAOL. SERIC ENVELOPE TO K SPAR VENLETS.	BRN-CHALCO-TR CPY ON 30° OR CLOSELY ASSOCIATED WITH FR PLANES. <1% DISS PY IN G.M & CONCENTRATED AS FR-FILL	30		2		
							5		1/5		
							45		1		

DRILL LOG

SHEET NO.

LOCATION		CO-ORDINATES		NORTH		EAST		ELEVATION		10 of 64					
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		HOLE NO.					
						HQ						D.D.H. 76-1			
DEPTH		CORE		LITHOLOGY				ALTERATION		MINERALIZATION		STRUCTURE			
From	To	Length	% Rec									F	V/F:	F/F:	Log
778	788	10'	100%	CG EQ Qtz MONZ. ST RUSTY WEATHERED & FRACTURED IN THIS SECTION. 1% B ₁ OFTEN WEATHERED FROM PK. IRREG. Qtz - SERIC ENVELOPE. 2cm WIDE AT 785' CONTAINS 2% DISS PY. Tr - BRN. AT 711' ON FR 1mm WIDE FILLED WITH K-SPAR - IRREG. S ₁ SERIC ENVELOPE TO VEINLET.				MOD-ST ALTN PLUG TO KAOL. 10% B ₁ ALT TO CHL Qtz - SERIC ENVELOPE AT 785' K-SPAR VEINLET AT 711'		<1% FN DISS PY & AS CG FR-FILL THICK LIMONITE ON FR PLANES & ST RUSTY WEATHERING OF G.M. Tr DISS BRN Tr DISS MAG		30			5
		5										5			2
		45										45			1
		0										0			1
788	798	10'	100%	SAME RKTYP 3% B ₁ ALT TO CHL PORPHYRIC DIKE WITH RELATIVELY SHARP CONTACTS FROM 791 TO 794. CONTACT OF 35" WITH CG Qtz MONZ. CONTAINS 1% ALT B ₁ . B ₁ ABSENT IN CG PK FROM 788 TO 791. Tr BRN ON FR AT 797 6' WITH PY. 2cm WHITE DIKE AT 789 45° T.C.A. CUT AT 90° BY CLAY FILL FR CONTAINING F & CG PY.				FRESH - WH ALT PLUG TO KAOL 80-100% B ₁ ALT TO CHL IN BOTH CG & PORPH PK TYPES. CRYSTALS OF F WITH CLAY FR-FILL.		1% DISS PY IN CHL & ON FR. WHEN MED-CG. Tr BRN. <1% DISS MAG IN CG PK IRREG RUSTY WEATHERING THROUGHOUT SECTION.		30			5
		70										70			2
		45										45			1
		5										5			1
798	808	9'6"	95%	SAME RKTYP. CORE V BROKEN TO 800'. RUSTY WEATHERING DISAPPEARS AFTER 801'. 3% B ₁ ALT TO CHL FR PLANES IN UNWEATHERED PK COVERED WITH CHLORITE				FRESH - WH ALT PLUG TO KAOL. 50-70% B ₁ ALT TO CHL		<1% DISS PY <<1% DISS MAG PY ALSO OCCURS AS FR-FILL (1/3')		30			1
		20										20			1
		5										5			1
808	818	10'	100%	CG EQ Qtz MONZ GRADUALLY INTO MED-FN GR PK AT 810' CONTINUES TO 814' 3% B ₁ ALT TO CHL. FAULT ZONE AT 810' FILL WITH CHL-CLAY & PY. Cpy - PY - COV ON FR AT 813' 6" PY FILLED FR 45° T.C.A. AT 810' APPEARS TO OFFSET BARREN 5° & 30° FR.				WH ALT PLUG TO KAOL INCREASE MOD-SP BELOW FG PK. 30-50% B ₁ ALT TO CHL		<1% DISS FG PY & AS SMALL FR-FILL. <1% DISS MAG Cpy - PY - COV ON 5° FR AT 813' 6"		45			5
		30										30			2
		5										5			2
		70										70			1
		90										90			1/5
818	828	10'	100%	CG Qt MONZ: SLIGHT SPOTTY RUSTY WEATHERING. 3% B ₁ ALT TO CHL FN DISS Mo-py WITH Qtz IN VEINS AT 821' 6" & 823' K-SPAR VEIN WITH PY AT 826' AT 821' MASSIVE MAG-PY VEIN 1mm WIDE WITH SELVAGES OF EPIDOTE. & MINOR CHL IRREG DISTRIBUTION OF MAG & PY WITHIN VEIN. ORIENTATED 40°				30-50% B ₁ ALT TO CHL MOD-ST ALTN OF PLUG TO KAOL WITH PATCHES OF ST RELATIVE ALTN.		SLIGHT IRREG PATCHES OF RUSTY WEATHERING 1% DISS PY & AS FR-FILL Mo ON 2 DRY FR (V FN DISS) AT 821 & 826' ORIENTATED 30°		20			1
		30										30			1
		45										45			1/2
		5										5			1/10
		40								<1% DISS MAG. MASSIVE MAG WITH PY IN VEIN AT 821'		40			1/10

DRILL LOG

SHEET NO.

LOCATION		CO-ORDINATES		NORTH		EAST		ELEVATION		HOLE NO.	
SALAL CREEK										11 of 64	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		HOLE NO.	
						HQ				D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE	
From	To	Length	% Rec							F	V/Ft
828	838	9'	90%	CG EQ Qtz MONZ. UNWEATHERED. 3% Bi. CAVED SECTION 836 TO 837 DRY 1mm wide Qtz - Mo VEINS AT 828' 6" & 839' 6"		10-20% Bi ALT TO CHL. INCREASES 20-100% AT 834' MOD ALT OF PLAG TO KAOL.		VFN DISS Mo FORMS MARGINS TO 1mm WIDE Qtz VEINS AT 828' 6" & 839' 6" ORIENTATED 5° T.C.A. <<1% EN DISS PY. CRS PY AS FR FILL. DENSITY 1/5' <1% DISS MAG.		30°	3
										5°	1/5'
										45°	2
										15°	2
838	848	10'	100%	SOLID CORE, BUT ADDITIONAL 2' IN CORE BOX CONSISTS OF DRILL MUD & CAVED MATERIAL FROM HOLE. CG EQ Qtz MONZ - UNOXIDIZED FROM 838 to 846. 3% Bi ALT TO CHL. FG - APLITIC TYPE AT 846 CONTACT COVERED BY CAVED MATERIAL SUB PORPHONITIC AT 846-847' WITH 1% FG Bi. Mo-PY ON 3 30% DRY FR V AT 844 & 845 6" & 846' 6" NON MINERALIZED FR AT 838 CONTAINS 1mm K SPAR WITH CHL COATING - 50% T.C.A. IN FG AT 847 40% FR CONTAINS SERIC APPEAR DENSE BY 45° FR CONTAINS EPIDOTE - PY - Tr Mo. WITH 2mm IRREG SERIC SELVAGES.		100% Bi ALT TO CHL DECREASES 30-50% AT 843' MOD ALT PLAG TO KAOL. 5% Bi ALT IN APLITIC - SUB-PORPH TYPE. FR IN FINE GRAINED TYPE HAVE 2-3mm SERIC ENVELOPES.		Mo ON 3 (4th row!) DRY. Qtz FILL FR IN BOTH RW TYPES. Tr PY IN CH. GEN OCCURS AS IRREG FR FILL WITH Mo Tr DISS MAG IN CG TYPE		60	4
										50	2
										30	1/3'
										20	2
										5	1
848	858	10'	100%	APLITIC - SUB PORPH TYPE GRADDES INTO PORPH TYPE AT 851' <5mm PLAG & K SPAR PHENOS: 3% Bi ALT TO CHL. Mo OCCURS WITH EPIDOTE ON 2 DRY FR. AT 855' & WITH NO EPIDOTE AT 857' <<1mm K SPAR VEIN 50° T.C.A. AT 857.6'		5-10% Bi ALT TO CHL V. ST ALT PLAG TO KAOL.		Mo OCCURS AS FR-FILL WITH MINOR EPIDOTE IN FR AT 30° T.C.A. Tr DISS PY. PY OCCURS WITH EPIDOTE & HEMATITE AS FR-FILL AT 1/5'		30°	1/5'
										5	1/5'
										45	1/2'
858	868	10'	100%	PORPH GRADDES INTO CG EQ Qtz MONZ AT 858' 3" CONTACT MARKED BY FAINT 1cm WIDE APLITE DIKE ORIENTATED 45° T.C.A. 1-3% Bi IN CG RK ALT TO Bi. Mo ON 1 FR PLANE AT 868'. MASSIVE MAG WITH PY & EPIDOTE + STILBITE? OR HEMATITE SELVAGES OF 5" FR AT 861' 6". BARREN Qtz VEINS (1/10') 1mm WIDE 2° T.C.A.; HEMATITE - CHL - PY FORMS FR-FILL AT INTERVALS OF 1/FT THROUGH SECTION.		50-70% Bi ALT CHL IN CG RK. MOD-ST ALT PLAG TO KAOL. SLIGHT 'DINKING' OF K-SPAR?		Mo ON FR PLANE AT 868' 35° T.C.A. <<1% DISS MAG WITH PY HEMATITE ON FR PLANES AT DENSITY 1/FT.		30	1
										20	1
										45	1/2'



DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		12.8 64		
DATE STARTED		DATE COMPLETED		SURVEYS						HOLE NO.		
								HOLE SIZE		TOTAL DEPTH		
								HQ		D.D.H. 76-1		
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE		
From	To	Length	% Rec							F	V/FI	
868	878	10'	100%	CG Eq Qtz Monz: 1-3% Bi IRREG VARIATION THROUGH CORE. AT 870' 5cm WIDE FR ZONE CONTAINING HEMATITE - CHL: < 1mm WIDE K-SPAR? VEINLETS OCCUR AT APPROX INTERVAL 1/3FT: INTERVAL 874' 6" TO 876' SHATTERED & WEAK-MOD JUST OXIDIZED. FR DENSITY HIGH 870' TO 871'. FR WITH PY HAVE 1-2mm SERIC ENVELOPES		80% Bi ALT TO CHL WITH ASSOCIATED PY. MOD-ST KAOL OF PLAG K-SPAR VEINLETS 30° & 70° T.C.		0.5% FG DISS PY IN G.M. ALSO AS IRREG FR. FILL: SL RUSTY OXIDATION OF G.M & ALONG FR 871' - 876': FR PLANES COATED WITH HEMATITE & CHL-CLAY.		50°	-	2
878'	888'	10'	100%	SAME RK TYPE: 3% Bi ALT TO CHL: AT 880' 2 "GREEN" APLITE DIKES OCCUR 1cm WIDE & 50° T.C.A.: AT 878' 6" 1cm WIDE CLAY FILLED FR ZONE WITH SERIC ENVELOPE 2mm WIDE: WITHIN ENVELOPE ARE 11 FR CONTAINING SERICIZED FRAGS & Qtz HEALED WITH K SPAR. Mo ON DRY FR AT 1 Fr / FT INTERVALS. 30° FR SET IS OFFSET BY 70° FR THAT CONTAIN PY		50-70% Bi ALT TO CHL CHL OPTEN WITH SCATTERED DISS PY & HEMATITE MOD-ST KAOL OF PLAG.		FN DISS Mo ROSETTES / SPARKS OCCUR OF FR PLANE WITH APPROX DENSITY 1 / FT. <1% FN DISS PY OCCURS WITH PY ON FR PLANES / FILL. TR DISS MAG. FN DISS HEMATITE WITH CHL APPEARS AT 883' - <1% IN G.M.		30°	-	8
888	898	10'	100%	SAME RK TYPE: 3% Bi ALT TO CHL: ST FR / BROKEN CORE INCLUDING SILIC ENVELOPE 890 - 898'. Mo ON DRY FR 1 / 2' AND FN DISS? WITHIN ALTERED ZONE		50-70% Bi ALT TO CHL MOD-ST KAOL OF PLAG: 100% Bi ALT TO CHL WITHIN SILIC ENVELOPE. FROM 891' TO 894'. ALSO CONTAINS HIGH CLAY CONTENT		FN DISS Mo SPLASHED ON DRY FR DENSITY 1 / FT POSSIBLE IRREG FN DISS Mo IN SILIC ENVELOPE. PY RANGES FROM <1% IN Qtz MONZ TO 7-10% AS CRs, CUBIC, IRREG DISS IN SILIC RK. HEMATITE <1% FG DISS IN UNALT RK. & VEINLETS WITHIN SILIC ENVELOPE. T. CHALCITE?		30		2
										40		1
										60		1
										5		1/2'

DRILL LOG

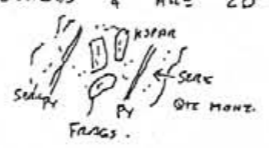
SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		13 of 64	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		HOLE NO. 76-1	
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE	
From	To	Length	%Rcc							F	V/FI
898'	908'	10'	100%	CG EQ Qtz MONZ : Bi 3% DECREASING TO <1% AT 903' : ST CLAY ALTN WITHIN 10CM ZONES 899-901' : FN DISS. SPLASHY Mo ON 3 DRY FRACTS: FR (30°) CONTAINING Mo AT 906' SHOWS REPEATED OFFSET BY 2ND SET (AT 40° T.C.A.) MINERALIZED BY PY-CHL: 2CM WIDE 'WHITE' APLITE DIKE INTERSECTS Qtz MONZ AT 901' : 50° T.C.A.  ZONE OF PERU CLAY ALTN (907'-908') CONTAINS 10-15% MG DISS PY + TR F	MOD-ST KAOL OF FLAG WITH ST PERU ARGILLIC ALTN IN LOCALIZED ZONES. 50-70% Bi ALT TO CHL TR F IN PERU CLAY ALTN ZONE	FN DISS. SPLASHY Mo ON 3 DRY FR PLANES AT 30° T.C.A. FN DISS PY <1% IN CORE INCREASES TO 10-15% WITHIN CLAY ALT ZONE TR MAG-HEMATITE DISS IN G.M	40		6		
908'	918'	10'	100%	SAME RK TYPE : SOLID CORE BUT CAVED SECTION AT 918' : 6' ZONE OFF-ARGILLIC ALT WITH 10-15% PY AT 918' 6" : TWO ZONES BETWEEN 909' - 913' 6" 909' - 913' 6" & 915' - 917' MAY BE EITHER "MAFFIC INCLUSIONS" OR ST PREDOMINANT SERIC-SILIC-PY ALTN: (RK DARK GREEN DENSE FN GRAINED) RELATIVELY SHARP CONTACT WITH UNALTERED Qtz MONZ. Bi <1% TO 909' INCREASES TO 3% IN UNALTD MONZ 913'-915' : 1-5mm WIDE BARREN Qtz VEINS DENSITY 1/3FT. FG DISS Mo OCCURS ON DRY FR AT 1/3FT	MOD-ST KAOL OF FLAG. INCREASING ST WITH PERU SILIC ALTN 913' 6" TO 915' 50-70% Bi ALT TO CHL. POSSIBLE ST PERU Qtz-SERIC ALTN = TO "MAFFIC" ZONES WITH TR F. MINOR K-SPAR VEINLETS AT 916' 9" & 909'.	FR WITH FG DISS Mo 30° T.C.A. Qtz MONZ <1% FG DISS PY WHICH INCREASES TO 5-7% IN "MAFFIC" OR ALTD ZONES. & 10% IN CLAY FILLED FAULT ZONES. FR PLANES OCCASIONALLY COATED WITH SPEC HEMATITE	40		2		
918'	928'	10'	100%	SAME RK TYPE : Bi <1% TO 921' INCREASING TO 3% : 5" WIDE APLITE DIKE AT 919' 40° T.C.A	30-50% Bi ALT TO CHL MOD KAOL OF FLAG: TR F ON FR AT 925'	TR Mo ON 1 DRY FR PLANE. <<1% DISS MAG & <1% FG DISS PY WITH 100% FR FILL	60		2		
928'	938'	10'	100%	SAME RK TYPE : Bi 3% TO 930' : MAFFIC INCLUSION / SERIC-SILIC ALT TO 934' 6" GRADING INTO FG & CG Qtz MONZONITE. GOOD FG DISS Mo ON FR 30° T.C.A AT 938'. MAFFIC/ALTERED ZONE HEAVILY FRD 933-934 CONTAINS CLAY GOUGH WITH TR F. Qtz VEINS 30° T.C.A 1/5FT	FRESH-WK ALT KAOL OF FLAG. 30-50% Bi ALT TO CHL. 1-5mm WIDE 100% SERIC ENVELOPE ON NON MINERALIZED FR AT 935' : SERIC-SILIC ALTN MAY = TO MAFFIC ZONE.	FG DISS Mo ON 1 FR. <<1% DISS PY IN UNALTD MONZ INCREASES 10% IN MAFFIC/ALT ZONE. TR MAG: HEMATITE ON FR AT 936'	40		2		
938'	948'	10'	100%	SAME RK TYPE : UNIFORM 3% Bi : 15" GREY APLITE DIKE AT 939' 25° T.C.A Mo OCCURS ON SMALL FR WITH Qtz-HEMATITE-PY. AT 1/2FT: ALSO K-SPAR OCCURS IN VEINLETS WITH Mo - 	WK-MOD KAOL OF FLAG 70-100% Bi ALT TO CHL OFTEN WITH PY & SPEC HEMATITE	Mo FG DISS ON DRY FR 1/2FT <1% FG DISS PY IN G.M RK & ASS FR-FILL WITH SPEC HEMATITE (1/5FT)	20		2		

DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH	EAST	ELEVATION	14 of 64		
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE	TOTAL DEPTH	HOLE NO.	
						HQ		D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY	ALTERATION	MINERALIZATION	STRUCTURE		
From	To	Length	% Rec				F	V/FI	F/FI
948'	958'	10'	100%	SAME RK TYPE - SOLID CORE: 3% BI EVENLY DISTRIBUTED. SILIC ALTN FROM 948' 6" TO 949' 6" WITH FG & Mo - PY AS FR-FILL AT 2' FT. FR WHERE PY >> Mo HAVE SERIC ALT ENVELOPES OF VARIOUS WIDTH 1-5cm. HIGHLY ALTO SERIC-SILIC ZONE / MAFFIC INCLUSION 949' 6" TO 950' 6" CONTAINING PY & TR F. PARTIALLY CLAY FAULT GOUGE. Qtz MONZ HIGHLY FR 950 TO 952' WITH DOMINANT FR-PLANCE AT 5° T.C.A.	WK-MOD KAOL OF PLAG. 70-100% BI ALT TO CHL WITH FG HEMATITE / PY. FR WITH PY AS FR-FILL HAVE IRREG SERIC ENVELOPES. PERVASIVE SERIC ALTN 956' TO 956' 6"	23 DRY FR CONTAIN Mo IN 20° T.C.A. SILIC ZONE ABOVE MAFFIC / SERIC ALTO ENVELOPE. AT 950'. <1% FG DISS PY IN Qtz MONZ INCREASING TO 10% WITHIN 6 SERIC / MAFFIC? ENVELOPES. TR MAG <<1% FG HEMATITE. PY AS DISCONTINUOUS FR-FILL	50		1
958	968'	10'	100%	SAME RK TYPE: BI DECREASE FROM 3% AT 957' TO <1% WITH IRREG AREAS OF 3% THROUGH SECTION. Mo OCCURS ON 2 DRY FR (960' 967') 25° T.C.A. K-SPAR VEINLETS AT 958' & 959' CONTAIN SMALL DARK BRX FRAGS (CHL?) WITH Qtz HEALED BY K-SPAR. VEINS ALSO HAVE SERIC SELVAGES & ARE 20° T.C.A. THIS FR SET IS OFFSET BY BARREN 70° FR SET	20% BI: ALT TO CHL (WHERE PRESENT: WK-MOD KAOL OF PLAG: SERIC ENVELOPES TO PY - K-SPAR VEINS.	2 FR CONTAIN FG Mo 1% FG DISS PY & AS FR-FILL	30		2
968'	978'	10'	100%	CG Qtz MONZ GRAPES INTO FG RK AT 971': 'GREY' APLITE DIKE AT 969' 6" 30° T.C.A. BI VARIES 3% IN CG RK TO 1% IN FG: OFTEN IRREG CONTENT IN CG MONZ. CLAY GOUGE IN FR ZONE AT 969' 3" PROBABLE PERV SILIC ZONE (BROKEN CORE) AT CG/FG Qtz MONZ CONTACT. Mo ON 2 FRs	50-70% BI: ALT TO CHL MOD KAOL OF PLAG IN CG MONZ: WK ALTN IN FG RK.	Mo ON 2 DRY FR 20° T.C.A. IN F.G. RK. <1% FG DISS PY. TR MAG - HEMATITE.	0		1/10
978'	988'	10'	100%	FG: SUB PORPH Qtz MONZ GRADATIONAL INTO MG RK AT 987' & INTO 'MAFFIC' INCLUSION AT 984'. BI 1%: AT 987' SHARP CONTACT OF 'MAFFIC INCLUSION' WITH Qtz - FELDSPAR PEGMATITE: MAFFIC INCLUSION IS A DARK GRAY-GREEN FR. DENSE RK WITH 8-10% UNALTERED BI: AT 987' 6" 2cm 50° T.C.A. CG APLITE DIKE OR CHILL ZONE SEPARATED PEGMATITE FROM CG Qtz MONZ. Mo ON DRY FR AT 1/2' INTERVALS: SILIC ENVELOPE ASSOCIATED WITH ST FR 892' 6" TO 893'	BI 80% ALT TO CHL IN FG TYPE DECREASES 30-50% IN CG RK. MOD KAOL OF PLAG: 50° FR CONTAINS CLAY WITH PY AS FR-FILL HAVE 1-5cm WIDE SERIC ENVELOPES. FR CUTTING MAFFIC INCLUSION HAVE 1-2cm WIDE BLEACHED SELVAGES WITH IRREG EPIDOTE-PY - K SPAR?	FRS CONTAINING IRREG-SPLASHY FG Mo ARE 15° T.C.A. <<1% FG DISS PY AND FR-FILL WITH <1% IN CG Qtz MONZ ASSOCIATED WITH HEMATITE	30		2
							45		1/2
							60		1
							15		1/2
							0		1/5





DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		HOLE NO. D.D.H. 76-1		
DATE STARTED		DATE COMPLETED		SURVEYS				HOLE SIZE		TOTAL DEPTH		
				TROPARI 1 & 2 AT 1000'		308'	69°					
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE		
From	To	Length	%Rec							F	V/FI	F/FI
988	998	10'	100%	CG EQ Qtz Monz : <1% Bi TO 988' 6" INCREASING TO 3% 989'-990' Qtz Monz HAS SHARP CONTACT WITH Qtz PLAG PEG THAT IS 5° T.C.A FROM 990' 6" TO 992' 6"; Bi INCREASES TO 5% CLOSE TO CONTACT. 5cm WIDE FINE GRAINED CHILL ZONE / APLITE AT 7-8° T.C.A IS SUB TO CONTACT. IRREG 'INCLUSIONS' OF MG Qtz Monz OCCUR IN PEG WHICH BECOMES VCG TOWARDS CONTACT WITH MG Qtz Monz AT 996' 6"		WK-MOD KAOL OF PLAG 30-50% Bi ALT TO CHL IN C & MG Monz; IRREG INTENSITY OF ALTN TR F WITH Py IN 15° FR AT 989'		SPASHY Mo ON 1 DRY FR AT 997 20° T.C.A. TR MAG & SERIC HEMATITE TR PY DISS WITH CHL FROM Bi & AS FR-FILL		80	1/3'	
										20	1/2'	
										25	1/5'	
										50	1/5'	
998	1008	10'	100%	MG EQ Qtz Monz : 3% Bi : PEGMATITE INTERVAL 102' 6" TO 104' 6" FOLLOWED BY FG Qtz Monz WITH 1-3% Bi : 3 ZONES ; 2-8cm WIDE OF PROBABLE MG Qtz Diorite Comp (25-30% Bi) CUT Qtz Monz AT 70° T.C.A & OCCUR AT FOOTAGES 1000; 1000'3" 1001' WITH MOD-SHARP CONTACTS.		WK-MOD KAOL OF PLAG IN MG RK INCREASES MOD-ST IN FG PHASE: 30-50% Bi IS ALT TO CHL IN MG : FRESH Bi IN 'DIORITE' ZONES: 5% Bi ALT IN FG RK. 1-2mm WIDE SERIC ENVELOPES ON FR CONTAINING THIN CLAY GOUGE IN FG PHASE		<1% FG DISS PY WITH SCATTERED FR-FILL TR MAG		70	1'	
										20	1/2'	
										30	1/3'	
1008	1018'	9' 6"	95%	FG EQ Qtz Monz : 1% Bi : SERIC-SILIC-PY ALTN & MIN ENVELOPES WITH TR CPY ON FR BETWEEN 1010' 3" TO 1112' : MIXED DARK GREY-YELLOW CLAY FAULT GOUGE CONTAINING HIGHLY KAOL/SILIC Qtz Monz FRAGS FILLS ZONE 1112 - 1115' : THIS IS FOLLOWED BY HIGHLY FR-KAOL MG Qtz Monz TO 1018' : CONTACT OF FAULT ZONE 40° T.C.A		WK-KAOL OF PLAG IN FG RK ST PERU KAOL OF BROKEN CG RK BELOW FAULT ZONE. 4cm WIDE SILIC ENVELOPE ENCLOSED BY 20cm SERIC-PY ENVELOPE ABOVE GOUGE FILLED FAULT ZONE		TR PY IN FG-RK INCREASES TO 8% MG DISS THROUGH SERIC ENVELOPE PY WITH TR CPY ALSO AS FR-FILL IN SERIC ENVELOPE		50	1	
										20	1	
1018	1028	9' 6"	95%	BROKEN KAOL MG EQ Qtz Monz : GRADATIONAL INTO FG SUB PORPH Qtz Monz AT 1021' : 3% Bi : Mo ON 3 DRY FR 1024 - 1025' 6" 1 OR 2mm Qtz VEINS IN SECTION T.C.A.		100% Bi ALT TO CHL IN MG RK : DECREASES 5-10% IN FG SUB PORPH RK MOD-ST KAOL OF PLAG IN MG : WK-MOD KAOL IN FG : SERIC ALTN ENVELOPES YELLOW CLAY/PY FILLED FR IN RK.		SPASHY FG Mo OCCURS ON FR PLANES. 5° T.C.A AT 30° TR VCG DISS Mo IN G.A 1024-1025' <1% MOD-CG DISS PY & ON FR PLANES. <<1% FG DISS Mo.		60	4	
										35	2	
										5	1/2'	
										20	1	

DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		16 of 64	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		HOLE NO. D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY	ALTERATION	MINERALIZATION		STRUCTURE			
From	To	Length	%Rec					F	V/Ft	F/Ft	GRAPE L
1028	1038	9.0'	90%	FG SUB PORPH Qtz MONZ : 1-3% Bi : CORE V BROKEN : SILIC & SHATTERED ZONE 1028' 6" - 1029' 6" WITH IRREG FG DISS Mo & Py : V SG SHATTERED ARGILL ALT ZONE 1030' 6" - 1031' WITH SOME CAUSE FRAGS : 2cm 'GREEN' APLITE DIKE 20° T.C.A AT 1037' 6" : CORE SOLID FROM 1033 - 1038	5% Bi ALT TO CHL WHERE MONZ UNFRACTURED WK KARL OF PLAG : THIN SERIC ALN ENVELOPES ON FR WITH IRREG PY FILL	FG IRREG MINOR Mo DISS IN FR CORE : <1% DISS PY AS FR FILL WITH HEMATITE OBTEN COATING FR-PLANES. <<1% FG DISS HEMATITE IN G.M OF Qtz MONZ.	80		5		
1038	1048	9.0'	90%	SAME RK TYPE : 3% Bi : CORE ST SHATTERED WITH CLAY GOUGH FILL 1039-1048' : IRREG SMALLER ZONES OCCUR 1039-1040 & 1046 - 'GREY' CLAY OCCURS AT 1039-1040 ; & 1049-1047 :	5% Bi ALT TO CHL WHERE CORE NOT BROKEN WK KARL OF PLAG IRREG ZONES SERIC ALTN IN SHATTERED ZONE	1% FG DISS PY INCREASING TO 5% WHERE CORE FRD. HEMATITE OCCURS ON FR-PLANES & <<1% FG DISS IN CORE TO VFG DISS Mo ? IN SOME PARTS OF FR ZONES	80		10		
1048	1058	10'	100%	FG SUB PORPH Qtz MONZ : ST SHATTERING OF CORE 1048 - 1053 : 1-3% Bi : VFG Mo ON <<1m. FRs 1/3' : VFG Mo APPARENTLY CONCENTED AT EDGES OF FR 10' T.C.A 1055' 6" TO 1057' : FR SYSTEM OFFSETS 1m Qtz VEINING AT 70° T.C.A. : MINOR K SPAR VEINING & SLIGHTLY BLEACHED SELVAGES TO VEINS AT 1056'	5% Bi ALT TO CHL WK KARL OF PLAG. SERIC ALTN & SEC Bi ? FORMS IRREG ENVELOPES ON FRs 1057 - 1058	3 DRY FR'S WITH FG IN FLASHY Mo ST HEMATITE VEINING WITH DISS MAG AT 1053 <<1% Py AS FR-FILL WITH TO DISS	30		2		
1058	1068	9' 6"	95%	SAME RK TYPE : 1-3% Bi : CAVED MATERIAL FROM UPPER HOLE 1066'-1067' : Mo ON 1 FR AT 1061' 6" : SHARP CONTACT AT 1065' BETWEEN Qtz MONZ & DARK GREEN FG BASALT. DIKE 30° T.C.A : CLOSE TO CONTACT PLAG PHENOS IN BASALT SHOW FLOW ORIENTATION TO CONTACT	10% Bi ALT TO CHL WK-MOD KARL OF PLAG IN Qtz MONZ & DEUTRIC ALTN PLAG IN BASALT : ZEPHYRITES / CALCITE FILL VESICLES IN BASALT : FR THROUGH Qtz MONZ (1/ft) CONTAINING PY & GRAY CLAY GOUGE HAVE 5cm WIDE ENVELOPES OF SERIC ALTN & POSSIBLY SEC Bi (DARK DENDRITIC / FINE BLAMELLA MINERALS)	Mo ON 1 DRY FR AT 1061' 6" 20° T.C.A. <1% Py GEN AS FR-FILL IN Qtz MONZ & BASALT : HEMATITE COMMON OF FR PLANES WHERE PY OCCURS	30		1		

DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		17 of 64	
DATE STARTED		DATE COMPLETED		SURVEYS		HOLE SIZE		TOTAL DEPTH		HOLE NO. D.D.H. 76-1	
DEPTH		CORE		LITHOLOGY		ALTERATION		MINERALIZATION		STRUCTURE	
From	To	Length	%Rec							F	V/FI
1068	1078	10'	100%	BASALT DIKE CONTINUES TO 1069' : \emptyset SUB PORPH @ F.G Qtz MONE WITH SHARP CONTACT: Qtz MONE HAS 3% Bi : SECOND BASALT DIKE IN LOWER PART OF SECTION WITH CONTACT AT 1072' : Mo ON 1 FR AT 1070' 6"		5% Bi ALT TO CHL WK-IRREG KAOL OF PLAG: SEVER FR IN MONE HAVE ENVELOPES OF SERIC ALTN (1/FT)		VFG Mo OCCURS ON 60° DRY FR AT 1070' 6" PY MAINLY AS FR-FILL IN Qtz MONE < 1% FG DISS IN G.M. PY-ALSO AS FR-FILL IN BASALT WITH VFG DISS PY FORMING 1-3mm WIDE ENVELOPE (BLEACHED APPEARANCE) TO FR. TR FG DISS MAG		50	4
										60	2
										70	1
										5	1/5
1078	1088	10'	100%	BASALT DIKE CONTINUES TO 1080' WHERE SHARP 25° CONTACT WITH FG SUB PORPH Qtz MONE: BASALT HAS DARK CHILL ZONE AT CONTACT: Qtz MONE ST FRACT & BRX FROM BASALT/MONE CONTACT TO 1086': FAULT ZONE FILLED WITH FRAGS & SANDY CLAY 1085-1086': IRREG AREAS OF SEC Bi IN MONE INCREASING INTENSITY/HOMOGENEITY TOWARDS PERVASIVE SILIC ENVELOPE WITH 50° FR DENSITY 20/FT IN INTERVAL 1082-1083' : UNALT RK HAS 3% Bi : Mo ON 3 FR FROM 1083' TO 1084'		5% Bi ALT TO CHL: WK KAOL OF PLAG: IRREG PERVASIVE SILIC/SERIC ALTN FROM 1080 TO 1086 WITH POSSIBLE SEC Bi MOD-ST DEVELOPER FR WITH PY & FR-FILL HAVE 2-5mm SERIC ENVELOPES.		VFG Mo ON 3 DRY FR OFTEN BRAIDED/SUBDIVIDED FROM 1083-1084 GEN Mo MINERAL FR 25° T.C.A: F.G PY AS IRREG FR-FILL WITH HEMATITE TR FG MAG IN G.M OF Qtz MONE		50	5
										60	4
										70	4
										20	1
1088	1098	10'	100%	SUB PORPH FG Qtz MONE : 3% Bi : K SEAR PHENOS TO 5mm LENGTH: MOD-ST SERIC ALT ENVELOPES ON FR WITH PY: FROM 1089-1090 & 1097-1098'		3% Bi ALT TO CHL: WK-MOD KAOL OF PLAG: MOD-ST SERIC ALTN AS ENVELOPE TO FR WITH PY: MOD DEV OF POSSIBLE SEC Bi: ENVELOPES ARE 5-8mm WIDE ON 60 & 20° FR FROM 1089-1090'		< 1% PY AS IRREG FR-FILL WITH < 1% FG DISS HEMATITE -PY IN G.M TR FG DISS MAG		60	2
										70	1
										30	1
										20	1/2
1098	1108	10'	100%	SAME RK TYPE : 3% Bi : K SEAR PHENOS TO 10mm LENGTH 3 FR CONTAIN Mo		3% Bi ALT TO CHL WITH IRREG INCREASE IN ALTN TO 30% CHL: WK-MOD KAOL OF PLAG: IRREG AREAS MOD SERIC ALTN AS ENVELOPE TO FR FROM 1098 TO : WK AREAS OF PERU SERIC ALTN OCCUR IN MOST OF SECTION		VFG Mo ON 3 11 DRY < 1mm FR FROM 1107-1108' GEN 10° T.C.A < 1% PY AS FR-FILL 1/2 FT WITH HEMATITE. < 1% FG DISS MAG		50	5
										10	1/2
										70	1
										30	1/3

DRILL LOG

SHEET NO.

LOCATION SALAL CREEK		CO-ORDINATES		NORTH		EAST		ELEVATION		18 f 64					
DATE STARTED		DATE COMPLETED		SURVEYS				HOLE SIZE		HOLE NO.					
								HQ/NQ		D.D.H. 76-1					
DEPTH		CORE		LITHOLOGY				ALTERATION		MINERALIZATION		STRUCTURE			
From	To	Length	% Rec									F	V/F	F/F	GRAPH Loc
1108'	1118'	5'	50%	REDUCTION OF CORE HQ - NQ AT 1110' : CORE V BRKEN 8 SECTIONS LOST DUE TO VIBRATION OF CORE BARREL : SUB PORH FG Qz MONZ : 3% Bi : Mo ON FR AT 1111'				10% Bi ALT TO CHL LW - MOD KARO OF PLAG : IRREG AREAS OF POSSIBLE REC Bi :		Mo FG ON 1 DRY FR << 1mm 5* T.C.A. << 1% Py AS FR-FILL		70			3
												30			2
												20			1
												5			1/3

M. S. P.
28 JUL 1977