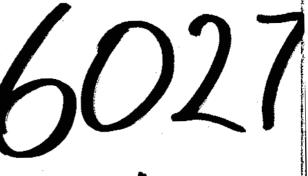
UTAH MINES LTD.

ISLAND COPPER MINE
P.O. BOX 370
PORT HARDY, B.C. VON 2PO
TELEPHONE (604) 949 • 6326



The Mining Recorder, Court House, 35 Front Street, Nanaimo, V9R 5J1.

Attn: Mrs. J. Carr.

October 19th, 196

.

My Assessment Report in duplicate is enclosed with this letter and covers the Joe's Lake Group. Copies of the affidavits (Form B) and the Notice to Group (Form I) have already been mailed to you.

Yours truly,

John Lamb, P. Eng.,

Proj. Geol.

JL:ebh att:

MINERAL RESOURCES BRANCH

ASSESSMENT REPORT

NO. 6027

#1 Glaim Map

IN BACK POCKET

CM-GC15

UTAH MINES LTD.

ISLAND COPPER MINE P.O. BOX 370 PORT HARDY, B.C. VON 2PO TELEPHONE (604) 949 • 6326

October 19th, 1976

Department of Mines and Petroleum Resources, Douglas Building, Government Street, Victoria, B.C.

Sirs,

This assessment report is being submitted in compliance with the Regulations Governing Assessment work, under the Mineral Act as revised to June 30th, 1976.

Assessment credits are requested for diamond drilling work, performed between 25th August and 3rd September, 1976.

The report covers one group of claims, known as the Joe's Lake Group.

Yours truly,

JL:ebh John Lamb, P. Eng.,
Project Geologist

att:

UTAH MINES LIMITED

ISLAND COPPER MINE

PORT HARDY, B.C.

WORK PERFORMED

- Diamond drilling between 25th August and 3rd September, 1976, I. on the northern part of the Island Copper mineral holdings, about 10 miles south of Port Hardy.
- One hole only was drilled on an old logging road, about one 2. mile north of the Island Copper pit. Particulars are as follows:
 - al Core size NQ.
 - Ъ] Core is stored at the Island Copper mine of Utah Mines Ltd.
 - Hole No. Collar True Inclin-Co-ordinates Collar Elev. ation M5 13165 N 3701 1098 ft. 27150 E
 - In relation to the claims, the hole is on the Lake mineral claim, approximately 330 ft. west-northwest of post 1 North, 0 West.
- 3. Drill core logs are included with the report.

Logging was done by: John Lamb, P.Eng., Project Geologist, BASc., M.A.Sc., - University of B.C.

- 4. An itemized cost statement is included in the report.
- A copy of the contract with Connors Drilling Ltd., is included. Hole M5 was drilled as a part of this contract. There are several later additions to the terms of the contract. See: a] letter to J. Lamb from R. Miller - 18th August, 1976.
 - b] letter to J. Lamb from P. Edwards -30th August, 1976.
 - c] letter to R. Miller from J. Lamb 10th September, 1976.
- Both an index map and detailed claim map are enclosed, showing 6. the location of the hole.

John Lamb, P. Eng., Proj. Geologist, Utah Mines Limited.

JL:ebh att:

STATEMENT OF COSTS

FOR

DIAMOND DRILLING ON THE JOE'S LAKE GROUP

OF MINERAL CLAIMS

A. Drill Contractor's Charge	<u>s</u>		
0 - 500 feet @ 10.79 500 -1000 feet @ 11.79 1000 -1098 feet @ 11.79	5 -	\$ 5,375.00 5,875.00 1,151.50	
Increased footage rates (as per letter of Aug 30 1098 feet @ \$2.50)	2,745.00	\$15,146.50
Extra Contract Charges			
50 man hours @ \$15.00	_	750.00	
15 drill hours @ \$12.00	_	180.00	
Travel time - 26 man		200.00	
hours @ \$15.00	; <u> </u>	390.00	
Hotel accommodation for crew - 8 days @ \$26.00 Casual Meals in Utah Cam	_ P,	208.00	
4 men for 10 days,			
@ \$3.50 per meal	_	<u>350.00</u>	
			\$ 1,878.00
B. Utah Mines Ltd Costs a) Core boxes and lids			
66 @ \$3.55 b] Site preparation	-	234.30	
road clearing		300.00	
c] Truck rental	-	150.00	
d] Supplies and freight	-	175.00	
e] Geologist's time f] Company overhead @ 25%		1000.00	
of labor charges gl Portion of mob-demob	-	250.00	
charges	_	250.00	
h] Preparation of report	- '	300.00	
•	-	300.00	\$ 2.650.20
	-		\$ 2,659.30
TOTAL DRILLING COSTS:	-		\$19,683.80

STATEMENT OF COSTS FOR DIAMOND DRILLING ON THE JOE'S LAKE GROUP OF MINERAL CLAIMS Page 2 contd...

Total Costs - \$19,683.80

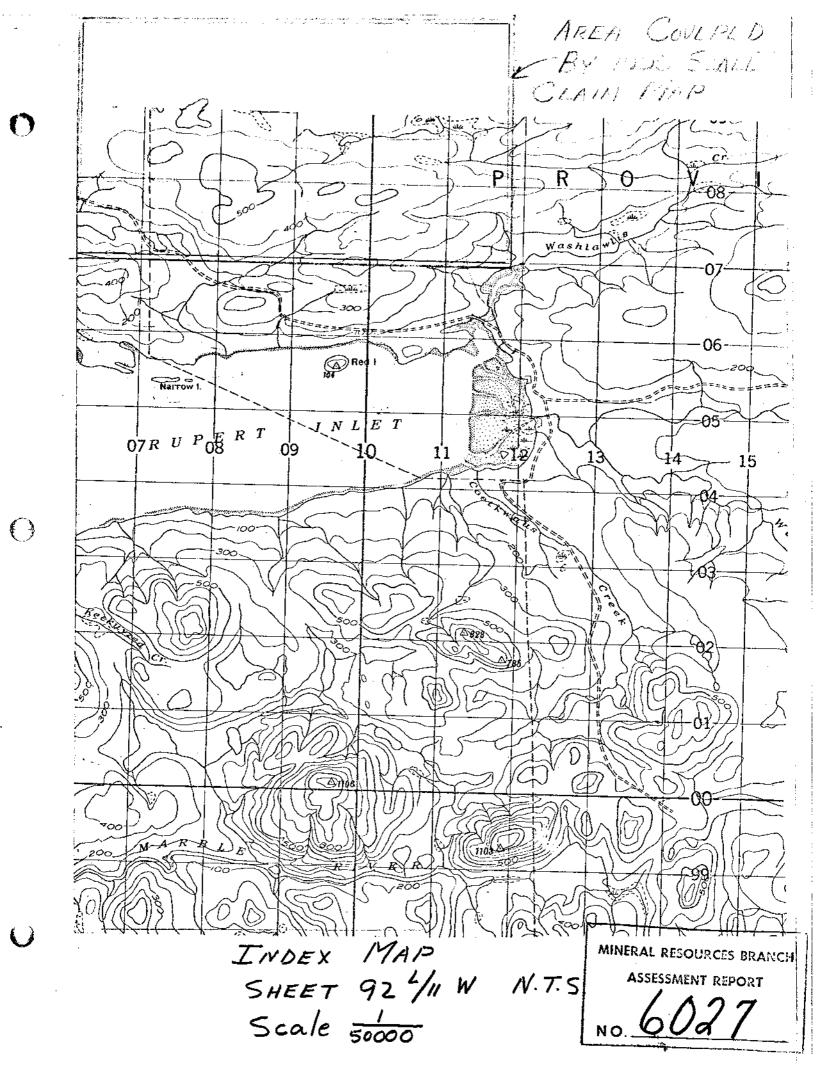
Footage Drilled - 1,098 feet

Drill Cost Per Foot - <u>\$17.92</u>

Note: -

At the time the affidavit was submitted, the best estimate of the cost was \$16.40 per foot. Actual cost was \$17.92 per foot as calculated above.

John Lamb, P. Eng., Proj. Geologist, Utah Mines Limited



AGREEMENT

This AGREEMENT made this 14th day of May 1976.

BETWEEN: UTAH MINES LTD.

ISLAND COPFER MINES

P.O. BOX 370 PORT HARDY, B.C.

(hereinafter referred to as the "COMPANY")

AND:

CONNORS DRILLING LTD.

205, 1201 WEST PENDER STREET VANCOUVER, B.C. V6E 2V2

(hereinafter referred to as the "CONTRACTOR")

WHEREAS the COMPANY hereby requests that the CONTRACTOR carry out certain surface diamond drilling and other services, on the COMPANY'S property at the Island Copper Mine at Port Hardy, B.C.

AMD WHEREAS the CONTRACTOR hereby agrees to perform said diamond drilling and other service; requested, under the terms and conditions bereivafter contained.

1. SCOPE OF WORK

The work is to consist of a scries of drill holes, drilled at locations specified by the COMPANY. A total minimum footage of approximately 2,200 feet shall be drilled, but total footage may be extended beyond that amount, by mutual consent. Holes shall be drilled with NQ tools producing approximately 1 7/8" diameter core, as far as is reasonably practical. Maximum depth of holes shall be around 1000 feet deep. Inclination of holes shall be from minus 60 to minus 90 degrees. Total cost of program is estimated to be \$25,000.00.

2. COMMENCEMENT AND EXECUTION OF WORK

Work shall be commenced: During the month of June, 1976. Work will be carried out with shifts operating seven days a week or as near that schedule as can reasonably 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 skid mounted drill rig, pumps, rods, casing, diamond set items, oil and grease, service truck, water line, etc.

- (b) That 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 labor, 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 Taxes, or other such applicable charges relative to its own labor and supplies purchased.
- (d) The CONTRACTOR shall, 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) The CONTRACTOR shall 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.
- (f) The CONTRACTOR or its personnel shall not divulge any information concerning drilling results or 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 FIELD COST Rates.
- (b) That it will provide access roads to as near all drill sites as is practical.
- (c) The COMPANY shall 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.

- 5. THE COMPANY HEREBY AGREES to pay the CONTRACTOR for footage drilled and other services performed as follows:
- (a) Mobilization and demobilization, for equipment and supplies from Vancouver to Island Copper Mine, via water transport, for the COMPANY'S account. The cost of getting personnel to and from job site shall be for the CONTRACTOR'S account.
- (b) Drilling: 0 500 feet \$10.75 a foot 500 1000 feet 11.75 a foot
- (c) Overburden penetration:

0 - 50 feet, at \$10.75 a foot 50 - 125 feet, at \$11.25 a foot Beyond 125 feet, at Field Cost, if the cost of penetration is greater than \$11.25 a foot.

- (d) Reaming hole in rock for casing, if required, at Field Cost.
- (e) Casing of hole in rock, if required, at Field Cost.
- (f) Standby, dip-testing, or delay time, or other time during which the CONTRACTOR'S crews are performing services, for the COMPANY not otherwise covered herein, at Field Cost.
- (g) Cementing of drill holes, and redrilling of cemented section of hole, at Field Cost.
- (h) Water supply: CONTRACTOR will supply 1,000 feet of water line and pump for a maximum vertical lift of 300 feet. The cost of hauling water, if required, shall be for the COMPANY'S account.
- (i) Moving of drill and equipment from site to site: The cost of labor shall be for the CONTRACTOR'S account.
- (j) Drilling mud and additives, if required, shall be at Cost.
- (k) Truck rental: The CONTRACTOR shall provide service trucks at no cost to the COMPANY.
- (1) Tractor: To move skid mounted drill rigs, if required, shall be provided by the COMPANY.
- (m) Camp: The COMPANY will provide housing and board for the CONTRACTOR'S personnel at no cost to the CONTRACTOR.

- (n) Field Cost, where applicable, shall be: Labor at \$11.50 a man hour (including supervision), equipment rental at \$10.00 a drill shift hour, and all the "down the hole" tools and supplies lost or consumed during the Field Cost portion of the work at Cost plus ten percent.
- (o) Record Keeping: Invoices for footage drilled and other services performed shall be made up from daily log sheets submitted to the COMPANY by the CONTRACTOR'S foreman in charge.
- (p) Geotechnical operations rate: For the installation of piezometers, water pressure testing etc., shall be at \$42.00 per shift hour.

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.
- (b) The CONTRACTOR shall not 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.
- (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 invoice date.

IN WITNESS WHEREOF THE COMPANY and the CONTRACTOR

set their hands this	day of	, 19
	UTAH MINES LTD.	1
	CONNORS DELLLING	LTD.



August 18, 1976

Mr. J. Lamb Utah Mines Ltd. Island Copper Mine P.O. Box 370 Port Hardy, B.C.

Re: Drilling Extra Hard Rock in Pit Area.

Dear Mr. Lamb:

Further to our discussion of August 13th regarding charges for the above, my proposal as follows:

Effective: August 12th to include hole #D-26, to recover extra bit costs.

0 - 500 feet \$ 7.50 a foot 500 - 1000 feet \$ 9.00 a foot 1000 - 1500 feet \$10.50 a foot

Plus, the cost of casing shoes used on Hole #D-26 and on any other holes that may be collared in extra hard rock.

The above listed footage rates would be additional charges for extra hard ground encountered when drilling production is lower than 3 feet per shift hour and bit footage is less than 40 feet per bit used.

Extra cost charges will have to be approved by Utah Mines Ltd. before they can be invoiced.

I trust you will find this acceptable.

Yours very truly,

CONNORS DEPLLING LTD.

R.V. Miller

Division Manager

RVM:itm

cc F. Tagami

Z. Kluczewski

Suite 205 - 1201 West Pender Street, Vancouver, B.C. V6E 2V2 (604) 683-2222



August 30, 1976

Mr. John Lamb
Island Copper Mine Ltd.
Port Hardy, B.C.

Dear John:

We have examined the financial status of our drill program for you and despite the fact that field operations are going well, we have lost a considerable amount on this work. We have obtained 6.5 feet per drilling hour, average penetration, which is good for drilling in and around the pit, with 95% availability of equipment. We have a top crew there and we have been without personnel problems. The simple fact is that our price does not allow us to recover costs. To the end of July we show a loss of almost \$4,000.00 for this job, after completing 2,846 feet of drilling. The results for August will be even worse.

To reverse this situation and to have any hope of turning a small profit by the end of the program we need a substantial increase in rates. Our fixed costs have averaged \$41.22 per shift hour, and we have recovered much less than this on Field Cost, and only just recovered it on the geotechnical rate. Therefore, we request an increase in our Field Cost rate to this amount based on \$15.00 per man hour for two men per shift, and \$12.00 per shift hour for the equipment.

For the footage rates, our base cost has averaged \$11.45 a foot, while footage revenue has averaged \$10.54 a foot. To partially offset the loss already on the books, and, hopefully, to allow us a small profit on the balance of the program, we request a general increase of \$2.50 a foot in the base drilling rates. We also request that these rates apply from August 15, after completion of 3,962 feet. The extra charges for hard ground quoted in Rudy's letter of August 18 will still apply whenever these conditions are encountered.

Mr. John Lamb August 30, 1976 Page 2

I trust that you will approve our request so that the drill program will be a success for us both.

Please give this matter your immediate attention.

Yours very truly,

CONNORS DRILLING LTD.

Phil Edwards

Assistant Division Manager

PE:itm

September 10th, 1976.

Mr. R. Miller, Connors Drilling Ltd., \$205, 1201 W. Pender, Vancouver, B.C. V6E 2V2

Dear Rudy:

Re: Present Drilling Program

As per our verbal agreement made today we are accepting your request for certain rate increases in charges for our current program, as they are outlined in the letter to me from Phil Edwards, dated 30 August 1976.

Also as agreed between us verbally we will accept moving costs for labor from the pit to hole M5, then to hole R6 and back to the pit again. Such long distance moves were not spelled out in our contract and as they are not ordinary pit moves we'll bear the cost as mentioned.

Trusting this is estimisectory, I remain,

Yours truly.

John Lamb, Project Geologist

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PAGE NO: / OF 12 PROJECT: ISLAND COMPER DATE STARTED: 25 ,400 75 REF. TO CLAIM CORNER: GROUND ELEV,: /370 CASING COLLAR ELEV.: SCALE: /"= 10 DATE FINISHED: 2 5=5.76 13/65 N 27/50 E LOGGED BY: JI Lamb COORDINATES: TOTAL DEPTH: 1098 FF INCLINATION: - 30° BEARING: comments: Hale on sld logging read, south of y to the east of Toks Lake Lake (unit 2-N . O-W) . (Dip test a 1098, mel. = -84° AVE CORE REC'Y / HOLE ESTI-MATED ALTERATION SUL PHIDES
DRILLING
INTERVAL
% CORE
RECOVERED
CORE
SIZE SECTION Note - Collar elevation shown is 1000 above two elevation DESCRIPTIVE GEOLOGY - 26 - overburden 26-48 - Mixed argillite (minor) and gray
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Rock quite limey (acid fraz) 74 ansillate, well hold a both to gray

ansillate, well hold a both to to core &

Cocasional room holds to to to core &

roomed Py. Nots a streaks fine coisite

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anales One open from it 49, loaded we

dear to calc crystals

Dear to calc crystals 75 Rock quite line, (acid fizz)

PAGE NO: 2 OF 10 PROJECT: REF. TO CLAIM CORNER: DATE STARTED GASING COLLAR ELEV. GROUND ELEV. SCALE: COORDINATES: LOGGED BY : TOTAL DEPTH BEARING: INCLINATION: AVE CORE ESTL-ALTERATION COMMENTS: REC'Y / HOLF MATED FRACTURING MINERAL SECTION DESCRIPTIVE GEOLOGY 88 88-47- 315 K striped liney arg. 45 95 in previous run emposed of argillate & tontoff works like a source fuff fall in argillate sediments. Cre partly broken. Many -100-Rock limer 30-BL 131-147 - Buti-any lapilli toff mixed w. black aighthe as in previous run. Hony constructs privoce. 95

PAGE NO: 2 of 18 PROJECT: REF. TO CLAIM CORNER: DATE STARTED: GROUND ELEV. GASING COLLAR FLEY .: SCALE: DATE FINISHED: COORDINATES: I DESER AY : TOTAL DEPTH INCLINATION: READING: ESTI-AVE CORE ALTERATION COMMENTS: REC'Y / HOLE MATED FRACTURING DRILLING
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CORE
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HOLE NO. 145

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PROJECT:

PAGE NO: 4 OF 18

CASING COLLAR ELEV,;

GROUND ELEV,:

DATE STARTED:

REF. TO GLAIM CORNER:

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DATE FINISHED:

SCALE:

COORDINATES:

READING

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LOGGED BY :

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Į O		ACTURING	GEOLOGY				· · · · · · · · · · · · · · · · · · ·	% H	IN S	VER	ORE	SAMPLE INTERVA	EC.	ĺ
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	-													-
	-													
125	-								252					•
		And the second s			argillite healed w. sale. To stripe py chert voig. Fine bode	aled his 268, Wepla	the block coment	,		73		_		

HOLE NO. M-5 PAGE NO: 5 OF A PROJECT: GASING COLLAR ELEV. GROUND ELEV. DATE STARTED: REF. TO CLAIM CORNER: €. SCALE: DATE FINISHED: COORDINATES: TOTAL DEPTH: LOGGED BY : INCLUMATION! BEARING: ESTI-ALTERATION COMMENTS: AVE CORE REC'Y / HOLE MATED FRACTURING DRILLING
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from 65°-80° to sore. From -270 312-32 strongly carbonaceous & sheared Fine locing foracs we calc filling. F. gr. py veinlets & occ bed py. Many tiest frams showing less than 1" offset on 230

HOLE NO A/4 5 PAGE NO: 6 PROJECT: GASING COLLAR ELEV. GROUND ELEV. DATE STARTED REF. TO CLAIM CORNER: COORDINATES SCALE: BEARING INCLINATION: TOTAL DEPTH: LOSGED BY : ALTERATION COMMENTS: AVE CORE ESTI-REC'Y / HOLE % CORE RECOVERED RACTURING MATED MINERAL GEOLOGY SECTION DESCRIPTIVE GEOLOGY ary shot through w. com From 331 stripes whert & block ora, very fine bold stall limey Boldy 2, 3070 30° to core At 353 boda parallel to core At 356, a sharp right angle bend in bildo The All core crackled y locad w sale. 92 358-380-Mixed the stack cherty
A liney org tan chert, toth w
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30° to 60° to some fine scome
pyon odd speck epy. 780

HOLE NO. M 5 PAGE NO: 7 PROJECT: DATE STARTED: REF. TO CLAIM CORNER: GASING COLLAR ELEV. GROUND ELEV, SCALE: ε. DATE FINISHED: COORDINATES: TOTAL DEPTH: LÓGGED BY : BEARING INCLINATION: AVE CORE ESTL-ALTERATION COMMENTS: REC'Y / HOLE % CORE RECOVERED CORE SIZE MATED FRACTURING DRILLING INTERVAL GEOLOGY MINERAL SULPHIDE SECTION DESCRIPTIVE GEOLOGY 380 - 436 - Some therty toffo402 followed

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OF 18 PAGE NO: 8 HOLE NO M5 PACHECT: REF. TO GLAIM CORNER: CASING COLLAR ELEV .: GROUND ELEV. DATE STARTED SCALE: COORDINATES: LOSGED BY : BEARING TOTAL DEPTH: INCLINATION: ALTERATION AVE CORE COMMENTS: REC'Y / HOLE MATED DRILLING
INTERVAL
% CORE
RECOVERED
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HOLE NO. 115

PROJECT:

PAGE NO: 9 05 18

SASING COLLAR ELEV.

GROUND ELEV,:

DATE STARTED:

REF. TO CLAIM CORNER:

COORDINATES:

N. BEARING: : .

DATE FINISHED:

SCALE:

TOTAL DEPTH: LOGGED BY :

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					 	-		-ib.	C.		538	?				
						4 med slip	1 layers, this block and a afen gray horeston layers. All lines Beldy averages 40-450 to core py on chenty layers. Calute I throughout.	nar	1000			93				
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PAGE NO: 10 OF 18 HOLE NO. 2/5 PROJECT: REF. TO CLAIM CORNER: GASING COLLAR ELEV .: GROUND ELEV. DATE STARTED: ε. SCALE! DATE FINISHED: COORDINATES: LOGGED BY : TOTAL DEPTH: INCLINATION: BEARING ESTI-AVE CORE ALTERATION COMMENTS: REC'Y / HOLE DRILLING INTERVAL % CORE RECOVERED CORE SIZE MATED FRACTURING SULPHIDES MINERAL SECTION DESCRIPTIVE GEOLOGY 538-574 See P9 93 574 574-620-Dark gray argillaceous limestone fraught w. fractures & gashes of white calcite Contains irregular streaks of black argillite Body indistinct w occasional tuffaceous appearing layers. <u>-550-</u> - 6 900gz 1 500 C 94 ان سا 620

PAGE NO: // OF /8 HOLE NO. 14 5 PROJECT : REF. TO CLAIM CORNER: DATE STARTED: GASING COLLAR ELEV.: GROUND ELEV. SCALE: DATE FINISHED COORDINATES: LOGGED BY : TOTAL DEPTH INCLINATIONS REARING FST1-AVE CORE ALTERATION COMMENTS: REC'Y / HOLE MATED SULPHIDES
DRILLING
INTERVAL
% CORE
RECOVERED
CORE
SIZE FRACTURING MINERAL SEOLOGY DESCRIPTIVE GEOLOGY dark gray poorly had loss w much calcité crockle veins and irregular anothe streaks or black avgillaces insterior - constant 1 2000 slip. -107 H to- w. made scattered ton fracments a white timey frags. Occ. stream angulaceus times times. Methods of calcile streams. i white cale vn. 656-664 - gray Ima with dark carbonoceaus mottling a many gash veins of white white 45 664-735 - Blue-gray poorly bdd lms, heavily stackled w cale veinlets. Some interbeds of dark argillament motorial, w many irregular Hobs of streams of same , throughout

HOLE NO. 115 PAGE NO: 12 OF 13 PROJECT: GASING COLLAR ELEV. GROUND ELEV, DATE STARTED: REF. TO GLAIM CORNER: Ε. COORDINATES: SCALE: INCLINATION: TOTAL DEPTH ALTERATION AVE CORE REC'Y / HOLE COMMENTS: ESTI-SULPHIDES
DRILLING
INTERVAL
% CORE
RECOVERED
CORE
SIZE MATED FRACTURING MINERAL SECTION DESCRIPTIVE GEOLOGY Sec P11 664 - 735 1" back gouge soft-shared -700-95 carbonaceous slip -710 - 2 gougy meterial wagu hally = 75° 735-776 - 5==

PAGE NO: 13 OF 18 HOLE NO. M 5 PROJECT REF. TO CLAIM CORNER: GASING COLLAR FLEV. GROUND ELEV. DATE STARTED 0 PA1 E DATE FINISHED COORDINATES: LOGGED BY : TOTAL DEPTH BEARING' MICLINATION: AVE CORE ALTERATION COMMENTS: REC'Y / HOLE MATED MINERAL DESCRIPTIVE GEOLOGY 735-776 To 750 Sork gray to black Ims.

W. many streaks ~ interbeds of arg. Rock

brecciated a crackled w calc seams.

760-764 - gray liner cherty toff w numerous

cole verms & 35° to e-19 - bdag 750 764-776 dork gray Ims W spots with vems. 93 Z'sheared corbonaccous holdy : 700 776-815 - Strong brecera. Tan cherty toff francients to 1 size & sown to sand size, slosely packed in a black matrix of carbonoceous-liney. In White calcite venter cutting across free-allow No VAIDLE bodg.

HOLE NO. MS PAGE NO: 14 OF 18 PROJECT: GASING COLLAR ELEV.: GROUND ELEV. REF. TO CLAIM CORNER: DATE STARTED: SCALE! DATE FINISHED: COORDINATES: TOTAL DEPTH LOGGED BY : INCLINATION: SEARING: AVE CORE ALTERATION COMMENTS: ESTI-REC'Y / HOLE SULPHIDES
DRILLING
INTERVAL
% CORE
RECOVERED
CORE
SIZE MATED FRACTURING MINERAL DESCRIPTIVE GEOLOGY -850 776-815-See P13 This pale cresking 80 - 4"co/s 815 815-840 - liney tuff, starty bressia as in preverum Darker of more sheared Shords of treats of white calc throughout. soft gauge zone 1-10 @ 150 to core . **3**20 93 8 80 340-862-Groy Pinnestone W taint bodg Streaks & shares of black arg Thoroughly crackled & healed w. White sale. 95 , vague boldy à 60°

page no: 15 of 18HOLE NO. M.5 CASING COLLAR ELEV. DATE STARTED: REF. TO CLAIM CORNER: GROUND ELEV. SCALE: COORDINATES: LOGGED BY READING! TOTAL DEPTH INCLINATION: AVE CORE ALTERATION COMMENTS: REC'Y / HOLF MATED MINERAL DESCRIPTIVE GEOLOGY 862 some hodg This w shorts a streaky thin layers of availaceous rock throughout fractured of healed w white cake veinlets 11slip 95 Jugue 1/4 2 150 -39) 393-899-tan colored lapilly tuff w buff frags to to in a cherty groundmass. Splattered w cak verns Rock slightly limey 399 899-928 - Moth gray las. Togoz - Mixed ton lop toff or streaky lms possible bodg 93 5:ft sheared breezinted

PAGE NO: 16 OF 19 HOLE NO. 145 PROJECT' REF. TO CLAIM CORNER: GROUND ELEV. DATE STARTED: CASING COLLAR ELEV. SCALE: DATE FINISHED COORDINATES: LOGGED BY : TOTAL DEPTH: REARING INCLINATION: AVE CORE ESTI-ALTERATION COMMENTS: REC'Y / HOLE DRILLING
INTERVAL
% CORE
RECOVERED
CORE
SIZE MATED FRACTURING GEOLOGY MINERAL DESCRIPTIVE GEOLOGY 928 923-950-Moto, pare gray long, porsesive w. no obvious hodding. At 919 long gives way to a green-tan layer of weak skarn we abundant time pyr + a little dissem cpy. -930 90 949 750 950-956-Tan skarn & breccia, well peppered w py or some fine spy 956-979- To 961, streaky green to pink
skarny volcane rock, only slightly limey
From 961 dark gray volcanie w epidote in
streaks & anygdules & numerous calcite
venilets. This is the Karmutsen formation 761

PAGE NO: 17 OF 18 PROJECT: REF. TO CLAIM CORNER: DATE STARYED CASING COLLAR ELEV. GROUND ELEY. ε. DATE FINISHED: OCAL E COORDINATES: LÓSSED SY : BEARING: TOTAL DEPTH INCLINATION! AVE CORE REC'Y / HOLE ESTI-ALTERATION COMMENTS: MATED FRACTURING MINERAL SECTION DESCRIPTIVE GEOLOGY 979-1022 - Greenish amyddoloidal Karmutsen
basait - ondesife lava with many
streaks girch epidote w white colore
Ming amyadoles ultil to epidote
From 991-993 - pale lms w hotem
few inches composed of brocks frags
of lms in a green-black motros Storned w. hematite from 1001 - 1004 Core inclined to be broken 1022-1074- Grus-black andesitie-basaltie
lova Contains fine black scatt's
amyidules in places, some alt's to
epidote. Minor strenky veins of calcite.

PAGE NO: 18 OF 18 PROJECT: REF. TO CLAIM CORNER: DATE STARTED: CASING COLLAR ELEV.: GROUND ELEV. DATE FINISHED: SCALE: COORDINATES: LOGGED BY : TOTAL DEPTH INCLINATION: ESTI-AVE CORE ALTERATION COMMENTS: REC'Y / HOLE DRILLING
INTERVAL
% CORE
RECOVERED
CORE
SIZE MATED RACTURING MINERAL SECTION GEOLOGY DESCRIPTIVE Sec 8 17 1022-1074 Core broken Wlower in previous run except fan pervasive flooding w epidole A few veins v splotekes of white calcite. At 1090, porpyritic w. thin blodes of crystals, closely packed

