

5247

94D/1E, 1W

DIAMOND DRILLING AND CATERPILLAR TRENCHING

ON THE NORSTAR PROPERTY, situated North of

Takla Landing, Omineca Mining Division, B.C.

NTS 94 D/1 W and 1 E - M^s Connell Creek,
126° 15' W Longitude, 56° 03' N Latitude.

Owned by Northstar Copper Mines Ltd and
optioned by PECHINEY DEVELOPMENT LTD

Field work between 12 July and 15 September 1974

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 5247 MAP
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Report by

R.J. Wehr

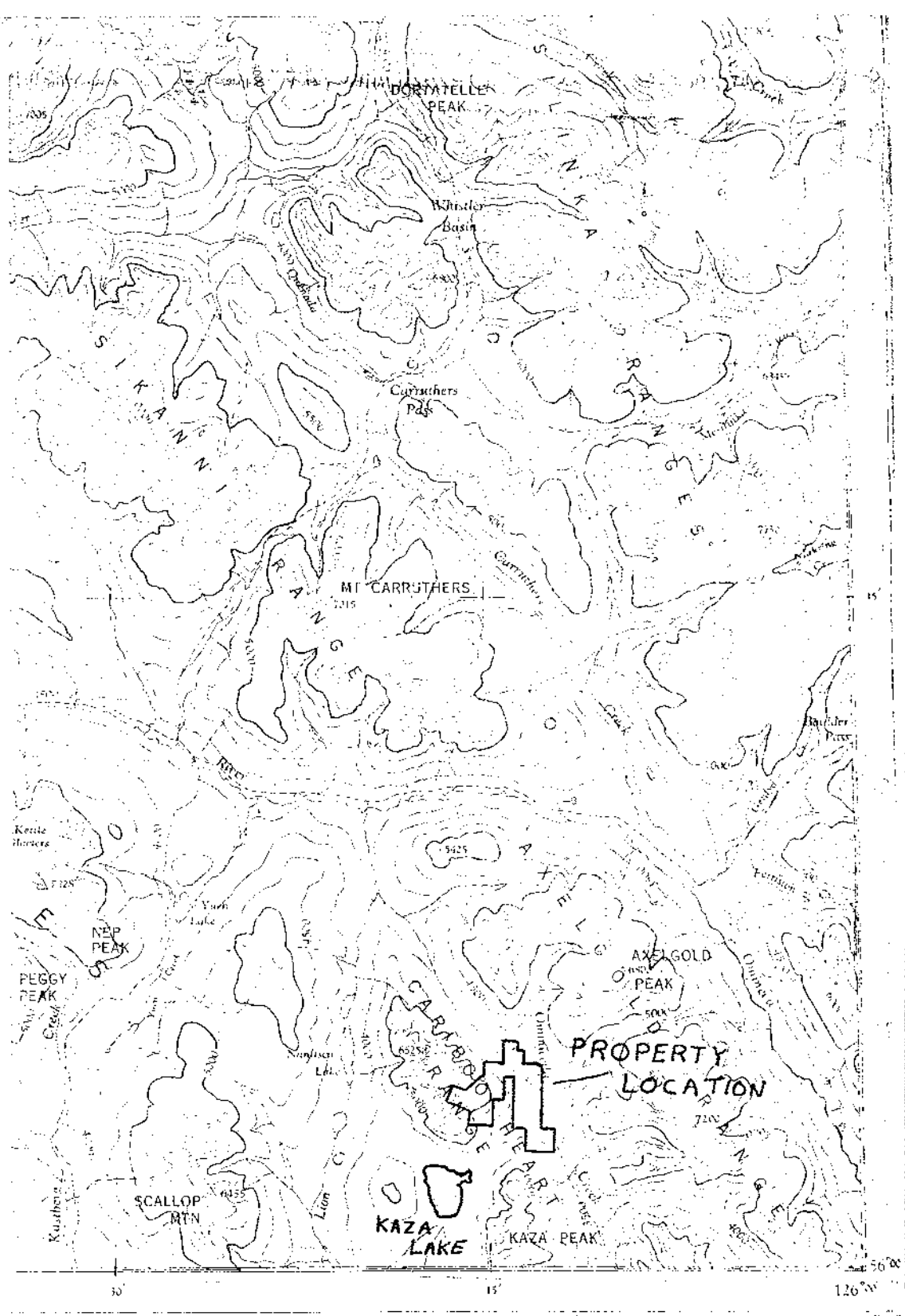
Geologist

5 November 1974

R.J. Wehr

TABLE OF CONTENTS

	<u>Pages</u>
1. LOCATION AND ACCESS	1
2. CLAIMS	1, 2
3. TOPOGRAPHY AND PHYSICAL ENVIRONMENT	2
4. PREVIOUS WORK	3
5. WORK CARRIED OUT BETWEEN JULY 12, SEPTEMBER 15, 1974	3, 4, 5
6. RESULTS	5
APPENDIX I - Personnel certificates	
APPENDIX II- Cost breakdown	
LOGS	
LIST OF MAPS : #1 Location map	
: #2 Claim map	
#3 Trench and E.D.H. location	



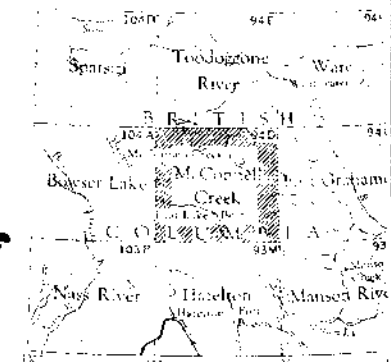
Contour interval 500 Feet.
 All Elevations in Feet above Mean Sea Level.

1" = 4 miles

REFERENCE

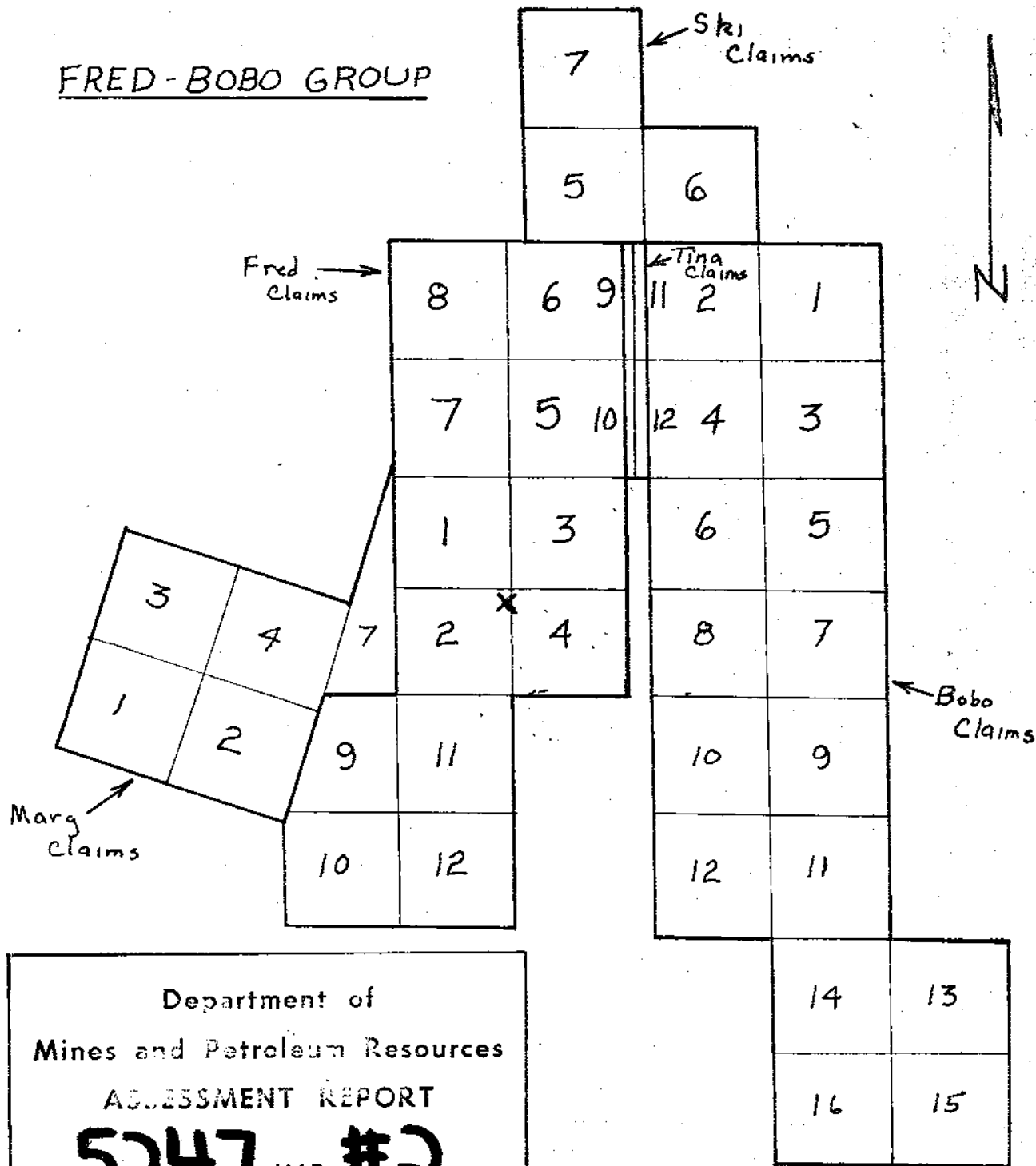
Important Control Point	Spot Elevation, in feet	124
Contour Elevation	Forest, unclassified	
Depression	Swamp or Marsh	
Approximate		
Water or Snowfield		
Stream, intermittent	Ferry	W.L. 125
Dam	Lighthouse	Mud Sand
Falls		
Airfield, on Land	Water	Landing Ground
		Anchorage

S247
MAP 1



NOTE: On the above index the above indicated locations refer to

FRED-BOBO GROUP



Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. **5247** MAP **#2**

KAZA LAKE AREA
Omineca Mining Division
Scale 1" = 2000'

Kaza
Lake

1. LOCATION AND ACCESS

The Fred-Bobo claim group is located at 126° 15 W. longitude and 56° 03' N latitude about 100 miles northeast of Smithers, British Columbia. The claims are located immediately northeast of Kaza Lake and on the southeast flank of the Cariboo Heart Range. Access to the property is generally by float plane from Smithers. A cat road, over 30 miles in length, passable by 4-wheel drive vehicles during the summer months, connects the property with Bukley House and the B.C. Railway.

2. CLAIMS

The Fred-Bobo claim group is made up of 40 contiguous claims. They are the following :

<u>Claim Name</u>	<u>Record Number</u>
Fred 1	33694 M
" 2	33695 M
" 3	33696 M
" 4	33697 M
" 5	33698 M
" 6	33699 M
" 7	33700 M
" 8	33701 M
" 9	33702 M
" 10	33703 M
" 11	33704 M
" 12	33705 M
Tina 9	51851 H
" 10	51852 H
" 11	51853 H
" 12	51854 H
Ski 5	48593 D

<u>Claim name</u>	<u>Record Number</u>
Ski 6	48594 D
" 7	48595 D
Bobo 1	33706 N
" 2	33707 N
" 3	33708 N
" 4	33709 N
" 5	33710 N
" 6	33711 N
" 7	33712 N
" 8	33713 N
" 9	33714 N
" 10	33715 N
" 11	33716 N
" 12	33717 N
" 13	60731 H
" 14	60732 H
" 15	60733 N
" 16	60734 N
Marg 1	33718 N
" 2	33719 N
" 3	33720 N
" 4	33721 N
" 7 FR.	116277 M

3. TOPOGRAPHY AND PHYSICAL ENVIRONMENT

Kaza Lake is situated at the eastern end of a broad valley which dissects the Cariboo Heart Range and marks the divide between the Fraser and Peace River drainage system. The elevation of the claim block varies from 3800 feet in the eastern section to 6,200 feet in the mountainous western portion. Outcrop is moderate at the higher elevations but decreases eastward towards the valley bottom where a thin mantle of glacial drift covers all bedrock apart from that exposed by stream erosion, especially that found in the Ominicetla Creek. Below the 5,400 feet elevation, the terrain is generally heavily timbered with spruce, pine and balsam.

4. PREVIOUS WORK

Then property was discovered by Mr. RM. Tait in 1965. This property contains two types of copper mineralization, one in porphyry volcanics and the other in a shale-siltstone sequence locally known as the RMT shale.

From 1966 to 1972 considerable stripping, road building, trenching and diamond drilling has been completed under the direction of NORSTAR COPPER MINES LTD. Geochemical surveys were completed over the central portion of the claim block area in 1967. In 1967-69 thirty-three AQ diamond holes were completed for a total of 8789 feet. In 1972 nine more AQ holes for 2273 feet were drilled.

In 1973, the property was under option by BETHLEEM COPPER MINES LTD (N.P.L.). Work completed by this company was 8 AQ diamond drill holes totalling 950 feet, a geochemical survey on eastern flank of the property and two bulldozer trenches.

5. WORK CARRIED OUT BETWEEN JULY 12, SEPTEMBER 15, 1974

It was decided to carry out a Winkie drill program in and around the original RMT mineralized shale on the Fred 2 claim. Since there is inadequate outcrop exposure in the area it was hoped the drilling of shallow holes along strike would give a lateral extension of this mineralized shale. It was decided later to supplement the Winkie drilling with cat trenching to expose more of the outcrop adjacent to the showing and farther down the hill along the strike of the shale. All work was supervised by R.J. Wehr, geologist with Pechiney Development Ltd.

The Winkie drilling program was carried out between 12 July 74 to 12 August 74 by a crew of two consisting of A. Woolsey, a professional driller, T. Lort, Laborer (12 July to 23 July) and P. Alexander, Laborer (24 July-12 August). The drill and its

complete equipment was rented from Wright Drilling, Kamloops, B.C. The diamond bits were purchased from J.K. Smit and Son, Diamond Product, Vancouver.

Eight shallow drill holes were drilled on Fred # 2 and two holes on Fred # 4 to explore the possible lateral extension of the shale unit. Helicopter support was provided by Northern Mountain Helicopters, Float plane transportation of crew and equipment from Takla Landing to Kaza Lake by Transprovincial Airlines.

These holes are summarized below :

<u>Hole #</u>	<u>Bearing</u>	<u>Dip</u>	<u>Lenght</u>	<u>Core diameter</u>	<u>Elevation</u>
DDH 74-1	285°	45°	16'	IEX	5200'
2	0	90°	76.5'	IEX	5232.7'
3	310°	45°	90'	IEX	5232.7'
4	000°	45°	46'	IEX	5204.5'
5	340°	40°	28'	IEX	5212.3'
6	310°	55°	32'	IEX	5222.7'
7	315°	65°	34'	IEX	5192.5'
8	020°	50°	43'	IEX	5072.3'
9	0	90°	13'	IEX	5097.2'
10	0	90°	20'	IEX	5114.1'

The cores are stored on the Norstar Copper Mines Ltd property.

The caterpillar trenching was carried out on the week-ends of 10-11 August and 17-18 Aug. by G. Gainer, a professional cat skinner. The "D-8" caterpillar, located on the property was rented from Kaza Copper Ltd.

Float plane support was provided by N.T. Airlines, Fort St. James and Columbia Airlines, Fort ST. James to provide Mr. Gainer transportation to and from the property, on consecutive weekends.

Two bulldozer trenches were completed to test the possible extension of the shale unit. The first trench, located on Fred # 2, trending east-west is 70 feet long, 25 feet wide and 10 feet deep. This trench, situated on the north side of the RMT shale was dug to show the structural relationships and possible northerly extension of this unit. The second trench, located on Fred # 4, trending about north-south is 60' long, 10' wide and 3' deep. This trench was re-cut down to bedrock along a pre-existing road to determine structural relationship of a shale unit located 250 feet downhill.

6. RESULTS

Winkie Drilling

The 10 shallow diamond drill holes in and around the RMT mineralized shale indicated the following results. One, this shale does not extend laterally for any distance and is complicated by faults and shears. Second, the actual thickness of this unit is much thinner than previously interpreted.

Trenching

Trenching at the RMT showing confirmed that the shale unit does not extend laterally to the north and that it was complicated by a number of faults and shears. The second trench showed that the lower shale was more tuffaceous than the shale on the RMT showings.

R. J. Wahr

The work described in the above report was under the
direct supervision of the undersigned -



W. G. Hainsworth, P. Eng.
Canadian exploration Manager

APPENDIX 1

PERSONNEL CERTIFICATES

Personnel

WEHR, Ray, Geologist, graduated in 1965 from San Jose State College in California, worked for the United State Geological Survey from 1965 to 1970 and has been engaged in geology with various companies in B.C. since 1971. Presently employed with Pechiney Development Ltd.

WOOLSEY, Hal, Professional driller, West Vancouver.

GAINER, Glenn, Professional cat skinner, Fort St. James .

LORT, Tony , Laboror, Vancouver, B.C.

ALEXANDER, Peter, Laboror, Takla Landing, B.C.

Wright Drilling Ltd, Kamloops, B.C. (Drill rental)

Northern Mountain helicopters, Prince George, B.C. , and Johanson Lake, BC.

N.T. Airlines, Fort ST.James, B.C.

Columbia Airlines, Fort St.James, B.C.

Transprovincial Airlines, Smithers, B.C.

APPENDIX 11

Cost Breakdown

1. Physical work (Trenching on Fred # 2 and # 4)		
1.1. Fees to caterpillar operator		
G. Gainer (Fort St. James) for 2 consecutive weekends		\$ 530
1.2. Caterpillar rental (From Kaza Copper Ltd)		\$ 500
1.3. Supervision		
R. Wehr	5 days @ \$ 37	\$ 185
J.P. Guelpa	1 day @ \$ 50	\$ 50
1.4. Assays		\$ 100
1.5. Transportation from Ft St. James to Kaza and return trip for G. Gainer (Columbia Airlines and N.T. Air)		
		\$ 865
1.6. Helicopter support (Northern Mountain) from Johanson Lake		
	3 hours @ \$ 300	\$ 900
1.7 Food	10 meals @ \$ 10	\$ 100
	TOTAL	\$ 3,130

I wish to apply \$ 2,200 of this work to the claims listed below for one year :

Claims : Tina 9-12 incl. ; Fred # 1-7 incl.

Declared before me at the

City

in the

Province

of British Columbia, this

12

Nov 1974 A.D.

R. J. Wehr

R. Wehr,
Geologist,

Jill Susan
A C. [unclear] the Affidavits within British Columbia at
A [unclear] the Province of British Columbia.

R. J. Wehr

Sub-mining Recorder

2. Winkie Drilling

2.1. Drill rental 1½ month (from Wright drilling, Kluloops)		
\$ 625/month @ 1½ month		\$ 937
2.2. Driller salary, one month		
Hal Woolsey		\$ 1,000
2.3. Helper salary		
T. Lort 11 days @ \$ 16/day		\$ 176
P. Alexander 21 days @ \$ 16/day		\$ 336
2.4. Diamond bits purchase, drill supplies and spare parts		\$ 1,045
2.5 Geological supervision		
R. Wehr 10 days @ \$ 37/day		\$ 370
J.P. Guelpa 2 days @ \$ 50/day		\$ 100
2.6. Food		
80 meals @ \$ 10		\$ 800
2.7 Flying in crew and equipment from Takla Landing, T.P.A. from Smithers		\$ 600
2.8. Helicopter support for camp supplies and for moving equipment, N.M. Helicopters out of Johanson lake		
5 hours @ \$ 300/hour		\$ 1,500
	TOTAL	\$ 6,864

I wish to apply \$ 5,800 of this work to the claims listed below for one year :

Fred # 8-12 incl., Bobo # 1-16 incl. , Marg # 1-4 incl., Marg # 7Fr, Ski # 5-7 incl.

Subscribed and sworn to before me at the City of *Cheyenne*, in the State of *Wyoming*, this *12* day of *Nov* 19*74*.

R. Wehr,
Geologist,

R. J. Wehr

Juli Surner
Submitting Recorder

PECHINEY DEVELOPMENT LTD.

DRILLING RECORD

SHEET No. 1

PROPERTY NORTHSTAR HOLE No. DDH-74-1
 CLAIM No. _____ BEARING 285°
 _____ DIP 45°
 COORDINATES _____ LENGTH 16'
 _____ DIAMETER 1EX
 ELEVATION 5200'

DRILLED BY R. WOOLSEY
 STARTED: 14 July, 1974
 TERMINATED: 21 July, 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY	
FROM	TO				NO.	FROM	TO	Total Cu%	
0	4	70		<u>Tuff Agglomerate - tight - greenish grey matrix with black colored subrounded fragments (5-10 mm).</u> - Calcite coating (< 1mm thick) on randomly oriented fractures. - 2' to 4' moderately broken.					
4	14	50		<u>Tuff Shale</u> - thin bedded green tuffaceous rock interlayered in black compact shale. - High broken. - tuff usually < 3cm thick and shale 3-8 mm. - 4' feet bedding about 60-70° to axis. - 8-9' bedding normal to axis. - 6-7' highly broken (40% recovery) Fault - 8-14' " " (20% ")					
14	16	40		<u>Tuff</u> - medium green fine grain chloritized amphibole/pyroxene tuff. - hematite coating on fractures 60° to axis. - Trace amounts of very fine grain sulphide (pyrite?) disseminated in ground mass. End of hole					

PECHINEY DEVELOPMENT LTD.

DRILLING RECORD

SHEET No. 1

PROPERTY NORTHSTAR

HOLE No. DDH- 74-2

DRILLED BY A. WOOLSEY

CLAIM No. _____

BEARING -0-

STARTED: 22 July 1974

COORDINATES _____

DIP 90°

TERMINATED: 26 July 1974

LENGTH 77 1/2

LOGGED BY: R. Wehr

DIAMETER 1EX

ELEVATION 5232-7

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY	
FROM	TO				NO.	FROM	TO	Cu	
0	15	80		<u>Tuff</u> - medium green, fine grain chloritized amphibole pyroxene tuff - thin hematite coatings on fractures 30° to axis. - thin (<2mm) white calcite normal to axis - 0-4' moderately broken.					
15	26	85		<u>Tuff - agglomerate</u> - dark green medium grain tuff matrix with very dark green to black subangular volcanic clasts with small (< 2mm) subhedral plagioclase. - Calcite randomly oriented and 5-10% of core. - Minor amounts of hematite on fractures - becomes more chloritized toward bottom.					
26	45	85%		<u>Tuff</u> - Yellowish - green almost aphanitic tuff - trace amounts calcite as fillings throughout - 30-45 highly chloritized amphibole/pyroxene					

PECHINEY DEVELOPMENT LTD.

DRILLING RECORD

SHEET No. 2

PROPERTY NORTHSTAR HOLE No. DBH-74-2
 CLAIM No. _____ BEARING -0-
 COORDINATES _____ DIP 90°
 ELEVATION 5232-7 LENGTH 77½
 DIAMETER 1EX

DRILLED BY A. WOOLSEY
 STARTED: 22 July 1974
 TERMINATED: 26 July 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE	ASSAY
FROM	TO					
				medium green tuff. - slightly to moderately epidotized throughout - Angular tuff fragments in more epidotized zones.		
45	51	90%		Tuff Agglomerate: - yellowish green matrix with dark-green to black subangular volcanic clasts (2-3 cm). - moderately epidotized matrix - no calcite		
51	68	95%		Tuff - yellowish green to dark green chloritized amphibole/pyroxene tuff - Epidotized matrix with subhedral (2-4mm) chloritized mafics - appears in part to be slightly brecciated (fragments < 10 mm) - 63' rock becomes more epidotized (60% rock) with < 40% dark green irregular shaped masses up to 7 cm long.		

PECHINEY DEVELOPMENT LTD. DRILLING RECORD

SHEET No. 3

PROPERTY NORTHSTAR

HOLE No. DDH 74-2

DRILLED BY A. WOOLSEY

CLAIM No. _____

BEARING -0-

STARTED: 22 July, 1974

DIP 90°

TERMINATED: 26 July 1974

COORDINATES _____

LENGTH 77½

LOGGED BY: R. Wehr

DIAMETER 1EX

ELEVATION 5232-7

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY
FROM	TO				NO.	FROM	TO	
				- 65'-68' chloritized tuff is dark green.				
				- " " trace amounts of epidote & very fine grain disseminated pyrite.				
				- fractures 30° to axis.				
68	75	90%		<u>Tuff Breccia</u>				
				- Yellowish green with some irregular dark green volcanic material.				
75	77½	60%		<u>Tuff</u>				
				- dark green aphanitic tuff				
				- 75'-76' fractures parallel to axis, broken in this zone also.				
				<u>END OF HOLE</u>				

PECHINEY DEVELOPMENT LTD.

DRILLING RECORD

SHEET No. 1

PROPERTY NORTHSTAR
 CLAIM No _____
 COORDINATES _____
 ELEVATION 5232-7

HOLE No. DDH 74-3
 BEARING 310°
 DIP 45°
 LENGTH 92'
 DIAMETER 1EX

DRILLED BY A. WOOLSEY
 STARTED: July 26, 1974
 TERMINATED: July 28, 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY	
FROM	TO				NO.	FROM	TO	Cu	
0	25	95		<u>Tuff</u> - dark green fine grain tuff - Fractures 60° to axis - Thin hematite coating on fractures - Thin (<2 mm) white calcite stringers ~ 60° to axis. - Chloritized amphibole/pyroxene - 7'-10' highly broken (Fault?) - 16-17' slightly broken - 23'-24' fractures parallel to axis with hematite staining.					
25	31	50%		<u>Tuff - agglomerate</u> - medium green tuff matrix with subrounded (1-2cm) dark green clasts. - 30'-31' moderately broken.					
31	58	90%		<u>Tuff</u> - Yellowish green to dark green tuff - Epidotization ~40-50% rock - chloritized amphibole/pyroxene - trace amount (<1%) thin (<1mm) white calcite					

PECHINEY DEVELOPMENT LTD. DRILLING RECORD

SHEET No. 2

PROPERTY NORTHSTAR HOLE No. DDH 74-3
 CLAIM No. _____ BEARING 310°
 COORDINATES _____ DIP 45°
 ELEVATION 5232-7 LENGTH 92'
 DIAMETER 1EX

DRILLED BY A. WOOLSEY
 STARTED: July 26, 1974
 TERMINATED: July 28, 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE		ASSAY	
FROM	TO				NO.	FROM	TO	Cu
				stringers.				
				- fractures ~25° to axis				
				- 39'-40' more dense with amphibole/pyroxene (<3 mm) in epidote.				
				- 41'-44' brecciated with epidote cement (30% recovery) with some hematite coating broken surfaces.				
				- 53'-54' fracture parallel to axis				
				- 58'-59' epidotized-bedded (?) tuff, yellowish green, thinly laminated (1-4mm), beds ~30° axis.				
59	68	90%		<u>Tuff Agglomerate</u>				
				- Yellowish green matrix with dark green to black subrounded volcanic clasts (1-2cm)				
				- Apparent beds ~30° axis				
				- some dark clasts contain small (3mm) euhedral plagioclase.				
				- epidotized throughout.				
				- Fractured ~50° to axis.				

PECHINEY DEVELOPMENT LTD. DRILLING RECORD

SHEET NO. 1

PROPERTY NORTHSTAR
 CLAIM No. _____
 COORDINATES _____
 ELEVATION 5204-5

HOLE No. DDH 74-4
 BEARING 000°
 DIP 45°
 LENGTH 46'
 DIAMETER 1 EX

DRILLED BY A. WOOLSEY
 STARTED: July 29, 1974
 TERMINATED: July 30, 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS
FROM	TO			
0	12	10		<u>Tuff</u> - medium to dark green tuff - chloritized amphibole/pyroxene
12	16.5	15		<u>Tuff - Shale</u> - highly black tuffaceous shale - Fault ?
16.5	46	25		<u>Tuff</u> - medium green very fine grain tuff - thin (<1 mm) calcite & hematite stringers & coatings randomly oriented. - fractures parallel to core axis - 20' fractures ~35' core axis - 21'-25' a black aphanitic ground mass with (1-3 mm) subhedral - tight green to olive colored plagioclase (?). - 25'-30' very broken (<10% recovery) - 30'-39.5' hematite stain moderately abundant in fractures ~30° to core axis. - 30'-39.5' (<50% recovery)

PECHINEY DEVELOPMENT LTD. DRILLING RECORD

SHEET No. 1

PROPERTY NORTHSTAR
 CLAIM No. _____
 COORDINATES _____
 ELEVATION 5222-7

HOLE No. DDH 74-6
 BEARING 310°
 DIP 55°
 LENGTH 32'
 DIAMETER 1 EX

DRILLED BY A. WOOLSEY
 STARTED: Aug. 1, 1974
 TERMINATED: Aug. 2, 1974
 LOGGED BY: R. Kehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY		
FROM	TO				NO.	FROM	TO	Cu		
0	16	30		<u>Tuff</u> - yellowish green epidotized fine grain tuff - fractures ~70° core axis - 15'-16' moderately broken						
16	21	85		<u>Tuff agglomerate</u> - medium green matrix with dark green subangular clasts (1-3 cm) - matrix contains sparse to moderate epidotization - fracture ~30° to core axis.						
21	32	60		<u>Tuff</u> - light to medium green, aphanitic tuff - moderate amount epidotization in matrix - fracture normal to core axis - minor amounts of brecciation - trace amounts of disseminated fine grain pyrite in epidote. - 29'-32' fractures ~40° to core axis - 29'.5 - 30' moderately broken (possible Fault?)						
				<u>END OF HOLE</u>						

PECHINEY DEVELOPMENT LTD.

DRILLING RECORD

SHEET No. 1

PROPERTY NORTHSTAR HOLE No. DDH 74-7
 CLAIM No. _____ BEARING 315°
 COORDINATES _____ DIP 65°
 ELEVATION 5192-5 LENGTH 34'
 DIAMETER 1 EX

DRILLED BY A. WOOLSEY
 STARTED: Aug. 3, 1974
 TERMINATED: Aug. 6, 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE	ASSAY
FROM	TO					
0	6	30		<u>Shale</u> - highly broken, thinnly laminated (1-5mm) grey to black, silt to clay with thin (< 2mm) interbeds light green Text - bedding normal to axis - malachite stain on bedding & fractures.		
6	8	50		<u>Tuff</u> - light greenish grey fine grain limey tuff minor amounts very fine grain black shales - bedding normal to axis - calcite stringers (< 3mm) ~ 60° to core axis - malachite staining on fractured - 7'-8' highly broken (possible fault) - 8'-11' light grey - fine grain black to green mottled texture, limey with very small, sparse cubedral plagioclase. - black matrix with olive to green irregular blebs of tuff (?) - trace amount (<1%) malachite stain on fractures.		

PECHINEY DEVELOPMENT LTD.

DRILLING RECORD

SHEET No. 2

PROPERTY <u>NORTHSTAR</u>	HOLE No. <u>DDH 74-7</u>	DRILLED BY <u>A. WOOLSEY</u>
CLAIM No. _____	BEARING <u>315°</u>	STARTED: <u>Aug. 3, 1974</u>
COORDINATES _____	DIP <u>65°</u>	TERMINATED: <u>Aug. 6, 1974</u>
ELEVATION <u>5192-5</u>	LENGTH <u>34'</u>	LOGGED BY: <u>R. Wehr</u>
	DIAMETER <u>1 EX</u>	

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE			ASSAY	
FROM	TO				NO.	FROM	TO	Cu	Sulph
11	34	60		Tuff					
				- 11'-16.2' (40% recovery) same as above except black matrix more pronounced.					
				- 11.5' cut by many thin (<2mm) white calcite stringers randomly oriented					
				- very slightly limey.					
				- trace amounts malachite staining					
				- 16.2 - 21' (90% recovery) tight greenish grey almost aphanitic tuff.					
				- minor amounts slightly chloritized amphibole pyroxene (~2%)					
				- 18'-19' highly broken					
				- 21'-23' (60° recovery) green-grey tuff with minor amounts of thin (<3mm) black shale innerbeds					
				- Beds about normal to axis					
				- 23'-34' (40% recovery) tight green nearly aphanitic tuff.					
				- trace amounts of very fine grain pyrite disseminated in matrix.					
				- calcite stringers (< 2mm) ~ 60° & parallel to core axis.					
				- 28'-34' > 90° core loss. Possible fault					
				End of hole					

PECHINEY DEVELOPMENT LTD. DRILLING RECORD

SHEET No. 1

PROPERTY NORTHSTAR
 CLAIM No. _____
 COORDINATES _____
 ELEVATION 5072.3

HOLE No. DDH 74-8
 BEARING 020°
 DIP 50°
 LENGTH 42'
 DIAMETER 1 EX

DRILLED BY A. WOOLSEY
 STARTED: Aug. 7, 1974
 TERMINATED: Aug. 9, 1974
 LOGGED BY: R. Wehr

FOOTAGE		% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE		ASSAY	
FROM	TO				NO.	FROM	TO	Cu
0	18	30		<u>Tuff - Shale</u> - highly broken (angular fragments < 1.5cm) tan to light greenish-grey fine grain tuff-shale - 14'-18' (< 5% recovery) abundant (10%) irregular white calcite stringers (~ 4mm) randomly oriented. - bedding normal to core axis.				
18	21	40		<u>Tuff</u> - olive to medium dark green, fine to medium grain tuff. - moderate amounts of randomly oriented calcite (~ 20%) - 19'-20' highly broken				
21	23	50		<u>Tuff- shale</u> - compact olive to medium grey-green fine grain tuff with thin laminated black shales (~ 20%) - apparent bedding of shale ~ 40° to core axis. - fracture about parallel to bedding - no fragments larger than 1 cm.				


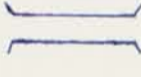


NORTHSTAR PROJECT

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **5247** MAP **#3**

SCALE : 1 inch = 200 ft
0 200 400

1974

LEGEND

-  DDH-74-1 DIAMOND DRILL HOLE LOCATION (With Number)
-  TRENCH
-  ROADS
-  CLAIM POST

**5247
MAP 3**

To Accompany Assessment Report by Ray Wehr

7 November 1974

Ray Wehr

