

6086

DRILLING ASSESSMENT REPORT

ON THE  
EAGLE CLAIMS 112-139  
LAT. 58°30'N Long. 129°10'W  
104 I, 6E and 11 E  
LIARD MINING DIVISION  
BRITISH COLUMBIA

FOR

IMPERIAL OIL LIMITED  
#314 - 1281 West Georgia Street  
Vancouver, B.C.

EAGLE

104 I/6E

J.M. Marr  
November 2, 1976

MINERAL RESOURCES BRANCH

ASSESSMENT REPORT

No. 6086

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Drilling Assessment Report

Eagle Claims 112-139

November 2, 1976

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Eagle, Nov. 2, 1976 .... 1

Introduction

This report is submitted to obtain assessment credits on the Eagle claims 112-139, located in the Liard Mining Division in northern B.C.

Access to the area is by fixed-wing aircraft from Dease Lake, approximately 48 km. to the west, into Eaglehead Lake. The location of the claims is shown on Map 1 on the following page. The property on this occasion was serviced by a helicopter, stationed in a company base camp 50 km. to the southeast.

The claims to which this work is being applied (see Map 2) are in the following position at the present time:

<u>Claims</u>	<u>Record Nos.</u>	<u>Recording Date</u>	<u>Expiry Date</u>
Eagle 112-139	68894-68921	October 6, 1972	October 6, 1980

*WORK  
6/11-1  
RENT  
1977*

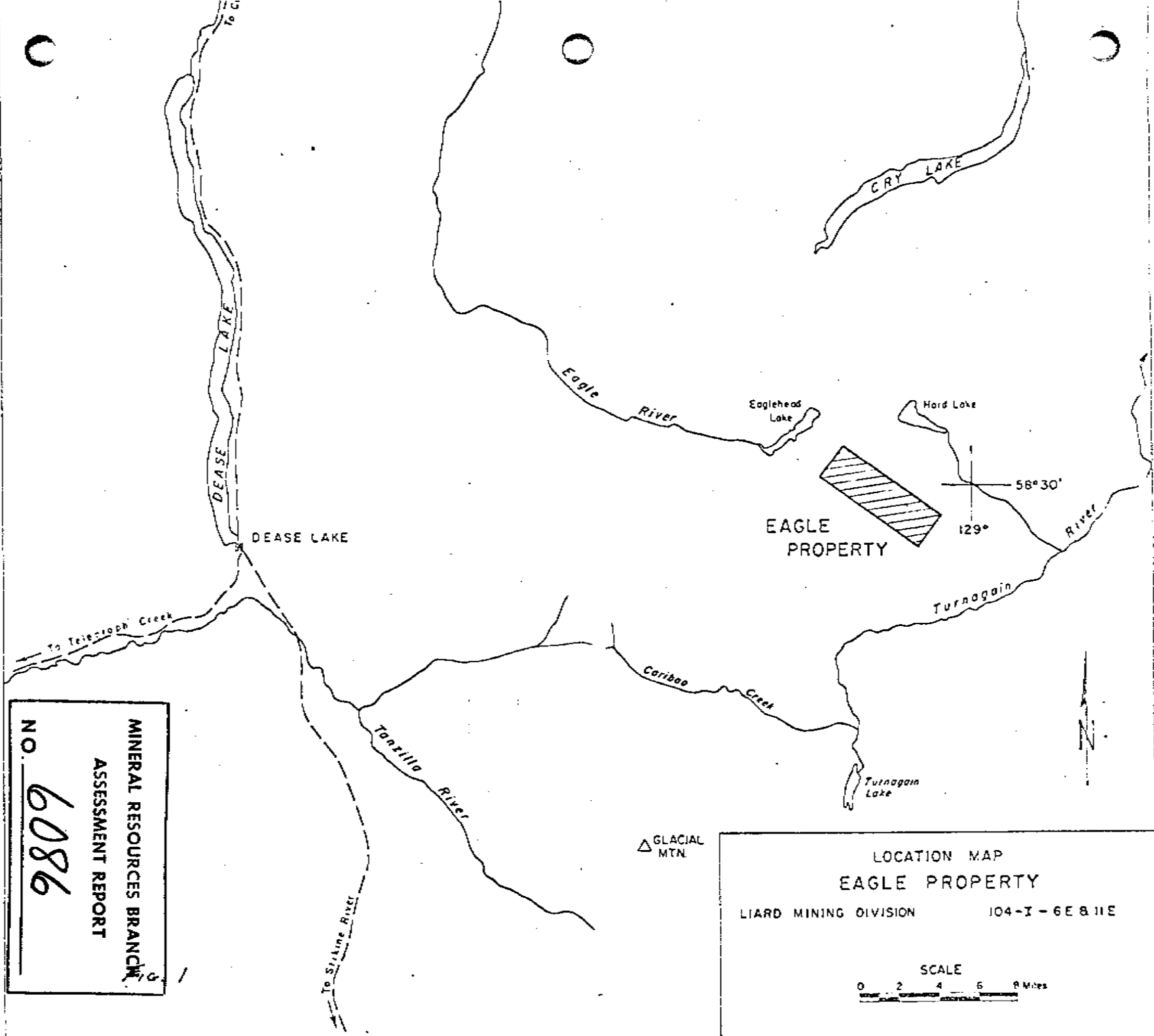
Drilling work only, to a value of \$33,600 (as explained later) is being applied to the 28 claims in the block as follows:

<u>Claims</u>	<u>Record Nos.</u>	<u>No. of Years</u>	<u>New Expiry Date</u>
Eagle 112-139	68894-68921	6	October 6, 1986
Costs incurred (see cost statement)			\$36,933.30
28 claims x 6 years' credits @ \$200/year			<u>33,600.00</u>
			<u>\$ 3,333.30</u>

*WORK  
ONLY  
RENT  
1983*

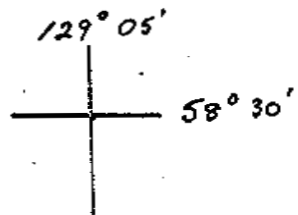
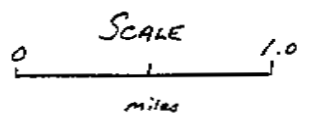
These claims are wholly owned by Imperial Oil Limited. All the work herein reported was paid for by Imperial Oil Limited.

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
NO. 6086

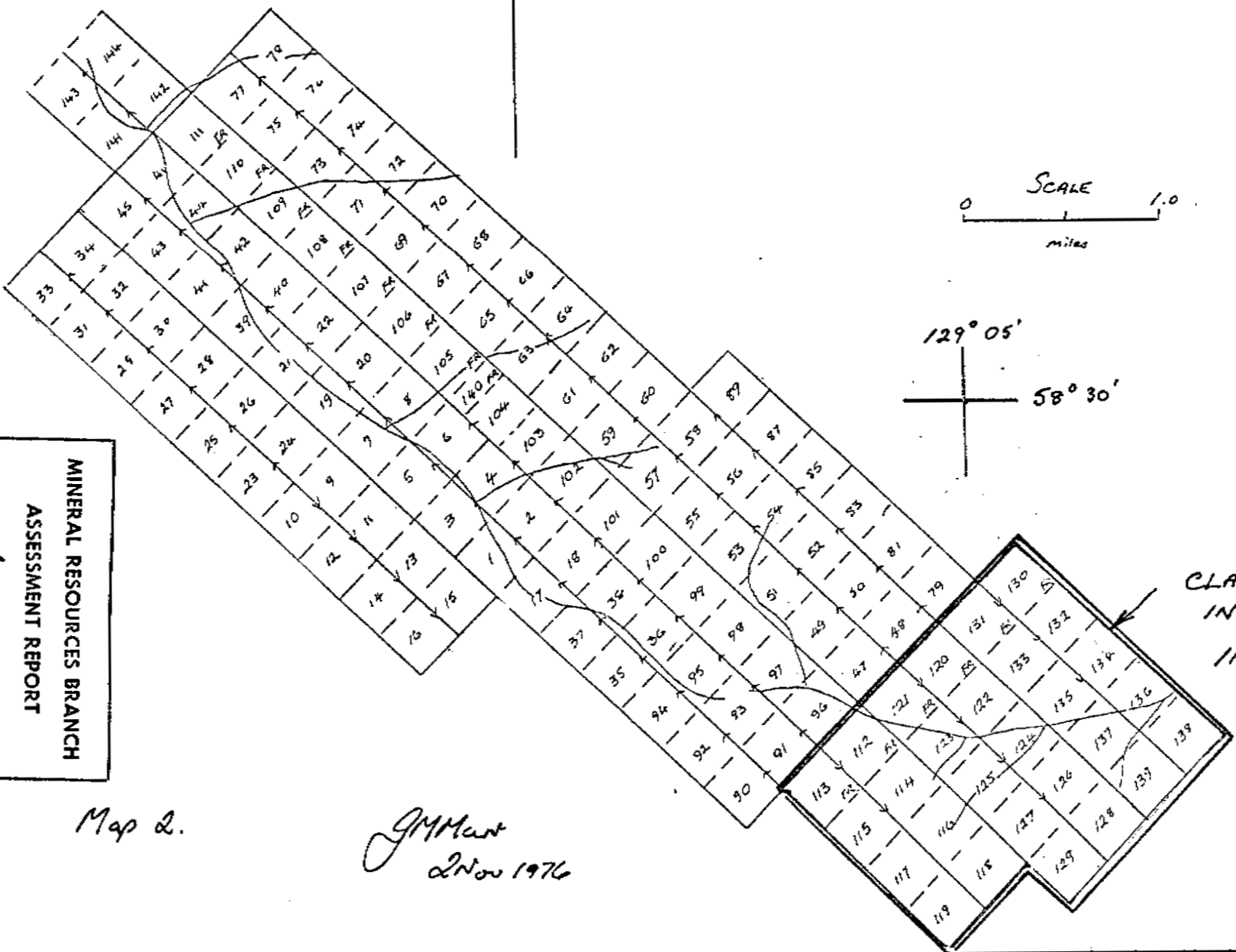


LOCATION MAP  
EAGLE PROPERTY  
LIARD MINING DIVISION 104-I-6E & 11E  
SCALE  
0 2 4 6 8 Miles

EAGLE CLAIMS



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
NO. 6086



Map 2.

JMMant  
2 Nov 1976

CLAIMS  
INVOLVED  
112 - 139

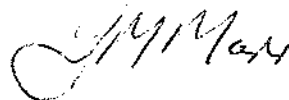
Eagle, Nov. 2, 1976 .... 2

Diamond Drilling - Supporting Data

D.W. Coates Enterprises Ltd. performed 3,428 feet (1,045 m.) of BQ diameter diamond drilling on the property between June 24th and August 12th, 1976 in 5 holes. The work presently being applied concerns 2 of these holes, with a combined footage of 1,207 (368 m.). Total costs for the project, directly concerning the diamond drilling, are itemized on the attached cost statement and are reduced in the proportion 1207:3428 as shown for application to the two holes in question.

The location of these two holes is shown on Map 4 in relation to recognizable topographic features of the area. Map 3 is a key map showing the regional location of the Map 4 area. The core is stored at the company camp, also indicated on Map 4.

Core logs for these two holes, company identification 33 and 34, follow this page.



J.M. Marr

JMM/mj

DIAMOND DRILL CORE LOGEAGLE PROPERTY

DRILL HOLE NO.	33	LOCATION:	See Map 4
		CLAIM:	112
AZIMUTH:	090°	CORE SIZE:	BQ
INCLINATION:	-50°	CORE STORAGE:	At property
ELEVATION:	4,810 feet.	LENGTH OF HOLE:	617 feet

DESCRIPTION

FROM	TO	DESCRIPTION
0'	43'	Overburden.
43'	180'	Biotite quartz diorite. Slight chlorite and sericite alteration locally, otherwise fresh, light-coloured, massive rock. Slightly fractured, some with hematite and sericite. Not mineralized.
180'	248'	Same host rock. Increased chloritic alteration of mafic minerals and sericitic alteration of plagioclase. Fracture intensity increases, strongly developed locally. Chlorite, sericite and hematite common on fracture surfaces. Traces of chalcopyrite only.
248'	320'	More intensely altered zone, some shearing, high fracture intensity, numerous narrow quartz and calcite veins, mainly at 60° to core axis. Not mineralized.
320'	481'	Slightly to moderately altered zone as before. The biotite quartz diorite is moderately fractured (chloritic and sericite) and has occasional quartz on calcite veins. Zones of low-grade mineralization, as fracture-controlled bornite, chalcopyrite and molybdenite.
481'	502'	Higher grade zone, chalcopyrite in fractures with chlorite and some hematite. Local quartz flooding. Abrupt increase in chloritic and sericitic alteration.
502'	617'	As before, slightly altered biotite quartz diorite, light apple green in colour. Slight fracture intensity. Persistent zones of mineralization with chalcopyrite or molybdenite on chloritic fractures. Few veins or veinlets. Mineralization very weak in bottom 20 feet.



J. Marr



Eagle, Nov. 2, 1976 .... 4

DIAMOND DRILL CORE LOG

EAGLE PROPERTY

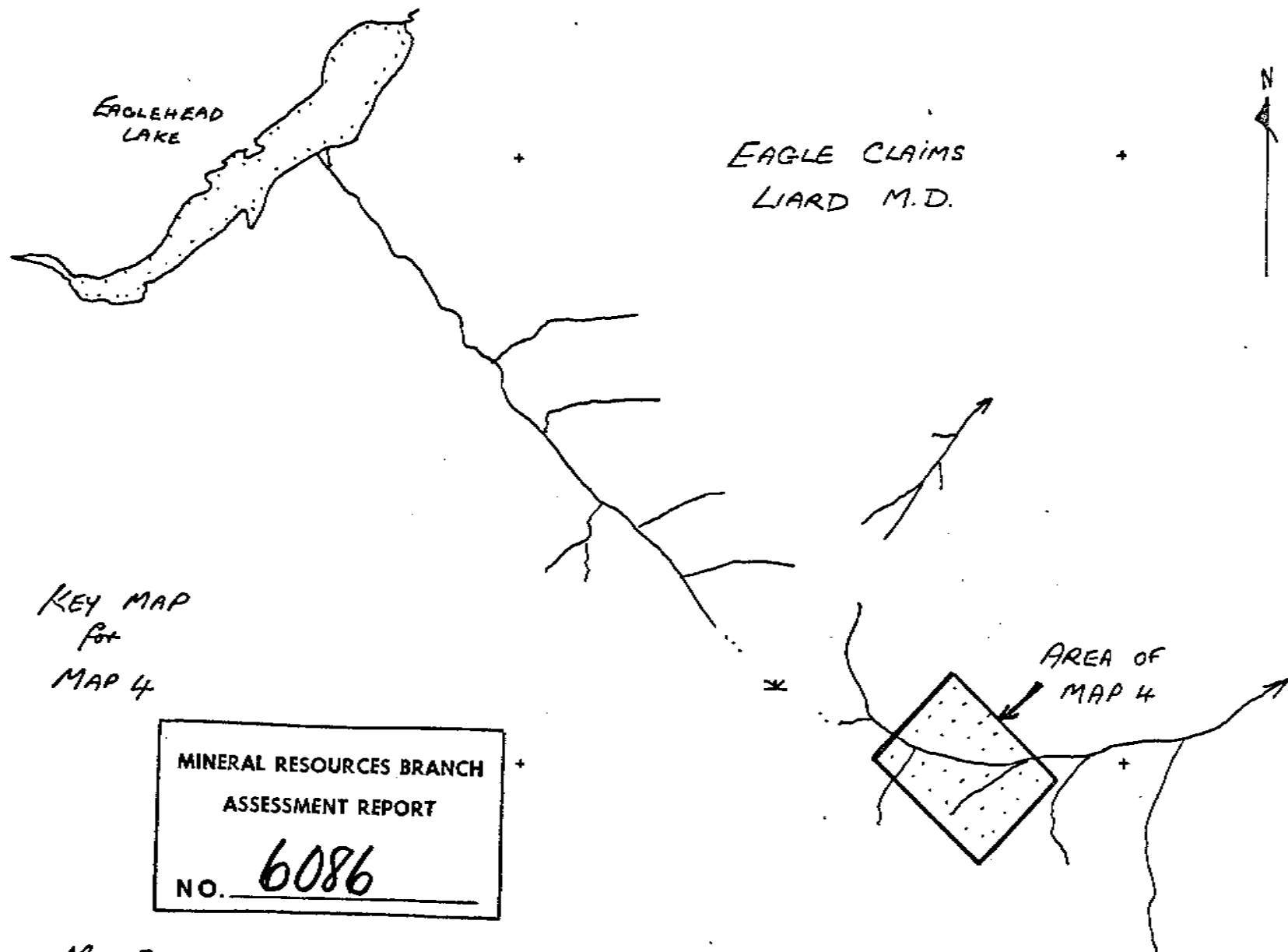
DRILL HOLE NO. 34 LOCATION: See Map 4  
CLAIM: 124  
AZIMUTH: 340° CORE SIZE: BQ  
INCLINATION: -50° CORE STORAGE: At property  
ELEVATION: 4,710 feet LENGTH OF HOLE: 590 feet

DESCRIPTION

FROM	TO	DESCRIPTION
0'	87'	Overburden.
87'	148'	Plagioclase porphyry, dark green with minor (5%) quartz biotite, and magnetite. Several narrow diabase dykes. Not mineralized.
148'	244'	Biotite quartz diorite. Light-coloured, slightly sericitized unit, biotite slightly to locally intensely chlorite altered. Minor magnetite. Very sparse pyrite and chalcopyrite on chloritic fractures.
244'	276'	Plagioclase, porphyry, probably of quartz dioritic composition. Slight to moderate chlorite alteration, slight sericitic alteration of plagioclase. Narrow, intensely fractured zones.
276'	470'	Biotite quartz diorite porphyry. Dark-coloured intrusive rock as before, gradational contact with last. Accessory magnetite. Slight alteration generally. Weak fracture intensity with chlorite, hematite and epidote. Several narrow aplite veins. Minor quartz and calcite veining. Insignificant fracture-controlled pyrite and chalcopyrite.
470'	590'	Biotite quartz diorite, slightly greater degree of alteration as before, biotite (intervening stage chlorite) is sericitized as is the plagioclase. Greenish homogeneous rock. Narrow quartz veins. Broad mineralized zones of low grade feature pyrite and chalcopyrite on dry or quartz-filled fractures.

*JMM*

J. Marr



KEY MAP  
for  
MAP 4

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
NO. 6086

Map 3

JMM:aw Nov 2 1976

0 1 2  
SCALE IN MILES

Eagle, Nov. 2, 1976 .... 5

Cost Statement  
Eagle Diamond Drilling Project  
June 24 - August 31, 1976

1. Wages

G. Bloy

June 24-30,	5 days		
July 1-31,	17 days		
August 1-12,	<u>11 days</u>		
	33 days @ \$45.00		\$1,485.00

R. Salkeld

June 24-30,	7 days		
July 1-31,	14 days		
August 1-12,	<u>12 days</u>		
	33 days @ \$34.00		1,122.00

J. Marr

June 24-30,	3 days		
July 1-31,	6 days		
August 1-12,	<u>1 day</u>		
	10 days @ \$80.00		<u>800.00</u>

\$3,407.00

2. Camp Costs

Field camp supplies and equipment, fuel, miscellaneous support costs and travel expenses		2,477.42
------------------------------------------------------------------------------------------------	--	----------

3. Technical Costs

Core boxes, accessories, engineering and stationery supplies		1,692.31
-----------------------------------------------------------------	--	----------

4. Services

Radiotelephone, fees and licences, charges		795.40
-----------------------------------------------	--	--------

5. Diamond Drilling Costs

D.W. Coates Enterprises Ltd.		65,710.78
------------------------------	--	-----------

6. Transportation Costs

Helicopter and fixed-wing charters, scheduled air travel, freight		<u>30,811.33</u>
----------------------------------------------------------------------	--	------------------

Total \$104,894.24

Proportion applicable to this claim:

$\frac{1,207}{3,428} \times \$104,894.24$	<u>\$36,933.30</u>
-------------------------------------------	--------------------

Eagle, Nov. 2, 1976 .... 6

A P P E N D I X

SCHEDULE A

BID SHEET AND JOB SPECIFICATIONS

1. DESCRIPTION OF WORK:

The work is to consist of a series of drill holes, drilled at locations specified by Imperial. A total minimum footage of 3500 feet shall be drilled, but total footage may be extended by mutual consent. Maximum depth of any hole shall not exceed 1200 feet and minimum depth shall be 300 feet. The Contractor will not be called upon to drill any hole at a flatter angle than 50 degrees. Measurement of all holes shall be taken from the top of the casing pipe. If holes of a greater depth than \_\_\_\_\_ feet are desired, such drilling shall be performed only upon such conditions and at such rates as may be agreed upon before commencement of such drilling.

2. SCHEDULE OF RATES:

Imperial agrees to pay the Contractor for footage drilled and other services performed as follows:

(a) Coring at Bedrock

Depth Intervals	Rate	Size	Rate	Size
0 - 500 Ft.	\$ 13.60	/Ft.	\$ _____	/Ft.
500 - 1000 Ft.	\$ 14.25	/Ft.	\$ _____	/Ft.
1000 - 1200 Ft.	\$ 15.00	/Ft.	\$ _____	/Ft.
_____ - _____ Ft.	\$ _____	/Ft.	\$ _____	/Ft.

(b) Casing of Overburden

Depth Interval	Rate	Size
0 - 50 Ft.	\$ 13.60	/Ft.
50 - 100 Ft.	\$ 15.00	/Ft.
<u>100</u> plus Ft.	\$ <u>field Cost</u>	/Ft.

(c) The following services will be provided on an operating Field Cost basis:

1. Casing of overburden over 100 ft.
2. Reaming and setting casing for borehole reduction, borehole stabilization, and control of return water.
3. Drilling caved or broken ground.
4. All cementing operations, excluding setting time but including drilling of set cement.
5. Supplying water to the drill when water supply over 1000 ft. lateral and/or 150 ft. vertical lift

from borehole collar under non-freezing conditions and N/A ft. lateral and/or N/A ft. vertical lift under freezing conditions.

- 6. Recovering pipe and/or casing at Imperial's request.
- 7. Hole orientation tests.
- 8. Setting of wedges, at Imperial's request, for the purpose of directional drilling.

Where operating Field Costs are defined as:

Operating Field Costs

Labour (including Supervision) \$14.50 per man hour.

Tractor N/A per hour.

Water Truck (excluding driver) N/A per hour.

Equipment

Drills	Type	Operating Hourly Rate
<u>34</u>	<u>Longyear</u>	<u>\$9.50</u>

Pumps	Type	Operating Hourly Rate
<u>420</u>	<u>Bean</u>	<u>\$.90</u>

Other	Type	Operating Hourly Rate
	<u>Mud Mixer</u>	<u>\$.75</u>

While operating on a Field Cost basis, supplies consumed or damaged beyond use, including diamond articles, mud ingredients, cement, rods, core barrels, etc. shall be for Imperial's account at site replacement value plus 15 %. However, if due to Contractor negligence, or through poor drilling practices, equipment is damaged or lost and hole is not completed, then these costs shall be for Contractor's account.

(d) The following services would be provided on a non-operating Field Cost basis:

- 1. Setting time for cement.
- 2. Delays caused by Imperial.

Where non-operating Field Costs are defined as:

Non-Operating Field Costs

Labour (including supervision)	<u>\$12.00</u>	per man hour.
Drill, pumps and service vehicle	<u>\$ 3.50</u>	per drill hour.
Tractor - operating	<u>--</u>	per hour.
Tractor - non-operating	<u>--</u>	per hour.

(e) Travelling Time

Imperial agrees to pay for travelling time from camp to drill site and return per shift on the following basis: when time greater than  $\frac{1}{2}$  hr. per shift.

Labour \$12.00 per day. Hour  
Vehicle \_\_\_\_\_ per day.

(f) Mobilization and Between Hole Moves

Moving between holes is at field cost - labour \$14.50 per man hour.

(g) Room and board for Contractor's personnel will be provided by \_\_\_\_\_

Contractor will provide meals ~~and accommodation~~ for up to 3 of Imperial's representatives at a price of \$15.00 per day. Per man Room and board will be provided by Imperial to Contractor at \_\_\_\_\_ per man day.

(h) Core boxes, including lids, will be provided by Company. Contractor's rates for core boxes on site shall be \$ \_\_\_\_\_.

(i) Core splitter to be supplied by Contractor. Contractor to supply core splitter at \$30.00 per month.

(j) Standby Rental

It is agreed that, at the completion of the present active drilling program, Imperial may retain the Contractor's drilling equipment at the drill area for a rental rate of \$700.00 per month per drilling unit. The standby rental charge will cease to apply upon commencement of continuous drilling program, or on the giving of a written notice to the Contractor by Imperial that the drilling equipment is no longer required.

(k) Special Agreements

Mobilization - Demobilization

The Company agrees to move the Contractor's men, equipment and supplies from the last hole in the Atan Lake project to the first hole site at the Eagle project on a field cost basis. The Company further agrees that such move would include all necessary trucks and aircraft as necessary and the construction of a suitable camp. The move from the last hole site at Eagle to the Dease road would also be performed on a field cost basis.

The Contractor would demob his men and equipment to his base from road site for the lump sum of \$1400.00.

Moving between hole locations would be performed on a field cost basis. The Company would supply the helicopter to move between drill locations at no cost to the Contractor.

All fuel for camp and drill will be supplied by Contractor.



JUL 9 REC'D

L.W. COATES ENTERPRISES LTD.

256A SIMPSON ROAD  
RICHMOND, B.C.  
V6X 2P9

INVOICE NO.: 999  
JOB NO.: 270  
DATE: July 7/76

Imperial Oil Limited  
Minerals Section  
314 - 1281 West Georgia St.  
Vancouver, B . C. V6E 3J7

RE: Eaglehead Lake Drilling

PERIOD: June 23 - 30, 1976

Drilling Detail	\$8866.25
Travelling Time	336.00
Transportation	5645.00
Room & Board	260.00
Core Splitter	9.00
	<hr/>
	\$15,116.25
	<hr/> <hr/>

APPROVED FOR PAYMENT

BY *[Signature]*

CHARGE 83-025-28-9300-1150-3201

JUL 21 ENT'D

JUL 26 REC'D

D.W. COATES ENTERPRISES LTD.

256A SIMPSON ROAD  
RICHMOND, B.C.  
V6X 2P9

INVOICE NO.: 1008  
JOB NO.: 270  
DATE: July 21/76

Imperial Oil Limited  
Minerals Section  
314 - 1281 West Georgia St.  
Vancouver, B . C.

Eaglehead Lake Drilling

PERIOD: July 1 - 14, 1976

Drilling Detail	\$21,817.00 ✓
Reaming Casing	80.60 ✓
Drilling with Mud	122.48 ✓
Moving Setting Up & Tearing Down	1,508.00 ✓
Travelling Time	816.00 ✓
Acid Testings	130.50 ✓
Board & Room	950.00 ✓
Core Splitter	15.00 ✓

\$25,439.58

APPROVED FOR PAYMENT

BY

CHARGE 83-025-28-9300-1150-3201

AUG 4

ENT'D

AUG 17 RECD

D.W. COATES ENTERPRISES LTD.

256A SIMPSON ROAD  
RICHMOND, B.C.  
V6X 2P9

INVOICE NO.: 1023  
JOB NO.: 270  
DATE: Aug 13/76

Imperial Oil Limited  
Minerals Section  
314 -1281 West Gerogia St.  
Vancouver, B. C. V6E 3J7

Eaglehead Lake Drilling

PERIOD: July 15 - 31, 1976

Drilling Detail	\$13,130.85 ✓
Reaming Casing & Hole Stabilizing	806.00 ✓
Drilling with Mud	300.00 ✓
Moving, Setting Up & Tearing Down	1,566.00 ✓
Standby	154.50 ✓
Acid Testing	42.75 ✓
Room & Board	1,020.00 ✓
Core Splitter	15.00 ✓
Other Charges	456.00 ✓

\$17,491.10 ✓

APPROVED FOR PAYMENT

BY *F. A. [Signature]*

CHARGE 83-025-28-~~62~~9300-1150-3201

AUG 20 1976

INVOICE

D.W. COATES ENTERPRISES LTD.

256A SIMPSON ROAD  
RICHMOND, B.C.  
V6X 2P9

INVOICE NO.: 1025  
JOB NO.: 270  
DATE: August 19/76

AUG 24 RECD

Imperial Oil Limited  
Minerals Section  
314 - 1281 W. Georgia St.  
Vancouver, B. C. V6E 3J7

RE: Eaglehead Lake Drilling

PERIOD: August 1 - 6, 1976

Drilling Detail	\$3472.10 ✓
Demobilization	3488.00 ✓
Acid Testing	42.75 ✓
Room & Board	130.00 ✓
Core Splitter	6.00 ✓
Other Charges	525.00 ✓
	<u>\$7663.85</u>

APPROVED FOR PAYMENT

BY JH L. H. Mind

CHARGE 83-025-28-9300-1150-3201

AUG 24 ENT'D

STATEMENT OF QUALIFICATIONS

I, John M. Marr, of North Vancouver, B.C.  
hereby certify the following qualifications:

- (a) I obtained a B.Sc. (Hons.) degree in Geology (1968) from St. Andrews University, Fife, Scotland.
- (b) I obtained an M.Sc. degree in Geology (1970) from the University of Manitoba, Winnipeg, Manitoba.
- (c) I have been practising my profession as a geologist in Canada since that time.

*John M Marr*

LOCATION OF  
DIAMOND DRILL HOLES  
33 + 34 (1976)







EAGLE PROPERTY

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT

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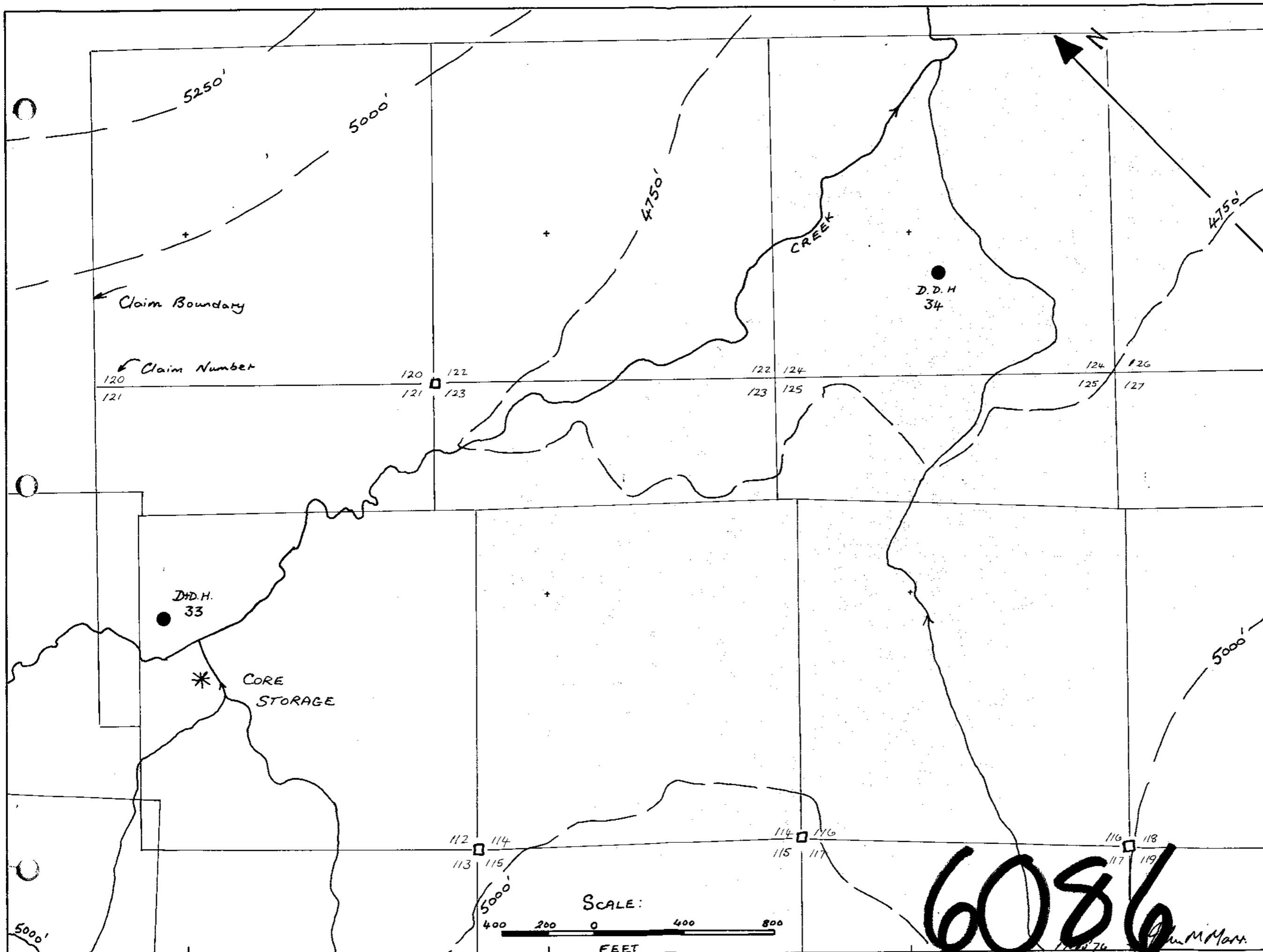
● DRILL HOLE

□ CLAIM POST  
LOCATION  
WHERE POST FOUND

Contours — 2500 —  
Stream or creek (Perennial, intermittent)  
Marsh   
Lake   
Road   
Jeep Road   
Trail   
Trees 

IMPERIAL OIL LIMITED — MINERALS

Project No. 9300  
Mining Division LIARD  
Latitude 54° 30' N  
Longitude 129° 10' W  
NTS 104 I  
To Accompany a Report By:  
J. Marr  
Dated 2 Nov 1976  
Map No. 4



SCALE:  
400 200 0 400 800  
FEET

6086  
J. Marr