5074 I

Diamond Drilling Report

on

THE PALMER OPTION PROJECT

Par 74 Claim Group

49°26'N; 117°30'W

82F/6W

82F/6W

Nelson Mining Division

by

J. Paxton P. Eng.

for

The Granby Mining Company Limited

PHOENIX COPPER DIVISION

Box 490, Grand Forks, B.C.

Field Work and Report: J. Paxton P. Eng.

Field Work Period: July 15 to August 30, 1974

CONTENTS

MAPS IN POCKET

#1 LOCATION MAP - Scale 1" = 1500'

#2 DRILL HOLE LAYOUT AND SECTION - Scale 1" = 40', 1" = 20'

#3 Surface plan

#4 Claim map

SUMMARY

In 1973 claims in an area on the projected strike of the Mineral King Mine four miles to the south of Nelson, B.C. were optioned from Mr. Palmer of Nelson. Additional claims were staked in the area by Granby personnel. In July of 1974 an attempt was made at building an access road to the property but was frustrated by lack of permission from the B.C. Forest Service. In August of 1974 a diamond drill was flown to the property by helicopter and three holes were drilled totalling 610 feet. Results were disappointing. The holes intersected pyritic sericite schists and quartzites with only traces of visible base metal sulphides. All the core was split and racked on the site. The best assay result obtained was:

DDH 3 - 0.0365 oz/ton Au ; 0.126 oz/ton Ag over 10 feet

Total cost of the project was $19,000 including the work with the Cat.

James Paxton

James Paxton, P. Eng.
Senior Mine Geologist.

HISTORY OF THE AREA

Serious prospecting in the area began in the 1880's. In 1886 the Hall Brothers staked the Silver King group of claims on the west slope of Toad Mountain, three miles south of Nelson. Production of ore began in 1889 and continued intermittently until 1948. In this period 222,246 tons of ore were produced from several parallel shear zones trending approximately N60°W. Grade of the ore (Ref. - Minister of Mines, B.C. Annual Reports) was as follows:

Gold	0.0012 oz/ton
Silver	19 oz/ton
Copper	3.36%
Lead	0.069%
Zinc	0.016%

These shear zones were traced by prospecting and hand trenching on strike to the northwest across the basin of Giveout Creek and over Morning Mountain to Sandy Creek. Many small shafts and adits were sunk on these zones but only the Silver King, had any appreciable production. In the 1930 to 1950 period a small amount of high grade ore was produced from the old workings by small operators. Mr. K. C. Fahrni examined a number of showings and old working in the area on behalf of Granby in 1946 and his report is on file. (No. 2040) In the period 1950 to 1970 control of the main mining area around the Mineral King Mine was held by Cominco Ltd. of Trail, B.C. and by Sproatt Silver Mines Ltd. of 333,885 Dunsmuir Street, Vancouver, B.C. The portion of the Mineral King shear zone crossing

Morning Mountain was acquired by Mr. Richard Palmer of Nelson, B.C. Granby's renewed interest in the area was originated by Mr. G. B. Hardwicke, who in researching old reports in the Granby file and the old Minister of Mines Reports, noted mention of widespread, low grade mineralization around the high grade copper-silver veins in the Silver King Mine area. In 1973 Mr. Hardwicke staked several claims in the area for Granby and entered into an agreement with Mr. Palmer for an option to purchase his claims in the area. In 1974 an attempt was made to build a road into the area with the idea of trenching along the ridge of Morning Mountain to test the presence of the Mineral King shear zone. Permission to do this work could not be obtained from the B.C. Forest Service so a small diamond drill was moved in by helicopter and three holes were drilled to test the most promising areas. This work is described in detail in this report.

GEOLOGY OF THE AREA

According to the only geological map available to the writer (1090A Nelson, west half, by H.W. Little, 1960) the Palmer property lies on the west limb of a syncline trending north-south between Nelson and Salmo. The syncline is composed of andesites and tuffs of the lower Jurassic, Rossland Formation, overlain in the core of the syncline by argillite and sandstone of the Hall Formation. The syncline is surrounded by, and intruded at numerous points by plutonic diorite, quartz diorite and porphyritic syenite of the Nelson Batholith.

According to other reports, listed at the end of this section,

the north end of the syncline is cut by three parallel shear zones trending N60°E. The Mineral King Mine lies on the strongest of these shear zones. The Palmer property covers the presumed projection of two of these shear zones. The drilling done in this report was done to test the existance and mineralization of these shear zones on the property. The old time prospectors tried to trace the shear zones with a series of trenches and shallow shafts. The writer examined several of these showings but could see no major shear structure linking them together and none was intersected in the subsequent drilling. Most of the showings examined were in a widespread uniform zone of strongly foliated pyrite - sericite schist. Within the schist small lenses and cross-fractures occur, filled with, quartz, limonite, sphalerite, galena and chalcopyrite. To the north of drill hole No. 3 there was a sharp contact with quartzitic rocks. These quartzites were strongly pyritized similar to the schist. They may belong to the Ymir Group of Jurassic rock as shown on Little's map. The widespread disseminated pyrite mineralization seen in the drill core in both the shistose and quartzitic rocks is probably syngenetic and is earlier then the epigenetic quarz-base metal veinlets seen in the old workings.

Copies of the following reports are at hand and were read in preparation for this report:

1. Giveout Creek Group, Nelson M.D.
   by K.C. Fahrni, July, 1946.

2. Examination Report covering the Starlight, Victoria, Jessie, North Star, Great Western, Great Eastern and Irene claims for Privateer Mines Limited.
   by W.S. Ellis, 1945.

3. A report containing lengthy extracts from reports made by E. Nelson Fell M.E., A.R., S.M., in 1899 and 1911 written in 1936 covering the Kootnia Star, Golden Star, Starlight, Woodstock and Calgary claims.
   by A. St. Clair Brindle M.E., 1936.

4. A report for Cominco Limited on the Silver King and surrounding properties.
   by G.F. Waring, 1952.

   Unfortunately the maps which originally accompanies Mr. Waring's report were not available.

ROAD WORK

A number of wagon roads and pack horse trails were made in the early days in the Giveout Creek Valley. Most of these trails have since grown in but some have been maintained and extended by loggers. One of these roads reaches the northwest corner of the Golden Star claim. Mr. Palmer had made an extension to this road about 4000 feet southwest along the west fork of Giveout Creek, but by 1974 this road was badly washed out and was impassable to vehicles. In 1974 it was planned to bring in a D-6 Cat and repair Mr. Palmer's road and extend it another 4000 feet westward to the crest of Morning Mountain and there test the shear zone with a 1000 foot north-south cat trench. In July, 1974 the D-6 Cat was moved in and Palmer's road was repaired to the point where it was passable in dry weather to 4WD vehicles. Work was halted at this point since it was found that permission to build new road and do the trenching could not be obtained from the B.C. Forest Service in a reasonable time.

Since the road could not be completed, it was decided to test the shear zone by moving in a light diamond drill with a helicopter, and

further work on the road was discontinued. Palmer's road was used for personal access and for moving out the supply pump for the drill.

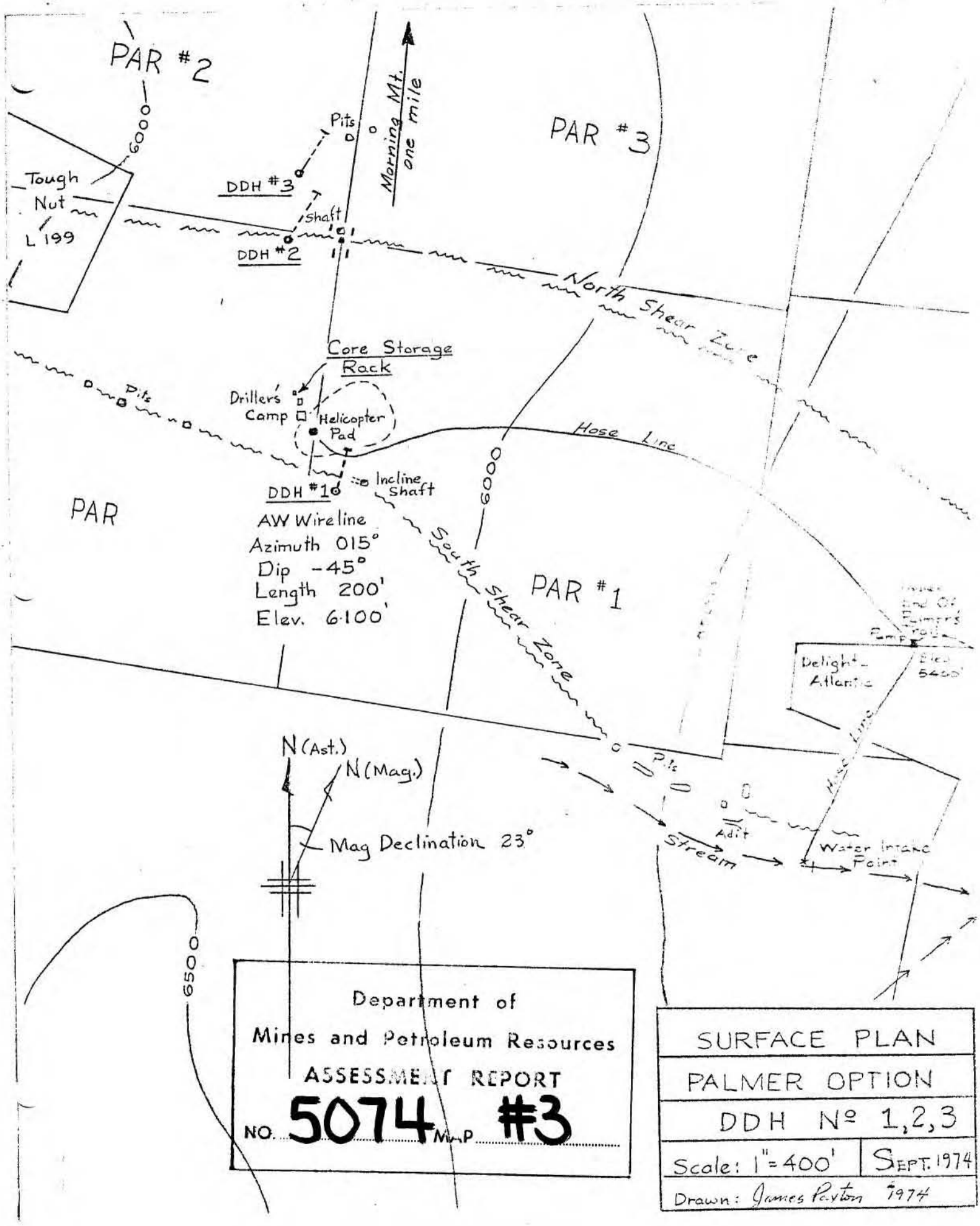
DIAMOND DRILLING

On August 1, 1974 a contract was signed with Connors Drilling Limited, 155 West 3rd Avenue, Vancouver, B.C. to do a minimum of 600 feet of AQ drilling at a basic price of $10.85 per foot in overburden to 50 feet, and in rock to 300 feet. Transportation of the drill camp and equipment to be Granby's cost and responsability.

On August 8th a landing place for the helicoptor was cleared on the crest of Morning Mountain.

Supplying water to the drill and camp presented a problem. A small stream was located about 500 feet east of the top end of Palmer's trail coming from springs at an elevation of about 5500 feet. It was decided to move a large diesel pump to the top end of Palmer's trail then run a hose line from the pump over to the stream and bring the water by gravity to the pump which was at an elevation of about 5400 feet, then pump it up to the camp in one lift of 700 feet to the 6100 foot elevation.

On August the 13th the drill, a driller and a helper, and all equipment were moved up to the camp. The first hole was started on August 16th and completed at 200 feet on August 18th. The second hole was started August 22nd. Problems were encountered in getting the overshot to go down. It had been planned to go to 250 feet but because of the problems and lack of important mineralization, drilling was stopped at 210 feet.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5074 MAP #3

SURFACE PLAN	
PALMER OPTION	
DDH Nº 1,2,3	
Scale: 1" = 400'	SEPT. 1974
Drawn: James Payton 1974	

The third hole was started on August 25th and completed on the 26th. Increasing the dip of this hole from 45° to 50° overcame the problem with the overshot. Core recovery in all three holes was over 90%. Moving the drill was accomplished by winching and dragging the mast. The rods were packed by the helper.

The drill was a BBS-1 with a lycoming diesel motor. The hose was heavy duty PVC rated at 160 psi. It withstood pressure in excess of 300 psi with only an occasional rupture. This was the most critical factor in the whole project.

RESULTS

The first two holes intersected fine grained sericite schist with occasional short sections of rusty vuggy material containing irregular veins of secondary quartz. No metallic mineralization other than fine desseminated pyrite, magnetite and occasionally chalcopyrite could be identified in the core either in the schist or the rust sections. The third hole collared in schist similar to the previous two then at 41 feet passed into grey quartzite and chert. Mineralization was as in the previous holes. These results were dissapointing in that nothing could be correlated with the main shear zone in the Silver King Mine which is described as a very strong feldspathized fault zone ranging in width from 4 feet to 200 feet.

All the core was split and samples taken over ten foot intervals except in rusty quartz vein material which was sampled separately. Of these samples (total 65) 37 were selected for copper assay, 20 for gold

silver assay and 14 for lead and zinc.

Assay returns for these selected samples show very low values for copper lead and silver and low values for gold and zinc. All samples were below ore grade. No relationship between metal variation was apparent, although there may be some relationship between gold and zinc.

CONCLUSIONS

The drilling done was unsuccessful in locating the extensions of the Mineral King shear zones and there is a strong probability that they do not exist in their original form this far to Northeast. It is possible that the old working in the area were not put down on mineral outcrops but were speculative attempts at locating the extension of the shear zone just as our drilling was. The fact that the old-timers turned up small amounts of ore grade mineralization in a fair number of their diggings indicates the area is still good prospecting ground. The widespread desseminated pyrite noted in the area is also a good prospecting indicator.

RECOMMENDATIONS

1. Assay all of hole No. 2 for gold and silver.

2. In view of the negative drilling results terminate the option agreement with Mr. Palmer.

3. Make a regional soil and stream silt sampling survey in the area next year covering a five to ten square mile area with a soil sampling spacing of 500 feet.

CLAIM OWNERSHIP

The following claims were covered in the option agreement between Granby and Mr. Palmer of Nelson, B.C. dated October 24, 1973.

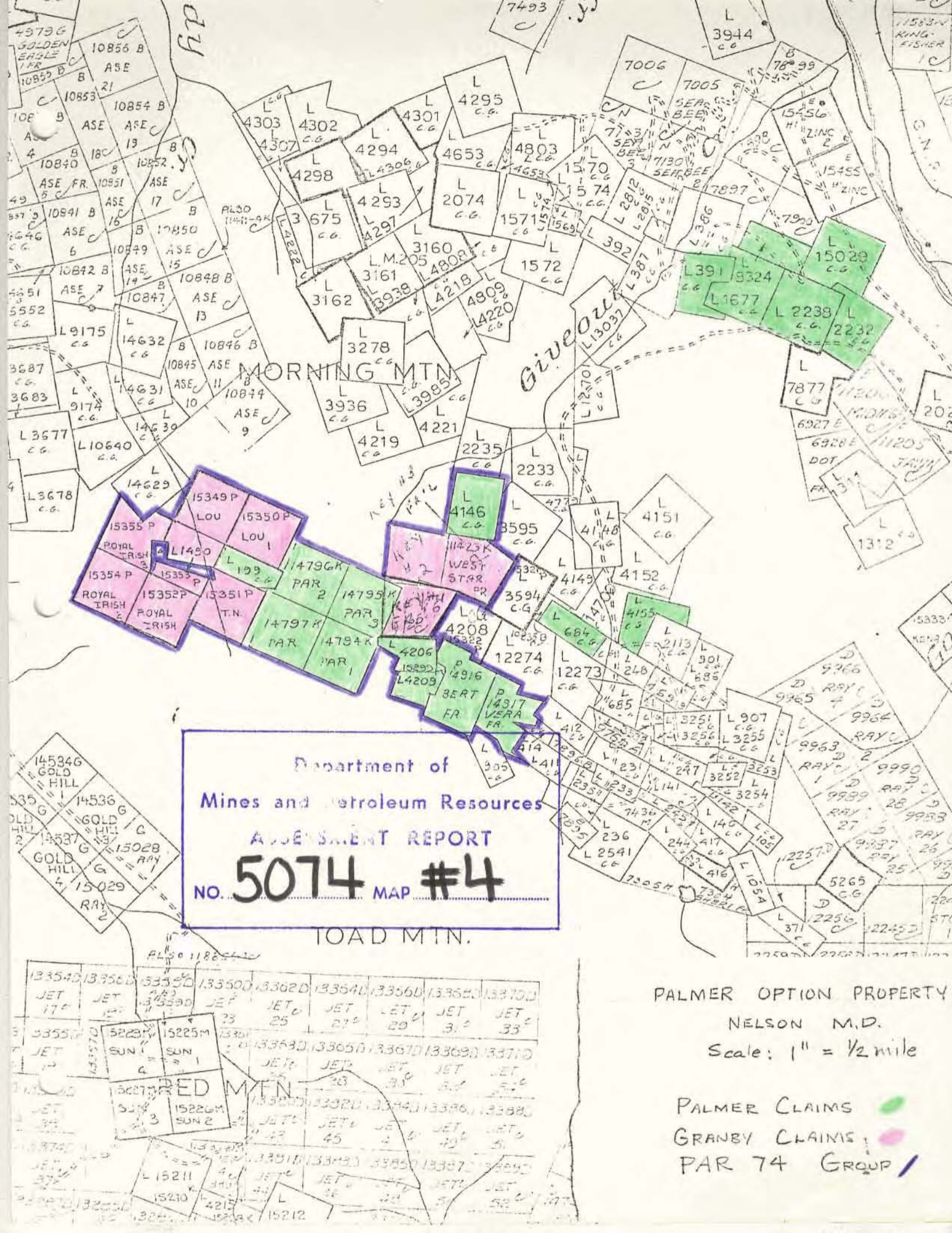
	Claim Name	Lot or Rec. No.	Anniversary Date	Owner
**	PAR	14797	August 22	Shirley Palmer
**	PAR 1	14794	August 22	Shirley Palmer
**	PAR 2	14796	August 22	Shirley Palmer
**	PAR 3	14795	August 22	Shirley Palmer
*	Bert Fr.	14916	November	Shirley Palmer
*	Vera Fr.	14917	November	Shirley Palmer
*	Atlantic-Delight	15299	September 13	
*	Tough Nut	L 199		Richard Palmer
	Starlight	L 684		" "
*	Black Witch	L 4146		" "
	Gold Bell	L 4155		" "
	California	L 1677		" "
	Exchequer	L 391		" "
	Union	L 8324		" "
	Hillside	L 2238		" "
	Deadwood	L 2232		" "
	Clift	L 15029		" "

** These claims were grouped as the PAR 74 group on August 20, 1974.

* These claims were added to the PAR 74 group in September, 1974.

The following claims were staked in the area by Granby personnel in 1973 and 1974:

Claim Name	Lot or Rec. No.	Anniversary Date	Owner
Royal Irish	370112	November	Granby
Royal Irish 1	370113	November	Granby
Royal Irish 2	370114	November	Granby
Royal Irish 3	370115	November	Granby
T.N.	370111	November	Granby
Lou	370109	November	Granby
Lou 1	370110	"	Granby
Key 1	15528	July	Granby
Key 2	15529	July	Granby
Key 3	15530	July	Granby


MORNING MTN.
TOAD MTN.
RED MTN.
Giveout
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5074 MAP #4
PALMER OPTION PROPERTY
NELSON M.D.
Scale: 1" = ½ mile
PALMER CLAIMS
GRANBY CLAIMS
PAR 74 GROUP

TIME DISTRIBUTION

July 17th - Reconnaissance and layout of road from the top of Palmer's road to the crest of Morning Mountain.

G.B. Hardwicke - 1 day

J. Paxton - 1 day

July 19th, July 25th - Moved D-6 Cat from Grand Forks to Nelson. Repaired Palmer's road and returned Cat to Grand Forks.

J. Paxton - 7 days

V. Lesjack, Cat Operator - 7 days

Granby D-6 Cat - 5 days

August 2nd, 6th - Reconnaissance Trips.

J. Paxton - 2 days

J. R. Lucke - 2 days

August 8th - Cleared helicopter landing site.

J. Paxton - 1 day

J. R. Lucke - 1 day

D. D. Rexin - 1 day

August 11th to August 30th - Moving pump to top of Palmer's road, and drill and camp from Salmo to top of Morning Mountain, drilling 610 feet and returning.

Connors Drilling Limited

S. Savinkoff, Driller - 231 hours

M. Bonderoff, Helper - 85 hours

D. Deschambault, Helper 111 hours

J. Paxton - 14 days

J. R. Lucke - 9 days

Okanagan Helicopters Limited - 5.5 hours

September 3rd - 13th - Wrote report, drafted maps and packed equipment.

J. Paxton - 8 days

J. R. Lucke - 4 days

STATEMENT OF COSTS

Granby Costs

Supervision, Surveying, Core Logging, Core Splitting, Travelling

J. Paxton, Sr. Mine Geologist - 27 days

J. R. Lucke, Assistant Geologist - 18 days

D. D. Rexin, Faller - 1 day

Vehicle 66-82 - 1500 miles

Vehicle 66-83 - 2000 miles

All covered by Work Order 1576 (to August 31)	$ 3,563
Additional Estimate September 1 - 13	600
	$ 4,163

Road Work with D-6 Cat

J. Paxton, Sr. Mine Geologist - 8 days

W. Lesjack, Cat Operator

D-6 Cat @ $8.00 per hour

Transport of Cat

All covered by Work Order 1577	$ 1,849

Assaying

Phoenix Mine Assay Lab.

37 for Cu. at $3.00	111
20 for Au. Ag. at $5.00	100

General Testing Labs, Vancouver

14, Wet - Pb. Zn.		
14, Spectro - Cu. Pb. Zn. Au. Ag.	est.	200
Total Granby Costs		$ 6,423

Contract Costs

Connors Drilling Limited (Invoice 5140 Job 4-502)

4-0 feet drilled as per contract at $10.85 per ft.	$ 6,619
Mobilization fee as per contract	1,000
Field Costs - Moves, Waterline, Etc.	3,015
	$10,634
Supplies	98
	$10,732

Okanagan Helicopters Limited

Flying time, 5.5 hours @ 286.50	1,576
Fuel, 123 gallons @ 0.65	80
	$ 1,656
Total Contract Costs	$12,388

TOTAL COSTS, PALMER OPTION PROJECT $18,811

STATEMENT OF QUALIFICATIONS

The undersigned graduated from the University of Saskatchewan with a B.A. Sc. degree, major in geological sciences, in 1953.

One year of honors geology was taken in 1954 at University of Manitoba.

Since graduation the undersigned has been employed on various mining and exploration projects. Since 1964 the undersigned has been employed by The Granby Mining Company Limited on both mine and exploration geology projects in B.C.

The undersigned is a member C.I.M., fellow of the G.A.C. and a member of the Association of Professional Engineers of B.C.

JAMES PAXTON P. Eng.
Senior Mine Geologist
The Granby Mining Company Limited
PHOENIX COPPER DIVISION

APPENDIX I

DIAMOND DRILL LOGS FOR HOLES

NO. 1, NO. 2, NO.3

APPENDIX II

ASSAY CERTIFICATES

The Granby Mining Company Limited
PHOENIX COPPER DIVISION
Box 490, Grand Forks, B.C.

PALMER OPTION
WO 1576

ASSAY SHEET - GEOLOGY DEPARTMENT

1. Check assay required in space provided
2. Show composite assays with double arrows
3. Make duplicate sheet for geology file

Date Submitted	Tag Number	Copper Percent	Silver oz per ton	Gold oz per ton	Sulphur Percent		
	3651	.07					
	52	.05					
	53	.05					
	54	.10	.126	.0365			
	55	.07					
	56	.07					
	57	.10					
	58	.07	.106	.0195			
	[illegible]	.07	.1125	.018			
	[illegible]	.07	.0085	.005			

The Granby Mining Company Limited
PHOENIX COPPER DIVISION
Box 490, Grand Forks, B.C.

PALMER OPTION

ASSAY SHEET - GEOLOGY DEPARTMENT

WO 1576.

1. Check assay required in space provided
2. Show composite assays with double arrows
3. Make duplicate sheet for geology file

Date Submitted	Tag Number	Copper Percent	Silver oz per ton	Gold oz per ton	Sulphur Percent		
	3705	.07	.043	.0045			
	06	.10	.089	.003			
	07	.05	.065	.001			
	08	.07	.038	.001			
	13	.05	.0605	.001			
	17	.05	.0027	.001			
	21	.05	.092	.001			
	24	TR	.0675	.0045			
	25	.05	.055	.007			
	26	.05	.052	.010			
	27	.05	.025	.0022			
	31 32	.05	.0415	.001			
	31 32	.05	.047	.0035			
	33	TR					
	34	TR					
	35	.05					
	36	.05	TR	TR			
	37 37	.05					
	38	.07					
	39	.07					
	37 40	.12					
	41	.07	.0495	.0075			
	42	.07					
	43	.07					
	44	.05					
	37 48	.07	.011	.001			
	37 50	.10					

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY

DIP TESTS			LEVEL	LAT.	HOLE No. 3
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LOCATION	DEP.	SHEET No. 2
			ELEVATION	BEARING	LOGGED BY J.P.
			FINISHED	LENGTH	TOTAL RECOV. %

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
138	140			Lamprophyre Dyke Black with Fine kernel [illegible] In Some Parts [illegible] Contacts sharp at 70°
140	144			Grey Quartzite Similar to previous
144	145.5			Lamprophyre Dyke Similar to 138-140. Contacts at 70°
145.5	148.5			Grey Quartzite Similar to previous
148.5	149			Lamprophyre Dyke Contacts at 70°
149	152			Grey Quartzite
152	152.4			Lamprophyre Dyke Contacts at 80°
152.4	153			Grey Quartzite
153	154			Lamprophyre Dyke Contacts at 70°
154	191			Grey Quartzite Similar to previous Scattered blebs of chalcopyrite 165-170

CORE ASSAYS							SLUDGE ASSAYS						RECOVERY		RECOV
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE	SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	RUN	SHORT	RUN

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY

DIP TESTS			LEVEL	LAT.	HOLE No. 3
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LOCATION	DEP.	SHEET No. 3
			ELEVATION	BEARING	LOGGED BY J. Pitts
			FINISHED	LENGTH	TOTAL RECOV. %

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
191	195			Bleached Alteration Zone Rock shows red-brown fractures and brecciated with limonite and pyrite filling the fractures
195	200			Grey Quartzite Similar to previous
	200			End of hole

CORE ASSAYS							SLUDGE ASSAYS						RECOVERY		RECOV
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE	SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	RUN	SHORT	RUN

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY Palmer Option, Nelson, B.C.

DIP TESTS			LEVEL	LAT.	HOLE No. 1
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LOCATION PAR Nº 1	DEP.	SHEET No. 1/2
Collar	-45°		ELEVATION 6100 Approx.	BEARING N 015° E	LOGGED BY J. Paxton
			FINISHED Aug 19 1974	LENGTH 200'	TOTAL RECOV. 93.0

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
0	10			Casing through overburden
10	107			Chlorite - Sericite Schist
				10-22 Brown stained. Iron minerals all oxidized to limonite
				22-26 Typical unaltered rock Grey-green color. Hardness 3-4 Strongly schistose at 70° to Core axis Aphanitic with 2-3mm lenticular grains of green chlorite comprising 20-30% of total rock. Numerous very fine (>1mm) subhedral grains of magnetite (8% of total rock) and pyrite (2% of total rock) Occasional specks of chalcopyrite noted.
				26-28 Brown oxidized schist
				28-61 Similar to section 22-26
				49-51 Oxidized zone surrounding a small fault cutting foliation at 90°.
				55-56 Oxidized zone at 80° to core filled with a network of irregular secondary white quartz veins
				61-71 Brown limonite stained, vuggy oxidized zone. Much partially leached fine magnetite and pyrite.
				71-75 Similar to section 22-26
				75-76 Oxidized zone
				76-93 Grey-green schist similar to Section 22-26
				93-101 Numerous short sections of oxidized schist surrounding small irregular vuggy quartz veins. Specks of malachite noted at 100'

CORE ASSAYS

SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	Pb	Zn
3701	10	20					
2	20	30					
3	30	40					
4	40	50					
5	50	55	.07	.0045	.345		
6	55	56	.10	.003	.389	.04	.20
7	56	60	.05	.001	.065		
8	60	70	.07	.001	.238		
9	70	80					
10	80	90					
1	90	100					
2	100	110					
3	110	120	.05	.001	.0605	.01	.01
4	120	130					
5	130	140					
6	140	150					
7	150	160	.05	.001	.0027	.01	.01
8	160	170					
9	170	180					
20	180	190					
3721	190	200	.05	.001	.092	.01	.01

SLUDGE ASSAYS

SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.

RECOVERY

RUN	SHORT
8	0
11	1.0
15	1.0
18	2.0
22	1.5
27	0.5
32	0
37	0
42	0
47	0
52	0
57	0
62	0
67	0
72	0
77	1.0
82	0
87	0
92	1.0
97	0.5
102	0.5
107	0
112	0
117	0
122	0
126	0
131.6	0
136	1.5
140	0.5
145	0
150.5	0
	9.0

RECO

RUN
156
161
165
170
175
180
185
190
195
200
Reco
200-1
186/200

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY Palmer Option, Nelson B.C.

DIP TESTS			LEVEL	LAT.	HOLE No. 1
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LOCATION	DEP.	SHEET No. 2/2
			ELEVATION	BEARING	LOGGED BY J. Paxton
			FINISHED	LENGTH	TOTAL RECOV. %

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
107	108			Lamprophyre Dyke Consists of med grained dark brown biotite. Contacts at 60° to core
108	156			Chlorite Sericite Schist Similar to previous section but finer grained and slightly less schistose
156	158			Talc Schist Grey to black color. Blocky core
158	200			Chlorite - Sericite Schist Similar to section 108 - 156 Local short vuggy oxidized sections 185 - 185.5 Quartz vein, vuggy and limonite stained
	200			End of hole.
				Summary
				0 - 200 Chlorite Sericite Schist 61 - 71 Oxidized zone with Pyrite & Mag 93 - 101 Oxidized schist with quartz veinlets. Malachite 107 - 108 Lamprophyre dyke 156 - 158 Talc Schist.
				Signed: James Poyton P. Eng. Aug 19, 1974

CORE ASSAYS							SLUDGE ASSAYS						RECOVERY		RECOV
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE	SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	RUN	SHORT	RUN

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY Palmer - Olson

DIP TESTS					
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LEVEL	LAT.	HOLE No. 2
Collar	-45°		LOCATION PAR No 2	DEP.	SHEET No. 1
			ELEVATION 6000 Approx.	BEARING N. 030° E	LOGGED BY J.R.
			FINISHED Aug 24 1974	LENGTH 210	TOTAL RECOV. 92.6 %

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
0	5			Casing in overburden
5	19			Schistose quartz porphyry Mottled grey, white and tan colors 5mm aggregates of fine quartz and sericite in a tan fine grained felsic groundmass Foliation at 60° Locally leached and vuggy. Sparse pyrite mineralization
19	44			Sericite schist Medium grey color. Fine grained Strongly foliated at 60°-70° Fine grained pyrite mineralization both disseminated and in bands up to 5mm Local lenses of medium grained euhedral pyrite. Local irregular barren quartz- calcite veinlets up to 2cm. 22'- Small fault with brown limonite alteration 20.5 to 23.0 25.5 - 10cm white quartz and calcite vein. Minor pyrite mineralization Contacts at 60° 33-35 Mingled white quartz-calcite veins, massive pyrite veins and schist. Porous and vuggy 36-40 Mislatch - 3' core ground. 41-42 - 3cm white qtz-pyrite vein at 50° then 20 cm of rusty vuggy fault zone 43.5-44 Mixture of quartz-calcite vein material and rusty vuggy fault zone. Much fine pyrite

CORE ASSAYS

SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE Pb	AVERAGE Zn
3722	5	20					
3	20	30					
4	30	34	Tr	.0045	.0675		
5	34	35	.05	.007	.055	.01	.03
6	35	41	.05	.010	.052		
7	41	44.5	.05	.0022	.025	.01	.03
8	44.5	50.0	.05	.001	.0415		
3729	50	60					
0	60	70					
3731	70	80					
2	80	90	.05	.0025	.047	.01	.01
3	90	100	Tr				
4	100	110	Tr				
5	110	120	.05				
6	120	130	.05	Tr	Tr.	.01	.01
7	130	140	.05				
8	140	150	.07				
9	150	160	.07				
40	160	170	.12				
1	170	180	.07	.0075	.0495	.01	.02
2	180	190	.07				
3	190	200	.07				
3744	200	210	.05				

SLUDGE ASSAYS

SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.

RECOVERY

RUN	SHORT	RUN	RECOV
6	2	20	
11	.5	34	
15.6	0	194	
21	0	222	
26	.5	204	
31	0	210	
36	0		
40	3.0	Total	
45	0	Footage	
50	.5	194.5	
54	0	210	
57.5	.5		
65	.5		
70	0		
76	.5		
81	1		
86.5	1.5		
91.5	2		
95	1		
99	0		
103	0		
108.5	0		
114	.5		
119	0		
124	0		
129	0		
134	0		
139.5	0		
145	.5		
154	0		
159	0		
164	1.0		

James Peterson

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

ROPERTY Palmer Option

DIP TESTS			LEVEL	LAT.	HOLE No. 2
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LOCATION	DEP.	SHEET No. 2
			ELEVATION	BEARING	LOGGED BY J.P.T.
			FINISHED	LENGTH	TOTAL RECOV. %

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
44	102			Quartz Sericite Schist More siliceous than previous. Pale grey color. Strongly schistose at 70°-80°. Numerous small quartz-calcite veinlets parallel to foliation. Up to 20% dessem. pyrite 62-63 Quartz-pyrite vein at 60° 73-73.8 " " " " " " 65 - 3 mm calcite veinlet at 20° with scattered blebs of galena 94-104 Quartz eyes up to 5mm locally. Less pyrite (2-5%)
102	200			Dark Grey Sericite Schist Medium to dark grey color. Fine grained to aphanitic with streaks and augen of lighter colored medium grained material Streaks, lenses and desseminated fine pyrite throughout averaging about 5% of total rock. Strong foliation at 70°-80° Traces of very fine chalcopyrite noted Local short sections show definate sedimentary bedding 2-5mm at 70°-80°
200	204			Fault Zone - 3.5 ft core lost
204	207			Bedded Grey Schist Fine grained. Good 3-10mm white and grey bedding at 60°-70°. Moderately schistose. Fine desseminated pyrite up to 5% of total rock. 207- 10 cm of fault gouge and breccia

CORE ASSAYS							
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE	

SLUDGE ASSAYS						
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	

RECOVERY		RECOVE	
RUN	SHORT	RUN	SH

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY Phoenix

DIP TESTS			LEVEL	LAT.	HOLE No. 2
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LOCATION	DEP.	SHEET No. 3
			ELEVATION	BEARING	LOGGED BY
			FINISHED	LENGTH	TOTAL RECOV.

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
207	210			Grey Tuff Grey color. Fine grained. Granular to fine fragmental texture. Local angular fragments up to 3 mm. Scattered fine leucoxene. 1-3% desseminated pyrite
	210			End of hole.
				Summary 0-19 Schistose quartz porphyry 19-44 Sericite Schist 44-102 Quartz Sericite Schist 102-200 Dark grey Sericite Schist Traces of chalcopyrite 200-204 Fault Zone 204-207 Bedded Grey Schist 207 Fault Zone 207-210 Grey Tuff
				Signed: James Pearson, P.Eng. Aug 25 1974

CORE ASSAYS							SLUDGE ASSAYS						RECOVERY		RECC
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE	SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	RUN	SHORT	RUN

DIAMOND DRILL HOLE RECORD

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION, GRAND FORKS, B.C.

PROPERTY PALMER · OPTION

DIP TESTS					
FOOTAGE	ANGLE RECORDED	ANGLE CORRECTED	LEVEL	LAT.	HOLE No. 3
all ⊥	-50°		LOCATION PAR Nº 2	DEP.	SHEET No. 1
			ELEVATION 6000 Approx.	BEARING Az 030°	LOGGED BY J. Paxton
			FINISHED Aug 26 1974	LENGTH 200'	TOTAL RECOV. 95.2 %

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	MINERALIZATION	DESCRIPTION
0	5.5			Casing in overburden. Casing extended to 13'
5.5	41			Dark Grey Sericite Schist Dark grey color. Fine grained, extremely schistose texture with scattered 3mm white augen and scattered 1mm grains of magnetite (1-2% of total rock) Also scattered fine disseminated pyrite (1-2% of total rock) Foliation at 50% with occasional small drag folds (S type) 33-34 Massive grey quartzite Contact gradational over 3 ft.
41	138			Grey Quartzite Grey color. Aphanitic to fine grained granular texture. Also often has a fine breccia texture. Scattered (1-2% of total rock) 1-2mm blebs of magnetite and pyrite. The pyrite is very fine grained and yellowish and may be a mixture of pyrite and chalcopyrite. Chalcopyrite definately identified associated with some of the magnetite grains. 64-66 Brecciated 91- Fault at 60°. Limonite and brown stained wall rock for 20 cm 98-Fault at 30°. Limonite and brown stained wall rock for 30cm Minor chalcopyrite noted 131-137 Pale grey chert with numerous pyrite filled fractures.

CORE ASSAYS

SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.	AVERAGE Pb	AVERAGE Zn
3745	5	10					
6	10	20					
7	20	30					
8	30	40	.07	.001	.011	.01	.02
9	40	50					
50	50	60	.10				
3651	60	70	.07				
2	70	80	.05				
3	80	90	.05				
4	90	100	.10	.0365	.126	.01	.29
5	100	110	.07				
6	110	120	.07				
7	120	130	.10				
8	130	140	.07	.0195	.106	.01	.19
9	140	150					
60	150	160					
1	160	170	.07	.018	.1195	.01	.45
2	170	180					
3	180	191					
4	191	195	.07	.005	.0985	.01	.04
3665	195	200					

SLUDGE ASSAYS

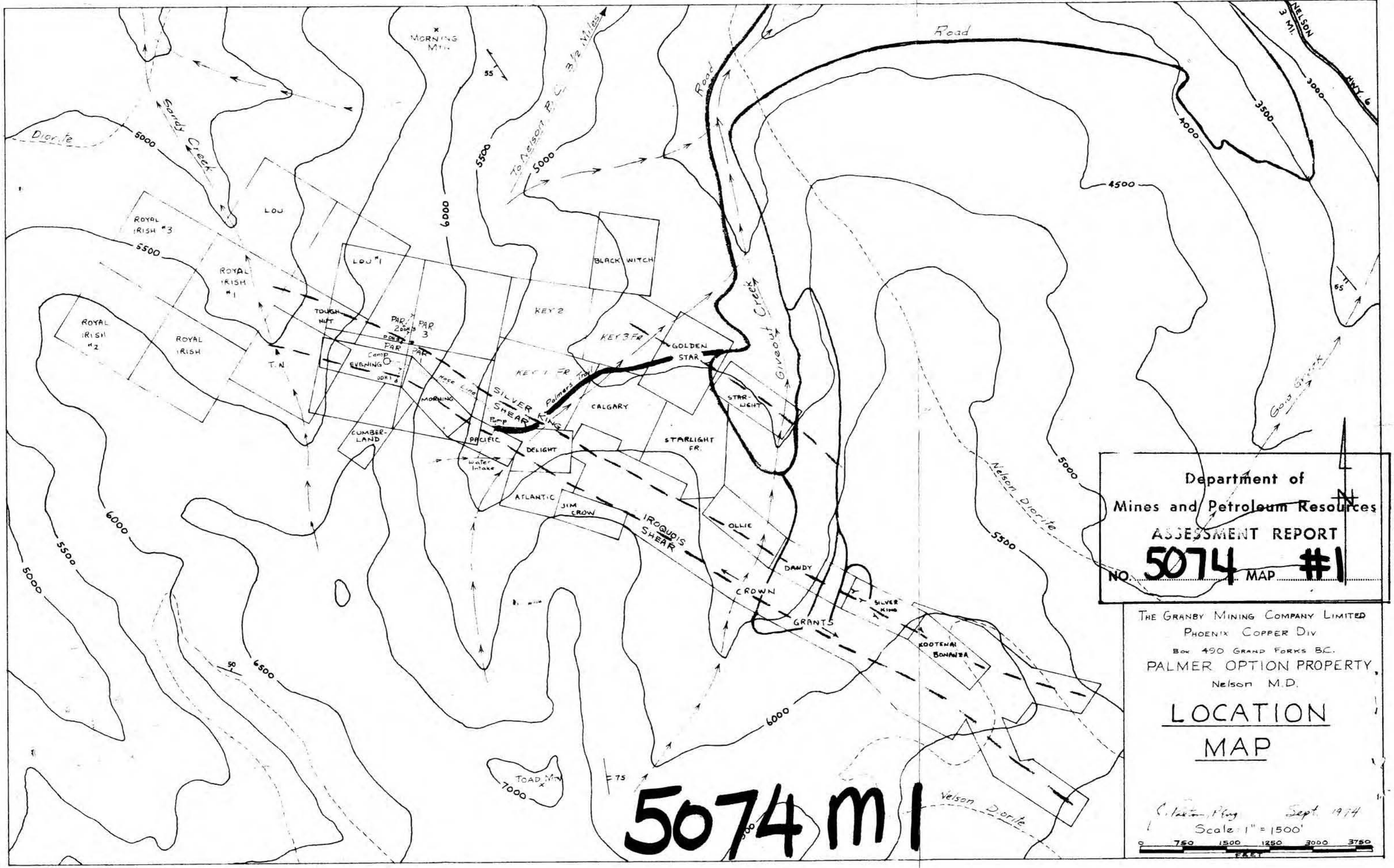
SAMPLE No.	FROM	TO	% CU.	OZ. AU.	OZ. AG.

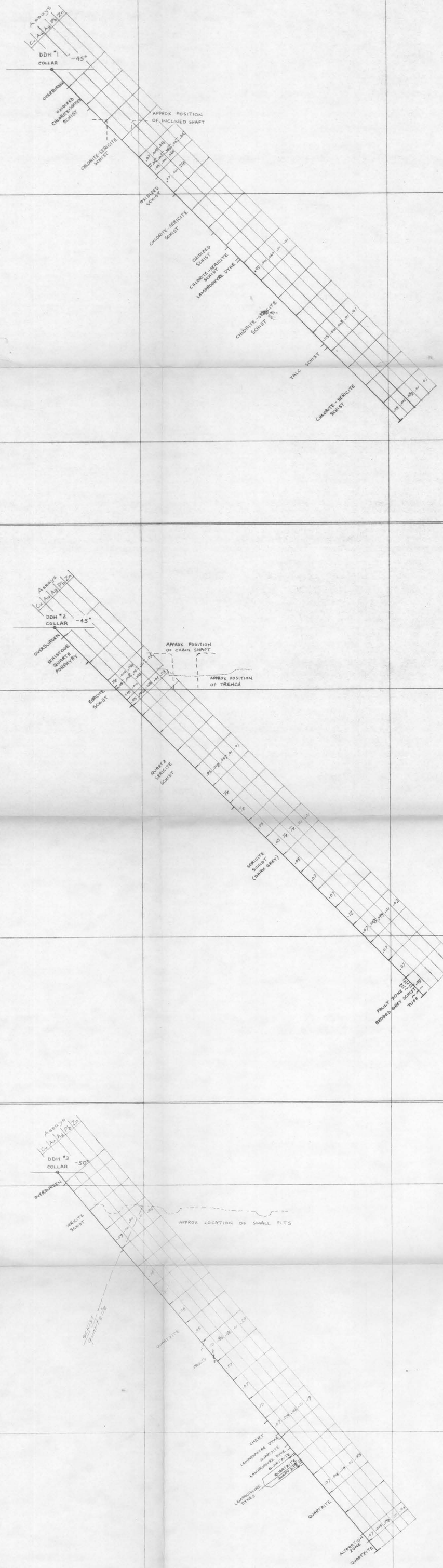
RECOVERY

RUN	SHORT
6	0
10	.5
12	.5
15½	0
16½	.7
21	2.0
27	1.5
29	0
31½	.5
35	0
45	0
50	0
60½	.5
70'9"	0
81	0
86	.5
96'3"	0
96	0
106	0
116	0
125	.5
130	0
140	0
150	0
160	0
161½	0
175	1.0
182	1.0
192½	.5
200	0
	9.7

RECOV

James Paxton

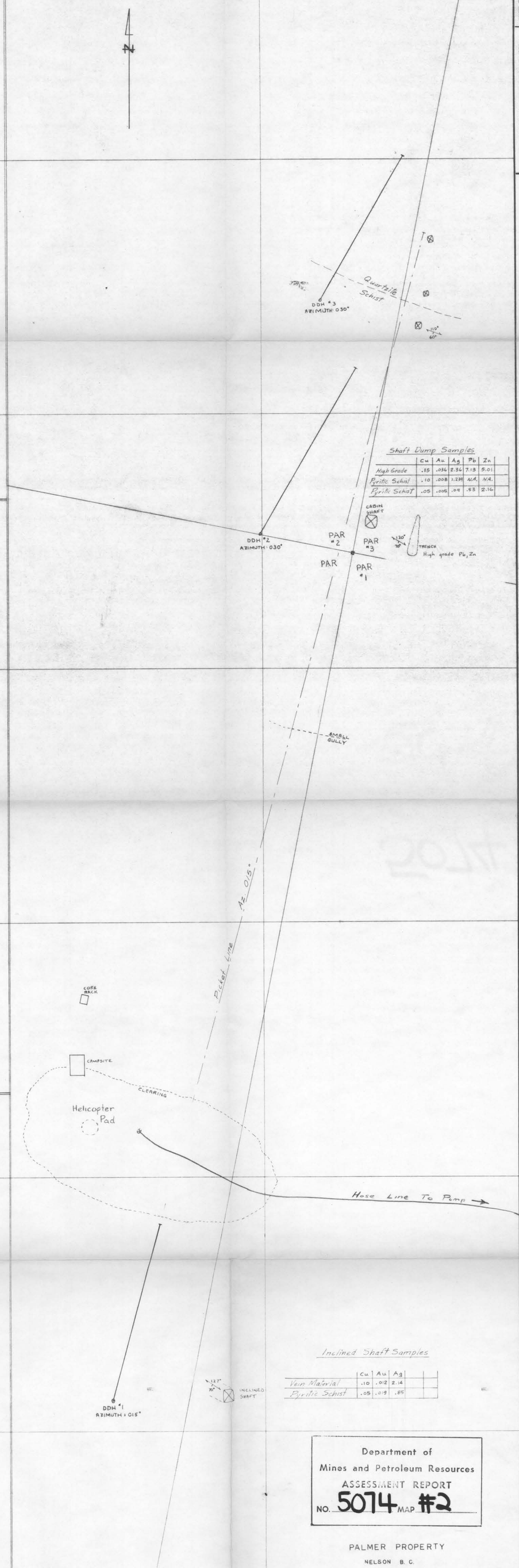

MORNING MTN.
Sandy Creek
Diorite
5000
5500
6000
6500
7000
To Nelson P.C. 3 1/2 Miles
Road
NELSON 3 MI.
HWY 6
3000
3500
4000
4500
Gravel
Creek
Gold Creek
Nelson Diorite
ROYAL IRISH #3
ROYAL IRISH #1
ROYAL IRISH #2
ROYAL IRISH
LOU
LOU #1
BLACK WITCH
KEY 2
KEY 3 FR.
KEY 1 FR.
GOLDEN STAR
STAR-LIGHT
TOUGH NUT
PAR 2
PAR 3
PAR 1
PAR
Camp
EVENING
JOHN
T.N.
Hose Line
MORNING
SILVER SHEAR
Palmers Trail
Pump
CALGARY
CUMBER-LAND
PACIFIC
DELIGHT
Water Intake
STARLIGHT FR.
ATLANTIC
JIM CROW
IROQUIS SHEAR
OLLIE
DANDY
CROWN
GRANTS
SILVER KING
KOOTENAI BONANZA
TOAD MTN.
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5074 MAP #1
THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIV
Box 490 GRAND FORKS B.C.
PALMER OPTION PROPERTY
Nelson M.D.
LOCATION MAP
C. Clarkson, P.Eng. Sept. 1974
Scale: 1" = 1500'
0 750 1500 1250 3000 3750
FEET
5074 m1



DIAMOND DRILL HOLE NO. 1
VERTICAL SECTION
SCALE: 1 INCH = 20 FEET

DIAMOND DRILL HOLE NO. 2
VERTICAL SECTION
SCALE: 1 INCH = 20 FEET

DIAMOND DRILL HOLE NO. 3
VERTICAL SECTION
SCALE: 1 INCH = 20 FEET



THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION
GRAND FORKS, B.C.
SCALE: 1 INCH = FEET

TITLE PALMER PROPERTY NELSON B.C.
W.O. 1577
NO.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5074 MAP #2

PALMER PROPERTY
NELSON B. C.
DIAMOND DRILL HOLE LAYOUT
SCALE: 1 INCH = 40 FEET
AUGUST 1974
J. R. Leaker

5074 M2