

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
DATE RECEIVED MAR 05 1996

BURBRIDGE LAKE PROPERTY  
93L/10  
OMINECA M.D.  
D. GROOT LOGGING LTD.  
SMITHERS, B.C.  
D.C. PLEKASH - GEOLOGIST - FEBRUARY, 1996

54° 43'  
126° 43'

FILMED

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

24,335

PART 1 OF 2

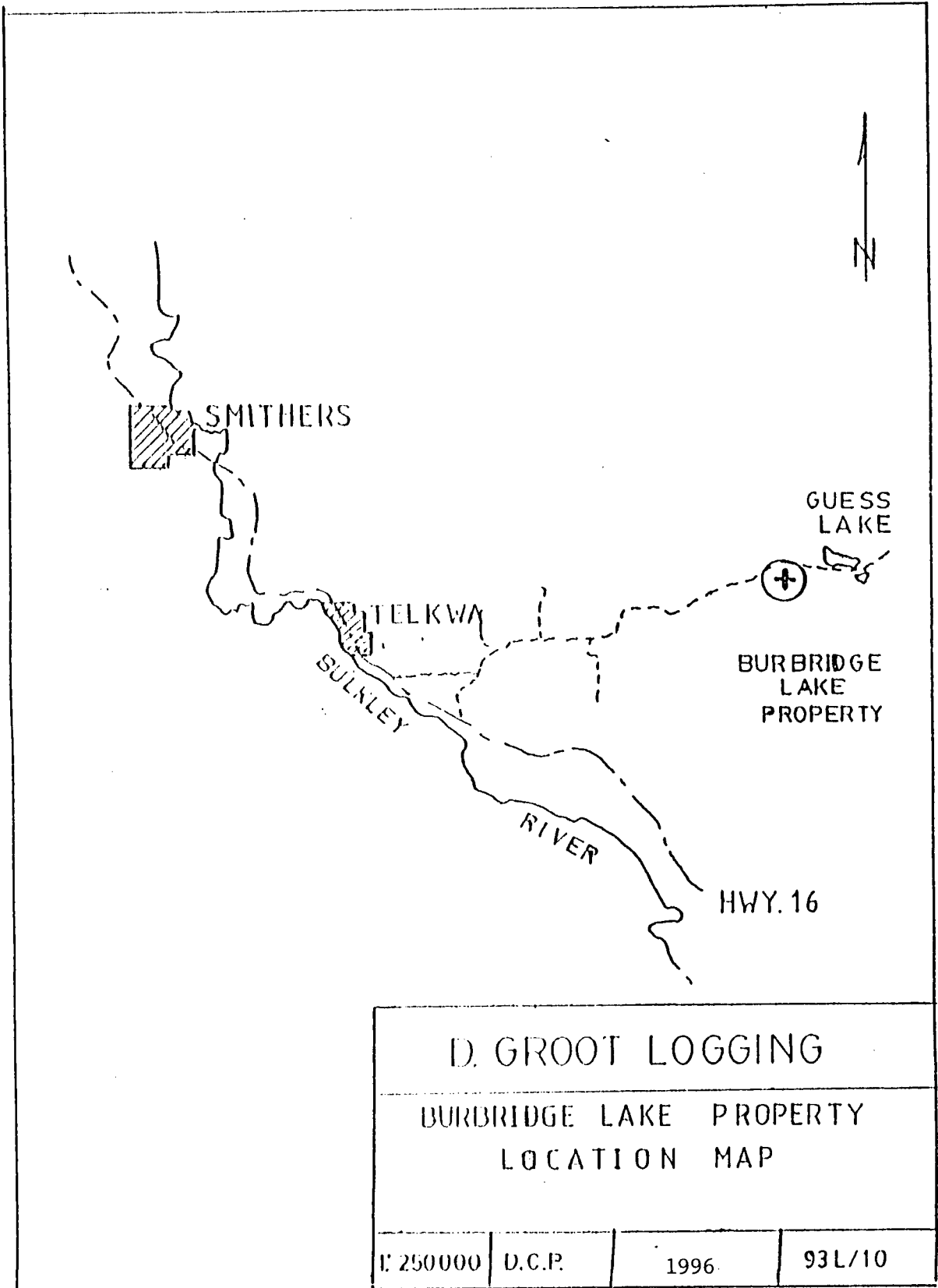


TABLE OF CONTENTS

	Page
Summary.....	1
Location and Access.....	2
History.....	2,3,4
Regional Geological Setting.....	5
Property Geology.....	5
References.....	6
Conclusion.....	7
Qualification.....	8

Figures

Location Map	Front Page
Burnbridge Lake and Environs Surface Plan.....	#1 Pocket

Appendices

Appendix A.....	Cost Statement
Appendix B.....	Claim List

BRITISH COLUMBIA  
OMINECA M. D. - 93 / L  
BURBRIDGE LAKE PROPERTY

SUMMARY:

Between August 1995 and October 1995, D. Groot Logging Ltd. of Smithers, B.C. did work on the Burbridge Lake Property. 20.5 KM of line cutting was done on the June #1 mineral claim, H.B.#4 mineral claim and the H.B.#6 mineral claim. This work was done by Hobson Contracting Ltd. of Smithers, B.C.

S.J. Geophysics Ltd. of Delta, B.C. were brought onto the Burbridge Lake Property to conduct an I.P. and Mag. VLF. survey over the above claim area where the line cutting had been done. Results of the survey were recieved in January and February of 1996.



D.C. Plecash  
Geologist

#### LOCATION AND ACCESS:

The Burbridge Lake Property is located in West Central, British Columbia at latitude 54° 43' North and longitude 125° 45' West. The main area of interest is located to the East and South of Burbridge Lake.

The property is accessible via Woodmere Road, which leaves Highway 16 approximately 1.6 km South of the town of Telkwa, B.C. and then up Woodmere Road for 9.5 km to the Deception Lake Forestry Access Road. Travel up to Deception Lake Forestry Access Road for 11.3 km to Burbridge Lake.

#### HISTORY:

The Burbridge Lake Property was staked by Mel Chapman in 1969 after laying undeveloped for numerous years. In 1973 the property was optioned by Hudson's Bay Oil and Gas Company Limited, who conducted a program of geological mapping, a ground magnetometer survey, geological soil sampling and 366 meters of Diamond Drilling in three (3) holes. The option agreement was then terminated due to unfavourable results.

In 1974 Cities Service Minerals Corporation acquired a working option on the property and completed an induced polarization survey using McPhar P660 frequency domain instrument. From results of this induced polarization survey and the previous magnetometer survey, the company opted to drill 485M of Diamond Drilling in two (2) holes. This work failed to encounter any significant mineralization of any magnitude therefore the working option was terminated.

In 1976 Asarco Explorations Company of Canada Limited did a cursory examination of the structural and stratigraphic setting of the area of mineralization. In the reviewing of all available data, it was suggested that a dip to the south-west, with the host diorite intrusion occurring as a sill within the volcanic succession. With Hudson's Bay Oil and Gas Company Limited and Cities Service Minerals Corporation Drill programs set up, that all of the Diamond Drill holes were inclined between 45° and 50° to the south, the Diamond Drill holes were close to being parallel to, rather than crosscutting the zone of mineralization. On this basis, an option agreement was drawn up to do work on the Burbridge Lake Property. In 1977 Asarco Explorations Company of Canada laid out a Diamond Drill program to drill six (6) holes. The results confirmed that the diorite is a sill like body dipping to the southwest. There was not enough

commercial mineralization in the core to continue working on the property. Therefore the work option was terminated.

In 1980, D. Groot Logging Ltd. of Smithers, British Columbia reviewed all of the pertinent data from previous work done on the Burbridge Lake property, and came to the conclusion that there could be a possibility of increased amounts of copper and molybdenum in the stockwork to the west of the Diamond Drill holes that Asarco Explorations Company of Canada had put in. A bargain was made to get control of the property from Mr. Mel Chapman of Smithers, B.C., and then work commenced. A detailed geochemical survey program was conducted over four (4) areas of the property. Four (4) Diamond Drill holes were drilled. The first three (3) to see if the diorite sill increased in mineralization to the west and also a westerly extension of the sill. The results showed that the mineralization did not increase above the previous encountered amounts and also that the diorite sill is cut off to the west between Diamond Drill hole 80-2 and 80-3, by a fault. The fourth Diamond Drill hole was drilled on the eastern part of the property above Camp Lake. This drilling was done to try and encounter some small copper, silver veins that appeared on surface. This Diamond Drill hole did not pick up any vein extensions at depth. Some cat trenching and hand trenching was also done over a few areas of the property. Nothing of any significance appeared in any of the trenching.

In 1981 D. Groot Logging Ltd. decided to Diamond Drill in an area where the previous year geochemical program came up with some high anomalies in two different zones. Five (5) Diamond Drill holes with a total of 491.2 meters were drilled. The first three (3) Diamond Drill holes were put in on the southwest part of the property on the strength of the high soil sample readings that were obtained from the 1980 field work. No significant mineralization was encountered in any of these Diamond Drill holes. The two (2) other Diamond Drill holes were drilled in the central part of the property, southeast of Burbridge Lake. These Diamond Drill holes were also drilled to check the area of high anomalies of copper and molybdenum, that were obtained in the 1980 field work. No significant mineralization was encountered in either of these Diamond Drill holes. In 1991 D. Groot Logging Ltd. decided to Diamond Drill three (3) holes in the immediate area south of Asarco's Exploration Company Limited Drill hole 77-6 to explore the possibility of more

mineralization occurring at depth, as the diorite sill dips into the ground to the south at a dip of 20° to 40°. Three (3) Diamond Drill holes were completed for a total distance of 670.87M. The results of the three Diamond Drill holes showed that the diorite sill is still in place at depth and that as you go deeper, the rock formations are more defined at the upper and lower contacts. The appearance of iron pyrites seems to increase at depths but the copper and molybdenite lessens at depth. The result also shows that the diorite stock in an area of fracturing and veining with clay-chlorite, quartz-calcite alteration now shows no visible amounts of copper and molybdenum to the naked eye as previous occurred in the other Diamond Drill holes that intersected the stock work at a higher elevation.

D. Groot Logging Ltd. now decided to Diamond Drill in the areas of the high magnetometer readings that Hudson's Bay Oil and Gas Company Limited found in their 1973 geophysical survey. No other company attempted to drill these zones even though some coincide with the high geochemical anomalies found in the same areas.

#### REGIONAL GEOLOGICAL SETTING:

The Burbridge Lake property is situated along the western margin of the Babine Range, within a block of uplifted rhyolite to andesite volcanic rocks of the Jurassic Age. These rocks are part of the Telkwa formation of the Hazelton group and have been subjected to regional green schists metamorphism, overlain by well bedding marine sediments and red tuff, breccias, epiclastics, and andesitic flows. With the predominant north east and north by northwest trending linears intersecting in the vicinity of the Burbridge Lake property. This usually represents high angle faults.

#### PROPERTY GEOLOGY:

The Burbridge Lake property is underlain by rhyolitic dacite and andesite tuffs and flows of the Telkwa formation. Their rocks have been regionally metamorphosed to the green schist facies and are strongly foliated in places, with foliation occurring along bedding planes. The general trend of the foliation is to the northwest with variable dips to the southwest. Eutaxitic textures are common in the more siliceous crystal and lapilli-tuff units. (By. D.G. MacIntyre)

In the vicinity of Burbridge Lake, the Telkwa formation is intruded by a sill like complex which is between 150M and 200M thick and at least 1500M in length. The upper part is porphyritic and approaches a granodiorite in composition. Towards the bottom of the contacts, the sill becomes more mafic-rich with a well developed diorite texture. The sill appears to be foliated and metamorphosed to the same intensity as the volcanic country rock, which suggests that all of the rocks in the immediate area are of the same age.

e.g. Jurassic.



REFERENCES:

- |  |      |
|--|------|
| A.D. Schmidt, P. Eng. Hudson's Bay Oil and Gas Company Limited   | 1973 |
| D.A. Silversides, Geologist, Cities Service Minerals Corporation | 1974 |
| D.G. MacIntyre, Geologist, Asarco Explorations Co. of Canada     | 1977 |
| D.C. Plecash, Geologist, D. Groot Logging Ltd.                   | 1980 |
| D.C. Plecash, Geologist, D. Groot Logging Ltd.                   | 1981 |
| D.C. Plecash, Geologist, D. Groot Logging Ltd.                   | 1991 |
| D.C. Plecash, Geologist, D. Groot Logging Ltd.                   | 1995 |

CONCLUSION:

The results of the I.P. and Mag. VLF. survey shows that the area has a potential of a mineralized zone that goes from a shallow horizon to a deep horizon. In the northwest and the west part of the surveyed group.

There will be more ground staked and a further I.P. and Mag. VLF. survey done in the very near future to help pinpoint the areas of interest for a forth coming Diamond Drill program. The results of the survey is shown on the attached report from S.J. Consultants Ltd.




D.C. Plecash  
Geologist

STATEMENT OF QUALIFICATIONS:

I, Donald C. Plecash of 3869, 12th Avenue, Box 2694, Smithers, B.C. certify that:

- 1) I attended Queens University, Kingston, Ontario from September 1947 to May 1950.
- 2) I was employed by Yale Lead and Zinc Mines of Ainsworth, B.C. as a mine Surveyor, Junior Engineer, Junior Geologist from 1950 to 1956.
- 3) I was employed by Canam Copper Mines of Hope, B.C. as a Mine Engineer and Mine Geologist from 1956 to 1957.
- 4) I was employed by Reeves MacDonalld Mines Ltd. of Remac, B.C. as a Mine Engineer, Mine and Exploration Geologist from 1957 to 1969.
- 5) I was employed by Norex Uranium of 605-535, Thurlow St., Vancouver, B.C. as Exploration Geologist and Manager from June 1969 to October 1969.
- 6) I was employed by Nadine Explorations Ltd. of 1005-789, West Pender St., Vancouver, B.C. as Mine Engineer and Mine Geologist then Mine Manager from October 1969 to September 1973.
- 7) I was employed in the Sales Industry from September 1973 to April 1980.
- 8) I was employed by D. Groot Logging Ltd. of Box 520, Smithers, B.C., as an Exploration Geologist from May 1980 to June 1984.
- 9) I have been self employed in the Mining Industry as Engineering and Geology services where I have worked from Exploration to Mine Product to the present time.

  
D.C. PLECACHE


BURBRIDGE LAKE

1991

COST STATEMENT

S.J. GEOPHYSICS LTD.	\$ 26,728.86
S.J.V. CONSULTANTS LTD.	\$ 2,996.00
S.J.V. CONSULTANTS LTD.	\$ 428.00
HOBSON CONTRACTING LTD.	\$ 13,161.00
D.C. PLEASH - GEOLOGIST, ETC.	
SERVICES 1995	\$ <u>1,500.00</u>

\$ 44,813.86



D.C. PLEASH  
GEOLOGIST

# SJ GEOPHYSICS LTD.

11762 - 94TH AVENUE,  
DELTA, B.C. CANADA V4C 3R7

PHONE (604) 582-1100  
FAX (604) 589-7466

25-Oct-95

**Dick Groot Logging Ltd.**  
P.O. Box 520  
Smithers, B.C.

## Invoice 13495

Days	Project			/Day	
	October 3 to 18, 1995				
	<b>IP and Mag VLF Survey</b>				
	<b>Burbridge Lake Property</b>				
	<b>IP Survey</b>	Persons			
2.50	Mobilization/demob days	2	75%	\$1,325.00	\$2,484.38
3.00	Production days	4		\$1,575.00	\$4,725.00
6.00	Production days	5		\$1,750.00	\$10,500.00
	<b>Mag VLF Survey</b>				
2.50	Production days System #1	1		\$650.00	\$1,625.00
2.50	Production days System #2	1		\$550.00	\$1,375.00
1.00	Standby day System #1	1	75%	\$650.00	\$487.50
1.00	Standby day System #2	1	75%	\$550.00	\$412.50
1.00	No charge day				
	Expenses mob/demob Cost + 10%				\$2,314.87
16.00	Truck Rental			\$66.00	\$1,056.00
				<b>Sub Total</b>	\$24,980.25
				GST	\$1,748.62
				<b>Total Invoice</b>	<b>\$26,728.86</b>

#R119313468

Please make cheque payable, within 14 days of invoice, to SJ Geophysics Ltd. at the above address. Interest calculated at the rate of 1.5% per month on overdue accounts.

Yours Sincerely



Joyce Visser

*Paide  
CRH 22984  
Nov. 10, 1995  
js*

# S.J.V. CONSULTANTS LTD.

11762 - 94TH AVENUE,  
DELTA, B.C. CANADA V4C 3R7

PHONE (604) 582-1100  
FAX (604) 589-7466

25-Jan-96


D.Groot Logging Ltd.  
1235 Main Street  
P.O. Box 520  
Smithers, B.C., Canada

## Invoice 31196

Sets	QTY	SQ FT	/unit	
				<b>Burbridge Lake Property</b>
				<b>Report and Interpretation</b>
				\$2,800.00
				<b>Sub Total</b>
				<b>\$2,800.00</b>
				#R104876404 GST
				\$196.00
				PST on \$0.00
				\$0.00
				<b>Total Invoice</b>
				<b>\$2,996.00</b>

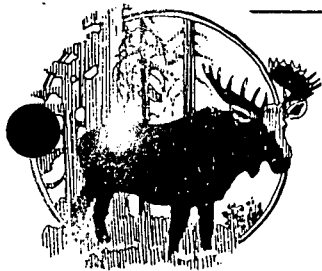
Please make cheque payable, within 14 days of invoice, to S.J.V. Consultants Ltd. at the above address. Interest calculated at the rate of 1.5% per month on overdue accounts.

Yours Sincerely



Joyce Visser





# INVOICE

## Hobson Contracting Ltd.

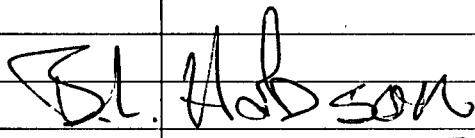
Box 2787 Smithers, B.C. V0J 2N0 Phone: 846-9165 Fax: 846-9555

Invoice N<sup>o</sup> 0227

to: D.GROOT LOGGING LTD.,  
BOX 520  
SMITHERS, B.C.,  
V0J-2n0  
Attn: Dick Groot

Date OCTOBER 4 1995

G.S.T. #R120964986

RE: Line Cutting On the Woodmere Road, south east from		
Smithers, B.C.		
20.5 km at \$550/km		\$ 11,275.00
Plus surcharge for very thick bush on lines \$50/km		\$ 1,025.00
plus 7% G,S,T,		\$ 861.00
<b>TOTAL OWING</b>		<b>\$ 13,161.00</b>
THANK YOU VERY MUCH FOR THE WORK		
Yours Sincerely,		
		
B.L. HOBSON		
H 22972		
10-10-95		



D.C. PLEASH  
GEOLOGICAL SERVICES  
P.O. BOX 2694  
SMITHERS B.C. V0J 2N0

DECEMBER, 1995

IN ACCOUNT WITH:

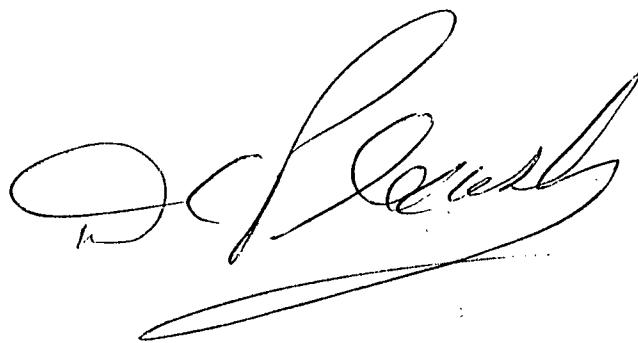
D. GROOT LOGGING LTD  
P.O. BOX 520  
SMITHERS B.C. V0J 2N0

GEOLOGICAL SERVICES @ BURBRIDGE LAKE  
PROPERTY 1995-

\$ 1500 <sup>00</sup>/<sub>xx</sub>

TOTAL

\$ 1500 <sup>00</sup>/<sub>xx</sub>



12.05.95

# 22994

CLAIM LIST:

NAME	RECORD NO.	DATE RECORDED
SUMMIT #1	59464	
SUMMIT #2	59465	
SUMMIT #3	112279	
SUMMIT #4	112280	
SUMMIT #7	112283	
SUMMIT #8	112284	
H.B. #4	126754	
H.B. #6	126756	
H.B. #21	126287	
H.B. #22	126288	
H.B. #23	126289	
H.B. #1 FRA	126290	
H.B. #2 FRA	126291	
H.B. #3 FRA	126292	
H.B. #4 FRA	126293	
MAY (9 UNITS)	2792	MAY 16, 1980
JUNE #1 (12 UNITS)	2833	JUNE 23, 1980
JUNE #2 (20 UNITS)	2834	JUNE 23, 1980

FEB 1  
15 UNITS

FEB 2  
4 UNITS

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

24,335

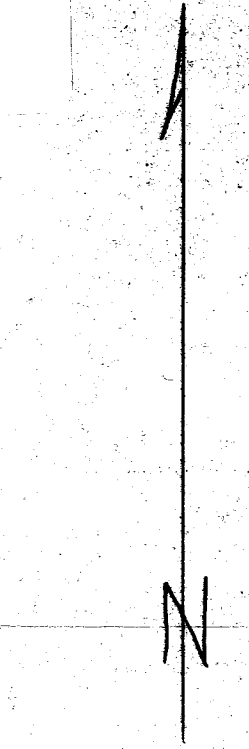
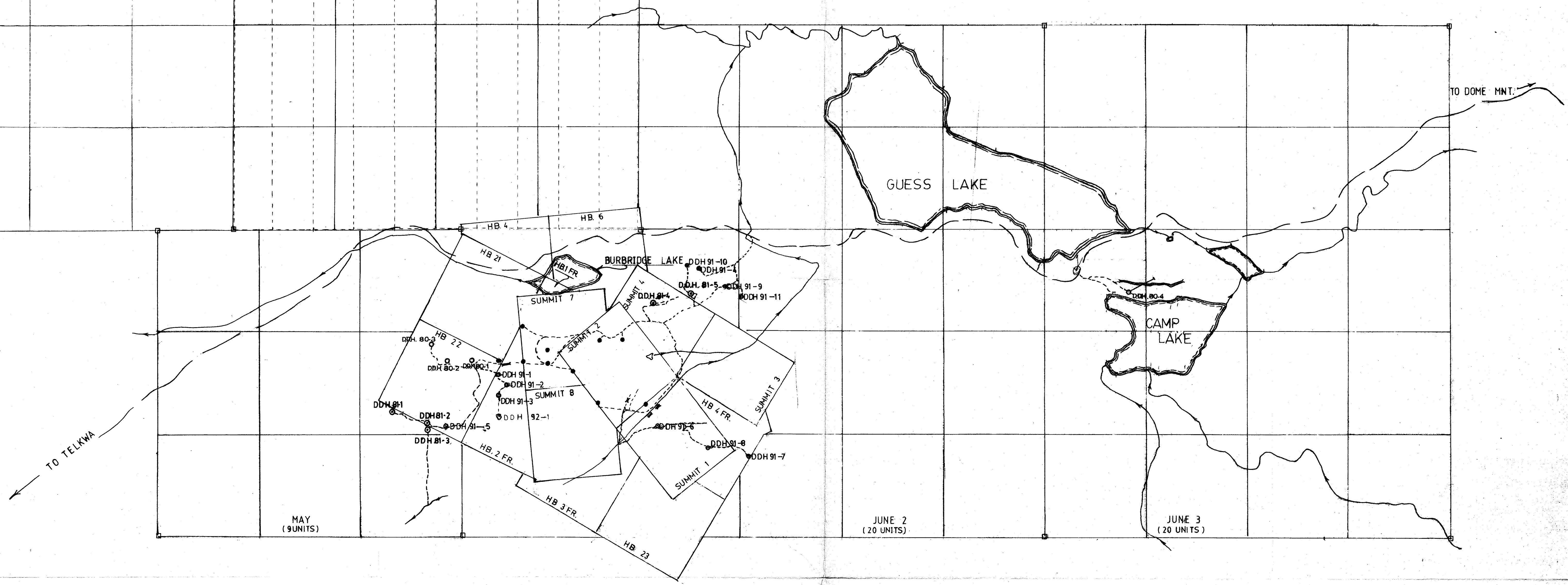
PART 1 OF 2

JUNE  
(12 UNITS)

MAY  
(9 UNITS)

JUNE 2  
(20 UNITS)

JUNE 3  
(20 UNITS)



- LEGEND**
- MAIN ROAD
  - - - PROPERTY ROADS
  - ~ CREEKS
  - OLD DD HOLES
  - 1980 DD HOLES
  - 1981 DD HOLES
  - 1991 DD HOLES
  - - - LINE CUTTING & GEOPHYSICS

D. GROOT LOGGING LTD.  
MINERALS EXPLORATIONS  
SMITHERS. BRITISH COLUMBIA

BURBRIDGE LAKE  
&  
ENVIRONS  
SURFACE PLAN

SCALE: 1:50,000 DATE: 1996  
DWN: D.C. PLEASH