

120083

PROGRESS REPORT

ON

PLACER LEASES (29)

NO.'S P11748, P11653 - P11680 INCL.

CERT. NO. 400P

BY

L.J. SIEGA, P.GEOL.

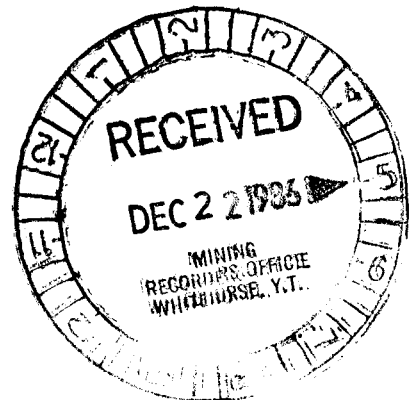
NOVEMBER 21, 1986

DATES: AUGUST 2 - 9, SEPTEMBER 1 - 5, 1986

PLACER SHEET NO. 115 - G-6

LOCATION: 188 miles N.W. of Whitehorse
along the Alaska Highway to M.P. 1104
thence 10.5 miles S.W. along
Burwash Creek.

LATITUDE 61°20' LONGITUDE 139°27'



This report has been examined by
the Geological Evaluation Unit under
Section 41 Yukon Placer Mining Act
and is recommended as allowable
representation work in the amount
of \$14,400.00.

S. R. M. O'Neil

for Chief Geologist, Exploration and
Geological Services Division, Northern
Affairs Program for Commissioner of
Yukon Territory.

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SUMMARY

Burwash Creek, in the Kluane District, Yukon Territory had a reported production of 25, 212 ozs. during the period 1945 - 1969. All of the gold production may not have been reported.

The creek is a swift mountain stream where canyons especially, acted as large natural sluice boxes through which great quantities of glacial material were washed down with partial elimination of sand and clay and the concentration of coarser components and placer minerals.

This group of 29 claims has the last interesting mineable canyon on Burwash Creek. The historical data, surface sampling, drilling and the results of a most recent sluiced sample warrants putting this property into production.

From a sluiced sample of 154 bank yds.³ 2.6 ozs. of gold was recovered. Including statistical data the auriferous value of the said gravels are in the order of:

0.017 to 0.019 oz/y³ (crude)

or

\$9.45 to \$10.64/yd.³ (crude)

Note: Au. value @ \$560.00/oz.

The estimated operating costs per yd.³ is \$3.20. The writer anticipates significantly higher values in deeper sections of the channel which are known to exist. More probably, the sluiced sample was on a remnant bench since it encountered bedrock (andesite with disseminated pyrrhotite) at seven feet.

The mineable reserves are in the order of 2 million cu. yds., one half of which will be mined in the canyon proper. On a projected production of 50,000 yds.³ per month, initial mining of the canyon complex will sustain a viable operation for five to six years. An extended operation below and above the canyon is subject to additional exploration and mining results.

INTRODUCTION

Burwash Creek, in the Kluane Lake map area, adjoins the Elias mountains of the southwest Yukon. A major trunk valley (Shakwak Trench) containing most of Kluane Lake transects the area from southeast to northwest and is an old prospect route now followed by the Alaska Highway.

Around the turn of the century (1903) the Jacquot brothers (placer miners) established Burwash Landing. The better access provided by the Alaska Highway enhanced activity by prospectors and mining companies.

In 1945 the Burwash Mining Co. mined from the lower canyon of Burwash Creek to the mouth of the Tatamagouche (3-1/2 miles). Total production from 1948 to 1960 inclusive, taken from the report on Emergency Gold Mining Assistance, was nearly 10,700 ozs. of gold or an average of 823 ozs. per year. Since then sporadic successes and failures have continued to this day but no reliable records on recent activities is available. (See Fig. I.)

PROPERTY, LOCATION, ACCESS

The property consists of twenty-nine placer claims (P11748, P11653 to P11680 incl.) grouped under Certificate No. 400P. The claims are located near the headwaters of Burwash Creek or nine miles S.W. of the Alaska Highway and 188 miles N.W. of Whitehorse. From M.P. 1104 access to the property is along a rough rocky trail parallel to Burwash Creek for a distance of 10-1/2 miles.

Burwash Creek (partially glacial fed) is a typical mountain stream with an extremely variable flow and in time of high water or heavy rainfall becomes a dangerous torrent. The lower end of the claims (P11748) lie within the 4500' contour level whereas P11680 adjoins the

Kluane National Park boundary and for the most part is within the 5000' contour level. In general, the lower and upper one third of the claims length (2.75 miles) are in a wide (300' \pm) braided ever shifting channel. These wide drift covered areas are separated by a steep winding canyon draped with glacial material of the Burwash Uplands. Bedrock is not visible in the canyon walls and near the bottom impenetrable thickets of alders, willows and bunchgrass thrive on moisture laden slopes.

The nearest comfortable roadhouse with outside communications is located at Burwash Landing M.P. 1093 at Kluane Lake. (See Fig. I.)

PHYSIOGRAPHY AND GENERAL GEOLOGY

The Kluane Lake map area (1177A) contains two major physiographic divisions. These include the Yukon Plateau to the N.E. and the St. Elias Mountains in the S.W. separated by the Shakwak Trench. The front ranges of the Elias Mountains (Kluane Ranges) adjoin Burwash Creek and the Burwash Uplands.

The information on the glacial history of this area has been compiled by assuming three progressively less extensive ice-sheets. (J.E. Muller, Memoir 340, 1967). The Nisling (oldest) and Ruby ice-sheets advanced N.W. across the Burwash area whereas the St. Elias was restricted to the headwaters of Burwash Creek.

Locally, a distinct physiographic feature of the Nisling advance is the glacial upland tract along the extreme N.E. portion of the claims area and extending along the central portion of Burwash Valley.

Mineral deposits known to date include: placer gold, copper, nickel, platinum sulphides associated with ultra basic intrusives, native copper in volcanic sediments and scheelite and molybdenite in granitic rocks. Presently, only placer gold is being produced and the total production to 1960 is estimated to be in the neighbourhood of 30,000 ozs. This production has been mainly from recent and probably some Pleistocene or Tertiary stream gravels mined to bedrock along narrow canyons.

BURWASH CREEK - STATISTICAL DATA

Between 1904 and 1945 mining activities on Burwash Creek consisted of small sniping operations. In 1945 the Burwash Mining Co. Ltd. (H. Besner) successfully mined from the lower canyon past the mouth of the Tatamagouche (3-1/2 miles). The recorded production data is as follows:

<u>Period</u>	<u>Volume - yds.³</u>	<u>Gold - oz.</u> <u>Crude 87%</u>
1945 - 59 incl.		approx. 17,000
1960 - June 9 - Oct. 10 Two shifts	expected 70,000	1,430
1961 - June 4 - Oct. 5	78,000	1,500
1962 - June 21 - Oct. 22	60,000	1,637
1963 - June 6 - Oct. 10	50,000	1,060
1964 - ?	?	946
1965 - ?	50,000	695
1966 - ? late Sept.	?	695
*1967 - ?	?	325
1968 - ?	?	342
1969 - ?	?	800

*NOTE: This production is taken from 500' past the junction of Burwash Creek and Tatamagouche Creeks.

The production statistics quoted here are those only of the Burwash Mining Co. Ltd. as recorded in G.S.C. Memoirs. The words "approx. and about" are quoted in all the references in regard to volume and crude

ozs. respectively. From 1969 to 1986 at least six different groups have mined tailings and virgin ground between Tatamogouche and Johnson Canyon. These past mining activities included minor successes and failures coupled with gross mismanagement and no recent reliable data is available at this time.

In summary, the statistical data for the years 1960 to 1967 indicate an average yearly production of 58,300 cu. yds. (say 60,000). The weighted average of 350,000 yds.³ is 0.0190 oz./yd.³ and 15 ozs. of Pt. was reported in 1963.

Additionally, using the total gold production for the years 1945-59 incl., 1964, 1968-1969 incl., and introducing an average yearly production of 60,000 cu. yds./yr. the average values on a production of 1,080,000 yds. would be as follows:

<u>Volume yds.³</u>	<u>Av. Crude ozs.</u>	<u>Av. oz./yd.³</u>	<u>Value/yd.³</u>
1,080,000	19,783	0.0180	\$10.08

NOTE: Av. @ \$560.00/oz.

The writer was in Burwash in 1973 when Besner (Burwash Mining) was operating and is acquainted with the productive capacity of his machines (3/4 yd. - 22B, 2 old D-8's).

EXPLORATION: GROUP NO. 400P

Group Certificate No. 400P covers 29 placer claims at the head of Burwash Creek. These claims cover the last canyon to be mined on the said creek. Especially the canyons acted as large natural sluice boxes, through which great quantities of glacial material were washed down, with partial elimination of sand and clay and the concentration of coarser components and placer minerals. The canyon is littered with volcanic boulder gravel (basalts and andesites), sandstone, conglomerate, gravel, shale, and a few large (10'x12') granite (Nisling?) remnant boulders.

In the summer of 1985 the owners contracted to drill the property and six holes or a total of 218 feet were sampled. The contracted equipment proved most unsatisfactory and the recoveries of the tested material were not acceptable in view of the fact that surface sampling provided more colors than did drill cuttings. However, drilling has provided critical data in regards to clay bands and plausible bedrock and these results will and have directed future exploration activities. (See Report 15/6/85 L.J. Siega.) One interesting aspect of the drilling indicates the presence of a thick (20' +) blue green fine silty felty clay on claim No.'s 11657 and again on 11667. The clay bed on these claims (minor colors on top) are near the mouth and the upper end of the canyon (some 400' diff. in elev.) and are not present or identified in the canyon proper.

In August of 1986 the owners graded the road from Tatamagouche to the claims area and rebuilt washouts along the canyon as well as prepare sampling sites. In addition to dozens of panned samples, 5 yards of near surface material was processed through the Dutchman concentrator. Sufficient colors were noted such that Duke River Mining (J. Willy) was contracted to move their equipment (D'7, 690B, and sluice box) into the canyon for a sluicing test.

The 30' sluice was set up about half way up the canyon (100'S. of post #1, Cl. No. 11662) to process material along a backwash or meander of the creek. From a bucket count and measured excavation 154 cu. yds. of gravel was sluiced. Prior to heavy stream seepage filling the excavation a brown rusty sandy gravel (approx. 1 ft.) was noted above the pale green andesite (with disseminated pyrrhotite) bedrock. Several near bedrock samples were panned and 4-6 good colors per pan were noted. After one hour of sluicing and panning material from the second riffle (and subsequently the same riffle) the results appeared most encouraging. Nuggets (1/4" to 1/8" - 15%) and medium to fine (-10 to -40 mesh -70%) gold were noted. The box was stripped, washed clean and the new mats were burn't and panned clean. Heavy minerals in the concentrate include: magnetite with minor amounts of garnets, hematite, native copper and gold specks amalgamated with mercury. Small globules of mercury were also noted in the concentrates. (Old prospectors evidence.)

The sluiced area (on one side of the canyon) encountered bedrock at 7 feet. It is not known whether this depth to bedrock would persist across the full creek width. Not likely, in view of the fact that drill holes in the canyon indicate depths between 28 and 40 feet. A drill hole 200' N. of the sluiced area went to 40 feet. Quite conceivably, the test was on a remnant bench of the main channel or a steep waterfall is nearby. In either case it is interesting to speculate on what auriferous values may be in plausible deeper sections.

CONCLUSION AND RECOMMENDATIONS

The historical production, drilling, surface sampling and in particular the sluice test warrants putting this property into production. One hundred and fifty-four cubic yds. of gravel was sluiced and 2.6 ozs. of free gold (purity 87%) was recovered.

Reasonable access (preferably 4x4) and a plentiful gravity fed water supply (4000 G.P.M.) is assured during the normal (3-4 months) operating season.

Initial mining will commence at the mouth of the canyon and sometime later be extended below and above the canyon. On the basis of an average projected mining width of 100 feet to a depth of 36 feet the mineable reserves are a minimum 2 million cu. yds. Approximately one-half of these reserves would be mined within the canyon complex. To speculate on mining full widths (300' +) of the creeks glacial gravels (considerably higher reserves) below and above the canyon is premature and requires further exploration as do the Burwash Uplands gravel that drape the canyon walls.

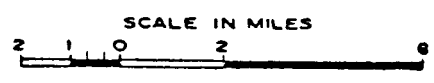
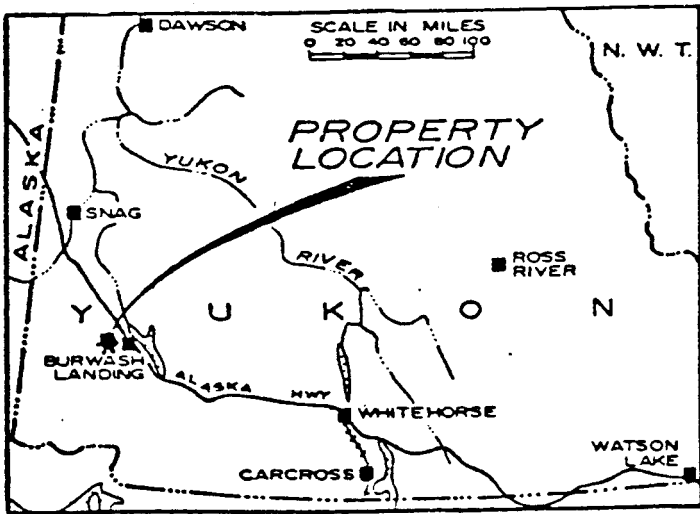
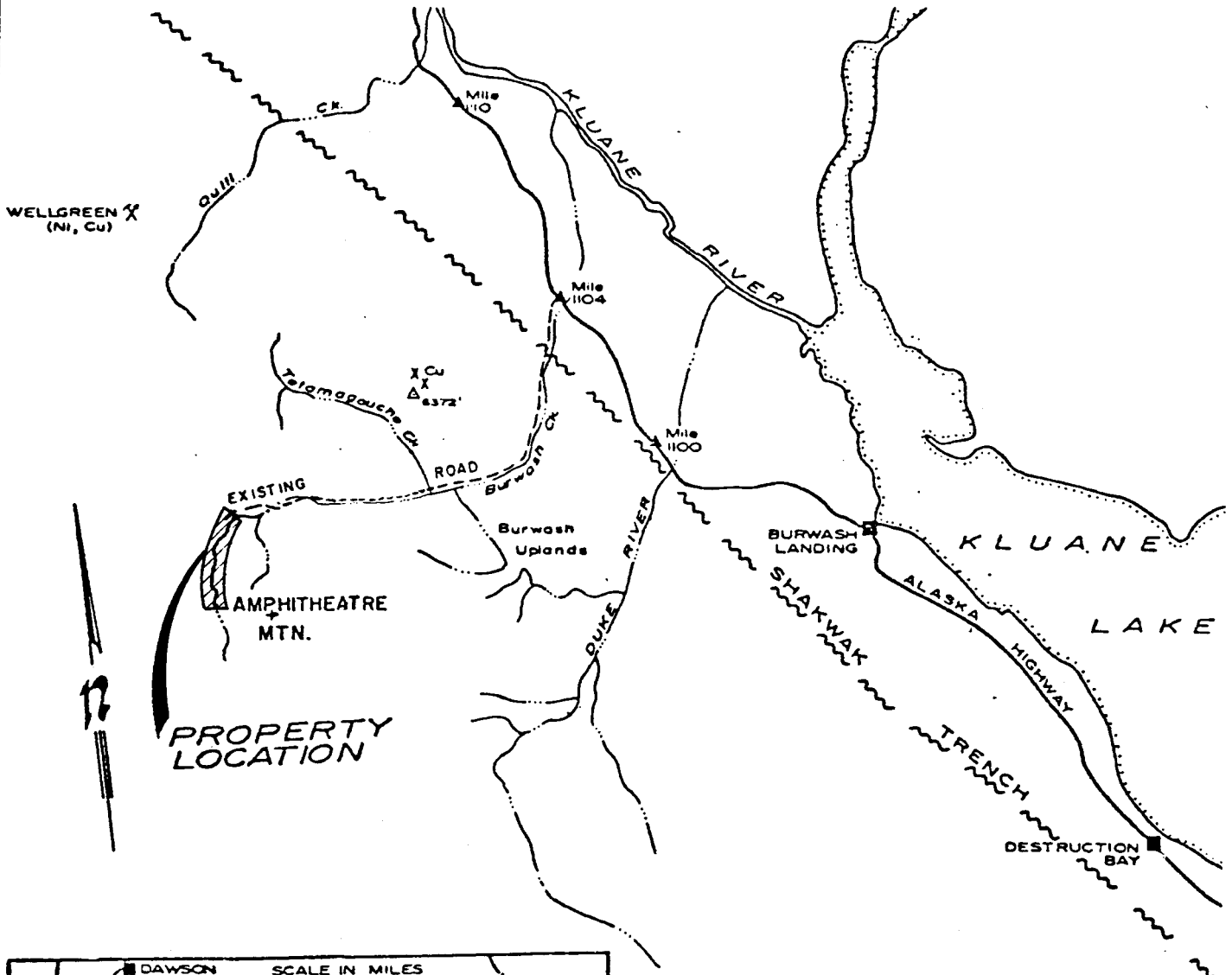
On a proposed production schedule (83% working efficiency) of 200,000 yds.³ per season mining the canyon will take 5 to 6 years. The cost estimates of the recommended program are listed below.

ESTIMATED COSTS/MONTH (1987)

1.	245 Backhoe	26,000.00
2.	D'8K - Dozer	10,000.00
3.	980 Loader	10,000.00
4.	Wages and Supervision	60,000.00
5.	Fuel	25,000.00
6.	Camp Supplies (Food)	12,000.00
7.	Two Pick-ups (4x4)	1,000.00
8.	Service Truck-Tandem	1,000.00
9.	Power Plant	1,000.00
10.	Camp Complex	2,000.00
11.	Mobilization and demobilization	3,000.00
12.	Contingency	<u>9,000.00</u>
		160,000.00

On a projected production of 50,000 yd.³/month the cost of processing 1 yd.³ = $\frac{160,000.00}{50,000}$ = \$3.20.

The noted costs of excavating and mobile equipment is based on relevant industrial rents rates whereas the camp and mobilization is quoted @ \$60,000.00 spread over 3 years or approx. 10¢/yd.³. A contingency of \$9,000.00/m should cover extraneous expenses including processing, dispersal of concentrates, and sluice box repairs.



GROUP CERTIFICATE No. 400P
 29 CLAIMS
 RECORD No's. P11748,
 P11653 - P11680 INCL.

LOCATION MAP

BURWASH CREEK PROPERTY
 YUKON TERRITORY

SCALE
 (AS SHOWN)

FIG. 1

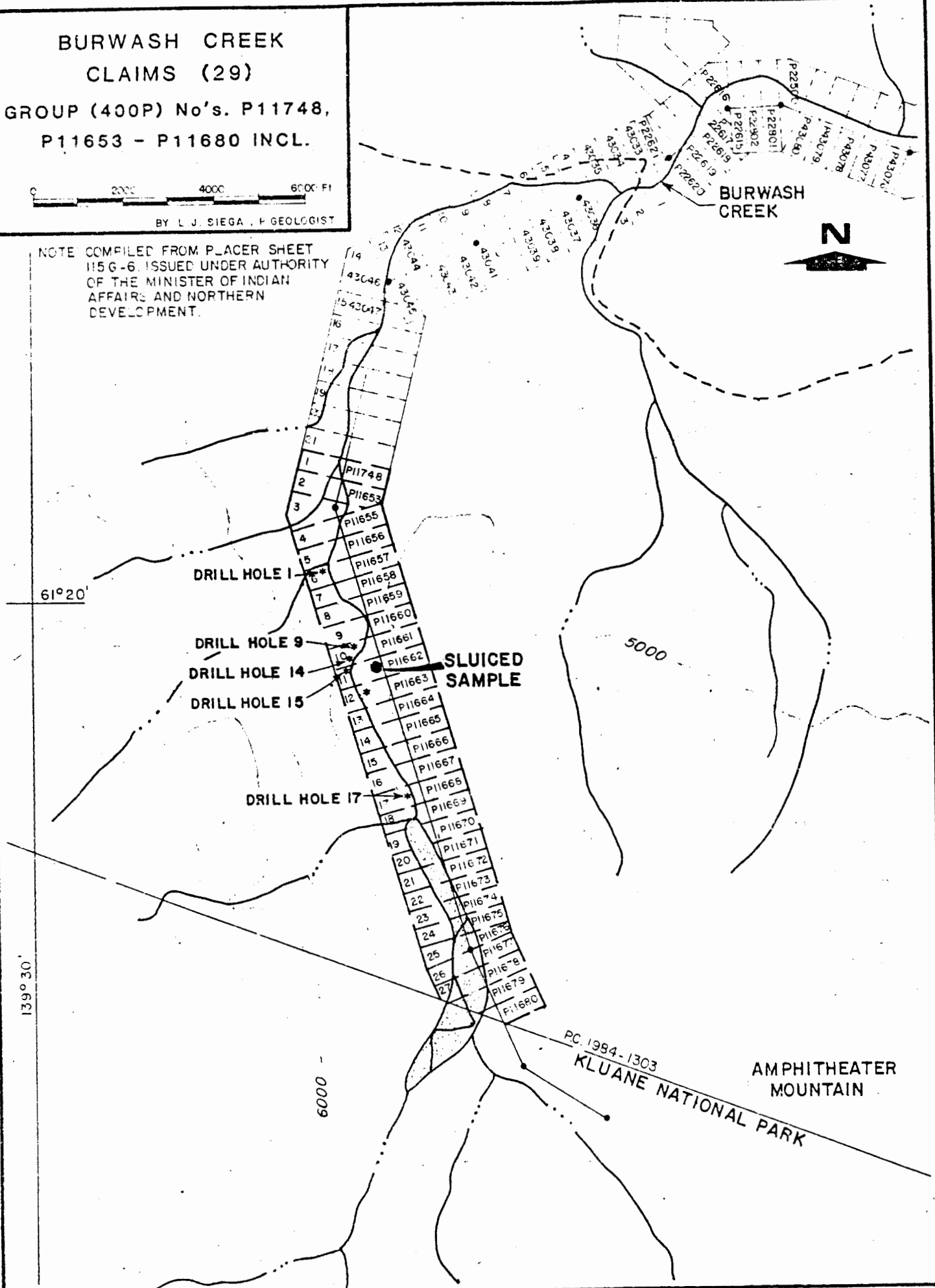
BURWASH CREEK CLAIMS (29)

GROUP (400P) No's. P11748,
P11653 - P11680 INCL.



BY L. J. SIEGA, F. GEOLOGIST

NOTE COMPILED FROM PLACER SHEET
115 G-6, ISSUED UNDER AUTHORITY
OF THE MINISTER OF INDIAN
AFFAIRS AND NORTHERN
DEVELOPMENT.

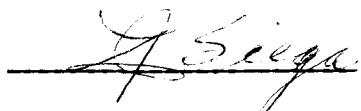


CERTIFICATE

I, LEVY J. SIEGA of St. Albert, in the Province of Alberta, hereby certify that:

1. I am a professional geologist with the office at 24 Grandville Avenue, St. Albert, Alberta, T8N 0T4.
2. I am a registered Professional Geologist in good standing with the Professional Engineers, Geologists and Geophysicists of Alberta.
3. I am a Graduate of Washington State University B.Sc. (1963).
4. I presently have a 50% interest in the reported leases (Group 400P).
5. This report is based on a personal examination and exploration of the property, reports, maps and data from my personal files.
6. Past owner operator of Warburg Coal Co. Ltd. (10 years).
7. I have been working in a consulting capacity for the past 23 years.

Levy J. Siega, P.Geol.



REFERENCES

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1967 paper #6868 D. GRAIG AND P. LAPORTE
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