P NO.: 116 B 2	PLACER PROSPECTUS CONFIDENTIAL OPEN FILE	ASSESSMENT REPORT X X	DOCUMENT NO: 120~~22~~ 029 MINING DISTRICT: Dawson TYPE OF WORK: Geology, Sampling

REPORT FILED UNDER: First Nuclear Corporation

DATE PERFORMED: July - August 1980 | DATE FILED: July 1981

LOCATION: LAT.: 64° 03'N | AREA: Germaine Creek

LONG.: 138° 55'W | VALUE $: N/A

CLAIM NAME & NO.: PL 5301, PL 5324

WORK DONE BY: R.A. Tilsley, First Nuclear Corporation

WORK DONE FOR: Adnac Minerals Ltd.

DATE TO GOOD STANDING:	REMARKS: Germaine Creek

FIRST NUCLEAR CORP. LTD.

GERMAINE CREEK

1981

116 B 2

64°03'N 138°55'W

21/03/86

CLAIMS: PL 5301, PL 5324

SOURCE: summary by B. Lueck of assessment report 12052Y by R. A. TILSLEY

Germaine Creek is located about 15 km west of the Dempster/Dawson road junction. A D8K Cat was used to strip gravels along the creek. Panning and later sluicing was done to evaluate the gravel deposit.
Ten test pits were dug and over 9502 m^3 of material were moved. Sampling of the pits showed that 9 of the 10 were completely barren and only one contained panable gold in small quantities. Trenched bedrock included high grade graphitic schists (80% graphite) and Yukon Group quartz schists.

120024

FIRST NUCLEAR CORPORATION

Placer Test Program

PL5301 and PL5324

Germaine Creek, Yukon Territory

by

Robert A. Tilsley

July - August, 1980

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1. Introduction

The following report deals with a test program carried out by First Nuclear Corporation of Edmonton, Alberta, on two placer gold leases located on Germaine Creek, Yukon Territory.

The work was performed on placer lease numbers PL 5301 and PL 5324, held by Adnac Minerals of Edmonton, Alberta. The placer potential of these leases was evaluated during the course of the test program.

2. Location and Access

Germaine Creek lies about eight miles west of the Dempster/ Dawson junction on the Whitehorse/Dawson highway. The coordinates are 138°55'30" west longitude and 64°03'00" north latitude. The property lies within the Rabbit Creek map sheet, N.T.S. 116B/2. Germaine Creek is about 3 miles in length and flows northward into the Klondike River.

Access to the property is by a well maintained, all-weather road between Whitehorse and Dawson. The property adjoins the all-weather road and a serviceable road to an abandoned Department of Highways construction site affords access to within five hundred feet of lease PL 5324. A bulldozed road was constructed from the Department of Highways site to the south end of lease PL 5301.

3. Climate

The area is characterized by long cold winters and short warm summers. Freeze-up occurs in October and Spring break-up takes place in late May. The winters are cold with temperatures dropping to -35°C for extended periods. Summers are warm with temperatures reaching +30°C. Annual precipitation averages 120 cm with approximately half falling as snow.

4. Physiography

The gently rolling terrain has not been glaciated and a modified residual soil, mantles the bedrock in most areas. In some areas fluvial gravels are the prevalent unconsolidated materials while solifluction modified, residual soils are more prevalent in other areas. Most of the unconsolidated material has been altered in some way by frost action. Permafrost conditions persist throughout the area.

Maximum relief is in the order of 1200 feet, however, most slopes are relatively gradual. The gradient of Germaine Creek averages 4%.

5. Geology

The area is underlain mainly by metamorphic rocks of the Klondike Schist series. The creek bed is underlain, in the upper reaches, by quartz mica schists with minor interbeds of graphitic schists. The lower segments are underlain by extensive graphitic schists and minor quartz mica schist interbeds. Tertiary volcanics comprised of flows, aggalomerates and pyroclastic breccias dominate the north end of lease PL 5324. The volcanic rocks appear to be relatively thin and in places basement lithology were exposed in windows.

5.1 Pleistocene and Recent Deposits

The build up of organic material was found to be minimal on the lower reaches of the creek (less than 2'), however it exceeds 10' or more along the upper reaches above station 71N.

Muck (fine brown river silt) was not present in the creek bed or on the west bank of Germaine Creek. Minor mounds of this material were noted on the east bank of Germaine Creek.

5.2 Gravel Deposits

The most extensive gravel deposits occurred on a bench on the west bank of Germaine Creek. These deposits consisted of several knobs vegetated with poplar and birch trees. These knobs were 10 to 12 feet higher than the surrounding terrain and formed elongated ridges up to 100 feet long, often with steep sides and tapered ends.

The gravel in these mounds was well washed, moderately sorted and consisted of quartzite cobbles, quartz schist fragements and gneissic fragments. The finer material was an assortment of quartz grains and lethic fragments. These gravels appear to be very recent deposits and lie directly above the weathered Klondike schists. Trenching on some of these knobs indicated the gravel only extended a few feet below the average height of the bench level.

These recent gravels were tested by panning and although a small amount of fine black sand (mostly magnetite and hematite) was recovered no visible gold was noted.

A small amount of streambed gravel was noted in the pit at 71N which was dug immediately adjacent to the present stream bed. The gravel was less than extensive, poorly washed, poorly storted and impregnated with graphic clay. Selected samples of the coarser of this material yielded three or four pieces of medium gold per standard pan.

No other significant stream bed gravels were located on the property.

The hillsides were characterized by a mantle of modified residual soil, regiolith and colluvial material. Solifluction, soil creep and frost action have modified the residual soils on most slopes. Run-off water from snow and rain has also modified the soils to some degree.

6. Test Program

6.1 Objectives

The objective of the program was to establish the amount and grade of the gravels present along the Germaine Creek leases. In order to do this, a D-8K caterpillar was used to construct a road along the creek and to strip and escavate a number of test pits. Gravel recovered from these pits would be panned by hand initially and subsequently by use of a sluice box to more accurately determine the recoverable gold content.

6.2 Program Procedure

On July 31, a D-8K caterpillar commenced work on the property. The caterpillar was rented from Kolody Enterprises Ltd. of Whitehorse. An access road was constructed along the creek from the construction site located near the north end of lease PL 5324 to the most southerly end of lease PL 5301. The construction of the road was useful in providing access to the property and also afforded a knowledge of such important parameters as depth to bedrock and the types of gravels and unconsolidated material prevalent in the valley.

Approximately 13,800 feet of road (2.6 miles) was constructed on the west bank of the creek.

6.3 Test Pits

6.3.1 General

Several test pits were made at various elevations above the creek bed to test for the existence of bench gravels. Two larger pits were made immediately adjacent to the creek to test the gravels directly above or in contact with the bedrock. The location and results of this test work will be discussed in detail later in this report.

6.3.2 Pit Locations

The property was not covered by a survey grid so it was necessary to use a chain and compass method to map in the road. The stations along the road were flagged and marked for subsequent use. A reference point was selected which could be relocated in the future and labelled 0 + 00N. The point was located at the intersection of the newly constructed road, an old powerline and Germaine Creek. All stations generally south of the 0 + 00 point along the road were marked 1 + 00S, 2 + 00S, etc., and stations in a northerly direction along the road were marked 1 + 00N, 2 + 00N, etc. At a point where the road divided, the more westerly road was marked with an "A" prefex, i.e. A85 + 00N.

Test Pit at 93N

This pit was attempted at or near creek level. About 3 feet of organic material was removed but no gravel was located. Perma frost and ice hampered the stripping process and this pit was abandoned.

Dimensions: 100' x 15' x 3' = 4,500 cubic feet or 166.6 cubic yards.

Test Pit at A95N

The test pit at A95N was dug to bedrock in search of a possible gravel bench similar to the gold bearing gravels several hundred feet north which are exposed on the wall of the construction pit. No gravels were encountered in this pit. Bedrock was reached at a depth of 15 feet on the up-hill side of the pit. The unconsolidated material above the bedrock consisted of a graphitic clay and residual soil derived from the volcanic breccia and volcanic flow rock which make up the underlying bedrock.

Dimensions: 200' x 40' x 7' = 56,000 cubic feet or 2,074 cubic yards removed.

Test Pit at 71N

Two pits were dug at 71N which coalesce with each other. The first pit was dug to explore the depth of a gravel ridge which was noted on surface. Only a few feet of gravel was removed before a white micaceous clay and a dark grey to black graphitic clay were intersected. It appears that these recent gravels were not gold bearing and lay on top of weathered bedrock. Panning of the gravel and gravel/clay interface failed to produce any gold, although some fine-grained magnetite and hematite were noted.

Dimensions: 50' x 10' x 10' = 5,000 cubic feet or 185 cubic yards removed.

Test Pit at 73N

At 73N a small pit was dug with much the same results as the first pit at 71N. No gold was panned from this pit and the gravels lay on top of weathered bedrock material, namely a residual soil derived from a graphitic to micaceous schist. About four feet of gravels rested on top of the graphitic and micaceous clays at this location.

Dimensions: 50' x 12' x 10' = 6,000 cubic feet or 222 cubic yards removed.

Test Pit at 44N

Stripping in preparation for a pit at 77N was attempted, however only a considerable thickness of organic muck was encountered (about 5 feet) which was underlain by ice and frozen peat. This pit did not progress past the stripping stage.

Dimensions: 100' x 12' x 3' = 3,600 cubic feet or 133 cubic yards removed

Test Pit at 41 + 50N

This pit was located about 75 feet west of the road up the side of the hill which forms the westerly slope of the valley.

The pit reached a depth of about 8 feet on the west side. No gravels were encountered in this pit. Weathered bedrock and regiolith were noted on the west side of the pit. This material indicated the bedrock to be a schistose rock typical of the Klondike schist.

Dimensions: 150' x 20' x 4' = 12,000 cubic feet or 444 cubic yards removed.

Test Pit at 28N

The pit dug at 28N indicated similar results as the pit located at 41 + 50N. No gravels were located in this pit and the bedrock located here was a quartz mica schistose rock of the Klondike schist series.

Dimensions: 100' x 20' x 4' = 8,000 cubic feet or 296 cubic yards removed

Test Pit at 71N

The second pit dug at 71N was to test the gravels as close to the stream without disturbing the stream bank. The pit reached a depth of 25 feet at its deepest point on the side adjacent to the stream. Gravels here were less than extensive and were found in discontinuous pods and layers in a grey black graphitic clay matrix. Several pieces of medium gold were found per pan by selective sampling, however, systematic sampling showed a much poorer return with only one pan producing a piece of medium gold. Results of this detailed sampling are shown in Table 1.

It appears that the bedrock in this location is dominantly a graphitic schist composed of over 80% pure graphite, the remainder being quartz stringers and pyrite. A thin bed of quartz mica schist was noted near surface on the north-west corner of this pit but with this exception, the remainder was graphitic schist or weathered graphitic material.

It would appear that the weathered graphitic material was fluid and flowed into the stream bed, impregnating and covering the gravels. This would explain the unwashed and layered character of the discontinuous gravel lenses encountered on the creek wall of the pit. It would appear that the bedrock was reached at about 25 feet below the creek level in this pit on the creek side (east side of the pit).

Bedrock topography varied in this area as it was apparent that bedrock was reached at a depth of 10 feet on the east side of the pit.

Dimensions: 150' x 20' x 12' = 36,000 cubic feet or 1,333 cubic yards removed

Test Pit at 65N

The terrain at 65N appeared to be a large gently sloping bench which had several knobs of gravel visible on it. These knobs were readily visible as they were 8 to 12 feet higher than the surrounding topography and wooded by poplar and birch as opposed to black spruce. It was thought that gravels may have formed the bench and had been subsequently covered by peat deposits except for the gravely knobs. The area was stripped for those reasons with the intent to dig a deep pit and explore the bedrock gravel interface. An area 250 feet by 100 feet by 3 feet was stripped, however, the gravel did not persist with depth and it was found that the bench was a result of differential erosion of the softer graphitic schist. Stripping was suspended when it was concluded that no gravels would be located at depth.

Dimensions: 250' x 100' x 3' = 75,000 cubic feet or 2,777 cubic yards removed

Test Pit at 30N

It was thought that if gold bearing gravels existed on Germaine Creek they would be most easily mined where the bedrock was a quartz mica schist as opposed to a graphitic schist. The quartz mica schist affords a more resistant bedrock capable of forming natural riffles which could trap placer gold and also be less likely to produce black graphitic clays which appear undesirable when mixed with placer gravels. The pit at 30N was dug to test the bedrock/gravel interface where the bedrock was known to be quartz mica schist from exposures along the road.

The pit was oriented parallel to the creek and about 15 feet west of the creek bed. On the west side of the pit a thin layer of organic material was encountered followed by a few feet of colluvial material mixed with minor rounded cobbles and pebbles. This material directly overlay the quartz mica schist regiolith. The creek side of the pit (the east side) encountered 19 feet of organic material (wood fragments and peat) directly overlaying 3 feet of shattered quartz mica schist in a clay matrix. No gravels were encountered and panning of the material from this pit did not produce any gold.

Dimensions: 200 x 60' x 11' = 132,000 cubic feet or 4,885 cubic yards removed.

Two other pits were started on the east side of Germaine Creek, one at 71N and one across from station 56N. Both these pits encountered a fine brown silty sand material and were not continued below a depth of 6 feet. No gold was panned from these pits.

7. Conclusions

A number of pits were dug during the test program and several areas were stripped. In excess of 12,515 cubic yards of unconsolidated material was moved on the two leases and tested by periodic hand panning. A total of 5,181 cubic yards of material was moved on lease PL 5301 with an additional 7,334 cubic yards of material being moved on lease PL 5324.

The program was successful in determining a number of factors regarding the placer potential of Germaine Creek and will form the basis of possible future investigations.

APPENDIX

Table 1

Systematic Sampling and
Planning of Test Pit at 71N

The test pit at 71 North was dug to a depth of 25 feet, measured on the creek wall side. This face was sampled and tested with respect to the definable beds of gravel and clay material. The depth of sample was recorded. Samples were collected over a distance of about one foot horizontally along the bed and extended for a distance of between five and six inches below the recorded sample depth.

Pan #	Depth Below Surface	Horizon Description	Heavy Minerals Recovered
1	2.5 ft	Brown recent gravel under organic muck	A very small amount of fine magnetite. No gold
2	3.5 ft	Brown poorly washed gravel	About 12 pieces of tarnished pyrite about ¼ inch in size and a small amount of fine magnetite. No gold
3	5 ft	Gravel with black graphitic material, cobbles, sand and graphitic schist chips	One ounce of coarse (up to ¼ inch) of tarnished pyrite and fine pyrite. No gold.
4	7 ft	Cobbles, pebbles and graphitic chips in a black graphitic clay material (just below roots and wood fragments).	About 3 ounces of pyrite, tarnished and broken. Minor fine magnetite. No gold
5	9 ft	Cobbles, pebbles and black graphitic clay	3 to 4 ounces of tarnished pyrite. Minor magnetite. No gold
6	11 ft	Graphitic clay with pyrite cubes and angular rock fragments	Recovered a lot of pyrite, 6 ounces or more. No gold. Pyrite up to 3/4 inch cubes.
7	13 ft	Black graphitic clay and mud, subangular, angular and rounded quartz pebbles. Angular graphitic schist and quartz mica schist.	No gold recovered. A large amount of pyrite (about 3 ounces).

Table continued on next page

Table 1 continued

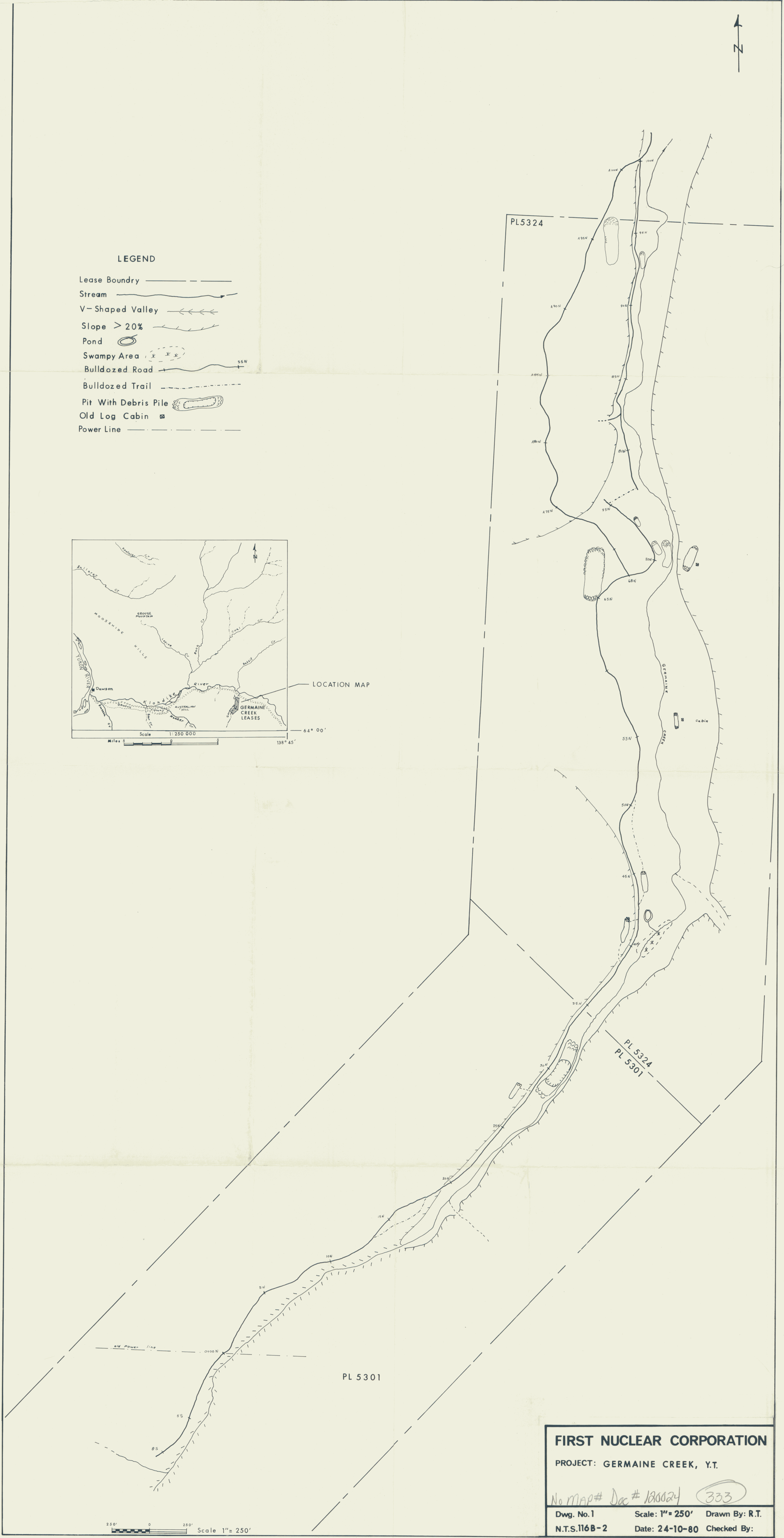
Pan #	Depth Below Surface	Horizon Description	Heavy Minerals Recovered
8	15 ft	Black graphitic clay and boulders and cobbles. Some gravel, rounded to sub-rounded and angular quartz and abundant cubic pyrite	Pyrite - about 4 ounces; coarse up to 3/4 inch crystals. No gold
9	17 ft	Black graphitic clay plus a few rounded to sub angular pebbles of quartz mica schist and graphitic schist	A large amount of pyrite complete to broken crystals about 5 ounces. One speck of medium gold.
10	20 ft	Jumbled graphitic schist fragments in graphitic clay material could possibly be bedrock, fault breccia or subcrop.	Minor fine-grained pyrite. No gold.

FIRST NUCLEAR CORPORATION

Project Expenses to October 31, 1980

Germaine Creek

Consulting Fees	3,653.67
Analytical	397.16
Vehicle Rental	2,526.08
Equipment Rental	19,813.93
Legal/Insurance	180.00
Travel/Accommodation	2,272.25
General	2,369.08
Salaries	11,227.26
Employer's share of benefits	129.67
	42,569.10
15% Administration	6,385.36
	48,954.46


N
LEGEND
Lease Boundry
Stream
V-Shaped Valley
Slope > 20%
Pond
Swampy Area
Bulldozed Road
Bulldozed Trail
Pit With Debris Pile
Old Log Cabin
Power Line
PL5324
PL 5324
PL 5301
PL 5301
LOCATION MAP
GERMAINE CREEK LEASES
Dawson
Klondike River
Moosehide Hills
Grouse Mountain
Scale 1:250 000
Miles
64° 00'
138° 45'
Scale 1"= 250'
FIRST NUCLEAR CORPORATION
PROJECT: GERMAINE CREEK, Y.T.
No MAP# Doc # 180024
333
Dwg. No. 1
N.T.S. 116B-2
Scale: 1"= 250'
Date: 24-10-80
Drawn By: R.T.
Checked By:
120024