GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL & TEST PITTING REPORT

- on the -

JEN JEN PROPERTY
Kamloops Mining Division,
British Columbia

- for -

UNION OIL COMPANY OF CANADA LTD.,
335 - 8th. Avenue S. W.,
CALGARY, Alberta. T2P 2K6.

Covering: Jen Jen #1 (12 units), Jen Jen #5 (18 units),
Jen Jen #2 (15 units), Jen Jen #6 (18 units),
Jen Jen #3 (16 units), Jen Jen #7 (18 units),
Jen Jen #4 (20 units), Jen Jen #8 (4 units),
Jen Jen #9 (8 units).

Work Performed: July 25, 1979 - September 26, 1979.

Location: (1). 50°43'N; 119°25'W.
(2). NTS Map 82L/11W.
(3). 11 km. west of Salmon Arm, B. C.

PREPARED BY:

KERR, DAWSON AND ASSOCIATES LTD.,
#1-219 Victoria Street,
KAMLOOPS, B.C.

W. Gruenwald, B. Sc. & J. R. Kerr, P. Eng.,

November 13,1979.

TABLE OF CONTENTS

APPENDICES

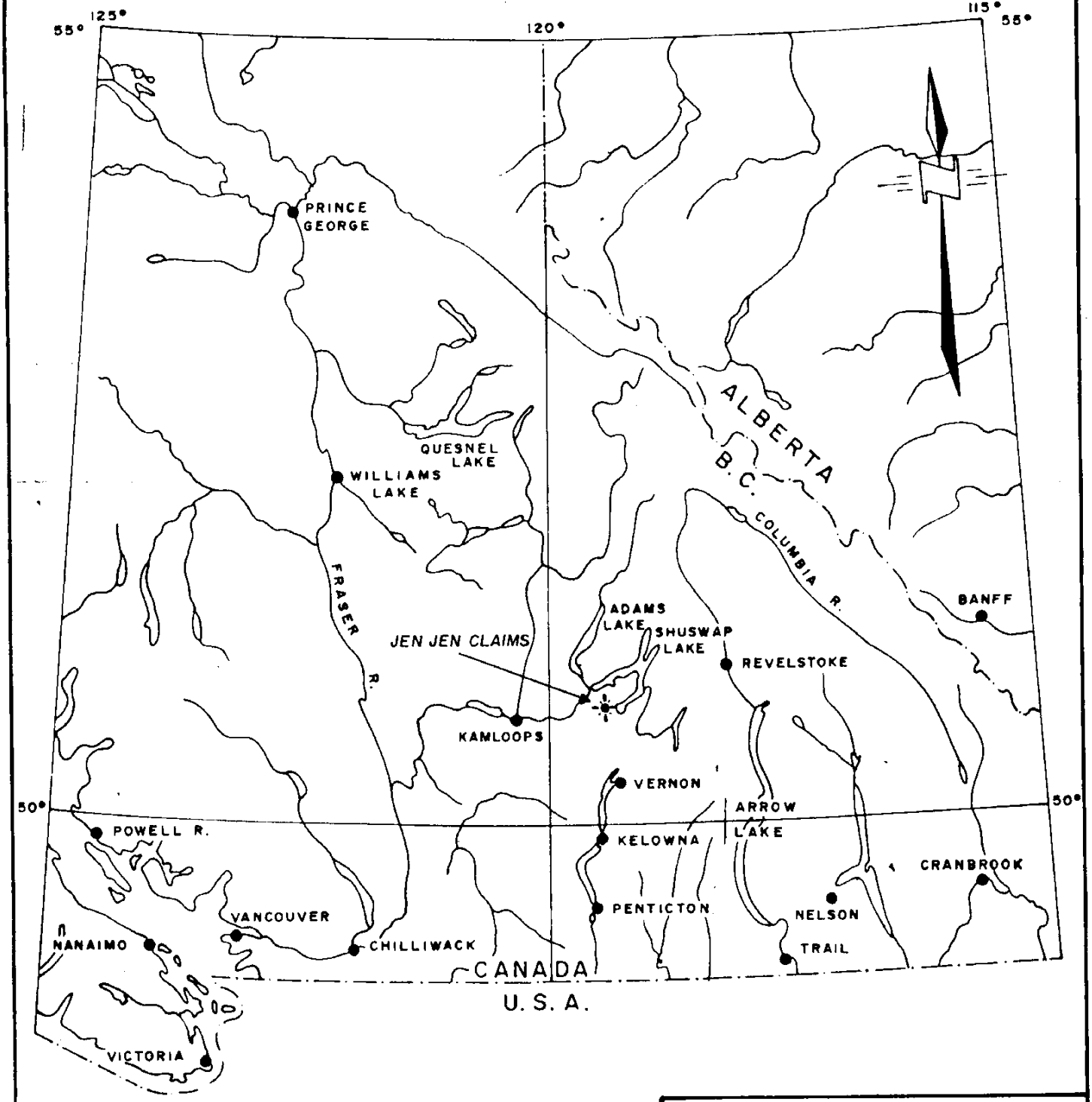
MAPS

		Scale
Figure 181-1	- Location Map	1 cm = 87 km.
Figure 181-2	- Index Map	1:50,000
Figure 181-3A (Sheet 1)	- Geochemical Plan (Uranium)	1: 5,000
Figure 181-3B (Sheet 2)	- Geochemical Plan (Uranium)	1: 5,000
Figure 181-5A (Sheet 1)	- Geological Plan	1: 5,000
Figure 181-5B (Sheet 2)	- Geological Plan	1: 5,000
Figure 181-11A (Sheet 1)	- Magnetic Plan	1: 5,000
Figure 181-11B (Sheet 2)	- Magnetic Plan	1: 5,000
Figure 181-12	- Plan showing grid extensions, locations of trenches and test pits and generalized geology.	1:10,000

INTRODUCTION

This report outlines the additional work on the Jen Jen claims part of which was that recommended in the November 20th., 1978 report by W. Gruenwald, B. Sc. and J. M. Dawson, P. Eng.

The 1979 programme consisted of the establishment of additional grid lines followed by geological mapping, soil sampling, radiometric and magnetic surveys. In September, 1979, the programme was concluded by backhoe trenching, test pitting and sampling in areas of known and suspected paleochannel sediments. The results of the 1979 programme have been incorporated with the 1978 programme results and appended in the maps of this report.



UNION OIL COMPANY OF CANADA

LOCATION MAP

JEN JEN CLAIMS

KAMLOOPS MINING DIVISION, B.C.

Date: NOV., 1978. revised Nov. 1979	Scale: 1" = 64 Miles
Dwn by: W.G.	Dwg no. 181-1

SUMMARY AND CONCLUSIONS

(1). The Jen Jen property consists of nine contiguous claims totalling 129 metric units. The claims are located west of Salmon Arm, B. C. in moderate to rugged terrain. Several good logging roads provide access to the property.

(2). The geology of the property consists of preCambrian (?) metasediments that have been intruded by a granitic pluton and associated late stage equivalents. Overlying and probably dervied from the older rocks are small areas of well indurated conglomerates. Situated above these rocks are one or more paleo drainage systems that are represented by variably sorted and stratified gravels. Local areas of finer grained sediments with carbonaceous matter represent lacustrine or swampy basins along the paleo drainage system. At least two areas of paleosediments are overlain by Tertiary basaltic flows, the sources of which are thought to be several fissure zones located on and/or near the Jen Jen claims.

(3). Geochemical surveys conducted during the 1979 programme failed to delineate any significant new anomalies. Several anomalies from the 1978 programme as well as some from the 1979 programme can be attributed to organic concentrations of uranium.

(4). Radiometric surveys were in general inconclusive except for a few anomalies in the Fly Hill area. The Fly Hill total count anomalies have no geochemical expression and may therefore represent potassium and/or thorium concentrations in basalt and/or the underlying granitic basement.

(5). The magnetic survey served to outline the basalt contact as well as possible vertical fissures or feeder dyke zones in grids "A" and "D".

(6). The trenching and test pit programme tested many of the known or suspected paleochannel sediments. Several areas of "paleo" sediments were found to overlie granitic and/or mica schist basement and underlie Tertiary basalt flows (ie Fly Hill exposures). Two areas of lacustrine (?) sediments (grids "C" and "E") containing coally lenses were found and

assumed to underlie Tertiary basalt flows. No geochemical anomalies were indicated from the sampling except for one pit dug over moderately radioactive pegmatitic granodiorite and a trench sample of coally material.

PROPERTY

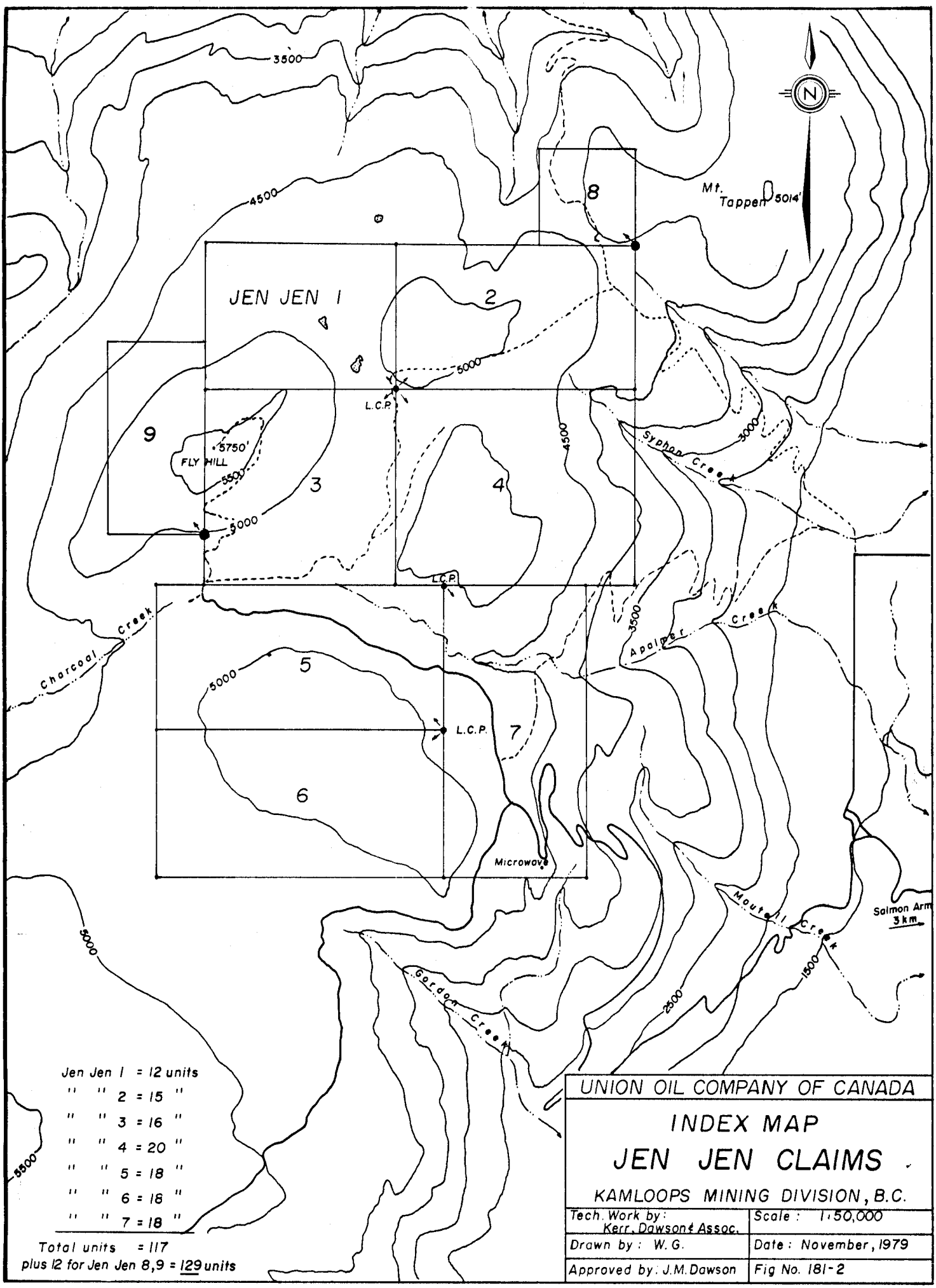
The Jen Jen property consists of nine contiguous metric claims totalling 129 units as follows:

Claim Name	No.of Units	Record No.	Tag Number	Expiry Date
Jen Jen #1	12 units	1103(11)	42916	Nov. 29/80
Jen Jen #2	15 units	1104(11)	42917	Nov. 29/81
Jen Jen #3	16 units	1105(11)	42918	Nov. 29/80
Jen Jen #4	20 units	1106(11)	42919	Nov. 29/80
Jen Jen #5	18 units	1107(11)	42920	Nov. 29/81
Jen Jen #6	18 units	1108(11)	42921	Nov. 29/80
Jen Jen #7	18 units	1109(11)	42876	Nov. 29/81
Jen Jen #8	4 units	1695(1)	45270	Jan. 26/80
Jen Jen #9	8 units	1901(6)	47462	June 18/80
TOTAL	129 units			

LOCATION AND ACCESS

The following is taken from the November 20th., 1978 report on the Jen Jen claims. The property is located in southern British Columbia about 11 km. west of the city of Salmon Arm. The approximate geographic center of the claims is at 50°43' north latitude and 119°25' west longitude.

The claims are accessible from Salmon Arm via approximately 15 km. of paved and gravel roads. Old logging roads and skid trails provide access to most areas of the property except the northwest corner.



Jen Jen 1 = 12 units
" " 2 = 15 "
" " 3 = 16 "
" " 4 = 20 "
" " 5 = 18 "
" " 6 = 18 "
" " 7 = 18 "

Total units = 117
plus 12 for Jen Jen 8,9 = 129 units

UNION OIL COMPANY OF CANADA

INDEX MAP
JEN JEN CLAIMS

KAMLOOPS MINING DIVISION, B.C.

Tech. Work by: Kerr, Dawson & Assoc.	Scale: 1:50,000
Drawn by: W.G.	Date: November, 1979
Approved by: J.M. Dawson	Fig No. 181-2

PHYSIOGRAPHY AND VEGETATION

(from 1978 report)

The property covers a rolling upland area and portions of the steeper, upper reaches of a number of creeks which drain this highland. The eastern side of the property drops steeply off to the valley containing the Salmon River and Shuswap Lake. Canyons of the upper reaches of Syphon, Palmer, and Moutell creeks to the east and Tappen Creek to the north include the areas of greatest relief.

Total relief is in the order of 700 meters, rising from approximately 1,050 meters in some of the creeks along the eastern boundary to about 1,750 meters at the summit of Fly Hill.

Approximately one quarter of the property has been logged and/or burned. Where the original vegetation is still in place, a fairly dense, mature growth of evergreens is supported. Pine and spruce predominate in the drier upland areas with cedar, fir, and hemlock in the creek bottoms.

HISTORY

Prior to 1977 there is no record of exploration work on the Jen Jen claim area. In 1977 the property was acquired during the course of a regional exploration programme for uranium carried out on behalf of Union Oil.

In 1978 a programme of grid establishment, geological mapping, geochemical sampling and radiometric surveys was carried out. The 1979 programme (this report) followed some of the recommendations outlined in the November 20, 1978 report by W. Grunewald, and J. M. Dawson, P. Eng.

TRENCHING AND TEST PITTING PROGRAMME

During the period from September 19-26, 1979, the writer (W. Gruenwald) conducted a programme of trenching and test pitting on the Jen Jen claims, (figure 181-12). A John Deere backhoe was used exclusively for this programme. A total of 13 trenches and 40 test pits were dug from which 86 geochemical samples were collected. Palynology (spore) samples were collected from the finer grained and carbonaceous portions of various trenches and pits for possible use in age determinations.

The depth of the trenches and test pits varied from 1.5 to 4.5 meters with the majority being from 3 to 3.5 meters in depth. The total surface area of all the trenches and test pits was approximately 205 m^2 or 0.205 hectaries. All trenches and test pits were dug along existing roads and skid trails. Upon completion of mapping and sampling the holes were refilled, ditches were re-established and the locations were marked in the field by the appropriate designation.

A table appended in this report describes all trenches and test pits in detail.

GEOLOGY

A detailed account of the property geology is given in the November 20th., 1978 report (W. Gruenwald, B. Sc. and J. M. Dawson, P. Eng.) on the Jen Jen claims. The following is a brief summary of the 1978 data after which is an account of the additional information gathered from the 1979 programme.

UNIT 1 (Geological Plan 181-5A, 5B).

- oldest rocks exposed on property, part of Shuswap Terrain (pre Cambrian).
- consists of quartz-feldspar mica schists found primarily in Jen Jen #7.
- locally have been intruded by dykes and sills of granodiorite and pegmatitic equivalent.
- quite often these rocks are moderately radioactive.

UNIT 2 (Geological Plan 181-5A, 5B).

- granodiorite, granite and pegmatitic equivalents, of Mesozoic age.
- underlies much of Jen Jen claim area.
- locally moderately radioactive.

UNIT 2A

- well indurated conglomerate containing rounded to subrounded pebbles - boulders of granitic rocks, schist, gneiss, quartzite, quartz and minor volcanics (no basalt).
- probably derived from Units 1, 2 and other "local" sources.
- rafted blocks of this conglomerate seen in basalt flows in southern portion of Grid "B".

UNIT 3

- youngest rock type is the Tertiary basaltic lavas and dykes.
- basalt found in grids "A", "B", "D" (Fly Hill), "E", and "F".

PALEOCHANNEL SEDIMENTS (BASAL GRAVELS)

- found in three areas of Jen Jen claims as follows:

  i) Fly Hill area:(Grid "D")

  - overlain by basalt, underlain by granitic rocks.

  ii) Grid "B" area; L-10^{E}

  - no basalt capping

  iii) Grid "A" area: (Jen Jen #2)

  - most extensive exposures on property
  - consist of pebble - boulder conglomerates with lenses of sandstones, clay and siltones,

some of which contain carbonaceous matter.

- no basalt capping; however noted a few vertical basaltic dykes cutting the sediments.

Geological information gathered from the 1979 programme is outlined as follows:

GRID "A" (northern extension):

- much of area is underlain by brown, reddish-purple and green, massive, vesicular and/or amygdaloidal basalts.
- the northeast corner of this grid contains quartz-mica schists, and tuffaceous volcanics both of which are older than the overlying (?) Tertiary basalts.

GRID "A":

- no new gological information except for mapping of a few new basaltic outcrops in the eastern portion of the grid.

GRID "D" (Fly Hill):

- geological mapping over the Fly Hill area outlined abundant outcrops of gray, green to red-brown, massive, fragmental or platy basalts.
- locally these basalts are vesicular, amygdaloidal or brecciated.
- in the center of the hilltop basalt area is a northeast trending zone of platy basalt thought

to be a fissure or "feeder dyke" for the basalt capping.

- the contact of the basalt is quite irregular in places.
- this is probably due to the varying thickness and undulating topography along the edge of this basalt capping which is thought to have been "draped" over a previously existing hill or ridge.

GEOLOGICAL & GEOCHEMICAL RESULTS OF TRENCHING AND TEST PITTING PROGRAMME - SEPTEMBER, 1979.

GRID "A":

- 8 trenches and 15 test pits dug.
- appears to be a west to east transition from coarse grained conglomerate with minor sandstone lenses to finer grained sediments (locally carbonaceous) with minor fine grained conglomerate.
- western and southernmost areas of Grid "A" contain more angular, poorly sorted sediments suggesting very little fluvial transport (ie the upper flanks of stream channel or valley wall talus slope?)

- imbrication measurements for grid "A" sediments yield a mean value for the flow direction of the stream channel as 080° or east-northeast.
- clasts of the coarser grained sediments in order of abundance are granitic rocks, mica schist, gneissic rocks, quartz and volcanics.
- no basaltic clasts observed.
- at least two basalt dykes found to intrude the paleosediments indicating that the basalts are definitely younger than the paleo-sediments.

- geochemcial sampling was generally negative, range of values 0.2 to 9 ppm; mean value = 1.4 ppm uranium which is roughly equivalent to the soil sampling mean (1978,1979).

GRID "B":

- one trench, one test pit.
- trench encountered yellow, oxidized boulder conglomerate with sandstone lenses cut by a north northeast trending basalt dyke.
- sediments are pre-basalt and are probably part of a paleo stream channel deposit.
- questionable imbrication measurements yield a flow direction of 080° or from west to east.
- geochemical values range from 0.8 to 3 ppm U.

GRID "C":

- two trenches, 8 test pits.
- 79 CT-1, CP-1,2 did not encounter any paleosediments.
- 79 CP-3,4 encountered fine grained sediments (locally carbonaceous) with minor conglomerate lenses.
- these latter test pits are thought to be pre-basalt.
- no imbrication measurements obtained.

79 CP-5, CP-6 are thought to be in glacial debris.

79 CP-7,8 encountered granitic and mica schist basement overlain by questionable, poorly sorted sediments.

- encountered basalt dyke in this region that cuts these "sediments" and may have been a feeder dyke or fissure zone?
- geochemical values range from 0.8 to 3 ppm, mean value = 1.84 ppm U.

GRID "D":

- 2 trenches, 2 test pits.
- encountered paleochannel sediments that overlie granitic basement and were noted to be overlain by Tertiary basalt flows.
- sediments are not well sorted or stratified.
- clasts of granitic rocks and schists are generally subangular to subrounded.
- imbrication measurements vague; flow directions = 152°(?) and 92°.
- geochemical values range from 0.2 to 2 ppm U; mean = 1.15 ppm U.

GRID "E":

- 6 test pits
- encountered granitic basement in 3 test pits.
- glacial fill in two test pits.

- two test pits encountered fine grained sandstones and clayey sediments, some of which contained carbonaceous debris.
- these sediments rest on granitic basement and were probably at one time overlain by basalt.
- no imbrication noted.
- geochemical values quite variable from 0.2 to 16 ppm U mean value = 4.27 ppm U.
- the two highest values 7 & 16 ppm are from decayed moderately radioactive granodiorite basement rocks.

GRID "F":

- four test pits
- glacial fill in one pit, basaltic bedrock in another while granodiorite basement noted in two pits.
- no sediments were encountered above the granitic basement.
- geochemical values ranged from 0.2 to 4 ppm U mean value = 1.1 ppm U.
- 79 FP-2 was a soil profile pit that showed a marked decrease in uranium values from the glacial overburden to the granitic basement.

GEOCHEMISTRY

A detailed description of the geochemistry for the 1978 programme is given in the November 20th., 1978 report on the Jen Jen claims. References to the previous results are made in the interpretation of the 1979 programme.

During July, 1979, a total of 33.2 km. of blazed and flagged lines were established over existing grids or as extensions to the existing 1978 grids. From these new lines a total of 542 soil samples were collected using the standard 50 meter sampling intervals. All samples were collected from the "B" horizon when possible, placed in waterproof kraft envelopes and marked with the appropriate grid co-ordinates. The samples were then shipped to the Bondar-Clegg Laboratory in Vancouver for uranium analysis.

The samples were dried and seived with a -80 mesh fraction being used. Extraction was done using hot nitric acid and analysis was done by fluorimetry. The two soil profile samples from the Fly Hill grid area were subjected to both a hot nitric acid and carbonate

leach method to achieve different degrees of extraction. The two different extractions were analyzed by fluorimetry, and the results were plotted along with a profile diagram on the geochemical plan (See figure 181-3B).

The results for all soil samples were expressed in parts per million uranium (ppm U). Geochemical categories from the 1978 survey were used and are as follows:

Negative	1.5 ppm U (rounded to 2 ppm)
Possibly Anomalous	1.5-5.4 ppm U (rounded to 6 ppm)
Probably Anomalous	5.5-9.3 ppm U (rounded to 10 ppm)
Definitely anomalous	9.3 ppm U.

The values were then plotted on 1:5,000 scale base maps that also contain the 1978 geochemical data. The following is a description of the 1979 data (incorporating the 1978 data).

GRID "A" (Northern extension):

- one low level anomaly, 2-3 ppm U, west of Baseline 24^{E} from L-40 to L-42^{N}.
- no outcrops noted in this area.

GRID "A":

- no geochemical values of any significance except along the western portion where there are small anomalies in the 3-4 ppm range.
- these can be attributed most likely to organic material in the soil.

GRID "C":

- five small, 1 to 4 sample anomalies in the northwest corner of the grid.
- highest value = 6 ppm, attributed to organic concentrations of uranium.
- organics probably account for most of these anomalies.

GRID "D": (Fly Hill)

- no new anomalies indicated from the 1979 programme.
- soil profiles were dug over two anomalous values indicated in the 1978 programme.
- geochemical results (using normal and partial carbonate leach methods), indicated that the uranium content dropped sharply from the organic surface horizons to the lower soil horizons.
- therefore these anomalies can be definitely attributed to uranium concentration in organic material.

GRID "F": (North extension; L-3^{S} to L-5^{S})

- several geochemical anomalies up to 6 ppm uranium.
- most likely these values can again be attributed to organic concentrations.

GRID "F":

- the westerly extensions of L-16^{S} and L-18^{S} served to close off the 1978 anomaly in this area.
- concentrations of uranium in clays and/or organics can probably be attributed to the uranium anomalies in this area.

RADIOMETRIC SURVEY

During August, 1979, a radiometric survey was carried out over the grid lines and extensions established in July, 1979.

An Exploranium GRS-101 scintillometer (measuring counts per second, cps) and a McPhar TVLA spectrometer (measuring counts per minute, cpm) were used in the 1979 survey. All readings were adjusted to counts per minute (cpm), to correlate with the 1978 radiometric survey.

The readings were taken at 50 meter intervals along all new grid lines. Since three different instruments have been used over the Jen Jen claims (1978, 1979) radiometric values considered anomalous varied for each instrument. Anomalous values were considered to be those 1 1/2 times background and greater. This works out to 9,000 cpm for the 1979 survey and 7,500 cpm for the 1978 survey.

These anomalous values were plotted on the geological plan (see figure 181-6C sheet 2). The vast majority of the anomalous values are centered around the

basalt capping in the Fly Hill area. Only one other radiometric anomaly was found at Baseline 0+00; L-3^{S} to L-5^{S}. No new targets were found elsewhere on the property and no definite geochemical-radiometric correlation was delineated.

Spectrometer readings were taken (using Exploranium GRS-101 scintillometer) in trenches and test pits dug in September, 1979 and are recorded in the table appended in this report.

Trenching and Test Pit Radiometrics:

No significant radiometric values were encountered in the trenches and test pits with the exception of 79 EP-4 where values up to 420 cps were encountered in a pit dug over moderatley radioactive granodiorite and minor pegmatite. This pit also yielded the highest geochemical values of the trenching and test pit programme. The average scintillometer reading for all of the trenches and test pits was 135 counts per second (cps) or 8,100 counts per minute (cpm).

MAGNETIC SURVEY

During the 1979 programme on the Jen Jen claims, a magnetic survey was carried out using a Geometric Portable Proton Magnetometer (Model G-836). This type of magnetometer measures the total magnetic field which in this area varies from 57,000 to 59,000 gammas (γ); however, only the last four digits are plotted on the magnetic plan (see figure 181-11A,B).

Magnetic readings were taken at 50 meter intervals over the 1978-1979 grids "A" (+ northern extension), "B", "C", and "F". During the magnetic survey a base station was established and tied into twice a day. Diurnal (daily) magnetic corrections were made for the entire survey.

By far the most magnetically active area on the Jen Jen claims is the Fly Hill area (Grid "C" & "D"). This feature represents the basaltic capping the contact of which is approximately outlined by the 8,200 gamma (γ) contour. Some of the magnetic "lows" in the center of the Fly Hill anomaly may represent linear vertical

structures such as fissures or feeder dykes. These fissures are thought to be represented by areas of platy basalt.

In the grid "B" & "C" to "A" areas the 8,200 gamma contour again outlines the approximate edge of the basalt. Most of the Grid "A" area is magnetically very flat except for the eastern extremity. In this eastern extremity of grid "A" between L-20^{E} & L-24^{E} the magnetic pattern, usually trending north-northeast is transected by a narrow esat-west trending magnetic low (See figure 181-11B). This magnetic low corresponds to an area of very platy basalts and may (as in the case of Fly Hill) represent another vertical fissure or feeder zone for the basalts. This may explain why the basalts come up nearly vertical against the fine grained sediments in trench 79 AT-1.

In the grid "F" area the magnetic "background" is slightly lower than in Grid "A", with most values in the 7,900-8,000 γ range. The geological contact of the basalt would appear to be outlined approximately by the 8,100 gamma contour.

EXPLORATION POTENTIAL

As a result of the 1978 and 1979 programmes on the Jen Jen property it is evident that a number of "paleochannel sediment" occurrences have been delineated. These sediments are geologically similar to the basal type gravels hosting the uranium mineralization in the Okanagan area of British Columbia.

It appears that the sampling of the "sediments" has not yielded any significant geochemical values; however, surface leaching of unprotected sediments could be a definite factor here.

Definite exploration potential exists in several areas of the claims as follows:

i) the main "gravel" exposures of Grid "A".

ii) the Fly Hill gravels beneath the basalt capping.

iii) Grid "C" area east of Baseline 3^{E} between $L\text{-}10^{N}$ and $L\text{-}16^{N}$.

RECOMMENDATIONS

Based on all information to date the following recommendations are made:

(1). Drill at least one hole (50-100 meters deep) south of the main Grid "A" gravel exposures between L-10^{E} and L-14^{E}.

(2). Drill at least one hole north of the known Fly Hill paleochannel exposure to penetrate the basalt, the underlying gravels and granitic basement.

(3). Possibly drill one hole in the Grid "C" area east of Baseline 3^{E} from L-10^{N} to L-16^{N}.

Any sediments recovered in the course of drilling should be analyzed for uranium. The hole should also be logged by a down hole spectrometer.

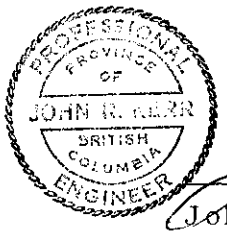
The Grid "F" basalt capping is of a low priority since it is now felt that little or no "gravels" exist beneath it and that if they do, they would be very thin and of very limited extent.

Respectfully Submitted By:

KERR, DAWSON AND ASSOCIATES LTD.,

Werner Gruenwald

Werner Gruenwald, B. Sc.,
GEOLOGIST



John R. Kerr

John R. Kerr, P. Eng.,
GEOLOGIST

November 13,1979,

KAMLOOPS, B. C.

APPENDIX A

GEOCHEMICAL ASSAYS

(in pocket)

APPENDIX A-1

TABLE OF TRENCHES & TEST PITTING

APPENDIX A-1

The trenching and test pitting carried out in September, 1979, is detailed in the following table. Trenches or test pits are designated by numbers and letters as follows:

Example: 79 AT-1

79 represents the year, 1979
A represents the grid that trench is located in
T represents trench; P represents pit
1 trench number

Abbreviations in Table:

sst - sandstone

congl - conglomerate

m.g. - medium grained

c.g. - coarse grained

$\bar{w}$ - with

strat - stratification, stratified

med. - medium

n - number of imbrication measurements

d - dark

l - light

TRENCHING & TEST PITTING - JEN JEN CLAIMS

TRENCH OR TEST PIT NO.	*GRID CO-ORD.*	*LENGTH/ WIDTH (meters)*	*DEPTH (meters)*	*AZIMUTH OF TRENCH*	*SAMPLE NO.*	*DESCRIPTION*	*SCINT READING (cps)*	*URANIUM ASSAY (ppm)*
79 AT-1	20+90E 32+65N	12m/1m	2m	92°	79 AT-1A	0-1m mixed sandstone, granule conglomerate with coally patches	120-130	1
					79 AT-1B	1-2m as in 1A	150	
					79 AT-1C	0-2m selected coally material over total depth	- -	9
					79 AT-1 pal	PALYNOLOGY SAMPLE - west end of trench Basalt contact at east end of trench - attitude N32°E/75°ESE	- -	- -
79 AT-2	17+70E 32+50N	10.2/1m	1-2m	N60°E	79 AT-2A	0.4m of weakly indurated conglomerate	90-100	0.8
					79 AT-2B	0.2m of brown sandstone with carbonaceous material.	90-100	2
					79 AT-2C	1.3m across basalt dyke, contact attitude is 160°/80°E.	110-130	1
						IMBRICATION MEASUREMENTS n=10 Mean direction = 257.4° Flow direction = 257.4°-180°=77.4°		
79 AT-3	16+70E 31+80N	3.5/1.5	4m	290°	79 AT-3A	1.8-2.8m, poorly sorted sst and pebble conglomerate few vague imbrication measurements at 260°	110-130	2
					79 AT-3B	2.8-3.6m - as above.	110-130	2
					79 AT-3C	3.6-4.0m - more indurated quartzose pebble - cobble congl.	110-130	3
						IMBRICATION - bottom 0.4m n=5, mean = 227°. Flow direction = 47°.		

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.	DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 AT-4	Baseline 30^{N} 16^{E}	3/1.4m	4m	140°	79 AT-4A	2-2.7m, silty, few blocks of sst+granule conglomerate, some carbon.	100-110	1
					79 AT-4B	2.7-3.3m, silts + sand >> congl. few blocks of autobrecciated semi consolidated sediments	110-120	1
					79 AT-4C	3.3-4m, more indurated pebble-cobble conglomerate, quartzose cobbles very common. IMBRICATION, n=6 Mean = 241°, Flow direction=61°	120	1
79 AT-5	15+90^{E}, 30+30^{N}	2/1.5m	4.5m@ back	150°	79 AT-5A	1.2-2.2m - surficial material, basalt blocks.	100-110	1
					79 AT-5B	2.2-3.4m - semi indurated pebble-cobble congl. with few blocks of c.g. sst. granitic and mica schist clasts common, clasts subangular-sub-rounded.	110-120	1
79 AT-6	13+80^{E} 27^{N}	2.5/1.3	3m	040°	79 AT-6A	0.7-1.7m - rusty yellow, semi indurated conglomerate? non stratified; no imbrication.	100-110	1
					79 AT-6B	1.7-2.3m - pebble-cobble congl. granitic & gneissic fragments in sand to granule matrix.	110-130	1
					79 AT-6C	2.3-3.0m - as above minor c.g. sst. lenses at bottom.	120-140	1

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.	DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 AT-6	(continued)				79 AT-6D	- Sample of wall of basalt dyke that cuts these sediments (?) - dyke has horizontal jointing - vertical dyke, 4 m. wide contact attitude = N 40°E/85°W.		
79 AT-7	11+50^{E}; 28+60^{N}	2/4	3m @ back	- -	79 AT-7A	0.6-1.6m - pebble-cobble congl. minor granule-pebble lenses.	80-90	1
					79 AT-7B	1.6-2.6m - cobble boulder congl. clasts subrounded and fairly well sorted.	90-100	1
					79 AT-7C	2.6-3.6m - as above granitic and mica schist clasts. IMBRICATION, n=24 Mean = 269° Flow direction = 89°	80-90	1
79 AT-8	11+03^{E} 28+85^{N}	2.5/3	3m	- -	79 AT-8A	0.6-1.6m - c.g. sst with intercalated granule-pebble congl. micaceous content high.	90-130	2
					79 AT-8B	1.6-1.9m - pale rusty yellow pebble-cobble conglomerate fairly well indurated.	110-130	4
					79 AT-8C	1.9-2.5m - green brown m.g. sst local c.g. w pebble-cobble conglomerate. IMBRICATION, n=9, Mean = 285° Flow direction = 105°	90-110	3

TRENCHING & TEST PITTING - JEN JENI CLAIMS

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 AP-1	9+80^{E} 29+75^{N}	2/1m	2.8m@ back	- - -	79 AP-1A	1.4-2.2m -	sandstone with few blocks of dark brown micaceous sandstone.	120-130	1
					79 AP-1B	2.2-2.8m -	semi indurated cobble conglomerate, poorly sorted subangular to subrounded. No imbrication.	120-130	1
					79 AP-pal.		PALYNOLOGY SAMPLE 1.4-2.2m.		
79 AP-2	9+48^{E} 30+05^{N}	1.5/1m	2m @ back	- - -	79 AP-2A	1.3-2.2m -	boulder conglomerate angular clasts up to 0.5m some clasts of c.g. micaceous sandstone.	100-130	1
79 AP-3	9^{E} 30+30^{N}	1.5/1m	2.4m @ back	- - -	79 AP-3A	1.2-2.2m	- mixed pebble-cobble conglomerate with some intercalated sandstone lenses @ 1.6-1.7m. poorly sorted, subangular to subrounded clasts of granitic, gneissic & schistose rocks. IMBRICATION (crude) n=7 Mean = 266° Flow direction = 86°	100-120	1
79 AP-4	8+25^{E} 33+50^{N}	2/1.5m	1.3m	- - -	79 AP-4A	0.6-1.2m -	semi indurated subangular boulder conglomerate, some boulders up to 0.8m; no imbrication.	90-110	1

TRENCHING & TEST PITTING - JEN JEN CLAIMS

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 AP-5	7+50^{E} 34^{N}	1.5/1m	2m	- - -	NO SAMPLE		- non stratified pebble-boulder debris, angular clasts.	110-120	- - -
79 AP-6	15^{E} 28+70^{N}	2/1.5m	2.6m @ back	- - -	79 AP-6A	1.3-1.9m	- poorly sorted pebble-cobble conglomerate.	100-110	0.8
					79 AP-6B	1.9-2.6m	- as above, less sorted, no sandstone lenses; no imbrication.		0.6
79 AP-7	15+40^{E} 29+20^{N}	2/1.2m	3.3 @ back	- - -	79 AP-7A	2-2.6m	- pebble-cobble congl. with sand-granule matrix.	100-120	1
					79 AP-7B	2.6-3m	- sandy horizon, locally carbonaceous, rusty at bottom.	120-150	1
					79 AP-7C	3-3.3m	- pebble-cobble congl. subrounded clasts, poorly sorted; last 20 cm. in sandstone lense. No imbrication.	100-120	1
79 AP-8	16+20^{E} 29+60^{N}	2/1	3.5m	- - -	79 AP-8A	1.0-2.5m	- gray, locally brown sandstone, some carbon.	110-130	1
					79 AP-8B	2.5-3.5m	- pebble-cobble congl. rounded clasts, poorly sorted; one 10-15 cm sandy seam with carbon. IMBRICATION n=10 Mean = 260° Flow direction = 80°	110-130	2
					79 AP-pal		PALYNOLOGY SAMPLE OF coally patch.		

TRENCHING & TEST PITTING - JEN JEN CLAIMS

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.	DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 AP-9	12^{E} 27+45^{N}	2/1.5m	2m	- - -	79 AP-9A	0.7-1.3m - semi indurated brown c.g. sst, granule + pebble conglomerate; weakly stratified.	100-110	0.6
					79 AP-9B	1.3-2m - mixed cobble congl. with sandstone lenses; micaceous sst. still common; no imbrication; clasts often subangular.	110-120	1
79 AP-10	11+15^{E} 27+65^{N}	2/1m	1.9m	- - -	79 AP-10A	1.0-1.9m -angular to subrounded pebble-boulder conglomerate? no sorting or stratification.	90-110	2
79 AP-11	11^{E} 27+80^{N}	2/1.2m	2m@ back	- - -	79 AP-11A	0.8-2m - poorly sorted, non strat. pebble-boulder conglomerate many clasts are subangular clasts of granite, granodiorite and mica schist predominate. IMBRICATION (questionable); Flow = 97°	100-110	0.4
79 AP-12	10+30^{E} 27+75^{N}	2/1m	1.9m	- - -	79 AP-12	0.9-1.9m - pebble-boulder congl? no sorting or stratification clasts often subangular sugg-esting little transport.	100-110	0.8
79 AP-13	11+75^{E} 28^{N}	2/1.5m	2.2m @ back	- - -	79 AP-13A	0.8-1.3m - m.g. sst with granule congl. lenses;mica still very common.	90-100	0.2
					79 AP-13B	2.1-2.2m - semi indurated, weakly bedded cobble-boulder congl. sub- angular to subrounded clasts.	100-115	2

TRENCHING & TEST PITTING - JEN JEN CLAIMS

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 AP-14	24E 35+80N	2/1m	3.5m	- - -	NO SAMPLE	-	glacial debris with basalt chips.	- - -	- - -
79 AP-15	13+80E 34+40N	- - -	- - -	- - - -	NO SAMPLE	-	glacial debris-checking out basalt slump block? may be a sill-like structure.	- - -	- - -
79 BT-1	10+90E 21+75N	3/2m	1.9m @ back	NNE	79 BT-1A	0.6-1.5m -	boulder conglomerate some clasts up to 0.5m; many are red stained possibly from emplacement of basalt dyke.	100-115	2
					79 BT-1B	1.5-1.9m -	yellow brown, m.g.-c.g. sst bed, few granitic pebbles. Basalt dyke along west wall attitude = N18°E/90° Dyke approx. 1.5-2m wide.	110-130	0.8
79 BP-1	7+ 60E 21+30N	2/1.2m	2.3m	- - -	79 BP-1	1.4-2.3m -	rusty yellow, semi indurated cobble conglomerate with c.g. sst lenses. no stratification; no imbrication.	140-150	3
79 BP-2	B/L 3E 20+50N	2/1m	2.0m	- - -	79 BP-2	1.0-2.0m -	glacial debris, clay-boulder fill.	155-210	2
79 CT-1	9N 5+70E	10/3m	2.5m	N10°W	- - -	-	1.4m of glacial till over fragmental crumbly and rotted gray brown basalt.	110-130	- - -

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.	DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 CT-2	11+20E 16+90N	5/2m	2.2m	NNE	79 CT-2A	0.6-1.6m - pebbles-boulders in basaltic debris, no sorting or stratification slightly yellow oxidized.	110-130	1
					79 CT-2B	1.6-2.2m - boulder congl. caught up in brown basalt flows. Could not see sediments under basalt.	120-130	1
79 CP-1	9+70N 5+50E	1.5/1.5m	3.5m	- - -	NO SAMPLE	0-3.5m + - glacial clay with boulders of granite and basalt.	130-140	- - -
79 CP-2	7+50E 13N	2/1.5m	3.5m	- - -	NO SAMPLE	- glacial overburden.	140-180	- - -
79 CP-3	9E 15+50N	1.5/1.5m	4 m @ back	- -	79 CP-3A	2.5-3.0m - c.g. sst + granule congl. weakly strat.	150	1
					79 CP-3B	3-4m - m. to dark gray micaceous sandstone with silty lenses. Coal lenses @ 3.3m & 3.7m.	150-200	3
79 CP-4	10E 16N	1.5/1	4 m	- - -	79 CP-4A	1.5-2.0m - yellow oxidized cobble conglomerate, mainly granitic boulders, sand-granule matrix. Some graded bedding observed.	130	2
					79 CP-4B	2.0-3.0m - gray - black m.g. sst with coally lenses @ 2.2-2.5m, mica content still very high.	130	2

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.	DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 CP-4 (continued)					79 CP-4C	3.0-4.0 m - as above.	130-140	2
					79 CP-4D pal	PALYNOLOGY SAMPLE 2.2-2.5m horizon.		
79 CP-5	16+50^{N} 1^{W}	1.5/1.5m	3.5m	- - -	NO SAMPLE	- glacial debris with basalt boulders.	110-130	- -
79 CP-6	19^{N} 1+65^{W}	2/1.5m	4 m	- - -	79 CP-6A	2 - 3m - yellow brown silt + clay; probably glacial	140-170	2
					79 CP-6B	3-3.5m - yellow brown-dark gray granule to boulder sediment. No sorting or stratification.	170-180	2
					79 CP-6C	3.5-4m - med. gray, micaceous clayey material. Probably glacial.	180-200	3
79 CP-7	1^{W} 19+50^{N}	2/1.5m	3 m @ back	- - -	79 CP-7A	1.2-2.0 m - pale brown-yellow, oxidized leuco granodiorite with biotite mica lenses.	110-120	0.8
					79 CP-7B	2.0-3.0m - as above.	120-140	3
79 CP-8	80 m S 10°^{E} of above.	2/1m	2.5m	- - -	79 CP-8A	1-2m - granule to boulder sediment; contains basalt boulders.	150-170	1
					79 CP-8B	2-2.5m - pebble-boulder congl. lower 40 cm is oxidized yellow & gray biotite schist. Along the east wall of a basalt dyke that trends N20°E/ 90°.	170-200	3

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 CP-8 (continued)					79 CP-8B		Width of dyke may be up to 10 m.		
79 DT-1	14+50W 9+15N	2.5/2m	3.8m @ back	NW	79 DT-1A	1-2m	- pebble-cobble congl. granitic + mica schist clasts that are subrounded and in sand and granule matrix. IMBRICATION - vague, n=4, Mean = 332° Flow direction = 152° (?)	100-110	0.8
					79 DT-1B	2-3m	- cobble-boulder congl. no bedding; no imbrication clasts more angular.	100-110	0.8
					79 DT-1C	3-3.8 m	- as above.	110	1
79 DT-2	14W 9+50N	3/2.5m	4.4m @ back	280°		0-3.0	- basalt, undulating contact.		
					79 DT-2A	3.0-3.4m	- zone of brick red baked c.g. sandstone.	110-120	0.4
					79 DT-2B	3.4-4.4m	- gray crumbly, soft, highly altered cobble-boulder congl. subangular clasts in c.g. matrix.	120	0.2
79 DP-1	13+95W 8+20N	1.5/1	2	- - -	79 DP-1A	1.2-2m	- pebble-cobble congl. well indurated. IMBRICATION n=3 (vague) Mean = 272° Flow direction = 92°	120	2

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
					79 DP-2A	2.5-2.8m	- glacial overburden.	140	2
79 DP-2	15+80W 8+60N	2/1m	3.8m	- - -	79 DP-2B	2.8-3.8m	- cobble-boulder congl. no bedding or stratification. One sandstone lense @ 3.3-3.7m granitic clast - all others no imbrication noted.	150	2
79 EP-1	1+00S 4+00E	2/1.5m	3m @ back	- - -	79 EP-1	3.0m	- decayed granitic debris.	110	0.2
79 EP-2	6+80E 1+60S	2.5/1.5m	4m	- - -	79 EP-2A	2-3.6m	- stratified sand and silt with minor granule - pebbly lenses, no imbrication.	150-170	6
					79 EP-2B	3.6-4m	- decayed granodiorite basement	170-240	3
79 EP-3	13+50E 2+50N	1.4/1	3.5m @ back	- - -	79 EP-3A	1.1-2m	- 1.brown, locally rusty non stratified silty zone; coally material present.	120-140	1
					79 EP-3B	2-2.6m	- 1.gray clay, well compacted, contains discontinuous clusters of pyritic cubes up to 1 cm. across.	140-150	0.6
					79 EP-3C	2.6-3.4m	- gray clay, minor carbon, some pyrite; some rounded granitic pebbles @ 2.6-2.9m.	130-140	0.4
					79 EP-3 pal		PALYNOLOGY SAMPLE.		

TRENCHING & TEST PITTING - JEN JEN CLAIMS

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 EP-4	14+60^{E} 3^{N}	1.5/1.5m	2.5m	- - -	79 EP-4A	0.5-1.5m	- highly decomposed granodiorite, some pegmatite.	250-280	16*
					79 EP-4B	1.5-2.5m	- as above - less decomposed.	280-420	7*
79 EP-5	9+50^{N} 18+20^{E}	1.5/1m	3.5m	- - -	NO SAMPLE		- glacial till.	90-100	- -
79 EP-6	18^{E} 18+20^{N}	1.5/1m	3.5m	- - -	NO SAMPLE		- glacial till	140-150	- -
79 FP-1	5^{S} 2+25^{W}	2/1.5m	3.5m	- - -	NO SAMPLE		- glacial till.	140-150	- -
79 FP-2	11+75^{S} 11+70^{W}	2/1m	3.4m	- - -	79 FP-2A	0-1m	- glacial till with basalt and granite boulders.	120	1
					79 FP-2B	1-2m	- brown clay as above.	160-170	1
					79 FP-2C	2-3m	- as above.	180-190	0.4
					79 FP-2D	3-3.4m	- crumbly granodiorite basement.	180	0.2
					2A-2D are soil profile.		- no sediments noted.		

TRENCHING & TEST PITTING - JEN JEN CLAIMS

TRENCH OR TEST PIT NO.	GRID CO-ORD.	LENGTH/ WIDTH (meters)	DEPTH (meters)	AZIMUTH OF TRENCH	SAMPLE NO.		DESCRIPTION	SCINT READING (cps)	URANIUM ASSAY (ppm)
79 FP-3	15^{S} 13+75^{W}	2/2m	2m @ back	- - -	NO SAMPLE		- red brown fragmental basalt.	140	- -
79 FP-4	13+50^{S} 13+60^{W}	2.5/1.5m	4m @ back	- - -	79 FP-4A	3-3.7m	- glacial till with basaltic fragments.	140-150	0.6
					79 FP-4B	3.7-4m	- altered crumbly leucogranodiorite, probably basement no sediments noted.	170-180	0.8
79 FP-5	5+60^{S} 1+75^{E}	2.5/2.5m	2.5m	- - -	79 FP-5A	0-0.6m	- sandy material, vaguely stratified.	200	1
					79 FP-5B	0.6-2.5m	- decomposed, highly angular m. grained granodiorite.	250	4

APPENDIX B

PERSONNEL

PERSONNEL

J. R. Kerr, P. Eng.	- Geologist	July 17, 27, 31, August 1,3,6-11,13-17 August 20,21,24 Sept. 4,5 October 16,17,19, 22-24, 1979 - 19 1/4 days
B. Hayashi, B. Sc.	- Geologist	August 7-17, 20-24, August 27-31 September 4, 1979 - 20 1/2 days
P. Murphy	- Assistant	August 7-18, 1979 - 12 days
S. Williams	- Assistant	August 7-18, 1979 - 12 days
D. Dunford	- Assistant	August 7-17, 1979 - 9 1/2 days
W. Gruenwald	- Geologist	
Field:		September 18-26, 1979 - 8 1/2 days
Office:		September 5,6,10 October 24-27, 29-31, November 1,2,3, 5-7, 9, November 12 - 12 1/2 days

APPENDIX C

STATEMENT OF EXPENDITURES

COST STATEMENT

(as per J. R. Kerr programme)

1. LABOUR:

Field:

J. R. Kerr, P. Eng., 12 days @ $190.00/day	$ 2,280.00	
B. Hayashi, Geologist 20 days @ $125.00/day	2,500.00	
P. Murphy, Assistant 12 days @ $100.00/day	1,200.00	
S. Williams, Assistant 12 days @ $100.00/day	1,200.00	
D. Dunford, Assistant 9 1/2 days @ $80.00/day	760.00	

Office:

J. R. Kerr, P. Eng., 7 1/4 days @ $190.00/day	1,337.50	
B. Hayashi, Geologist 1 day @ $125.00/day	125.00	$ 9,402.50

2. EXPENSES:

(a). Truck Rentals:

4 x 4 Suburban			
12 days @ $25.00/day	$300.00		
620 mi. @ 25¢/mile	155.00	455.00	
4 x 4 Suburban			
9 days @ $25.00/day	$225.00		
540 mi. @ 25¢/mile	135.00	360.00	
Suburban			
1 day @ $25.00/day	$ 25.00		
180 mi. @ 25¢/mile	45.00	70.00	$ 885.00

CARRIED FORWARD 10,287.50

COST STATEMENT (continued) . . . . . page two

BROUGHT FORWARD:	LABOUR		$ 9,402.50
BROUGHT FORWARD:	EXPENSES	$ 885.00	

EXPENSES (continued):

(b).	Grid Establishment:		
	33.2 km. @ $100.00/km.. . . .	3,320.00	
(c).	Geochemical Analyses	1,843.60	
(d).	Room and Board-Crew-Aug./79	1,287.97	
	Room and Board-J.R.Kerr	189.01	
	Expense Account-J.R.Kerr	103.25	
(e).	Equipment Rental:		
	2 scintillometers 24 days @ $10.00/day $240.00		
	1 magnetometer 12 days @ $15.00/day 180.00		
	General Field Equipment 12 days @ $10.00/day 120.00	540.00	
(f).	Misc. Printing, Xeroxing, and Telephone	189.10	8,357.93
	TOTAL HEREIN		$17,760.43

CERTIFIED CORRECT:

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA JOHN R. KERR

John R. Kerr

J. R. Kerr, P. Eng.
GEOLOGIST

COST STATEMENT

(as per W. Gruenwald)

1. LABOUR:

Field:

W. Gruenwald, Geologist 8 1/2 days @ $125.00/day	$1,062.50	
Office: (Map and Report Compilation)		
W. Gruenwald, Geologist 12 1/2 days @ $125.00/day	1,562.50	$ 2,625.00

2. EXPENSES:

(a).	Backhoe Rental-Stan Brewer: 75 hours @ $32.00/hour		$2,400.00	
(b).	Truck Rental:			
	8 days @ $25.00/day	$200.00		
	580 mi. @ 25¢/mile	145.00	345.00	
(c).	Room and Board - W. Gruenwald . . .		251.96	
(d).	Expense Account, Miscellaneous Meals, and Supplies		116.37	
(e).	Geochemical Analyses		399.90	
(f).	Misc. Printing, Xerox, Telephone . .		146.30	
(g).	Equipment Rental: 8 days @ $10.00/day		80.00	
(h).	Report Compilation, Xeroxing, Secretarial, Binding, and Printing + Misc		317.77	4,057.30
	TOTAL HEREIN			$6,682.30

CERTIFIED CORRECT:

GEOLOGICAL ASSOCIATION OF CANADA · W. GRUENWALD · FELLOW ·

W. Gruenwald

W. Gruenwald, B. Sc.,
GEOLOGIST

COST STATEMENT (continued) . . . . . page two

TOTAL - W. Gruenwald	$ 6,682.30
TOTAL - J. R. Kerr	17,760.43
GRAND TOTAL	$24,442.73

APPENDIX D

REFERENCES

REFERENCES

Jones, A.G. (1959): - Vernon Map Sheet (1"= 4 mi.) and G.S.C. Memoir #296.

Gruenwald, W. and

Dawson, J. M. (Nov.20,1978)- Geological, Geochemical and Geophysical Report on the Jen Jen Property, Kamloops Mining Division, B. C.

Shaw, J. (Sept.12,1979)-Geomorphological Report on the Jen Jen claims.

APPENDIX E

WRITER'S CERTIFICATE

CERTIFICATE

I, W. GRUENWALD, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY

CERTIFY THAT:

(1). I am a geologist residing at #1-219 Victoria Street, Kamloops, British Columbia, and employed by Kerr, Dawson and Associates Ltd. of Suite #1-219 Victoria Street, Kamloops, B. C.

(2). I am a graduate of the University of British Columbia, B. Sc. (1972), and a fellow of the Geological Association of Canada. I have practised my profession for 7 1/2 years.

(3). I am co-author of this report which describes the results of an exploration programme carried out in part by myself on the Jen Jen claims, Kamloops Mining Division, British Columbia.

KERR, DAWSON AND ASSOCIATES LTD.,

W. Gruenwald, B. Sc.,
GEOLOGIST

November 13,1979,
KAMLOOPS, B. C.

JOHN R. KERR, P.ENG.
GEOLOGICAL ENGINEER

1 - 219 VICTORIA STREET
KAMLOOPS, B.C.

PHONE (604) 374-0544

CERTIFICATE

I, J. R. KERR, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT:

(1). I am a member of the Association of Professional Engineers of British Columbia and a Fellow of the Geological Association of Canada.

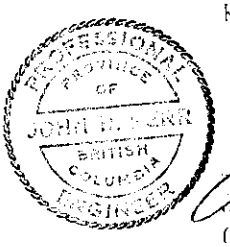
(2). I am a geologist employed by Kerr, Dawson and Associates Ltd. of #1 - 219 Victoria Street, Kamloops, B. C.

(3). I am a graduate of the University of British Columbia (1964), with a B. A. Sc. degree in Geological Engineering.

(4). I have practised my profession continuously since graduation.

(5). I am co-author of this report which describes the results of an exploration programme carried out in part by myself on the Jen Jen claims, Kamloops Mining Division, British Columbia.

KERR, DAWSON & ASSOCIATES LTD.,



J. R. Kerr, P. Eng.,
GEOLOGIST

November 13, 1979,
KAMLOOPS, B. C.

APPENDIX F

MAPS AND GEOCHEMICAL ASSAYS

BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-352667

Geochemical Lab Report

Extraction Hot HNO_3 Report No. 29 - 2078

Method Fluorimetric From Kerr-Dawson & Associates

Fraction Used Date October 9, 19 79

TRENCHING & TEST PITTING JENJEN CLAIMS

SAMPLE NO.	U ppm			SAMPLE NO.	U ppm		
79AP 10	2	1.0-1.9m	non sorted angular subangular conglom.	79AT 4B	1	2.7-3.3m	silt + sand >> conglom
12	0.8	0.9-1.9m	non sorted pebble-boulder conglom? granite + schists.	5B	1	2.3-3.4m	pebble-cobble conglom. - some c.g sst.
1A	1	1.4-2.2	predominantly sst.	6B	1	1.7-2.3m	pebble-cobble conglom sand-granule matrix.
2A	1	1.3-2.2	angular conglom? some blocks of micaceous sst.	7B	1	1.6-2.6m	cobble-boulder conglom. few pebbly lenses, some sand
3A	1	1.2-2.2m	mixed pebble-cobble conglom & some sst lenses.	8B	4	1.6-1.9m	pale mauve-yellow pebble-cobble conglom.
4A	1	0.6-1.2m	subangular conglom? - no sst.	1C	9	selected oxally material over 2m	
6A	0.8	1.5-1.9m	pebble-cobble conglom poorly sorted	2C	1	sample dyke	across basalt
7A	1	2-2.6m	pebble-cobble conglom & sand-granule matrix.	3C	3	3.6-4m	more indurated quartzose conglomerate
8A	1	1-2.5m	gray locally carbonaceous sst.	4C	1	3.3-4m	pebble-cobble congl. & minor silty lenses.
9A	0.6	0.7-1.3m	semi indurated brown sst. weakly stratified.	6C	1	2.3-3.0m	as in 6B - some grav pebble conglom.
11A	0.4	0.8-2m	poorly sorted, non stratified pebble-boulder conglom; angular	7C	1	2.6-3.6	as in 7B, no sandy lenses
13A	<0.2	0.8-1.3m	semi indurated cobble-boulder conglomerate, subangular frags.	8C	3	1.9-2.5m	green-brown m.g. sst horizon
1B	1	2.2-2.8m	semi indurated cobble conglomerate.	6D	2	decayed cutting conglom?	basaltic dyke.
6B	0.6	1.9-2.6m	as in 6A except more indurated & less sorted.	79BP 1	3	1.4-2.3m	rusty yellow semi indur. cobble conglom, non strat
7B	1	2.6-3m	sandy horizon - locally carbonaceous	2	2	1.0-2.0m	glacial debris
8B	2	2.5-3.5	pebble-cobble conglom - some sst & carbon.	79BT 1A	2	0.6-1.5m	boulder conglomerate
9B	1	1.3-2m	mixed cobble congl + sst lenses.	1B	0.8	1.5-1.9m	yellow-brown m.g. sst beds, granitic pebb
13B	2	1.3-2.2m	cobble-bldr conglom.	79CP 3A	1	2.5-3.0m	c.g sst + granule congl weakly stratified.
7C	1	3-3.3m	pebble-cobble conglom, - some sst lenses.	4A	2	1.5-2.0	yellowish cobble conglom sandy-granule matrix
79AT 1A	1	0->1m	micaceous sst with oxally patches	6A	2	2-3m	poss glacial debris
2A	0.8	0.4m	weakly indurated conglomerate	7A	0.8	1.2-2.0m	pale yellow brown oxid crumbly granule-cob
3A	2	1.8->2.8m	poorly sorted sst & pebble conglomerate	8A	1	1-2m	granule-boulder sed - contains basalt bld
4A	1	2-2.7m	silty horizon & some carbonaceous material	3B	3	gray micaceous sst & silty lenses, some lenses of coal.	
5A	1	1.2-2.2m		4B	2	2.0-3.0m	gray-black m.g. sst.
6A	1	0.7-1.7m	rusty semi indurated boulder conglom. no stratification.	6B	2	3-3.5m	yellow-brown granule boulder sst - nonsort
7A	1	0.6-1.6m	pebble-cobble conglomerate minor granule-pebble lenses.	7B	3	2.0-3m	as 7A, well frac. quartz + mica bands
8A	2	0.6-1.6m	c.g sst with intercalated granule-pebble conglomerate	8B	3	2-2.5m	pebble-boulder congl. lower para decayed schist
1B	1	1-2m	as in sample 1A	4C	2	3.0-4.0m	sst & lenses of f.g congl + oxally altered
2B	2	0.20m	brown sandstone with carbonaceous material	6C	3	3.5-4.0m	gray micaceous clayey material, prob. glacial
3B	0.6	2.8-3.6m	clay to pebble conglomerate.	4D	0.8	4.0-4.2	pebble-cobble conglom granitic+gneiss clast >all
							others

7580

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 2078 Page No. 2

SAMPLE NO.		U ppm			SAMPLE NO.				
79CT	2A	1	0.6-1.6m	pebbles - boulders in basaltic debris					
	2B	1	1.6-2.2m	boulder conglom., minor granule-pebble beds.					
79DP	1A	2		pebble - cobble conglomerate, well indurated.					
	2A	2	2.5-2.8m	- probably glacial debris.					
	2B	2	2.8-3.8m	cobble-boulder conglomerate with sst lense @ 3.3-3.7m, no imbrication.					
79DT	1A	0.8	1-2m	pebble-cobble conglomerate, granitic clast + minor schists, clasts = c.g. sand + granule matrix.					
	2A	0.4	3-3.4	brick red, baked c.g. sandstone mica common					
	1B	0.8	2-3m	cobble-boulder conglomerate, clasts more subangular no bedding or imbrication.					
	2B	0.2	3.4-4.4	grey crumbly soft, highly altered cobble-boulder congl. granitic frags >> all others.					
	1C	1	3-3.8m	as in 1B some rotted granitic debris predominates, no imbrication.					
79EP	1	<0.2	~3m	decayed granitic debris well altered to clayey material.					
	2A	6	2-3.6m	stratified sand + silt with minor granule-pebbly lenses.					
	3A	1	1.1-2.0m	brown, non-stratified silty zone with carbonaceous zone from 1.4-1.7m.					
	4A	16	0.5-1.5m	highly decomposed granodiorite - some pegmatitic material noted					
	2B	3	3.6-4m	decayed granitic basement					
	3B	0.6	2.2-2.6m	l. grey, well compacted, locally rusty discontinuous zones of pyritic masses up to 1cm.					
	4B	7	1.5-2.5m	less decomposed than 4A. - fresher granitic rock.					
	3C	0.4	2.6-3.4m	med. grey, well indurated clay-silt zone with some sandy lenses + minor carbonaceous material					
~~79FP~~ ~~79GP~~	2A	1	0-1m	overburden, part of soil profile.					
	4A	0.6	3-3.7m	glacial till in abundance of basalt					
	~~5A~~ ~~6A~~	1	0-0.6m	vaguely stratified sandy material					
	2B	1	1-2m	clayey till + blocks of granite + basaltic rocks.					
	4B	0.8	3.7-4m	altered, crumbly leucogranodiorite fragments probably basement rock					
	~~5B~~ ~~6B~~	4	0.6-2.5m	decomposed, med. grained granodiorite.					
	2C	0.4	2-3m	as in 2B. part of SOIL PROFILE.					
	2D	<0.2	3-3.4m	crumbly granodiorite basement.					

BONDAR-CLEGG & COMPANY LTD.
1500 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-54554

Geochemical Lab Report

Extraction Hot HNO_3 Report No. 29 - 1428

Method Fluorimetric From Kerr, Dawson & Associates Ltd.

Fraction Used Date August 24, 19 79

SAMPLE NO.	U ppm				SAMPLE NO.	U ppm			
J-5N 3+00E	0.4				J-10N 4+00E	1			
3+50E	0.4				4+50E	0.8			
4+00E	0.6				5+00E	2			
4+50E	0.4				5+50E	0.8			
5+00E	1				6+00E	0.6			
5+50E	0.6				6+50E	0.4			
6+00E	1				7+00E	0.6			
6+50E	0.8				7+50E	0.6			
7+00E	0.4				8+00E	1			
J-6N 3+00E	1				J-L34N 20+00E	0.8			
3+50E	1				20+50E	0.4			
4+00E	5				21+00E	1			
4+50E	0.6				21+50E	IS			
5+00E	0.6				22+00E	0.8			
5+50E	2				22+50E	0.8			
6+00E	2				23+00E	0.6			
6+50E	0.6				24+50E	0.6			
7+00E	3				25+00E	0.8			
7+50E	0.6				25+50E	1			
8+00E	0.2				26+00E	0.8			
J-8N 3+00E	0.8				26+50E	IS			
3+50E	0.8				27+00E	0.6			
4+00E	1				27+50E	0.8			
4+50E	0.6				J-L36N 22+50E	0.8			
5+00E	0.6				23+00E	IS			
5+50E	2				23+50E	IS			
6+00E	1				24+00E	IS			
6+50E	0.6				24+50E	0.8			
7+00E	3				25+00E	0.4			
7+50E	0.4				25+50E	0.6			

V-18

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1428 Page No. 2

SAMPLE NO.	U ppm	SAMPLE NO.	U ppm
J-L36N 26+00E	0.6	J-L42N 26+50E	1
26+50E	1	27+00E	0.4
27+00E	0.6	27+50E	0.6
27+50E	0.6	28+00E	1
28+00E	2	J-BL10N 20+50W	0.8
J-L40N 20+00E	0.4	21+00W	0.6
20+50E	0.6	21+50W	0.6
21+00E	0.6	J-18S 17+00W	4
21+50E	0.6	16+50W	1
22+00E	1	16+00W	3
22+50E	0.8	15+50W	4
23+00E	3	15+00W	6
23+50E	0.8	14+50W	0.8
24+00E	0.6	J-16S 16+00W	1
24+50E	0.6	15+50W	0.6
25+00E	0.6	15+00W	0.2
25+50E	0.4	14+50W	17
26+00E	1	J-8E 24+00N	LO.2
26+50E	0.4	24+50N	0.2
27+00E	0.4	25+00N	0.4
27+50E	0.4	25+50N	LO.2
28+00E	0.4	26+00N	LO.2
J-L42N 20+00E	0.8	26+50N	0.2
20+50E	0.4	J-10E 24+00N	0.6
21+00E	0.6	24+50N	0.4
21+50E	0.4	25+00N	LO.2
22+00E	0.4	25+50N	LO.2
22+50E	2	26+00N	0.4
23+00E	0.6	J-12E 24+00N	LO.2
23+50E	0.8	24+50N	LO.2
24+00E	1	25+00N	0.6
24+50E	0.4	25+50N	LO.2
25+00E	0.6	26+00N	0.2
25+50E	0.8	J-14E 24+00N	LO.2
26+00E	0.6	24+50N	2

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1428 Page No. 3

SAMPLE NO.	U ppm
J-14E 25+00N	L0.2
25+50N	L0.2
26+00N	L0.2
J-16E 24+50N	L0.2
25+00N	L0.2
25+50N	L0.2
26+00N	L0.2
26+50N	L0.2
J-18E 23+50N	L0.2
24+00N	0.8
24+50N	L0.2
25+00N	L0.2
25+50N	L0.2
26+00N	L0.2
26+50N	0.4
J-20E 23+00N	2
23+50N	1
24+00N	0.4
24+50N	0.4
25+00N	1
25+50N	0.4
26+00N	0.4
26+50N	0.4
J-22E 24+50N	0.6
25+00N	0.4
26+00N	0.6
26+50N	2
J-24E 26+00N	0.4
26+50N	0.4
27+00N	0.4
J-24W 15+00N	1
14+50N	3
14+00N	0.2
13+50N	0.4
13+00N	1

SAMPLE NO.	U ppm
J-24W 12+50N	0.4
12+00N	0.2
11+50N	0.4
11+00N	0.2
10+50N	0.4
10+00N	0.4
9+50N	0.4
9+00N	0.6
8+50N	0.6
8+00N	0.6
7+50N	0.6
7+00N	1
6+50N	0.6
6+00N	0.8
5+50N	0.6
5+00N	0.6
4+50N	0.8
4+00N	0.4
3+50N	0.4
3+00N	2
2+50N	1
J-22W 16+50N	1
16+00N	0.8
15+50N	1
15+00N	0.6
14+50N	0.6
14+00N	1
13+50N	0.4
13+00N	0.6
12+50N	0.6
12+00N	0.6
11+50N	0.6
11+00N	0.6
10+50N	0.4
10+00N	0.4

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1428 Page No. 4

SAMPLE NO.	U ppm	SAMPLE NO.	U ppm
J-22W 9+50N	0.8	J-19W 11+50N	0.4
9+00N	0.6	11+00N	0.4
8+50N	0.6	10+50N	0.4
8+00N	0.6	10+00N	0.6
7+50N	2	9+50N	0.4
7+00N	0.6	9+00N	0.4
6+50N	0.8	8+50N	0.6
6+00N	0.6	8+00N	0.8
5+50N	1	7+50N	1
5+00N	0.8	7+00N	0.8
4+50N	0.8	6+50N	0.6
4+00N	0.6	6+00N	2
3+50N	0.8	J-18W 22+00N	0.8
J-20W 19+50N	1	21+50N	3
19+00N	1	21+00N	0.6
18+50N	0.4	20+50N	3
18+00N	0.6	20+00N	2
17+50N	0.8	19+50N	0.6
17+00N	0.8	19+00N	0.8
16+50N	0.4	18+50N	1
16+00N	0.2	18+00N	2
15+50N	0.4	17+50N	1
15+00N	0.4	17+00N	4
14+50N	0.2	16+50N	2
14+00N	0.8	16+00N	0.4
13+50N	0.4	15+50N	0.6
13+00N	0.4	15+00N	0.4
12+50N	0.6	14+50N	1
12+00N	0.8	14+00N	0.6
11+50N	0.2	11+50N	0.4
11+00N	0.8	11+00N	0.6
10+50N	0.6	10+50N	0.8
J-19W 13+00N	0.6	J-17W 8+00N	0.4
12+50N	0.2	7+50N	0.4
12+00N	0.4	7+00N	0.4

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1428 Page No. 5

SAMPLE NO.	U ppm	SAMPLE NO.	U ppm
J-17W 6+50N	0.6	J-14W 18+50N	0.4
J-16W 22+50N	0.8	18+00N	0.2
22+00N	1	17+50N	0.4
21+50N	0.6	17+00N	0.6
21+00N	1	16+00N	1
20+50N -20M	3	15+60E 22+50N	2
20+00N	0.6	10+50N	0.6
19+50N	0.6	J-L12W 23+50N	0.6
19+00N	0.2	23+00N	0.2
18+50N	0.2	22+50N	2
18+00N	2	22+00N	0.6
17+50N	0.2	21+50N	0.2
17+00N	1	21+00N	L0.2
16+00N	0.4	20+50N	0.8
15+00N	0.6	20+00N	1
J-15W 11+50N	L0.2	19+00N	0.6
11+00N	4	18+00N	0.8
10+50N	1	17+00N	1
10+00N	0.8	16+00N	1
9+50N	L0.2	11+00N	0.8
9+00N	L0.2	J-L10W 26+00N	1
8+50N	L0.2	25+50N	L0.2
8+00N	1	25+00N	0.8
7+50N	0.2	24+50N	1
7+00N	0.4	24+00N	2
6+50N	0.4	23+50N	0.6
J-14W 23+00N	5	23+00N	0.4
22+50N	6	22+50N	0.4
22+00N	L0.2	22+00N	0.4
21+50N	7	21+30N	1
21+00N	L0.2	21+00N	0.4
20+50N	L0.2	20+50N	1
20+00N	0.4	20+00N	0.4
19+50N	L0.2	19+50N	0.6
19+00N	0.2	19+00N	0.6

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1428 Page No. 6

SAMPLE NO.	U ppm				SAMPLE NO.				
J-L10W 18+00N	0.4								
					cc Union Oil				
					L denotes 'less than				
					IS denotes 'insufficient sample'				

BONDAR-CLEGG & COMPANY LTD.
130 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-352667

Geochemical Lab Report

Extraction U; Hot HNO_3 U*; H_2O_2-CO_3 Report No. 29 - 1517

Method Fluorimetric From Kerr-Dawson & Associates

Fraction Used Date August 28 19 79

SAMPLE NO.	U ppm	U* ppm			SAMPLE NO.	U ppm	U* ppm		
J 4W - 13+00N	0.2	-			J18W - 7NA0	51	38		
13+50N	0.2	-			7NA	22	16		
14+00N	<0.2	-			7NA+B	24	18		
14+50N	0.4	-			7NC	8	3		
15+00N	<0.2	-			J79 - 01	0.8	-		
15+50N	0.4	-			02	0.6	-		
16+00N	<0.2	-			03	1	-		
16+50N	0.4	-							
17+00N	0.2	-							
17+50N	0.4	-							
18+00N	4	-							
18+50N	1	-							
19+00N	2	-							
19+50N	0.6	-							
20+00N	0.6	-							
20+50N	0.4	-							
21+00N	0.6	-							
21+50N	0.2	-			cc Union Oil Company				
22+00N	0.6	-							
22+50N	0.6	-							
23+00N	<0.2	-							
24+00N	<0.2	-							
25+00N	0.2	-							
25+50N	0.8	-							
26+00N	0.4	-							
26+50N	0.4	-							
J12W - 10NA	8	7							
10NB	3	2							
10NC1	1	0.8							
10NC2	3	1							

BONDAR-CLEGG & COMPANY LTD.
1500 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-54554

Geochemical Lab Report

Extraction Hot HNO_3 Report No. 29 - 1551

Method Fluorimetric From Kerr-Dawson & Associates

Fraction Used Date August 29, 1979

SAMPLE NO.	U ppm	SAMPLE NO.	U ppm
J5S - 4+50E	0.4	J3S - 0+00	0.8
3+00E	0.4	0+50W	0.8
2+50E	<0.2	1+00W	0.6
2+00E	0.4	1+50W	0.6
1+00E	<0.2	2+00W	0.8
0+00E	2	J9W - 9+50N	2
0+50W	3	10+00N	0.6
1+00W	5	10+50N	0.4
1+50W	5	11+00N	0.6
2+00W	3	11+50N	1
2+50W	1	12+00N	0.6
3+00W	1	12+50N	0.6
3+50W	1	13+00N	0.8
J4S - 4+50E	0.6	13+50N	0.6
4+00E	3	14+00N	0.8
3+50E	0.4	J11W - 8+50N	1
3+00E	0.4	9+00N	0.8
1+00E	0.4	9+50N	0.8
0+50E	0.4	10+00N	1
0+00	0.8	10+50N	0.8
0+50W	0.8	11+00N	0.8
1+00W	1	11+50N	0.8
2+00W	2	12+00N	0.4
2+50W	0.8	13+00N	1
3+00W	2	J13W 8+50N	0.4
J3S 4+50E	3	9+00N	0.8
2+00E	1	9+50N	0.6
1+50E	6	10+00N	0.4
1+00E	0.8	10+50N	0.4
0+50E	0.8	11+00N	0.6

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1551 Page No. 2

SAMPLE NO.	U ppm				SAMPLE NO.				
J17W - 12+00N	0.6								

cc Union Oil Company

BONDAR-CLEGG & COMPANY LTD.
1500 PEMBERTON AVE., NORTH VANCOUVER, B.C. PHONE: 985-0681 TELEX: 04-54554

Geochemical Lab Report

Extraction Hot HNO_3 Report No. 29 - 1575

Method Fluorimetric From Kerr-Dawson & Associates

Fraction Used -80 mesh Date August 30 19 79

SAMPLE NO.	U ppm				SAMPLE NO.	U ppm			
J 4E - 24+50N	3				J 6E - 31+00N	2			
25+50N	1				31+50N	0.8			
26+00N	0.8				32+00N	4			
26+50N	0.8				32+50N	0.6			
27+00N	0.6				J 2W - 14+00N	0.4			
27+50N	0.4				15+50N	0.2			
28+00N	1				16+00N	<0.2			
28+50N	2				16+50N	<0.2			
29+00N	0.8				17+00N	<0.2			
29+50N	1				17+50N	<0.2			
30+00N	2				18+50N	<0.2			
30+50N	0.4				19+00N	1			
31+00N	IS				19+50N	0.8			
31+50N	0.4				20+00N	0.2			
32+00N	1				20+50N	<0.2			
32+50N	3				21+00N	<0.2			
J 6E - 24+00N	0.8				21+50N	<0.2			
24+50N	0.6				22+00N	<0.2			
25+00N	2				22+50N	1			
25+50N	0.8				23+00N	<0.2			
26+00N	1				23+50N	<0.2			
26+50N	0.6				25+00N	<0.2			
27+00N	0.8				25+50N	0.2			
27+50N	1				26+00N	<0.2			
28+00N	1				26+50N	0.2			
28+50N	0.6				27+00N	<0.2			
29+00N	0.8				27+50N	0.2			
29+50N	1				J 6W - 11+00N	0.4			
30+00N	2				11+50N	0.6			
30+50N	2				12+00N	0.6			
					12+50N	0.2			

V-18

BONDAR-CLEGG & COMPANY LTD.

Geochemical Lab Report

Report No. 29 - 1575 Page No. 2

SAMPLE NO.	U ppm	SAMPLE NO.	U ppm
J 6W - 13+00N	0.6	JL8W - 23+50N	0.2
13+50N	0.6	24+50N	0.8
14+00N	0.6	25+00N	0.4
15+00N	0.6	25+50N	1
16+50N	0.6	26+00N	1
19+50N	0.8	26+50N	2
20+00N	0.6	27+00N	6
20+50N	0.4		
21+00N	0.4		
21+50N	0.4		
22+00N	0.4		
22+50N	0.6		
24+00N	0.2		
24+50N	1		
J6WB - 24+50N	0.6		
25+00N	0.6		
25+50N	0.2		
J 7W - 11+00N	0.4		
11+50N	0.4		
12+00N	0.6		
12+50N	0.4	IS denotes 'insufficient sample'	
13+00N	0.4		
13+50N	0.6		
14+50N	0.4		
15+00N	0.4		
15+50N	0.8		
JL8W - 13+00N	0.6		
13+50N	0.8		
18+50N	0.8		
20+00N	0.6		
20+50N	0.6		
21+00N	0.4		
21+50N	0.4		
22+50N	0.4		
23+00N	0.2		

— LEGEND —

- 5000 — Topographic contour in feet (a.s.l.)
- Main and secondary gravel roads
- Stream, seepage, swampy area
- Claim boundary and Legal corner post (L.C.P.)
- Grid line with station marker
- Soil sample site with uranium value in parts per million (ppm)

GEOCHEMICAL CATEGORIES

0.2	Negative	<1.5 ppm	uranium
2	Possibly anomalous	1.5 - 5.4	"
7	Probably anomalous	5.5 - 9.3	"
10	Definitely anomalous	>9.3	"

- Rock "geochem" sample site
- Soil profile pit with assay result for uranium by "normal" and $NaCO_3$ (partial leach) methods stated in p.p.m.

To accompany a report by W. Gruenwald, B.Sc and J.R. Kerr, P.Eng

Note: Organic content of soils
l.o.c. = low organic content
m.o.c. = moderately " "
o.s. = organic soil

UNION OIL COMPANY OF CANADA

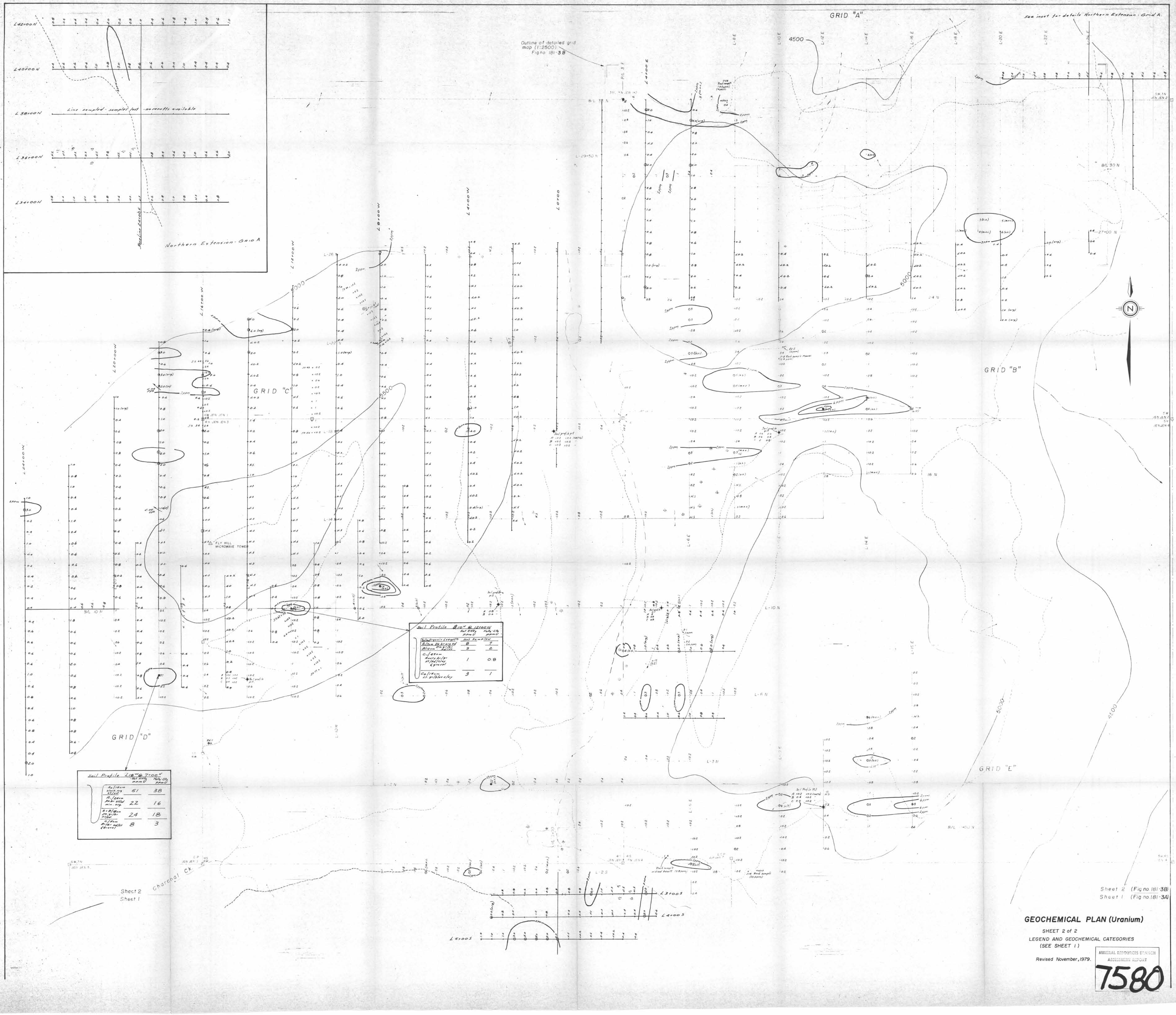
GEOCHEMICAL PLAN (URANIUM)

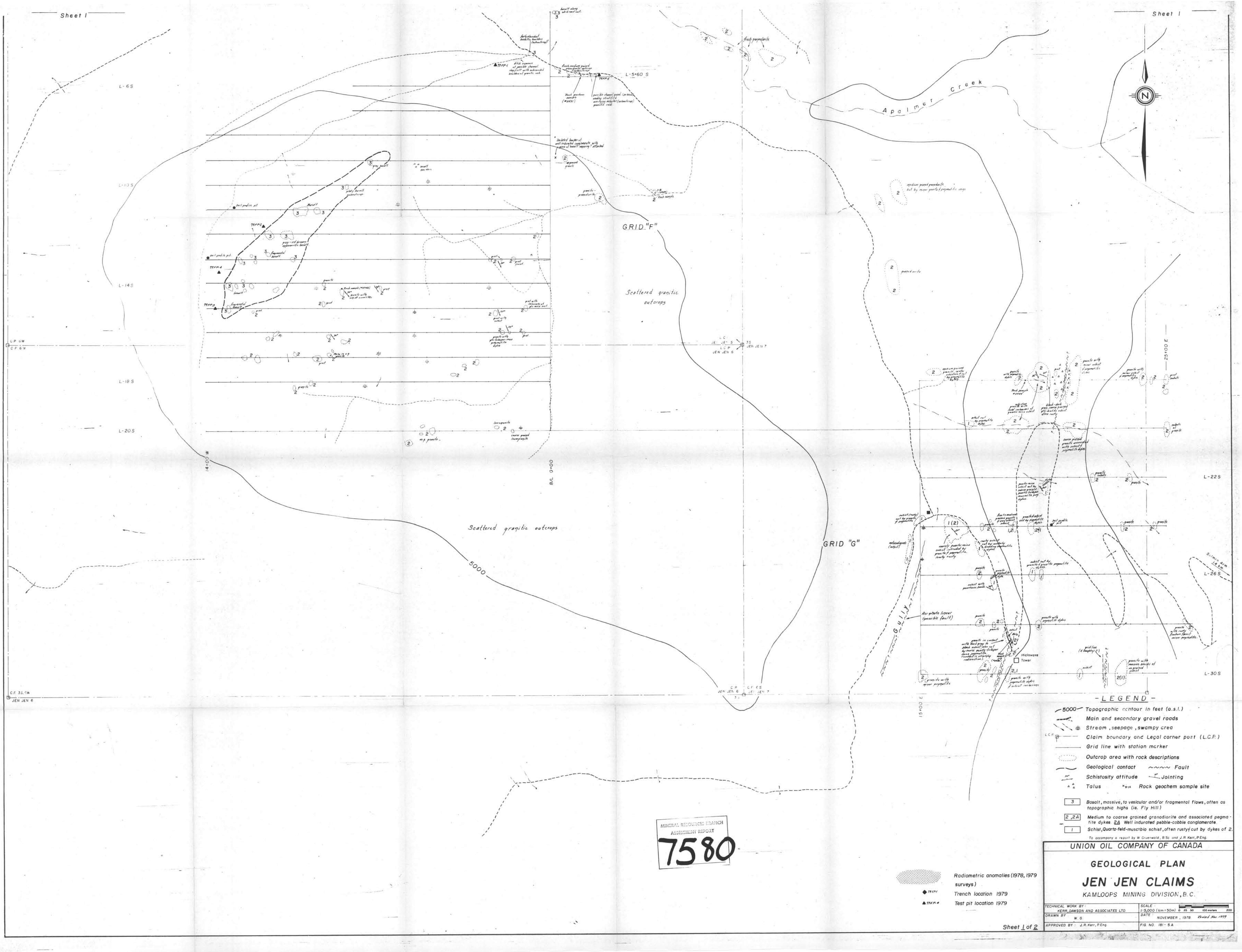
JEN JEN CLAIMS

KAMLOOPS MINING DIVISION, B.C.

TECHNICAL WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000 (1cm = 50m) 0 25 50 100 meters 200
DRAWN BY: W. G.	DATE: NOVEMBER, 1978. Revised Nov., 1979
APPROVED BY: J. R. KERR	FIG. NO. 181-3 A

Sheet 1 of 2


GRID "A"
GRID "B"
GRID "C"
GRID "D"
GRID "E"
see inset for details Northern Extension - Grid A
Outline of detailed grid map (1:2500) Fig no. 181-3B
Northern Extension - Grid A
Line sampled - samples lost - no results available
L42+00N
L40+00N
L38+00N
L36+00N
L34+00N
4500
5000
FLY HILL MICROWAVE TOWER
Charcoal Ck.
L3+00S
L4+00S
L5+00S
Soil Profile L18W @ 7+00N
Hot HNO3 ppm U
H2O2-CO3 ppm U
51
38
22
16
24
18
8
3
Soil Profile
Sheet 2
Sheet 1
Sheet 2 (Fig no. 181-3B)
Sheet 1 (Fig no. 181-3A)
GEOCHEMICAL PLAN (Uranium)
SHEET 2 of 2
LEGEND AND GEOCHEMICAL CATEGORIES
(SEE SHEET 1)
Revised November, 1979.
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7580


Sheet 1
Sheet 1
L-6S
L-10S
L-14S
L-18S
L-20S
L-22S
L-26S
L-30S
L-5+60 S
Apalmer Creek
GRID "F"
GRID "G"
Scattered granitic outcrops
Scattered granitic outcrops
5000
14+00 W
BL 0+00
15+00 E
25+00 E
Gully
Microwave Tower
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7580
Radiometric anomalies (1978, 1979 surveys)
Trench location 1979
Test pit location 1979
Sheet 1 of 2
- LEGEND -
5000 Topographic contour in feet (a.s.l.)
Main and secondary gravel roads
Stream, seepage, swampy area
Claim boundary and Legal corner post (L.C.P.)
Grid line with station marker
Outcrop area with rock descriptions
Geological contact
Fault
Schistosity attitude
Jointing
Talus
Rock geochem sample site
3 Basalt, massive, to vesicular and/or fragmental flows, often as topographic highs (ie. Fly Hill)
2, 2A Medium to coarse grained granodiorite and associated pegmatite dykes. 2A Well indurated pebble-cobble conglomerate.
1 Schist, Quartz-feld-musc-bio schist, often rusty & cut by dykes of 2.
To accompany a report by W Gruenwald, B.Sc and J.R. Kerr, P.Eng.
UNION OIL COMPANY OF CANADA
GEOLOGICAL PLAN
JEN JEN CLAIMS
KAMLOOPS MINING DIVISION, B.C.
TECHNICAL WORK BY: KERR, DAWSON AND ASSOCIATES LTD.
DRAWN BY W.G.
APPROVED BY: J.R. Kerr, P.Eng.
SCALE 1:5,000 (1cm = 50m) 0 25 50 100 meters 200
DATE NOVEMBER, 1978 Revised Nov. 1979
FIG. NO. 181-5A

GRID "A"

GRID "B"

GRID "C"

GRID "D"

GRID "E"

Outline of detailed grid map (1:2500) Figno. 181-7

See inset for details Northern Extension - GRID A

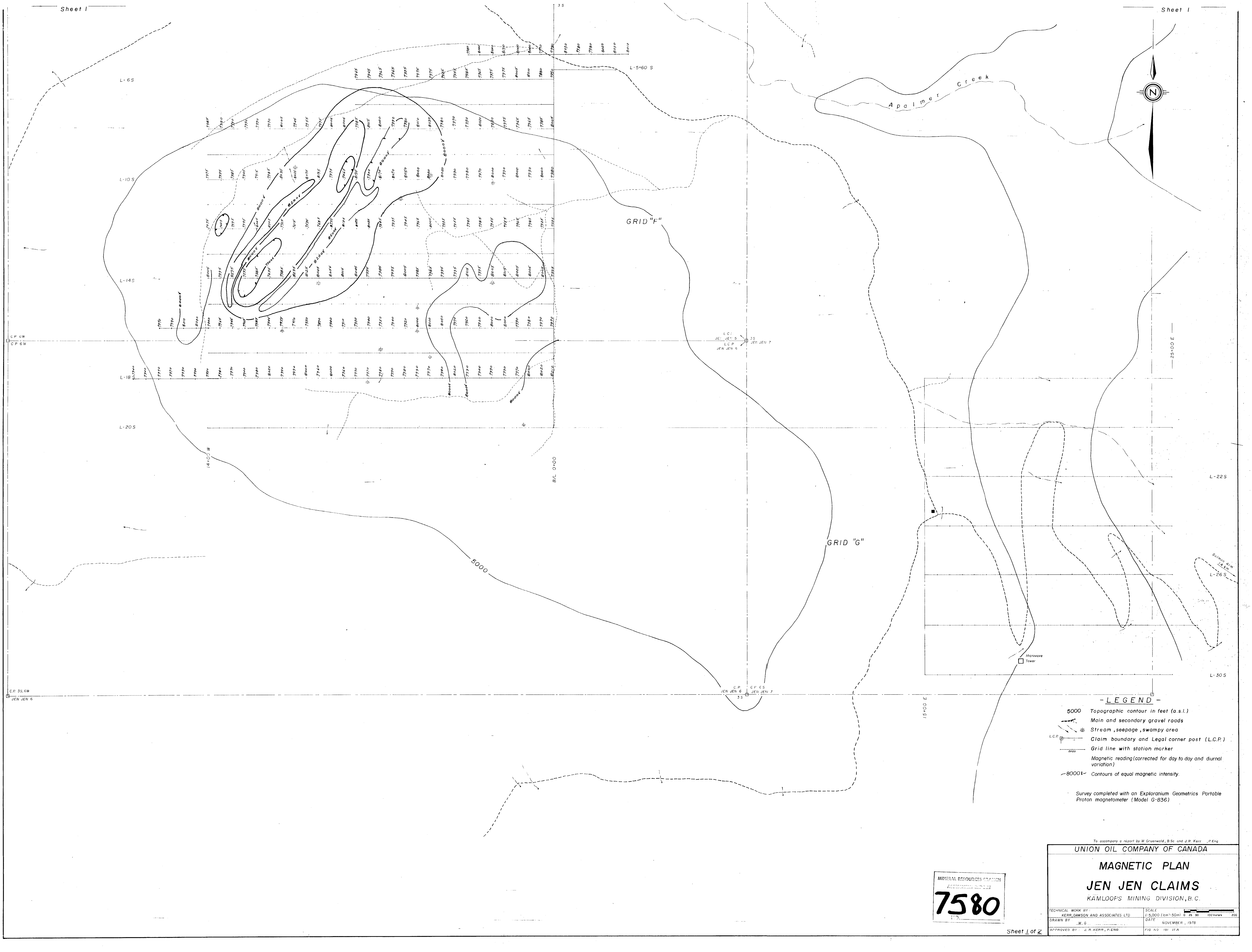
Northern Extension - GRID A

Sheet 2 (Fig no. 181-5B)
Sheet 1 (Fig no. 181-5A)

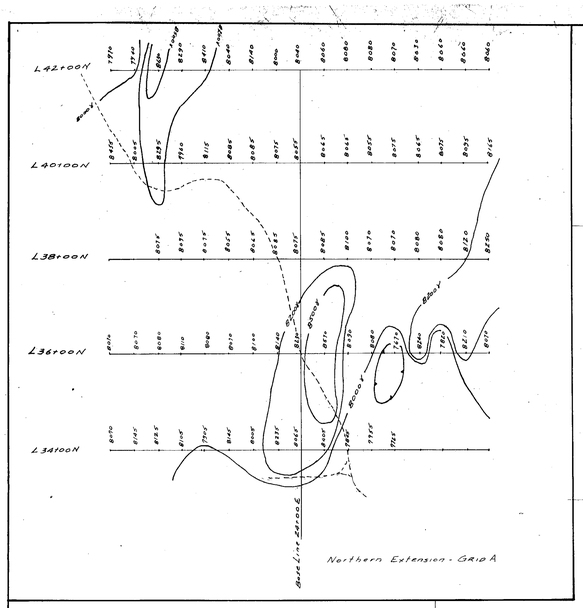
Sheet 2
Sheet 1

GEOLOGICAL PLAN
(SHOWING RADIOMETRICS)

LEGEND - SEE SHEET 1
revised Nov. 1979



Sheet 1
Sheet 1
L-6S
L-10S
L-14S
L-18S
L-20S
L-5+60 S
L-22S
L-26S
L-30S
GRID "F"
GRID "G"
Apalmer Creek
5000
14+00 W
B/L 0+00
15+00 E
25+00 E
C.P. 6W
JEN JEN 5
JEN JEN 7
JEN JEN 6
C.P. 35,6W
Microwave Tower
-LEGEND-
5000 Topographic contour in feet (a.s.l.)
Main and secondary gravel roads
Stream, seepage, swampy area
L.C.P. Claim boundary and Legal corner post (L.C.P.)
Grid line with station marker
8020 Magnetic reading (corrected for day to day and diurnal variation)
8000γ Contours of equal magnetic intensity.
Survey completed with an Exploranium Geometrics Portable Proton magnetometer (Model G-836)
To accompany a report by W. Gruenwald, B.Sc and J.R. Kerr, P.Eng
UNION OIL COMPANY OF CANADA
MAGNETIC PLAN
JEN JEN CLAIMS
KAMLOOPS MINING DIVISION, B.C.
TECHNICAL WORK BY: KERR, DAWSON AND ASSOCIATES LTD
SCALE 1:5,000 (1cm=50m) 0 25 50 100 meters 200
DRAWN BY W. G.
DATE NOVEMBER, 1978
APPROVED BY: J. R. KERR, P. ENG.
FIG NO 181 11A
MINERAL RESOURCES BRANCH
7580
Sheet 1 of 2



GRID "A"

GRID "B"

GRID "C"

GRID "D"

GRID "E"

Outline of detailed grid map (1:2500) Fig no. 181-

See inset for details Northern Extension Grid A

FLY HILL MICROWAVE TOWER

Charcoal CK.

Sheet 2
Sheet 1

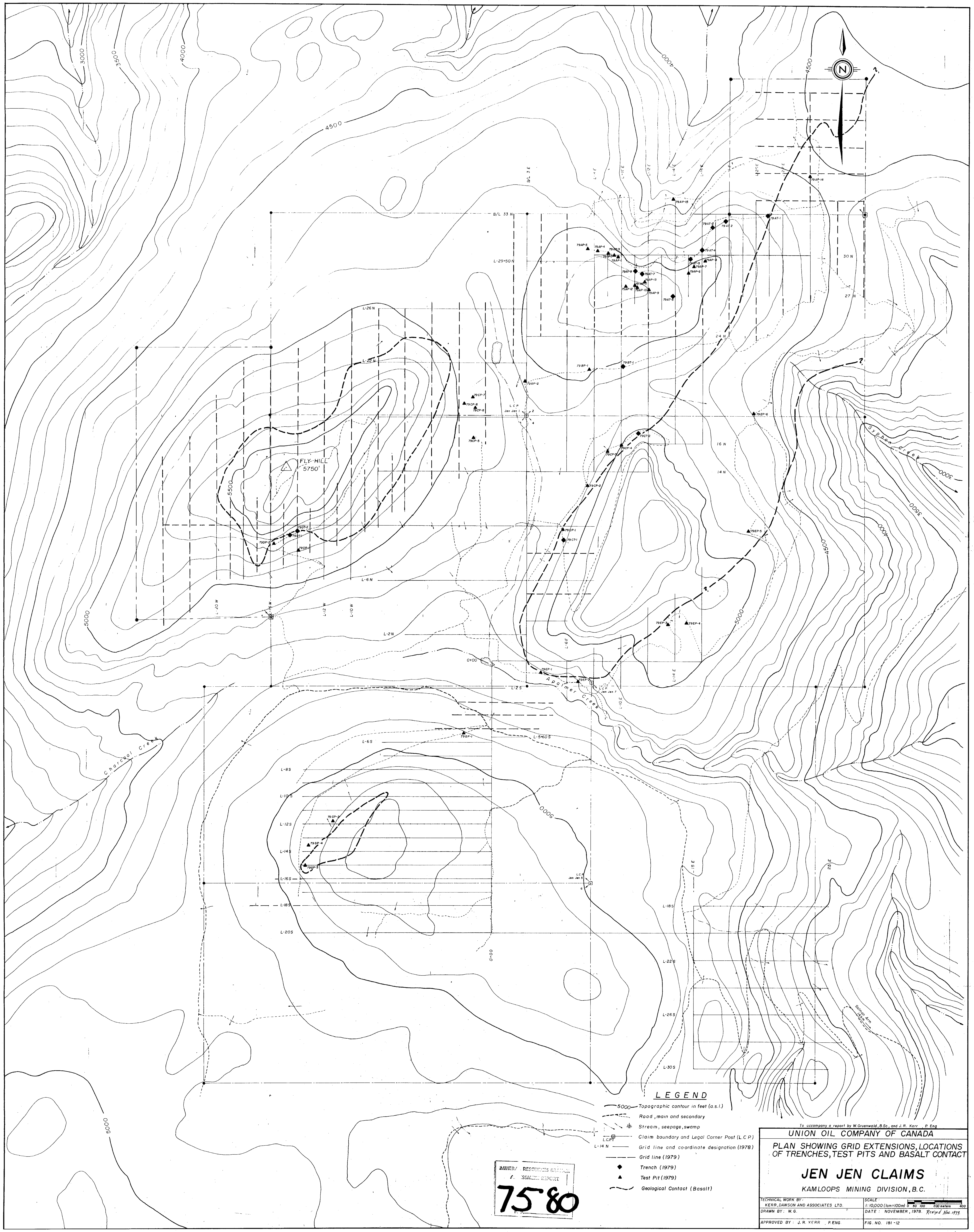
Sheet 2 (Fig no. 181-11B)
Sheet 1 (Fig no. 181-11A)

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7580

MAGNETIC PLAN

Sheet 2 of 2.

Legend (See Sheet 1)



To accompany a report by W. Gruenwald, B.Sc., and J.R. Kerr, P. Eng.

UNION OIL COMPANY OF CANADA

PLAN SHOWING GRID EXTENSIONS, LOCATIONS OF TRENCHES, TEST PITS AND BASALT CONTACT

JEN JEN CLAIMS

KAMLOOPS MINING DIVISION, B.C.

TECHNICAL WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:10,000 (1cm=100m) 0 50 100 200 meters 400
DRAWN BY: W.G.	DATE: NOVEMBER, 1978. Revised Nov. 1979.
APPROVED BY: J.R. KERR, P.ENG.	FIG. NO. 181-12