

CANADIAN OCCIDENTAL PETROLEUM LIMITED

MINERALS DIVISION

GEOLOGY AND GEOCHEMISTRY  
of the  
ENEAS CLAIM GROUP

Claim Sheet 82-E-12-W

Lat : 49<sup>o</sup> 40'N  
Long: 119<sup>o</sup> 46'W

Claims:

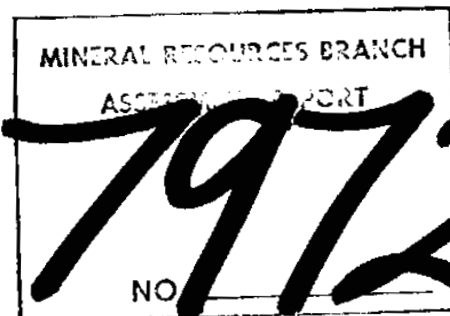
ENEAS 1 : Units 1-15  
ENEAS 2 : Units 1-15  
ENEAS 3 : Units 1-12  
ENEAS 4 : Units 1-18

Osoyoos Mining Division  
British Columbia

by:

E.J. SACKS, M.Sc.

Work Completed During the Period August 9-20, 1979.



CONTENTS

	Page
SUMMARY.....	1
I <u>Introduction</u> .....	2
II <u>Location and Access</u> .....	2
III <u>Physiography and Vegetation</u> .....	4
IV <u>Previous Work</u> .....	4
V <u>Work Completed - 1979 Survey</u> .....	6
5.1    Line Cutting.....	6
5.2    Geological Mapping.....	6
5.3    Geochemical Surveys.....	7
5.3.1    Soil Geochemistry.....	7
5.3.2    Rock Geochemistry.....	7
5.4    Radiometric Survey.....	7
5.5    Summary of Work Completed.....	8
5.6    Names and Addresses of Personnel.....	8
VI <u>Geology</u> .....	9
6.1    Introduction.....	9
6.2    General Geology.....	9
6.3    Table of Formations.....	11
6.4    Description of Rock Units.....	11
6.4.1-Unit 1a - Hornblende-Biotite-Diorite (hbDi)	11
6.4.2-Unit 1b - Hornblende-Diorite (hDi).....	11
6.4.3-Unit 2a - Hornblende-Biotite-Monzonite(hbMz)	12
6.4.4-Unit 2b - Hornblende-Monzonite (hMz).....	12

	6.4.5-Unit 3a - Hornblende-Biotite-Quartz-Monzonite Monzonite (hbQM).....	13
	6.4.6-Unit 3b - Hornblende Quartz Monzonite (HQM)	13
	6.4.7-Unit 4 - Aplite (Ap).....	14
6.5	Structure.....	14
6.6	Metamorphism.....	16
6.7	Alteration.....	16
6.8	Economic Geology.....	17
VII	<u>Soil Geochemistry</u> .....	18
7.1	Introduction.....	18
7.2	Soil Profile.....	19
7.3	Sampling Procedure.....	19
7.4	Laboratory Procedure.....	21
7.5	Standard Samples.....	21
7.6	Statistical Treatment of Results.....	21
7.7	Results of Soil Geochemistry Survey.....	24
VIII	<u>Rock Geochemistry</u> .....	25
8.1	Introduction.....	25
8.2	Laboratory Procedures.....	25
8.3	Statistical Treatment of Results.....	26
8.4	Results of Rock Geochemistry Survey.....	26
IX	<u>Radiometric Survey</u> .....	36
9.1	Introduction.....	36
9.2	Statistical Treatment of Results.....	36
9.3	Results of Radiometric Survey.....	36

	Page
X <u>Conclusions</u> .....	41
XI <u>Recommendations</u> .....	43
APPENDIX I    - List of Analytical Results - Soil and Rock.....	45
II    - Rock Descriptions, U and Th Contents.....	80
IIa   - U, Th Contents and U/Th Ratios by Rock Type....	88
IIb   - Thin Section Reports .....	92
III   - Laboratory Procedures .....	104
IV    - Comments by C.F. Gleeson- Consulting Geochemist	105
V     - References.....	107
VI    - Reanalysis of Radioactive Showing at L19S, 11W.....	108

List of Figures

Figure 1 - Location and Access of ENEAS Claims.....	3
2 - Schematic Vertical Cross-sections.....	15
3 - Soil Pit No. 1 - Vertical Section, Description, U Content .....	20
4 - Soil Geochemistry - Uranium - Frequency Distribution	23
5 - Rock Geochemistry - Uranium - Frequency Distribution	27
6 - Rock Geochemistry - Uranium - Cumulative Frequency Distribution.....	28
7 - Rock Geochemistry- Uranium Content - Unit 1 .....	29
8 - Rock Geochemistry- Uranium Content - Unit 2 .....	29
9 - Rock Geochemistry- Uranium Content - Unit 3 .....	30
10 - Rock Geochemistry - Thorium Content-Histogram.....	34
11 - Rock Geochemistry - Scattergram - Thorium v. Uranium	35
12 - Radiometric Survey- Frequency Distribution (cps)....	37
13 - Radiometric Survey - Cumulative Frequency Distribution (cps).....	38

List of Tables

Table 1 - Reproducibility of Standard Samples ..... 22

Table 2 - Summary of U and Th Contents, U/Th Ratios  
and Scintillometer Response by Rock Unit ..... 33

Plans Accompanying Report

Plan 1 - Geology )

2 - Rock Geochemistry )

3 - Soil Geochemistry Uranium - Sample Locations )

3a - Soil Geochemistry Uranium - Contoured Data ) IN

4 - Scintillometer Survey - Location and Value of ) BACK

Scintillometer Readings ) POCKET

4a - Scintillometer Survey - Contoured Data )

5 - Compilation of Geology, Soil Geochemical and )

Radiometric Anomalies )

. . . . .

SUMMARY

The ENEAS Claims are underlain by mappable units of diorite, monzonite and quartz monzonite, each of which can be subdivided into biotite rich and biotite deficient components. These units likely represent phases of one intrusive event. The claims are cut by an older, post-intrusive, NS striking, steeply east-dipping normal fault and a younger, EW striking, steeply north-dipping right-hand, strike-slip fault which truncates or deflects the NS fault to the east. Joint sets parallel these fault directions and in the vicinity of the NS fault are filled with epidote and sometimes display hematized halos. A radioactive outcrop occurs within one such fracture zone.

A strong soil-scintillometer-rock anomaly is localized by the NS fault in Eneas Creek valley. The anomaly is restricted to biotite deficient varieties of monzonite and particularly, quartz monzonite where they are cut by the fault. Very low U/Th ratios indicate that the rocks underlying the ENEAS Claims are not in themselves, potentially favourable uranium sources without structural modification. Any mineralization is likely of an intergranitic vein type.

A weaker soil uranium anomaly in the SW corner of the claims is associated with an area of hematized, and possibly brecciated, biotite deficient monzonite and has the only rock sample with a high U/Th ratio.

Detailed prospecting over both of the anomalies, prior to diamond drilling, is recommended. Areas underlain by diorite have a low priority. Prospecting should aim at defining areas of epidote-hematite alteration within fractured monzonite and quartz monzonite as well as areas of anomalous radioactivity.

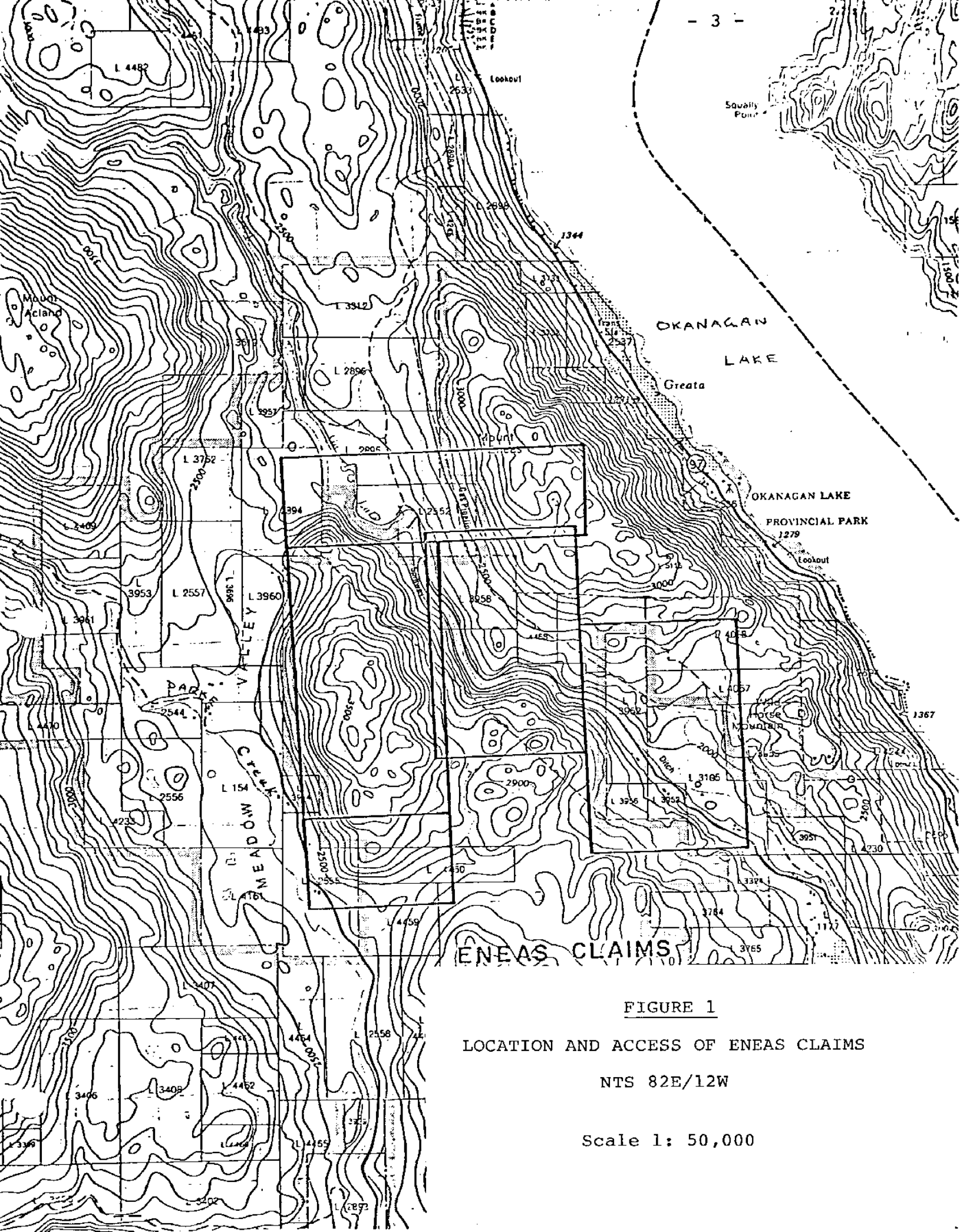
### I. INTRODUCTION

In August 1979 the ENEAS Claims were examined via a detailed mapping, soil and rock geochemistry, and radiometric survey by Canadian Oxy personnel. This report will provide background information, examine the results of previous work on the claims and their vicinity by Canadian Oxy and others, list and detail the results of the 1979 summer survey, compile these results, and present recommendations for further work.

### II. LOCATION AND ACCESS

The ENEAS Claims are located 11 km NW of the village of Summerland within the Osoyoos Mining District, B.C. The claims cover an area of 60 km<sup>2</sup> within NTS map sheet 82E/12W. The claims include portions of the Darke Creek valley to the west and Eneas Creek/Garnet Lake valley to the east.

Access to the north central portion of the claims is from the village of Summerland, taking Garnet Ave. which runs north through Eneas Creek valley to Garnet Lake. Numerous dirt tracks provide access east off Garnet Ave. to the north-



ENEAS CLAIMS

FIGURE 1

LOCATION AND ACCESS OF ENEAS CLAIMS

NTS 82E/12W

Scale 1: 50,000



east portion of the claims. Access to the western edge of the claims is via the Trout Creek logging road, turning north at Mile 0 onto the road to Fish Lake (Darke Lake).

### III. PHYSIOGRAPHY AND VEGETATION

Relief over the entire claims is 500 m (1650 ft.). The claims consists of rocky hills and flat plateaus separated by deeply cut, outcrop faced stream channels such as Eneas Creek valley, which transects the north central portion of the claims.

Much of Eneas Creek valley bottom is densely covered by thick conifer growth and alder brush adjacent to the streambed. Higher slopes are forested with mature conifer and little underbrush. Much of the upper hills and plateaus are open grassland. The area is quite arid with cactus growth prevalent in open areas.

### IV. PREVIOUS WORK

A total of 20 stream sediment samples were collected within areas 22, 39 and 40 of the Princeton/Nicky Project in 1973. Uranium values ranged from 2.5 to 96.8 ppm U with a background of 6.7 ppm U. These samples were collected primarily on Eneas and Darke Creeks.

The G.S.C. collected 5 stream sediment and water samples during the 1976 U.R.P. Survey. Values ranged from 3.7 to 38.8 ppm U in sediments and from 1.9 to 13.6 ppb U in waters.

A Canadian Oxy crew comprising 5 men, completed the majority of sampling in areas 22, 39 and 40 on June 4th and 5th, 1978

with follow-up by 2 men on June 23rd and 24th, 1978. 112 stream and lake sediment samples, 110 stream and lake water samples and six heavy mineral samples were collected within the area, as well as 12 rock chip samples during examination of the geology of localized portions of the area.

During the period June 25th to 29th, 1978, 66 units constituting the ENEAS Claims were staked to cover that portion of the originally anomalous areas 22, 39 and 40 (Princeton/Nicky Project) which remained open. Staking was done by Eastern Associates Ltd., Whitehorse, Y.T., for Canadian Oxy.

The claims were found to be underlain by Upper Jurassic Nelson granodiorite with local hematitic and chloritic alteration. The rocks contained up to 1.0 ppm U with a scintillometer response of 100-130 cps (Scintrex BGS-1SL). An Upper Eocene syenitic stock, outcrops to the north of the claims. Pegmatite dykes on the NW shore of Garnet Lake contained up to 7.0 ppm U.

Anomalous uranium values (up to 720 ppm) were found in lake and stream sediments, both in Darke Creek, to the SW of the claims, and in Garnet Lake.

Anomalous waters (> 20 ppb U) were found in areas SW, S and N (Garnet Lake) of the claims. Eneas Creek contained greater than 1 ppb U over the entire claim group. Abrupt cutoffs of anomalous values for the waters in the southern area along an E-W line resulted in a postulated E-W structure which would traverse the southern portion of the ENEAS 4 claim block, and to which these values of U would possibly be related. High water

values in Garnet Lake were correlated with the syenitic stock and the pegmatites on the NW shore. A significant positive correlation was found between anomalous water and sediment U values and between U in water, specific conductivity, and  $\text{HCO}_3$  content.

Heavy mineral samples contained up to 3.5 ppm U plus anomalous values for Au in Darke Creek. The source for these values was postulated to be Jurassic granites upstream.

The postulated E-W structure crossing the ENEAS 4 claim was the target for detailed soil, radiometric and prospecting surveys recommended for the 1979 summer program.

#### V. WORK COMPLETED - 1979 SURVEY

##### 5.1 Line Cutting

No lines were cut on the ENEAS Claims. A total of approximately 17,900 m (59,000 ft.) or 17.9 km (11.1 mi.) of line were picketed at 30 m (100 ft.) intervals by Futura Developments Registered, Whitehorse, Y.T. These lines constituted a NW base line, and tie lines as well as EW lines bounding the N and S edges of the grid, and followed previously blazed claim lines.

##### 5.2 Geological Mapping

The ENEAS Claims were geologically mapped at a scale of 1" = 400 ft. during the period August 9th to 20th, 1979. Control was by pace and compass/flagged lines established during the accompanying soil/radiometric survey. A total of approximately 53,300 m (175,000 ft.) of line representing an area of

approximately 10.1 km<sup>2</sup> (4.0 mi.<sup>2</sup>) was flagged and mapped.

The claims were mapped by E. Sacks, J. Houle and J. Hooper, all of Canadian Oxy. A total of 18 man days of geological mapping (plus rock geochemistry survey) were performed.

### 5.3 Geochemical Surveys

#### 5.3.1 Soil Geochemistry

Soil samples were collected over the period August 9th to 20th, 1978 by C. Pelletier, E. Jermakowicz and B. Zayachivsky. A total of 1031 samples (including soil pits and standard samples) were collected and analysed for uranium for a total of approximately 60.4 line km (37.5 line miles) of survey, representing 13 man days of work.

#### 5.3.2 Rock Geochemistry

Rock chip samples were collected in conjunction with the mapping survey. A total of 139 samples were collected and analysed for U and Th by Chemex Labs Ltd., Vancouver, B.C. As well, 6 samples were thin-sectioned and examined by Dr. S. Boucher.

### 5.4 Radiometric Survey

A radiometric survey utilizing Scintrex BGS-1SL scintillometers was performed in conjunction with the soil sampling survey. A total of 1980 readings were taken, representing 13 man days of work.

5.5 Summary of Work Completed

Type of Work	Man Days	No. Samples	No. Analyses	
			U	Th
Geological mapping and rock geochemistry.	18	139	139	139
Soil Geochemistry.	13	1031	1031	---
Radiometrics	13	----	----	---
Line picketing		17.9 km (11.1 mi)		
TOTAL:	44	1170	1170	139

5.6 Names and Addresses of Personnel

E. Sacks, M.Sc., Canadian Occidental Petroleum Ltd., 311-215 Carlingview Drive, Rexdale, Ontario M9W 5X8	Geologist
J. Houle, B.Eng. Canadian Occidental Petroleum Ltd., Same address as above.	Geologist
J. Hooper Same address as above.	Senior Assistant
E. Jermakowicz Same address as above.	Junior Assistant
C. Pelletier Same address as above.	Junior Assistant
B. Zayachivsky Same address as above.	Junior Assistant

## VI. GEOLOGY

### 6.1 Introduction

The ENEAS area is underlain primarily by Nelson Plutonic granodiorite, quartz diorite and diorite of Cretaceous age. The rocks locally exhibit steeply dipping, NW striking gneissosity. A stock of Oligocene Coryell Plutonic syenite outcrops to the north of the claims, north of Garnet lake. (Little, 1961)

### 6.2 General Geology (PLAN 1)

The ENEAS Claims were mapped at a scale of 1" = 400' by E. Sacks, J. Houle and J. Hooper of Canadian Oxy.

The ENEAS Claims are primarily underlain by a slightly altered, non-foliated, medium-grained intrusive complex. Rock types range in composition from diorites to monzonites and quartz monzonites with accessory biotite and hornblende. Sphene and magnetite occur locally in trace amounts.

The western side of the claim group consists of a north-westerly trending ridge cored by hornblende-quartz monzonite (hQM). Inliers of hornblende diorite (hDi) are to be found on the north and west sides of this area.

The northeastern area of the claim group, northeast of Eneas Creek, consists of a westerly trending upland area cored by hornblende-biotite monzonite (hbMz) and capped by hornblende (+ biotite) diorite (hbDi, hDi). Small inliers or phases of hornblende-biotite quartz monzonite (hbQM) are also present locally.

The southeast portion of the area was neither staked nor mapped (however, was soil sampled) but appears to be underlain by hornblende monzonite (hMz).

Some few aplitic dykes were found throughout the claim group but do not form a mappable unit. These appear to cross-cut all rock types.

A representative sample suite was selected and their sections examined by Dr. Shiela Boutcher. Results conform the generalized field classifications and are presented in Appendix IIb. Dr. Boutcher does, however, indicate that sericite and chloritic alteration as determined from their section studies are more extensive than is visible in hand specimen.

No age relationships among the various rock types were apparent except for the younger, crosscutting aplite dykes. It is the opinion of the mapping geologists that these various rock types represent a single intrusive event with varying mafic contents due to differentiation of the igneous mass and/or varying amounts of consumed xenolithic material.

Eneas Creek occupies a steeply east-dipping, north-south striking normal fault deflected eastward or truncated by a east-west trending strike-slip fault at approximately  $<60^{\circ}$ S. Joint sets generally paralleled these directions.

### 6.3 Table of Formations

Unit			
4		Ap	Aplite
3	3b	hQM	Hornblende-Quartz Monzonite
	3a	hbQM	Hornblende-Biotite Quartz Monzonite
3	2b	hMz	Hornblende Monzonite
	2a	hbMz	Hornblende-Biotite Monzonite
1	1b	hDi	Hornblende Diorite
	1a	hbDi	Hornblende-Biotite Diorite

### 6.4 Description of Rock Units

#### 6.4.1 Unit 1a - Hornblende-Biotite Diorite (hbDi)

This unit is medium-grained, massive and generally unaltered and consists of plagioclase (40-60%) and biotite (5 - 20%). Trace sphene and magnetite occur locally.

The unit typically exhibits a scintillometer response of 50 to 90 cps (BGS-1SL).

#### 6.4.2 Unit 1b - Hornblende Diorite (hDi)

This unit is fine to medium-grained, massive to slightly lineated and generally unaltered, and consists of plagioclase (30 - 60%), K-feldspar (0 - 15%), quartz (0 - 19%), hornblende (15 - 50%) and biotite (0 - 5%). Trace sphene and magnetite occur locally.

This unit shows a typical scintillometer response of 70 - 80 cps except near contacts with monzonite or quartz monzonite where response rises to 100 to 120 cps.



6.4.3 Unit 2a - Hornblende-biotite Monzonite  
(hbMz)

This unit is medium to coarse-grained and generally massive with local slight lineation of hornblende. It consists of plagioclase (30 - 60%), K-feldspar (20 - 40%); quartz (0 - 10%), hornblende (10 - 20%) and biotite (5 - 20%) with local trace magnetite.

The unit exhibits a scintillometer response of 100 - 180 cps.

6.4.4 Unit 2b - Hornblende Monzonite (hMz)

This unit is medium to coarse-grained and generally massive with local, slight lineation of hornblende. Local brecciation is evident along with epidote veining, sometimes with hematitic halos. The unit comprises plagioclase (30 - 50%), K-feldspar (10 - 40%), quartz (0 - 10%), hornblende (5 - 40%) and biotite (0 - 5%).

Scintillometer response ranges from 80 to 160 cps.

6.4.5 Unit 3a - Hornblende-Biotite-Quartz-Monzonite  
(hbQM)

This unit is medium to coarse-grained and generally massive with local, slightly lineated and foliated sections. It consists of plagioclase (30 - 40%), K-feldspar (20 - 40%), quartz (10 - 20%), hornblende (5 - 15%) and biotite (5 - 20%). Trace sphene and magnetite occur locally as disseminated grains. Scintillometer response is 80 to 100 cps.

6.4.6 Unit 3b - Hornblende Quartz Monzonite (hQM)

This unit is medium to coarse-grained and generally massive. It consists of plagioclase (20 - 50%), K-feldspar (20 - 40%), quartz (10 - 20%), hornblende (5 - 25%) and biotite (0 - 5%) with trace sphene locally.

Scintillometer response ranges from 85 to 180 cps.

#### 6.4.7 Unit 4 - Aplite (Ap)

This rock type occurs as dykes crosscutting all other rock types at various attitudes. The rock consists primarily of K-feldspar and quartz with less plagioclase component and minor biotite (<2%). Texture is fine-grained sucrosic.

### 6.5 Structure

Figure 2 illustrates schematic vertical cross-sections (east-west) at 255, 50S and 75S.

The major structural features are two postulated faults which cross the ENEAS Claims at right angles. The major, and likely older fault, roughly parallels the baseline from 0 to approximately 60S and forms the valley for Eneas Creek. Valley sides are very steep and faced with blocky outcrop. This fault appears to be a very steeply east dipping, normal fault with west side up and striking in this region at  $160^{\circ}$ .

The younger structure parallels line 60S and is an east-west striking, steeply north dipping, right-hand strike - slip fault characterized by sharp, but subdued escarpments. At approximately BL60S this younger fault either truncates the NS normal fault and continues as the east-west portion of the Eneas Creek Valley, east of the base line, or deflects the earlier fault to the east. The former situation is favoured due to the large offset of Eneas Creek (approximately 1/2 mile/0.8km) and sharp offset of the hbMz and hQM units (approximately 1/2 mile/0.8km).

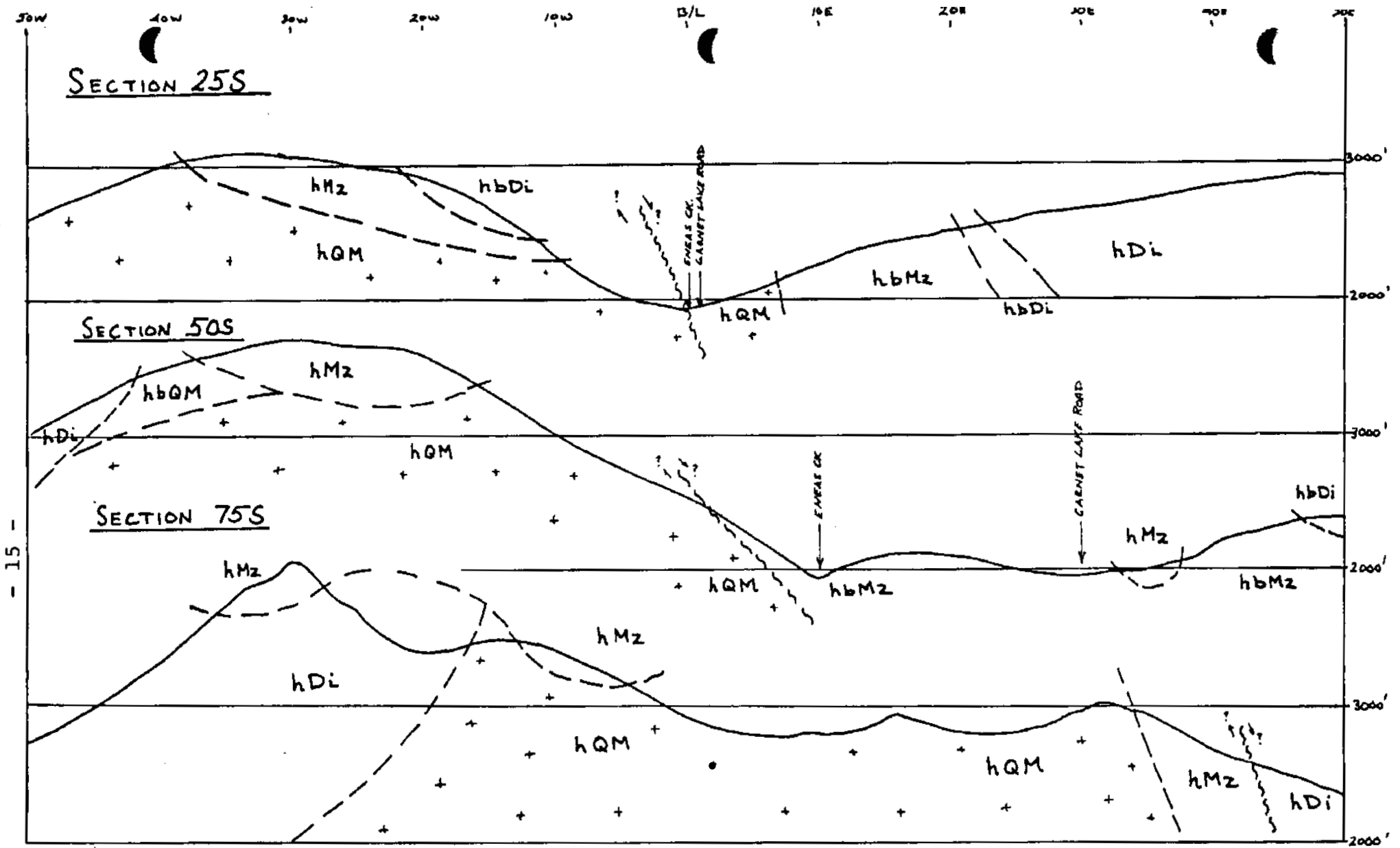


FIGURE 2 : SCHEMATIC VERTICAL SECTIONS (EAST-WEST) LOOKING NORTH

HORIZONTAL SCALE : 1" = 1000'

Jointing is prominent throughout the claim group. Three directions can be resolved at  $160^{\circ}/90^{\circ}$ ,  $70^{\circ}/90^{\circ}$  and  $30^{\circ}/90^{\circ}$ , the first two of which roughly parallel the postulated fault traces. Epidote fillings are common near the NS fault within the quartz-monzonite and monzonite units and these joints often display pinkish, hematized halos in which hematite coats grain boundaries. These halos occur up to 1/2 inch/1.3cm on either side of the joint surface.

#### 6.6 Metamorphism

The only significant metamorphism appears to be post intrusive and dynamic resulting in the faults. The presence of epidote and chlorite on fracture surfaces indicates a low grade, retrogressive event accompanying or post-dating the dynamic event(s).

#### 6.7 Alteration

Alteration on the ENEAS Claims is minor and localized. Hornblende and biotite show occasional and minor chloritic alteration, especially near joint surfaces with associated limonite and/or hematite staining surrounding these grains.

The epidote-hematite alteration mentioned above seems localized within about 1500 feet either side of the NS fault in the vicinity of lines 8S to 24S and within the monzonite and quartz-monzonite units particularly. Epidote filled fractures accompany anomalous radioactivity in an outcrop of HQM at  $\langle 19S, 11W$ .

(rock chip sample 79-PR-29858-R) and a broad area of anomalous radioactivity (up to 170 cps) within the quartz-monzonite and monzonite from <8S to <60S, 8W to 12E.

Two other areas of hematitic and/or chloritic alteration were visible. Sacks has noted that the bedrock in Soil Pit No. 1 (<0, 52W) comprises a friable, chloritized diorite or granodiorite with hematite coated fractures. Hill noted, during the 1978 survey, an area of hematitic alteration in the SW portion of the claims (approximately <110S, 55W) which coincides with a broad, soil uranium anomaly (up to 14 ppm) and restricted scintillometer anomaly (up to 120 cps).

#### 6.8 Economic Geology

1. One significantly radioactive outcrop was located at approximately L19S, 11W (rock chip sample 79PR29858R). Radioactivity up to 1200 cps (Urtec TC1) and 180 cps on TC2 channel was accompanied by parallel fractures filled with fine-grained epidote. The outcrop, 5 ft. by 5 ft (1.5m x 1.5m) in size, is located within the hMz unit, about 1000 ft, to the west and in the footwall of the NS fault.

A less radioactive (200 cps on TC1) piece of float was located at <16S, 37W (rock chip sample 79PR29853R). This is likely derived from the western exposure of the hQM unit, however, uphill prospecting failed to reveal the source.

2. It is likely that the source of uranium on the ENEAS Claims is related to the NS fault and associated epidote-chlorite-hematite fractures within the QM and Mz units.
  
3. The coincident soil and scintillometer anomalies and hematitic alteration of Mz in the SW corner of the claims suggests the possibility of an association between hematitic alteration and increased uranium content within the acid intrusive phase possibly structurally controlled. Brecciated was noted in this area.

## VII. SOIL GEOCHEMISTRY (PLAN 3, 3a)

### 7.1 Introduction

Soils on the ENEAS Claims consist primarily of very poorly differentiated and arid till with a possible wind blown component in open grassland areas. The ENEAS Creek valley bottom comprises organic rich, wet gleysols. Soils are usually thin (less than 1 ft./0.3m) to undertermined in depth but the scattered and subdued outcrops suggest that soils reach a maximum depth of only a few tens of feet. In open, grassy areas the soil is very sandy and loose and it is difficult to obtain a sample at depth without upper material contaminating it due to collapse of the pit wall.

## 7.2 Soil Profile

One pit was dug on the ENEAS Claims at 0 + 20S, 52 + 50W (Figure 3). The pit was located on an open, rocky hill which is well drained and arid.

The soil is likely a combination of thin till and/or illuvial material and residual soil as it is very thin and overlies a friable, chloritic and hematitic granodiorite, fragments of which are contained within the profile.

The profile is poorly differentiated with a 1/2 inch (0.8 cm) thick B horizon overlying a compact 6 inch (15 cm) thick C horizon. Decomposing fragments of the underlying rock occur throughout the profile.

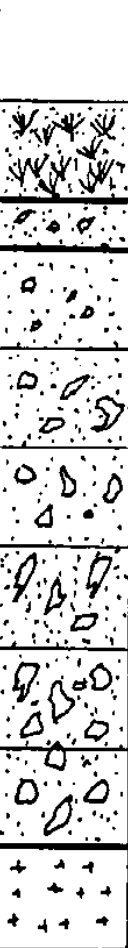
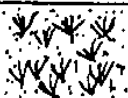


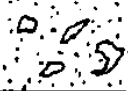


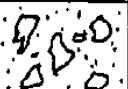
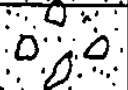

Uranium content ranges from <0.5 to 1.5 ppm and seems somewhat concentrated within the upper C horizon, however, the very small absolute value difference reduces the significance of this observation.

The B horizon is generally somewhat thicker over the bulk of the claim group than at this location and widespread and was routinely sampled.

## 7.3 Sampling Procedure

Soil samples were collected from B horizon at 60m (200 ft) intervals along pace and compass lines run at 240m (800 ft) spacings. Samples were placed in heavy duty, high wet-strength, pre-numbered kraft envelopes. An 80 column field data card was filled in with



DEPTH (inches)	HORIZON	SAMPLE NUMBER		ppm Uranium			DESCRIPTION
				0-5	0-1	1-5	
1/2	Litter Humus + A	79-PR-29001		0.5			Litter Humus (undecomposed grass, etc.) intermixed with extremely dry, fine silt-sand - dark grey
1	B	29002		0.5			Light orange, loose, fine sand with angular rock fragments - gradational to C
2	C	29003		<0.5			Light brown, compact, sandy with decomposing rock fragments up to 1/4". Dry.
3	C	29004			1.0		As above 79-PR-29003; rock frags. to 1/2"
4	C	29005			1.0		As above 79-PR-29004
5	C	29006		0.5			As above 79-PR-29003; rock frags. to 1"; very angular.
6	C	29007			1.5		As above 79-PR-29006.
7	C	29008		0.5			As above 79-PR-29006.
8	BEDROCK	29009			1.0		Very friable, chloritized granodiorite or diorite; trace hematite on fractures.

General Notes: Vegetation - grass; Slope - top of steep W slope; Contamination - none;  
Drainage - excellent

Likely a residual soil as very thin overlying bedrock and containing  
fragments of bedrock. Extremely dry and possibly a wind-blown  
component in upper sections.

Figure 3 ENEAS CLAIMS - SOIL PIT No. 1 (L0+20S, 52+50W) - Schematic Section,  
Description and Uranium Content

such data as location, drainage and sample composition for each sample.

Samples were partially dried in the field and then sent to Chemex Labs Ltd., in Vancouver, for analysis for U by fluorimetric method.

#### 7.4 Laboratory Procedure

All samples were screened to -80 mesh (177 micrometers), digested in hot perchloric-nitric acid and analysed fluorimetrically for U. Detection limit was 0.5 ppmU. Details of the procedure are listed in Appendix III.

#### 7.5 Standard Samples

29 standard samples composed of homogenized material from Soil Pit No. 1 were added to the sample run at random intervals. Values ranged from less than 0.5 ppmU to 2.5 ppmU for an average percent difference from the mean value of 44%. This deviance is considered as being somewhat high. Table I illustrates values for standard samples.

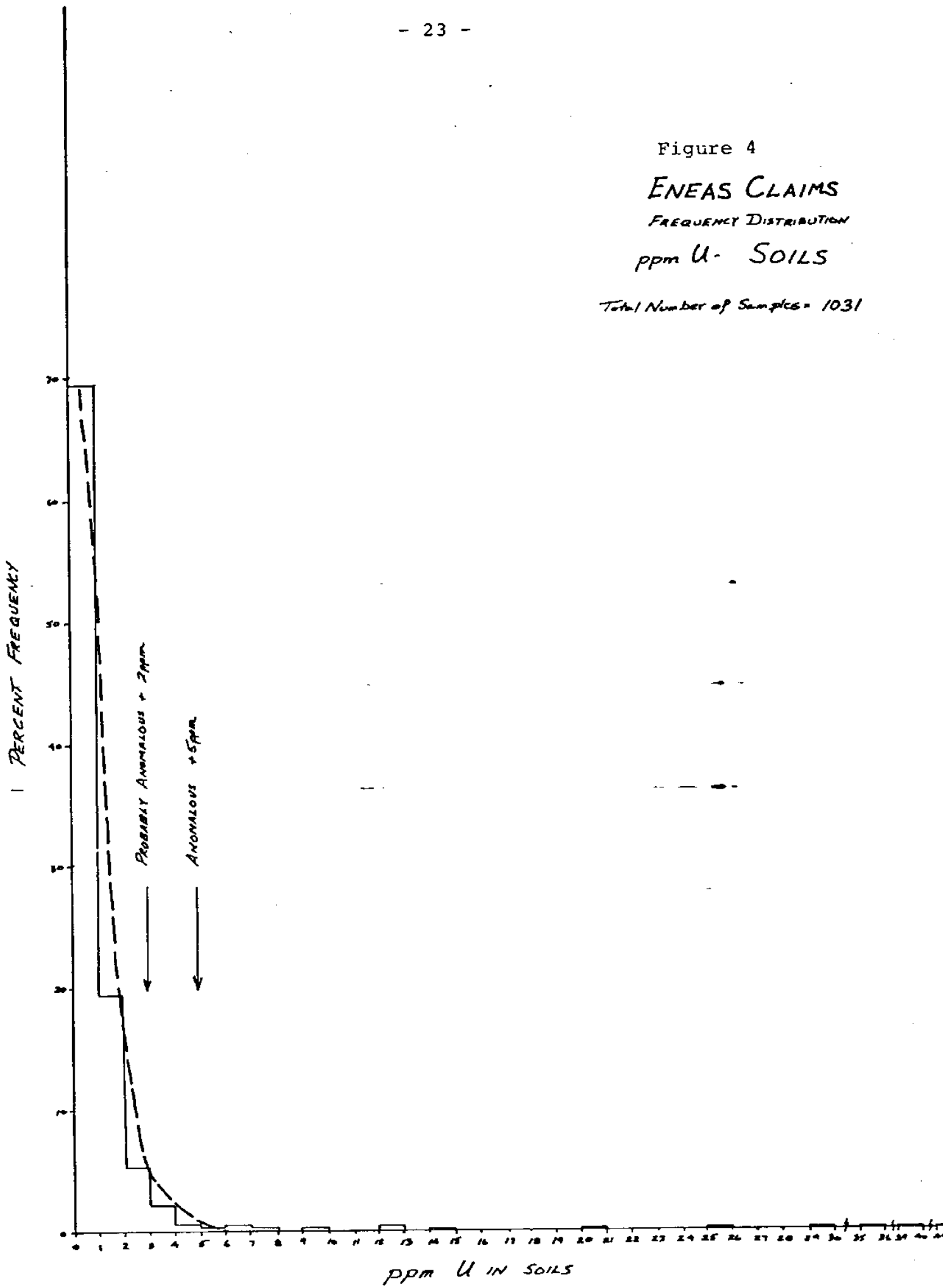
#### 7.6 Statistical Treatment of Results

Analytical results were plotted on a frequency distribution histogram (Figure 4). The distribution is extremely positively skewed. Mean, probably anomalous and anomalous levels were chosen visually at 0.5 ppmU , 2 - 5 ppmU and +5 ppmU.

TABLE I - ENEAS CLAIMS - Reproducibility of Standard Samples.

<u>Sample No.</u>	<u>ppmU</u>	<u>% diff. from Mean</u>	<u>Sample No.</u>	<u>pppmU</u>	<u>% diff. from Mean</u>
79PR29022	0.5	44.4	29683	1.0	11.1
29043	1.0	11.1	29710	0.5	44.4
29074	1.0	11.1	29729	0.5	44.4
29111	1.5	66.7	29748	1.0	11.1
29133	< 0.5	72.2	-	-	-
29148	0.5	44.4	Mean	0.9	44%
29165	1.5	66.7	-	-	-
29177	1.0	11.1	Total Number of Standard		
29203	2.0	122.2	Samples = 29		
29233	0.5	44.4	-	-	-
29260	1.5	66.7	Range: < 0.5 - 2.5		
29292	1.0	11.1	Avg. % diff. from Mean: 44%		
29305	0.5	44.4	-	-	-
29332	0.5	44.4	-	-	-
29350	0.5	44.4	-	-	-
29388	0.5	44.4	-	-	-
29409	0.5	44.4	-	-	-
29432	2.5	177.8	-	-	-
29459	0.5	44.4	-	-	-
29484	< 0.5	72.2	-	-	-
29518	1.0	11.1	-	-	-
29537	1.0	11.1	-	-	-
29572	1.0	11.1	-	-	-
29601	1.0	11.1	-	-	-
29628	0.5	44.4	-	-	-

Figure 4  
ENEAS CLAIMS  
FREQUENCY DISTRIBUTION  
ppm U- SOILS  
Total Number of Samples = 1031



A total of 1031 samples were of results treated statistically of which 29 were standards, 9 were from Soil Pit No. 1 and 993 were station samples. Analytical results are listed in Appendix I and illustrated on PLAN 3. The data was contoured at the following levels (PLAN 3a); 0-1, 1-3, 3-5, 5-10 and +10 ppmU.

7.7 Results of Soil Sample Survey (PLAN 3, 3a, 5) -

1. The main anomaly occurs in ENEAS Creek valley bottom. It is a NW trending anomaly (200' x 2400' or 60m x 730m) with U values ranging from 11.5 to 50 ppm. and extends from L24S to L48S, BL to 10E. Enrichment of uranium due to organic rich valley-bottom material was considered but there appears to be no direct relationship between high organic content and anomalous uranium content in soils.

The anomaly coincides with anomalous scintillometer readings (7150 cps Scintrex BGS-1SL), anomalous rocks (3-6.5 ppmU in QM at north end of the anomaly), a predominant QM unit and epidote - hematite alteration within fractures. It is cut by the NS trending ENEAS Creek Valley fault. Fracturing in the area is pervasive.

The anomaly is truncated by the eastward deflection of ENEAS Creek Valley by the younger EW fault. The source of uranium is likely associated with the NS ENEAS Creek Valley fault and of the intergranitic vein type.

2. A secondary soil uranium anomaly occurs in the SW portion of the claims (approximately L100S, 55W) associated with hematitic alteration of the hMz unit. Sporadic scintillometer readings up to 115 cps coincide. Structural control may be a factor in this area due to local brecciation.

### VIII. ROCK GEOCHEMISTRY

#### 8.1 Introduction

A total of 139 rock chip samples were collected during the mapping survey at approximately 300m (1000 ft) intervals. All samples were described, a portion of each kept for reference, and a small portion of each sent to Chemex Labs Ltd., Vancouver, B.C. for analysis for U (fluorimetric) and Th (neutron activation). The aim was to determine the background U content of each rock type as an aid to prospecting and to upgrade or downgrade other anomalies with the aid of U/Th ratios.

#### 8.2 Laboratory Procedures

All samples were crushed to 90% - 200 mesh, digested in hot perchloric-nitic acid and analysed for U by fluorimetry. Detection limit was 0.5 ppmU.

Samples of crushed rock were also analysed for Th by neutron activation with a 1ppm detection limit.

Details of analytical procedures are listed in Appendix III.

### 8.3 Statistical Treatment of Results

U values were plotted on a frequency distribution histogram (Figure 5). The distribution is extremely positively skewed and samples above 13 ppmU are definitely anomalous. To determine background, etc. of the main population (<13 ppm) a cumulative frequency distribution was plotted (Figure 6). Mean, possibly anomalous and probably anomalous were determined at the 50th, 84th and 97th percentiles as 1ppm, 2ppm and 8ppm respectively. Uranium values in soils overlying all mappable rock types were treated together as there were no great differences in values between these units upon visual examination of the data.

Thorium data were not treated in the above way and were used to construct U/Th ratios only.

Analytical data are presented in Appendix I and are listed against rock descriptions in Appendix II. U and Th values and U/Th ratios listed by rock type are presented in Appendix IIa.

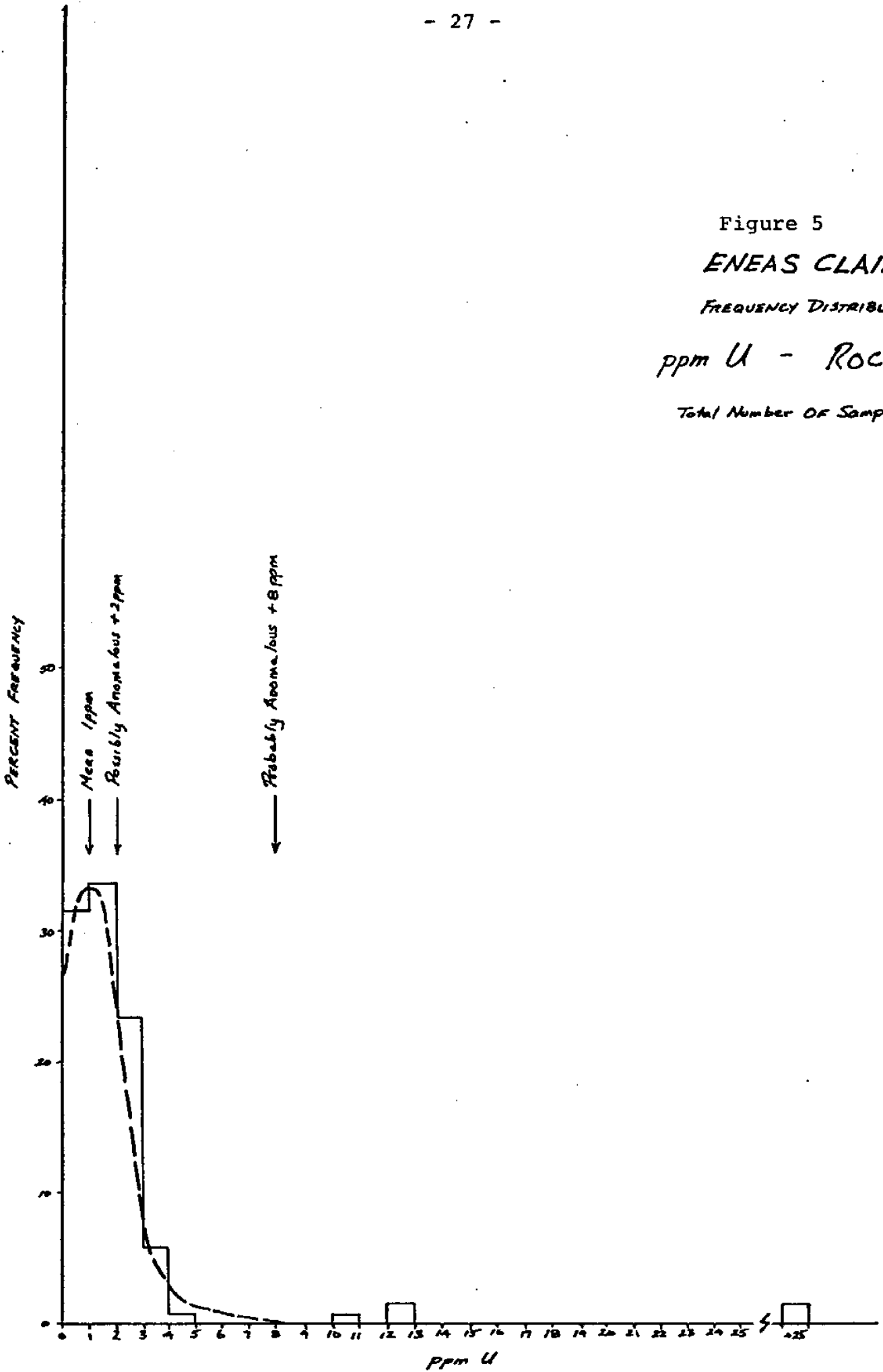
### 8.4 Results of Rock Geochemistry Survey

1. Figures 7, 8 and 9 illustrate the uranium content distributions for units 1 (diorite), 2 (monzonite) and 3 (quartz monzonite) respectively, as against the distribution of uranium contents for all rock types combined. Mean uranium contents for the diorite, monzonite and quartz monzonite are approximately 1ppm, 1.5 ppm and 2.5ppm respectively. Anomalous contents of uranium (+2.5ppm)

Figure 5  
**ENEAS CLAIMS**  
FREQUENCY DISTRIBUTION

ppm U - ROCKS

Total Number OF Samples = 139





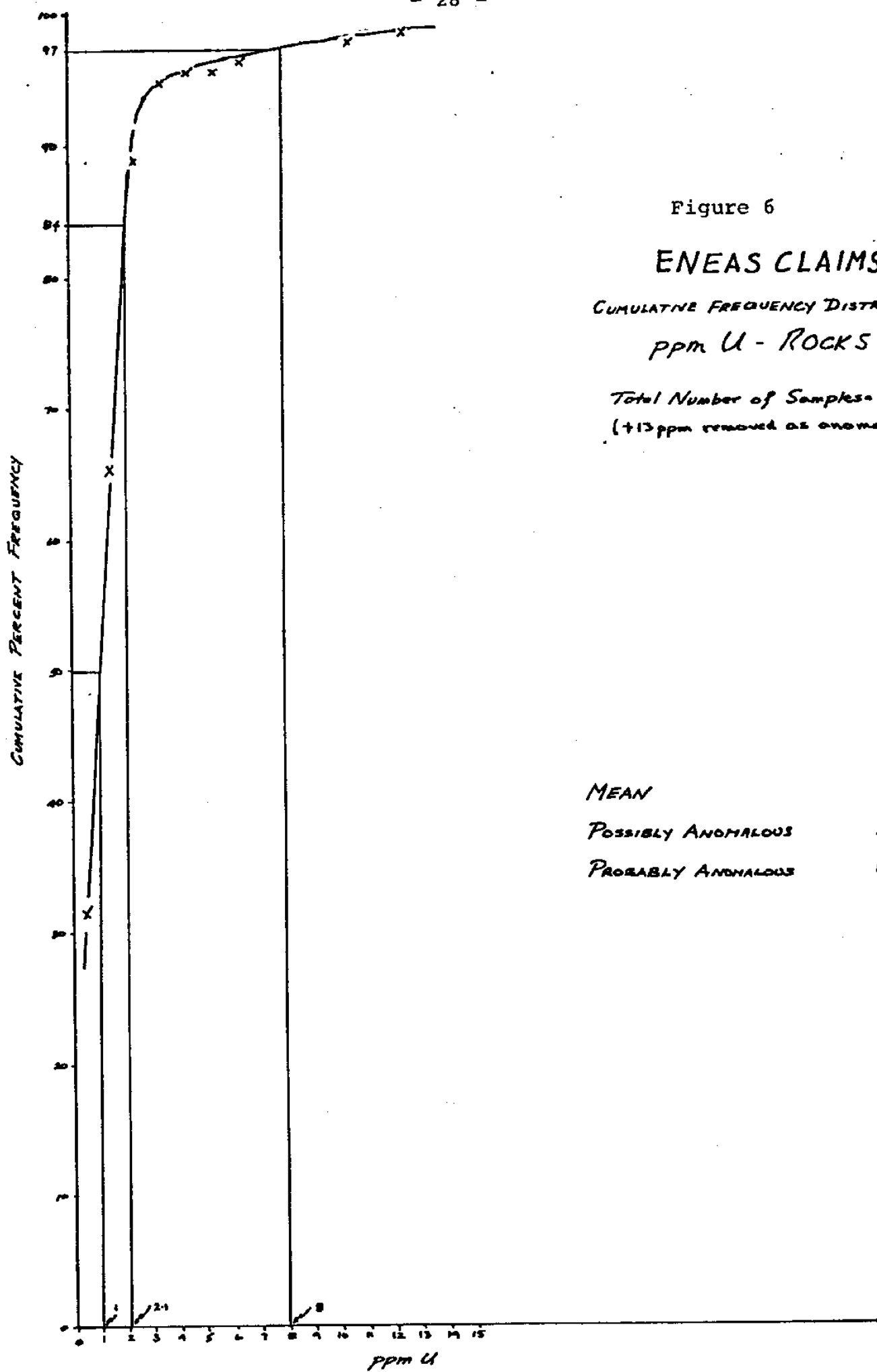


Figure 6

### ENEAS CLAIMS

CUMULATIVE FREQUENCY DISTRIBUTION

ppm U - ROCKS

Total Number of Samples = 137  
(+13 ppm removed as anomalous)

MEAN	1 ppm
POSSIBLY ANOMALOUS	2 ppm
PROBABLY ANOMALOUS	8 ppm

Figure 8

### ENEAS CLAIMS

### ROCK GEOCHEMISTRY - ppm U By Rock Unit

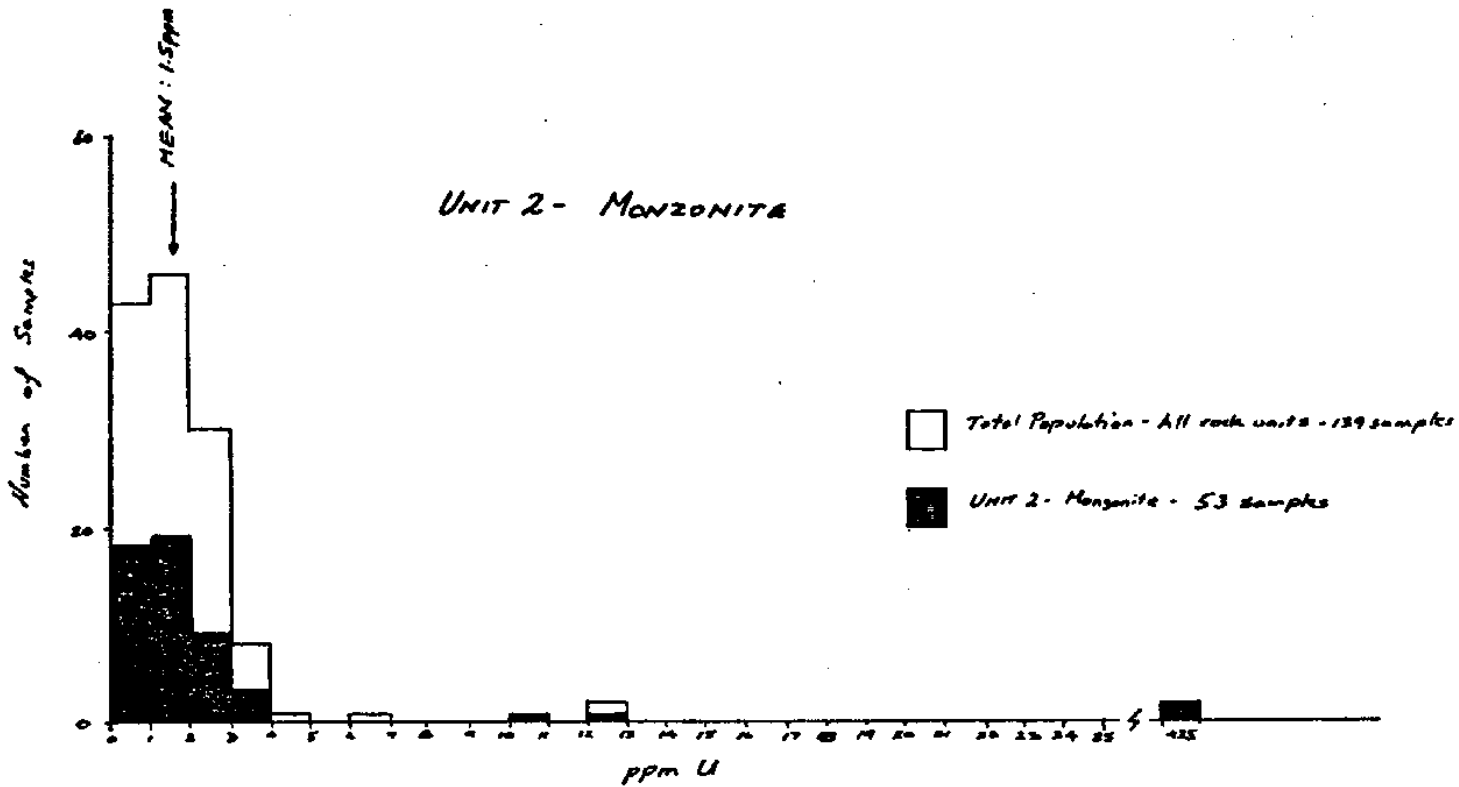


Figure 7

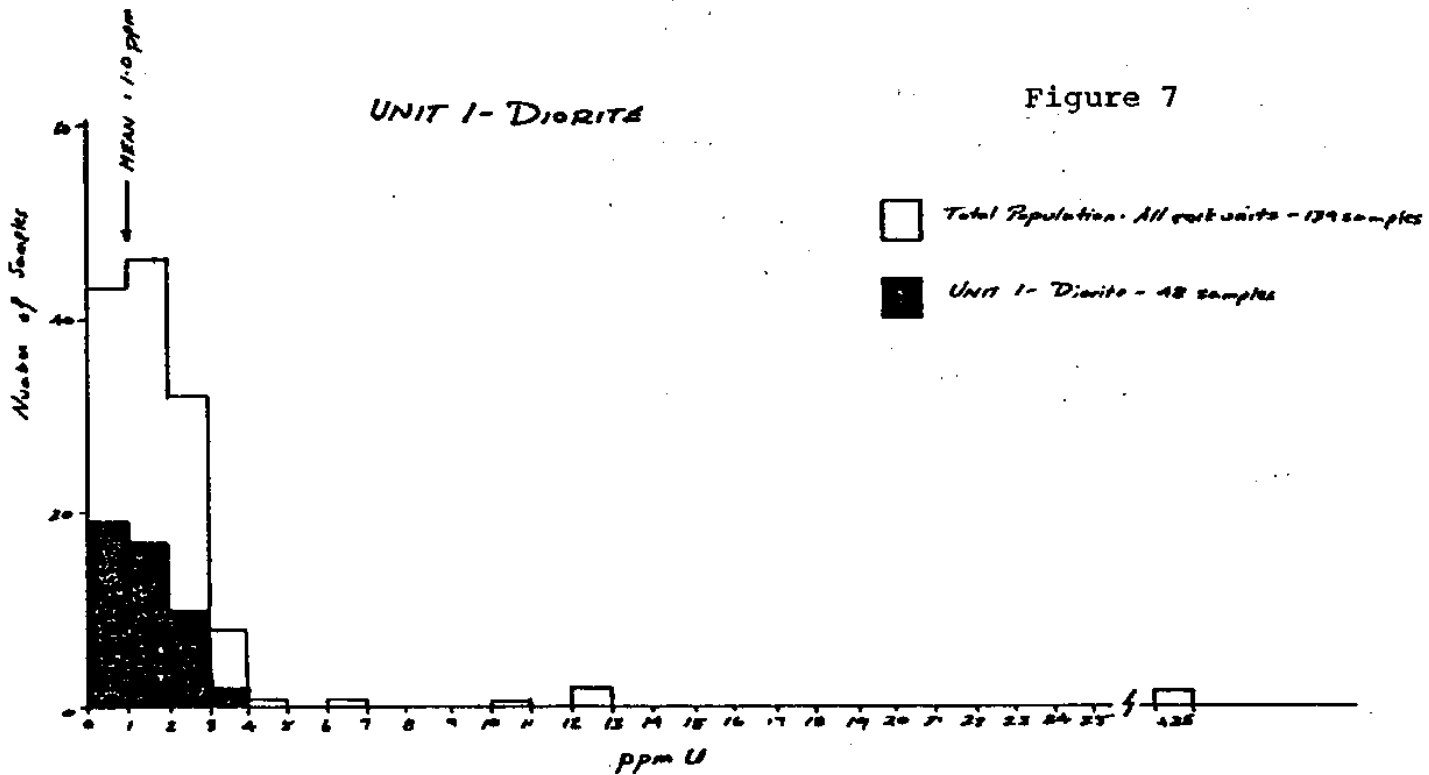
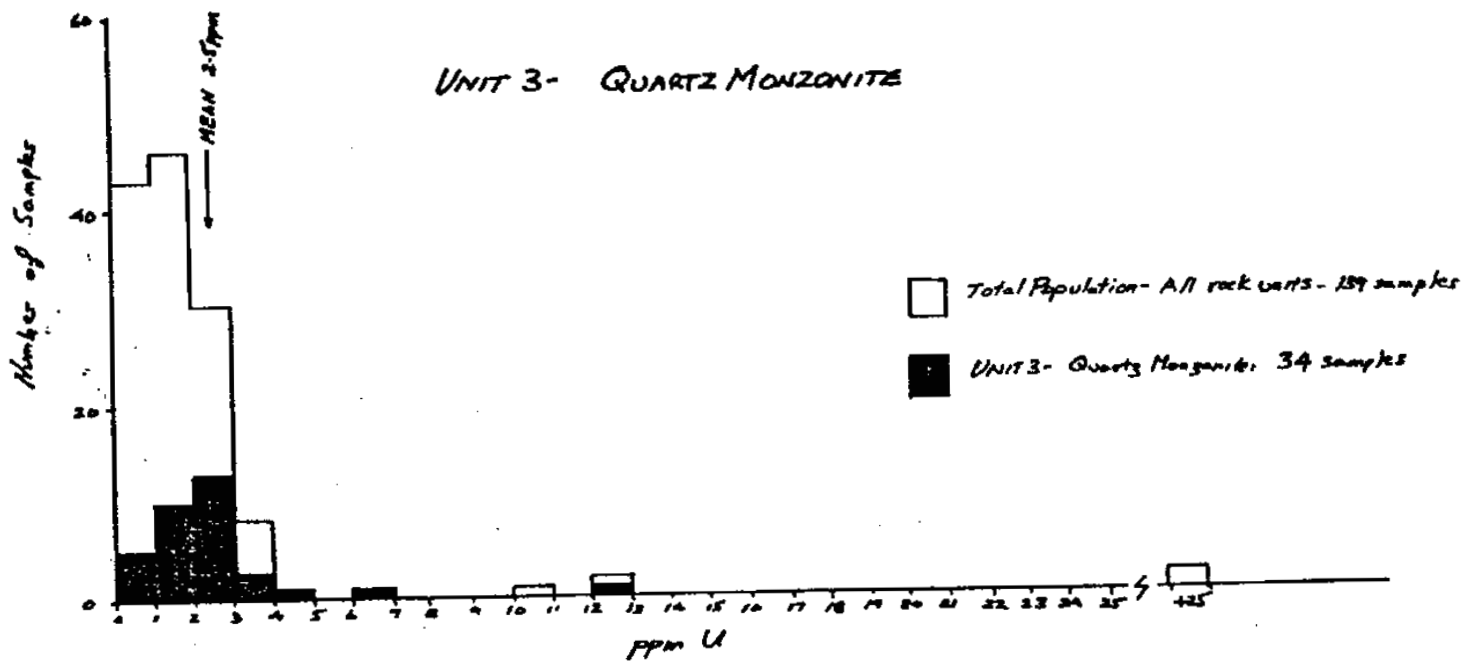


Figure 9  
ENEAS CLAIMS  
ROCK GEOCHEMISTRY - ppm U  
By Rock Unit



are restricted to the monzonite and quartz monzonite units.

2. The highest uranium value (35ppmU, 6ppmTh) occurs in monzonite in the SW part of the claims (L96S, 42W, Sample No. 79PR29890) just up-hill from the broad, secondary uranium soil anomaly. This sample is the only one collected with a U/Th ratio greater than 1 (U/Th = 5.8). A second sample of monzonite to the SE of this site, and also up-slope from the soil anomaly, contains 10.5ppmU and 72ppmTh (Sample No. 79PR29895 at L112S, 31+50W). Both samples are from the biotite deficient variety of monzonite (Unit 2b-hMz).
  
3. A third anomalous sample (12.5ppmU, 190ppmTh) occurs in quartz-monzonite (hQM) south of Eneas Creek at L72S, 16E (79PR2988Z). There is no coincident soil or scintillometer anomaly, however, waters draining this area are anomalous in uranium. (1978 survey).
  
4. Rocks underlying the main soil anomaly in Eneas Creek Valley in the N part of the claims contain from 3 to 6.5ppmU, the anomalous samples all being hornblende-quartz-monzonite (hQM). A sample from the radioactive outcrop at L19S, 11W contained only 3ppmU and 30ppmTh.

5. It appears that the source for recoverable uranium on the ENEAS claims, ie. that determined fluorimetrically in soils and rocks, is first by the quartz-monzonite and secondly, the monzonite, particularly the biotite deficient varieties. The diorite is low in U ( $<2$ ppm). The main soil-scintillometer anomaly in Eneas Creek Valley is strongest where the NS fault cuts quartz monzonite and weakens over adjacent monzonite.

6. Examination of Appendix IIa, which lists U and Th contents and U/Th ratios by rock type, indicates that with the exceptions of two samples, all have U/Th ratios much less than unity. As well, the biotite deficient varieties of both monzonite and quartz-monzonite have mean U/Th ratios approximately 4 times those of the biotite-rich equivalents. The diorite unit does not follow this pattern.

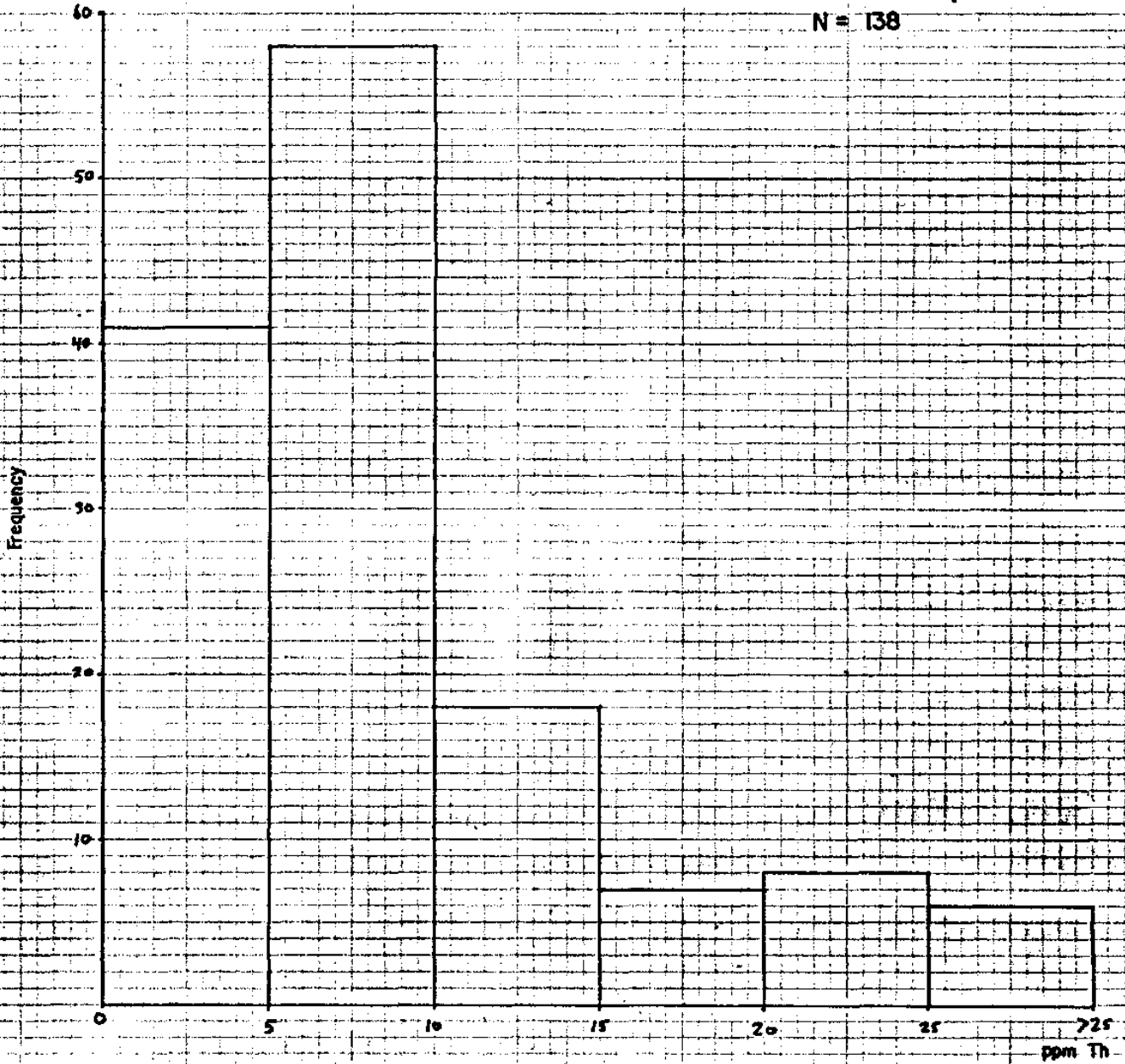
Table 2 below, summarizes Appendix IIa and illustrates that while the biotite deficient monzonite and quartz-monzonite have the higher U/Th ratios the increase is primarily due to an absolute increase in uranium content. There appears to be no significant correlation between this increase in uranium content and scintillometer response, however, the diorite unit may be differentiated from the acid intrusives by this means.

TABLE 2 - Summary of U, Th, U/Th and Scintillometer  
Response by Rock Unit

Unit	Mean ppmU	Mean ppmTh	Mean U/Th	Scintillometer Response (cps)
1a - hbDi	1.2	3.9	0.40	50-90
1b - hDi	1.9	8.2	0.28	100-120
2a - hbMz	0.9	14.8	0.09	100-180
2b - hMz	3.1	14.8	0.38	80-160
3a - hbQM	1.2	14.3	0.08	80-100
3b - hQM	3.0	18.9	0.27	85-180
4 - Ap	1.3	4.5	0.28	-

7. The low U/Th ratios in all rock types indicating that the rocks immediately underlying the ENEAS Claims are unlikely to act as sources for economic uranium mineralization on their own unless there is a structural modification through faulting or brecciation.
- The restriction of soil and coincident rock geochemical anomalies and radiometric anomalies to the NS fault zone and SW, brecciated part of the claims supports the conclusion that potential mineralization of the ENEAS Claims would most likely be structurally controlled and of intergranitic vein type.

PROJECT PRINIC  
ENEAS CLAIMS  
FREQUENCY DISTRIBUTION OF  
THORIUM IN ROCK CHIPS  
NOVEMBER, 1979  
N = 138



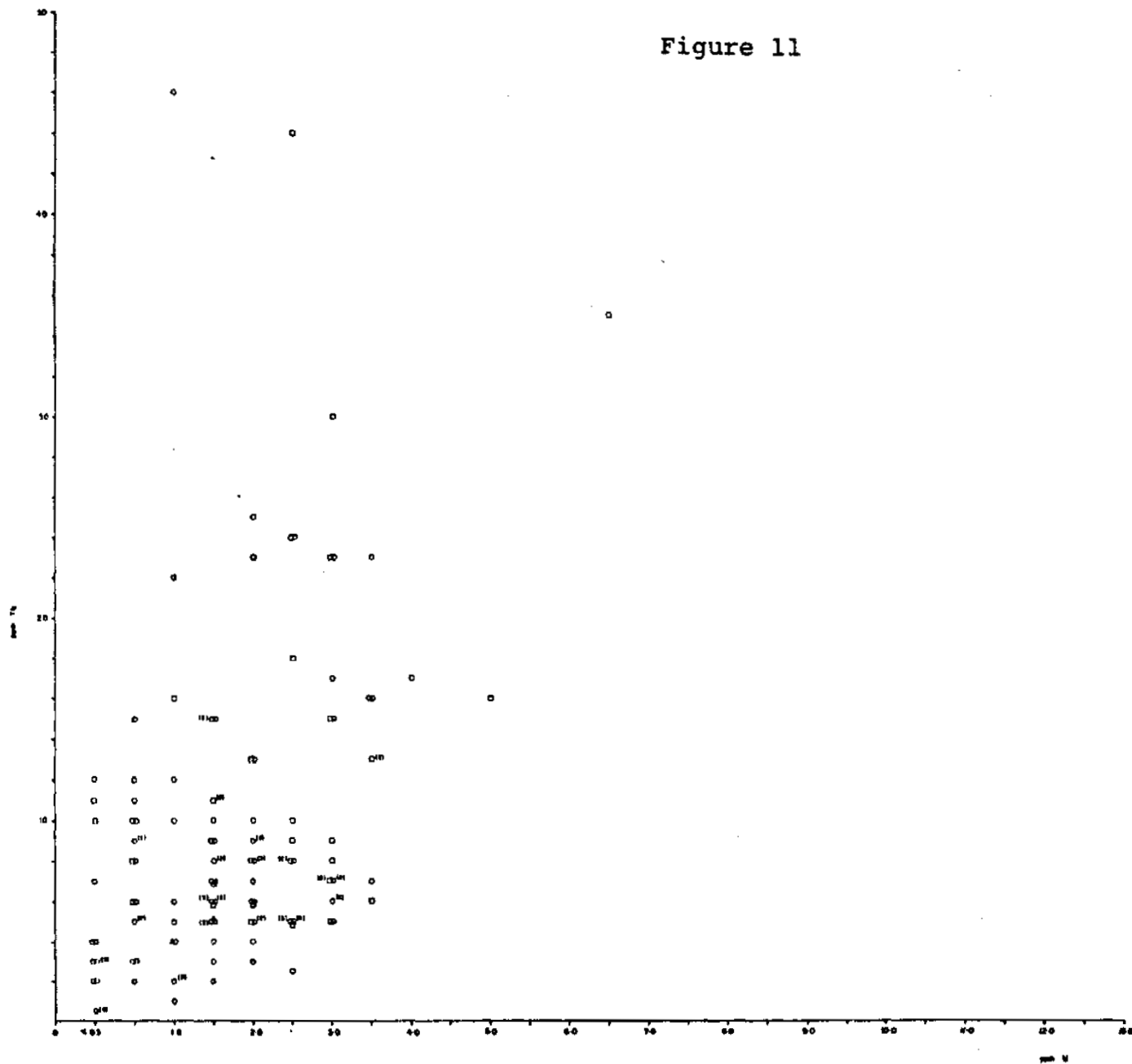
ABOVE 20 ppm Th IS ANOMALOUS

Figure 11

PROJECT PRINC  
ENEAS CLAIMS  
SCATTERGRAM OF URANIUM VERSUS THORIUM  
VALUES IN ROCK CHIPS  
NOVEMBER, 1979  
N = 138

KEY TO ROCK TYPE SYMBOLS:

- = HORNBLende - BIOTITE DIORITE OR  
HORNBLende DIORITE (NDI or NDI)
- ◻ = HORNBLende - BIOTITE MONZONITE OR  
HORNBLende MONZONITE (nbMz or Nmz)
- ◻ = HORNBLende - BIOTITE QUARTZ MONZONITE OR  
HORNBLende - QUARTZ MONZONITE (nbQM or nQM)
- △ = APLITE (Ap)



NB - Uniform distribution of Th/U independent of rocktype.



IX. RADIOMETRIC SURVEY (PLAN 4, 4a)

9.1 Introduction

A scintillometer survey was carried out in conjunction with the soil sampling survey. A Scintrex BGS-1SL scintillometer was utilized. Readings were taken at 30m (100 ft) stations along the grid lines. All readings were taken from hip level. A total of 1,980 readings were taken.

9.2 Statistical Treatment of Results

All readings were plotted on a frequency distribution diagram (Figure 10) and cumulative frequency diagram (Figure 11). The resulting distribution approximated the normal distribution with slight positive skewness. Mean, possibly anomalous and probably anomalous levels were determined from the cumulative frequency diagram at the 50th, 84th and 97th percentiles as 89 cps, 113 cps and 141 cps.

9.3 Results of Radiometric Survey (PLAN 4, 4a, 5)

1. The main soil anomaly in Eneas Creek Valley lies within a broad area of possibly anomalous radioactivity (113 to 141 cps) in quartz monzonite and monzonite. Scattered small areas of probably anomalous radioactivity (up to 200 ft x 400 ft or 60m x 120m) of up to 180 cps

Figure 12

ENEAS CLAIMS

FREQUENCY DISTRIBUTION

RADIOMETRIC SURVEY

Ⓢ Values are counts per second taken with SCINTREK BG3-15L

Total number of readings = 1,978

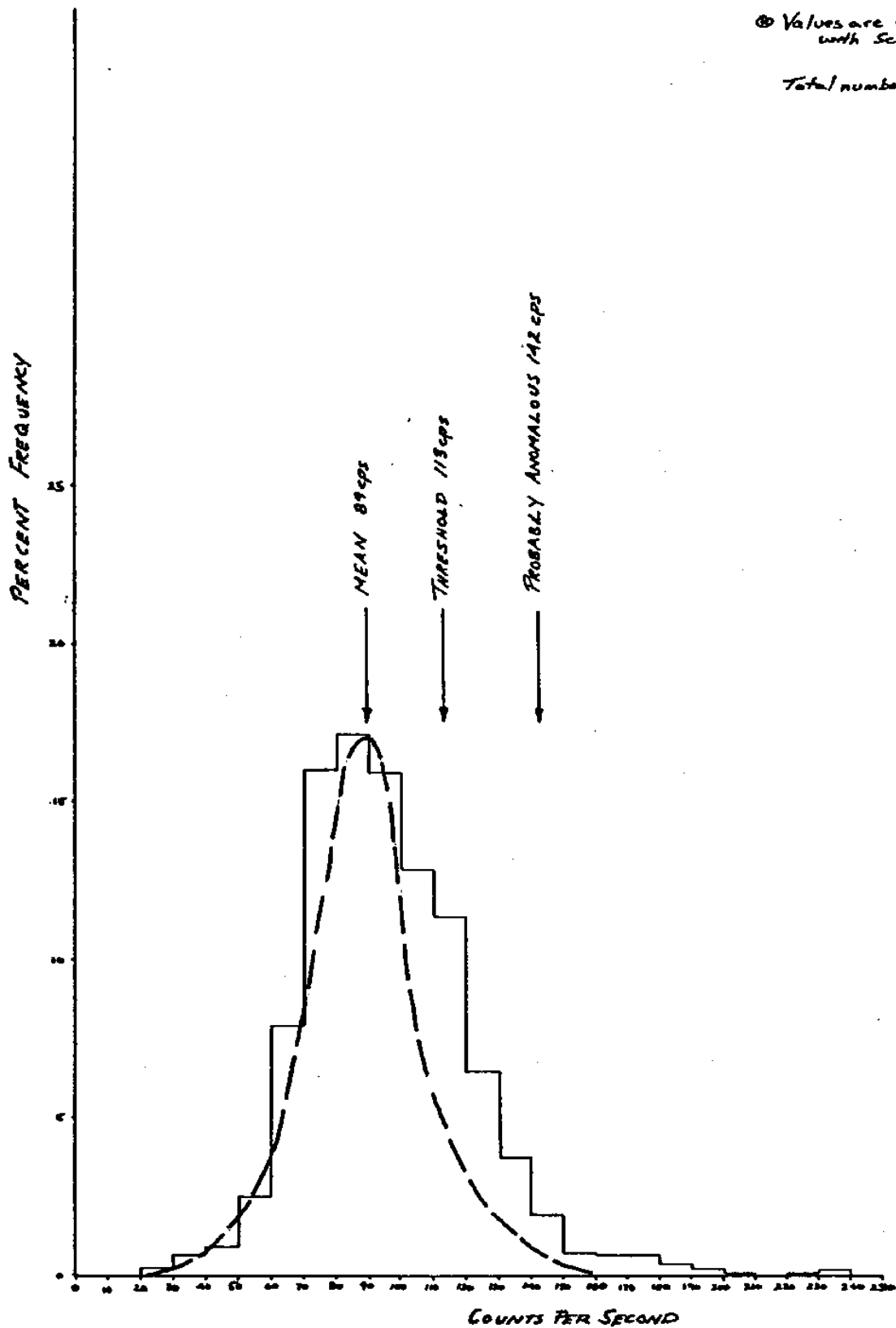
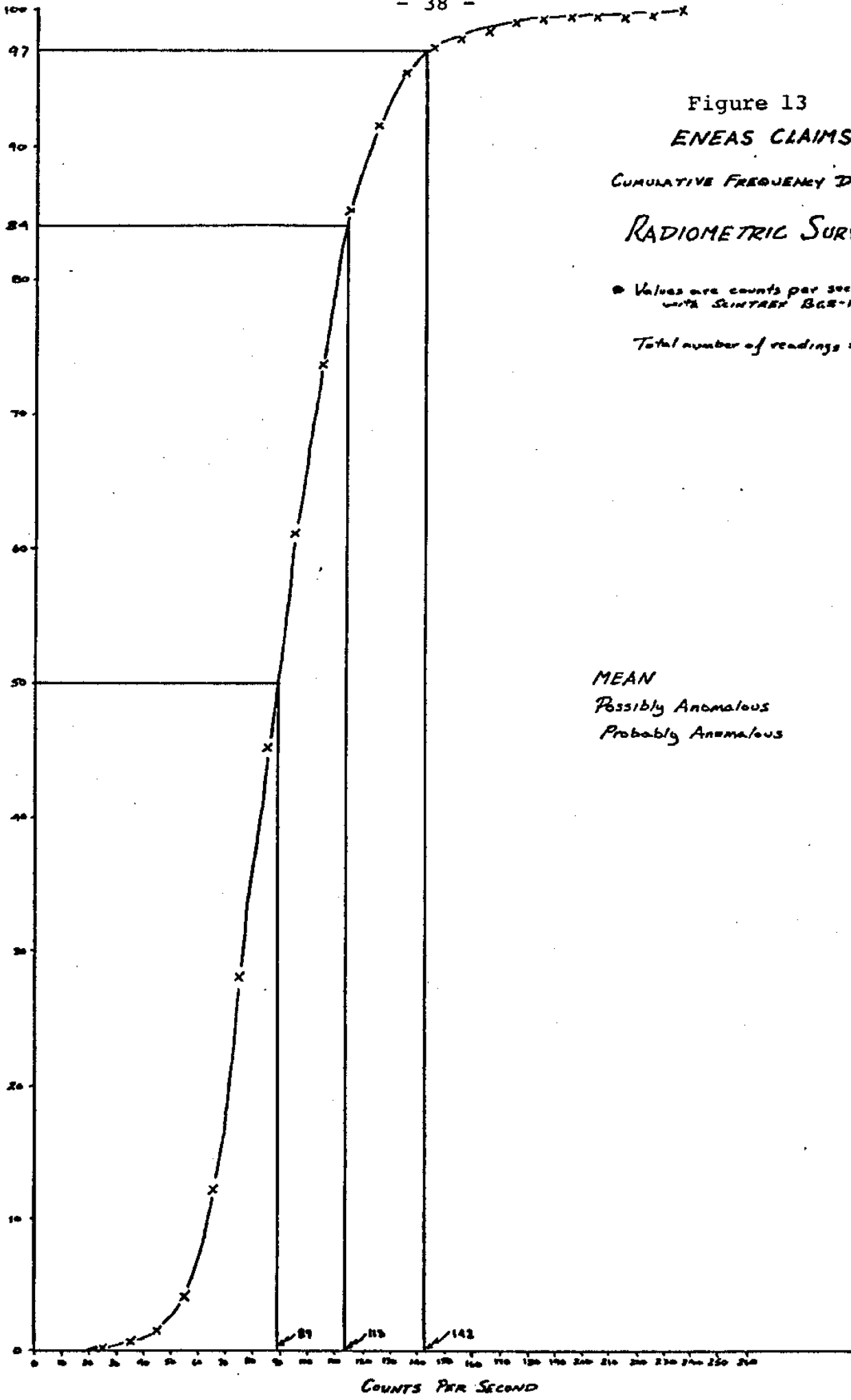


Figure 13  
ENEAS CLAIMS

CUMULATIVE FREQUENCY DISTRIBUTION  
RADIOMETRIC SURVEY

• Values are counts per second taken  
with SCINTREX BGS-15L  
Total number of readings = 1978

CUMULATIVE PERCENT FREQUENCY



MEAN	89 cps
Possibly Anomalous	113-141 cps
Probably Anomalous	+141 cps

overlie the fringes of the soil anomaly. These anomalies appear to correlate with outcrop areas on the valley sides while the central portion of the soil anomaly in the valley bottom is marked by a radiometric low where overburden cover predominates. (see Schematic Vertical Section - PLAN 5a). Thus, the correlation of soil anomalies with radiometric lows, a common occurrence on the ENEAS Claims, is likely due to the relative distributions of outcrop and overburden rather than to any weathering or leaching phenomena.

2. The secondary soil anomaly in the SW part of the claims does not exhibit any anomalous scintillometer response.
3. As can be seen from Table 2 (Section 7.4), the diorite unit exhibits a somewhat lower scintillometer response (50 to 120 cps) than the monzonite and quartz-monzonite units (80 to 180 cps) although there is some overlap: the monzonite and quartz-monzonite and also the biotite-rich and biotite-deficient varieties of all the rock types are not distinguishable from the radiometric survey, ie. radiometrics has not served to distinguish rock types in any reliable way.
4. The EW fault is marked by abrupt cutoffs of NS trending scintillometer anomalies along L60S (Plan 5). This is particularly marked where monzonite and diorite are in fault contact and less so where monzonite and quartz monzonite are in contact. This is due to the somewhat lower

radiometric response of the diorite versus the monzonite and quartz-monzonite. Thus, gross structures (fault or lithologic contacts) separating significantly different rock types may be defined by this type of survey while subtle differences would not be.

5. There are numerous scattered radiometric anomalies over quartz monzonite and monzonite throughout the ENEAS Claims (PLAN 5). Except for those mentioned above there are no co-incident soil anomalies. These are likely a result of the statistical treatment in which readings over all rock types are lumped together with the diorite, having lower response, forming background (no anomalies) and more radioactive monzonite and quartz-monzonite constituting the anomalous portion of the population. Only where spatial relationships between scintillometer and soil anomalies or structure exist, as above, are these anomalies considered significant. In these cases eg. Eneas Creek Valley, radioactivity is still anomalous even given the particular underlying rock unit's response.

X. CONCLUSIONS

1. The ENEAS Claims are underlain by mappable units of diorite, monzonite and quartz-monzonite, each divisible into biotite rich and biotite deficient varieties, and local unmappable aplite dikes and pods.

The claims are cut by a major NS trended, steeply east-dipping normal fault along Eneas Creek Valley and a younger, EW trending, right hand strike-slip fault along L60S which truncates or deflects the older fault to the east. The NS fault is accompanied by strong fracturing with epidote-hematite alteration up to 1000 ft into the footwall and localizes a strong, linear uranium in soil anomaly with co-incident radiometric and uranium rock anomalies.

2. The uranium soil geochemistry survey indicates only two significant anomalies. The main one of which is localized by the NS fault in Eneas Creek Valley. The secondary, weaker, anomaly occurs in the SW part of the claim group associated with an area of hematitic alteration of monzonite and suspected brecciation.
3. The uranium rock geochemistry survey indicates that the monzonite and particularly the quartz monzonite units contain up to 2.5 times the average recoverable uranium content of the diorite unit, with biotite deficient phases particularly enriched (up to 3 to 3.5 x diorite).

In all cases U/Th ratios are much less than unity indicating that the rocks underlying the ENEAS claims are not in themselves favourable as a uranium source without structural modification. Areas underlain by monzonite or quartz-monzonite and which have been fractured and altered are favourable to uranium mineralization. Areas underlain by diorite have a low priority.

4. The radiometric survey indicates no significant radioactive anomalies except for those coincident with the NS fault. The diorite is distinguishable from the monzonite and quartz-monzonite. However, the acidic phases may not be distinguished from each other. Structures which juxtapose significantly different rock types (eg. diorite-quartz-monzonite) such as faults or lithologic contacts may be defined by this method.
5. The only potential drill target, at this time, is the strong linear uranium in soil anomaly localized by the NS fault in Eneas Creek Valley.
6. Uranium water anomalies in the southern part of the claim group defined by the 1979 survey are derived from quartz-monzonite and monzonite which contain high background contents of recoverable (fluorimetrically defined) uranium.

Uranium water anomalies in Eneas Creek extend upstream from the main soil anomaly and into Garnet Lake. These are likely derived from pegmatites on the northern shore of Garnet Lake

and also possibly from the syenitic stock outcropping further north. Anomalous waters downstream from the anomaly may in part be derived from it, however, the dam at the east end of Garnet Lake prevents anomalous lake silts entering ENEAS Creek and stream silts in ENEAS Creek downstream from the anomaly do not contain high amounts of uranium.

7. Uranium in intergranitic, structurally controlled veins is the most likely model for potential uranium mineralization on the ENEAS Claims.

#### XI. RECOMMENDATIONS

1. The vicinity of the NS fault in ENEAS Creek valley (main soil anomaly) should be thoroughly prospected and geologically mapped on properly cut grid lines a maximum of 120m (400 ft) apart. Fill in soil and scintillometer surveys over these lines should also be conducted. The area covered should extend from L4S to L60S, 15E to 15W.

Epidote and hematite alteration and fracture types and orientatious should be particularly examined.

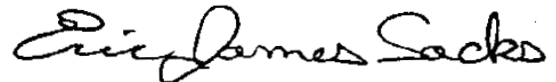
The north end of the soil uranium anomaly at BL20S is easily accessible to truck mounted drilling equipment via dirt tracks leading east off Garnet Lake Road for any drilling required after the anomaly is more properly



defined.

2. The vicinity of the radioactive outcrop at L195, 11W is included in (1.) above. The area is, however, not accessible to large drilling equipment without significant site preparation and drill water would be a problem. Light, back-packable drilling equipment and/or trenching should be considered. The outcrop itself should be thoroughly stipped to determine its extent and character of mineralization. The relationship of fractures, epidote-hematite alteration and uranium content is on-going.
  
3. The weaker uranium soil anomaly in the SW part of the claims (L90S to L120S, 40W to 56W) should be thoroughly mapped, prospected, soil sampled and radiometrically surveyed on 120m (400 ft) lines as in (1.) above. Drilling is not recommended at this time.

Respectfully submitted,



ERIC JAMES SACKS, M.Sc.

APPENDIX I

List of Analytical Results

Soil and Rock



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr., Soil  
Rexdale, Ontario M9W 5X8

ATTN: PROJECT: Eneas

CC: E. Sacks

CERTIFICATE NO. 49628

INVOICE NO. 32165

RECEIVED Aug. 13/79

ANALYSED Aug. 27/79

SAMPLE NO. :	PPM U
79 PR 29001	0.5
29002	0.5
29003	<0.5
29004	1.0
29005	1.0
29006	0.5
29007	1.5
29008	0.5
29009	1.0
✓29010	1.0
✓29011	1.0
✓29012	15
✓29013	0.5
✓29014	1.0
✓29015	0.5
29016	<0.5
✓29017	0.5
✓29018	<0.5
✓29019	<0.5
✓29020	<0.5
✓29021	<0.5
29022	0.5
✓29023	0.5
✓29024	<0.5
✓29025	1.0
✓29026	1.5
✓29027	2.0
✓29028	0.5
✓29029	0.5
✓29030	1.0
✓29031	0.5
✓29032	1.0
✓29033	50
✓29034	2.0
✓29035	0.5
✓29036	0.5
✓29037	0.5
✓29038	1.0
✓29039	<0.5
79 PR ✓29040	1.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8

ATTN: PROJECT: Eneas-Soil CC: E. Sacks

CERTIFICATE NO. 49697  
INVOICE NO. 32224  
RECEIVED Aug. 14/79  
ANALYSED Aug. 28/79

SAMPLE NO. :	PPM
	U
79 PR ✓29078	0.5
✓29079	6.5
✓29080	0.5
✓29081	1.0
✓29082	<0.5
✓29083	0.5
✓29084	1.5
✓29085	1.5
✓29086	1.5
✓29087	0.5
✓29088	1.0
✓29089	0.5
✓29090	0.5
✓29091	1.5
✓29092	<0.5
✓29093	1.5
✓29094	2.0
✓29095	0.5
✓29096	1.0
✓29097	1.0
✓29098	<0.5
✓29099	0.5
✓29100	0.5
✓29101	0.5
✓29102	0.5
✓29103	0.5
✓29104	<0.5
✓29105	0.5
✓29106	0.5
✓29107	1.5
✓29108	1.5
✓29109	3.0
✓29110	2.5
29111	1.5
✓29112	1.0
✓29113	0.5
✓29114	1.5
✓29115	0.5
✓29116	1.0
79 PR ✓29117	1.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49698

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8

INVOICE NO. 32224

RECEIVED Aug. 14/79

ANALYSED Aug. 28/79

ATTN: PROJECT: Eneas-Soil

CC: E. Sacks

SAMPLE NO. :	PPM U
79 PR ✓ 29118	0.5
✓ 29119	<0.5
✓ 29120	0.5
✓ 29121	1.0
✓ 29122	0.5
✓ 29123	0.5
✓ 29124	4.5
✓ 29125	0.5
✓ 29126	<0.5
✓ 29127	<0.5
✓ 29128	<0.5
✓ 29129	<0.5
✓ 29130	<0.5
✓ 29131	<0.5
✓ 29132	<0.5
✓ 29133	<0.5
✓ 29134	0.5
✓ 29135	1.0
✓ 29136	0.5
✓ 29137	0.5
✓ 29138	4.0
✓ 29139	0.5
✓ 29140	0.5
✓ 29141	1.0
✓ 29142	<0.5
✓ 29143	<0.5
✓ 29144	4.0
✓ 29145	0.5
✓ 29146	13.0
✓ 29147	<0.5
✓ 29148	0.5
✓ 29149	0.5
✓ 29150	0.5
✓ 29151	0.5
✓ 29152	0.5
✓ 29153	<0.5
✓ 29154	<0.5
✓ 29155	0.5
✓ 29156	1.0
79 PR ✓ 29157	0.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49699

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8  
ATTN: PROJECT: Eneas-Soil

INVOICE NO. 32224

RECEIVED Aug. 14/79

CC: E. Sacks

ANALYSED Aug. 28/79

SAMPLE NO. :	PPM
	U
79 PR-29158	<0.5
✓29159	0.5
✓29160	1.5
✓29161	1.0
✓29162	0.5
✓29163	0.5
✓29164	0.5
29165	1.5
✓29166	1.0
✓29167	1.5
✓29168	0.5
✓29169	1.0
✓29170	0.5
✓29171	1.5
✓29172	0.5
✓29173	0.5
✓29344	9.5
✓29345	<0.5
✓29346	3.5
✓29347	1.5
✓29348	1.5
✓29349	6.0
29350	0.5
✓29351	36
✓29352	40
✓29353	1.5
✓29354	0.5
✓29355	1.0
✓29356	0.5
✓29357	<0.5
✓29358	1.0
✓29359	1.0
✓29360	1.5
✓29361	1.0
✓29362	1.0
✓29363	0.5
✓29364	1.5
✓29365	0.5
✓29366	2.0
79 PR-29367	2.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1 984-0221  
TELEPHONE: [REDACTED]  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8  
ATTN: PROJECT: Eaneas-Soil

CC: E. Sacks

CERTIFICATE NO. 49700  
INVOICE NO. 32224  
RECEIVED Aug. 14/79  
ANALYSED Aug. 28/79

SAMPLE NO. :	PPM U
79 PR ✓ 29368	<0.5
✓ 29369	1.0
- 29370	1.0
✓ 29371	1.5
✓ 29372	1.0
✓ 29373	1.0
✓ 29374	0.5
- 29375	2.5
✓ 29376	2.0
✓ 29377	1.0
✓ 29378	1.5
✓ 29379	2.0
✓ 29580	<0.5
✓ 29581	0.5
✓ 29582	1.0
✓ 29583	0.5
✓ 29584	0.5
✓ 29585	<0.5
- 29586	0.5
✓ 29587	0.5
- 29588	1.0
- 29589	1.0
- 29590	30
- 29591	1.0
- 29592	0.5
- 29593	0.5
- 29594	1.0
- 29595	0.5
- 29596	0.5
- 29597	0.5
- 29598	2.5
- 29599	3.0
✓ 39600	2.5
29601	1.0
✓ 29602	1.0
✓ 29603	1.0
✓ 29604	1.5
- 29605	1.0
- 29606	1.5
79 PR ✓ 29607	1.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Bielle*







212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: ██████████ 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division  
Ste. 311-215 Carlingview Dr.  
Rexdale, Ont.

ATTN: PRINIC-ENEAS-Soil

CC. E. Sacks

CERTIFICATE NO. 49752  
INVOICE NO. 32232  
RECEIVED Aug. 16/79  
ANALYSED Aug. 29/79

SAMPLE NO. :	PPM U
79 PR ✓029624	1.0
✓0296285	2.0
✓029626	7.5
✓029627	1.5
029628	0.5
✓029629	0.5
✓029630	1.5
✓029631	0.5
✓029632	0.5
✓029633	0.5
✓029634	1.0
✓029635	1.0
✓029636	0.5
✓029645	1.0
✓029646	1.0
✓029647	1.0
✓029648	1.5
✓029649	1.5
✓029650	0.5
✓029651	1.0
✓029652	1.0
✓029653	1.0
79 PR ✓029654	2.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: [REDACTED] 984-C221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49751

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

INVOICE NO. 32232

RECEIVED Aug. 16/79

ATTN: PRINIC-ENEAS-Soil

CC. E. Sacks

ANALYSED Aug. 29/79

SAMPLE NO. :	PPM U
79 PR ✓ 029380	0.5
✓ 029381	0.5
✓ 029382	1.0
✓ 029383	1.0
✓ 029384	0.5
✓ 029385	0.5
✓ 029386	0.5
✓ 029387	2.0
029388	1.0
✓ 029389	0.5
✓ 029390	0.5
✓ 029391	0.5
✓ 029392	0.5
✓ 029393	0.5
✓ 029394	0.5
✓ 029395	0.5
✓ 029396	0.5
✓ 029397	1.5
✓ 029398	0.5
✓ 029399	1.0
✓ 029400	1.0
✓ 029401	1.5
✓ 029402	0.5
✓ 029403	1.0
✓ 029404	1.0
✓ 029405	0.5
✓ 029406	0.5
✓ 029407	1.0
✓ 029408	1.0
029409	0.5
✓ 029410	1.0
✓ 029411	0.5
✓ 029412	0.5
✓ 029413	0.5
✓ 029414	0.5
✓ 029619	0.5
✓ 029620	1.5
✓ 029621	1.0
✓ 029622	0.5
79 PR ✓ 029623	0.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: [REDACTED] 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49630

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr., Soil  
Rexdale, Ontario M9W 5X8  
ATTN: PROJECT: Eneas CC: E. Sacks

INVOICE NO. 32165  
RECEIVED Aug. 13/79  
ANALYSED Aug. 27/79

SAMPLE NO. :	PPM U
79 PR-29254	1.0
✓ 29255	0.5
- 29256	0.5
✓ 29257	1.0
✓ 29258	0.5
✓ 29259	<0.5
29260	1.5
✓ 29261	1.0
✓ 29262	0.5
- 29263	1.0
- 29264	0.5
✓ 29265	0.5
✓ 29266	<0.5
✓ 29267	1.0
- 29268	0.5
✓ 29269	0.5
✓ 29270	<0.5
✓ 29271	1.0
✓ 29272	<0.5
✓ 29273	<0.5
✓ 29274	0.5
✓ 29275	<0.5
✓ 29276	<0.5
✓ 29277	<0.5
✓ 29278	<0.5
✓ 29279	<0.5
✓ 29280	0.5
✓ 29281	<0.5
✓ 29282	1.0
✓ 29283	1.0
✓ 29284	6.5
✓ 29285	0.5
✓ 29286	1.0
✓ 29287	0.5
✓ 29288	1.5
✓ 29289	<0.5
✓ 29290	1.0
✓ 29291	2.0
29292	1.0
✓ 79 PR-29293	<0.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: 994-0221  
 AREA CODE: 604  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.  
 Minerals Division  
 Ste. 311 - 215 Carlingview Dr.  
 Rexdale, Ont. M9W 5X8

ATTN: PROJECT: Prinic-Eneas-Soil

CC: E. Sacks

CERTIFICATE NO. 49777  
 INVOICE NO. 32273  
 RECEIVED Aug. 16/79  
 ANALYSED Aug. 31/79

SAMPLE NO. :	PPM U
✓9PR29214	0.5
✓29215	1.0
✓29216	0.5
✓29217	1.0
✓29415	2.0
✓29416	1.0
✓29417	1.0
✓29418	1.0
✓29419	1.0
✓29420	0.5
✓29421	1.0
✓29422	0.5
✓29423	1.0
✓29424	1.0
✓29425	0.5
✓29426	2.0
✓29427	2.0
✓29428	1.5
✓29429	1.0
✓29430	1.0
✓29431	1.5
✓29432	2.5
✓29433	1.5
✓29434	4.5
✓29435	2.0
✓29436	2.0
✓29437	4.0
✓29438	3.0
✓29439	1.5
✓29440	0.5
✓29441	0.5
✓29442	2.0
✓29443	0.5
✓29444	1.5
✓29445	1.0
✓29446	5.5
✓29447	1.5
✓29448	1.5
✓29449	1.5
✓9PR29450	1.5



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: 984-0221  
 AREA CODE: 604  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49776  
 INVOICE NO. 32273  
 RECEIVED Aug. 16/79  
 ANALYSED Aug. 31/79

TO: Canadian Occidental Petroleum Ltd.  
 Minerals Division  
 Ste. 311 - 215 Carlingview Dr.  
 Rexdale, Ont. M9W 5X8

ATTN: PROJECT: PRINIC-ENEAS-SOIL CC: E. Sacks

SAMPLE NO. :	PPM U
✓79PR29174	1.5
✓29175	1.0
✓29176	1.0
29177	1.0
✓29178	3.0
✓29179	1.5
✓29180	1.0
✓29181	1.0
✓29182	1.5
✓29183	1.0
✓29184	1.5
✓29185	1.0
✓29186	1.0
✓29187	2.0
✓29188	2.0
✓29189	1.0
✓29190	1.0
✓29191	1.5
✓29192	2.5
✓29193	2.0
✓29194	1.5
✓29195	2.5
✓29196	2.0
✓29197	2.5
✓29198	1.5
✓29199	1.5
✓29200	1.5
✓29201	1.5
✓29202	2.0
29203	2.0
✓29204	2.0
✓29205	1.0
✓29206	1.0
✓29207	<0.5
✓29208	0.5
✓29209	0.5
✓29210	0.5
✓29211	0.5
✓29212	6.5
79PR29213	1.5



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION

CERTIFIED BY: *Hart Biele*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2G1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50006

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario

INVOICE NO. 32422

RECEIVED Aug. 22/79

ATTN: PROJECT: Prinic-Eneas-Soil Mr. R. Evans

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM
	U
79PR ✓ 29218	0.5
✓ 29219	0.5
✓ 29220	0.5
✓ 29221	1.0
✓ 29222	1.0
✓ 29223	0.5
✓ 29224	0.5
✓ 29225	1.5
✓ 29226	1.0
✓ 29227	0.5
✓ 29228	<0.5
✓ 29229	0.5
✓ 29230	0.5
✓ 29231	0.5
✓ 29232	<0.5
✓ 29233	0.5
✓ 29234	1.0
✓ 29235	<0.5
✓ 29236	0.5
✓ 29237	<0.5
✓ 29238	0.5
✓ 29239	1.0
✓ 29240	0.5
✓ 29241	14.5
✓ 29242	10.0
✓ 29243	3.0
✓ 29244	0.5
✓ 29245	1.0
✓ 29246	<0.5
✓ 29247	1.0
✓ 29248	<0.5
✓ 29249	1.5
✓ 20250	1.5
✓ 29456	1.0
✓ 29457	1.0
✓ 29458	0.5
✓ 29459	0.5
✓ 29460	1.0
✓ 29461	2.0
79PR ✓ 29462	1.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: [REDACTED] 994-0221  
AREA CODE: 604  
TELEX: 043-52597



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50039

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

INVOICE NO. 32452

RECEIVED Aug. 23/79

ATTN: PRINIC-ENEAS-SOIL R. Evans

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM U
79 PR-60344	2.5
-60345	2.0
-60346	2.0
-60347	2.0
-60348	2.5
-60349	3.5
-60350	1.5
-60351	2.5
-60352	2.0
-60353	2.0
-60354	3.0
-60355	2.5
-60501	1.0
-60502	1.0
-60503	1.0
-60504	0.5
-60505	1.0
-60506	0.5
-60507	1.0
-60508	2.5
-60509	2.0
-60510	6.5
-60511	2.5
-60512	1.5
-60513	2.0
-60514	2.0
-60515	2.0
-60516	1.5
-60517	1.5
-60518	1.5
-60519	2.5
-60520	2.0
-60521	5.0
-60522	4.0
-60523	4.0
-60524	2.0
-60525	4.0
-60526	26
-60527	4.0
79 PR-60528	3.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biele*





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

ATTN: PRINIC-ENRNAS-SOIL R. Evans

CERTIFICATE NO. 50014

INVOICE NO. 32432

RECEIVED Aug. 22/79

ANALYSED Sept. 6/79

SAMPLE NO. :	PPM
	U
79 PR-60278	1.5
✓ 60279	1.5
✓ 60280	1.0
✓ 60281	0.5
✓ 60282	0.5
✓ 60283	0.5
✓ 60284	0.5
✓ 60285	0.5
✓ 60286	1.0
✓ 60287	1.0
✓ 60288	1.0
✓ 60289	1.0
✓ 60290	1.5
✓ 60291	1.0
✓ 60292	1.5
✓ 60293	1.5
✓ 60294	1.5
✓ 60295	1.5
✓ 60296	0.5
✓ 60297	2.5
✓ 60298	2.5
✓ 60299	2.0
79 PR-60300	1.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50013

TO: Canadian Occidental Petroleum Ltd.,  
Mineral Division,  
Sta. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

INVOICE NO. 32432

RECEIVED Aug. 22/79

ANALYSED Sept. 6/79

ATTN: PRINIC-ENEAS-SOIL R. Evans

SAMPLE NO. :	PPM U
79 PR✓60029	< 0.5
✓60030	0.5
✓60031	< 0.5
✓60032	< 0.5
✓60033	1.5
✓60034	0.5
✓60035	0.5
✓60036	2.0
✓60037	0.5
✓60038	0.5
✓60039	< 0.5
✓60040	1.0
✓60041	2.0
✓60251	0.5
✓60252	0.5
✓60253	1.0
✓60254	1.0
✓60255	1.5
✓60256	0.5
✓60257	1.0
✓60258	2.5
✓60259	0.5
✓60260	1.0
✓60261	0.5
✓60262	1.0
✓60263	0.5
✓60264	1.5
✓60265	1.0
✓60266	1.0
✓60267	0.5
✓60268	1.0
✓60269	1.5
✓60270	1.0
✓60271	1.0
✓60272	0.5
✓60273	0.5
✓60274	1.0
✓60275	1.0
✓60276	0.5
79 PR✓60277	1.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2C1  
TELEPHONE: 984-0221  
AREA CODE: 804  
TELEX: 04-352597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Sta. 311 - 215 Carlingview Dr.,  
Roxdale, Ont.

ATTN: PRINIC-KNEAS-SOIL R. Evans

CERTIFICATE NO. 50037

INVOICE NO. 32432

RECEIVED Aug. 23/79

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM U
79 PR✓60042	14.0
✓60043	2.0
7 60044	4.0
✓60045	2.0
✓60046	3.5
-60047	4.0
-60048	2.5
-60049	4.0
-60050	2.5
-60051	2.5
-60052	2.0
-60053	2.5
-60054	1.5
-60055	2.0
-60056	1.0
-60057	2.0
-60058	1.5
-60059	3.0
-60060	1.0
-60061	1.0
-60062	1.0
-60063	1.5
-60064	4.5
-60065	1.5
-60066	2.0
✓60067	1.0
✓60068	3.0
✓60069	3.0
✓60070	1.0
✓60071	1.5
✓60072	1.5
✓60073	1.0
✓60074	1.5
✓60075	2.0
✓60076	1.0
✓60077	1.0
✓60078	1.5
✓60301	2.0
✓60302	1.0
79 PR✓60303	4.0



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Bielle*



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50038

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

INVOICE NO. 32432

RECEIVED Aug. 23/79

ATTN: PRINIC-ENEAS-SOIL R. Evans

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM
	U
79 PR-60304	1.5
✓60305	1.5
✓60306	3.5
✓60307	1.5
✓60308	1.0
✓60309	2.0
✓60310	1.0
✓60311	2.0
✓60312	2.0
✓60313	2.5
✓60314	1.0
✓60315	1.5
✓60316	2.0
✓60317	1.5
✓60318	1.0
✓60319	1.0
✓60320	1.0
✓60321	1.0
✓60322	1.5
✓60323	1.0
✓60324	1.0
✓60325	8.5
✓60326	5.0
✓60327	3.0
✓60328	3.0
✓60329	4.0
✓60330	3.5
✓60331	2.5
✓60332	3.0
✓60333	4.5
✓60334	3.0
✓60335	1.5
✓60336	2.0
✓60337	1.5
✓60338	3.5
✓60339	2.0
✓60340	1.5
✓60341	2.0
✓60342	2.5
79 PR-60343	2.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: [REDACTED] 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50012

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

INVOICE NO. 32432

RECEIVED Aug. 22/79

ANALYSED Sept. 6/79

ATTN: PRINIC-EANEAS-SOIL R. Evans

SAMPLE NO. :	PPM U
79 PR✓29809	< 0.5
✓29810	1.0
✓29811	< 0.5
✓29812	0.5
✓29813	0.5
✓29814	< 0.5
✓29815	1.5
✓29816	0.5
✓29817	0.5
✓29818	0.5
✓29819	1.0
✓29820	1.0
60001	< 0.5
✓60002	0.5
✓60003	0.5
✓60004	0.5
✓60005	< 0.5
✓60006	1.0
✓60007	1.0
✓60008	1.5
✓60009	2.5
✓60010	2.5
✓60011	1.5
✓60012	1.0
✓60013	1.0
✓60014	1.0
✓60015	1.0
✓60016	1.5
✓60017	1.5
✓60018	1.0
✓60019	1.0
✓60020	0.5
✓60021	2.0
✓60022	2.0
✓60023	1.0
✓60024	1.5
✓60025	1.0
✓60026	1.0
✓60027	1.0
79 PR✓60028	1.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: Hart Bielle



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 985-0649 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50011

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ont.

INVOICE NO. 32432

RECEIVED Aug. 22/79

ATTN: PRINIC-EANEAS-SOIL

R. Evans

ANALYSED Sept. 6/79

SAMPLE NO. :	PPM U
79 PR✓29769	1.5
✓29770	1.0
✓29771	0.5
✓29772	2.0
✓29773	< 0.5
✓29774	0.5
✓29775	0.5
✓29776	< 0.5
✓29777	1.0
✓29778	1.5
✓29779	2.5
✓29780	1.0
✓29781	0.5
✓29782	1.0
✓29783	1.5
✓29784	1.0
✓29785	3.0
✓29786	2.0
✓29787	2.0
✓29788	1.0
✓29789	6.0
✓29790	7.5
✓29791	8.0
✓29792	3.0
✓29793	7.5
✓29794	13.0
✓29795	13.0
✓29796	4.0
✓29797	4.0
✓29798	3.5
✓29799	3.5
✓29800	2.5
✓29801	2.5
✓29802	1.5
✓29803	2.5
✓29804	2.5
✓29805	2.0
✓29806	3.0
✓29807	3.0
79 PR✓29808	2.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50010

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Sta. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8  
ATTN: PROJECT: Prinic-Eneas-Soil Mr. R. Evans

INVOICE NO. 32422

RECEIVED Aug. 22/79

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM
	U
79PR 29729	0.5
✓29730	0.5
✓29731	<0.5
✓29732	<0.5
✓29733	<0.5
✓29734	2.0
✓29735	1.0
✓29736	1.0
✓29737	0.5
✓29738	<0.5
✓29739	0.5
✓29740	<0.5
✓29741	0.5
✓29742	<0.5
✓29743	<0.5
✓29744	1.0
✓29745	1.0
✓29746	1.0
✓29747	1.0
29748	1.0
✓29749	1.0
✓29750	1.0
✓29751	1.5
✓29752	2.0
✓29753	0.5
✓29754	0.5
✓29755	0.5
✓29756	1.0
✓29757	2.0
✓29758	0.5
✓29759	1.0
✓29760	1.5
✓29761	1.0
✓29762	1.5
✓29763	1.0
✓29764	1.0
✓29765	<0.5
✓29766	0.5
✓29767	1.0
79PR ✓29768	2.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: Hart Biddle



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352587

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50009

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8

INVOICE NO. 32422

RECEIVED Aug. 22/79

ATTN: PROJECT: Prinic-Eneas-Soil Mr. R. Evans

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM
	U
79PR ✓29689	2.5
✓29690	2.0
✓29691	0.5
✓29692	<0.5
✓29693	<0.5
✓29694	0.5
✓29695	<0.5
✓29696	<0.5
✓29697	0.5
✓29698	1.0
✓29699	1.0
✓29700	0.5
✓29701	1.0
✓29702	0.5
✓29703	0.5
✓29704	<0.5
✓29705	0.5
✓29706	0.5
✓29707	1.0
✓29708	1.0
✓29709	1.0
29710	0.5
✓29711	1.0
✓29712	1.0
✓29713	1.0
✓29714	1.0
✓29715	1.0
✓29716	0.5
✓29717	1.5
✓29718	0.5
✓29719	1.0
✓29720	1.0
✓29721	1.0
✓29722	1.0
✓29723	2.5
✓29724	1.0
✓29725	2.0
✓29726	<0.5
✓29727	1.0
79PR ✓29728	1.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8

ATTN PROJECT: Prinic-Eneas-Soil Mr. R. Evans

CERTIFICATE NO. 50008

INVOICE NO. 32422

RECEIVED Aug. 22/79

ANALYSED Sept. 7/79

SAMPLE NO. :	PPM U
79PR ✓29639	0.5
✓29640	0.5
✓29641	0.5
✓29642	1.0
✓29643	0.5
✓29644	0.5
✓29655	0.5
✓29656	0.5
✓29657	0.5
✓29658	0.5
✓29659	0.5
✓29660	0.5
✓29661	0.5
✓29662	0.5
✓29663	1.0
✓29664	0.5
✓29665	0.5
✓29666	0.5
✓29667	0.5
✓29668	1.5
✓29669	0.5
✓29670	2.0
✓29671	0.5
✓29672	0.5
✓29673	0.5
✓29674	0.5
✓29675	0.5
✓29676	1.0
✓29677	1.0
✓29678	2.0
✓29679	0.5
✓29680	1.0
✓29681	0.5
✓29682	0.5
✓29683	1.0
✓29684	1.0
✓29685	1.0
✓29686	1.0
✓29687	1.5
79PR ✓29688	1.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J2G1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 04-352597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8  
ATTN: PROJECT: Prinic-Eneas-Soil Mr. R. Evans

CERTIFICATE NO. 50007  
INVOICE NO. 32422  
RECEIVED Aug. 22/79  
ANALYSED Sept. 7/79

SAMPLE NO. :	PPM
	U
79PR ✓29463	0.5
✓29464	1.0
✓29465	0.5
✓29466	0.5
✓29467	0.5
✓29468	<0.5
✓29469	1.0
✓29470	3.0
✓29471	0.5
✓29472	0.5
✓29473	0.5
✓29474	0.5
✓29475	<0.5
✓29476	<0.5
✓29477	<0.5
✓29478	<0.5
✓29479	<0.5
✓29480	0.5
✓29481	1.0
✓29482	0.5
✓29483	<0.5
29484	<0.5
✓29485	<0.5
✓29486	<0.5
✓29487	<0.5
✓29488	0.5
✓29489	0.5
✓29490	0.5
✓29491	0.5
✓29492	0.5
✓29493	0.5
✓29494	0.5
✓29495	<0.5
✓29496	0.5
✓29497	1.0
✓29498	0.5
✓29499	1.0
✓29500	1.0
✓29637	0.5
79PR ✓29638	0.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 954-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49632

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8

INVOICE NO. 32165

RECEIVED Aug. 13/79

ATTN: PROJECT: Eneas

Soil  
CC: E. Sacks

ANALYSED Aug. 27/79

SAMPLE NO. :	PPM U
79 PR ✓ 29334	1.5
✓ 29335	20.5
✓ 29336	1.0
✓ 29337	0.5
✓ 29338	0.5
✓ 29339	0.5
✓ 29340	2.0
✓ 29341	<0.5
✓ 29342	1.5
✓ 29343	1.0
✓ 29501	<0.5
✓ 29502	1.0
✓ 29503	1.5
✓ 29504	0.5
✓ 29505	<0.5
✓ 29506	1.0
✓ 29507	0.5
✓ 29508	0.5
✓ 29509	1.0
✓ 29510	1.0
✓ 29511	1.5
✓ 29512	2.5
✓ 29513	1.0
✓ 29514	<0.5
✓ 29515	1.0
✓ 29516	0.5
✓ 29517	1.0
29518	1.0
✓ 29519	<0.5
✓ 29520	1.0
✓ 29521	2.0
✓ 29522	<0.5
✓ 29523	0.5
✓ 29524	<0.5
✓ 29525	1.0
✓ 29526	<0.5
✓ 29527	0.5
✓ 29528	<0.5
✓ 29529	0.5
79 PR ✓ 29530	1.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Bielle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: [REDACTED] 984-0221  
 AREA CODE: [REDACTED] 604  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.,  
 Minerals Division,  
 Ste. 311 - 215 Carlingview Dr.,  
 Rexdale, Ontario M9W 5X8

Soil

ATTN: PROJECT: Eneas

CC: E. Sacks

CERTIFICATE NO. 49631

INVOICE NO. 32165

RECEIVED Aug. 13/79

ANALYSED Aug. 27/79

SAMPLE NO. :	PPM
	II
79 PR ✓ 29294	<0.5
✓ 29295	0.5
✓ 29296	0.5
✓ 29297	1.0
✓ 29298	<0.5
✓ 29299	1.0
✓ 29300	0.5
✓ 29301	0.5
✓ 29302	1.0
✓ 29303	1.0
✓ 29304	0.5
29305	0.5
✓ 29306	0.5
✓ 29307	<0.5
✓ 29308	0.5
✓ 29309	<0.5
✓ 29310	1.5
✓ 29311	0.5
✓ 29312	2.0
✓ 29313	0.5
✓ 29314	0.5
✓ 29315	<0.5
✓ 29316	<0.5
- 29317	1.0
- 29318	0.5
✓ 29319	0.5
- 29320	1.0
- 29321	0.5
- 29322	1.0
- 29323	1.0
✓ 29324	<0.5
✓ 29325	<0.5
- 29326	2.0
- 29327	<0.5
- 29328	0.5
✓ 29329	<0.5
✓ 29330	1.5
✓ 29331	0.5
29332	0.5
79 PR ✓ 29333	1.5



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 985-0610 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49633

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 carlingview Dr.,  
Rexdale, Ontario M9W 5X8

Soil

INVOICE NO. 32165

RECEIVED Aug. 13/79

ATTN: PROJECT: Eneas

CC: E. Sacks

ANALYSED Aug. 27/79

SAMPLE NO. :	PPM
	U
79 PR ✓ 29531	1.0
✓ 29532	1.0
✓ 29533	1.5
✓ 29534	0.5
✓ 29535	17.5
✓ 29536	11.5
29537	1.0
✓ 29538	1.0
✓ 29539	1.0
✓ 29540	<0.5
✓ 29541	2.0
✓ 29542	1.0
✓ 29543	7.0
✓ 29544	<0.5
✓ 29545	1.5
✓ 29546	1.0
✓ 29547	1.0
✓ 29548	0.5
✓ 29549	1.5
✓ 29550	1.0
✓ 29551	1.0
✓ 29552	1.0
✓ 29553	0.5
✓ 29554	1.5
✓ 29555	0.5
✓ 29556	1.5
✓ 29557	1.0
✓ 29558	<0.5
✓ 29559	0.5
✓ 29560	0.5
✓ 29561	0.5
✓ 29562	<0.5
✓ 29563	0.5
✓ 29564	0.5
✓ 29565	0.5
✓ 29566	<0.5
✓ 29567	<0.5
✓ 29568	0.5
✓ 29569	1.5
79 PR ✓ 29570	0.5



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

*Hart Biddle*



*Copy for Mr. Sacks*

# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: ██████████ 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49634

TO: Canadian Occidental Petroleum Ltd.,  
Minerals Division,  
Ste. 311 - 215 Carlingview Dr.,  
Rexdale, Ontario M9W 5X8

INVOICE NO. 32165

RECEIVED Aug. 13/79

ATTN: PROJECT: Eneas Soil  
CC: E. Sacks

ANALYSED Aug. 27/79

SAMPLE NO. :	PPM U
79 PR ✓ 29571	<0.5
29572	1.0
✓ 29573	<0.5
✓ 29574	0.5
✓ 29575	1.0
✓ 29576	0.5
✓ 29577	<0.5
✓ 29578	0.5
79 PR ✓ 29579	1.0



CERTIFIED BY: *Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: 684-0221  
 AREA CODE: 604  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49629

TO: Canadian Occidental Petroleum Ltd.,  
 Minerals Division,  
 Ste. 311 - 215 Carlingview Dr.,  
 Rexdale, Ontario M9W 5X8

INVOICE NO. 32165

RECEIVED Aug. 13/79

ATTN: PROJECT: Eneas Soil  
 CC: E. Sacks

ANALYSED Aug. 27/79

SAMPLE NO. :	PPM U
79 PR✓29041	0.5
✓29042	<0.5
29043	1.0
✓20044	1.5
✓20945	1.0
✓29046	1.5
✓29047	0.5
✓29048	1.0
✓29049	1.5
✓29050	0.5
✓29051	0.5
✓29052	1.5
✓29053	<0.5
✓29054	1.0
✓29055	0.5
✓29056	<0.5
✓29057	<0.5
✓29058	<0.5
✓29059	1.5
✓29060	0.5
✓29061	1.0
✓29062	<0.5
✓29063	1.0
✓29064	0.5
✓29065	1.0
✓29066	0.5
✓29067	1.0
✓29068	1.0
✓29069	1.0
✓29070	0.5
✓29071	1.5
✓29072	0.5
✓29073	0.5
29074	1.0
✓29075	1.0
✓29076	1.0
✓29077	<0.5
✓29251	1.0
✓29252	1.5
79 PR✓29253	0.5



MEMBER  
 CANADIAN TESTING  
 ASSOCIATION

CERTIFIED BY: *Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: [REDACTED] 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.  
Minerals Division  
311 - 215 Carlingview Drive ENEAS ROCKS  
Rexdale, Ontario

CERTIFICATE NO. 50474  
INVOICE NO. 32730  
RECEIVED 33132 Th  
Sept. 7/79  
ANALYSED Sept. 20/79

ATTN: cc: E. Sacks

SAMPLE NO. :	PPM	PPM
	U	Th
29901	2.0	8
29902	0.5	2
29903	1.0	2
29904	< 0.5	3
29905	< 0.5	< 1
29906	0.5	5
29907	1.0	6
29908	0.5	6
29909	< 0.5	2
29910	0.5	3
29911	< 0.5	11
29912	0.5	15
29913	0.5	10
29914	0.5	8
29915	< 0.5	4
29916	< 0.5	3
29917	< 0.5	12
29918	1.0	12
29919	0.5	10
29920	< 0.5	3
29921	< 0.5	2
29922	0.5	3
29923	0.5	12
29924	< 0.5	3
29925	1.0	46
29926	0.5	11
29927	1.0	22
29928	2.0	25
29929	1.0	10
29930	0.5	5
29931	< 0.5	10
29932	1.5	15
29933	1.5	10
29934	< 0.5	7
29935	< 0.5	4
29936	0.5	6
29937	1.0	16
29938	0.5	8
29939	0.5	9
29940	0.5	9



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*





212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50475

TO: Canadian Occidental Petroleum Ltd.  
Minerals Division  
311 - 215 Carlingview Drive  
Rexdale, Ontario

ENEAS ROCKS

INVOICE NO. 32730

RECEIVED Sept. 23/79

ANALYSED Sept. 20/79

ATTN: cc: E. Sacks

SAMPLE NO. :	PPM	PPM
	U	Th
29941	2.5	14
29942	1.5	11
29943	2.0	8
29944	2.0	8
29945	3.0	7
29946	2.0	8
29947	2.5	18
29948	1.5	11
29949	5.0	6
29950	2.5	8
29951	1.0	2
29952	1.0	1
29953	3.0	6
29954	3.0	7
29955	0.5	< 1
29956	0.5	< 1
29957	3.0	6
29958	1.0	5
29959	1.5	7
29960	3.5	13
29961	6.5	35
29962	2.0	23
29963	3.0	9
29964	3.0	7
29965	3.0	23
29966	2.5	5
29967	4.0	17
29968	3.0	5
29969	2.0	4
29970	0.5	1
29971	1.5	8
29972	3.0	11
29973	2.0	5
29974	2.0	9
29975	1.5	6
29976	3.0	10
29977	1.5	9
29978	1.0	7
29979	3.0	11
29980	2.0	13



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 984-0221  
AREA CODE: 604  
TELEX: 043-52597

# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.  
Minerals Division  
311 - 215 Carlingview Drive  
Rexdale, Ontario

**KNEAS ROCKS**

ATTN: CC: E. Sacks

CERTIFICATE NO. 50476  
INVOICE NO. 32730  
RECEIVED 33132 <sup>Th</sup> Sept. 7/79  
ANALYSED Sept. 20/79

SAMPLE NO. :	PPM	PPM
	U	Th
29981	2.0	11
29982	2.5	8
29983	2.0	6
29984	2.0	9
29985	2.5	5
29986	4.0	14
29987	1.0	6
29988	2.5	10
29989	4.0	26
29990	2.0	6
29991	1.0	5
29992	2.0	5
29851	2.0	6
29852	3.5	6
29853	3.0	7
29854	2.0	7
29855	2.0	3
29856	1.5	2
29857	1.5	4
29858	3.0	30
29859	3.5	13
29860	2.5	16
29861	1.5	5
29862	3.0	5
29863	2.5	5
29864	3.0	8
29865	2.5	10
29866	3.0	17
29867	3.0	23
29868	2.5	9
29869	3.5	23
29870	3.0	15
29871	2.0	6
29872	3.5	16
29873	2.0	10
29874	1.5	8
29875	1.5	6
29876	2.5	24
29877	1.5	9
29878	1.5	7



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: [REDACTED] 984-0221  
AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50477  
INVOICE NO. 32730  
RECEIVED 33132 - Th  
Sept. 7/79  
ANALYSED Sept. 20/79

TO: Canadian Occidental Petroleum Ltd.  
Minerals Division  
311 - 215 Carlingview Drive  
Rexdale, Ontario

ENEAS ROCKS

ATTN: cc: R. Sacks

SAMPLE NO. :	PPM	PPM
	U	Th
29879	1.5	6
29880	2.0	9
29881	2.0	5
29882	12.5	190
29883	2.0	13
29884	2.5	8
29885	2.5	5
29886	1.5	15
29887	1.5	6
29888	1.5	6
29889	1.0	4
29890	35	6
29891	2.5	5
29892	1.5	5
29893	1.5	3
29894	2.0	5
29895	10.5	72
29896	1.5	5
29897	3.5	7



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *Hart Biddle*

- 19 -  
X-RAY ASSAY LABORATORIES  
LIMITED

1895 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

CERTIFICATE OF ANALYSIS

INVOICE 6181 REF. FILE 2372-L2

TO: CANADIAN OCCIDENTAL PETROLEUM LTD.,  
ATTN: MR. SACKS,  
SUITE 311 - 215 CARLINGVIEW DR.,  
REXDALE, ONTARIO.  
M9W 5X8

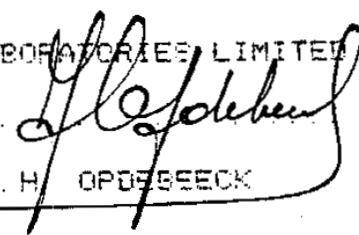
3 ROCKS SUBMITTED ON 9-NOV-79

WERE ANALYSED AS FOLLOWS:

	UNITS	METHOD	DETECTION LIMIT
U	PPM	WET	0.500
TH	PPM	NA	1.000

X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY

  
J. H. OPPESECK

DATE 03-DEC-79

SAMPLE	U PPM	TH PPM
79PR29858RA	77.0	1190
79PR29858RB	54.0	750
79PR29858RC	47.0	790

APPENDIX IIa - U and Th Contents and U/Th Ratios By Rock Type

ENEAS Claims

<u>Unit 1a - hbDi</u>				<u>Unit 1b - hDi</u>			
<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>	<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>
79PR29854	2	7	0.3	79PR29869	3.5	23	0.15
856	1.5	2	0.8	871	2	6	0.33
857	1.5	4	0.4	872	3.5	16	0.35
29901	2	8	0.3	877	1.5	9	0.17
902	0.5	2	0.3	878	1.5	7	0.21
903	1	2	0.5	879	1.5	6	0.25
904	< 0.5	3	< 0.2	881	2	5	0.40
906	0.5	5	0.1	885	2.5	5	0.50
909	< 0.5	2	< 0.3	887	1.5	6	0.25
910	0.5	3	0.2	893	1.5	3	0.50
914	0.5	8	0.1	894	2	5	0.40
920	< 0.5	3	< 0.2	896	1.5	5	0.30
951	1	2	0.5	905	< 0.5	< 1	0.50
952	1	1	1.0	907	1	6	0.17
953	3	6	0.5	908	0.5	6	0.08
954	3	7	0.4	915	< 0.5	4	< 0.13
955	0.5	< 1	< 0.5	916	< 0.5	3	< 0.17
956	0.5	< 1	< 0.5	930	0.5	5	0.10
957	3	6	0.5	932	1.5	15	0.10
958	1	5	0.2	943	2	8	0.25
-	-	-	-	944	2	8	0.25
MEAN	1.2	3.9	0.4	945	3	7	0.43
				968	3	5	0.60
				970	3	15	0.20
				976	2.5	24	0.10
				983	2	13	0.15
				984	2.5	8	0.31
				985	2.5	5	0.50
				MEAN	1.9	8.2	0.28

UNIT 2a - hbMz

<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>
79PR29912	0.5	15	0.03
917	<0.5	12	<0.04
919	0.5	10	0.05
921	<0.5	2	<0.25
922	0.5	3	0.17
923	0.5	12	0.04
924	<0.5	3	0.17
925	1	46	0.02
926	0.5	11	0.05
927	1	22	0.05
928	2	25	0.08
929	1	10	0.10
965	3	23	0.13
<u>MEAN</u>	<u>0.9</u>	<u>14.8</u>	<u>0.09</u>

UNIT 2b - hMz

<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>
79PR29855	2	3	0.67
860	2.5	2.5	0.16
866	3	17	0.18
873	2	10	0.20
874	1.5	8	0.19
875	1.5	6	0.25
876	2.5	24	0.10
880	2.0	9	0.22
884	2.5	8	0.31
886	1.5	15	0.10
888	1.5	6	0.25
890	35	6	5.80
891	2.5	5	0.50
892	1.5	5	0.30
895	10.5	72	0.15
897	3.5	7	0.50
918	1	12	0.08
933	1.5	10	0.15
934	<0.5	7	<0.07
935	<0.5	4	<0.13
936	0.5	6	0.08
939	0.5	9	0.06
940	0.5	9	0.06
950	2.5	8	0.31
959	1.5	7	0.21
966	2.5	5	0.50
967	4	17	0.24
969	2	4	0.50
972	3.5	16	0.22
974	1.5	8	0.19
975	1.5	6	0.25
980	2	9	0.22
982	12.5	190	0.07
986	1.5	15	0.01
987	1.5	6	0.25
988	1.5	6	0.25
989	1	4	0.25
990	2	6	0.33
991	2.5	5	0.50
992	1.5	5	0.30
<u>MEAN</u>	<u>3.1</u>	<u>14.8</u>	<u>0.38</u>

UNIT 3a - hbQM

<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>
79PR29911	<0.5	11	<0.05
913	0.5	10	0.05
937	1	16	0.06
938	0.5	8	0.06
858	3	30	0.10
942	1.5	11	0.14
-	-	-	-
<u>MEAN</u>	<u>1.2</u>	<u>14.3</u>	<u>0.08</u>

UNIT 3b - hQM

<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>
79PR29851	2	6	0.33
852	3.5	6	0.58
853	3	7	0.43
859	3.5	13	0.27
862	3	5	0.60
863	2.5	5	0.50
864	3	8	0.38
865	2.5	10	0.25
867	3	23	0.13
868	2.5	9	0.28
870	3	15	0.20
882	12.5	190	0.07
883	2	13	0.15
931	<0.5	10	<0.05
941	2.5	44	0.06
946	2.0	8	0.25
947	2.5	18	0.14
948	1.5	11	0.14
949	5	16	0.31
960	3.5	13	0.27
961	6.5	35	0.19
962	2	23	0.09
963	3	9	0.33
964	3	7	0.43
977	1.5	9	0.17
978	1.5	7	0.21
979	1.5	6	0.25
981	2	5	0.4
-	-	-	-
<u>MEAN</u>	<u>3.0</u>	<u>18.9</u>	<u>0.27</u>



UNIT 4 - Ap

<u>Sample No.</u>	<u>ppm U</u>	<u>ppm Th</u>	<u>U/Th</u>
79PR29861	1.5	5	0.30
889	1	4	0.25
-	-	-	-
<u>MEAN</u>	<u>1.3</u>	<u>4.5</u>	<u>0.28</u>

APPENDIX IIb

THIN SECTION REPORTS

Specimen No. - 79 PR 29861R

Rock name - sericitised and argillised quartz-feldspar porphyry

Mineralogy - phenocrysts - plagioclase (altered)  
quartz  
groundmass - quartz  
K-feldspar  
plagioclase  
biotite  
accessory - magnetite  
apatite, zircon  
secondary - sericite  
argillaceous material  
chlorite

Description - This rock is an acid porphyry, composed of numerous medium grained, altered, plagioclase phenocrysts and less abundant phenocrysts of quartz, set in a very fine grained groundmass composed predominantly of quartz and acid feldspar. A low proportion of tiny biotite flakes is scattered through the groundmass.

Plagioclase phenocrysts are very abundant, up to about 3 mm long, and are now only shadowily discernible through a mixture of alteration products. They were probably originally subhedral in general form, with irregular margins in detail. They are now covered by a dense mixture of sericite and argillaceous material, so that the original composition of the plagioclase cannot be determined. Many of the plagioclase phenocrysts contain numerous small inclusions of quartz, while others contain irregular patches of K-feldspar, often with microcline twinning. Occasional small patches of carbonate also occur in a few plagioclase phenocrysts. Quartz phenocrysts are relatively sparse. They are up to about 3 mm across, and are euhedral to subhedral in form. They contain occasional small patches of groundmass material.

The groundmass is allotriomorphic granular, with an even grained interlocking mosaic texture and a grain size of about 0.04 mm on average. It is composed of a mixture of quartz, K-feldspar and acid plagioclase. Owing to the fine grain size, it is difficult to estimate relative proportions of these minerals. However, quartz appears to be predominant, with K-feldspar next in abundance, and plagioclase comparatively sparse. K-feldspar is fresh, and sometimes shows microcline twinning. Plagioclase often shows a light dusting by argillaceous material in the groundmass. The groundmass also

(continued overleaf)

Specimen No. - 79 PR 29861R (continued)

contains a low proportion (perhaps about 10%) of biotite, which occurs mostly in the form of evenly disseminated tiny flakes of finer grain than the quartzo-feldspathic mixture. The biotite occasionally forms loose clots of slightly larger flakes, which represent the dark spots visible in the hand specimen. Most of the biotite flakes are quite fresh, but some are partly to completely chloritised. Scattered through the rock there are occasional compact grains of magnetite, which are somewhat larger than the average grain size of the groundmass. Small accessory crystals of apatite are also quite noticeable, while crystals of zircon were extremely rarely present.

Specimen No. - 79 PR 29874R

Rock name - fresh hornblende-biotite granite

Mineralogy - essential - plagioclase - 35%  
K-feldspar - 25%  
quartz - 20%  
hornblende - 10%  
biotite - 5%

accessory - magnetite  
sphene  
epidote  
apatite  
zircon

secondary - sericite  
chlorite

Description - This rock is medium grained, hypidiomorphic granular, non-porphyrific. It consists of an interlocking mosaic of subhedral, tabular, crystals of plagioclase intermingled with anhedral of quartz and K-feldspar, and with a relatively low proportion of hornblende and biotite. The rock is essentially fresh. It shows no sign of foliation.

Plagioclase is the predominant mineral in this rock. It occurs in tabular subhedra, and in anhedral, which average about 2-3 mm in length. Most crystals are about andesine-oligoclase An<sub>30</sub> in composition, but occasional crystals are slightly zoned from cores of sodic andesine to calcic oligoclase. Most crystals are essentially fresh, but usually contain a few tiny flakes of sericite. Occasional small clots of biotite or hornblende inclusions occur in some plagioclase crystals. K-feldspar occurs in anhedral of irregular form, up to about 4 mm across. These are untwinned, usually non-perthitic, and sometimes slightly strained looking. They are extremely fresh, and sometimes contain occasional plagioclase inclusions. There is very occasional slight development of myrmekite where plagioclase abuts onto K-feldspar. Quartz in this rock occurs in patches of interlocking anhedral, which are usually somewhat smaller than the feldspar crystals, and interstitial to them. The quartz is unstrained, or only very slightly strained.

Hornblende in this rock forms crystals which range from compact subhedra to very ragged anhedral, often with clusters of very small crystals fringing the larger crystals. Small crystals of biotite often occur in inclusions within, or bordering, hornblende crystals. The hornblende is very fresh, and deep green in colour. Very rarely, small patches of isotropic chlorite are associated with hornblende crystals. In addition to occasional inclusions of plagioclase, the hornblende often contains inclusions of, or is associated with, accessory amounts of magnetite, sphene, and apatite. Occasionally a few small

(continued overleaf)

Specimen No. - 79 PR 29874R (continued)

grains of epidote are associated with magnetite and/or sphene crystals. This is not clearly of secondary origin, and may well be primary, at least in part. Biotite flakes range in size from quite large (about 3.5 mm across) down to very tiny. The larger flakes tend to occur by themselves, rather than in association with hornblende, and are themselves fringed by numerous tiny biotite flakes. The biotite has a greenish brown colour, and is extremely fresh. It often contains scattered small inclusions of sphene. The only other minerals noted in this rock was zircon, in extremely rare tiny anhedral.

Specimen No. - 79 PR 29884R

Rock name - very slightly altered quartz monzodiorite

Mineralogy - essential - plagioclase - 40%  
K-feldspar - 15%  
quartz - 15%  
hornblende - 15%  
biotite - 10%

accessory - magnetite  
sphene  
apatite

secondary - sericite  
epidote and clinozoisite  
chlorite

Description - This rock is medium grained, hypidiomorphic granular, non-porphyritic, with an average grain size around 2 mm. It is non-foliated, and predominantly fresh, but does contain occasional small spots of relatively dense alteration in plagioclase. It is composed predominantly of tabular subhedra of plagioclase, surrounded by interstitial anhedral of K-feldspar and quartz, and with scattered subhedra and anhedral of hornblende and biotite.

The plagioclase in this rock occurs in tabular subhedra of rather variable size. These range from unzoned to quite strongly zoned, the composition ranging from intermediate andesine An<sub>40</sub> in the crystal cores to about calcic oligoclase An<sub>28</sub> at the margins. Most plagioclase crystals are quite fresh, the only alteration being a very slight flecking by tiny crystals of sericite. However occasional crystals contain patches of intense alteration, composed of a mixture of sericite and clinozoisite, or in some cases sericite and epidote. The most intense clots of alteration are adjacent to a hairline fracture which cuts across the thin section, but a few other clots occur which cannot be clearly associated with such a feature. K-feldspar forms irregularly shaped anhedral, interstitial to the plagioclase. These are usually untwinned, although occasional crystals show very fine microcline twinning. Some crystals are very finely perthitic, while many show rather shadowy extinction patterns, indicating the presence of some strain. Occasional plagioclase crystals also show some flexing of twin lamellae. The larger K-feldspar crystals often contain one or two inclusions of quartz and/or plagioclase. There is also a slight development of myrmekite where plagioclase abuts onto K-feldspar. K-feldspar is typically very fresh.

(continued overleaf)

Specimen No. - 79 PR 29884R (continued)

Hornblende occurs in this rock in crystals which range from compact subhedra to irregularly shaped, rather ragged looking, anhedral. It is a deep green variety, and tends to occur in clusters of crystals, often in association with biotite flakes. Accessory amounts of magnetite, apatite and sphene tend to be associated with, or enclosed within, hornblende and biotite crystals. Hornblende is typically very fresh. Biotite flakes range from quite large to very tiny, the smaller ones often being enclosed within hornblende. They are a deep brown variety, and usually fresh. Occasional flakes show slight chloritisation, the chlorite sometimes being accompanied by a little epidote. No increase in chloritisation is evident near the fracture which has associated alteration of feldspar. Quartz in this rock forms small, irregularly shaped, anhedral and patches of anhedral. These are often quite strongly strained looking.



Specimen No. - 79 PR 29917R

Rock name - fresh hornblende-biotite granodiorite

Mineralogy - essential - plagioclase - 40%  
K-feldspar - 20%  
quartz - 20%  
hornblende - 10%  
biotite - 5%

accessory - magnetite  
sphene  
apatite  
zircon

secondary - sericite  
chlorite  
epidote

Description - This rock is medium grained, hypidiomorphic granular, non-porphyrific, with an average grain size of around 2 mm. It is non-foliated, and is essentially fresh. It is composed predominantly of tabular subhedra of plagioclase interspersed by subsidiary amounts of quartz and K-feldspar anhedral, and by a relatively low proportion of hornblende and biotite. The mineralogy and texture are typically granodioritic.

The plagioclase in this rock ranges from tabular subhedra to irregularly shaped anhedral. The composition is usually about andesine-oligoclase  $An_{30}$ , but some crystals show slight zoning, from sodic andesine to calcic oligoclase. The plagioclase is to all intents and purposes fresh, although most crystals contain a very slight flecking by tiny crystals of sericite. Occasional small clots of sericitic alteration are present, sometimes accompanied by a little epidote. K-feldspar occurs in irregularly shaped anhedral, which are untwinned, often very finely perthitic, and sometimes contain small inclusions of plagioclase. The K-feldspar is typically very fresh. Small patches of myrmekite often occur where plagioclase abuts onto K-feldspar. Quartz tends to occur in patches of interlocking mosaic, consisting of several irregularly shaped anhedral. The crystals are usually slightly strained looking. Hornblende in this rock occurs in crystals which range in form from compact subhedra to very ragged anhedral. The hornblende is a deep green variety. Some crystals occur independently of biotite; others are intimately associated with biotite, with small flakes of biotite occurring as abundant inclusions within, and rimming, the hornblende. The hornblende is typically fresh, but some crystals contain small patches of chlorite, often accompanied by a little epidote. Biotite flakes occur both as relatively large, isolated, crystals, and in close association with hornblende as described above. It is a deep brown variety, usually

(continued overleaf)

Specimen No. - 79 PR 29917R (continued)

forms compact flakes, is typically very fresh, and often contains small inclusions of sphene. Very occasional flakes show traces of chloritisation.

Accessory amounts of magnetite, sphene, and apatite tend to occur in close association with the ferromagnesian minerals. Extremely rare tiny crystals of zircon were also noted.

Specimen No. - 79 PR 29924R

Rock name - amphibolitised porphyritic basalt

Mineralogy - essential - hornblende  
plagioclase  
biotite  
sericite  
epidote and clinozoisite  
accessory - magnetite  
sphene

Description - This rock appears to have been originally a porphyritic basalt, with medium grained phenocrysts of plagioclase and pyroxene, set in a fine grained groundmass which probably had a doleritic texture. The pyroxene has now been completely replaced by hornblende, intermingled with some biotite, while the plagioclase phenocrysts have been completely sericitised, although much of the groundmass plagioclase is still visible.

Plagioclase phenocrysts appear to have been quite sparse. They were probably subhedral, and up to about 5 mm across. They are now represented by a dense mat of extremely fine grained sericite, dotted throughout by occasional small clots of clinozoisite. No trace of the original plagioclase remains in the phenocrysts, except for a very narrow marginal rim in one or two cases. These marginal rims show compositional zoning, indicating that some, at least, of the original phenocrysts were zoned. The original ferromagnesian phenocrysts, presumed to have been pyroxene, have been completely pseudomorphed by masses of uralitic amphibole. The phenocrysts were euhedral to subhedral in form, and up to about 6 mm across. In some cases they are pseudomorphed by a fairly deep green hornblende; in other cases the amphibole is a virtually colourless tremolite, usually surrounded by a narrow rim of deep green hornblende. In many cases the phenocryst pseudomorphs are also rimmed by a narrow zone of biotite, at least for part of the way around the pseudomorph.

The groundmass consists of a confused mixture of deep green hornblende and subsidiary biotite, intermingled with crystals of plagioclase which retain a more or less lath shaped form in most cases, indicating an originally doleritic texture. The plagioclase laths average about 0.2 mm in length, and range from quite fresh-looking to varying degrees of sericitisation. The hornblende and biotite in the groundmass are very fresh, the hornblende mostly forming compact anhedral, while the biotite forms tiny compact flakes, often cutting across hornblende crystals. A low proportion of granular epidote crystals is scattered, rather patchily, through the groundmass, usually associated with the ferromagnesian minerals. Many of the hornblende crystals in the groundmass have a very dirty appearance, as a result of the presence of numerous tiny opaque inclusions.

Specimen No. - 79 PR 29971R

Rock name - pervasively altered acid rock, probably originally of approximately quartz monzonitic composition

Mineralogy - primary - quartz  
K-feldspar  
secondary - chloritic minerals  
sericite  
carbonate  
pyrite  
limonite  
accessory - magnetite  
apatite

Description - This was originally a medium grained, probably hypidiomorphic granular, acid rock. It is now pervasively altered, so that quartz is the only primary mineral which is clearly visible. No strain accompanied the alteration, so that the texture of the original rock can be distinguished fairly well, and the original mineralogy guessed at with a fair degree of certainty. It was probably originally quartz monzonitic, with about 20% of ferromagnesian minerals, probably mostly hornblende with subsidiary biotite. Both plagioclase and K-feldspar were probably present, most likely in about equal proportions.

Quartz forms about 15% of the rock, in irregular anhedral, and patches of anhedral, which are moderately strained looking. The areas which are assumed to represent altered K-feldspar are colourless in plain light, while under crossed nicols they are seen to consist of a base of optically continuous feldspar throughout which is disseminated about an equal proportion of very fine grained chloritic material. This intermingling gives the crystal a very blotchy appearance. There are also occasional small patches of dirty looking carbonate dotted throughout these crystals. By contrast, those areas which are assumed to represent original plagioclase have a rather dirty appearance in plain light. Under crossed nicols they are seen to consist of an extremely fine grained, jumbled looking, mixture of secondary minerals, with no optically continuous base such as was described above. The secondary minerals seem to consist of a mixture of a colourless chlorite, a feldspathic mineral which is probably albitic, a dusting of extremely fine grained opaque minerals, a little sericite, and occasional clots of dirty looking carbonate. The extremely fine grain of the alteration products makes definite identification of the constituent minerals difficult.

(continued overleaf)

Specimen No. - 79 PR 29971R (continued)

The areas which are presumed to represent pseudomorphed hornblende are in the form of fairly compact patches which now consist of a dense mat of extremely fine grained chlorite. This has a yellowish brown colour in plain light, and usually contains a few small clots of carbonate. Associated with these chloritic pseudomorphs, there are masses of a very pale brown mica. These form aggregates, the form of which is reminiscent of biotite flakes, and this secondary mica probably pseudomorphs original biotite. It is often intermingled with some carbonate, and has stringers of very fine opaque minerals along cleavages, mostly limonitic in nature. The rock also contains occasional patches of partly limonitised pyrite. There are occasional slight traces of the former presence of a myrmekitic texture.

Although the general texture of the original rock is pseudomorphed, in detail the secondary minerals from one pseudomorph tend to penetrate the surrounding pseudomorphs, giving a rather confused texture upon very close inspection.

The only accessory minerals noted were small amounts of magnetite and apatite.

APPENDIX III

LABORATORY PROCEDURES

1. Soil Samples

Samples are sorted and dried at 50°C for approximately 2 hours. The dried material is passed through a -80 mesh (177 micron) screen; fine material is retained for analysis and coarser material discarded.

2. Rock Samples

The entire sample is crushed. If necessary (>250 gm), the sample is split on a Jones splitter, the reject being retained for a short period. The split fraction is pulverized such that 90% passes a 200 mesh (74 micron) sieve.

3. Geochem Procedures

A). Uranium (Fluorometric)

A 1 gram sample of -80 mesh soil or -200 mesh rock is digested with hot  $\text{HClO}_4 - \text{HNO}_3$  to strong fumes of  $\text{HClO}_4$  for approximately 2 hours. The digest is cooled, diluted to volume and mixed.

An aliquot is extracted into methyl isobutyl ketone (MIBK) with the aid of an aluminum nitrate-tetrapropyl ammonium hydroxide salting solution. The uranium in the MIBK is determined by evaporating a portion of the MIBK in a platinum dish and fusing

APPENDIX IV - Comments by C. F. Gleeson, Consulting Geochemist.

October 16, 1979

ENEAS

Geol: Monz-Qtz. Monz and diorite underlie the property.

Geoch: Rocks - Diorites generally low in U.  
i.e. <2 ppm.

1. Anom. U in rocks (i.e. >3 ppm) general in the Monz - Qtz Monz. Highest value 35 ppm U, 6 Th in a sample in S-W part of claims. All rocks around this sample of QMNZ are low in U.
2. Another sample of QMNZ S-E of this site contains 10.5 ppm U and 72 ppm Th. No significant soil or scint anom. in this area.
3. A third anomalous QMNZ sample (12.5 U, 190 Th) is present in a sample S of Eneas Cr. - no associated soil or scint anom., although waters draining this hill were anom. in U.
4. A group of rocks (QMNZ) in Eneas Cr. valley to the north contain 3 - 6.5 ppm. According to J. Joule, he found a radioactive outcrop west of Eneas Cr. that registered 1200 cps. on TC1 (Urtec) and 180 cps. on TC2; however analyses of this rock showed only 3 ppm U and 30 ppm Th. Epidote alteration along fractures are common.

Soils: Only one significant soil anomaly in Eneas Creek valley to the north. N-W trending anomaly (200' X 2400') in valley bottom with U values ranging from 11.5 to 50 ppm. Possibly enrichment due to organic material. This general area is also anom. in scint readings (>150 cps. Scintrex). The anomalous rocks mentioned in #4 above occur at the north end of this anomaly. Geologically QMNZ predominates, it is cut by a N-NW trending fault. Evidently the rocks in the area are highly fractured and epidotized.

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition (%)					Description	Name	Unit	ppmU (Fluorimetric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29851R	L16S, 3+25E	40	20	15	15	5	lineated, med.gr., unaltered	Hbqztzmz	3b	2	6	.33
52	L16S, 14+25E	40	30	10	10	5	P.Gr., slightly lineated, minor Chl. alt <sup>n</sup> . of hb, slightly pinkish hue on fspars.	Hbqztzmz	3b	3.5	6	.58
53	L16S, 22+50E	40	30	10	10	5	med.gr., v. slight lineation	Hbqztzmz	3b	3	7	.42
54	L16S, 26E	50	10	<5	30	5	lineated, med.grained, unaltered	Hb(bi) dio-la rite		2	7	.29
55	L16S, 34E	40	30	5	20	5	med.gr., massive, unaltered	Hb mz	2b	2	3	.67
56	L16S, 44E	50	20	-	20	10	med.to c.gr., massive, unaltered	Hb(bi) dio-la rite		1.5	2	.75
57	L16S, 54E	40	<sup>5</sup> 10	-	20	10	med.gr., massive, unaltered	Hb(bi) dio-la rite		1.5	4	.38
58	L16S, 58+50E	30	40	20	5	5	med.gr., massive w̄ kfsp, qtz.rich veinlet crosscutting	Hb-biztzmz3a		3	30	.10
59	L235, 2W	40	20	10	15	5	f.to med.gr., v. slightly lineated, no alt <sup>n</sup> .	Hbqztzmz	3b	3.5	13	.27
60	L245, 13W	30	10	10	10	25	f.to med.gr., with numerous "patches" f.gr. mica	Hbmz	2b	2.5	16	.16
61	L24S, 15+50W						aphanitic with qtz grains visible trac. Py, trace Mo? or figr. mica	Aplite	4	1.5	5	.30
62	L24S, 30W	40	30	15	15	5	slightly lineated, med.gr., unalt- ered, trace sphere	Hbz tzmz	3b	3	5	.60
63	L24S, 40W	40	30	10	20	5	med.gr., massive, unaltered	Hbqztzmz	3b	2.5	5	.50
64	BL40S	40	30	10	20	5	c.gr. massive, unaltered	Hbqztzmz	3b	3	8	.38
65	L40S, 10+50E	40	20	15	15	<5	c.gr., massive, unaltered	Hbqztzmz	3b	2.5	10	.25
66	L40S, 22E	40	40	10	5	5	c.gr. Kspar enhedral + mega- crystic, unaltered	Hbmz	2b	3	17	.18
67	L40S, 23E	20	50	5	15	5	c.gr. Kspar enhedral + mega- crystic, unaltered	Hbgranite	3b	3	23	.13
68	L40S, 33E	20	40	20	5	5	m.gr. Kspar slightly mega- crystic, unaltered	Hbgranite	3b	2.5	9	.28
69	L40S, 42E	50	10	5	15	5	med.gr., massive, unaltered	Hbdiorite	1b	3.5	23	.15
70	L40S, 53E	30	30	20	10	5	med.gr., massive, unaltered	Hbqztzmz	3b	3	15	.20
71	-	50	10	5	20	5	med.gr., massive, unaltered euhedral plag + hb	Hbdiorite	1b	2	6	.33
72	L56S, 51+40W	50	10	10	15	5	med.gr., massive, unaltered	Hbdiorite	1b	3.5	16	.22
73	L56S, 37W	30	15	-	40	5	med.to c.gr. massive, un- altered	Hbmz	2b	2	10	.20



APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition(%)					Description	Name	Unit	ppmU (Fluori- metric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29874	L56S,27+50W	40	20	5	25	5	med.gr. massive,unaltered	Hbmz	2b	1.5	8	.19
75	L56S,20W	40	20	10	25	5	med.gr. massive,unaltered	Hbmz	2b	1.5	6	.25
76	L56S,10W	40	20	5	25	5	med.gr.brecciated & cut by irreg.veinlets chl+hb	Hbmz	2b	2.5	24	.10
77	L72S,44W	50	10	5	20	5	med.gr. euhedral plag+hb, massive unaltered	Hbdiorite	1b	1.5	9	.17
79PR29878R	L72S,34W	50	20	10	15	5	slightly feld,med.gr., unsalted	Hbdiorite	1b	1.5	7	.21
79	L72S,24W	40	15	10	15	5	med.gr. massive,unaltered	Hbgdior- ite	1b	1.5	6	.25
80	L72S,15W	50	25	10	10	5	med.gr. massive,unaltered	Hbgdior- ite	2b	2.0	9	.22
81	L72S,5E	50	15	10	20	5	med.gr.massive,unaltered	Hbgdior- ite	1b	2	5	.40
82	L72S,16E	40	35	15	10	5	med.gr.massive,unaltered with fsp-qtz veins X-cutting	Hbqtzmz	3b	12.5	190	.07
83	L72S,27E	40	30	20	10	5	slightly fol <sup>d</sup> ,med.gr,unaltered	Hbqtzmz	3b	2	13	.15
84	L72S,35E	40	30	5	20	5	slightly lineated,med.gr. with occas.euhedral plag megacrysts	Hbmz	2b	2.5	8	.31
85	L72S,46E	60	15	-	20	5	f.to med.gr.,slightly lineated, unaltered	Hbdiorite	1b	2.5	5	.50
86	L96S,55W	40	30	5	15	5	med.gr.,massive,unaltered	Hbmz	2b	1.5	15	.10
87	L96S,42+50W	50	20	10	20	5	med.to c.gr.,massive,unaltered	Hbgdior- ite	1b	1.5	6	.25
88	L96S,42+50W	50	20	10	20	5	med.to c.gr.,massive,unaltered	Hbmz	2b	1.5	6	.25
89	L96S,42+25W						aphanitic qtzo-feldspathic- aplite?	Aplite	4	1	4	.25
90	L96S,42+25W	50	20	10	20	5	med.gr.,massive,unaltered	Hbmz	2b	35	6	5.83
91	L96S,33+50W	40	20	5	25	5	med.gr.,massive,unaltered	Hbmz	2b	2.5	5	.50
92	L96S,22W	50	30	10	5	5	slightly lineated,med.gr., unaltered	Mz	2b	1.5	5	.30
93	L96S,12W	60	5	tr	20	5	med.gr.,massive,unaltered	Hbdiorite	1b	1.5	3	.50
94	L112S,19W	50	20	10	10	-	med.gr.,massive,unaltered	Hbgdiorite	1b	2	5	.40
95	L112S,31+50W	50	30	10	5	-	med.gr.,massive,unaltered	Hbmz	2b	10.5	72	.15
96	L112S,30W	60	5	10	25	-	med.gr.,massive,unaltered	Hbdiorite	1b	1.5	5	.30
97	L112S,48W	50	30	10	5	5	med.gr.,massive,unaltered	Hbmz	2b	3.5	7	.50

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition(%)					Description	Name	Unit	ppmU (Fluori- metric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29901R	L0+00,5+75E	50%	20	10	20	5-10	Massive,slightly fol,no visible alteration,trace Mt.	Hbbiqtzdi-la granodio- rite		2	8	.25
2R	L1+00N,18+00E	40	<10	-	30	20	Feint,diabasic texture, on stained surface Kspa occurs as knobs which in places resemble angen trace Mt.	Hb-bi dior-la ite		0.5	2	.25
3R	L0+75S,28E	40	15	5	35	45	V.slightly lineated,no visible alteration-possible slight mica alteration of feldspar,trace Mt.	Hb-bi diorite la to gdi.		1	2	.50
4R	L0+00,41E	40	10	-	40	10	ophitic tex.,euhedral hb prisms w interst. play,kspa occupies knobs w inrk. often accompanied by bi,no visible alt.	Hb -bi diorite	la	<0.5	3	<.16
5R	L0+00,54+40E	60	10	tr	30	tr	trace Mt,v.slightly lineated, hb to 1/4",interstit. fspar euhedral v.slight chlorite alteration of hb	Hb-diorite lb		0.5	<1	<.50
6R	L14+50S,6+25E	60	10	tr	30	10	trace Mt.slightly lineated,hb subhedral to 1/4" sometimes banded,fspars euhedral & interstitial, trace brown translucent wedge shaped mineral(sphenea?)	Hb-bi diorite	la	0.5	5	.10
7R	L16S,15+00E	60	10	tr	30	tr	trace Mt,trace sphere,slightly brecciated,f.gr.sugary appearnce, generally unaltered except for white clouding of plag.,slightly lineated	Hb-diorite lb		1	6	.17
8R	L16S,24+00E	50	15	5	30	tr	lineated w kspar occupying bands slight hem.stain on fspar occurs in small patches,local knobs of foliated bi U to lineation,trace Mt,slight rusty weathering of hb+ bi(faint gnerssic' texture)	Hb-diorite lb to qtz diorite		0.5	6	.08
9R	L16S,35+00E	50	-	-	40	10	trace Mt.,generally massive, inclusions or knobs of bi + plag local w gradational boundaries,generally fresh	Hb-bichorite la		<0.5	2	<.25

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition(%)					Description	Name	Unit	ppmU (Fluorimetric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29910R	L14+25S,45E	50	5	-	20	25	trace Mt,slightly fol.,relatively fresh w minor rusty weathering of bi,whitish fspar alteration,hb euhedral, bi consists of masses of fol. finer grains often associated w kspar & appear as yellow knots on stained surface	Bi-hb diorite	1a	0.5	3	.17
11R	L32S,1E	30	30	20	10	10	trace Mt,hypidiomorphic granular,no visible alteration, trace sphere	Bi-Hbqtz monzonite	3a	< 0.5	11	<.04
12R	L32S 11E	30	30	10	10	20	trace Mt,trace sphere,hypidiomom-pwc granular,m.gr.,subhedral hb & bi,not aligned	Bi-Hb monzonite	2a	0.5	15	.03
13R	L32S,21E	30	25	15 10	15	20	trace Mt,spere,slightly fol. and lineated,m.gr.	Bi-Hb Qtzmonzonite	3a	0.5	10	.05
14A	L32+50S,31E	50	5	5-10	25	10	M.gr.,contact btn A+B -very strays hypidiomorphic granular	Hb-Bidiorite	1a	0.5	8	.06
14B	L32+50S,31E	50	10	tr	10	30	f.gr.equigranular w trace Mt occasional wo + tals to 1/4"	Bi-Hbdio-rite	1a			
15	L32S 47E	30	tr	tr	50	10	slight ophitic texture w euhedral interstitial fsp. to subhedral skeletal hb, tract Mt.	Hb-diorite	1b	< 0.5	4	< 1.2
16	L32S 58+25E	50	tr	-	50	tr	f.gr.,equigranule trace Mt.	Hb-diorite	1b	< 0.5	3	<.16
17	L40S,3E	50	30	5	10	5	trace Mt,m.gr.,hb lineated, unaltered	Bi-Hb mz	2a	< 0.5	12	<.04
18	L40S,16E	40	40	10	10	<1	trace Mt,trace epidote in fractures m.gr.,slightly lineated hb,unaltered	Bi-mz	2b	1	12	.08
19	L40S,23E	50	30	5	10	5	trace Mt,trace sphere,m.gr., hb lineated,unaltered	Bi Hb mz	2a	0.5	10	.05
20	L30S,44+50E	50	10	-	30	5	m.gr.,massive,unaltered in contact w f.gr.,massive equivalent(inclusion)	BiHbdio-rite	1a	< 0.5	3	<.17

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition (%)					Description	Name	Unit	ppmU (Fluorimetric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29921	L40S,55E	60	20	-	15	5	trace Mt, f.m gr., slightly diabasic tex. unaltered	BiHbmz	2a	<0.5	2	<.25
22	L48S,54E	50	20	5	20	5	c.gr., massive, unaltered	BiHbmz	2a	0.5	3	.17
23	L48S,41E	60	20	5	10	5	trace Mt. hb. lineated, bi foliated ll to lination, unaltered, m.gr.	BiHbmz	2a	0.5	12	.04
24	L48S,33E	20	20	-	50	10	trace Mt, trace cl., v.f.gr. dark w euhedral hb xtals & rounded-semirounded gr. of fspar to 1/2" & aggregates of f.hb w fspar up to 1/8", both lineated slight cl. alteration of hb, mica most visible on fracture faces	amphiboltic		<0.5	3	<.17
25	L54S,4E	50	20	10	15	5	c.gr., massive unaltered	Hb-Bi Mz	2a	1	46	.02
26	L56S,13+50E	50	30	10	5	5	slightly lineated, med.to cr.gr., unaltered	Hb-Bi-mz	2a	0.5	11	.05
27	L56S,24E	40	30	10	15	5	med.gr., massive, unaltered	Hb-bimz	2a	1	22	.05
28	L56S,34E	30	40	10	15	5	f. to med.gr., trace hb stain on fspar	"	2a	2	25	.08
29	L56S,40E	40	30	10	15	5	slightly lineated, med.gr., unaltered	"	2a	1	10	.10
30	L56S,52E	50	10	5	20	5	v.slightly lineated, med. gr., white unaltered	Hbdiorite	1b	0.5	5	.10
31	L32S,2W	40	20	20	15	5	med.to c.gr., massive unaltered	Hbqtmz	3b	<0.5	10	<.05
32	L32S,12W	40	15	5	15	5	slightly fol <sup>d</sup> , f.to med.gr., unaltered	Hbdiorite	1b	1.5	15	.10
33	L32S,22W	50	20	5	20	5	v.slightly lineated med.gr., unaltered	Hb Mz	2b	1.5	10	.15
34	L32S,34+50W	50	30	5	10	5	med.gr., massive, unaltered	Hbmz	2b	<0.5	7	<.07
35	L32S,42W	50	20	5	15	5	med.gr., massive, unaltered	Hbmz	2b	<0.5	4	<.13
36	L32S,53W	50	25	10	10	5	slightly lineated, med.gr., unaltered	Hb-mz	2b	0.5	6	.08

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition(%)					Description	Name	Unit	ppmU (Fluorimetric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29937	L48S	40	20	20	15	5	c.gr., massive	Hbbiqtzmz 3a		1	16	.06
37b	51+90	50	-	-	50	-	med.gr., massive, euhedral, plag w interstitial Hb	Hbdiorite 1b				
38	L48S	40	20	20	10	10	c.gr., massive, v. slightly pinkish hue to fsp. (Ht?)	Hb-biqtzmz 3a				
38B	42W	50	-	-	40	10	med.gr., unaltered, contact sharp	Hb-bidiorite 1a	0.5		8	.06
39	L48S, 31+75W	50	20	10	10	5	c.gr., massive, ht on fractures only	Hb mz	2b	0.5	9	.06
40	L48S, 22W	40	30	10	10	5	c.gr., massive, inclusions, f.gr., fsp-bi-hb material	Hbmz	2b	0.5	9	.06
41	L48S, 12W	40	30	15	10	5	c.gr., massive, unaltered	Hbqtzmz	3b	2.5	14	.18
42	L48S, 2W	40	40	15	<5	<5	slightly lineated fsp + qtz, unaltered, med. grained	Qtzmz	3a	1.5	11	.14
43	L64S, 46W	50	40	tr	40	5	med. to c.gr. with plag + hb both euhedral, possibly brecciated?	Hbdiorite 1b		2.0	8	2.5
44	L64S, 36W	50	20	<5	10	10	med.gr., unaltered, massive	Hbdi-mz	1b	2.0	8	.25
45	L63S, 25W	50	<5	tr	30	5	med.gr., massive cut by light ping bi-peg veinlet	Hbdi	1b	3.0	7	.43
46	L64S, 16W	40	25	15	15	5	med.gr., massive, unaltered	Hbqtzmz	3b	2.0	8	.25
47	L64S, 6W	30	40	15	10	<5	med. to c.gr. massive, unaltered	"	3b	2.5	18	.14
48	L64S, 9E	40	20	15	15	5	med.gr., massive unaltered	"	3b	1.5	11	.14
49	L64S, 19E	20	40	15	15	5	med.gr. w inclusion plag - hb f.gr. material; v. slight Ht stain	Hbgranite	3b	5.0	6	.83
50	L64S, 28+50E	50	25	10	15	5	med.gr., massive, unaltered	Hbmz	2b	2.5	8	.31

APPENDIX IV - (cont'd.)

ENEAS

Conclusions: The only drill target we might have here is the above anomaly. However, it would be advisable to do more prospecting around it before any decision is made on drilling.

Model: Intergranitic veins.

APPENDIX V

References

1. Little, H.W. (1961): Geology - Kettle River, B.C.  
(W ½); G.S.C. Map 15 - 1961

APPENDIX VI - REANALYSIS OF RADIOACTIVE SHOWING AT L19S, 11W

1200 c.p.s. (TC1) and (180 c.p.s. (TC2) occur in hornblende monzonite at L19S,11W. The rock comprises hornblende monzonite cut by fine, epidote-filled fractures. Material from fractures and intervening fresh rock were analysed for U and Th to determine the source of the radioactivity.

<u>Sample No.</u>	<u>Description</u>	<u>ppm U</u> *	<u>ppm Th</u> *	<u>U/Th</u>
79PR29858R-A	Epidote vein material	77	1190	0.06
-B	Epidote vein material	54	750	0.07
-C	Fresh rock between fractures	47	790	0.06

\* Data are listed in Appendix I.

U contents are up to 2 times the highest previous value on the ENEAS Claims, however Th contents also are extremely high resulting in U/Th ratios much less than unity. The increased radioactivity is likely the result of the increased Th rather than U contents.



APPENDIX VI - ENEAS CLAIMS - ROCK SAMPLE 79PR29858R  
- Radioactive Showing at L19S,11W

- Sent for U, Th

- A: vein material - ep, ht | PARALLEL FRACTURES  
B: vein material - ep, ht | ~ 2" apart  
C: unaltered fresh rock between fractures

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition(%)					Description	Name	Unit	ppmU (Fluori- metric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29951	BL6S	60	10	2-5	30	5	M.-c.gr., slightly lineated, unaltered	Hb-Bidi	1a	1	2	.50
52	L9+20S,13E	60	10	2-5	30	5	M.-c.gr., slightly lineated, unaltered	Hb-Bidi	1a	1	1	1.00
53	L8S,22E	60	10	2-5	30	5	m.gr., slightly lineated, unaltered, trace sphere, pods of f.gr.mica to lineation	Hb-Bidi	1a	3	6	.50
54	L8S,29+60E	40	30	tr	25	5	" " "	Hb-Bidi	1a	3	7	.43
55	L8S,39E	50	1-2	tr	40	2-3	trace hem.-disseminated, f.gr., lineated, slight cl.alt. of hb.	Hb-Bidi	1a	0.5	<1	7.50
56	L24S,53E	60	tr	tr	40	tr	f.-m.gr., equigranular, massive, unaltered	Hb-Bidi	1a	0.5	<1	7.50
57	L23+40S,41E	60	tr	tr	40	tr	" " "	Hb-Bidi	1a	3	6	.50
58	L23+80S,29E	60	5	5	30	-	m-c.gr., massive, cut by narrow veinlet containing mafic mat. w Kspar, halo to 1/4".	Hb-Bidi	1a	1	5	.20
59	L23+90S,15+30E	60	20	tr	15	5	m.gr., massive, cut by narrow epidote veinlet w halo of pinkish stained fsp (hem.halo)	HbMz	2b	1.5	7	.21
60	- - - -	50	30	15	5	tr	f-m. gr., massive, unaltered	HbQtzMz	3b	3.5	13	.27
61	BL27S	30	25	15	25	5	m.gr., massive, unaltered	HbQtzMz	3b	6.5	35	.19
62	BL37S	30	25	15	25	5	m.gr., massive, unaltered	HbQtzMz	3b	2.0	23	.09
63	BL47S	25	30	20	15	5	m-c.gr., massive, unaltered	HbQtzMz	3b	3.0	9	.33
64	L60S,1W	30	30	15	20	5	m-c.gr., massive, unaltered	HbQtzMz	3b	3.0	7	.43
65	L0,48W	40	30	5	5	20	med.gr., slightly lineated unaltered	Bi-hbmz	2a	3.0	23	.13
66	L0,38W	35	15	<5	35	5	med.gr., slightly lineated, some zoning of plag+Kfspar into ill-defined bands paralleled lineation	-	-	-	-	-
67	L0,27W	35	15	<5	35	5	contact w pegmatite vein w 1" wide and slightly foliated and lineated, unaltered, med.grained rock	Hbmz	2b	4.0	17	.24
68	L1+20S,11W	40	10	tr	40	5	med.gr., massive, unaltered	Hbdiorite	1b	3.0	5	.60
69	L8S,4W	30	30	<5	25	5	contact med.gr., unaltered lineated rock + f.gr., Hb rich inclusion	HbMz	2b	2.0	4	.50

APPENDIX II - ENEAS CLAIMS - Rock Descriptions and U and Th Contents

Number	Location	Composition (%)					Description	Name	Unit	ppmU (Fluorimetric)	ppmTh (N.A.)	U/Th
		Plag	Ksp	Qtz	Hb	Bi						
79PR29970R	L8S,15W	50	10	-	25	5	blotchy appearance w pods of f.gr.,Hb-plag.(inclusion) and Hb.grains in med.gr. plag. matrix,unaltered	Hb-di	1b	3.0	15	.20
71	L8S,21W	-	-	-	-	-	highly chloritized,hematized altered rock in which only original qtz.remains -likely equivalent of Hb-diorite	?	ø	2.0	6	.33
72	L8S,29+50W	50	20	2	25	5	med.gr.,slightly foliated,unaltered	HbMz	2b	3.5	16	.22
73		-	-	-	-	-		?	ø	2.0	10	.20
74	L80S,54W	50	30	10	20	5	med.gr.,massive,unaltered	Hb-Mz	2b	1.5	8	.19
75	L80S,41W	50	30	10	20	5	med.gr.,massive,unaltered	Hb-Mz	2b	1.5	6	.25
76	L80S,30+80W	60	10	5	20	5	med.gr.,massive,unaltered	Hbdi	1b	2.5	24	.10
77	L80S,22W	50	30	15	5	-	med.gr.,massive,unaltered	HbQtzMz	3b	1.5	9	.17
78	L80S,12W	40	20	20	15	5	med.gr.,massive,unaltered	HbQtzMz	3b	1.5	7	.21
79	L80S,2+50W	30	30	15	15	5	med.gr.,massive,unaltered	HbQtzMz	3b	1.5	6	.25
80	L88S,6W	50	25	10	20	5	f.to med.gr.,massive,unaltered	HbMz	2b	2.0	9	.22
81	L88S,16W	50	25	15	15	5	med.gr.,massive,unaltered	HbQtzMz	3b	2.0	5	.40
82	L88S,29W	50	20	10	20	5	med.gr.,massive,unaltered	HbMz	2b	12.5	190	.07
83	L88S,39W	50	10	10	20	10	med.gr.,massive,unaltered	Hbdi	1b	2.0	13	.15
84	L92S,51W	50	15	10	25	-	slightly lineated,med.gr.,unaltered	Hbdi	1b	2.5	8	.31
85	L103S,46W	60	<5	5	25	-	med.gr.,massive,unaltered	Hbdi	1b	2.5	5	.50
86	L105S,27W	40	30	10	20	-	med.gr.,massive,unaltered	HbMz	2b	1.5	15	.15
87	L105S,17+20W	40	25	5	25	5	med.to c.gr.,massive,unaltered	HbMz	2b	1.5	6	.25
88	L104S,7+50W	40	35	5	15	5	med. to c.g.,massive,unaltered,slightly megacrystic,Kfsp.	HbMz	2b	1.5	6	.25
89	L120S,9+50W	50	25	5	15	5	trace epidote veining,med.gr.,massive.	HbMz	2b	1.0	4	.25
90	L120S,20W	40	30	10	15	5	med.gr.,massive,unaltered	HbMz	2b	2.0	6	.33
91	L120S,30W	30	15	-	40	5	slightly brecciated w mafic felmass to fsp. frags	HbMz	2b	2.5	5	.50
92	L120S,40W	40	15	5	30	5	cut by hb. filled fracture,med. gr.	HbMz	2b	1.5	5	.30

SAMPLE	U PPM	TH PPM	- 110 -
79PR29858RA	77.0	1190	
79PR29858RB	54.0	750	
79PR29858RC	47.0	790	

STATEMENT OF EXPENDITURES

CLAIMS ENEAS 1-5 (66 Units)

RECORD NUMBERS 433-437

	<u>Pro-rated Costs</u>
Salaries and Benefits .....	\$ 6,850.43
Travel and Accommodation	965.41
Drafting and reproduction	519.73
Consultant	249.94
Camp costs and supplies	2,074.61
Rental of equipment	2,339.83
Administration @ 10%	1,300.05
 SUB TOTAL	 <u>14,300.00</u>

Linecutting <u>17.9</u> km @ \$218	\$ <u>3,885.00<sup>2</sup></u>	
Geochemical analyses	<u>3,553.64<sup>3</sup></u>	
PAC	<u>4,661.36</u>	<u>7,438.64</u>
 TOTAL	 \$	 <u>26,400.00</u>

Notes

- 1) Pro-rated on basis of 44 man-days worked on claims conducting geological/geochemical/geophysical surveys out of a total of 798 man-days spent on these surveys during Project Prinic (see attached breakdown on following sheet)
- 2) Linecutting completed by Futura Developments Reg'd., Penticton, B.C.
- 3) Geochemical analyses completed by Chemex Labs, Vancouver, B.C.

PROJECT PRINIC EXPENDITURES- 1979

Geological, Geochemical/Geophysical  
Surveys

Excl. linecutting, drilling, staking  
and geochemical analyses

Salaries and Benefits	\$ 124,242
Travel and Accommodation	17,509
Drafting and Reproduction	9,426
Consultant	4,533
Camp Costs and Supplies	37,626
Rental of Equipment	42,436
Administration @ 10%	<u>23,578</u>
TOTAL	\$ <u>259,350</u> <sup>1</sup>

Note:

<sup>1</sup>A total of 798 man-days was spent carrying out geological/geochemical/geophysical surveys during summer 1979 on Project Prinic (refer attached man-day breakdown)

PROJECT PRINIC EXPENDITURES

1979 FIELD WORK (excluding drilling,  
geochem analyses  
staking)

<u>Claim</u>	<u>No. of Man-Days Work</u>	<u>Pro-rated Survey<sup>1</sup> cost @\$325/man-day</u>	<u>No. of miles(km) of linecutting</u>	<u>Linecutting Cost @\$350/l.m. (or \$218/km)</u>
1) MAR 1-2	35	\$ 11,375	5.5(8.9)	\$ 1,925
2) WAS 1-2	15	4,875	9.1(14.6)	3,185
3) GLAD 1-4) 5-10)	11	3,575	-	-
4) SEC 1	20	6,500	8.5(13.7)	2,975
5) FIN 1-2	10	3,250	-	-
6) NIC	50	16,250)		
	45	14,625)	28.2(45.4)	9,870
	40	13,000)		
7) FRED 1-2) 3-5)	20	6,500	14.8(23.8)	5,180
8) LINK 1-3	144	46,800	33.5(53.9)	11,725
9) BALD 1-4	55	17,875	36.6(58.9)	12,810
10) ENEAS 1-5	44	14,300	11.1(17.9)	3,885
11) TOK 1-4	70	22,750	41.8(67.3)	14,630
12) DEMUTH 1	10	3,250	5.4(8.7)	1,890
13) DARK 1-5	32	10,400	32.4(52.1)	16,524
14) COMA 1-3	2	650	-	-
15) FOX 1	10	3,250	4.2(6.8)	1,470
16) MEL 1-2	20	6,500	6.4(10.3)	2,240
17) SHORT 1	-	-	-	-
18) SHIN 1-2	-	-	-	-
19) CLARK 1-6	125	40,625	19.4(31.2)	6,790
20) DROP 1	15	4,875	3.4(5.5)	1,190
21) STAKE 1-2	25	8,125	5.4(8.7)	1,890
<b>TOTAL</b>	<b>798</b>	<b>\$259,350</b>	<b>233.3(375.4)</b>	<b>\$98,179</b>

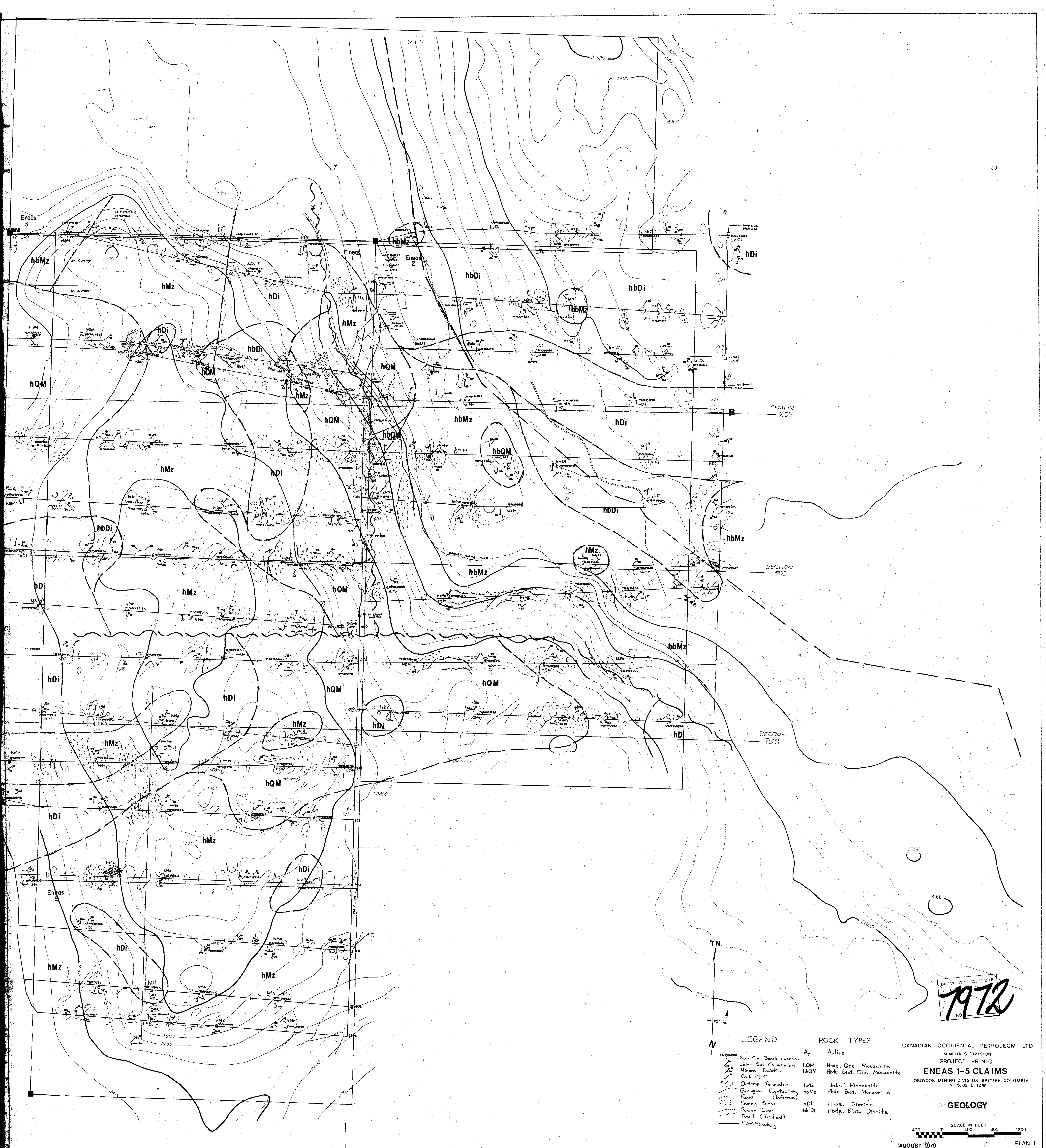
Author's Qualifications

Eric J. Sacks

Education - Graduated Queen's University,  
Kingston, Ontario  
M.Sc. in Geology, 1978  
- Graduated University of Toronto,  
Toronto, Ontario  
B.Sc. in Geology, 1977

Work Experience - Employed as field exploration geologist  
with Canadian Occidental Petroleum Ltd., Minerals Division,  
Toronto, Ontario since 1978. Carried out and supervised  
mineral exploration programs in B.C. and Yukon.



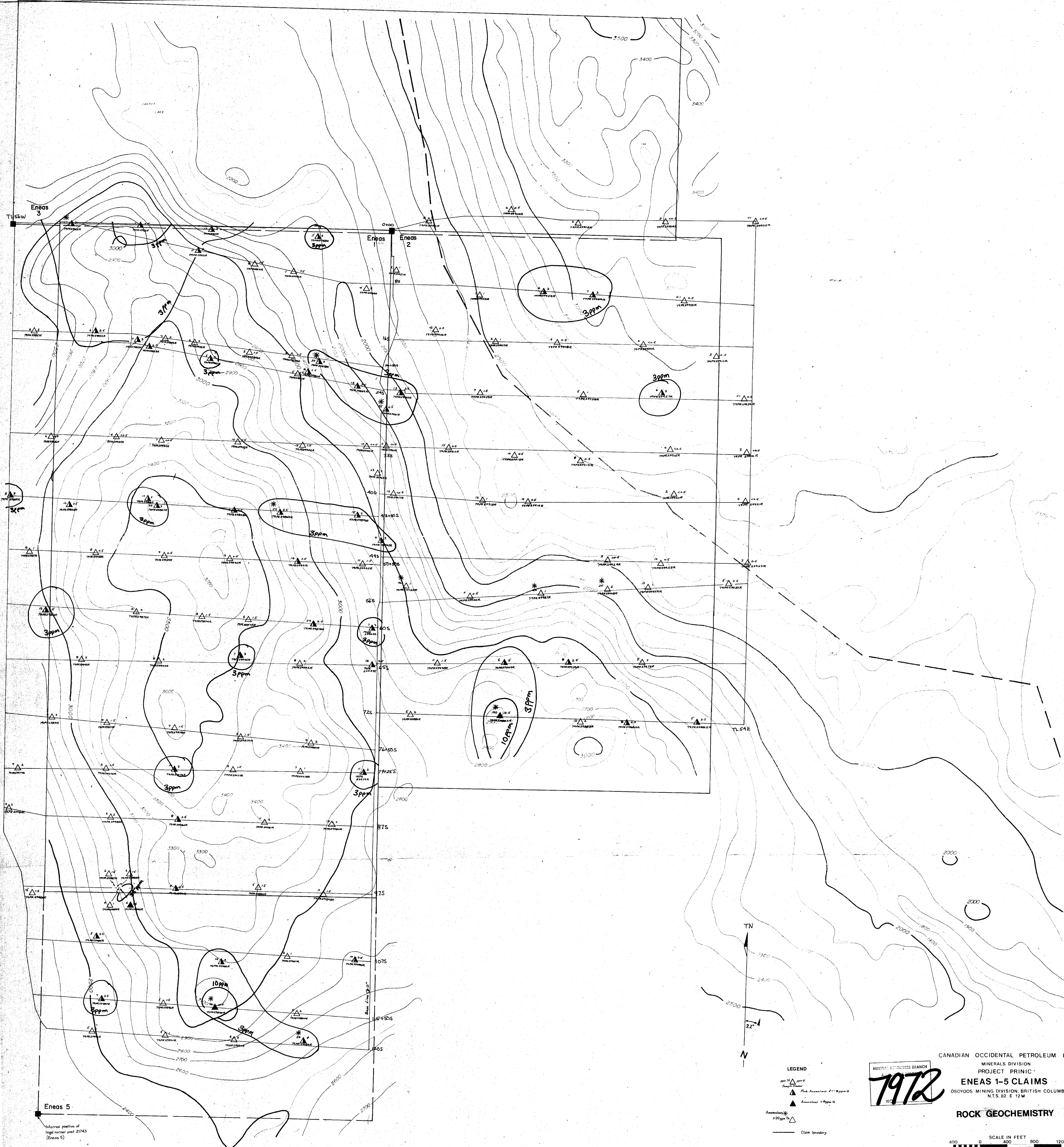


1972  
NO.

LEGEND		ROCK TYPES	
	Rock Chip Sample Location	Ap	Aplite
	Joint Set Orientation	hQM	Hbde. Qtz. Monzonite
	Mineral Foliation	hbQM	Hbde. Biot. Qtz. Monzonite
	Rock Cliff	hMz	Hbde. Monzonite
	Outcrop Perimeter	hbMz	Hbde. Biot. Monzonite
	Geological Contact	hDi	Hbde. Diorite
	Road (Inferred)	hbDi	Hbde. Biot. Diorite
	Scree Slope		
	Power Line		
	Fault (Implied)		
	Claim Boundary		

CANADIAN OCCIDENTAL PETROLEUM LTD  
MINERALS DIVISION  
PROJECT PRINIC  
**ENEAS 1-5 CLAIMS**  
OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
N.T.S. 82 E 12 W

**GEOLOGY**  
SCALE IN FEET  
0 400 800 1200  
AUGUST 1979 PLAN 1



Inferred position of  
legal corner west 21743  
(Eneas 5)

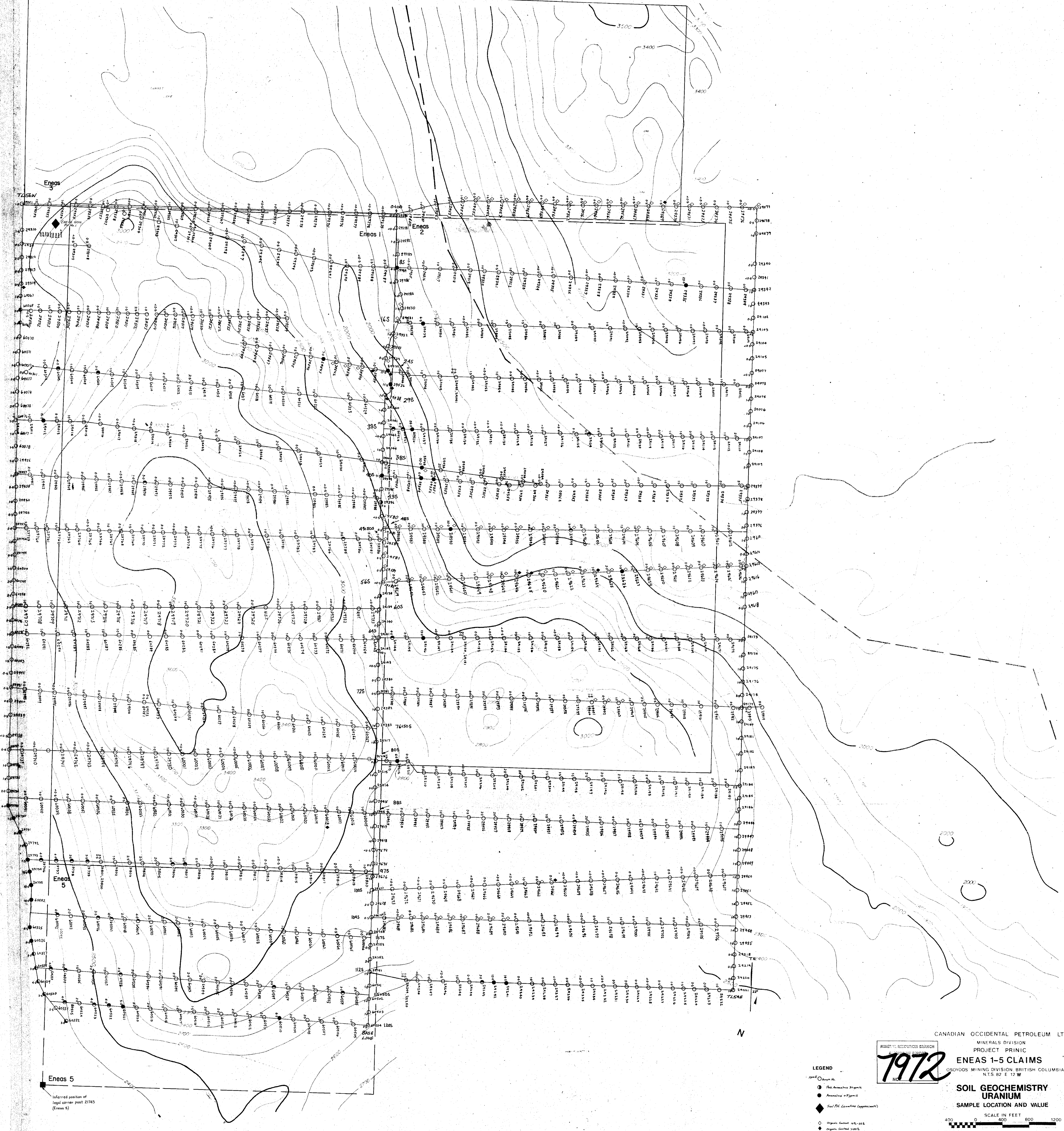
**LEGEND**  
 ▲ Anomalous > 20 ppm Pb  
 ▲ Anomalous > 20 ppm Zn  
 ▲ Anomalous > 20 ppm Cu  
 ▲ Anomalous > 20 ppm Ag  
 ▲ Anomalous > 20 ppm Au  
 — Claim boundary

CANADIAN OCCIDENTAL PETROLEUM LTD.  
 MINERALS DIVISION  
 PROJECT PRINIC  
**ENEAS 1-5 CLAIMS**  
 OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
 N.T.S. 82 E 12 W

MINERALS RESOURCES BRANCH  
**7972**  
 N.C.

**ROCK GEOCHEMISTRY**

SCALE IN FEET  
 0 400 800 1200  
 AUGUST 1979 PLAN 2



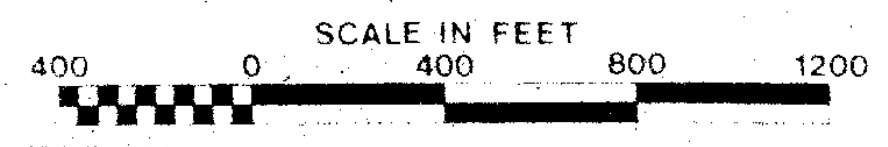
MINERAL RESOURCES BRANCH  
**1972**  
 NO.

CANADIAN OCCIDENTAL PETROLEUM LTD.  
 MINERALS DIVISION  
 PROJECT PRINIC

**Eneas 1-5 CLAIMS**  
 OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
 N.T.S. 82 E 12 W

**SOIL GEOCHEMISTRY  
 URANIUM**  
 SAMPLE LOCATION AND VALUE

- LEGEND**
- Sample
  - Pit Anomalous Uranium
  - Anomalous Uranium
  - ◆ Soil Pb Location (approximate)
  - ◇ Original Contour 1972-1973
  - ◇ Original Contour 1965
  - Claim Boundary



AUGUST 1979

PLAN 3

Eneas

Eneas 1

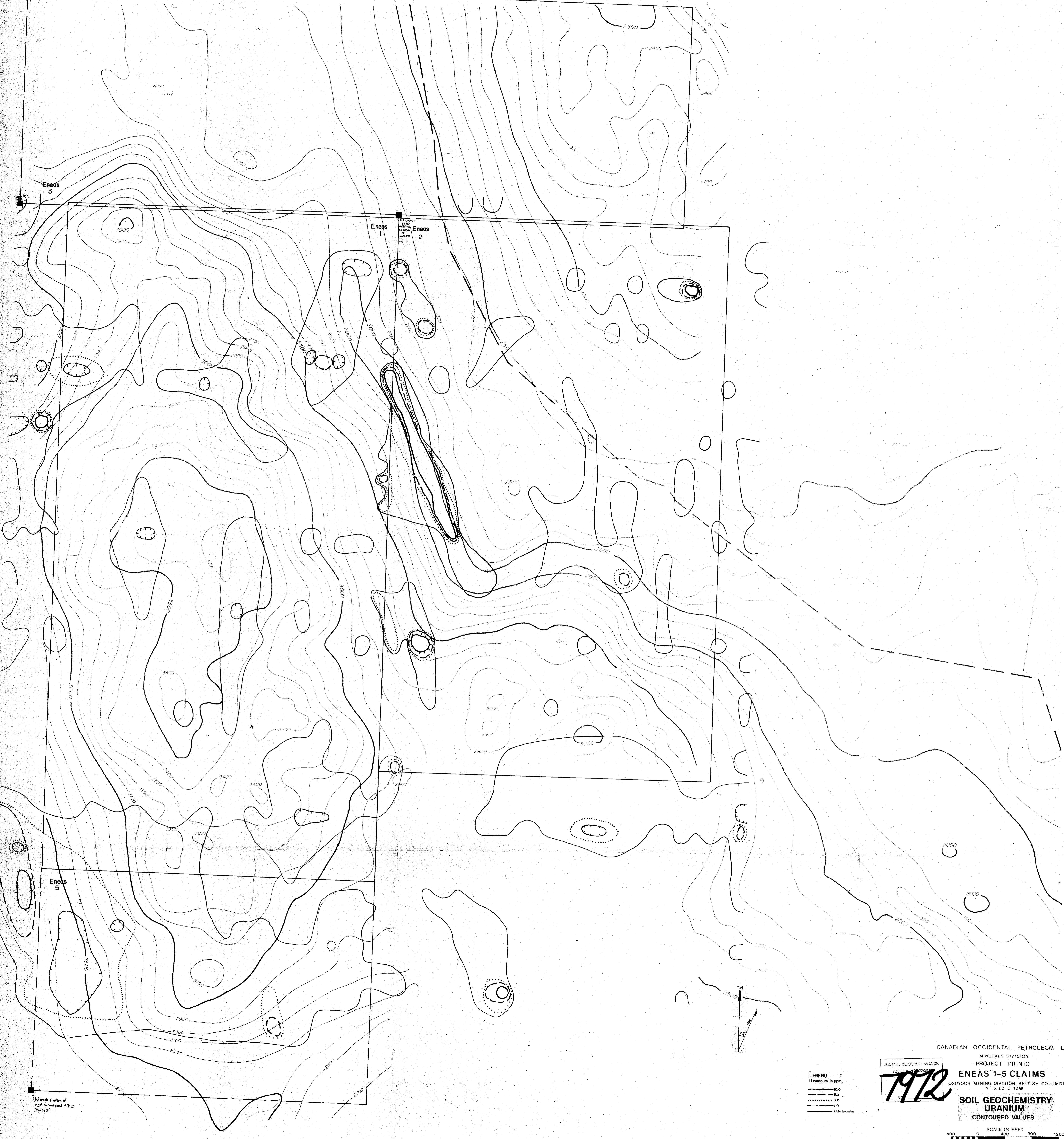
Eneas 2

Eneas 5

BASE LINE

N

Inferred position of legal corner post 2143 (Eneas 5)



Eneas 3

Eneas 1 Eneas 2

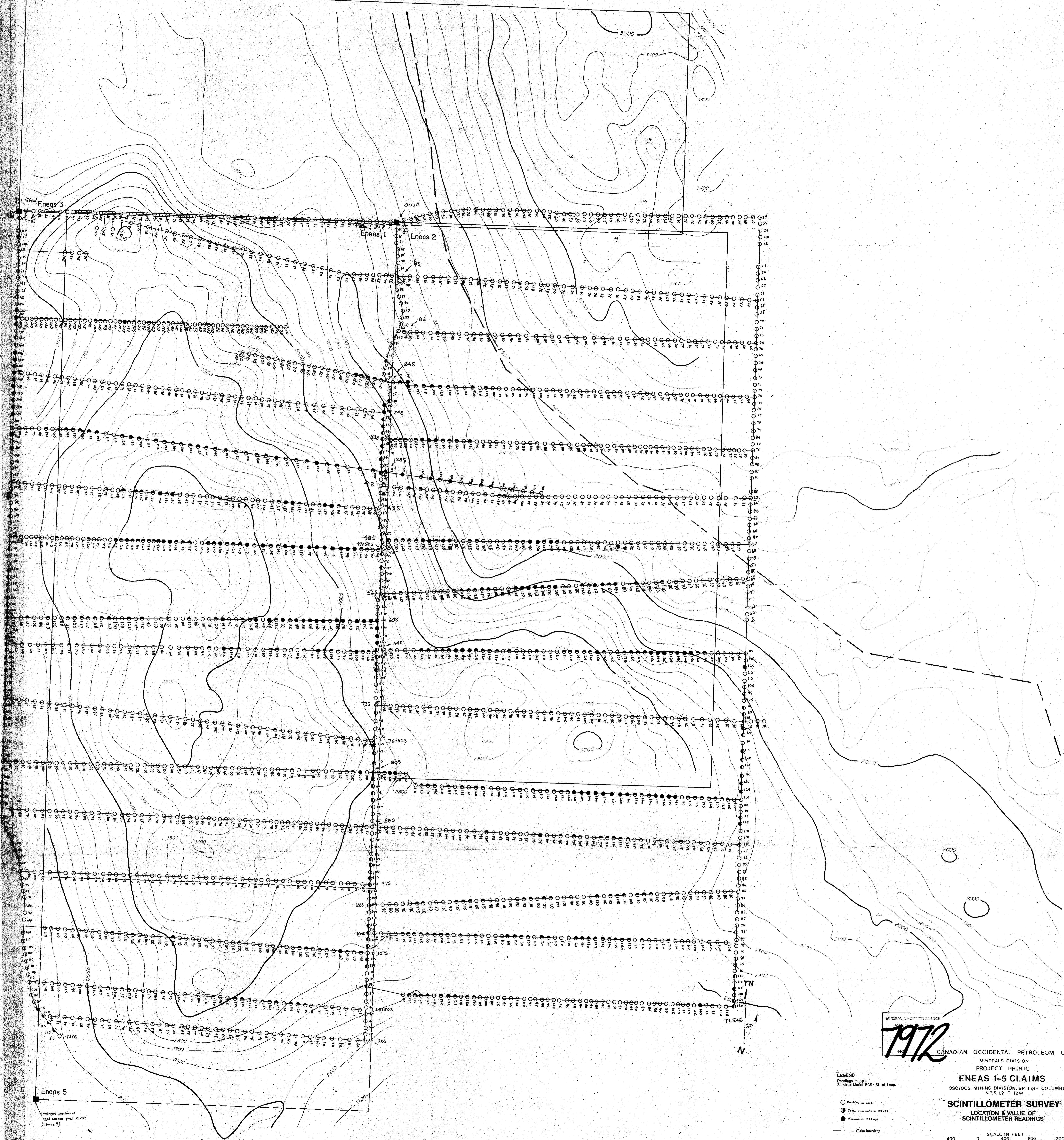
Eneas 5

Intersect location of legal corner post 6745 (Eneas 5)

LEGEND  
 U contours in ppm  
 — 10.0  
 - - - 5.0  
 ····· 3.0  
 - - - 1.0  
 --- claim boundary

CANADIAN OCCIDENTAL PETROLEUM LTD.  
 MINERALS DIVISION  
 PROJECT PRINIC  
**1972**  
 ENEAS 1-5 CLAIMS  
 OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
 N.T.S. 82 E 12 W  
**SOIL GEOCHEMISTRY  
 URANIUM**  
 CONTOURED VALUES

SCALE IN FEET  
 0 400 800 1200  
 AUGUST 1979 PLAN 3a

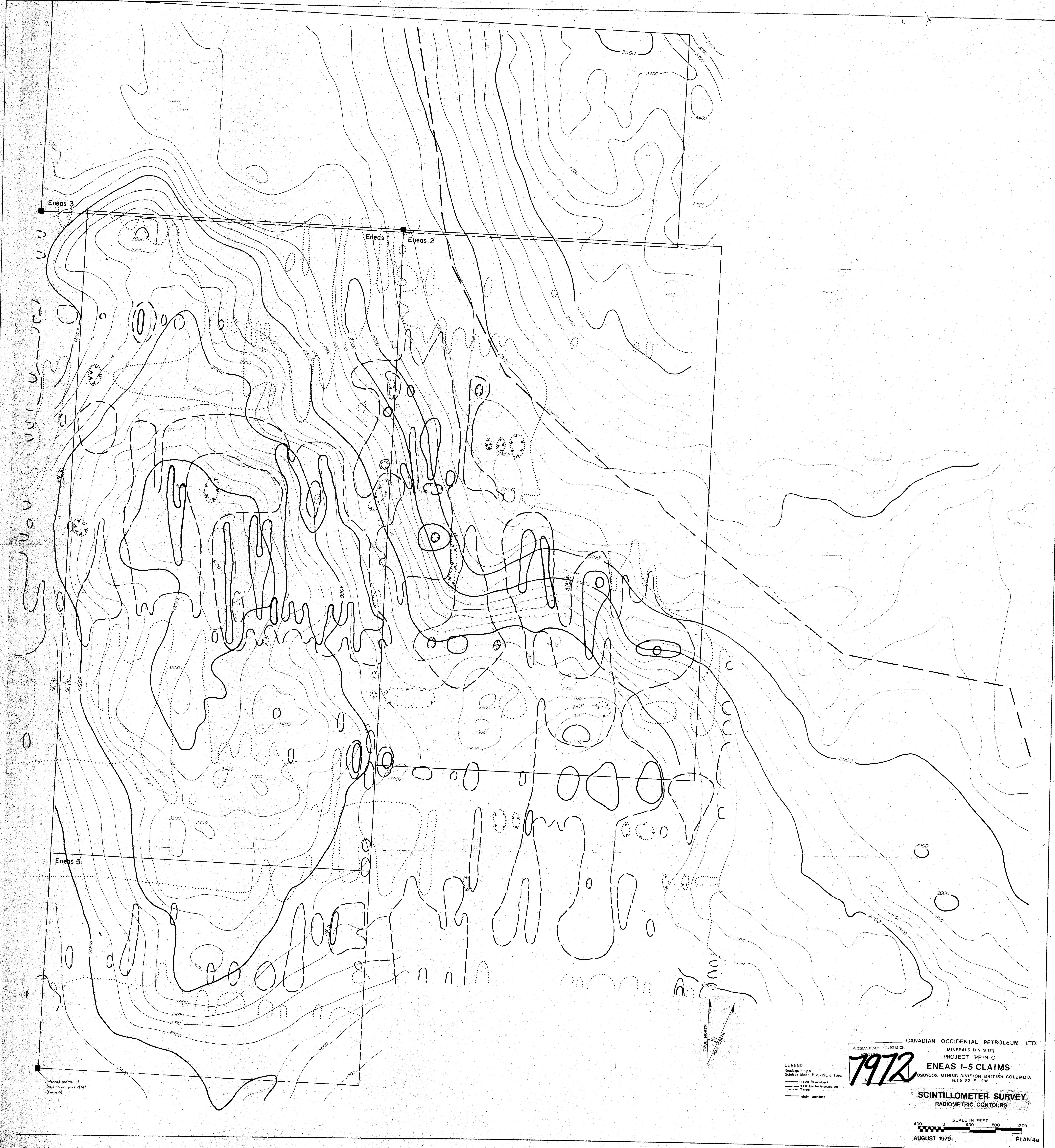


MINERAL RESOURCES BRITISH COLUMBIA  
**1972**  
 NO. CANADIAN OCCIDENTAL PETROLEUM LTD.

MINERALS DIVISION  
 PROJECT PRINIC  
**ENEAS 1-5 CLAIMS**  
 OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
 N.T.S. 82 E 12W  
**SCINTILLOMETER SURVEY**  
 LOCATION & VALUE OF  
 SCINTILLOMETER READINGS

LEGEND  
 Readings in cps  
 Scintrex Model 805-1SL at 1 sec.  
 ○ Reading in cps  
 ● Peak anomalies 10 cps  
 ● Anomalous 10 cps  
 — Claim boundary

SCALE IN FEET  
 0 400 800 1200  
 AUGUST 1979  
 PLAN 4



Eneas 3

Eneas 1 Eneas 2

Eneas 5

Inferred position of  
legal corner post 21743  
(Green 5)

LEGEND  
Readings in c.p.s.  
Scintrex Model BGS-ISL at 1 sec.  
— T + 20" (anomalous)  
— T + 0" (probably anomalous)  
— T mean  
— claim boundary

MINERAL RESOURCES BRANCH  
CANADIAN OCCIDENTAL PETROLEUM LTD.  
MINERALS DIVISION  
PROJECT PRINIC  
**1972**  
Eneas 1-5 CLAIMS  
OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
N.T.S. 82 E 12W

SCINTILLOMETER SURVEY  
RADIOMETRIC CONTOURS

SCALE IN FEET  
0 400 800 1200  
AUGUST 1979 PLAN 4a



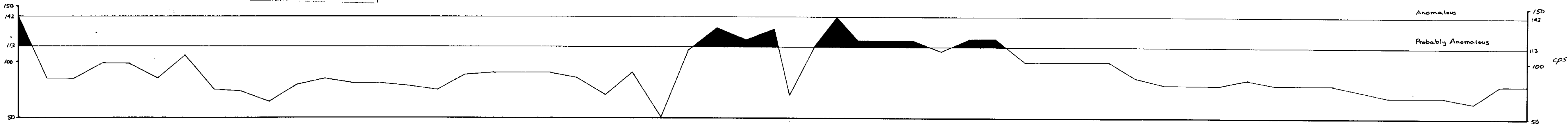
MINERAL RESOURCES BRANCH  
**7972**  
 NO.

CANADIAN OCCIDENTAL PETROLEUM LTD.  
 MINERALS DIVISION  
 PROJECT PRINIC  
**Eneas 1-5 CLAIMS**  
 OSOYOOS MINING DIVISION, BRITISH COLUMBIA  
 N.T.S. 82 E 12 W  
**COMPILATION OF GEOLOGY,  
 SOIL GEOCHEMICAL AND  
 RADIOMETRIC ANOMALIES**  
 SCALE IN FEET  
 400 0 400 800 1200  
 AUGUST 1979 PLAN 5

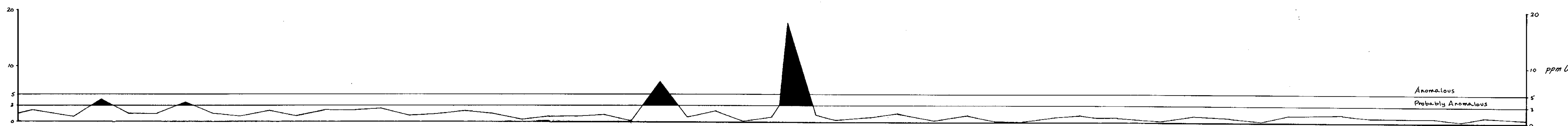
- LEGEND
- |                                 |                              |
|---------------------------------|------------------------------|
| <b>1978 SURVEY</b>              | <b>1978 SURVEY</b>           |
| Sediment                        | ▲ Anomalous * 20 ppm U       |
| Ap - Apatite                    | △ Significant * 1 ppm U      |
| OM - Old Shale or Old Monocline | ▽ Anomalous * 20 ppm U       |
| Mz - Mt. St. Helens Monocline   | ▽ Prob. Anomalous * 10 ppm U |
| Di - Mt. St. Helens Diabase     |                              |
| <b>Soils</b>                    |                              |
| — 10 ppm U Anomalous            |                              |
| — 2 ppm U Anomalous             |                              |
| — 3 ppm U Probable Anomalous    |                              |
| <b>Radiometrics</b>             |                              |
| ..... Anomalous * 14.0 cps      |                              |
| ..... Prob. Anomalous * 13 cps  |                              |
| ● Anomalous * 8 ppm U           |                              |
| ○ Prob. Anomalous * 2 ppm U     |                              |
| — claim boundary                |                              |

Eneas 5  
 Inferred position of  
 legal corner post 21743  
 (Eneas 5)

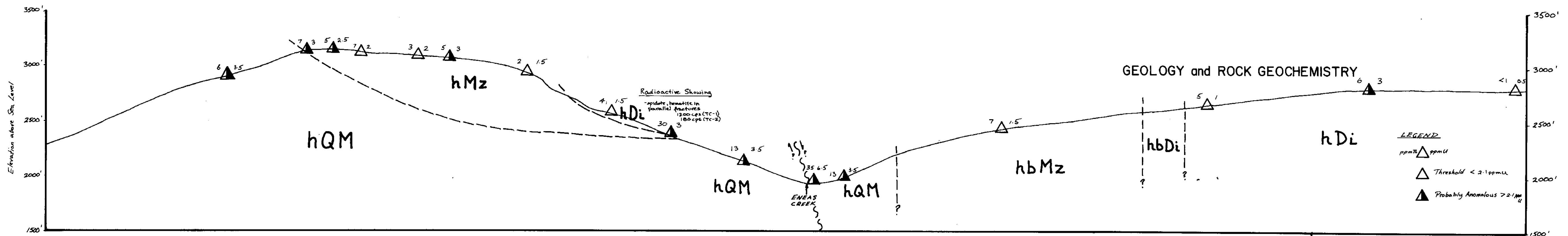
226L  
 ON  
 1978  
 HONOLULU, HAWAII



RADIOMETRICS - counts per second (Scintrex model BGS-ISL)



ppm Uranium in soil (B horizon)



A ENEAS CLAIMS - Schematic Vertical Section A-B (East to West) Looking North

Horizontal Scale 1" = 400'

Plan 5a

B