ELDORADO NUCLEAR LIMITED

Assessment Report on

MAT 1-56 (YA47281-YA47336)

63° 38' 12" N. LAT 140° 27' 51" W. LONG

090760

January, 1981

William Olsson
Project Geologist

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

$ 5,600.00

Resident Geologist or
Regional Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

INDIAN and NORTHERN AFFAIRS

TRANSMITTAL FORM

M.R. File No. _____

S.M.R. File No. _____

Date Rec'd. _____

Office of the Supervising Mining Recorder
MAR 2 1981
WHITEHORSE
Yukon Territory

FROM: Mining Recorder at Dawson, Y.T.

TO: Supervising Mining Recorder at Whitehorse, Y.T.

FOR ACTION ARE:

☐ NEW APPL'N for PLACER LEASE to PROSPECT: Name:

☐ RENEWAL APPL'N PLACER LEASE to PROSPECT: Name: Lease No. .....

☐ AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name. Lease No. .....

☐ ASSIGNMENT of PLACER LEASE No. .....
From: To:

☐ GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner:

☐ DIAMOND DRILL LOGS:
Claims: Claim sheet no: 090760

☒ QUARTZ ASSESSMENT REPORT:
Claims: MAT 1-56 Claim sheet no. 115-N-9,10,15,16
Type of report: GEOL., GEOCHEM. & GEOPHYS. Submitted by: Eldorado Nuclear
Cls. work performed on: $ Req. for ren. application #5,600.00

Signature

REPLY ACTION. Date Ret.

Signature

Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)

RECEIVED SEP 5 1980 MINING RECORDER LAND AGENT DAWSON, Y.T. I.A. & N.D.

OFFICE DATE STAMP

I (Name) William Olsson Occupation Geologist

(Postal Address) 400-255 Albert St., Ottawa, Ontario

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, wotk on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

MAT 20, 22, 33, 35

situated at 63°39'N 140°28'W Claim Sheet No. 115 N 9

in the DAWSON Mining District, to the value of at least $5600

dollars, since the 4th day of Sept 19 79,

to represent the following mineral claims under the authority of Grouping Certificate No. Q915.
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 47315	MAT 35	Sept 4/80 - Sept 4/81
YA 47316	MAT 36	"
YA 47318	MAT 38	"
YA 47320	MAT 40	"
YA 47333 - YA 47336	MAT 53-56	"

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

Report to follow.

Sworn before me at Whitehorse

this 3 day of Sept. 1980

Notary Public

William Olsson

Applicant.

Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)

RECEIVED SEP 5 1980 MINING RECORDER LAND AGENT DAWSON, Y.T. I.A. & N.D.

OFFICE DATE STAMP

I (Name) William Olsen Occupation Geologist

(Postal Address) 400 - 255 Albert St. Ottawa. Ontario

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, wotk on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

MAT 20, 22, 33, 35

situated at 63° 39'N 140° 28'W Claim Sheet No. 115N 9

in the Dawson Mining District, to the value of at least $5600

dollars, since the 4th day of Sept 19 79,

to represent the following mineral claims under the authority of Grouping Certificate No. Q914
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 47291 - YA47294	MAT 11-14	Sept 4/80 - Sept 4/81
YA 47301 - YA47308	MAT 21-28	Sept 4/80 - Sept 4/81
YA47317	MAT 37	"
YA47319	MAT 39	"
YA47321	MAT 41	"
YA47322	MAT 44	"

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

Report to follow

Sworn before me at Whitehorse

this 3 day of Sept. 1980

Notary Public

William Olsen

Applicant.

Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)

RECEIVED
SEP 5 1980
MINING RECORDER
LAND AGENT
DAWSON, Y.T.
I.A. & N.D.

OFFICE DATE STAMP

I (Name) William Olsson Occupation Geologist

(Postal Address) 400-255 Albert St. Ottawa Ontario

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, wotk on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

MAT 20, 22, 33, 35

situated at 63° 39'N 140° 28'W Claim Sheet No. 115N9

in the Dawson Mining District, to the value of at least $5600

dollars, since the 4th day of Sept 19 79,

to represent the following mineral claims under the authority of Grouping Certificate No. Q913.
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 47281 - YA47290 MAT 1-10 Sept 4/80 - Sept 4/81

YA47295 - YA47300 MAT 15-20 "

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

Report to follow

Sworn before me at Whitehorse

this 3 day of Sept. 1980

Notary Public

William Olsson

Applicant.

Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)

RECEIVED
SEP 5 1980
MINING RECORDER
LAND AGENT
DAWSON, Y.T.
I.A. & N.D.

OFFICE DATE STAMP

I (Name) William Olsson Occupation Geologist

(Postal Address) 400 - 255 Albert St. Ottawa Ontario

MAKE OATH AND SAY, THAT:-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, wotk on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

MAT 20, 22, 33.35

situated at 63° 39'N 140° 28'W Claim Sheet No. 115 N 9

in the Dawson Mining District, to the value of at least $500

dollars, since the 4th day of Sept 19 79.

to represent the following mineral claims under the authority of Grouping Certificate No. Q912
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 47309 - YA 47314 MAT 29-34 Sept 4/80 - Sept 4/81
YA 47323 - YA 47332 MAT 43-52. " "

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

Report to follow

Sworn before me at Whitehorse

this 3 day of Sept 1980

Notary Public

William Olsson

Applicant.

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I INTRODUCTION

1.1 General

1.1.1 Introduction

Work on the MAT claim group is carried out under a Joint Venture Agreement between Eldorado Nuclear Limited (66 2/3%) and Canadian Occidental Minerals (33 1/3%). Eldorado is the operator of the venture.

1.1.2 Previous work

The area around the MAT claims has been prospected and mined for placer gold at one time or another since the late 1800's. The recent resurgence in the price of gold has resulted in vigorous, renewed interest by individuals and companies in gold deposits and potential gold-bearing streams in the area.

The Geological Survey of Canada has mapped the terrane around the MAT property several times. The most recent geological map is published at a scale of 1:250,000 and accompanies G.S.C. Paper 73-41 authored by D. Templeman-Kluit and entitled "Reconnaissance Geology of Aishihik Lake, Snag and Part of Stewart River Map Areas, West-Central Yukon".

Eldorado Nuclear, as part of a broad, regional program, examined stream anomalies located in the vicinity of Matson Creek. This work involved hound dogging (a 113 cubic inch Mt. Sopris crystal mounted on the side of a Bell-47 helicopter and connected to a GAD-4 spectrometer and recorder), combined with geochemical sampling of stream silts and waters and led to the acquisition of 16 claims located along Glazy Creek. (the JOVE property)

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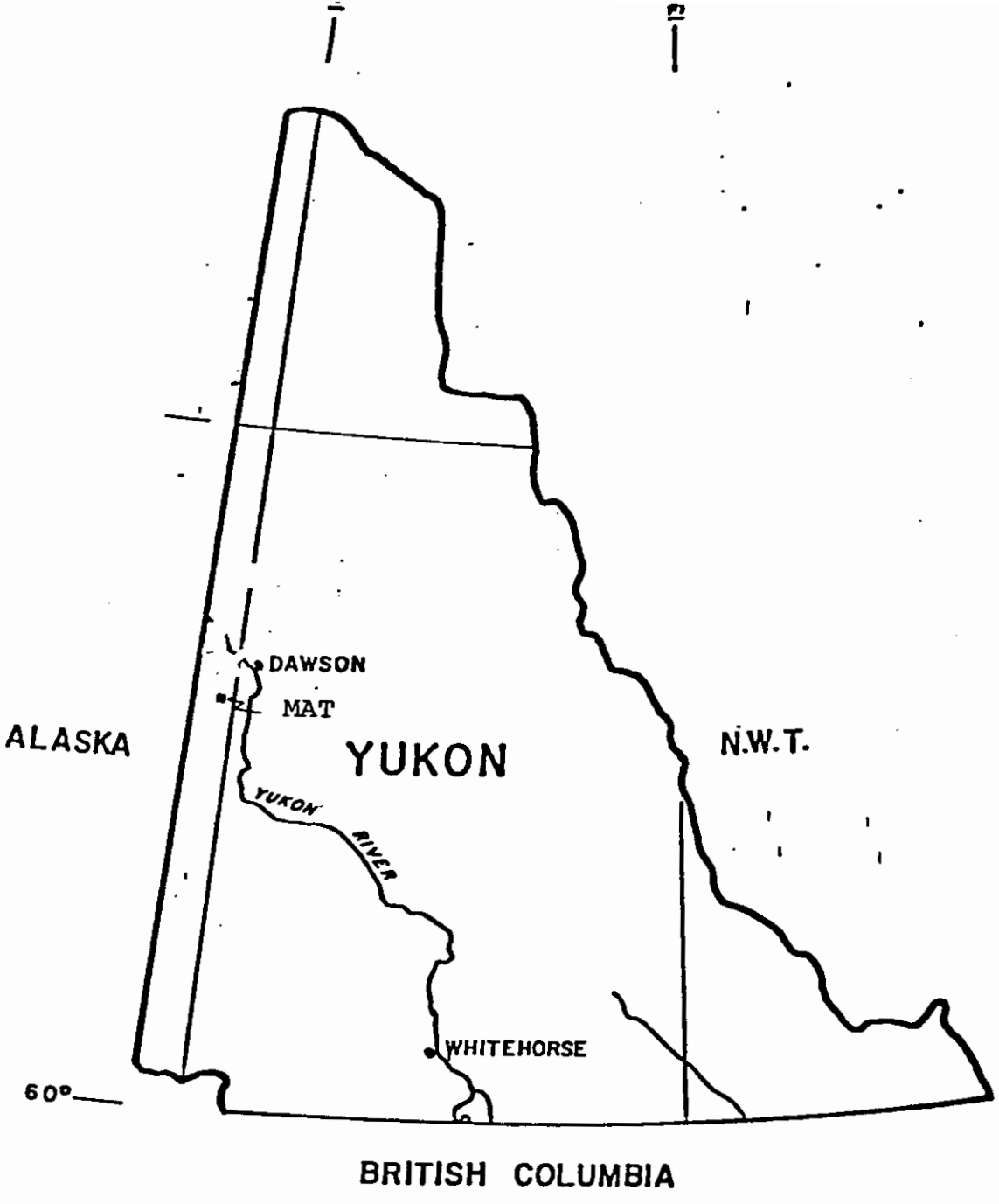

Figure 1

ELDORADO NUCLEAR LIMITED

PROJECT 522

LOCATION MAP

MAT

CLAIM GROUP

N

SCALE: 1" = 120 mi

Regional work continued in the area during 1978 and 1979. Late in 1979, MAT 1-56 were staked to protect a sharp drainage anomaly defined earlier in the season. The southeast corner of the MAT property was subsequently fringe-staked by Cominco Ltd. Applications to group and for certificates of work were made late in the 1980 field season for the work presented in this report.

1.1.3 Location and Access

The MAT claims are located at North Latitude 63° 38' 12" and West Longitude 140° 27' 51" approximately 70 kilometers southwest of Dawson City, Yukon. (See Figure 2). Access to the property is via helicopter from Dawson City or fixed wing to the Matson Creek airstrip and then by helicopter to the property.

1.1.4 Objectives of the 1980 Program

The objectives of the 1980 field program on the MAT property were:

1: to locate the source of uranium that defined the sharp drainage anomaly present on the property.

2: to evaluate the surficial expression of the source using detailed ground radiometrics followed by detailed geochemistry involving soils, waters, and soil gas.

II THE 1980 FIELD PROGRAM

2.1 General

The 1980 field work by Eldorado Nuclear consisted entirely of property evaluation. The largest part of the program dealt with evaluating the JOVE property which displayed the largest and most extensive anomalies and was therefore

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considered to be the most significant. The remaining portion of the work included examining the MAT property. The approach used was to evaluate this claim group by a detailed program of surface radiometrics and geochemistry and to compare the results to those observed on the JOVE property.

2.2 Logistics

2.2.1 Personnel

The 1980 field crew consisted of the following personnel employed by Eldorado Nuclear:

NAME	TITLE	STATUS
William Olsson	Project Geologist	Permanent
John Mulvie	Senior Assistant	Temporary
Dave Melling	Assistant	Temporary

Messrs. Mulvie and Melling carried out the work on MAT between August 7th and August 20th, 1980 from a fly camp established on the property. Supervision was done from a base camp established 6.5 km northwest of the property.

Technical advice was provided by Dr. C.F. Gleeson of C.F. Gleeson and Associates,Consulting Geochemists. Visitors to the property during the season were Mr. D.K. Fountain, Exploration Manager, and Mr. L.A. Homeniuk, District Geologist, both of whom are employed by Eldorado Nuclear Limited.

2.2.2 Aircraft

All airborne support between the properties and Dawson City was carried out by helicopters that were chartered on a casual basis. These helicopters were supplied by Trans North Turbo Air of Whitehorse, Y.T., Shirley Helicopters of Edmonton, Alberta, or Canwest Aviation Ltd., of Calgary, Alberta, and consisted of machines such as a Hughes 500D, a Bell 206B and a Bell Long Ranger.

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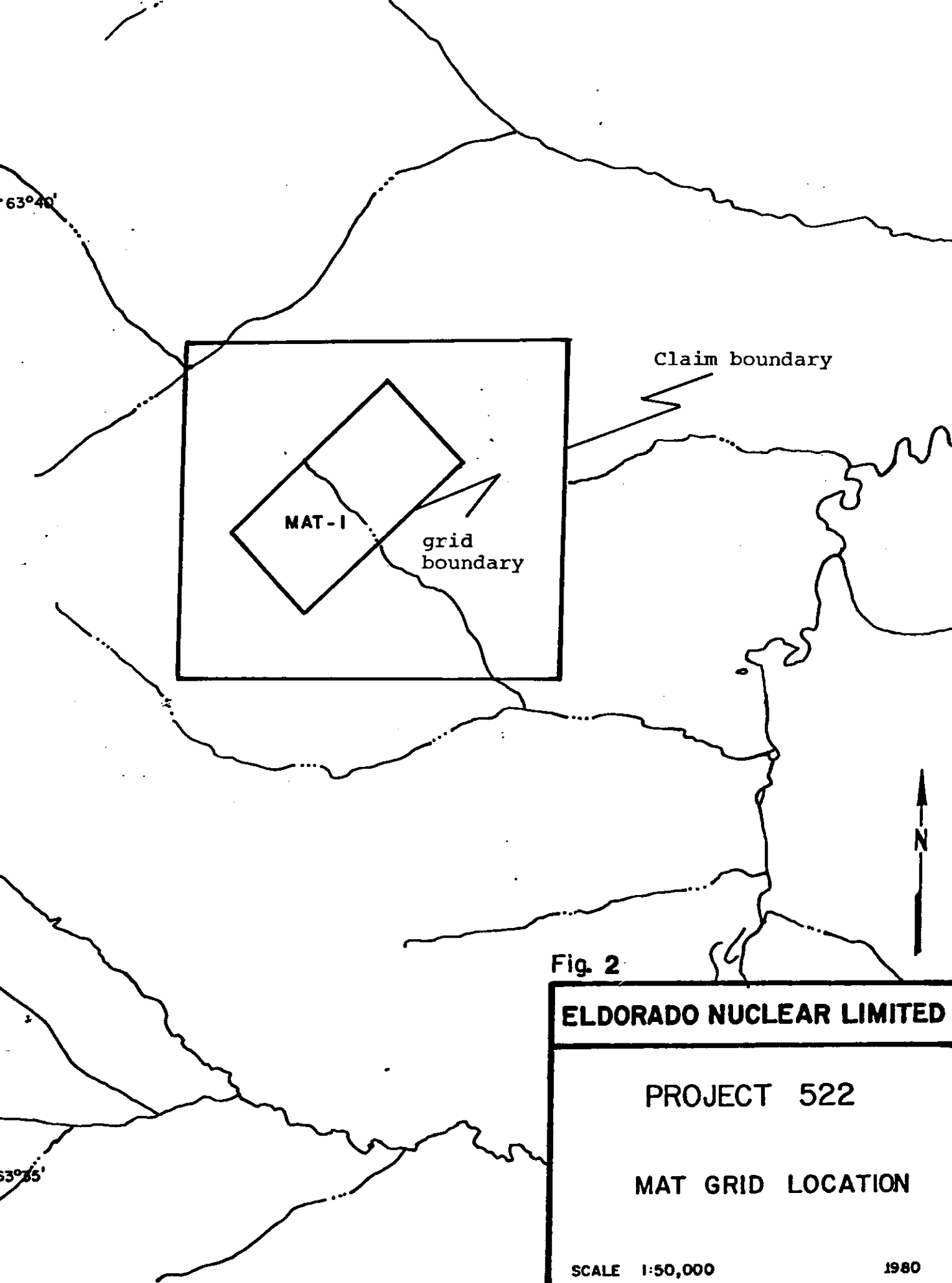

Fig. 2

ELDORADO NUCLEAR LIMITED

PROJECT 522

MAT GRID LOCATION

SCALE 1:50,000

1980

2.2.3 Expediting

Resources Expediting of Dawson City, Y.T. provided excellent radio support and expediting services during the entire field season. Traeger SSB50C H.F. radios were used for communication with the expeditors and between camps.

2.2.4 Camp Locations

The 1980 program was operated from a base camp established in late May along Glazy Creek on the JOVE property. Work on the MAT property was undertaken from a fly camp located close to the work area.

2.2.5 Grid Locations

The MAT grid was designed to cover an area considered to be the source for the seepage and stream anomaly outlined by previous work. (See figure 2). The baseline was established just upstream from the point of influence of uranium into the system.

2.3 Geophysical Surveys

2.3.1 General

One of the objectives of the 1980 field program was to obtain a detailed radiometric response of our work areas. This was accomplished through a detailed ground radiometric survey.

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2.3.2 Radiometric Surveys

A detailed ground radiometric response of properties was obtained with field personnel running lines 25 metres apart and taking readings every 10 metres. Instruments used for the surveys were Scintrex BGS-1SL total count scintillometers containing a 1½" crystal. Raw data was plotted daily at a scale of 1:2500 and contoured at a 20cps interval.

The final radiometric map for the properties is presented with only the contours and no raw data. The contour interval in this instance is 40 cps as a re-evaluation of the 20 cps intervals has shown it to be insignificant. Since radioactive decay producing gamma ray emissions follows the Poisson Distribution, the variance of the distribution of samples equals the standard deviation. Therefore, for a population with a mean around 100 cps (MAT property has a mean radiometric response of 105 cps) there is a corresponding variance of 10 cps. One would therefore expect a reading of 100 cps to vary somewhere between 90 cps and 110 cps. If one uses the formula of the mean plus 2 times the standard deviation as a minimum significant observation, one arrives at a minimum contour interval of 100 cps. A minimum significant fluctuation of 20 cps in data would suggest any contouring below 40 cps for data in the 100 cps range is not meaningful.

2.4 Geochemical Surveys

2.4.1 General

The geochemical work in 1980 on Project 522 involved soil sampling of radiometric anomalies, sampling of seeps, and indirectly measuring the amount of radon gas present in the soil using alpha meters.

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Analyses were carried out by Chemex Ltd. in labs located in North Vancouver, B.C. Specific conductivity, pH measurements and approximate radon determinations were all carried out in the field by Eldorado personnel. The conductivity meter employed was Model 1484 manufactured by the Horizon Ecology Company while pH measurements were made using a digital meter Model 5985-40 manufactured by the same company. All radon-in-water measurements were carried out in camp utilizing a RE 279 Radon Counter obtained on lease from Bondar Clegg Company. Radon-in-soil measurements were approximated in the field by alpha meters leased from Alpha Nuclear Company. Field supplies for the geochemical sampling were obtained through Chemex Labs Ltd.

All sample sites were identified by a 4-digit number which was pre-printed on Kraft sample bags. A prefix was added to the 4-digit number for sample-type identification while a suffix was also added for work area identification. For example, a water sample taken from anomaly 115N9-3 would appear 42-7521-N93. Table I lists the prefixes used in 1980.

TABLE I

PREFIXES ASSIGNED TO SAMPLE SITE NUMBERS
FOR SAMPLE TYPE IDENTIFICATION

PREFIX	SAMPLE TYPE
40	soil
41	silt
42	water

All field data was recorded on 80-character data cards. These completed cards are on file in Ottawa for possible future computerization of data.

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Daily traverses were summarized nightly in a report. Individual traverses were identified by the letter E followed by a second letter taken from the first letter in an individual's last name. In the event of two people with last names beginning with the same letter, the letter of their first name was used.

2.4.2 Sampling Procedures

(a) Soils

Soil sampling was carried out on a 50m x 50m interval on the grid work. The B horizon was sampled at each location. Sample sites had previously been marked by the radiometric survey which also established the radiometric response at each station. The soil sample number was then written on a piece of flagging which was tied to a nearby branch at each location.

The grid soil sampling geochemical results are plotted at a scale of 1:2500.

(b) Soil gas

Radon-in-soils was indirectly measured using alpha meters. Initially, the program involved 25 alpha meters that are owned by Eldorado. However, as the technique appeared to have some merit to it, the number of alpha meters was increased to 100 by leasing additional units from Alpha Nuclear Co. and from Canadian Occidental Minerals.

The spacing of alpha meters was at 50m x 50m. Areas of interest were followed up at 25m x 25m. For the most part a large contrast was observed in the data, however, difficulties were met in relating data derived by Eldorado's units with that read from the rest of the meters. Testing in camp revealed the CanOxy and Alpha Nuclear units read below the Eldorado units by a factor of 4.4. All data plotted has been adjusted to compensate for this difference between units.

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(c) Waters

All seepages present on the grids were sampled for uranium analysis as well as for radon analysis. This required 2 samples to be taken at each site: one in a 200 ml plastic bottle; one in a 200 ml glass bottle. The water in the plastic bottle was measured for pH and specific conductivity before shipping to Chemex for uranium analysis. The sample in the glass bottle was used for radon determination in camp. As was the case for all other sample sites, the 4-digit sample number was written on a piece of flagging which was left nearby.

The Bondar-Clegg RE 279 radon counter can also be used to determine an indirect measurement of radium-in-water. This is done by first running a sample for radon where the assumption is made that the sample is totally degassed of radon at this point. The sample is then allowed to sit for 3½ days at which time the procedure for analyzing for radon is once again repeated. The amount of radon detected during this second analysis is directly proportional to the amount of radium from which it was derived. (A 3½ day waiting period allows the radium-derived radon to arrive at equilibrium with the radium in solution.) The theory is intriguing, however, experience in the field revealed that the assumption that the sample is entirely degassed during the radon analysis is in fact incorrect. This was confirmed later by discussions with Bondar-Clegg.

In order to overcome the problem of incomplete degassing of water, two procedures were used. First of all, bulk samples were obtained from seeps with anomalous values in radon. These samples were submitted to Bondar Clegg and Company for both radon and radium determinations. At the same time a sample was taken for radon analysis in camp. In this way the amount of radon liberated during the analysis in camp was determined.

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The second procedure involved setting aside arbitrary samples with variable amounts of radon in them. These samples were kept for 30 days (equivalent to 6 half lives of radon) at which time any excess radon in the sample due to incomplete degassing will have desintegrated to negligible amounts. Any radon detected in the water at that time will have thus been derived from the radium in the sample.

2.4.3 Sample Control

Lots of pre-numbered sample bags were assigned to specific sampling surveys to allow for easy monitoring of results. Samples numbers used on the MAT property were obtained from the interval 1000 to 3999.

Individuals were responsible for the drying of their own soil and silt samples. Specific individuals were assigned tasks involving shipping the samples or analyzing the waters for specific conductivity and pH. All data was entered nightly into the traverse report and data accumulation book.

2.4.4 Analytical Procedures and Methods

All silt, soil and water samples were submitted for uranium analysis. Waters were regularly measured for pH specific conductivity and radon prior to shipping. In the case of samples greater than 100 ppm U, an automatic analysis for % U_3O_8 was carried out.

Analytical results were sent to Dawson City by telex and then forwarded to the field on the first available flight. Certificates of analysis were subsequently received.

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Soils were dried at 550° C, screened to -80 mesh, split, weighed, dried twice in 4M nitric acid, acidified, fused with a standard sodium fluoride flux and analyzed with a G.K. Turner Fluorometer. Results are reported as ppm U. Rock samples were initially crushed and then processed in a similar fashion. The detection limit for this analytical method is 0.5 ppm U. As reported earlier, samples with values in excess of 100 ppm U (.001%) were automatically assayed and results reported as % U_3O_8.

Water samples were first preconcentrated in the laboratory by evaporation and then analyzed in a similar fashion as the silts, soils and rocks. In this instance, results are reported as ppb U with a lower detection limit of 0.05 ppb U.

2.4.5 Data Control

(a) Monitoring

Individuals were responsible for completing a Daily Traverse Report which consisted of a sketch map showing sample locations, a paragraph or two of comments regarding the day's work and a list of all samples taken according to type. As analytical data was received, the information was transferred to the traverse reports and then plotted in the field.

A Data Accumulation book was kept to record various information regarding traverses. This information consisted of:

i) the traverse number
ii) the grid/work area worked
iii) a list of sample numbers used during the traverses
iv) a list of sample types taken at each station

and was filed according to individual traverse numbers.

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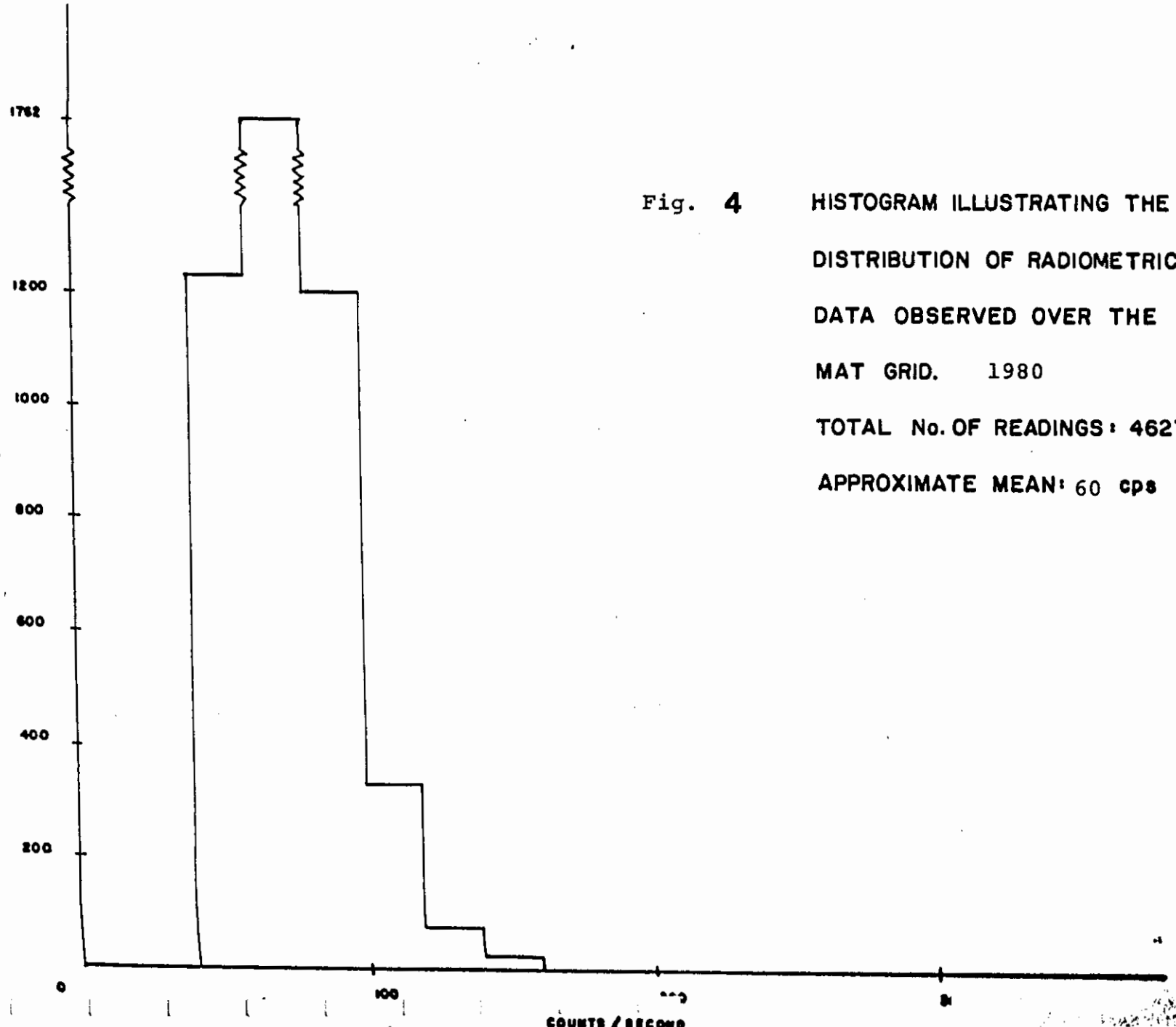

Fig. 4 HISTOGRAM ILLUSTRATING THE DISTRIBUTION OF RADIOMETRIC DATA OBSERVED OVER THE MAT GRID. 1980

TOTAL No. OF READINGS : 4627

APPROXIMATE MEAN : 60 cps

A sample location map accompanies each set of maps and consists of the 4-digit sample number plotted along with a series of symbols indicating sample type. These symbols are:

X water
O silt
● soil

III RESULTS

3.1 Introduction

Detailed stream traverses carried out on anomaly 115N-9-1 in 1979 led to the acquisition of 56 claims called the MAT Group. A sharp cutoff in uranium values was detected and a grid was established at that point during the 1980 field season. Work on the grid consisted of detailed radiometrics (stations at 10m intervals on lines 25m apart) and follow-up soil and soil gas surveys. All available waters were also sampled and analyzed. The objectives of the 1980 work on MAT were to establish the radiometric and geochemical signatures of the grid and compare the results to the observations made on the nearby JOVE claims. Detailed mapping of the MAT grid was not included in the final program approved by the Management Committee in early 1980, however, the geological information contained in the summation is based on observations made in previous years.

3.2 Radiometrics

Radiometric data from the MAT grid is presented in contoured form as Figure 3. The 40 cps contour interval was chosen as a smaller interval would be meaningless as gamma radiation follows a Poisson distribution. A histogram constructed from the data is presented as Figure 4.

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North of the stream, the average radiometric response is in the 80 to 100 cps range whereas south of the stream, most values vary from 40 to 80 cps. There is no definitive reason for the apparent subtle difference in the data as the terrain appears to be quite similar in the two areas.

Using an approximate threshold of 120 cps, two anomalies have been defined by the data. They are located at 65+00N, 60+00W and at 66+50N, 65+00W. The anomalies are approximately the same size and trend to the north. The maximum value in each anomaly is 160 cps. Both anomalies occur over areas of very little rock exposure. Their linearity suggests they reflect underlying structures. The two very small anomalies located 250m north of anomaly 1, are related to an exposed, uplifted shear zone within the quartz monzonite.

3.3 Soil Geochemistry

The contoured uranium-in-soil data from the MAT property is presented as Figure 5. There are three anomalies outlined on the map. Anomaly 1 trends in a northerly direction, and cuts diagonally across the grid starting at the upper left-hand corner and extending down to the central right edge. Anomaly 2 forms an oblong shape centered at 61+50N, 64+00W, anomaly 3 is circular shaped and is centered at 57+50N, 59+00W.

Both ends of anomaly 1 are open, resulting in a strike length of over 1400m. The average width of the zone is 300m. Although the 7.0 ppm contour defines the anomaly, over 30% of the values are in excess of 20 ppm U, and 90% are greater than 10 ppm U. The anomaly is coincident with an intermittent drainage system suggesting it may in fact be a seepage anomaly with a source for the uranium located north of the present grid. Although a near-parallel drainage system lies 300m south of this intermittent one, there is no comparable soil geochemical response associated with it.

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Anomaly 2 consists of two small, elongated anomalies located near the main drainage system that cuts through the grid area. Although sharply defined, the anomaly does not have an appreciable magnitude to the values (maximum value is 21.0 ppm U). This anomaly is considered to be due to local seeps.

Anomaly 3 lies in an area covered by clay-rich soils. The shape and location of the anomaly suggest it may represent a very local paleo-basin where water accumulated and uranium concentrated due to the scavenging effect of the clay minerals.

A comparison of the radiometric data and the uranium-in-soil data reveals the 2 radiometric anomalies previously described, are closely associated with soil anomaly 1. If, as was postulated, the radiometric anomalies reflect underlying structural zones, then the uraniferous waters that developed anomaly 1 originated along these structural zones, and the source of uranium will be found in these fracture zones either at depth, along strike, or both. This situation is analogous to the one present on JOVE-1 and JOVE-2 where the radiometric response is interpreted to be reflecting a buildup in radium at seeps while the soil anomalies are caused by the concentration of uranium in the soil horizons due to uraniferous waters percolating through these horizons.

3.4 Soil Gas Geochemistry

The alpha meter survey over the MAT grid was confined to the area of the grid where the highest radiometric response was recorded, namely in the north half of the work area. Figure 6 presents the contoured, alpha meter data.

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Alpha meter readings taken on the MAT property vary from about 10 counts per hour up to a maximum of 335 cph. Approximate threshold values are considered to be 150 cph and anomalous areas are highlighted when readings greater than or equal to 200 cph are observed.

A total of 6 alpha meter anomalies are outlined on Figure 6. All but one are spot anomalies and all six are summarized in Table II.

TABLE II
ALPHA METER ANOMALIES
MAT CLAIMS

Anomaly Number	North Co-ordinate	West Co-ordinate	Size	Value(s) cph
1	67+50N	65+50W	100m x ?	202, 335
2	67+50N	63+00W	50m x 50m	238
3	67+50N	60+75W	50m x 75m	193
4	67+50N	59+50W	50m x 50m	203
5	66+00N	59+00W	100m x 50m	210
6	65+50N	67+00W	100m x 50m	292

Compared to data received elsewhere in the project area, the alpha meter results from MAT are very low. Variations in the results are considered to be inherent in the radon method and are therefore not considered significant.

Although the alpha meter readings are low for MAT, they may not necessarily be a true indication of the amount of radon present. During the soil sampling portion of the program, field crews observed a high clay content in soils for most of the surveyed area. A high clay soil could provide a near impermeable layer through which radon would find it difficult to pass and thereby be one plausible explanation for low readings.

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3.5 Water Geochemistry

Generally, the terrain covered by the MAT grid was exceptionally dry during the 1980 field season. Approximately 2 dozen samples were collected and analyzed. The resulting data is presented as Figure 7.

The few water samples taken from MAT represent 3 mediums: 1 - the main drainage system; 2 - a subsidiary drainage system; 3 - several seeps.

In the first instance, samples collected had pH measurements of 6.1 to 6.7, specific conductivity readings of 39 to 225 micromohs per cm, uranium values of 0.2 to 61.0 ppb and a radon content of 35 to 1207 pico curies per litre.

The subsidiary drainage system runs near parallel to and is located just north of the main stream. The pH and specific conductivity measurements range from 4.7 to 7.2 and from 26 to 50 micromohs/cm respectively. The uranium content of these waters is between 0.5 and 1.5 ppb while the radon content varies from 49 to 999 pc/l. This drainage system corresponds to the one related to the development of the main soil anomaly on the property.

The seepage samples, all of which were obtained south of the main drainage system, have pH values of 5.4 to 6.8, specific conductivity readings of 21 to 61 micromohs per cm, a uranium content of 0.2 to 0.6 ppb, and a radon content of 7 to 46 pc/l.

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The preceding data indicate waters draining the north half of the grid have large fluctuations in pH values and in radon content. The uranium and specific conductivity values however remain relatively constant. Samples from the stream cutting through the grid indicate an influx of uranium occurs somewhere between 58+00W and 59+50W. Similarly there is a large increase in the radon content of the last 2 samples taken from the stream. Both the uranium and radon increases appear to be accompanied by a similar increase in the specific conductivity of water. The samples obtained from the hillside south of the main creek do not exhibit any noticeable variation in their analytical measurements.

3.6 Summation

The geological setting of the MAT property was investigated in 1979 and reported in the 1979 Project Report (Pg. 16, Vol. VII). The area is underlain by grey weathering, medium-grained, leucocratic quartz monzonite. Muscovite-bearing phases are present as are pegmatite dykes. Usually the unit is massive but locally it appears weakly foliated.

MAT is located at a thousand feet lower topographically than the JOVE property. The high clay content observed in the soils on MAT is interpreted to be the result of in situ weathering of the feldspars in the quartz monzonite and because of the low topographic setting, the resulting clay minerals have accumulated as opposed to being washed away as is the case for the JOVE property. The base of the Carmacks Group is reported by Cockfield to be clay-rich suggesting the MAT property may in fact be underlain by the basal units of the Tertiary sedimentary sequence. Templeman-Kluit reports on outcrop of these units 2 km south of the property. Investigative work in 1979 failed to locate this outcrop.

.....17

The high clay content of the soils would create a more impervious barrier between the surface and the underlying units thereby masking the true geochemical and radiometric response of the underlying geology. Based upon this assumption the data obtained from the MAT property in 1980 may be just as significant as that from the JOVE property even though the absolute values from MAT are several magnitudes lower than those observed on JOVE. Alternatively, the clay-sized fraction may be scavenging uranium from the waters originating upstream and thus the anomaly is not due to an underlying bedrock source.

The subsidiary drainage pattern located north of the main stream has a good soil anomaly related to it as well as waters with anomalous radon and uranium contents. Future work on the property should be focussed on the headwaters of this intermittent water course especially in the vicinity of the radiometric anomalies.

The 1980 work on MAT located the apparent source of the uranium detected in the main stream in previous years. The soil anomaly defined by this work reflects an intermittent drainage pattern and a radiometric anomaly is present near the headwaters of this streamlet. It is interpreted that the anomalies on MAT are analogous to the JOVE-1 and JOVE-2 anomalies in that the soil anomaly has developed from uraniferous groundwaters flowing out of the hillside and down the water course with uranium being scavenged out by the organic and iron content of the soils.

.....18

IV DISCUSSION OF RESULTS

The sharp uranium-in-soil anomaly, its relationship with a weak radiometric anomaly and the presence of radon in waters draining these two anomalies has upgraded the MAT property. Although the magnitude of the survey results on MAT is somewhat lower than those observed on JOVE, it is suggested the high clay content of the soils may mask the chemical and radiometric response of the terrane. However, the possibility also exists that the clay minerals have in fact scavenged uranium from surface waters.

V CONCLUSIONS

The following conclusions have been developed from the 1980 field program on the MAT claims:

1: The source of the anomaly covered by the MAT property was located north of the main stream.

2: The high clay content of soils taken from the property may have masked the geochemical and radiometric responses thereby prohibiting an accurate evaluation of the property to be made.

3: The MAT property may in part be underlain by the basal units of the Carmack Group.

.....19

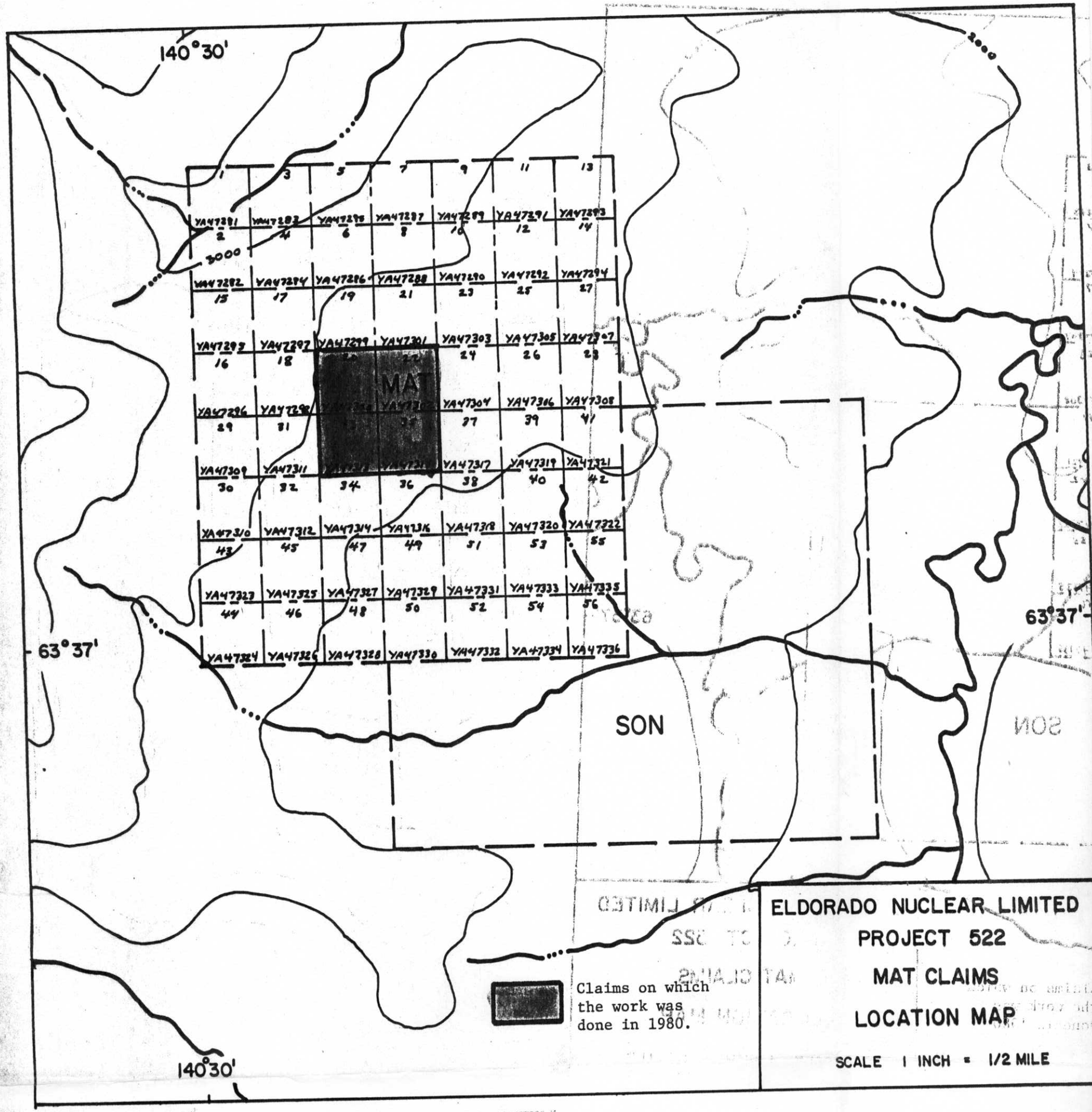
VI RECOMMENDATIONS

It is recommended that the 1980 survey on the MAT property be extended to cover the entire claim block, and, furthermore, the survey should be accompanied by detailed prospecting and geological mapping.

January, 1981

William Olsson
Project Geologist

APPENDIX A
GRID LOCATION ON MAT CLAIMS
1980


140°30'
63°37'
MAT
SON
YA47281
YA47283
YA47285
YA47287
YA47289
YA47291
YA47293
YA47282
YA47284
YA47286
YA47288
YA47290
YA47292
YA47294
YA47295
YA47297
YA47299
YA47301
YA47303
YA47305
YA47307
YA47296
YA47298
YA47304
YA47306
YA47308
YA47309
YA47311
YA47317
YA47319
YA47321
YA47310
YA47312
YA47314
YA47316
YA47318
YA47320
YA47322
YA47323
YA47325
YA47327
YA47329
YA47331
YA47333
YA47335
YA47324
YA47326
YA47328
YA47330
YA47332
YA47334
YA47336
Claims on which the work was done in 1980.
ELDORADO NUCLEAR LIMITED
PROJECT 522
MAT CLAIMS
LOCATION MAP
SCALE 1 INCH = 1/2 MILE

APPENDIX B
CHEMEX CERTIFICATES OF ANALYSIS
1980

CHEMEX LABS LTD.

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

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

C : Eldorado Nuclear Ltd.
Bag #3000
Dawson City, Y.T.

CERT. # : A8010240-001-A
INVOICE # : 38796
DATE : 15-SEP-80

PROJECT 522 MAT

Sample Description	U PPB			
42-1302	1.2	--	--	--
42-1362	0.6	--	--	--
42-1380	1.4	--	--	--
42-1379	0.2	--	--	--
42-1650	46.0	--	--	--
42-1651	0.6	--	--	--
42-1652	1.2	--	--	--
42-1653	0.6	--	--	--
42-1654	0.6	--	--	--
42-1655	0.8	--	--	--
42-1656	0.6	--	--	--
42-1657	0.4	--	--	--
42-1658	0.2	--	--	--
42-1659	0.2	--	--	--
42-1660	0.2	--	--	--
42-1661	0.6	--	--	--
42-1662	0.6	--	--	--
42-1663	0.6	--	--	--
42-1664	0.6	--	--	--
42-1665	0.2	--	--	--
42-2535	61.0	--	--	--

Certified by .....

CTA MEMBER CANADIAN TESTING ASSOCIATION

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-001-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert Street
Ottawa, Ontario
K1P 6A9

ATTN: Mr. William Olsson

INVOICE NO. 39505

RECEIVED Aug. 26/80

ANALYSED Oct. 10/80

SAMPLE NO. :	U (Fluor.) ppm
40-1300	1.5
40-1301	3.5
40-1302	6.0
40-1303	17.5
40-1304	17.0
40-1305	27
40-1306	28
40-1307	8.0
40-1308	13.0
40-1309	21.0
40-1310	2.5
40-1311	1.0
40-1312	3.5
40-1313	0.5
40-1314	0.5
40-1315	1.0
40-1316	1.5
40-1317	2.0
40-1318	11.5
40-1319	3.0
40-1320	1.0
40-1321	1.0
40-1322	0.5
40-1323	1.0
40-1324	4.0
40-1325	1.0
40-1326	72
40-1327	2.5
40-1328	1.0
40-1329	4.5
40-1330	1.5
40-1331	76
40-1332	22.0
40-1333	52
40-1334	20.5
40-1335	2.0
40-1336	2.0
40-1337	10.5
40-1338	1.0
40-1339	4.5

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: J. McKay

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-002-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert Street
Ottawa, Ontario
K1P 6A9

ATTN: Mr. William Olsson

INVOICE NO. 39505

RECEIVED Aug. 26/80

ANALYSED Oct. 10/80

SAMPLE NO. :	U (Fluor.) ppm
40-1340	1.0
40-1341	2.5
40-1342	2.0
40-1343	1.5
40-1344	2.5
40-1345	4.5
40-1346	2.5
40-1347	3.0
40-1348	3.5
40-1349	35
40-1350	16.5
40-1351	1.0
40-1352	2.5
40-1353	4.0
40-1354	1.5
40-1355	N S S
40-1356	1.0
40-1357	1.5
40-1358	6.0
40-1359	1.0
40-1360	1.0
40-1361	1.0
40-1362	32
40-1363	43
40-1364	34
40-1365	6.0
40-1366	12.5
40-1367	1.0
40-1368	43
40-1369	6.5
40-1370	3.0
40-1371	1.5
40-1372	1.0
40-1373	1.0
40-1374	1.5
40-1375	2.5
40-1376	2.5
40-1377	1.5
40-1378	8.5
40-1379	11.5

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: D. McKay.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-003-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert Street
Ottawa, Ontario
K1P 6A9

ATTN: Mr. William Olsson

INVOICE NO. 39505

RECEIVED Aug. 26/80

ANALYSED Oct. 10/80

SAMPLE NO. :	U (Fluor.) ppm
40-1380	12.0
40-1381	38
40-1382	9.5
40-1383	8.5
40-1384	2.5
40-1385	8.5
40-1386	16.0
40-1387	2.5
40-1388	2.5
40-1389	1.0
40-1390	1.0
40-1391	1.0
40-1392	1.5
40-1393	3.0
40-1394	19.5
40-1395	3.5
40-1396	0.5
40-1397	40
40-1398	3.0
40-1399	19.0
40-1400	12.0
40-1401	2.0
40-1402	4.5
40-1403	1.5
40-1404	12.0
40-1405	1.0
40-1406	0.5
40-1407	3.0
40-1409	13.0
40-1410	2.5
40-1411	3.5
40-1412	1.5
40-1413	0.5
40-1414	1.0
40-1415	0.5
40-1416	0.5
40-1417	0.5
40-1418	1.0
40-1419	1.0

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: D. McKay

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-004-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert Street
Ottawa, Ontario
K1P 6A9

ATTN: Mr. William Olsson

INVOICE NO. 39505

RECEIVED Aug. 26/80

ANALYSED Oct. 10/80

SAMPLE NO. :	U (Fluor.) ppm
40-1420	0.5
40-1421	0.5
40-1422	1.0
40-1423	1.5
40-1424	16.5
40-1425	10.5
40-1426	20.5
40-1427	2.0
40-1428	5.0
40-1429	11.5
40-1430	5.0
40-1431	1.0
40-1432	1.0
40-1433	1.0
40-1434	1.5
40-1435	1.0
40-1436	1.0
40-1437	0.5
40-1438	1.5
40-1439	1.0
40-1440	0.5
40-1441	1.0
40-1442	1.0
40-1443	0.5
40-1444	8.0
40-1445	2.0
40-1446	0.5
40-1447	1.0
40-1448	1.0
40-1449	3.5
40-1450	0.5
40-1451	1.5
40-1452	1.0
40-1453	1.5
40-1454	N S S
40-1455	1.5
40-1456	1.0
40-1457	21.0
40-1458	1.5
40-1459	15.0

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: J. McKay

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

CHEMEX LABS LTD.

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CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-005-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert Street
Ottawa, Ontario
ATTN: K1P 6A9
Mr. W. Olsson

INVOICE NO. 39505
RECEIVED Aug. 26/80
ANALYSED Oct. 10/80

SAMPLE NO. :	U (Fluor.) ppm
40-1460	9.5
40-1461	8.5
40-1462	8.0
40-1463	1.0
40-1464	1.0
40-1465	18.0
40-1466	1.5
40-1467	1.5
40-1468	1.5
40-1469	0.5
40-1470	1.0
40-1471	1.5
40-1473	2.0
40-1474	1.5
40-1475	5.0
40-1476	N S S
40-1477	2.0
40-1478	3.0
40-1479	2.5
40-1480	2.5
40-1481	2.0
40-1482	1.5
40-1483	2.0
40-1484	1.5
40-1485	1.5
40-1486	2.0
40-1487	2.0
40-1488	4.0
40-1489	6.0
40-1490	2.0
40-1491	5.5
40-1492	7.5
40-1493	7.5
40-1494	4.0
40-1495	6.0
40-1496	3.5
40-1497	3.0
40-1498	7.5
40-1499	6.0

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: J. McDonald

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-006-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert St.
Ottawa, Ontario
ATTN: K1P 6A9
Mr. W. Olsson

INVOICE NO. 39620

RECEIVED Aug. 26/80

ANALYSED Oct. 10/80

SAMPLE NO. :	U
	ppm Fluor
40-1500	2.5
40-1501	6.0
40-1502	6.0
40-1503	0.5
40-1504	0.5
40-1505	4.5
40-1506	6.0
40-1507	0.5
40-1508	1.0
40-1509	1.0
40-1510	0.5
40-1511	0.5
40-1512	2.5
40-1513	1.0
40-1514	2.5
40-1515	1.5
40-1516	0.5
40-1517	4.5
40-1518	1.5
40-1519	9.5
40-1520	2.5
40-1521	1.0
40-1522	0.5
40-1523	1.0
40-1524	1.0
40-1525	1.0
40-1526	1.0
40-1527	1.0
40-1528	1.5
40-1529	1.0
40-1530	1.0
40-1531	0.5
40-1532	-0.5
40-1533	1.0
40-1534	3.0
40-1535	2.5
40-1536	4.0
40-1537	3.5
40-1538	1.5
40-1539	11.5

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: D. McKay

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-007-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert St.
Ottawa, Ontario
K1P 6A9

INVOICE NO. 39620

RECEIVED Aug. 26/80

ATTN: Mr. W. Olsson

ANALYSED Oct. 10/80

SAMPLE NO. :	U ppm Fluor
40-1540	3.0
40-1541	5.0
40-1542	3.0
40-1543	6.0
40-1544	1.5
40-1545	4.5
40-1546	4.5
40-1547	1.5
40-1548	3.0
40-1549	5.5
40-1550	3.0
40-1551	3.5
40-1552	4.5
40-1553	4.0
40-1554	4.0
40-1555	3.5
40-1556	8.5
40-1557	16.0
40-1558	2.5
40-1559	2.5
40-1560	1.0
40-1561	1.0
40-1562	1.0
40-1563	1.0
40-1564	1.0
40-1565	1.5
40-1566	1.5
40-1567	1.5
40-1568	1.0
40-1569	2.0
40-1570	1.5
40-1571	1.0
40-1572	1.5
40-1573	2.0
40-1574	1.0
40-1575	0.5
40-1576	1.5
40-1577	3.0
40-1578	2.5
40-1579	4.5

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: J. McKay.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010199-008-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert Street
Ottawa, Ontario
K1P 6A9

ATTN: Mr. W. Olsson

INVOICE NO. 39620

RECEIVED Aug. 26/80

ANALYSED Oct. 10/80

SAMPLE NO. :	U ppm Fluor
40-1580	5.5
40-1581	3.0

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: J. McKay

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 04-352597

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. A8010244-001-A

TO: ELDORADO NUCLEAR LIMITED
Ste. 400 - 255 Albert St.
Ottawa, Ontario
K1P 6A9

ATTN: Mr. W. Olsson

INVOICE NO. 39622

RECEIVED Aug. 28/80

ANALYSED Oct. 14/80

SAMPLE NO. :	U ppm Fluor
40-1600	1.0
40-1601	1.5
40-1602	1.0
40-1603	2.0
40-1604	2.0
40-1605	1.5
40-1606	1.5
40-1607	4.5
40-1608	2.5
40-1609	3.0

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: .....

APPENDIX C

SAMPLE LOCATION MAP

MAT CLAIMS

1980

ELDORADO NUCLEAR LIMITED

PROJECT 522

MAT CLAIMS

SAMPLE LOCATIONS

1980

Scale 1:2,500

150m 100 50 0 50

• soil
× water

Statement of Expenditures
MAT 1-56
1980

Direct Costs to Eldorado Nuclear:				
	Salaries:	J. Mulvie 14 days @ 100	$1,400	
		D. Melling 14 days @ 75	1,050	
			2,450	2,450
Contractor Costs:				
	Helicopters:	Shirley Helicopters	927.05	
			662.18	
			1589.23	4039.23
Analytical Charges:				
	375 Soils @ 2.60		975.00	
	21 Waters @ 2.80		79.80	
			1054.80	5094.03
Instrument Rental				
	RE-279 from Bondar Clegg rate= 562.50/mo.			
	1 unit for 0.50 mo		281.25	5375.28
Food Costs		Dawson Gen. Store	197.15	
			185.62	
			382.77	5758.05

The above costs are a true and accurate compilation of expenditures that were incurred in carrying out the field work on the MAT 1-56 claim block between August 7 and August 20, 1980.

William Olsson,
Project Geologist

PROFESSIONAL ENGINEER
W. J. OLSSON
ELDORADO
SASKATCHEWAN

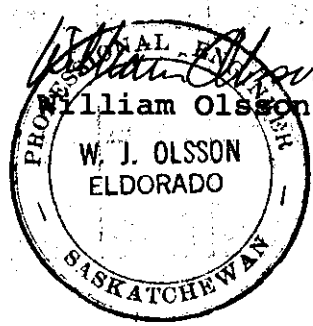
Sworn before me in
Ottawa, Ontario on
the 6th day of
February, 1981.

I, William Olsson, do hereby certify I am a geologist, having graduated from Queen's University in Kingston, Ontario and hold the degree of Bachelor of Applied Science. I am also registered as a Professional Engineer with the Professional Engineers of Saskatchewan.

I have practised my profession for seven years and am presently employed by Eldorado Nuclear Limited, 400 - 255 Albert Street, Ottawa, Ontario.

I certify that I have no direct or indirect interest in this property, nor do I anticipate receiving any in the near future.

William Olsson



RAW GEOPHYSICAL DATA

MAT CLAIMS

1980

OUTCROP

2

2800

2500

2100

65+00N

60+00N

55+00N

65+00W

60+00W BL

55+00W

LEGEND

ACTIVE WATERCOURSE

(2) ANOMALY OUTLINE

CONTOUR INTERVAL

0-80 cps
80-120 "
120-160 "
+160 "

NOTE: READINGS WERE OBTAINED AT 10m INTERVALS ALONG LINES TRENDING 292° AND 25m APART.

ELEVATION CONTOURS ARE IN FEET

Fig. 3

ELDORADO NUCLEAR LIMITED

PROJECT 522

MAT CLAIM

GEOPHYSICS-RADIOMETRICS

50 0 50 100 150 m

Scale 1:2,500

1980

65+00N

60+00N

65+00W

60+00W

ELDORADO NUCLEAR LIMITED

PROJECT 522

MAT CLAIMS

RADIOMETRIC DATA

50 0 50 100 150m

Scale 1:2,500

1980

OUTCROP

1

2

3

65+00N

60+00N

55+00N

65+00W

60+00W BL

55+00W

2800

2500

2100

LEGEND

ppm U

ACTIVE WATERCOURSE

(2) ANOMALY OUTLINE

CONTOUR INTERVAL

0-3 ppm U
3-5 "
5-7 "
7-10 "
+10 "

NOTE: ELEVATION CONTOURS ARE IN FEET.

Fig. 5

ELDORADO NUCLEAR LIMITED

PROJECT 522

MAT CLAIM

GEOCHEMISTRY - SOIL

50 0 50 100 150 m

Scale 1:2,500

1980

OUTCROP

2800

2500

2500

2100

1

2

3

4

5

6

65+00N

60+00N

55+00N

65+00W

60+00W BL

55+00W

LEGEND

cph

ACTIVE WATERCOURSE

(2) ANOMALY OUTLINE

CONTOUR INTERVAL

0-50	cph
50-100	"
100-150	"
150-200	"
200-250	"
+250	"

NOTE: ELEVATION CONTOURS ARE IN FEET.

Fig. 7

ELDORADO NUCLEAR LIMITED

PROJECT 522

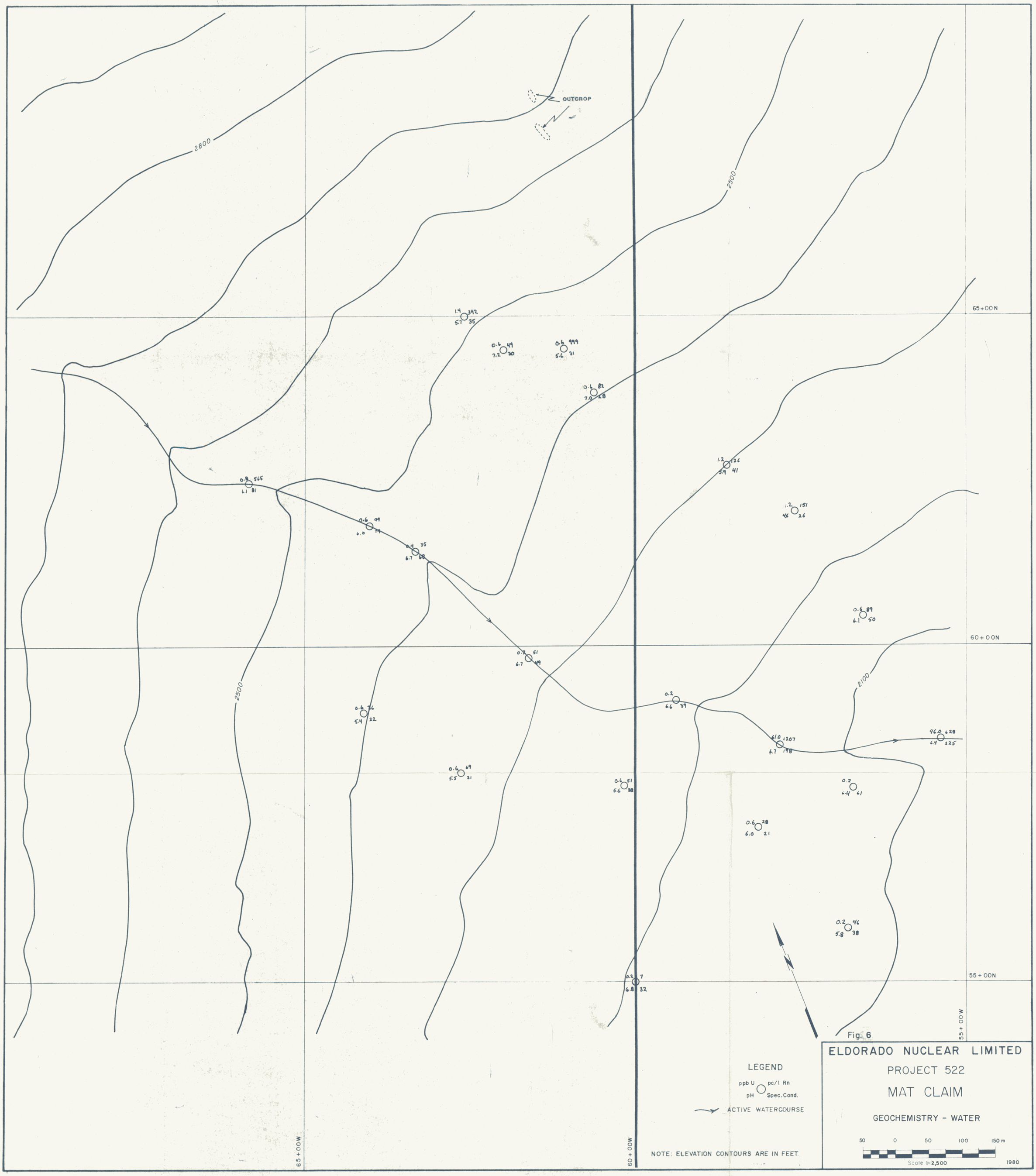
MAT CLAIM

ALPHA METER SURVEY

50 0 50 100 150 m

Scale 1:2,500

1980


OUTCROP
2800
2500
2500
2100
65+00N
60+00N
55+00N
65+00W
60+00W
55+00W
1.4 342 5.7 35
0.6 49 7.2 30
0.6 999 5.6 31
0.6 82 7.0 28
0.8 565 6.1 81
0.6 99 6.6 74
0.4 35 6.7 68
0.8 51 6.7 49
0.6 76 5.4 22
0.6 69 5.5 21
0.6 51 5.6 38
0.2 7 4.8 32
1.2 126 5.9 41
1.2 151 4.6 26
0.6 89 6.1 50
0.2 6.6 39
61.0 1207 6.7 198
46.0 628 6.4 225
0.2 6.4 61
0.6 28 6.0 21
0.2 46 5.8 38
LEGEND
ppb U pc/l Rn
pH Spec. Cond.
ACTIVE WATERCOURSE
NOTE: ELEVATION CONTOURS ARE IN FEET
Fig. 6
ELDORADO NUCLEAR LIMITED
PROJECT 522
MAT CLAIM
GEOCHEMISTRY - WATER
50 0 50 100 150 m
Scale 1:2,500
1980