REPORT ON DIAMOND DRILLING PROGRAMME
Bond 1 - 96 Claims

Mayo Mining District Y.T.
Claim Sheet 106D/10

Lat. 64°40'N Long. 134°57' W

October, 1977 091308

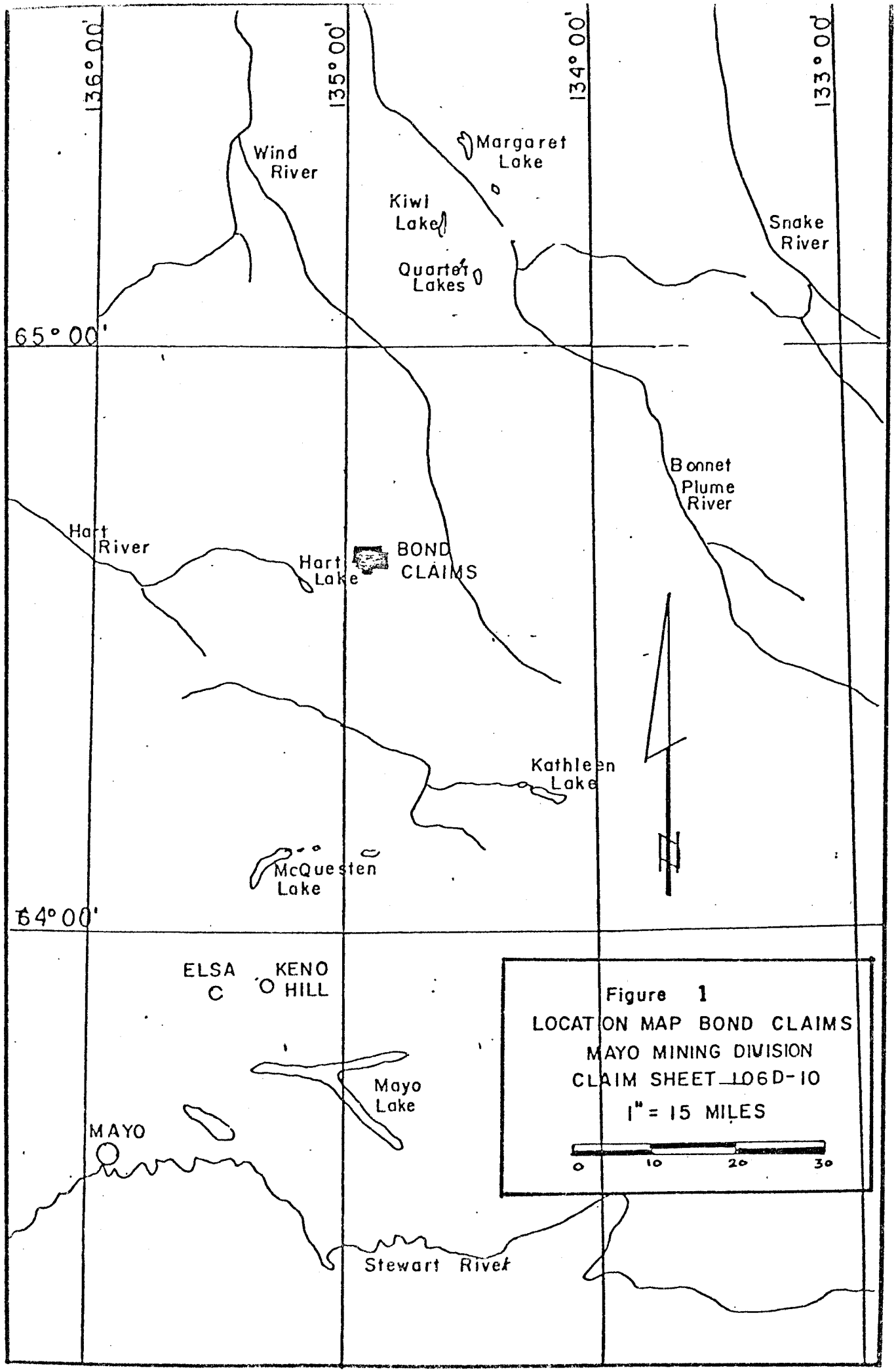
W.J. Olsson Geologist

REPORT APPROVED FOR
$40,905.00
MINING RECORDER.

TABLE OF CONTENTS

APPENDICES

FIGURES


136° 00'
135° 00'
134° 00'
133° 00'
65° 00'
64° 00'
Wind River
Margaret Lake
Kiwi Lake
Quarter Lakes
Snake River
Bonnet Plume River
Hart River
Hart Lake
BOND CLAIMS
Kathleen Lake
McQuesten Lake
ELSA
KENO HILL
Mayo Lake
MAYO
Stewart River
Figure 1
LOCATION MAP BOND CLAIMS
MAYO MINING DIVISION
CLAIM SHEET 106D-10
1" = 15 MILES
0
10
20
30

INTRODUCTION

Location and Access

The Bond 1-96 mineral claims are located approximately 100 miles north of Mayo, Yukon at 134°57' longitude and 64°39' latitude (NTS ref 106 D/10). Access to the property is by helicopter from Mayo. Access to the area is via Mayo to Hart Lake by float-equipped, fixed-wing aircraft and to the property by helicopter.

History

The Bond showings were located in late August, 1974 by Ogilvy Joint Venture (Standard Oil of B.C. Ltd., Aquitaine Company of Canada Ltd., Marietta Resources International Ltd., and Messrs. L. and H. Clay) managed by Archer-Cathro and Associates Ltd. In 1975 the property was worked under the auspices of Wernecke Joint Venture (Standard Oil of B.C. Ltd., Aquitaine Company of Canada Ltd., Messrs. L. and H. Clay) and directed by Archer-Cathro and Associates Ltd. During 1976, Eldorado Nuclear optioned the Bond group of claims from Wernecke Joint Venture.

Previous Work

In 1961, L.H. Green of the Geological Survey of Canada began mapping the Dawson, Larsen Creek and Nash Creek areas of the Yukon Territory at a scale of 1:250 000. His work was published as G.S.C. Memoir 364 in 1972. The Bond Claims are located in the north central portion of the Nash Creek map.

The first radioactive occurrence on Bond Creek was located in late August 1974 by Ogilvy Joint Venture.

Subsequent prospecting by Archer-Cathro and Associates Ltd. located the Bond II occurrence resulting in further staking of the area. Grid soil geochemical and radiometric surveys were performed over the claim group in 1975. Trenching and sampling of the occurrences took place at the same time. A diamond drill programme under the supervision of geologists employed by Eldorado Nuclear Limited was conducted. A total of 391.5 feet was drilled. Several radioactive zones were intersected and have been previously reported.

1977 FIELD PROGRAM

Objectives

A diamond drill programme was carried out over the Bond II occurrence to determine whether mineralization detected in the 1976 drill programme extended along strike and whether it was confined to the breccia horizon. During the 1976 drill programme it appeared magnetite was concentrated in breccia zones, some of which were mineralized with uranium. A magnetometer survey was therefore conducted over the area previously drilled to confirm a relationship between magnetite and uranium mineralization.

Logistics

Work on the Bond claims in 1977 was conducted under Exploration Permit MX18/76 issued to Eldorado Nuclear Limited for work in the Yukon Territory by the Atomic Energy Control Board; Land Use Permit Y75J217 issued by the Regional Director, Forest and Lands Division, Department of Indian Affairs and Northern Development, and Water Use Permit Y2A3-0590 issued under Section 11 of the Northern Inland Water Regulations.

Eldorado Nuclear Limited activated a company-owned Winkie diamond drill set up to drill IAX core. Equipment was

shipped to Whitehorse where driller W. Umpherville assembled and checked the gear. Mobilization from Whitehorse was by truck to Mayo where a DHC 3 Otter was utilized to fly the crew and gear into Hart Lake. A Bell 206 helicopter was used to transport men and equipment into the camp site on Bond Creek.

Drilling commenced on June 23 and was completed on July 12. The drill camp was supervised by Eldorado geologist William Olsson under the guidance of District Geologist Colin Riley. A total of 16 holes involving 1,140 feet of drilling was carried out with an average daily footage of 57 feet achieved. The drill core is stored in the core warehouse of the Department of Indian Affairs and Northern Development in Whitehorse. Representative samples of the individual holes are in the Eldorado office in Ottawa.

Problems encountered during the programme included missing parts, inadequate hose, heavy overburden conditions and poor weather.

Geophysics

A ground magnetometer survey utilizing a Barringer GM 122 proton magnetometer, was conducted by C. Riley and W. Olsson over the Bond II occurrence. An orientation survey on lines 50 feet apart running over the 1976 drill targets was carried out with a station interval of 10 feet. The data obtained during this survey confirmed the association of magnetite with uranium mineralization. An expanded survey was then conducted on a total of 23 lines 50 feet apart. The station-interval was 10 feet and the average length of survey line was 600 feet. A few off-scale readings were observed, however the general peak of the values tended

to be 200 to 250 gammas above the background (58,000 γ). The anomaly threshold is considered to be 58,500 gammas.

Diamond Drilling

Initially, 7 drill holes, 150 feet in length were laid out to be drilled on an azimuth of 190° with a dip of -45°. The first hole was laid out to investigate the downward extension of the radioactive zone intersected in the northern-most hole drilled in 1976. Also, it was intended to verify whether or not the magnetite-uranium relationship is a valid concept. Two holes were laid out on a section 150 feet to the west and four holes were laid out 150 feet to the west of the 1976 drill section to complete step-out sections across the magnetic zone.

A total of 16 holes were eventually collared during the programme. Five holes were abandoned due to difficult overburden conditions. Some core was recovered from two of the five holes. Six holes were completed to a depth of 150 feet. One hole was abandoned at 91 feet due to difficult drilling conditions. An intermediate hole 51 feet long was drilled in order to complete the cross-section. Core recovery was better than 90%. The diamond drill logs are appended to this report.

Results

(a) Geophysics

The orientation magnetometer survey carried out over the area drilled in 1976 confirmed the presence of a magnetic anomaly coincident with a radioactive breccia zone. The data from the expanded survey delineated two distinctive trends; the northern trend is linear and ends rather abruptly to

the east; the southern trend appears to arc towards the south and is open to the southeast. It is felt the western end of the northern anomaly is truncated by a fault running parallel to and underneath Bond Creek.

(b) Diamond Drilling

The data obtained in this year's diamond drilling coupled with that obtained in 1976 has clearly defined the stratigraphy in the vicinity of the Bond II showing. A sequence of mudstones, phyllite, and intercalated volcanic beds are present in contact with a brecciated unit considered to be explosive in origin. The upper strata dip approximately 40° to the north and appear to be conformable with one another.

The mudstone, phyllite and volcanic units tend to be fine to very fine grained, are well bedded and are moderately fractured. Fractures tend to contain limonite and to be hematized. Some magnetite and/or sulphide material is present along fractures. The contact between the upper units with the explosive breccia varies from gradational (hole B-5) to fault controlled (hole B-14).

The explosive breccia unit is the host rock for the uranium mineralization. The matrix consists of chlorite-carbonate material and is crudely foliated. (The foliation dips 30° to the north). Locally the matrix is highly crenulated. Lenses and pods of sulphide material are present throughout, however concentrations tend to correspond to radioactive zones. Concentrations of magnetite are found as disseminated euhedral to subhedral crystals in the matrix as well as in the form of fracture-filling material. The fragments of the breccia consist of barite material and/or quartz-feldspar material. They constitute 30% to 60% of the unit and exhibit a pink to purple hue in the radioactive zones.

DISCUSSION

The ground magnetometer survey has shown that there is a direct corresponding relationship between the magnetic anomaly in the vicinity of the Bond II occurrence and the breccia zones within the bedrock unit. Diamond drilling has shown while magnetite is present in all of the bedrock units, it tends to be concentrated within the breccia unit. Similarly, sulphide material is found in all of the bedrock units, but significant concentrations are found only within the breccia unit. The magnetite, sulphide material and radioactive mineralization are all concentrated within the explosive breccia unit due to a selection of areas of increased porosity and dilatancy in the breccia horizon by the solutions emplacing the minerals.

The 1977 diamond drilling program on the Bond claims verified that uranium mineralization is restricted to the breccia horizon. The radioactive zone is truncated to the east of 39+50 E but is open to the west. It would appear that a fault, running parallel to and beneath Bond Creek has cut the westward extension to the mineralized zone. This would account for the lack of mineralization on the west side of Bond Creek.

Assay values for samples of the radioactive intersections encountered in the 1977 drill program are presented as Appendix A. These values have failed to increase the thickness of the radioactive zone and have not significantly increased the tonnage.

CONCLUSIONS AND RECOMMENDATIONS

The 1977 field season on the Bond mineral claims has produced enough data to support the following conclusions:

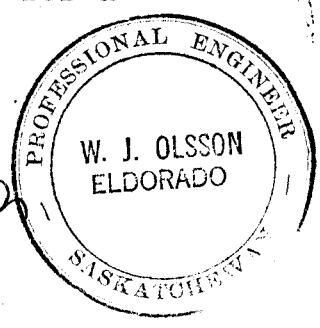
1. A magnetic anomaly outlines the explosive breccia found in the vicinity of the Bond II occurrence.
2. Uranium mineralization at the Bond II occurrence is restricted to the explosive breccia horizon.
3. Magnetite and sulphide material are present throughout the strata in the vicinity of the Bond II occurrence. Significant concentrations of these minerals are restricted to the explosive breccia horizon.
4. The uranium mineralization associated with the Bond II occurrence is cut off to the east of 39+50E but is open to the west.
5. The relative low cost associated with the Winkie drill makes the unit a viable alternative to high cost operations encountered with contract drilling.

Recommendations resulting from the 1977 programme on the Bond claims are:

1. No additional field work is recommended at this time.
2. Possible future work would include a detailed magnetometer survey followed by testing of anomalies with a Winkie drill to determine targets for a major drilling programme.

William Olsson

W.J. Olsson



ELDORADO NUCLEAR LIMITED

Exploration Division

APPENDIX A

DRILL CORE ASSAYS

Appendix A

DRILL CORE ASSAYS

		from	to	width (feet)	assay (% U_3O_8)
1)	Uranium				
	B-5	134.0	135.0	1.0	.011
		135.0	136.1	1.1	.023
		136.1	138.5	2.4	.142
		138.5	139.0	0.5	.087
		139.0	140.0	1.0	.018
	B-12	69.0	70.0	1.0	.007
		70.0	71.0	1.0	.087
		71.0	71.9	0.9	.584
		71.9	73.6	1.7	.132
		73.6	75.0	1.4	.021
		75.0	77.6	2.6	.001
		77.6	78.8	1.2	.001
		78.8	79.9	1.1	.017
		79.9	81.2	1.3	.081
		81.2	82.8	1.6	.080
		82.8	84.0	1.2	.157
		84.0	85.8	1.8	.091
		85.8	87.2	1.4	.124
		87.2	89.1	1.9	.146
		89.1	90.8	1.7	.052
		90.8	91.5	0.7	.125
		91.5	92.4	0.9	.014
		92.4	92.7	0.3	.082
		92.7	93.9	1.2	.007
		93.9	95.1	1.2	.032
		95.1	96.8	1.7	.018
		96.8	99.0	2.2	.006
		99.0	100.0	1.0	.001
		100.0	100.5	0.5	.088
		100.5	104.0	3.5	.004
		104.0	105.3	1.3	.165
		105.3	106.3	1.0	.083
		106.3	107.6	1.3	.014
		107.6	108.3	0.7	.010
		108.3	108.6	0.3	.031
		108.6	109.9	1.3	.003
		121.7	122.8	1.1	.005
		122.8	123.7	0.9	.063

		from	to	width (feet)	assay (% U_3O_8)
1)	Uranium				
	B-12 (con't.)	123.7	129.3	5.6	.004
		129.3	129.9	0.6	.005
		129.9	130.8	0.9	.013
		130.8	131.2	0.4	.018
		131.2	132.4	1.3	.146
		132.4	133.4	1.0	.004
		133.4	137.5	3.9	.004
		137.5	138.8	1.3	.006
		138.8	141.1	2.3	.193
		141.1	142.4	1.3	.006
		142.4	144.7	2.3	.001
		144.7	148.0	3.3	.003
		148.0	149.3	1.3	.025
		149.3	150.0	0.7	.010
		150.0	154.0	4.0	.012
	B-13	139.5	141.0	1.5	.026
		141.0	142.0	1.0	.057
		142.0	143.3	1.3	.116
		143.3	144.7	1.4	.002
		144.7	148.0	4.3	.001
		148.0	152.0	4.0	.001

		from	to	width (feet)	assay (% Cu)
2)	Copper				
	B-5	134.0	135.0	1.0	.08
		135.0	136.1	1.1	.31
		136.1	138.5	2.4	.84
		138.5	139.0	0.5	.16
		139.0	140.0	1.0	.04
	B-12	69.0	70.0	1.0	.01
		70.0	71.0	1.0	.15
		71.0	71.9	0.9	.44
		71.9	73.6	1.7	.39
		73.6	75.0	1.4	.07
		75.0	77.6	2.6	.05
		77.6	78.8	1.2	.04
		78.8	79.9	1.1	.40
		79.9	81.2	1.3	.15
		81.2	82.8	1.6	.08
		82.8	84.0	1.2	.19

		from	to	width (feet)	assay (% Cu)
2)	Copper				
	B-12 (con't.)	84.0	85.8	1.8	.11
		85.8	87.2	1.4	.20
		87.2	89.1	1.9	.23
		89.1	90.8	1.7	.30
		90.8	91.5	0.7	.54
		91.5	92.4	0.9	.05
		92.7	93.9	1.2	.01
		93.9	95.1	1.2	.01
		95.1	96.8	1.7	.02
		96.8	99.0	2.2	.03
		99.0	100.0	1.0	.01
		100.0	100.5	0.5	.03
		100.5	104.0	3.5	.03
		104.0	105.3	1.3	.41
		105.3	106.3	1.0	.75
		106.3	107.6	1.3	.01
		107.6	108.3	0.7	.01
		108.3	108.6	0.3	.02
		108.6	109.9	1.3	.01
		109.9	122.8	1.1	.01
		122.8	123.7	0.9	.01
		123.7	129.3	5.6	.02
		129.3	129.9	0.6	.01
		129.9	130.8	0.9	.01
		130.8	131.2	0.4	.01
		131.2	132.4	1.3	.01
		132.4	133.4	1.0	.07
		133.4	137.5	3.9	.09
		137.5	138.8	1.3	.02
		138.8	141.1	2.3	.13
		141.1	142.4	1.3	.01
		142.4	144.7	2.3	.23
		144.7	148.0	3.3	.79
		148.0	149.3	1.3	.31
		149.3	150.0	0.7	.44
		150.0	154.0	4.0	.21
	B-13	88.0	93.0	4.0	.10
		93.0	98.0	5.0	.10
		98.0	103.0	5.0	.06
		103.0	108.0	5.0	.01
		108.0	113.0	5.0	.04
		113.0	118.0	5.0	.05
		118.0	123.0	5.0	.01
		123.0	128.0	5.0	.01
		128.0	133.0	5.0	.01
		133.0	137.0	4.0	.01
		137.0	139.5	2.5	.06

		from	to	width (feet)	assay (% Cu)
2)	Copper				
	B-13	139.5	141.0	1.5	.01
	(con't.)	141.0	142.0	1.0	.03
		142.0	143.3	1.3	.11
		143.3	144.7	1.4	.01
		144.7	148.0	3.3	.01
		148.0	152.0	4.0	.01

ELDORADO NUCLEAR LIMITED

Exploration Division

APPENDIX B

DIAMOND DRILL LOGS

B-4 to B-16 inclusive

212 [illegible]
NORTH VANCOUVER
CANADA
TELEPHONE
AREA CODE
TELEX

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CERTIFICATE OF ASSAY

CERTIFICATE NO. 32682

INVOICE NO. 20988

RECEIVED July 20, 1977

ANALYSED July 26, 1977

[illegible]athro & Assoc. Ltd.,
[illegible] 4127
[illegible]se, Y.T.

EYP-514

	% Cu	% U_3O_8
[illegible]51	0.01	0.007
[illegible]52	0.15	0.087 1.75
[illegible]53	0.44	0.584 [illegible].0
[illegible]54	0.39	0.132 2.6
[illegible]55	0.07	0.021 [illegible]
[illegible]56	0.05	0.001
[illegible]57	0.04	0.001
[illegible]58	0.40	0.017 .3
[illegible]59	0.15	0.081 1.6
[illegible]60	0.08	0.080 1.6
[illegible]61	0.19	0.157 3.2
[illegible]62	0.11	0.091 1.85
[illegible]63	0.20	0.124 2.5
[illegible]64	0.23	0.146 2.9
[illegible]65	0.30	0.052 1.0
[illegible]66	0.54	0.125 2.5
[illegible]67	0.05	0.014 .3
[illegible]68	0.01	0.082 1.6
[illegible]69	<0.01	0.007
[illegible]70	<0.01	0.032 .6
[illegible]71	0.02	0.018 .03
[illegible]72	0.03	0.006
[illegible]73	<0.01	0.001
[illegible]74	0.03	0.088 1.7
[illegible]75	0.03	0.004
[illegible]76	0.41	0.165 [illegible]
[illegible]77	0.75	0.083 [illegible]
[illegible]78	0.01	0.014
[illegible]79	0.01	0.010
[illegible]80	0.02	0.031
[illegible]81	0.01	0.003
[illegible]82	<0.01	0.005
[illegible]83	0.01	0.063 1.8
[illegible]84	0.02	0.004
[illegible]85	0.01	0.005
[illegible]86	<0.01	0.013
[illegible]87	<0.01	0.018
[illegible]88	0.01	0.146 [illegible]
[illegible]89	0.07	0.004
[illegible]90	0.09	0.004

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
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TELEX: 043-52597

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CERTIFICATE OF ASSAY

CERTIFICATE NO. 32683 A

INVOICE NO. 21035

RECEIVED July 20, 1977

ANALYSED July 28, 1977

TO: Archer Cathro & Assoc. Ltd.,
Box 4127
Whitehorse, Y.T.

ATTN: EYP-514

SAMPLE NO. :	% Copper	% U_3O_8
12191	0.02	0.006
12192	0.13	0.193
12193	< 0.01	0.006
12194	0.23	0.001
12195	0.79	0.003
12196	0.31	0.025
12197	0.44	0.010
12198	0.21	0.012

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CANADA V7J 2C1
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AREA CODE: 604
TELEX: 043-52597

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CERTIFICATE OF ASSAY

CERTIFICATE NO. 32683 B

INVOICE NO. 21036

RECEIVED July 20, 1977

ANALYSED July 28, 1977

TO: Archer Cathro & Assoc. Ltd.,
Box 4127
Whitehorse, Y.T.

EYP-514 (Bond)

ATTN:

SAMPLE NO. :	% Copper	% U_3O_8
12199	0.08	0.011
12200	0.31	0.023
12201	0.84	0.142
12202	0.16	0.087
12203	0.04	0.018
12204	0.10	
12205	0.10	
12206	0.06	
12207	0.01	
12208	0.04	
12209	0.05	
12210	0.01	
12211	0.01	
12212	< 0.01	
12213	< 0.01	
12214	0.06	
12215	< 0.01	0.026
12216	0.03	0.057
12217	0.11	0.116
12218	< 0.01	0.002
12219	< 0.01	0.001
12220	0.01	< 0.001

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR°	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
@collar	0	23.0	23'	-45	16.26		16.26	
						16.26		16.26

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 39+50
LATITUDE 1+50S
DEPARTURE 39+50E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-4
AZIMUTH 190°
DIP -45°
LENGTH 23.0'
PURPOSE Inv. Mag. anomaly
COMPLETED June 23/77
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	6.0	Casing
6.0	23.0	Interbedded Sedimentary and Volcanic Mudstones

Colour: Varies from grey through buff grey to red brown

Hardness: 3-5

Composition: 50% carbonate, 30% chlorite (and other mafics).
20% quartz and secondary minerals.

Texture: Very fine grained. Largest grain size is less than 1 mm in size.

Structure: Bedding is very well developed and cuts the core at 70°. Locally it shallows to 45° and also some minor brecciation is evident (ie. 7.0'-7.2'). Fracturing is parallel to bedding and at 45° in a direction opposite to that of the bedding.

Alteration: There is intense hematitization associated with the fracture patterns mentioned above. There is also some accompanying limonitic stain. Some sulphide material (mainly pyrite) is present with the hematite as is minor magnetite.

Radioactivity: None.

Broken Core: None.

6.0 - 23.0

This unit is very well banded (bedded) due to alternating beds of siltstone (coarse) and volcanic mudstone (fine). The hematite and limonitic beds appear to be a post-depositional feature (see 22.0')at that point there is a 6" section of core whose centre is a grey-green colour while the outter 1" is

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES WIDTH	CORE SAMPLES %	CORE SAMPLES AVERAGES
		deep red-purple colour due to hematite staining. The contact between the 2 colours is uneven, suggesting this feature is post-depositional. The hole was abandoned at the 23' mark due to drilling difficulties. The set-up was moved to the north 2' and a second hole B-5 was drilled.					

DIP TESTS

TEST	FROM	TO	TOTAL	DIP	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
@collar	0	149	149		-45°	105.36		105.36	
							105.36		105.36

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 39+50E
LATITUDE 1+48S
DEPARTURE 39+50E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-5
AZIMUTH 190°
DIP -45°
LENGTH 149'
PURPOSE Inv. Mag. anomaly
COMPLETED JUne 25/77
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	6.0	Casing
6.0	35.0	Interbedded Sedimentary & Volcanic Mudstones
		Colour: Greyish to buff grey to red brown.
		Hardness: 3-5
		Composition: 40-60% carbonate, 30-40% chlorite, 10-20% silica, 5-10% other minerals (magnetite, sulphides, etc.)
		Texture: very fine grained.
		Structure: This unit is more fractured than that recognized in B-4 (only slightly more). Bedding is well developed and cuts the core steeply @ 70° or so. Individual beds are .25-.50" thick: fractures cut the core at 40°, 45°, and at 60°. All contain deeply hematized material.
		Alteration: There is intense hematitization associated with all of the fracture patterns. Generally this hematitization extends into the mudstone (up to several inches). Magnetite and pyrite are present in some of the hematitized zones.
		Radioactivity- None
		Broken Core - Minor broken core is associated with some of the larger hematitized fracture patterns.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES WIDTH	CORE SAMPLES %	CORE SAMPLES AVERAGES
35.0	72.5	Volcanic Mudstone (phyllite?) Colour: Pale grey green to light tan. Hardness: 3.5 Composition: 50-60% carbonate (?) 30-40% chlorite, 10-20% silica and other secondary minerals. Texture: Very fine grained. Structure: A very weak bedding is present cutting the core at 60-70°. Locally fractures ∥ the bedding & occur in zones 4" to 1' thick. Some breccia is associated with these wider fracture zones. Also vuggy quartz material is present in the larger fractures (@54'). This quartz is accompanied by magnetite. This unit is probably a transitional phase from the previous unit to the next unit as it possesses qualities of each. Lenses of sulphide material (some chalco. but mainly pyrite) are present periodically. They generally lie near ll to the bedding. This unit is most likely the green phylite mentioned in logs of holes B-1 to B-3 incl. Alteration: Limonitic staining accompanies the fracture pattern. This is in contrast to the intense hematitization observed in the previous unit. There is some minor hematitization with the limonite. The sulphide lenses do not appear to be visibly altered nor have they altered the host rock. Magnetite found with the vuggy quartz veinlets is partially hematitized. Radioactivity: None.					

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
35.0	72.5	Volcanic Mudstone (phyllite?) con't. Broken Core: Minor broken core is found with some of the larger fracture patterns. 35.0-72.5 This unit corresponds to the green phyllite mentioned in drill logs of holes B-1 to B-3 inclusive. It also is a transitional zone between the overlying well-bedded mudstones and the underlying breccia. The final 5' of this unit are locally brecciated implying a transitional phase within the transitional zone.
72.5	149.0	Explosive(?) Breccia Colour: Pale green-grey with large fragments of pink to brownish to dark black coloured material. Hardness: 3 - 5. Composition: 50% carbonate, 30% chlorite, 10-20% barite, 0-10% silica and other minerals. Texture: The matrix is very fine grained and fragments are rounded to sub-rounded and up to several inches in diameter. Structure: A crude bedding (foliation?) cuts the core at 60-70°. The matrix is locally crenulated. Bands of barite exhibit drag folding. Fractures cut the core at 30-40°, 60° and 90°. Generally there is intense hematization and limonitic staining associated with the fractures. Some of the wider fractures contain vuggy quartz. Fragments of flint are present at 103'-105' with barite and quartz veinlets. Lenses of sulphide material are found throughout the unit associated with the fractures or on the fringe of barite stringers. Crystals of magnetite are found with the fractures as well. Fault gouge is present at 128' and 133' (no angle evident). (cuts at 45°)

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
72.5	149.0	Explosive(?) Breccia, con't.					

Alteration: Hematization and/or limonitic staining are found with the fracture patterns. 134.7-139.0 is radioactive and tends to exhibit a pink-purple hue in contrast with the rest of the unit. There is also a high sulphide content to this radioactive interval. The sulphides tend to rim quartz and barite veins that cut the core parallel to the bedding-foliation. A high amount of magnetite is also present. The hematite is altered magnetite.

Radioactivity: There is a radioactive section as follows:

135.0'-135.5'	175 cps
136.5'-136.9'	250 cps
136.9'-137.6'	450 cps
137.6'-138.4'	450 cps
138.4'-139.2'	175 cps

The radioactivity is associated with a concentration of sulphide material within the breccia. Also the section was a pink-purple hue to it.

Broken Core: 128'; 133' (fault zones?)

END OF HOLE.

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	18	18	-45	12.73		12.73	
						12.73		12.73

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 1+90S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE N/A

HOLE No. B-6
AZIMUTH 190°
DIP -45°
LENGTH 18'
PURPOSE Investigate Mag.
COMPLETED June 26/77 Anom
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	18	Casing
		Due to heavy sanding problems, this hole was abandoned as well. Hole B-7 was drilled to investigate this location.
		END OF HOLE.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LAT. CUM.	DEPARTURE	DEP. CUM.
Collar	0	14	14	-45	9.90		9.90	
						9.90		9.90

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 1+86S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE N/A

HOLE No. B-7
AZIMUTH 190°
DIP -45
LENGTH 14'
PURPOSE Investigate Mag.
COMPLETED June 27/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
0	14	Casing					
		This hole was abandoned at 14' due to heavy sanding problems. A heavier mud pump will be required to drill this location due to the fine grained nature of the sand present in the overburden.					
		END OF HOLE.					

DIP TESTS

TEST	FROM	TO	TOTAL	DIP	DIP CORR.	LATITUDE	LAT. CUM.	DEPARTURE	DEP. CUM.
Collar	0	145	145		-45	102.53		102.53	
							102.53		102.53

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 5+20S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-8
AZIMUTH 190°
DIP -45°
LENGTH 145'
PURPOSE Investigate Mag.
COMPLETED June 29/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	21.0	Casing
21.0	66.1	Explosive Breccia

Colour: Pale grey with rounded to subrounded fragments of buff. Also zones of red-brown are present.

Hardness: 3 - 5.

Composition: The matrix consists of chlorite and carbonate(?) while the breccia fragments contain barite with some quartz-feldspar content. Sulphides and magnetite comprise up to 5% of the unit.

Texture: The matrix is very fine grained. The fragments are up to several inches in diameter.

Structure: A very faint foliation is present cutting the core at 50° to 60°. Numerous fractures are present cutting the core at 30°, 60° and 90°. Some local fractures run near parallel to the core. From 21' to 50', these fractures tend to be intensely hematized and locally are vuggy with quartz. From 50' to 66.1' the fractures tend to be somewhat tighter and the associated hematization is noticeably limited when compared with the upper portions of the unit. Sulphide material (lenses, pods, fracture filling) is found throughout the unit. The foliation is post brecciation as the rounded to subrounded fragments tend to be elongated parallel to the foliation. Fracturing occurred later and solution passing along the fractures altered the unit (most notably magnetite to hematite.) From 62.9' to 63.3' there is a massive quartz vein containing crystals of magnetite. Badly broken core at 55' suggests a possible fault or intensive shear zone.

Alteration: Intense hematization is associated with the fracturing above 50'. This hematization tends to affect the unit above and

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
21.0	66.1	Explosive Breccia, con't.					
		Alteration: below the fractures. Locally magnetite is altered to hematite in the vicinity of the fractures, however, when it appears in the unit as a pod or lense, it tends to be unaltered. The matrix is chlorite-rich - the blue variety.					
		Radioactivity: None.					
		Broken Core: The core is generally broken around the wider fractures in the initial 25' of core. A zone of intensely broken core is present at 55' suggesting a possible fault zone.					
		21.0-66.1 This unit is definitely what is termed "Explosive Breccia". Sulphide material is found throughout as lenses, pods and/or veins (fracture filling). Magnetite is found with or without sulphide material. No pink-purple hue is present. The contact with the following unit is very abrupt. Some local breccia zones are present within the next unit, however they are not extensive.					
66.1	145.0	Volcanic Barite-Chlorite Breccia					
		Colour: Pale grey-green with some zones of buff.					
		Hardness: 3 - 5					
		Composition: 50% chlorite, 30% carbonate, 15% barite, 5% secondary minerals.					
		Texture: Very fine grained matrix with breccia fragments up to several inches across.					
		Structure: Fractures cut the core at 30°, 45° (parallel to foliation) and at 90°. Broken core is present at 105' suggesting a possible fault. 117.9-119.6' consists of a solid white coloured barite vein. This is preceded by a hematized, magnetite - rich fracture that cuts the core at 45°. Other impure barite veins crisscross the core. From 120'-145' euhedial to subhedial crystals of magnetite disseminated in the unit impose a speckled appearance to the core. 133.3-134.0', brown to buff coloured barite vein with sulphide material. This vein					

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
66.1	145.0	Volcanic Barite-Chlorite Breccia, con't					

Structure: cuts the core parallel to the foliation. The brecciation of this unit is subtle compared to that of the preceding unit.

Alteration: Intense hematitic and/or limonitic staining is present associated with the fractures at the following footages:

66.5'- 67.1'	111.0'- 111.4'
67.3'- 68.8'	111.6'- 111.8'
76.8'- 77.2'	113.8'- 114.1'
82.6'- 82.8'	114.9'- 115.5'
96.4'- 96.5'	133.0'- 133.4'
97.0'- 97.2'	138.5' -138.7'

There is very little evidence to show any alteration of the sulphides.

Radioactivity: None.

Broken Core: At 105'

66.1-145.0 This unit appears to correspond to what has been previously logged as a breccia. It is more subtle that the "Explosive breccia" as the angular fragments in this unit compose 30% of the rock while those in the former unit are close to 60% of the unit.

End of Hole.

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	36'	36'	-45°	25.56		25.56	
						25.56		25.56

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 4+10S
DEPARTURE 41+00E
ELEVATION Surface
CORE TAX
STORAGE Whitehorse

HOLE No. B-9
AZIMUTH 190°
DIP -45°
LENGTH 36'
PURPOSE Investigate Mag.
COMPLETED June 30/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	10.0	Casing
10.0	36.0	Explosive Breccia

Colour: Pale green-blue-grey with zones of buff and red-brown.

Hardness: 3 - 5.

Composition: Matrix is chlorite-carbonate while fragments are barite and/or quartz-feldspar.

Texture: Matrix is fine to very fine grained while the fragments are up to several inches across.

Structure: A foliation cuts the core at 60°. The fragments tend to be elongated parallel to this foliation. Numerous hematized fracture patterns cut the core at 45°, 60° and 90°. In some local cases, tight fractures run near parallel to the core. Loss of core reported at 27.0 to 27.7 due to a subsurface cavity. Sulphide material (chalcopyrite and pyrite) is present as lenses and pods generally but also as fracture filling material. Disseminated magnetite throughout with concentrations appearing between 18' and 28' giving the unit a speckled appearance.

Radioactivity: None.

Broken Core: None.

10.0-36.0 The high incidence of magnetite present accounts for the magnetic anomaly. There is no radioactivity in this hole.

This hole was abandoned due to a cave-in. Drill hole B-10 was drilled to further investigate the mag anomaly at this location.

END OF HOLE

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	91	91'	-45	64.35		64.35	
						64.35		64.35

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 4+08S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-10
AZIMUTH 190°
DIP -45°
LENGTH 91'
PURPOSE Investigate Mag.
COMPLETED July 2/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	10.0	Casing
10.0	12.0	Cored boulders - not bedrock
12.0	42.0	Highly Fractured Explosive Breccia

Colour: Blue-grey with zones of buff and red-brown.

Hardness: 3 - 5.

Composition: The matrix consists of chlorite and carbonate while fragments consist of barite-rich quartz-feldspar material. Sulphides and oxides comprise up to 5% of the unit.

Structure: A foliation cuts the core at 45°. The rounded to subrounded fragments (up to several inches in size) are roughly elongated parallel to this foliation. Cavities were encountered at the following footages: 23.3'-24.0'; 20.0'-21.0'; 33.2'-33.7'. Fracture patterns cut the core at 45° (parallel to the foliation) 60° and 90°. Generally these fractures are characterized by some broken core and moderate to intense hematization.

Alteration: Intense to moderate hematization is found associated with the various fracture patterns. The matrix is a blueish colour (alteration product?).

Radioactivity: None.

Broken Core: There is broken core at 37' and 42'.

12.0-42.0 This unit is a subunit of the explosive breccia in the sense that it differs from the explosive breccia because of the intense fracturing that has occurred. This possibly could represent a contact zone between the explosive breccia and the adjacent country rock.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES WIDTH	CORE SAMPLES %	CORE SAMPLES AVERAGES
42.0	91.0	Explosive Breccia Colour: Pale to blue grey with rounded zones of buff. Hardness: 3 - 5 Composition: The matrix is chlorite and carbonate while the fragments consist of barite and/or quartz-feldspar material. Some fractures are hematized. There is up to 5% magnetite and/or sulphides. Texture: The matrix is very fine grained while the fragments are rounded to subrounded and are up to several inches in size. Structure: A foliation, developed in the matrix, is cutting the core at 50°. Some fractures (tight) cut the core at 45° and 60°. From 69.0-76.0 the core is criss-crossed by numerous fractures and exhibits intense hematization. Barite rich and chert fragments are roughly aligned parallel to the foliation. 47'-52' exhibits a foliation near parallel to the core. Specks of magnetite are found throughout and are concentrated along the fragment-matrix boundaries. 82.6'-91.0' exhibits a very fine grained matrix with wisps of barite material comprising only about 25% of the unit. (This may mark the base of the volcanic breccia?) The matrix is much bluer in colour than in the rest of the unit. Sulphide material (chalco and pyrite) is not as extensive in this hole as was observed in previous holes. Magnetite is present in the same proportion (5-10%) as is present elsewhere. Alteration: The matrix is a blue green colour with a tendancy for an increase in blue towards the end of the hole. Magnetite has been altered to hematite not only along fractures but the disseminated magnetite is hematized as well. The fracture zone (69.0'-76.0) is intensely chloritized and hematized. Radioactivity: None. 42.0-91.0 This unit is typical of the explosive breccia except for 82.6-91.0 which does not exhibit much brecciation. Mineralogically it consists of the same minerals as the breccia. No sign of the pink-purple alteration associated with radioactivity in other holes was observed.					

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	16.0	16.0	-45°	11.31		11.31	
						11.31		11.31

DIAMOND DRILL HOLE LOG

Project 516

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 3+00S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE N/A

HOLE No. B-11
AZIMUTH 190°
DIP -45°
LENGTH 16'
PURPOSE Investigate Mag.
COMPLETED July 3/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	16	Casing
		The hole was abandoned due to heavy sanding in the overburden.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	154	154	-45°	108.89		108.89	
						108.89		108.89

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 37+95E
LATITUDE 3+10S
DEPARTURE 37+95E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-12
AZIMUTH 190°
DIP -45°
LENGTH 154'
PURPOSE Investigate Mag.
COMPLETED July 5/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	4.0	Casing
4.0	18.0	Broken Rock Badly weathered basement or boulders (float)
18.0	154.0	Explosive Breccia Colour: Matrix is a blue-grey colour and the fragments are pink to buff. Hardness: 3 - 5. Composition: The matrix consists of carbonate and chlorite while the fragments are quartz-feldspar and barite rich with some chert fragments. Texture: Matrix is fine grained. The fragments are up to 4 or 5 inches in size. Structure: Several cavities were encountered in drilling at the following footages: 26.2'-26.8'; 28.0'-28.3'; 47.0'-48.0'; 55.7'-56.1'. A foliation cuts the core at 45-50°. Fractures crisscross the core, especially in the upper 60' of the unit. Magnetite and sulphide-filled fractures are present throughout. The magnetite is generally altered to hematite. A quartz vein is present from 134.0' to 134.5'. Euhedral crystals of carbonate are present at 136.0' (Personal sample taken). Broken core at 113' suggests a possible fault. Alteration: Magnetite is hematized; sulphides show little or no alteration; a pink-to-purple colour occurs in fragments in radioactive sections while the matrix is a greenish colour.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
18.0	154.0	Explosive Breccia, con't.					

Radioactivity:

70.0'- 74.9'	-	280 cps	(BGS-BL)
79.5'- 96.8'	-	230 cps	(BGS-BL)
100.3'-109.1'	-	120 cps	(BGS-BL)
139.8'-141.0'	-	450 cps	(BGS-BL)

High readings as follows:

70.4'- 70.8'	850 cps
71.3'- 72.0'	750 cps
73.2'- 73.4'	400 cps
83.2'- 87.8'	420 cps
93.8'- 96.8'	400 cps
139.8'-141.0'	450 cps

Broken Core: At 113'.

18.0-154.0 The entire hole is within the explosive breccia unit. Difficulty in pulling the rods was encountered at this footage so it could not be extended past 154'. The radioactive intervals are extensive and the pink-purple alteration common to mineralized breccia is present.

END OF HOLE.

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	152'	152'	-45	107.48		107.48	
						107.48		107.48

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 38+20E
LATITUDE 2+00S
DEPARTURE 38+20E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-13
AZIMUTH 190°
DIP -45°
LENGTH 152'
PURPOSE Investigate Mag.
COMPLETED July 7/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	2.0	Casing
2.0	88.0	Fractured, Well Layered (Foliated) Phyllite

Colour: Initially a dark grey which becomes a lighter shade around 40'. Some buff layers present.

Hardness: 3 - 5.

Composition: 80% chlorite and carbonate, silica in 10% hematite, limonite 10%.

Texture: Very fine grained.

Structure: A layering (foliation?) cuts the core at 50°. This feature is poorly to well developed where layers of buff and grey material ½" thick alternate with one another. The core is very broken up suggesting this is a fracture zone. Lost core is reported at the following footages:

6.0'- 6.8'	28.0'-29.2'
7.9'- 8.6'	35.0'-36.0'
10.8'-11.7'	37.9'-38.4'
22.0'-22.5'	39.0'-39.7'
23.9'-24.5'	

Sporadically between

39.7'-44.8'	81.0'-82.4'
45.0'-46.3'	83.9'-84.6'
51.6'-52.0'	86.0'-87.3'
79.0'-80.0'	

Intensely broken core is present at the following footages due to intense fracturing:

27.0'-28.0'	63.0'-68.0'	74.0'-78.0'
36.0'-37.9'	72.0'-73.0'	87.0'-88.0'

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
2.0	88.0	Fractured, Well Layered (Foliated) Phyllite, con't					
		Structure: Fractures tend to cut the core at 30°, 45° and 60°. In some instances a pattern cuts the core at 90°. In the vicinity of the fractures, the core is very fine grained (ie. mudstone) and is brownish greenish in colour. The entire unit represents a zone of fracturing.					
		Alteration: Hematite and limonite staining are present in the fractures with the latter predominating. Magnetite is less than 5% and it is only partially hematized.					
		Radioactivity: None					
		Broken Core: See "Structure".					
		2.0-88.0 The fine grained nature of the unit classes it as a phyllite although volcanic mudstone may be an alternate name. The broken nature of the core suggests a zone of wide spread fracturing that occurred after the foliation developed. Of significance is the lack of sulphide material and the relative small amount of magnetite present compared to the core observed in other holes. The magnetite that is present appears to be in fractures and not disseminated as observed elsewhere.					
88.0	152.0	Explosive Breccia					
		Colour: The matrix is a steel-blue grey. The fragments are buff coloured (pink to purple in zones of radioactivity).					
		Hardness: 3 - 5.					
		Composition: The matrix is a carbonate-chlorite matrix while the fragments are rich in barite and quartz-feldspar material. Magnetite is up to 5% locally. Up to 5% sulphides present (chalco, pyrite and/or pyrrhotite).					
		Texture: The matrix is fine-grained while the fragments are up to 4" in size.					

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
88.0	152.0	Explosive Breccia, con't.					

Structure: A rough foliation cuts the core at 50-60°. It is defined by the elongation of the smaller fragments that are rounded to sub-rounded. From 133' magnetite is disseminated giving the unit a speckled appearance. Sulphide material is found as fracturing fillings or as lenses parallel to the foliation. Fractures cut the core at 30°, 60° (parallel to foliation) and 20°.

Alteration: Hematite and/or limonite is present on some of the fractures. Generally this type(s) of alteration is not as wide spread as in the previous unit. Magnetite is locally hematized. The radioactive zone is signified by pink to purple fragments in a greenish matrix.

Radioactivity: The following footage is radioactive:

140-142'	190 cps
142-143'	425 cps
143-143.5'	160 cps

There is a pink-purple hue to the fragments and a greenish colour to the matrix and part of the fragments. Also there is a concentration of magnetite and sulphide material coinciding with the higher grade portions. There are such concentrations elsewhere that are not radioactive. The fragments show signs of having been fractured before the formation of the breccia. Fragments are cross-cut by barite(?) filled fractures that do not extend into the matrix.

Broken Core: There is broken core associated with the radioactive zones and sporadically between 104' and 122'

88.0-152.0 This unit is typical "explosive" breccia. There is an increase in the magnetite content with depth. Fragments in the breccia show signs of previous deformation. Although there is a concentration of sulphide material and magnetite with the radioactive zones there are such concentrations elsewhere that are not radioactive.

End of Hole.

DIP TESTS

TEST	FROM	TO	TOTAL	DIP CORR.	LATITUDE		DEPARTURE	
						CUM.		CUM.
0	0	145'	145'	-45°	102.53		102.53	
						102.53		102.53

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 1+81S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-14
AZIMUTH 190°
DIP -45°
LENGTH 146.0
PURPOSE Investigate Mag.
COMPLETED July 9/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	28.0	Casing
28.0	115.0	Fine Grained Phyllite

Colour: Light green-grey with zones of orange-brown and red-brown.

Hardness: 3 - 5.

Composition: 80% chlorite-carbonate, 10% barite, 10% secondary minerals.

Texture: Very fine grained.

Structure: A foliation cuts the core at 30° initially and is non-existant in the last half of the unit. Fracturing is moderate to intense from 28' to 50'. Loss of core encountered at:

31.4'-31.9'	60.2'-61.1'
30.5'-31.2'	68.0'-68.5'
34.4'-35.0'	93.0'-94.4'
58.2'-59.0'	111.0'-112.0'

Badly broken core from 112.0'-115.0'; also 40% recovery ⇒ fault. Fracture patterns tend to cut the core at 45° and 60°. Generally the unit is orange-brown near the fractures (also hematite stain). Locally, breccia zones 2"-3" wide have developed. The foliated portion of the unit exhibits crenulation. "Z" folding is evident in the fractures. Barite "patches" occur in the latter half of the unit and are accompanied by magnetite. From 107' to 115' there is a higher concentration of magnetite than elsewhere. The contact with the next unit is marked by a possible fault. (112-115)

Alteration: Magnetite → hematite (moderate)
Magnetite → limonite (predominate)
Disseminated magnetite shows little signs of alteration.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
28.0	115.0	Fine Grained Phyllite, con't Alteration: Some of the tighter fractures are surrounded by a feature similar to a water stain. This "stain" invades the unit several inches from the fracture ⟹ solution encroachment on the unit through the fractures. Radioactivity: None. Broken core: Everywhere - most notably 112'-115'. 28.0-115.0 This unit is the phyllite and locally resembles a barite breccia. It is very fine grained and partly foliated (upper portions only). Magnetite is concentrated mainly in lower portions. Fracturing is present throughout.					
115.0	124.0	Explosive Breccia Colour: Matrix is a steel blue-grey, the fragments are buff. Hardness: 3 - 5. Composition: Matrix consists of chlorite and carbonate while the fragments are barite and quartz-feldspar rich. Texture: Matrix is fine grained. Fragments are up to 3 inches. Structure: A well developed foliation is present cutting the core at 60°. It is outlined by the elongation of fragments. (More so than observed elsewhere. Several fracture patterns cut the core at 90° and at 30°. Some disseminated sulphides are present (<2%). Magnetite present as well (<5%). This unit grades into the following unit over several feet. Alteration: Limonite and hematite staining along fractures. Radioactivity: None. Broken Core: At 119'.					

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
		115.0-124.0 This unit is explosive breccia. Foliation is better developed than usual. The narrow thickness may be due to faulting (112-115) (accounts for intense foliation).					
124.0	146.0	Barite Breccia (Volcanic)					
		Colour: Pale buff-green					
		Hardness: 3 - 5.					
		Composition: 30-40% Barite 40% Chlorite - Carbonate 10% Sulphide and oxide 10% Secondary					
		Texture: Fine grained					
		Structure: Locally the unit is similar to the explosive breccia in a subtle way - the outline of the fragments are not as distinct here. Secondary fracturing has created tectonic breccia locally. Fractures cut the core near 0^{o}, 30^{o} and $60-70^{o}$. Gouge is present at 130'. Broken core form 130-132', 135-136'. Lenses and pods of hematized magnetite and specularite are present throughout with concentration up to 20% below 136' (very well disseminated).					
		Alteration: Limonitic staining in most fractures. Magnetite is hematized. Matrix is chloritized and possibly silicified (increase in hardness.)					
		Radioactivity: None.					
		Broken Core: 130-132' possible faults 135-136'					
		124.0-146.0 This unit grades gradually up into the explosive breccia which may extend as far as 130'. The main distinction between this unit and the explosive breccia unit is the subtle nature of this unit. Barite content is higher in this unit as well.					
		END OF HOLE.					

DIP TESTS

TEST	FROM	TO	TOTAL		DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	145	145		-45	102.53		102.53	
							102.53		102.53

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION 41+00E
LATITUDE 2+95S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-15
AZIMUTH 190°
DIP -45°
LENGTH 145'
PURPOSE Investigate Mag.
COMPLETED July 11/77 Anom.
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	25.0	Casing
25.0	47.0	Intensely Fractured Hematized Limonite Barite Breccia (Explosive Breccia?).
		Colour: Rusty-brown to blue-grey.
		Hardness: 3 - 5.
		Composition: Matrix is chlorite-carbonate - 40% Barite - 50% Other - 10%
		Texture: Matrix is fine grained; fragments are up to 4" in size.
		Structure: A foliation cuts the core at 45° - 50°. Intense fracturing has occurred throughout resulting in very broken core. Quartz veins are at 42' and are accompanied by sulphide material. Fracturing cuts the core at 60°, 45° and 90°. Several networks of hairline fractures crisscross the core. Missing core 37.0' - 38.0'. Fault gouge is present at 47' associated with a fracture cutting the core at 70°. Minor amounts of disseminated magnetite and sulphide material is present (<5%).
		Alteration: Hematization and limonitec staining is associated with the fractures with hematite localized near the fractures and limonite extending into the host rock further. The matrix is chloritized. Gouge at 47' is sandy-buff in colour.
		Radioactivity: None.
		Broken Core: Throughout.
		25.0-47.0 This is the same unit as the following one. However, it is much more fractured and limonitic alteration is quite extensive.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES
47.0	145.0	Barite Breccia (Volcanic) Colour: Light to medium grey-blue. Hardness: 3 - 5. Composition: 60% chlorite-carbonate; 30% barite; 10% others (mainly magnetite) Texture: Generally fine grained. Fragments of barite-rich material up to several inches. Structure: A foliation cuts the core at 70°. Locally it is 30° and 0°. Fracturing is minor to moderate cutting the core at 30° and at 60° and 90°. Magnetite is disseminated throughout as fine euhedral crystals. Some sulphide material is present with magnetite along fractures. A 30° fracture at 54' contains vuggy quartz coated with hematite and magnetite. At 110' there is a 6" section of greenish-brown core in a 30° fracture. Alteration: The matrix is a blueish colour. Barite filled fractures are common. Limonite and hematite are found in some fractures. Radioactivity: None. Broken Core: At 120'. 47.0-145.0 This unit resembles an altered andesite. Local brecciation has occurred with fragments predominantly consisting of barite. A possible name for this unit is "phyllite" as it is very fine grained and massive. END OF HOLE					

DIP TESTS

TEST	FROM	TO	TOTAL	DIP	DIP CORR.	LATITUDE	LATITUDE CUM.	DEPARTURE	DEPARTURE CUM.
Collar	0	52	52	-45	-45	36.77		36.77	
							36.77		36.77

DIAMOND DRILL HOLE LOG

Project 514

ELDORADO NUCLEAR LIMITED

LOCATION Bond Claims
SECTION
LATITUDE 4+72S
DEPARTURE 41+00E
ELEVATION Surface
CORE IAX
STORAGE Whitehorse

HOLE No. B-16
AZIMUTH 190°
DIP -45°
LENGTH 52'
PURPOSE Investigate Mag.
COMPLETED July 21/77 Anom
LOGGED BY W.J. Olsson

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	13.0	Casing
13.0	22.0	Intensely Fractured, Chloritized Volcanic Colour: Steel blue-grey with zones of white and red-brown to orange. Hardness: 3 - 5. Composition: Matrix is mainly chlorite, fractures are filled with quartz-barite material 10-15% sulphide content 5-10% magnetite. Texture: Fine grained. Structure: A crude foliation cuts the core at 30°-45° and is crisscrossed and offset by fracture patterns which cut the core at 60°, 45°, 70° and are usually filled with quartz-barite. The core also has numerous fracture patterns crisscrossing the unit giving it a very fractured appearance. There is missing core at 15.1-15.7, 17.0-18.2. Alteration: Limonitic staining and/or hematite stain is present throughout - related to fractures. The matrix is chloritized and bleached in places. Radioactivity: None. Broken Core: None. 13.0-22.0 This unit is the same as the next unit, however, fracturing is more intense in this footage. Magnetite and/or sulphide material is found as lenses and/or fracture filling usually adjacent to or included in barite rich zones.

CORE SAMPLES FROM	TO	WIDTH	%	AVERAGES

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES WIDTH	CORE SAMPLES %	CORE SAMPLES AVERAGES
22.0	52.0	Barite Rich Chloritized Andesite Colour: Pale to rich grey-blue with zones of buff to cream. Hardness: 3 - 5. Composition: The matrix (80% of unit) is mainly chlorite and the rest consists of barite10%; sulphides, 5-10%; others, 0.5%. Texture: Very fine grained. Structure: A crude foliation cuts the core at 60°. Fractures cut core at 40°, 60°, 90°, near 0°, and in places (40°) are offset by the foliation. Locally large zones of barite material are fractured → breccia. Sulphide and magnetite tend to concentrate in these fractures. Alteration: Limonitic staining is common to most fractures with sulphide and/or magnetite. Radioactivity: None. Broken Core: At 52'. 22.0-52.0 This unit is similar to the breccia only the matrix accounts for a very large percentage of the rock. Folding, etc. is exhibited in the wisps of barite material present. END OF HOLE.					

ELDORADO NUCLEAR LIMITED

Exploration Division

APPENDIX C

STATEMENT OF EXPENDITURES

ON BOND CLAIMS IN

THE YEAR 1977

ELDORADO NUCLEAR LIMITED

STATEMENT OF EXPENDITURES ON BOND CLAIMS

For the Year 1977

Recruiting Personnel		
Travel		$ 112
Drafting and clerical		
Salaries	$ 235	
Burden on salaries	29	
Contractor	58	
Office supplies	10	332
Reporting		
Salaries	525	
Burden on salaries	76	
Maps and publications	9	610
Diamond Drilling		
Salaries	7,019	
Burden on salaries	925	
General supplies	5,216	
Fuels	1,377	
Contractor	1,960	
Travel	466	
Groceries	1,137	
Room and board	1,147	
Camp supplies	93	
Helicopter	5,743	
Fixed wing aircraft	1,657	
Truck rental	1,504	
Laboratory analysis	924	29,168
Geophysical Radiometric		
Instrument rental		150
Geophysical Magnetometer		
Salaries	727	
Burden on salaries	109	836
Projects Supervision		
Salaries	1,358	
Burden on salaries	183	1,541
Project Personnel Support		
Salaries	2,637	
Burden on salaries	373	
Travel	564	
Accommodation	274	
Helicopter	2,114	
Fixed wing aircraft	2,170	
Publications and maps	24	8,156
		$ 40,905

Port Hope, Ontario
March 20, 1978

Certified a true and correct account

G. A. Frost, Treasurer

I certify that I am a geologist, having graduated from Queen's University at Kingston, Ontario, and hold the degree of Bachelor of Applied Science (Geological).

I have practised my profession for five years.

I am currently employed as an Exploration Geologist by Eldorado Nuclear Limited, Ottawa, Ontario.

I certify that I have no direct or indirect financial interest in this property.

William J. Olsson

ELDORADO NUCLEAR LIMITED

BOND CLAIM GROUP
DIAMOND DRILLING
B-6, B-7, B-8, B-9, B-10, B-11, B-14, B-15, B-16

SCALE 1" = 30'

LOGGED BY W. OLSSON — JULY, 1977

LOCATION MAP

SCALE 1" = 200'

0+00N

1+00S

2+00S

3+00S

4+00S

5+00S

6+00S

7+00S

B-5 -45° 149'
B-4 -45° 23'

B-13 -45° 152'

B-14 -45° 146'
B-7 -45° 14'
B-6 -45° 18'

B-7
-50°
(1976)
178'

B-15 -45° 145'
B-11 -45° 16'

B-12 -46° 154'

B-3 -50°
96.5'
(1976)

B-10, -46° 91'
B-9, -45° 36'

B-16 -45° 52'

B-8 -45° 145'

36+00E

37+00E

38+00E

39+00E

40+00E

41+00E

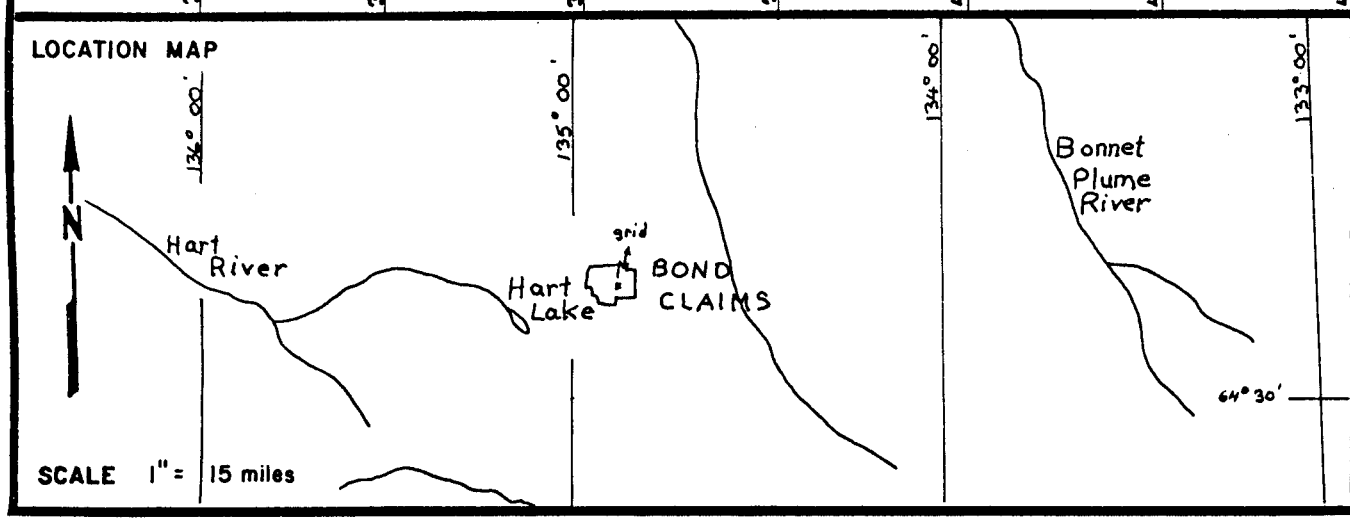
42+00E

43+00E

44+00E

45+00E

LOCATION MAP



SCALE 1" = 15 miles

ELDORADO NUCLEAR LIMITED

PROJECT BOND CLAIMS D.D. LAYOUT

DISPOSITION

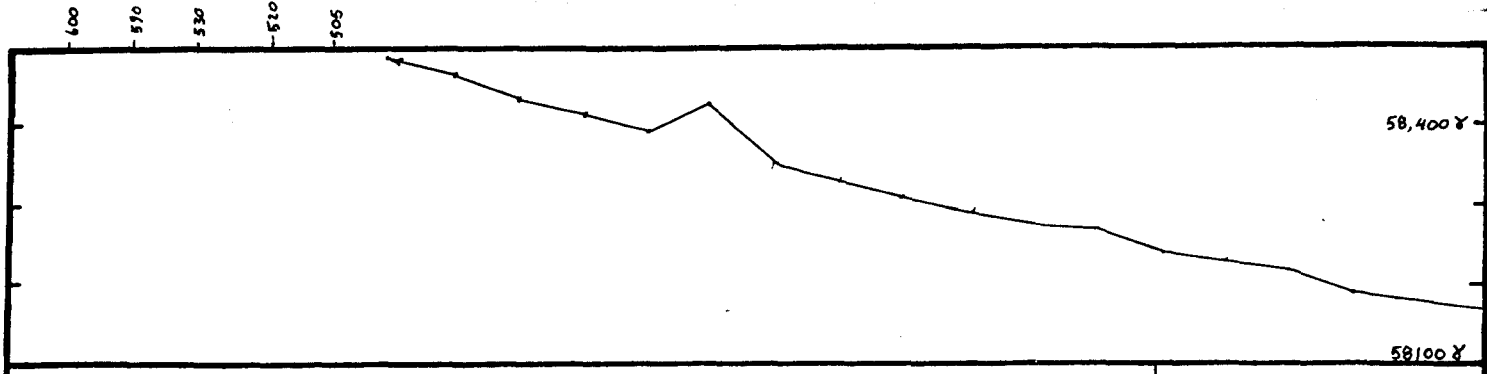
SECTION PLAN VIEW

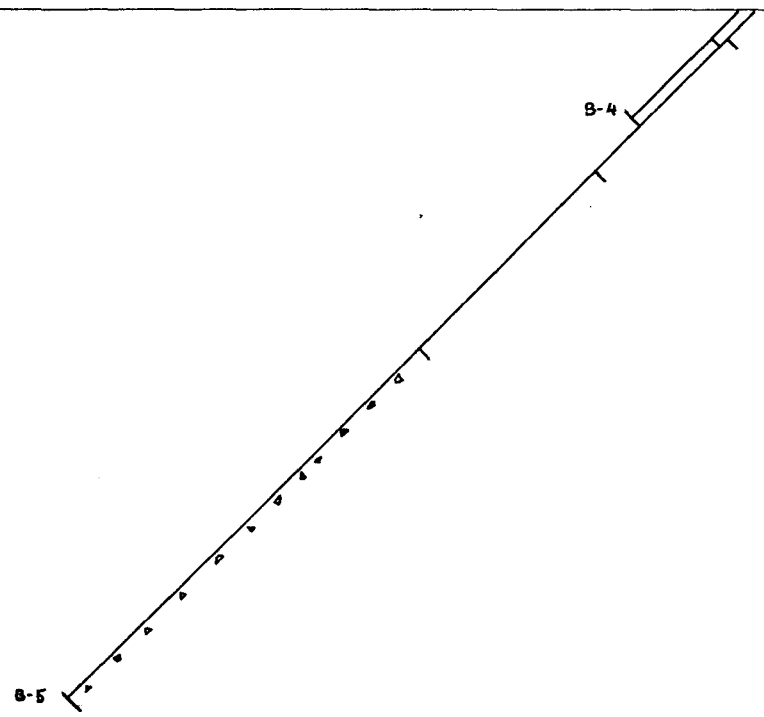
HOLE B-2 to B-16 incl.

COMPLETED B-2,B-3 1976;B-4 to-16'77

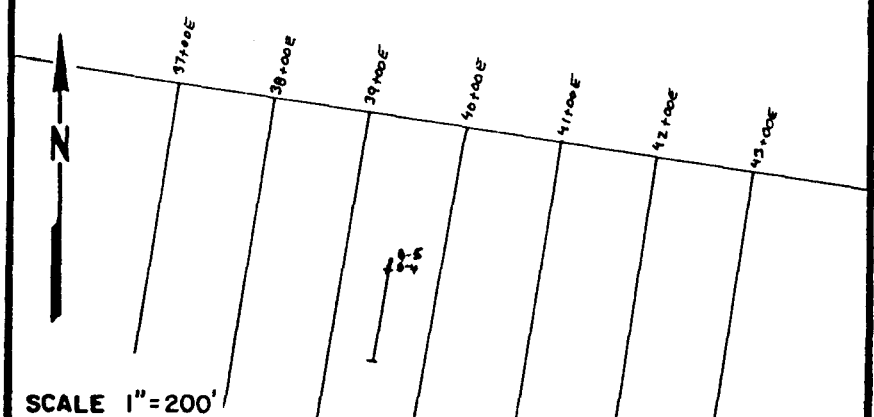
LOGGED BY W. OLSSON

SCALE 1" = 100'





LOCATION MAP



SCALE 1"=200'

ELDORADO NUCLEAR LIMITED

PROJECT BOND CLAIMS

DISPOSITION

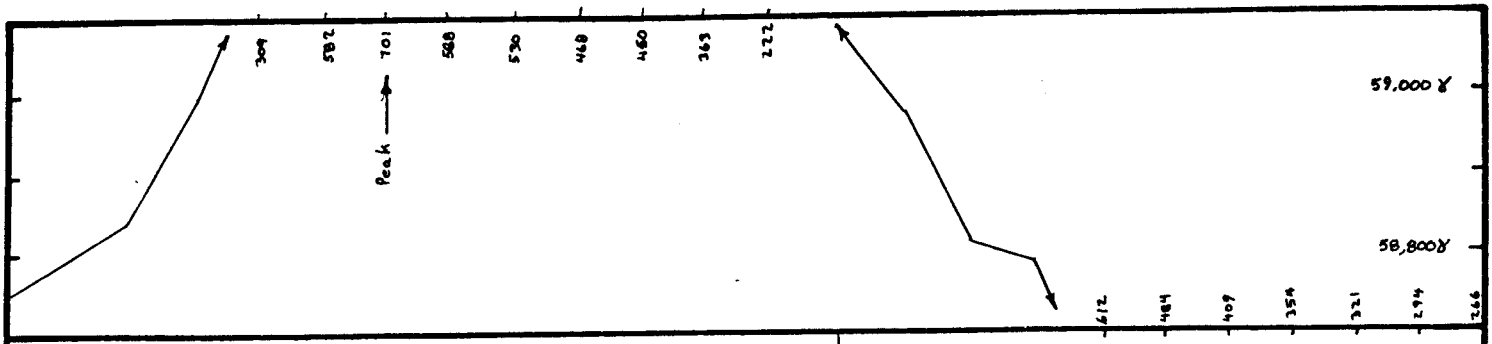
SECTION 39 + 50 E

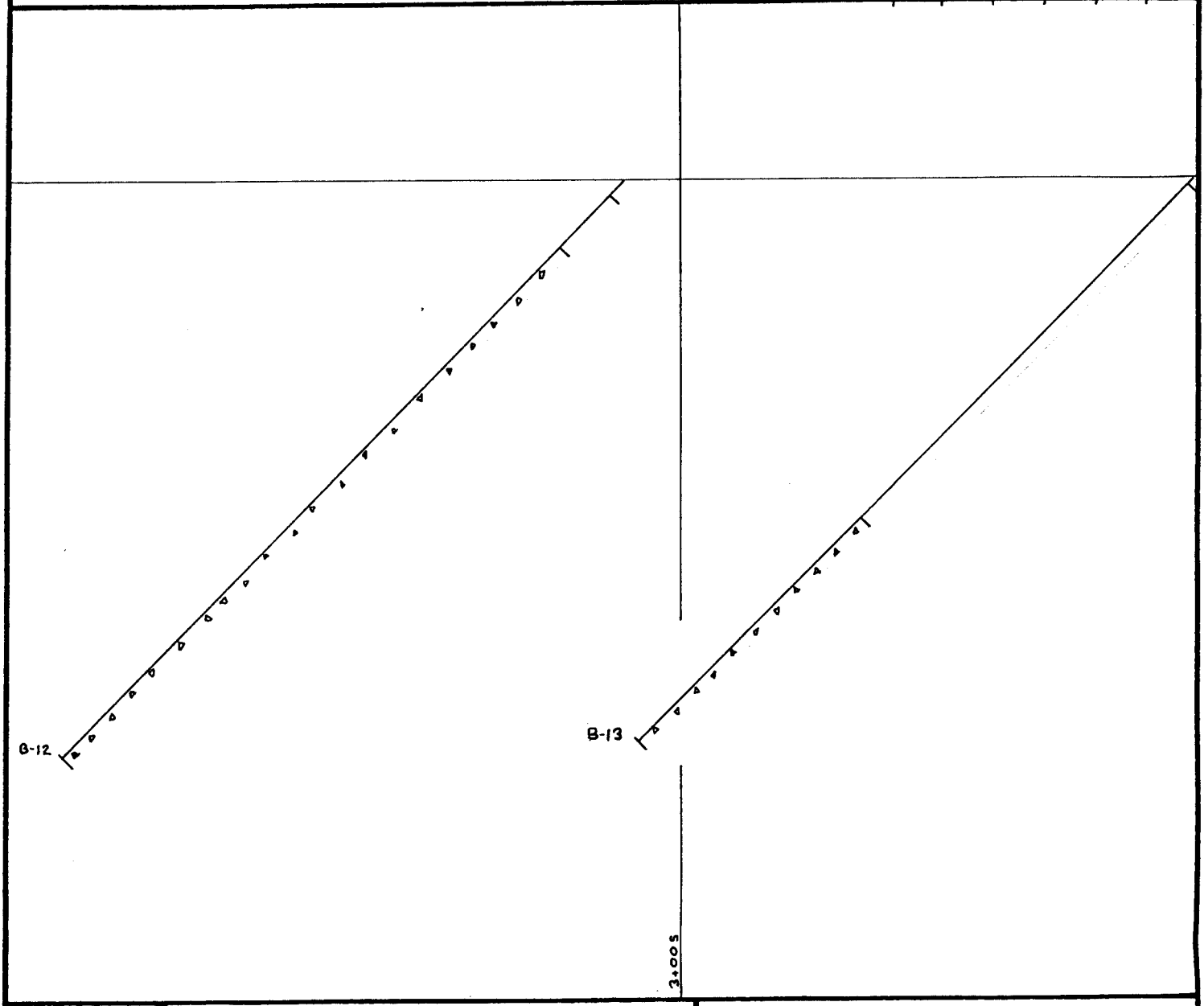
HOLE B4 , B5

COMPLETED JUNE 1977

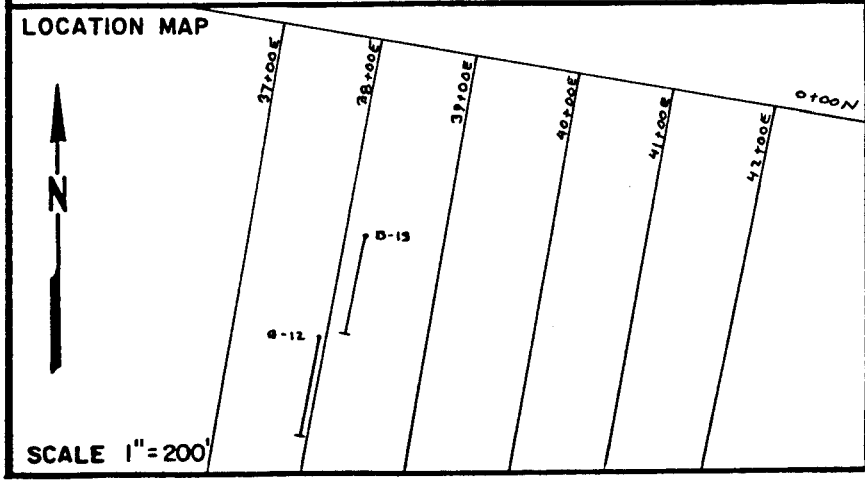
LOGGED BY W. OLSSON

SCALE 1" = 30'





LOCATION MAP



ELDORADO NUCLEAR LIMITED

PROJECT BOND CLAIMS

DISPOSITION

SECTION 37+95E

HOLE B-12, B-13

COMPLETED JULY 1977

LOGGED BY W. OLSSON

SCALE 1" = 30'

B-5 149'
B-4 23'
B-13 152'
B-14 146'
B-7 14'
B-6 18'
B-2 (1976) 178'
B-12 154'
B-15 145'
B-11 16'
B-3 (1976) 96.5'
B-10 91'
B-9 36'
B-16 52'
B-8 145'

58,500
59,000
59,500
60,000
60,294
59,973
59,355
60,339
60,777
58,564
58,520
58,511
58,500
58,440
57,888
57,980
60,390
57,850
57,831
60,957

0+00S
1+00S
2+00S
3+00S
4+00S
5+00S
6+00S
7+00S
8+00S

34+00E
34+50E
35+00E
35+50E
36+00E
36+50E
37+00E
37+50E
38+00E
38+50E
39+00E
39+50E
40+00E
40+50E
41+00E
41+50E
42+00E
42+50E
43+00E
43+50E
44+00E
44+50E
45+00E

ELDORADO NUCLEAR LIMITED

PROJECT 514

BOND AREA 2

MAGNETOMETER SURVEY

SCALE: 1 cm = 10 feet

DATE: 21., 22. June 1977 | BY: C.J. Riley, W.J. Olsson