

ORIGINAL

RESUME OF INFORMATION

TARGET PROJECT MAP 93/F

673485

BRITISH COLUMBIA

Nov. 1978

RESUME OF INFORMATION

TARGET PROJECT MAP 93 F

BRITISH COLUMBIA

J.C. STEPHEN EXPLORATIONS LTD.
1124 WEST 15th STREET,
NORTH VANCOUVER, B.C.
V7P 1M9

NOVEMBER 1978

PHONE (604) 988-1545

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RESUME OF INFORMATION
TARGET PROJECT MAP 93 F
BRITISH COLUMBIA

INTRODUCTION

During 1977 a regional silt sampling program was conducted between Quesnel and Endako, B.C., using the extensive network of logging roads available in the region. The BIN, NIT, and SWAB properties were staked on silt sample geochemical anomalies. Further regional and property work was done during 1978.

The following pages are extracts of relevant information taken from several Target Project Quarterly Reports and Assessment Reports. Accompanying the text are regional and property maps itemized in the List of Illustrations. Most references to the SWAB property have been deleted.

Uranium exploration, including drilling, was conducted in the region during 1978 by Shell Canada Resources Ltd., E & B Explorations and Canex - Placer. No significant mineral finds, as a result of this work, are known to the writer at present.

NECHAKO AREA



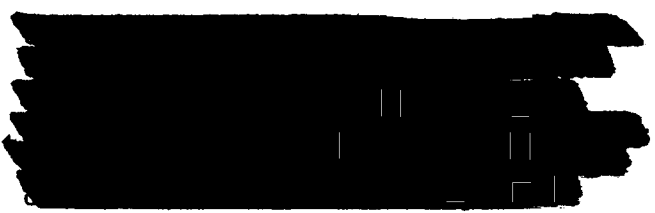
SILT GEOCHEMISTRY

Examination of the geochemical results on the 1:50,000 scale base maps indicated a number of anomalous, or otherwise favourable, areas. The following is a summary of those areas.

AREAS ANOMALOUS FOR URANIUM

<u>MAP SHEET</u>	<u>LOCATION</u>	<u>PPM URANIUM SILT SAMPLES</u>	<u>GEOLOGY</u>
93G/5	Tagai Lake	2 - 3.5	Scattered low values associated with Tertiary formations not obviously associated with intrusive outcrop.
93G/6	No anomalies		Blackwater River valley might warrant investigation near o.c. of intrusive.
93G/7	No anomalies		Minor Mo and W geochem east of bend in Fraser River in area of small intrusives.
93G/10	South of Mt. Baldy Hughes	2 - 5	Scattered values over large region in area of overburden. Low priority no magnetic structure evident.
93G/11	Scattered	2 - 3	Scattered along road across south half of map sheet. Very low priority.
93G/12	West of Naltesby Lake	2 - 46	Values erratic in area of intrusive. Possible N.E. trending faults suggested by aeromag. Low priority.
	N.W. corner of map sheet (photo 1)	3.5 - 18	Rock specimen of slightly foliated med. grained grey granodiorite ran 4.5 ppm U. Photo <u>1</u> Source of anomaly probably the intrusive. Low priority.
93G/13	Scattered	2 - 20	S.W. of Cluculz Lake widely scattered and erratic values in area of no outcrop. Not apparently related to intrusive at Sinkut Mtn.
93G/14	No anomalies		Very few samples near west edge and S.E. corner of map. Geology not very interesting.

<u>MAP SHEET</u>	<u>LOCATION</u>	<u>PPM URANIUM SILT SAMPLES</u>	<u>GEOLOGY</u>
93F/8	No anomalies		Relatively few samples in Batnuni Lake area where lignite was reported.
93F/9	S.E. corner, Chilako River	4 - 24	Topley intrusives and Takla volcanics exposed through Tertiary volcanics. Might warrant investigation of unconformity.
	East side	2 - 5	Topley intrusives fairly widely exposed through Tertiary volcanics. U values low and widely separated. Two values of 6 and 15 ppm Mo and N.E. trending unconformity at 53°40'N might warrant more sampling.
	North of Finger Lake	2 - 7	Widely spaced samples along a valley, near the unconformity between Topley intrusives and Tertiary volcanics show low U with Mo values of 7-48 ppm. More sampling is warranted. Possible NE structure.
93F/10	No anomalies		No values obtained north of Kenney Dam where lignite was reported. At north edge of map Targe Cr. area should be sampled to check Topley-Tertiary unconformity.
93F/12	North edge- Cheslatta R.	25	Isolated value just within edge of map sheet.
93F/13	Uncha Lake	2 - 13	Scattered values around west end of lake in overburden area. Possibly derived from acid Tertiary volcanics.
	Binta Lake BIN GROUP (photos - 2,3 & 4)	3 - 108	Relatively concentrated area of anomalous results. Some indication of NE faulting. Samples anomalous in areas of rhyolitic Ootsa Lake Grp. but much less so in areas of Endako andesite-basalt to the west.
93F/14	Binta Lake BIN GROUP	2 - 50	Extension of Binta L. anomalous area SE to Wapoose Lake in area of rhyolitic volcanics. Samples from NE from andesitic Ootsa Lake Grp. not anomalous.

<u>MAP SHEET</u>	<u>LOCATION</u>	<u>PPM URANIUM SILT SAMPLES</u>	<u>GEOLOGY</u>
93F/14	Borel Lake	2 - 35	Relatively isolated anomaly in rhyolitic volcanics north of Borel Lake should be investigated. Isolated value of 20 ppm west of Anzus Lake is of low priority. Area of Triassic red beds, possibly derived from the north, have not been sampled.
93F/15	East of Nithi Mtn.	2 - 32	Area within Topley intrusives is partially sampled. Uranium occurrence in late dyke occurs on NW slope of Nithi Mtn. Samples were not run for Mo, some are anomalous for Cu. Area is staked in vicinity of highest U values.
	Nithi River	2 - 24	The majority of samples taken show some U. The area is near the unconformity between Topley intrusives and Tertiary volcanics.
	NIT GROUP (photo 6)	2 - 60)	This is the strongest portion of the Nithi River anomaly. Specimens of lithic tuff from the ridge top ran 0.5 and <0.5 ppm U in the vicinity of the high silt values. NE and NW air mag and air photo linears intersect in the vicinity.
			
	South of south boundary SWAB	4.5- 60	Values occur close to the unconformity between Takla volcanics and Tertiary volcanics.
	NE of SWAB	2.5- 44	Uranium values with associated Mo values of 5-63 ppm as well as scattered copper extend along a NE trending zone from the Tertiary fm. into the Topley intrusives a distance of four miles. This may follow a NE fault zone. Lower U values to the north are associated with Cu. Mo was not determined.

<u>MAP SHEET</u>	<u>LOCATION</u>	<u>PPM URANIUM SILT SAMPLES</u>	<u>GEOLOGY</u>
93F/15	SE of Tahultzu Lake	2 - 9.5	Scattered U values with no significant Mo or Cu occur within Topley intrusives.
	Greer Creek	3.5 - 5	Low U values occur close to the Topley intrusive - Tertiary unconformity. Dawson (1878) reports sandstones, conglomerates, and lignite at the base of the Tertiary in this region. Air mag patterns suggest extensive overlap of Tertiary fm. above the Topley. Topography and aeromag patterns suggest a NE fault structure.
	SE corner		No samples. Structure indicates Targe Cr. - Muskrat L. area should be sampled.
93F/16	South of Nulki Lake	2 - 7	Scattered low values with minor Mo and one Cu value. Values would not constitute important anomalies but sampling is scattered. Large areas were staked by Tyee, Shell etc. in 1977. Location along the east contact of the Topley intrusives should be relatively favourable.

There are more anomalous areas indicated than can be examined with the approved budget. However, if current large scale staking reported to have taken place in the area does not interfere, we intend to examine the following:-

- | | | | |
|-----|--------|------------------------------------|---------------------------------|
| (a) | 93F/14 | Borel Lake | 2 - 35 ppm U |
| (b) | 93F/15 | South of south boundary SWAB group | 4.5 - 60 ppm U |
| (c) | 93F/15 | NE of SWAB group | 2.5 - 44 ppm U
5 - 63 ppm Mo |
| (d) | 93F/15 | Greer Creek | 3.5 - 5 ppm U |

In general these will likely be rather superficial examinations. If any favourable indications are found a claim block will be staked pending further developments.

ROCK GEOCHEMISTRY

The following rock specimens were analysed for uranium content using flouride fusion - flourimetric detection.

<u>PHOTO NO.</u>	<u>ROCK</u>	<u>AREA OR PROPERTY</u>	<u>URANIUM PPM</u>	<u>ASSOCIATION</u>
1	Granodiorite	Topley Intrusive	4.5	Granitic area slightly anomalous for U and Mo.
2	Tuff - tuff breccia	BIN Group	3.0	"Conglomerate" of Barrie's mapping (1977 report). Specimen appears to have graded bedding. Occurs close to anomalous drainage.
3	Chert	BIN Group	2.0	Occurs in southern part of the property. Silt samples run as high as 50 ppm U.
4	Tuffaceous ash	BIN Group	2.5	Silts run up to 27 ppm U.
5	Tuff	Near east side Map 93F/14 near * galena showing.	< 4.0	Determination of U below 4 ppm interfered with by fluorescence of other metals. Specimen has minor pyrite and Mn stain. Stream silts are not anomalous for U.
* Abundant manganese, pyrite and a vein (?) type galena showing occur in the vicinity. A picked specimen assayed 62.0% Pb; 7.00% Zn; 28.25 oz. Ag; and 0.142 oz. Au. The area has been staked for several years.				
6	Lithic tuff	NIT Group	< 0.5	Sample is from ridges. Barrie reported only this rock type. Stream silts reach 150 ppm U.

TARGET PROJECT # 117

GEOLOGICAL LEGEND FOR 1:50,000 SCALE REGIONAL GEOCHEM MAPS

MIOCENE AND(?) LATER

- 6 ENDAKO GROUP
Basalt, andesite, tuff, breccia, conglomerate, greywacke, lignite

PALEOCENE(?), EOCENE AND OLIGOCENE

- 5 OOTSA LAKE GROUP (In Part) ~~Swab Alaskite~~
Rhyolite, dacite, tuffs, breccia, andesite, basalt, conglomerate

UPPER CRETACEOUS AND(?) PALEOCENE

- 4 OOTSA LAKE GROUP (In Part)
Andesite, basalt, tuff, breccia, minor rhyolite, minor conglomerate, greywacke

LOWER JURASSIC


- 3 TOPLEY INTRUSIONS

UPPER TRIASSIC-LOWER JURASSIC

- 2 TAKLA GROUP
Red and brown shale, conglomerate, greywacke

- 1 TAKLA GROUP
Andesite, basalt, tuff, breccia, argillite, minor limestone

ANOMALOUS SAMPLES

<p>pink </p> <p>green</p> <p>orange</p>	<p>Uranium</p> <p>Molybdenum</p> <p>Copper</p>	<p>≥ 5ppm</p> <p>≥ 5ppm</p> <p>≥ 100ppm</p>	<p>2-5ppm 2-5ppm</p>
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AIR SURVEY

Maps 93F/13, 14, and 15 accompany this report showing scintillometer readings as taken from the helicopter and plotted on the silt sample maps. Background readings are considered to be 40 - 70 cps, readings over 100 cps are considered possibly anomalous to anomalous.

MAP 93F/15 East of Nechako River air scintillometer readings up to 140 and 150 cps were checked on the ground in one area. Readings on outcrops ran up to 300 cps in areas of reddish colored flow banded rhyolite.

The basalt contact overlying these Tertiary sediments and volcanics was found to lie some distance east and south of the location shown on the 4 mile geological map.

A contractor was engaged to stake 75 units (GREER) to cover this area. Confirmation of the completion of staking has not yet been received.

West and north of Nechako River areas of Tertiary sediments and basalts overlying, at least in part, Topley intrusives were flown. Readings up to 150 cps were obtained at the south margin of an area of basalt. A limited ground check indicated an up faulted wedge of bleached and altered tuff with outcrop readings of 200 cps. Property staking was deferred pending more prospecting.

North east of SWAB an area of silt samples ran up to 25 ppm and 25 ppm Mo. Flying of this area did not detect a radio metric anomaly. Preliminary ground checking encountered a quartz feldspar porphyry dyke, possibly related to the SWAB alaskite, which gave readings up to about 150 cps. No molybdenum mineralization was found.

Immediately south of SWAB silt samples ran up to 22 ppm U. Prospecting was conducted in the main creek but no mineralization was found. Checking of the area from the helicopter gave one reading of about 100 cps in a very small area on a tributary stream.

South west of the south west corner of SWAB two indefinite areas of what appeared to be glacial till and boulders gave readings up to 100 cps. It is possible there are radioactive boulders in this area. Detailed prospecting would be desirable.

A flight was made to the north edge of Map 93F15 to the uranium occurrence on the north west side of Nithi Mountain. Contour flying of the three peaks in the area indicated isolated highs of 100 - 110 cps and close flying over the trenched portion of the showing gave a reading of 120 cps.

Uranium mineralization occurs in a quartz porphyry dyke about 10 to 30 feet wide and probably in excess of 400 feet in length. Even shallow till overburden serves to blank out radiometric readings. Over the best trench readings reached a high of 4000 cps and a specimen of the most radioactive rock assayed 0.132% U_3O_8 and $<0.01\%$ ThO_2 . Some minor yellow uranium stain was evident but otherwise mineralization was not visibly evident.

From the results of our flying I suspect other similar uranium occurrences exist in the vicinity but the area is staked and we are not presently proposing any work there.

MAP 93F/14

North of Borel Lake silt samples in a local area ran up to 35 ppm U. Air checking gave no distinct anomaly although readings of 110 and 130 cps were obtained. Some ground prospecting would be desirable.

In the east central part of the map area a 1969 silt sample was anomalous for uranium. Limited checking by silt sampling in 1977 failed to show an anomaly. Air reconnaissance indicates a definite area with counts of 80 to 150 cps. Further ground prospecting should be done.

North of Holy Cross Mountain, in the south east part of the claim map, an anomaly reading up to 160 cps was located. Due to burned timber and low fuel at the time it was not possible to do a ground check but the rocks appeared to have bedded characteristics close to basalt cover.

The staking contractor has been asked to stake 20 units on this target. (Now the LAKE claim.)

North of the east end of Knapp Lake zones of readings up to 120 cps were noted and just south of a small pond west of Knapp Lake distinctly anomalous readings up to 150 cps occur near a small basalt cap.

South and south east of Binta Lake extensive areas give readings of 100 - 140 cps. One spot high on a ridge gave 170 - 190 cps. Silt sampling on the north side of this ridge gave only low uranium values but sampling covers only a small part of the apparently anomalous formation and further prospecting is warranted. A new forest access road provides easy transportation into the area.

GREER CLAIM GROUP

The GREER property occupies the west slopes of Mt. Greer and extends almost to the Nechako River which flows north almost parallel to the property. Location of the property is shown on Map III with this report.

Staking was initiated after locating an anomalous zone during reconnaissance scintillometer flying. The area had been selected because of (1) an area of Ootsa Lake volcanics extending westerly across the Nechako River valley and flanked to the north and south by Topley intrusives. This pattern suggested a possible deep paleovalley occupied by Tertiary rocks. Either the granites or the Tertiary rhyolites could be a source rock for uranium. (2) A reference in Memoir 69 p. 306 to a report by G.M. Dawson in Report of Progree 1876-77 regarding lignites, arenaceous clays and conglomerate underlying Tertiary basalt along the Nechako River.

GEOLOGY

During August a preliminary examination of the GREER property was conducted. Outcrop is relatively sparse and because of the large size of the property only a very general picture of the geology has been obtained.

CRETACEOUS

Diorite, Granodiorite

Outcrops of equigranular, generally fresh looking, diorite and granodiorite occur on the property. These appear to be parts of the Topley intrusives.

Some outcrops occur at relatively high elevations, considerably above some areas of Tertiary volcanics. It is likely that the paleotopography was fairly rugged. Insufficient information is available yet to suggest where basins or old river valleys may

have occurred but it is probable that they exist.

TERTIARY

Dacite

Dacitic volcanics appear to be the lowermost volcanics observed on the property. Some of these rocks appear to be altered and sheared. Occurrences found to date are only along new road cuts.

Lignite

Numerous fragments of lignite occur on the gravel bars on the Nechako River immediately west of the property. The lignite is friable and unlikely to have travelled far. No outcrops have yet been located.

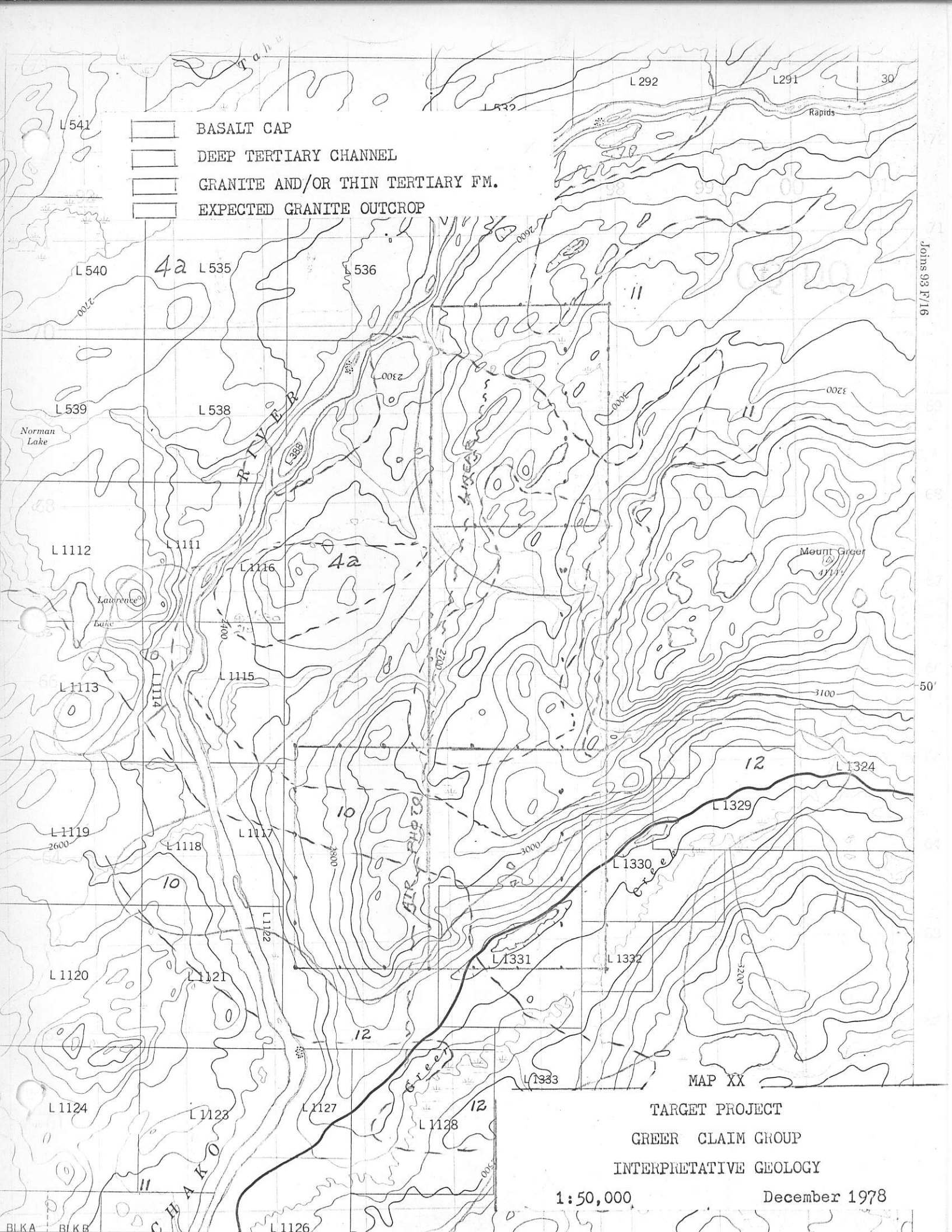
Rhyolite

Rhyolite flows and tuffs appear to be the best exposed, and probably most common, rocks on the property. Readings of 2x and 3x background were obtained on the scintillometer when flying over certain of these outcrops.

In general the formations are probably relatively flat lying but locally quite steep flow structures are common.

Basalt

Capping the acid volcanics to the east of the property are thick, flat lying basalt flows which make up the higher portions of Mt. Greer.



Joins 93 F/16

50'

BLKA BLKB

GEOCHEMISTRY

A ridge from Mt. Greer trends southwest across the claims and, as a result, some portions of the property drain south into Greer Creek. The remainder of the property drains west and northwest to the Nechako River. There are many small swamps and several ponds. Drainage is poorly developed.

Only a small number of silt samples were taken. Three of these gave values of 24, 12 and 9 ppm uranium. All samples were run for molybdenum but no significant values were obtained. A few samples were run for copper and two of these gave results of 169 and 660 ppm Cu.

It is evident that some followup work will be required to investigate the copper and uranium values so far obtained. Normal silt sampling, however, will not serve to assess the property because of the poor drainage system. Some parts of the property may be amenable to normal silt sampling and consideration should be given to sampling the perimeters of swamp areas since, if uranium is reaching any of these swamps through ground water percolation, it should be precipitated by the acid swamp conditions.

Along the Nechako River there are deep glacial sand and silt deposits into which much surface drainage seeps leaving no adequate medium for geochemical sampling.

GEOLOGICAL AND GEOCHEMICAL REPORT

NIT 1, MINERAL CLAIM

OMINECA MINING DIVISION

N.T.S. 93F/15W

Latitude 53°53'N; Longitude 124°56'W

OWNER J.C. STEPHEN

OPERATOR DOME EXPLORATION (CANADA) LTD.

July 31, 1978

GARY A. COHOON

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MAP III	HELICOPTER RADIOMETRIC SURVEY 1:6000	In Pocket at Back of Report

GEOLOGY AND GEOCHEMICAL REPORT

NIT 1

RECORD NO. 716

INTRODUCTION

The NIT 1 claim was staked in July of 1977 to cover a uranium anomaly revealed by a regional silt sampling program. Additional silt sampling and scintillometer prospecting were initiated in 1978.

In June of 1978 soil sampling, geological mapping and an airborne scintillometer survey were carried out to determine the source of the uranium. No economic mineralization has been found to date.

PROPERTY, LOCATION AND ACCESS

The NIT 1 claim (⁷¹⁶~~29108~~) which comprises 20 units is located 10 kilometres off the east end of Francois Lake, 143 kilometres west of Prince George, B.C. on N.T.S. sheet 93F 15W. A logging road which runs south from the Nithi River east of Francois Lake provides easy access to the property.

The claim was staked by crews working for J.C. Stephen Explorations Ltd. and is held by J.C. Stephen in trust for a joint venture funded by Dome Exploration (Canada) Ltd.

Previous Work

There is no evidence of previous work having been carried out on the property.

Summary of 1977 and 1978 Programme

Subsequent to staking an additional 15 silt samples were collected to verify the original anomaly and limited prospecting was undertaken.

Early in 1978 a contoured base map was prepared to provide better control for future geochemistry and geological mapping.

In June of 1978 424 soil samples were collected, geological mapping at a scale of 1:6,000 was undertaken and an airborne scintillometer survey was flown.

GEOLOGY

Rhyolite lithic tuff is the only unit which outcrops on the property. Because outcrop is essentially restricted to the tops of hills and ridges very little is known of the stratigraphy, however an outcrop of diorite immediately east of the property suggests that the tuff over-

lies diorite.

The rhyolite lithic tuff is buff coloured, quite fractured and composed of 30 - 40% fragments of feldspar, quartz and lithic fragments in a fine grained matrix. The clasts locally approach agglomerate size and the matrix is locally obsidian. Scintillometer readings (with a McPhar TC-33A) are 150 - 175 counts per second over large outcrops of lithic tuff, as opposed to 70 - 100 counts over overburden and 40 - 50 counts over swamp.

The results of the geological survey are illustrated on Map No. 1 (back pocket).

GEOCHEMISTRY

The NIT claim was staked on the basis of two uranium anomalies (41 and 50 p.p.m.) in a regional stream sediment survey. An additional 15 samples verified the uranium anomaly.

In order to further evaluate these anomalies and identify the source of the uranium a soil sampling survey was undertaken.

Samples were collected on 100 metre centres over most of the property. An attempt was made to collect the "B" horizon at all sample

sites but when that was not possible the "C" or "A" horizon was sampled.

At all sites the following information was recorded: location, colour, sample depth, slope of terrain, vegetation, horizon sampled, quality of soil development and parent material.

Each sample was screened to -80 mesh and analyzed for molybdenum and uranium. (See Appendix III for description of analytical procedures). The results of this survey are plotted on Map No. 2 (Back Pocket)

No distinct anomalies are apparent. Only 4 samples can be considered anomalous and they are associated with wet organic areas. Further check samples should be taken in these areas.

Stream sediments are however still anomalous which suggests that active leaching of the tuff is taking place. This may account for the lack of uranium in surficial samples. Two character rock samples from outcrops of lithic tuff were analyzed and returned 0.5 p.p.m. uranium.

AIRBORNE RADIOMETRIC SURVEY

In June of 1978 an airborne radiometric survey was flown over

the NIT 1 claim using a McPhar TC-33A scintillometer and a Bell 47 helicopter. In order to facilitate navigation, lines were flown along contours. Elevation was approximately 50 metres and speed 80 km/hr.

Readings on the property range from 50 c.p.s to 120 c.p.s. The highest readings occur in the centre of the property (See Map 3 in back pocket) and may be related to outcrops of rhyolitic lithic tuff.

CONCLUSIONS AND RECOMMENDATIONS

The geological and geochemical survey over the NIT 1 claim failed to reveal the source of anomalous uranium values in stream sediments. Rhyolitic lithic tuff is the only rock which outcrops on the property.

It is the writers opinion that the tuff has a high background uranium content, that this uranium has been leached from the surface of the tuff and that leaching is still taking place which leads to high uranium concentration in streams.

The search for economic uranium mineralization should be centred around sites for deposition of this leached uranium. One possibility is the deep valley which runs north through the property.

Unfortunately this area is now masked by glacial drift and/or swamp.

Further samples should be taken around the moderately anomalous soil samples and future work should be aimed at assessing the potential of the low lying areas where uranium may have been deposited.

August 10, 1978

J.C. Stephen Explorations Ltd.

Gary A. Cohoon, Geologist

APPENDIX III

April 3, 1978.

Geochemical Preparation and Analytical Procedures

1. Geochemical samples (soils, silts) are dried at 80°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 0.50 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO₄ and concentrated HNO₃. Digestion time = 2 - 3 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit:
 - Copper - 1.0 ppm
 - Molybdenum - 1 ppm
 - Zinc - 1.0 ppm
 - Silver - 0.2 ppm
 - Lead - 1.0 ppm

APPENDIX III

April 3, 1978

Uranium Geochem Method - Fluorometric

The method used by Chemex Labs. Ltd., measures the fluorescence of uranium in a fused carbonate-fluoride flux. The -80 mesh sample is weighed, ashed, and digested with hot nitric acid and evaporated to dryness. The residue is leached with a known volume of dilute nitric acid, mixed, and a small aliquot pipetted into a platinum dish for evaporation and then fusion with the flux.

The detection limit is 0.5 ppm.

GEOLOGICAL AND GEOCHEMICAL REPORT

BIN 1 - 8 MINERAL CLAIMS

OMINECA MINING DIVISION

N.T.S. 93 F 13 and 14

Latitude 53°52'N Longitude 125°32'W

OWNER J.C. STEPHEN

OPERATOR DOME EXPLORATION (CANADA) LTD.

August 6, 1978

Gary A. Cohoon

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GEOLOGICAL AND GEOCHEMICAL REPORT

BIN 1 - 8

INTRODUCTION

The BIN 1 - 8 claims were staked in August 1977 to cover a number of anomalous uranium stream sediment samples collected during a regional geochemical survey in 1977.

In June and July of 1978 soil samples were collected in the vicinity of the stream sediment anomalies and a geological survey was undertaken to determine the source of the uranium anomalies.

No economic mineralization was noted during the course of the survey. Only moderately anomalous values were revealed in the soil survey. The uranium values in the stream sediments may be derived from rhyolitic tuffs which are the only rocks which outcrop on the property.

PROPERTY, LOCATION and ACCESS

The BIN property comprises the following claims:-

	TAGS	RECORD NO	UNITS
BIN 1	29109	717	15 units
BIN 2	29110	718	12 units
BIN 3	29111	719	15 units
BIN 4	29112	720	12 units
BIN 5	29113	721	20 units
BIN 6	29114	722	16 units
BIN 7	29115	723	20 units
BIN 8	29116	724	6 units

The claims were staked in August 1977 by crews working for J.C. Stephen Explorations Ltd. They are held by J.C. Stephen in trust for a joint venture funded by Dome Exploration (Canada) Ltd.

The property is located 40 kilometres south of Burns Lake, B.C. on N.T.S. sheets 93F 13 and 14. Access can be gained by travelling south from highway 16 at Fraser Lake to Dahlgren road and then southwest to Binta Lake or via Burns Lake and the Francois Lake ferry by following Campbell Road south to Uncha and Binta Lakes.

PREVIOUS WORK

There is no evidence of previous work having been carried out

on the property.

GEOLOGY

Rhyolite Tuff

Rhyolite tuff is the only rock located during the surveys. The tuff is presumably a member of the Ootsa Lake Group. Outcrop is essentially restricted to the tops of ridges which run northwest-southeast across the claims. The rest of the property is mantled by glacial till. The rhyolite tuff is very inhomogeneous but predominantly fine grained and pink to buff coloured with 5% quartz eyes. Perlitic structure, with a reddish or light green grey 5 mm. spheres, is common. Locally it contains agglomeratic porphyritic casts up to 10 cm. The tuff is usually quite massive but locally it displays alternating 2 - 3 mm. buff and brownish red bands. The banding usually indicates very steeply dipping beds striking southeast to northwest. It is presumed that these are very local structures since individual outcrops commonly contain widely differing strikes and dips.

Scintillometer readings with a McPhar TC-33A over the tuff range from 180 - 220 counts per second (80 - 120 over glacial drift and 40 - 50 over swamp).

Samples of the tuff have been collected for analysis for uranium but no results are yet available.

The tuff is overlain by a small basalt cap to the southeast of the property (0 N, 130 E). The basalt is dark grey green and characterized by polygonal jointing. The contact between rhyolite and basalt was not observed.

GEOCHEMISTRY

In order to define the uranium anomalies revealed in the stream sediment survey (up to 108 p.p.m. U) an additional 54 silt samples and 244 soil samples were collected in 1977 subsequent to staking. In 1978, an additional 785 soil samples were collected.

The 1977 samples were collected at 50 metre intervals on all north south claim lines. The 1978 samples were collected at 100 metre centres across the drainage basins which displayed anomalous uranium values in stream sediments. An attempt was made to collect the "B" horizon at all sites but where this proved impossible the "C" or "A" horizon was sampled. At all stations the following information was recorded: Location, colour, depth, slope of terrain, type of vegetation, horizon sampled, quality of sample and parent material. The samples were shipped to Chemex Labs where they were screened

to -80 mesh and analyzed for uranium. (See Appendix III for description of Analytic Procedures).

The results of the geochemical survey have been plotted on Map 2 (Back Pocket). To aid in interpretation only those values which are above 2 p.p.m. Mo and 1 p.p.m. U have been plotted; all other samples sites have been indicated with a tick to indicate their location.

No strong anomalies were revealed by this survey. By inspection background is 1 p.p.m. U and 2 p.p.m. Mo. Moderately anomalous values are scattered across the survey area but none offer an explanation for the stream sediment anomalies.

AIREBORNE RADIOMETRIC SURVEY

An airborne scintillometer survey was flown over the property using a McPhar TC - 33A scintillometer in a Bell 47 helicopter. The elevation was approximately 50 metres and the speed 80 km/hr.

The results of the survey are plotted on Map 3 (Back Pocket). Distinctly higher readings were obtained in a band in the southeastern section of the property. Ground traverses in the area indicate that the airborne anomaly is associated with well exposed large outcrops of rhyolite tuff and the higher readings can be explained by mass effect from these exposures.

CONCLUSIONS AND RECOMMENDATIONS

A geochemical and geological survey over selected areas of the BIN property have failed to define distinct sources for the anomalous uranium values revealed in the stream sediment survey.

It is the writer's opinion that the uranium in the silt samples is derived from the acid tuffs which outcrop on the property. The most likely site for economic uranium mineralization is not in the tuffs but in chemical and structural traps where the uranium leached from the acid tuffs could have been precipitated. The extensive drift cover will hamper the search for these sites.

The following work might be considered in order to define potential sites for economic mineralization.

- 1) Regional study of the stratigraphy.
- 2) Airphoto study to define structural features such as faults and linears.
- 3) Drift prospecting for boulders.
- 4) More extensive soil sampling.

J.C. Stephen Explorations Ltd.

100-100-1000

July 31, 1978

Gary A. Cohoon