A Report On

GEOCHEMICAL SAMPLING

on the

GAIL, LINDA,

GLORY 1, GLORY 2

MINERAL CLAIMS

Trail Creek M.D.

(NTS 82F 4W)

Lat: 49° 8'

Long: 117° 57'

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 7977

OWNER: F.L. Hastings
Lacana Mining Corporation

OPERATOR: Lacana Mining Corporation

D. Johnson, B.Sc.

April, 1980

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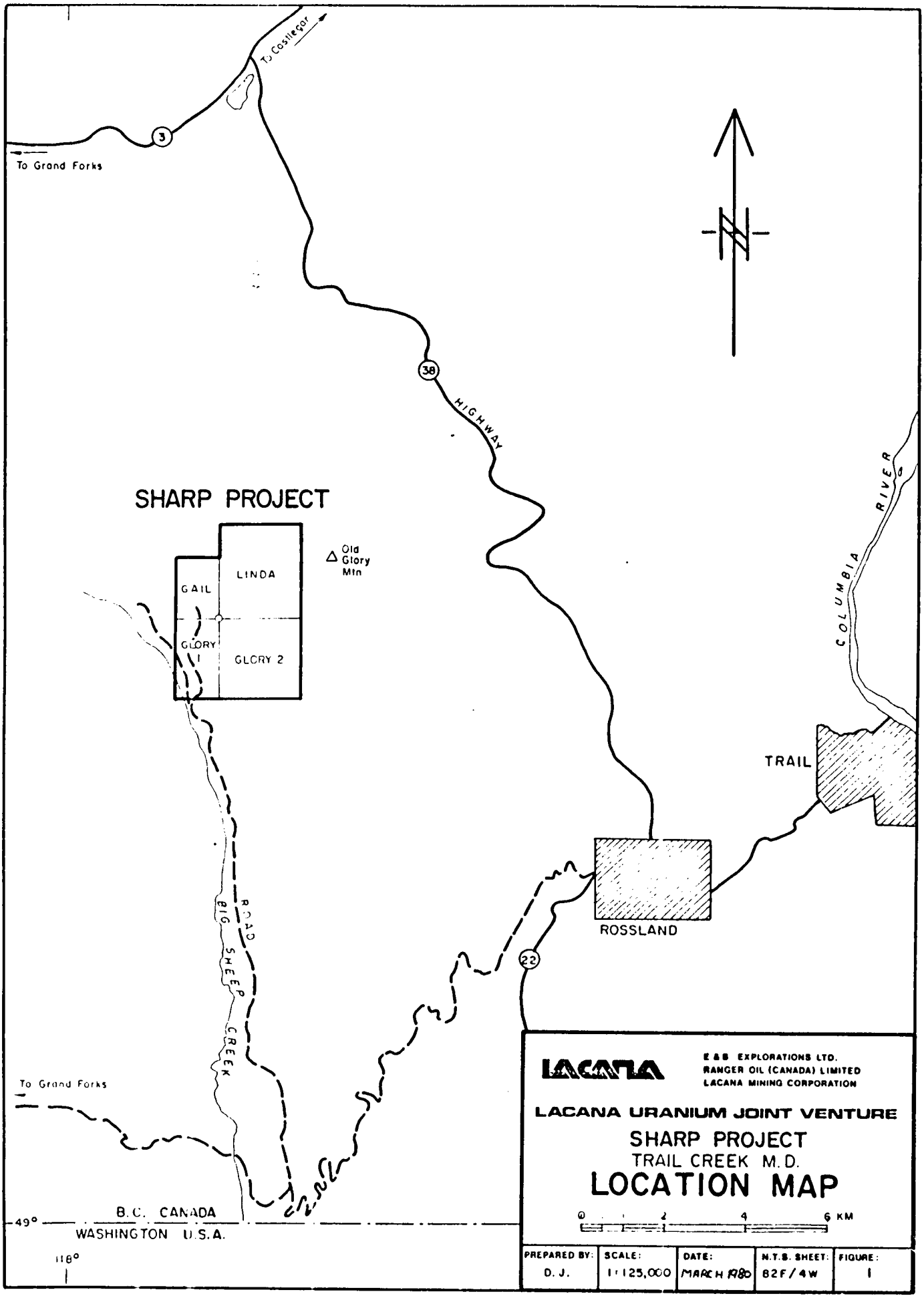
SUMMARY

The Sharp Syndicate, a private prospecting syndicate headed by Don Sharp, staked their original claims in the Big Sheep Creek area to cover extremely high uranium values in stream sediment samples. Lacana optioned their original claims in 1978, and have spent two seasons attempting to discover a mineral deposit related to these anomalies. This has not been achieved.


To Castlegar
To Grand Forks
3
38
HIGHWAY
SHARP PROJECT
Old Glory Mtn
LINDA
GAIL
GLORY 1
GLORY 2
COLUMBIA RIVER
TRAIL
ROSSLAND
22
BIG SHEEP CREEK ROAD
To Grand Forks
49°
B.C. CANADA
WASHINGTON U.S.A.
118°
LACANA
E & B EXPLORATIONS LTD.
RANGER OIL (CANADA) LIMITED
LACANA MINING CORPORATION
LACANA URANIUM JOINT VENTURE
SHARP PROJECT
TRAIL CREEK M.D.
LOCATION MAP
0 2 4 6 KM
PREPARED BY: D. J.
SCALE: 1:125,000
DATE: MARCH 1980
N.T.S. SHEET: 82F/4W
FIGURE: 1

CONCLUSIONS AND RECOMMENDATIONS

Our work to date has relied heavily on soil and rock geochemistry. Our 1979 programme included the collection of 271 soil samples, of which 12 were from hand dug test pits in highly anomalous areas. As well, 17 rock samples were analysed for uranium content.

This programme has let to the conclusion that the SHARP anomalies are strictly geochemical phenomena resulting from groundwater leaching and re-deposition in an area of elevated background uranium content. The existence of an actual uranium deposit related to these anomalies is not indicated.

INTRODUCTION

Location and Access

The SHARP project claims are located on the steep, west slope of Old Glory Mountain, about 11 km. N.W. of Rossland, B.C. Terrain is steep, with elevations ranging from 800 to over 2,000 m. Thick cedar, alder and devil's club make traversing slow and arduous.

A rough logging road connects the lower part of the GAIL claim with the main Big Sheep Creek road and the old "Santa Rosa Summit" highway.

Claim Status

The original 26 unit GAIL and LINDA property was expanded by Lacana by the staking of the GLORY 1 and 2 claims in June 1978, to bring the total to 50 units, (1,750 hectares). The present expiry date is 1980; this can be advanced to 1981 by application of our 1979 work. Since our 1978 staking, there has been greatly increased staking activity in the Big Sheep Creek area. This has surrounded our claims on 3 sides, and would cause problems if we wanted to increase the size of our holdings.

GEOLOGY

Regional Geology

Granitic to syenitic rocks of the Tertiary "Coryell" series are the main country rock, with minor pendants of Jurassic "Rossland" volcanics present at higher elevations.

The main valley of "Big Sheep Creek" is apparently the surface expression of a major regional fault system. This is evident by the distinct northerly trend of parallel elongate ridges and drainage patterns.

Property Geology

Our work has not included a detailed geological mapping job: Although the property has been prospected in detail, no attempt has been made to differentiate the numerous phases of the Coryell stock.

Contact Zone

Some effort was devoted to prospecting the Rossland-Coryell contact zone, in the hope that there might exist some concentration of mineralization either in the altered Rossland rocks or in the extreme margins of the Coryell stock. No such situation was evident. The contact zone itself is gradational and poorly defined.

RADIOMETRICS

Our Exploranium GRS 101 Scintillometer was carried on all prospecting traverses on the property. No well defined anomalies were discovered, although erratic highs in the 300 to 400 cps range were not uncommon in the Coryell.

GEOCHEMISTRY

The bulk of our 1979 programme consisted of detailed soil sampling of three anomalous zones evident from our previous seasons sampling. As well, some stream sediment sampling and widely spaced soil samples were collected from the southern portion of the property (GLORY 1 and 2). Rock samples, for geochemical analysis, were collected from within our main anomalous zones. In all some 271 soil samples and 17 rock samples were submitted for analysis.

Figure 2 shows our reconnaissance sampling and the location of our various detailed sample grids. Figures 3, 4 and 5 show results from each of these detailed grids, as well as rock geochemical data and soil profile results.

Reconnaissance Sampling

Stream sediment samples were collected at 100 metre intervals from a large creek which flows in a generally south of west direction near the southern boundary of the claim group. All 22 of these samples returned high uranium values; from 130 to 600 ppm. While these numbers would be highly interesting on a regional scale, they are not anomalous in comparison with the rest of our property. This data does not alter our concepts of the mineral potential of the claim group.

Soil samples were collected at roughly 100 m. intervals along broadly spaced lines on the GLORY 1 and 2 claims on the southern portion of the property. These values were highly variable, from 1.6 to 260 ppm uranium. While these individual erratic hgihs were not checked or re-samples, our conclusions regarding the other high sample sites on the property are also believed valid here.

Detailed Grid "A"

Our first detailed soil sampling target was a narrow, elongate basin, perched on the side of a steep slope on the lower part of the GAIL claim; a perfect natural collection basin. Sixty two samples were collected on a 50 m. x 25 m. grid extending from 650 to 850 E, and 2N to 550 N, (figure 3). Within this area were several high samples, including an 1,850 ppm, (725E, 250N) and 1,700 ppm (775E, 450N). At these two sample sites, pits were dug and samples taken from each of the A,B, and C soil horizons.

Zone "A", Pit 1

This pit was dug at 2 + 46N, 7 + 24E, within a few metres of the actual sample site. The area was near the lower flanks of a steep rocky hill. Vegetation was thick underbrush and large cedar trees. The original sample appears to have been taken from highly organic soil and decaying vegetation. This site was re-sampled, and ran 1,090 ppm as compared to 1,850 ppm. Data regarding soil horizon thickness, radioactivity and uranium content is given in tabular form below.

Soil Horizon	Type	Thickness	cps Scint. Reading	ppm Uranium
A	Wet, clay, organic	46 cm	440	4,760
B	Clayey	28 cm	220	1,244
		Total Depth		
C	Rocky	134 cm	190	158

Zone "A", Pit 2

The second pit in Zone "A" was dug at 450N, 775E, where a value of 1,700 ppm uranium had been recorded. Apparently this original sample had been collected from the thick organic soil at the base of an overturned stump. The "A" horizon was composed entirely of damp, well decayed organic material. The "B" and "C" layers were sandy, with little clay. Depth, radiometric and analysis data is given below.

Soil Horizon	Type	Thickness	cps Scint Reading	ppm Uranium
A	Rich, organic	35 cm	220	200
B	Sandy	30 cm	220	449
		Total Depth		
C	Sandy	95 cm	200	207

The original 1,700 ppm value obtained at this site was not repeated.

Zone "A" Rocks

Rock samples for geochem analysis were collected from 4 stations near these high sample sites, including the high bare cliff above the low swampy basin area. Values range from 4.0 to 9.0 ppm uranium.

Detailed Grid "B"

The second area to be sampled in detail extended from 550N to 950N, and from 1,650E to 21E. In contrast to Zone "A", this area was a steep rocky slope, at a higher elevation (1,650 m.). There was no apparent topographic collection basin, and the organic content of the soil was

much lower than Zone "A". Data on the two pits dug in this detail area is presented below.

Zone "B", Pit 1 750N, 1,750E

Soil Horizon	Type	Thickness	cps Scint Reading	ppm Uranium
A	Dry, organic	5 cm	110	70
B	Red	80 cm	200	239
		Total Depth		
C	Red	115 cm	240	281

Zone "B", Pit 2 850N, 1,850E

Soil Horizon	Type	Thickness	cps Scint Reading	ppm Uranium
A	Needles, leaves	5 cm	130	310
B	Golden brown	50 cm	190	392
		Total Depth		
C	Golden brown	95 cm	230	255

Zone "B" Rocks

Rock samples were collected from eight sites within the detail area. Values range from 3.4 to 7.8 ppm uranium. A sample collected at 850N, 1,850E, the site of our second pit, gave 3.8 ppm, as compared to values over 300 ppm in soil.

Zone "C"

Zone "C", on the southern part of the property, was not examined in detail. With regard to topography, soil type and amount of outcrop, this zone is very similar to Zone "B".

Discussion

There can be no doubt that the geochemical anomalies on the SHARP property are just that: strictly a geochemical phenomenon. There is absolutely no correlation between values in soil samples and values from nearby, or even adjacent outcrops. Further evidence for this conclusion is contained in our radiometric data; even our sample from Zone "A", Pit 1, "A" horizon, which contained 4,760 ppm uranium, is only slightly elevated above background. This indicates very recent deposition of uranium, with negligible development of highly radioactive daughter products.

APPENDIX I

STATEMENT OF QUALIFICATIONS

DARREL L. JOHNSON

I Darrel L. Johnson, of the City of Port Coquitlam, British Columbia, do hereby state that:

1. I am a graduate of the University of British Columbia with a B.Sc. degree in Geology, obtained in 1970;
2. I have been working in all phases of mineral exploration in British Columbia since 1964, and have held responsible positions as an exploration geologist with various exploration companies for the last 8 years;
3. I am presently the managing geologist of the Vancouver Office of Lacana Mining Corporation;
4. All work described in this report was conducted under my personal supervision.

Dated this 16, day of April 1980 at Vancouver, B.C.

Darrel L. Johnson, Geologist

APPENDIX II

STATEMENT OF COSTS

1.	Wages	D. Johnson	
		July - 4,5,6,7,8,10	
		Sept - 19,20,21,22	
		10 days @ 100.00/day	$1,000.00
		L. Uher	
		July - 4-17, 14 days @ 50.00/day	700.00
		M. Caine	
		July - 6-16, 12 days @ 50.00/day	600.00
		C. Crowley	
		Sept. - 19-22, 4 days @ 65.00/day	260.00
2.	Motels, Meals, etc.		1,684.21
3.	Truck - July 4-17, Sept. 19-22, 18 days @ 40.00/day		720.00
4.	Sample Analyses (per Min-En invoices)		
		271 soil, 17 rock	1,295.75
5.	Equipment Rental (Scintillometer)		125.00
6.	Report preparation costs		
		D. Johnson - 3 days @ 100.00/day	300.00
		Drafting	120.00
		Typing, etc.	80.00
		TOTAL	$6,884.96

Apportionment of costs to groups

SHARP East (Linda, Glory 2)	60%	4,130.98
SHARP West (Gail, Glory 1)	40%	2,753.98

APPENDIX III

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

Procedure for Uranium Analysis:

Rock, soil and silt samples are dried at 110°C and then rocks are crushed and pulverized to -80 mesh.

Soils and silts are sieved and the minus 80 mesh fraction is retained for analysis.

1.000 g. sub-sample is weighed and digested for eight hours with HNO_3 and $HClO_4$.

Then the uranium is separated chemically from other possible interfering ions as Mn,Fe, etc.

After preparation a suitable aliquote is taken and fluxed to form a 1.5 inch diameter discs in platinum dishes.

These salt discs then are compared and measured along with suitable standard with a Jarrell Ash Fluorometer.

The results are calculated accordingly to the sample aliquotes used from standard graphs.

INVOICE

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone: 980-5814

5117

DATE July 21/79

YOUR ORDER NO.

TO · Lacana Mining Corp.,
· 312-409 Granville St.,
· Vancouver, B.C.

OUR ORDER NO.		TERMS	F.O.B.	
9-344				Sharp-D.Johnson

QUANTITY	STOCK NUMBER/DESCRIPTION	UNIT PRICE	AMOUNT
62	soil geochem - U	3 75	232 50
62	soil sample preparation	50	31 00
	TOTAL		263 50

Sharp
D.J.

THESE ARE PROFESSIONAL SERVICES AND PAYABLE WHEN RENDERED.
OVER 30 DAYS 1.5% INTEREST WILL BE CHARGED PER MONTH.

INVOICE

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone: 980-5814

DATE July 21/7[illegible]
YOUR ORDER NO.

TO · Lacana Mining Corp.,
· 312-409 Granville St.,
· Vancouver, B.C.

OUR ORDER NO.		TERMS	F.O.B.	
9-344				Sharp & Johnson

QUANTITY	STOCK NUMBER/DESCRIPTION	UNIT PRICE	AMOUNT
62	soil geochem - U	3 75	232 50
62	soil sample preparation	50	31 00
	TOTAL		263 50

Sharp
D.J.

THESE ARE PROFESSIONAL SERVICES AND PAYABLE WHEN RENDERED.
OVER 30 DAYS 1.5% INTEREST WILL BE CHARGED PER MONTH.

INVOICE

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone: 980-5814

2217

DATE July 31/79

YOUR ORDER NO.

TO . Cacana Mining Corp.,
. 312-409 Granville St.,
. Vancouver, B.C.

D. Johnsen

OUR ORDER NO.		TERMS	F.O.B.	
1-1-1				Linda, Glori 1

QUANTITY	STOCK NUMBER/DESCRIPTION	UNIT PRICE	AMOUNT
113	soil geochem - U	3 75	423 75
113	soil sample preparation	50	56 50
5	rock geochem - Cu,Ag,Au	6 15	30 75
5	rock sample preparation	1 75	8 75
	TOTAL		519 75

SHARP.

DJ.

THESE ARE PROFESSIONAL SERVICES AND PAYABLE WHEN RENDERED.
OVER 30 DAYS 1.5% INTEREST WILL BE CHARGED PER MONTH.

INVOICE

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone: 980-5814

[illegible]203

DATE July 23/79
YOUR
ORDER NO.

TO · Lacana Mining Corp.,
· 312-409 Granville St.,
· Vancouver, B.C.

OUR ORDER NO.		TERMS	F.O.B.	
9-352				D. Johnson

QUANTITY	STOCK NUMBER/DESCRIPTION	UNIT PRICE	AMOUNT
82	soil geochem - U	3 75	307 50
82	soil sample preparation	50	41 00
13	rock geochem - U	3 75	48 75
13	rock sample preparation	1 75	22 75
	TOTAL		420 00

SHARP
D Johnson

THESE ARE PROFESSIONAL SERVICES AND PAYABLE WHEN RENDERED.
OVER 30 DAYS 1.5% INTEREST WILL BE CHARGED PER MONTH.

INVOICE

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone: 980-5814

DATE Oct.9/79.
YOUR ORDER NO.

TO · Lacana Mining Corp.,
· 312-409 Granville St.,
· Vancouver, B.C.

OUR ORDER NO.		TERMS	F.O.B.	
9-689				S. Cooper

QUANTITY	STOCK NUMBER/DESCRIPTION	UNIT PRICE	AMOUNT
14	soil geochem - U	3 75	52 50
14	soil sample preparation	50	7 00
6	rock geochem - U	3 75	22 50
6	rock sample preparation	1 75	10 50
2	assays - Cu, Ag, Au	13 75	27 50
2	assays sample preparation	2 00	4 00
	TOTAL		124 00
			SHARP 92 50

THESE ARE PROFESSIONAL SERVICES AND PAYABLE WHEN RENDERED.
OVER 30 DAYS 1.5% INTEREST WILL BE CHARGED PER MONTH.

INVOICE

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone: 980-5814

5117

DATE July 21/79.

YOUR ORDER NO.

TO · Lacana Mining Corp.,
· 312-409 Granville St.,
· Vancouver, B.C.

OUR ORDER NO.		TERMS	F.O.B.	
9-344				Sharp-D.Johnson

QUANTITY	STOCK NUMBER/DESCRIPTION	UNIT PRICE	AMOUNT
62	soil geochem - U	3 75	232 50
62	soil sample preparation	50	31 00
	TOTAL		263 50

THESE ARE PROFESSIONAL SERVICES AND PAYABLE WHEN RENDERED.
OVER 30 DAYS 1.5% INTEREST WILL BE CHARGED PER MONTH.

PROPERTY BOUNDARY

Detail Grid 'A'

ZONE A

Detail Grid 'B'

ZONE B

Detail Grid 'C'

BASELINE

L I N D A

G A I L

G L O R Y 1

G L O R Y 2

LCP

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 7977

LEGEND

- 2.8 Uranium values, ppm
- X500 Sediment sample (uranium in ppm) fluorimetric
- 73.0 Water sample, uranium in ppb
- C2100 1979 stream sediment site
- R78 Rock sample site

C2100 199 · C2000 189 · C1900 794 · C1800 199 · C1700 241 · C1600 147 · C1500 159 · C1400 361 · C1300 139 · C1200 361 · C1100 265 · C1000 259 · C900 190 · C800 221 · C700 214 · C600 331 · C500 250 · C400 361 · C341 540 · C300 408 · C200 600 · C100 268 · C000 490

LACANA

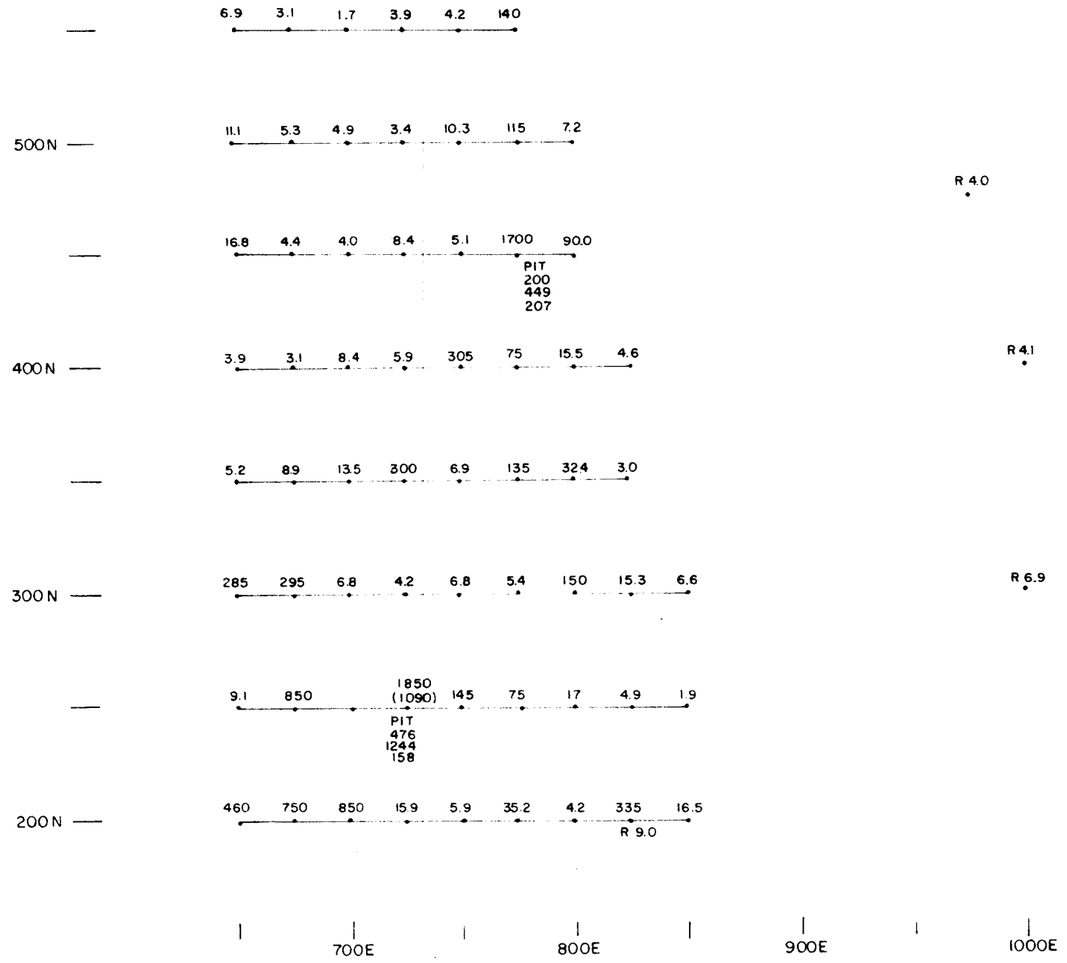
E & B EXPLORATIONS LTD.
RANGER OIL (CANADA) LIMITED
LACANA MINING CORPORATION

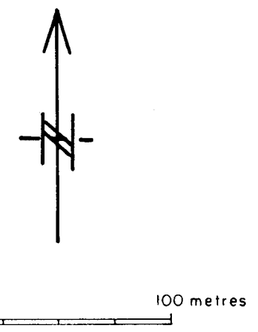
LACANA URANIUM JOINT VENTURE

SHARP PROJECT
TRAIL CREEK M.D.
URANIUM GEOCHEMISTRY

0 100 200 300 METRES

PREPARED BY:	SCALE:	DATE:	N.T.S. SHEET:	FIGURE:
D. J.	1: 5000	NOV. 1979	82F/4W	2





ALL VALUES PPM URANIUM
(1090) DUPLICATE SAMPLE

SOIL PROFILES A HORIZON 476
B " 1244
C " 158

R 3.4 ROCK SAMPLE

• 0.9 SAMPLE LOCATION, U in ppm.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 7977

LACANA

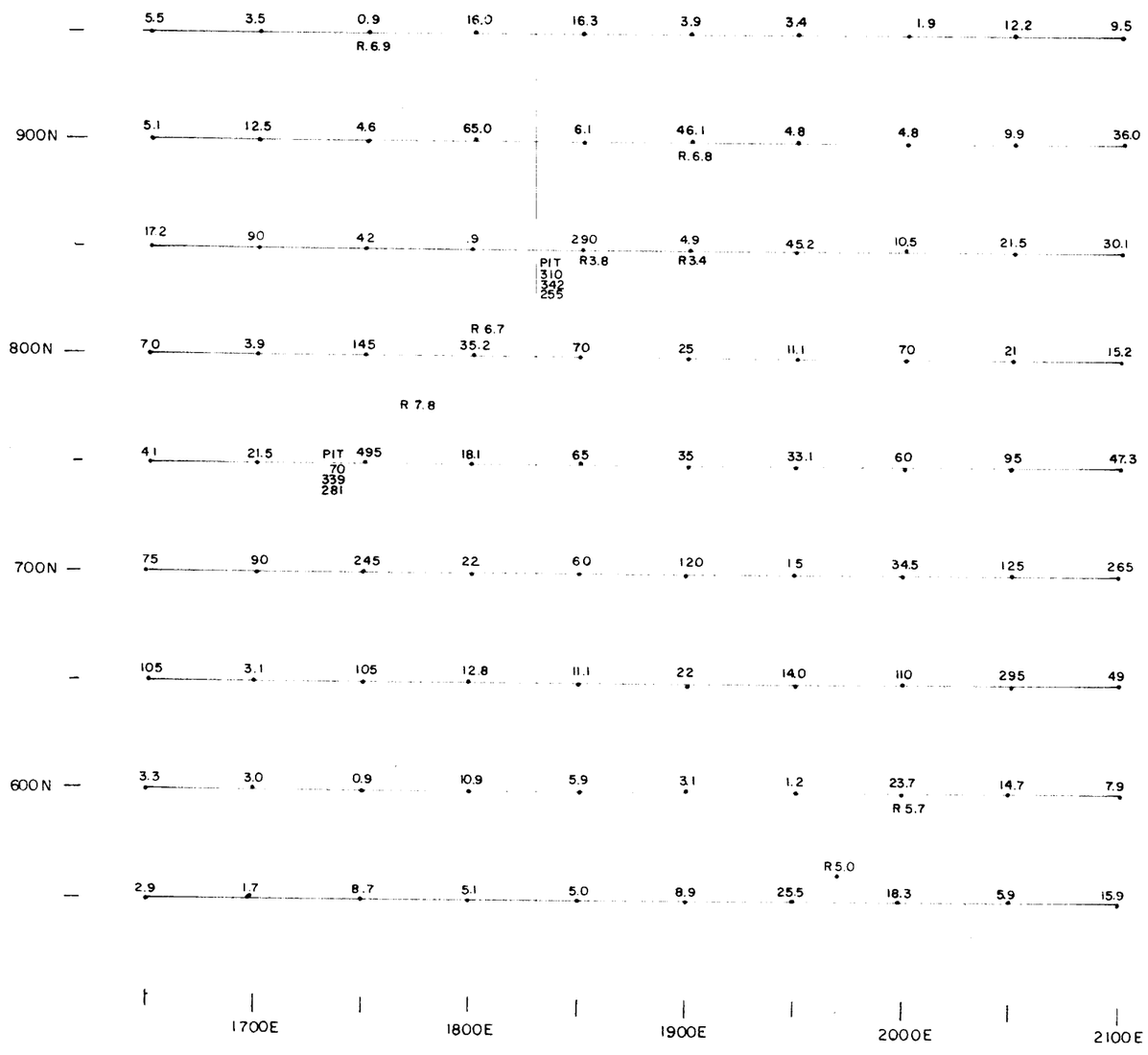
E & B EXPLORATIONS LTD
RANGER OIL (CANADA) LIMITED
LACANA MINING CORPORATION

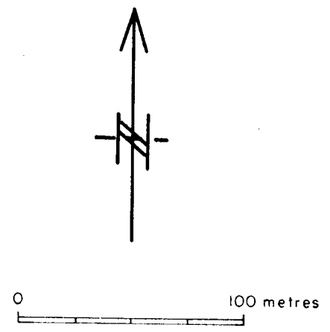
LACANA URANIUM JOINT VENTURE

SHARP PROJECT
TRAIL CREEK M.D.

URANIUM GEOCHEMISTRY
DETAIL GRID "A"

PREPARED BY	SCALE	DATE	N T S	FIGURE
D. J.	1: 2500	NOV. 1979	82F/4 W	3





ALL VALUES PPM URANIUM

SOIL PROFILES A HORIZON 310
B " 342
C " 255

R 3.4 ROCK SAMPLE

• 0.9 SAMPLE LOCATION, U in ppm

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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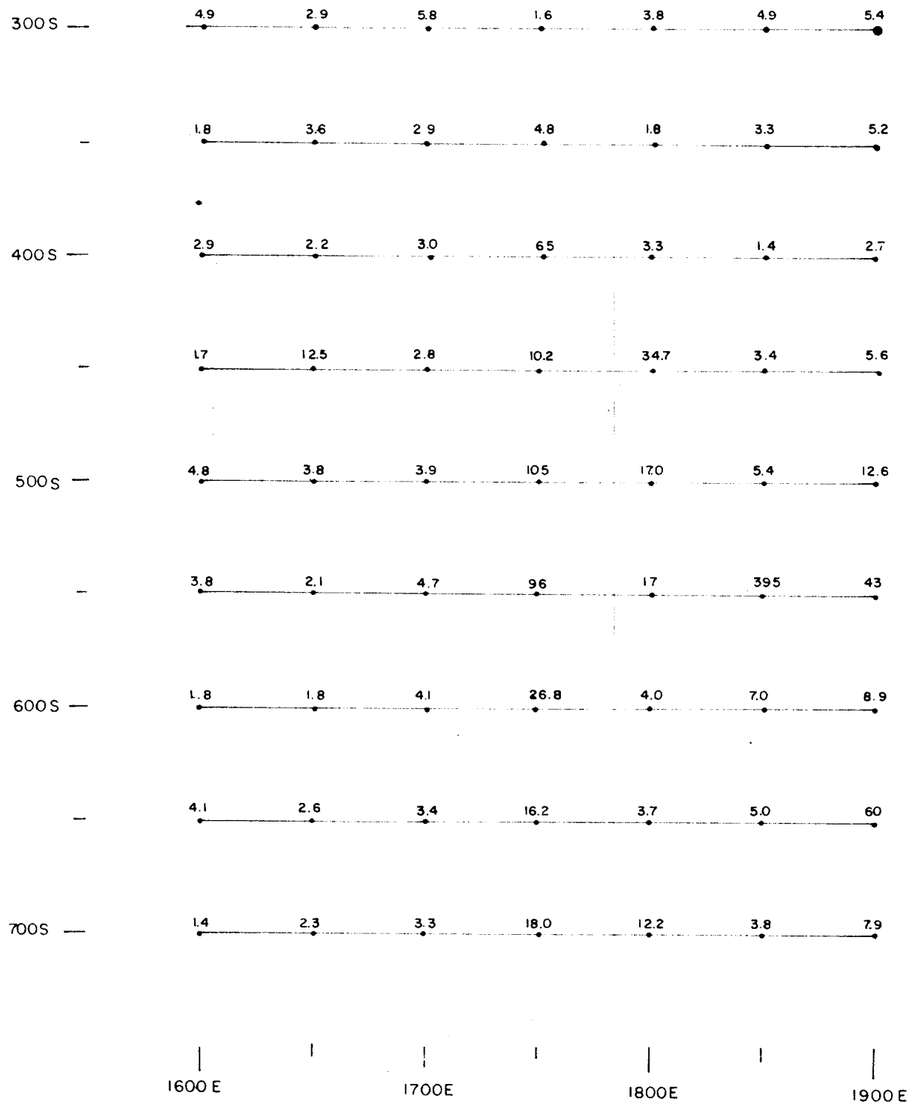
LACANA URANIUM JOINT VENTURE

SHARP PROJECT
TRAIL CREEK M.D.

URANIUM GEOCHEMISTRY
DETAIL GRID "B"

PREPARED BY	SCALE	DATE	N T S	FIGURE
D. J.	1 : 2500	NOV. 1979	82F/4 W	4



• 0.9 SAMPLE LOCATION, U in ppm.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 7977

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RANGER OIL (CANADA) LIMITED
LACANA MINING CORPORATION

LACANA URANIUM JOINT VENTURE

SHARP PROJECT
TRAIL CREEK M.D.

URANIUM GEOCHEMISTRY
DETAIL GRID "C"

PREPARED BY	SCALE	DATE	N T S	FIGURE
D. J.	1: 2500	NOV. 1979	82F/4 W	5