

6052

CANADIAN OCCIDENTAL PETROLEUM LTD.

MINERALS DIVISION

GEOCHEMISTRY
OF THE
WHIT 19 CLAIM

Claim Sheet No. 82 L/4E

Lat.: 50°13'

Long: 119°38'

82L/4E

Claims:
Whit 19, Record Number 35
Vernon Mining Division, British Columbia

by:
Colin C. Macdonald, B.Sc. (Eng.)

Covering Work Completed During the Period
August 20 to August 23, 1976

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

No. 6052

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SUMMARY

The Whit 19 claim is located seven miles (11.3 km) west of Okanagan Lake on Whiteman Creek. The property was originally staked in October, 1974, to investigate the source of a major regional stream sediment anomaly for molybdenum and zinc. A 1975 survey drew attention to a uranium stream silt anomaly off the Whit (1-18) claim group. Whit 19 was staked to cover part of the probable source area, and a stream and soil geochemical follow-up was completed in August, 1976.

This survey confirmed the presence of anomalous stream silt samples in uranium in a tributary of Whiteman Creek draining Whit 19. The dispersion length is about 3500 feet (1068 m), with values ranging from <.5 to 275 ppm U. Soil geochemistry failed to outline related uranium anomalies, as only one sample contained detectable uranium.

INTRODUCTION

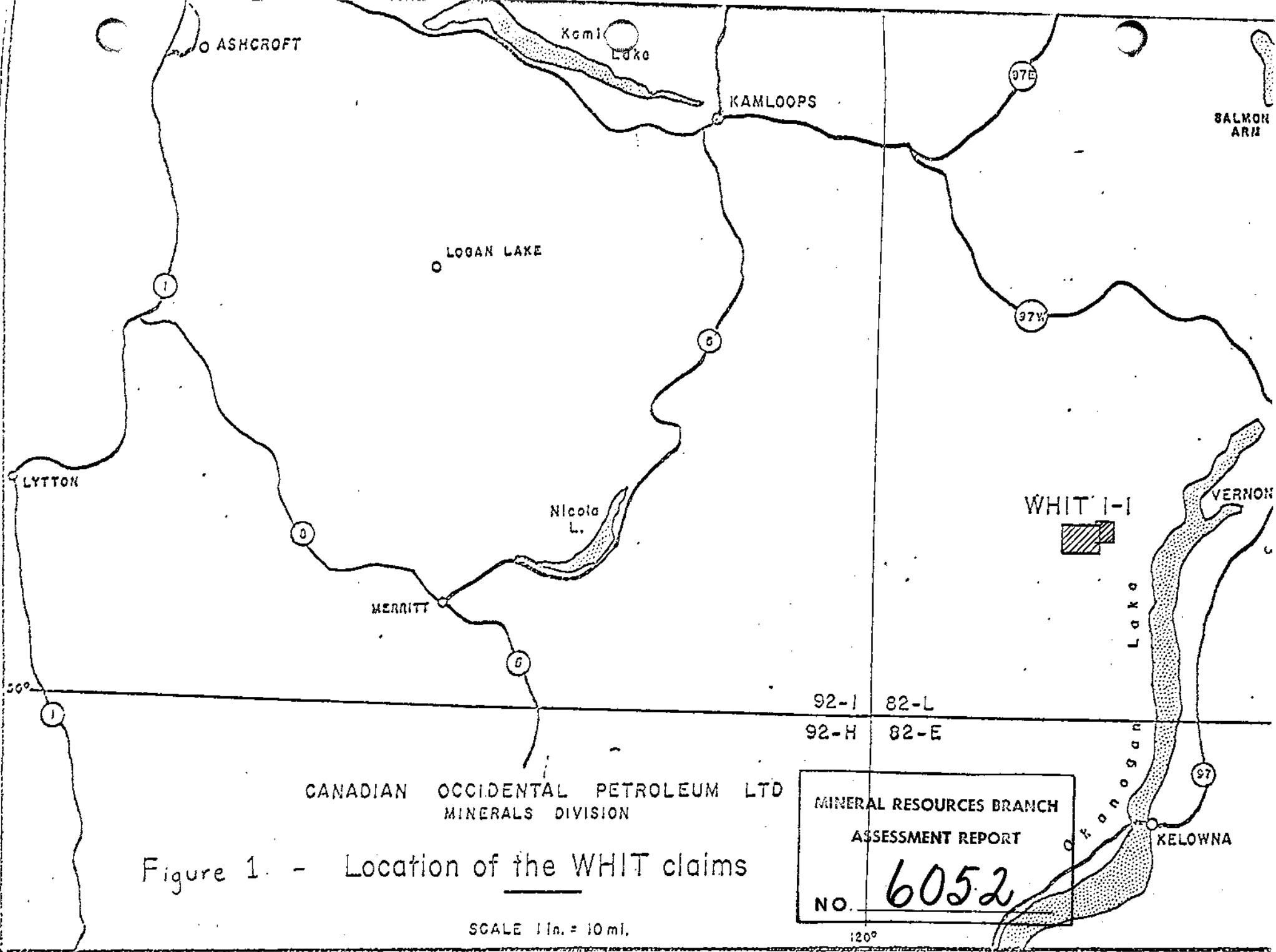
The Whit (1-18) claims were originally staked in October, 1974, to investigate a major copper-molybdenum-zinc stream sediment anomaly detected during the 1974 Nicky Project. A geological and geochemical survey was completed over the claims in July, 1975, (see 1975 report by C.C. Macdonald, "Geology and Geochemistry of the Whit Claims") by Canadian Occidental Petroleum Ltd. This survey outlined some coincident

Cu-Mo-Zn anomalies, with the centre of interest being an altered zone related to a fault.

At the suggestion of Dr. C.F. Gleeson, Geochemical Consultant, the stream sediment samples taken were also analysed for Sn, W, and U. This showed one anomalous stream in uranium draining the northeast corner of Whit (1-18), with values up to 240 ppm U. To investigate this area further, an additional claim, Whit 19, was staked by C.C. Macdonald of Canadian Occidental Petroleum Ltd. in October, 1975. This report will describe the results of a soil and stream geochemical survey completed in the area of Whit 19 between August 20 and 23, 1976, by Canadian Occidental Petroleum Ltd., the holder of the claim. The work was done to check and determine the soils dispersion of the above-mentioned uranium anomaly.

LOCATION AND ACCESS

The Whit claim is recorded on claim sheet 82 L/4E in the Vernon Mining Division, British Columbia. The property is located about seven miles (11.3 km) west of Okanagan Lake, on the south side of Whiteman Creek. It is accessible by the all-weather Whiteman Creek logging road from the Westside Road, a distance of 12 miles (19.3 km) (Figure 1).



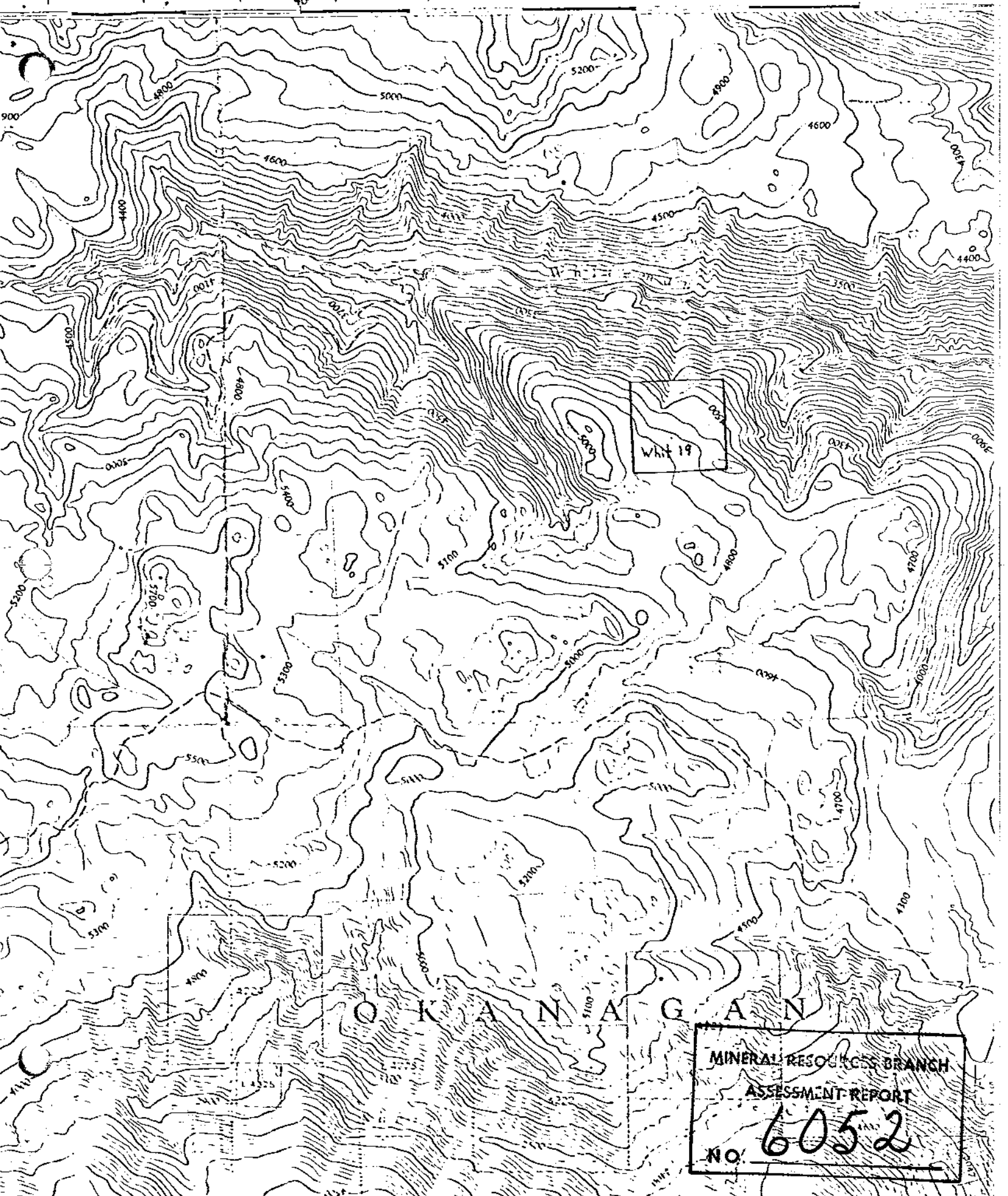
1:50,000

Figure 2 - Topographic Location Map



N.T.S. sheet 82L/4E

35 36 37 38 39 40 41 42 43 44



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VEGETATION

The property is below the tree line, with maximum elevation at 4700 ft. (1403 m) on the plateau. The entire claim and north-facing slope is the site of an old burn, hence the regrowth is extremely dense, consisting of pine and alders, with cedar at lower elevations.

PREVIOUS WORK

From old claim posts found, previous owners of parts of the Whit (1-19) claims were Southwest Potash Corp. (1964), Noranda Exploration Ltd. (1966, 1967), P. Lafleur (1967), Cominco Ltd. (1970) and Kennco (Western) Exploration (1973). Of these, the only known work completed was a geochemical survey by Noranda in 1967, on a group of claims east and south of Whit 19.

WORK COMPLETED

Geochemical Survey

Dr. C.F. Gleeson Ph.D., P.Eng.	Geochemical Consultant
Colin C. Macdonald (August 20-23, 1976)	Geochemical Sampling
Steve A. McIntyre (August 20-23, 1976)	" "
Richard M. Nodder (August 20-23, 1976)	" "

A total of 24 soil, 31 stream, and 1 rock samples were taken and analysed for U, for a total of 56 determinations.

Names and Addresses of Personnel

Colin C. Macdonald	Canadian Occidental Petroleum Ltd. 801-161 Eglinton Ave. E. Toronto, Ont.
Steve A. McIntyre	"
Richard M. Nodder	"
Dr. C.F. Gleeson	764 Belfast Rd., Ottawa, Ont.

PHYSIOGRAPHY

The Whit claim group forms part of the dissected Interior Plateau. Whit 19 lies on the north-facing slope of the Whiteman Creek valley. Relief is quite high, with elevations from 2700 feet (823 m) at Whiteman Creek to 4700 feet (1403 m) on the plateau.

GEOLOGY

The area is shown by Jones¹ to be underlain by Jurassic and Cretaceous felsic intrusions, as well as some patches of Kamloops Group volcanics of Tertiary age. Geological mapping of the Whit (1-18) claims as part of the 1975 survey showed these claims to be underlain by a zoned syenite intrusion, of which the border phase, a latite porphyry, is predominant. This rock unit covered the eastern half of Whit (1-18), presumably extending eastwards off the property towards Whit 19, though there is very little outcrop on the

¹Jones, A.G., Vernon Map Area, G.S.C. Memoir 296, 1959

plateau to support this. However, outcrop is present in the valley of the tributary draining Whit 19, and the rocks examined here were very similar to the moderately altered latite porphyry seen on Whit (1-18). One sample analysed showed only 3 ppm uranium.

SOIL GEOCHEMISTRY

Sampling Procedures

B-horizon soil samples were taken at 400-foot (122 m) intervals on picket lines spaced 800 feet (244 m) apart. The soil grid was located over the most probable source area for the uranium mineralization detected in the 1975 stream sampling. All samples were stored in special heavy-duty high wet-strength kraft envelopes, and then sent to Chemex Labs Ltd., in Vancouver for analysis for uranium.

Laboratory Procedures

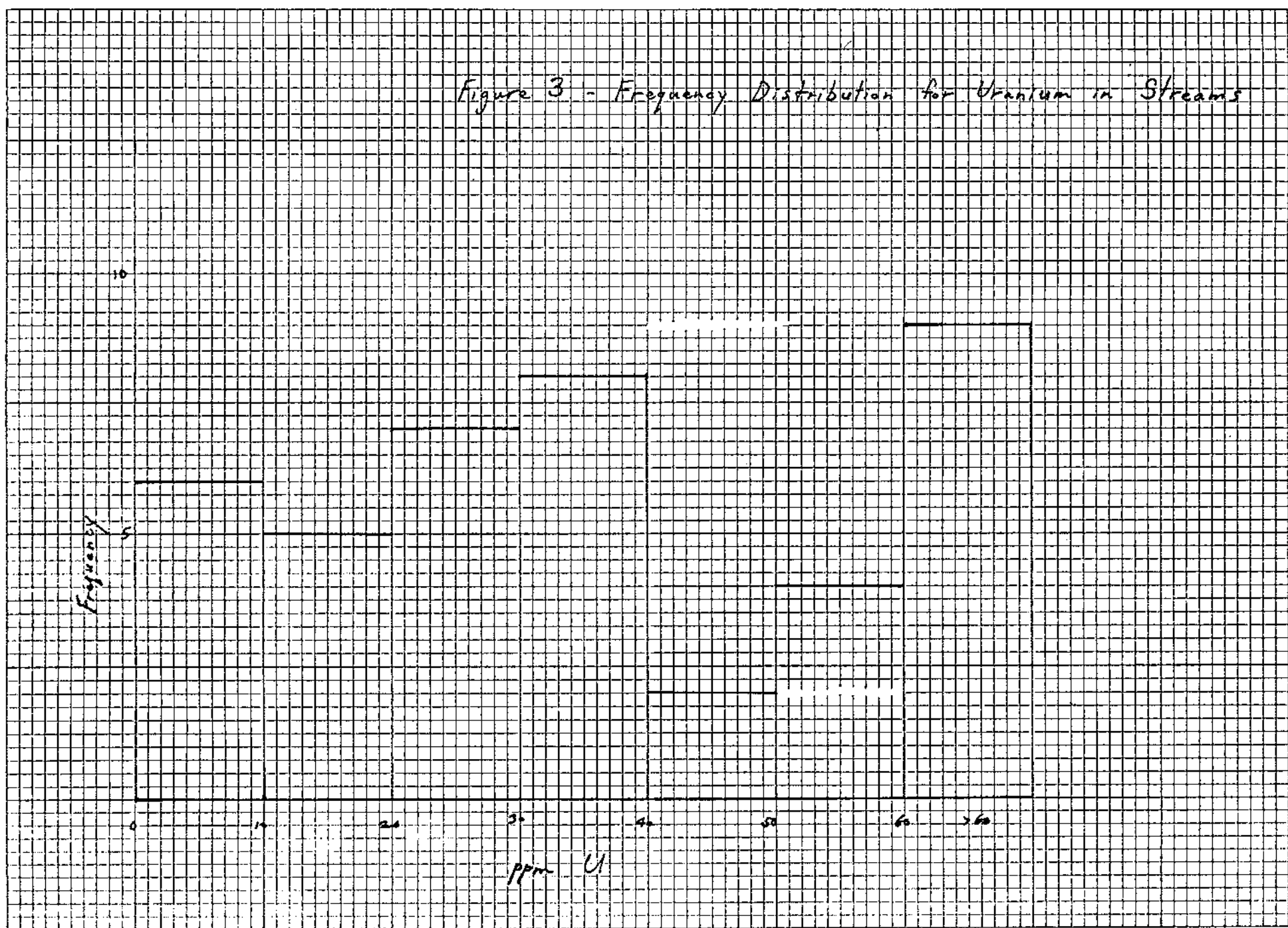
The samples are dried and sieved to -80 mesh. 0.5 grams of this fraction is digested in 4M HNO₃ to dryness, then repeated. A portion of this solution is evaporated to dryness on a platinum dish. The sample is fused with flux at 650°C, and analysed fluorimetrically on a Turner III fluorometer.

STREAM GEOCHEMISTRY

A total of 31 stream silt samples were taken on three streams; the tributary (of Whiteman Creek) draining Whit 19, and the two tributaries immediately east of this one. These samples consisted of stream silt from below water level, dried and analysed for uranium in the same manner as described for soils.

The anomalous and threshold levels used in Plan 2 were estimated from the frequency distribution (Figure 3). The results show that all three streams sampled are above normal background levels, implying that the uranium is coming from a major rock type with a high background level. The stream draining Whit 19, which was anomalous in 1975, was again the most prominent stream, with an anomalous dispersion length of about 3500 feet (1068 m), starting from a point at elevation 4300 ft. (1312 m) and proceeding downstream to its junction with Whiteman Creek. The maximum values are even higher than those of 1975, with samples of 260 ppm and 275 ppm U.

Figure 3 - Frequency Distribution for Uranium in Streams



CONCLUSIONS

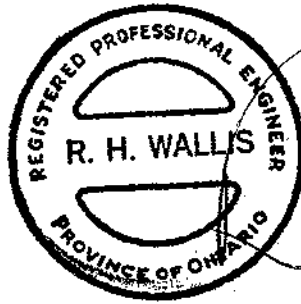
The uranium stream silt anomaly detected in the 1975 survey was reproduced, showing a downstream anomalous dispersion length of about 3500 feet (1068 m), and uranium values up to 275 ppm. The underlying rock seems to be very similar to the latite porphyry found on Whit (1-18). Soil geochemistry did not delineate any major anomalous areas, as only one sample contained detectable uranium, this being in the stream valley where overburden is much thinner.

RECOMMENDATIONS

The intensity and size of the anomalous dispersion in the stream draining Whit 19 warrants further investigation to determine the source and extent of the uranium. It is recommended that:

- 1) A second 4-unit claim be staked immediately north of the present Whit 19.
- 2) Due to the extremely dense bush, a cut and picketed grid should be completed, covering part of Whit 19 and the proposed new claim. The grid will have east-west lines at 400-foot spacing, 3200 feet (976 m) in length, covering the full width of the claims.
- 3) Soil geochemical sampling be carried out over the lines at 200-foot intervals.

4) A scintillometer and/or spectrometer survey be carried out over the grid.



Respectfully submitted,

R. H. Wallis

Colin C. Macdonald

Colin C. Macdonald, B.Sc. (Eng.)

TORONTO

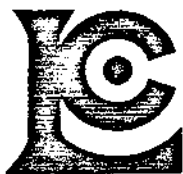
September 30, 1976

Statement of Expenditures

WHIT 19

August 20-23

Salaries: C.C. Macdonald, A.A. Seaman	\$ 316.44
R. Nodder, S. McIntyre	
12 man days, 26.37/man day	
Geochemical Analysis - 36 samples,	
56 determinations	339.80
Camp Costs	146.97
Vehicle Usage (4-wheel-drive)	84.76
Consultant (C.F. Gleeson & Assoc.)	412.00
Reporting Costs	<u>100.00</u>
Total	<u>\$1,399.97</u>



APPENDIX I
GEOCHEMICAL VALUES

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.
Minerals Division
801 - 161 Eglinton Ave. East
Toronto, Ontario

WHIT

ATTN: cc: C. MacDonald

CERTIFICATE NO. 38385
INVOICE NO. 18034
RECEIVED Aug. 30/76
ANALYSED Sept. 1/76

SAMPLE NO. :	PPM Molybdenum	PPM Zinc	PPM Uranium
16501	4	72	
16502	7	80	
16503	6	105	
16504	3	102	
16505	3	194	
16506	10	105	
16507	4	92	
16508	11	102	
16509	6	77	
16510	7	80	
16511	5	47	
16512	12	62	
16513	7	52	
16514	4	55	
16515	5	60	
16516	4	52	
16517	11	77	
16518	5	77	
16519	6	98	
16520	2	43	
16521	4	72	
16522	10	77	
16523	7	50	
16524	11	131	
16525	3	80	
16526	17	89	
16527	58	194	
16528	5	70	
16529	19	83	
16530	68	108	
16531	67	28	< 0.5
16532			< 0.5
16533			< 0.5
16534			< 0.5
16535			< 0.5
16536			< 0.5
16537			< 0.5
16538			< 0.5
16539			< 0.5
16540			< 0.5
STD.	10	194	



MEMBER
CANADIAN TESTING
ASSOCIATION

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CHEMEX LABS LTD.

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NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

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TO: Canadian Occidental Petroleum Ltd.
Minerals Division
801 - 161 Eglinton Ave. East
Toronto, Ontario

WHIT

ATTN: cc: C. MacDonald

CERTIFICATE NO. 38386
INVOICE NO. 18034
RECEIVED Aug. 30/76
ANALYSED Sept. 1/76

SAMPLE NO. :	PPM Molybdenum	PPM Zinc	PPM Uranium
16541			< 0.5
16542			< 0.5
16543			< 0.5
16544			< 0.5
17401			40
17402			38
17403			32
17404			36
17405			40
17406			59
17407			59
17408			39
17409			49
17410			12
17411			34
17412			25
17413			24
17414			57
17415			3.5
17416			54
17417	9	120	
17418	68	60	
17419	12	70	
17420	87	169	
17421	240	98	
17422	24	115	
17423	5	98	
17424	8	62	
17425	6	75	
17426	4	75	
17427	7	92	
17428	4	72	
17429	4	60	
17430	14	60	
17431	5	70	
17432	6	50	
17433	7	67	
17434	5	83	
17435	5	77	
17436	6	50	
STD.	9	194	

PP Swaites



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NORTH VANCOUVER, B.C.
CANADA V7J 2C1
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AREA CODE: 604
TELEX: 043-52597

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CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.
Minerals Division
801 - 161 Eglinton Ave. East
ATTN: Toronto, Ontario

WHIT

CERTIFICATE NO. 38387
INVOICE NO. 18034
RECEIVED Aug. 30/76
ANALYSED Sept. 1/76

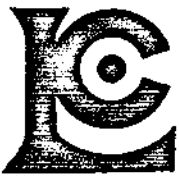
cc: G. MacDonald

SAMPLE NO. :	PPM Molybdenum	PPM Zinc	PPM Uranium
17437	7	65	
17438	8	86	
17439	28	160	
17440	18	77	
17441	20	105	
17442	12	120	
17443	34	72	
17444	17	65	
17445	4	80	
17446	2	77	
17447	2	89	
17448	2	83	
17449	<1	83	
17450	3	70	
17451	2	92	
17452	1	148	
17453	1	127	
17454	3	80	
17455	3	140	
17456	2	112	
17457	1	131	
17458	2	80	
17459	1	65	
17460	2	108	
17461	3	148	
17462	<1	148	
17463	<1	115	
17464	<1	102	
17465	<1	62	
17466	<1	43	
17467	<1	67	
17468	<1	123	
17469	<1	86	
17470	22	34	
17471	3	75	
17472	1	67	
17473			< 0.5
17474			< 0.5
17475			5.0
17476			< 0.5
STD.	10	200	4.5



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TO: Canadian Occidental Petroleum Ltd.
Minerals Division
801 - 161 Eglinton Ave. East
Toronto, Ontario

WHIT

ATTN: cc: C. MacDonald

CERTIFICATE NO. 38388
INVOICE NO. 18034
RECEIVED Aug. 30/76
ANALYSED Sept. 1/76

SAMPLE NO. :	PPM Molybdenum	PPM Zinc	PPM Uranium
17477			< 0.5
17478			< 0.5
17479			196
17480			275
17481			260
17482			162
17483			56
17484			35
17485			< 0.5
17486			24
17487			< 0.5
17488			< 0.5
17489			< 0.5
17490			< 0.5
17491			< 0.5
17498			< 0.5
17965			14
17966			21
17967			11
17968			14
17969			23
17970			4.5
17971			9.5
17972			< 0.5
17973	4	112	
17974	5	98	
17975	3	98	
17976	3	102	
17977	1	115	
17978	4	105	
17979	3	108	
17980	2	70	
17981	1	72	
17982	2	67	
17983	1	123	
17984	1	86	
17986	<1	86	
17987	1	62	
17988	34	112	
17989	7	72	
STD.	10	206	



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ASSOCIATION

CERTIFIED BY:

R. Swaiter



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NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

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CERTIFICATE OF ANALYSIS

TO: Canadian Occidental Petroleum Ltd.
Minerals Division
801 - 161 Eglinton Ave. East
Toronto, Ontario

WHIT

ATTN: cc: C. MacDonald

CERTIFICATE NO. 38389
INVOICE NO. 18034
RECEIVED Aug. 30/76
ANALYSED Sept. 1/76

SAMPLE NO. :	PPM Molybdenum	PPM Zinc
17990	5	67
17991	8	72
17992	8	80
17993	19	120
17994	17	152
17995	26	123
17996	31	57
17997	7	98
17998	68	72
17999	25	72



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MINERAL RESOURCES BRANCH
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 NO. 6052
 MAP NO. #1

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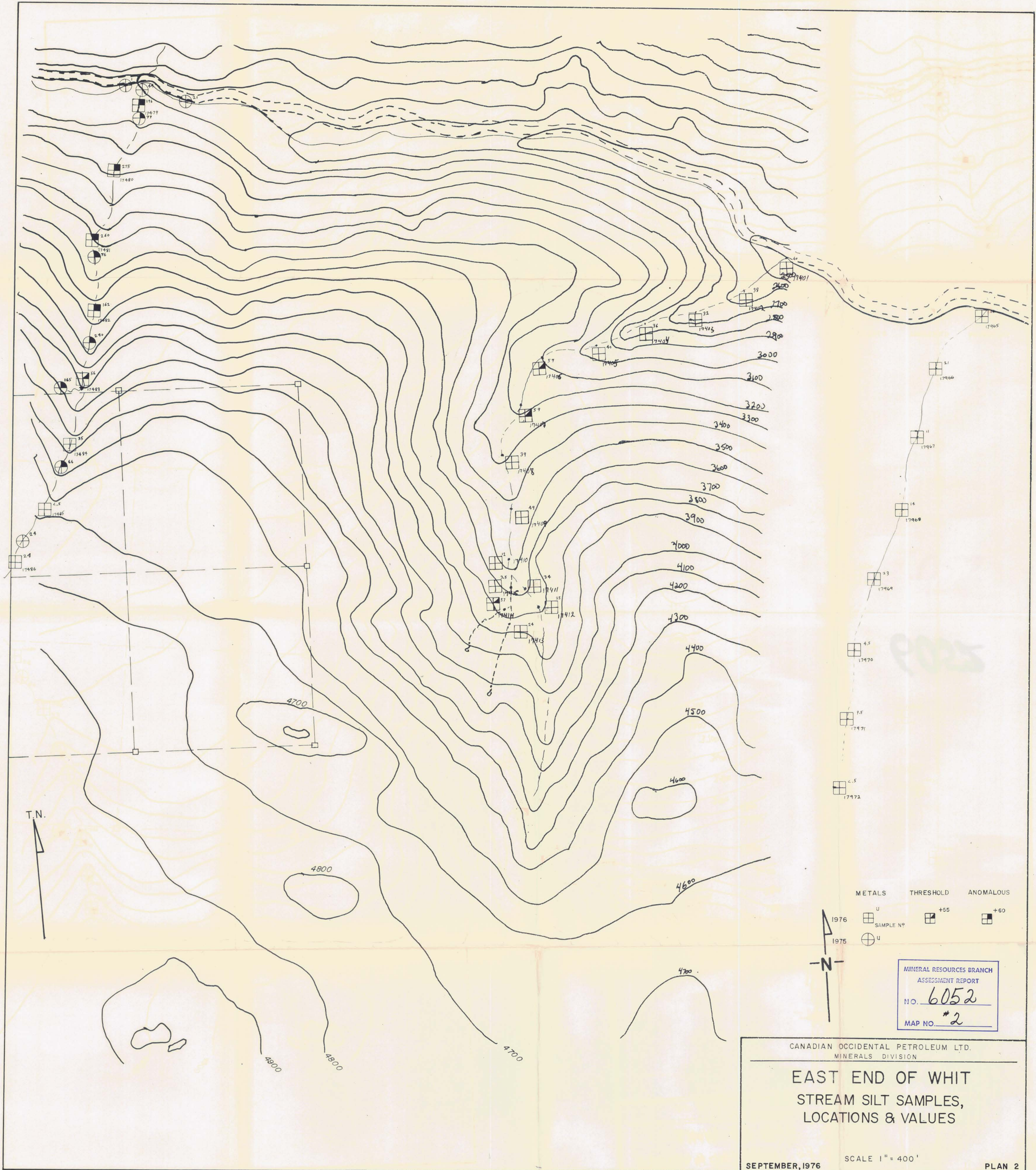
EAST END OF WHIT
 SOIL SAMPLES, LOCATIONS & VALUES

SEPTEMBER, 1976 SCALE 1" = 400' PLAN 1

METALS THRESHOLD ANOMALOUS

⊕₁ ⊕₂ ⊕₊₂

Sample No.



METALS	THRESHOLD	ANOMALOUS
1976 □ SAMPLE NO	+55	+60
1975 ⊕		

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 NO. 6052
 MAP NO. #2

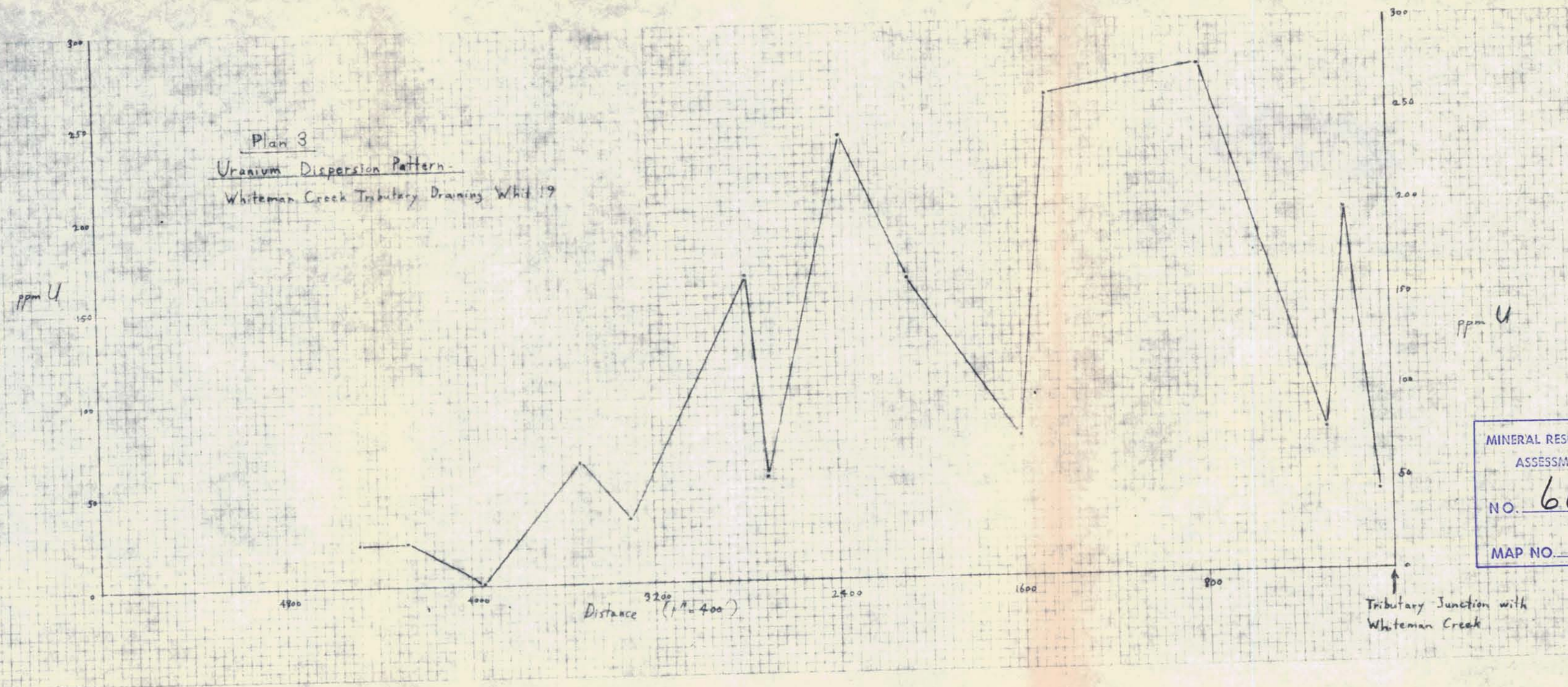
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 MINERALS DIVISION

**EAST END OF WHIT
 STREAM SILT SAMPLES,
 LOCATIONS & VALUES**

SEPTEMBER, 1976 SCALE 1" = 400' PLAN 2

6052

Plan 3
 Uranium Dispersion Pattern -
 Whiteman Creek Tributary Draining Whit 19



MINERAL RESOURCES BRANCH
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 NO. 6052
 MAP NO. #3

Tributary Junction with
 Whiteman Creek

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