RGIP CANADA LÍD.

EXPLORATION ACTIVITY ON THE LOS CLAIMS LOS CLAIMS NELSON MINING DISTRICT NTS 82F/3 LATITUDE 49<sup>0</sup>05' LONGITUDE 117<sup>0</sup>07' OWNER: J. A. CLIMIE OPERATOR: AGIP CANADA LTD.



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APPENDIX A APPENDIX B



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#### LIST OF FIGURES

Figure 1 - Location Map

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Figure 2 - Geology, Geochemical and Radiometric Map

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established on the north side of Lost Creek 3 kilometers west and adjacent to the LOS I claim block, for the duration of field program (Figure 1).

#### 1.3. Claim Disposition

J. A. Climie is holder of the three claims LOS 1-3 in groups of 18, 16 and 20 units. At present AGIP Canada Ltd. of Calgary, Alberta, is operator of the project.

#### 2. GEOLOGY AND RADIOMETRICS

#### 2.1. Introduction

Exploration comprised of detailed geochemical, geologic and radiometric examination of the intrusive contact with metasediments at Lost Creek. The work was carried out by two geologists and two assistants during the time period May 22nd to May 31st, 1979. Thirty-six man days were required to complete this phase of the work.

The area consists of approximately 10 to 20% outcrop exposure. Mapping results are plotted in Figure 2 at a scale of 1:10,000.

#### 2.2. Detailed Geology

The claim group is located within a small stock of the Lower Cretaceous Nelson Batholith in contact with a roof pendant of Lower Cambrian metasediments of the Reno Formation, and flanked on the east side of the claim group by the Lower Cambrian metasediments of the Laib Formation.

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Geological mapping has revealed that the metasediments of the Reno Formation in the southern portion of the claim group are less extensive than indicated on the current geological map (Little 1960), (Figure 2). Following is a description of the main lithologies encountered:

Reno Formation (Lower Cambrian): The formation is made up in large part of a layered to massive grey-white guartzite. In the north east portion of LOS I the formation grades to a laminated grey argillite and a micaceous (less than 20% biotite) guartzite. The contact between the formation and the Nelson Intrusion is sharp and clearly defined in areas of exposure, with no alteration observed in the metasediments. Laib Formation (Lower Cambrian): The formation consists of an assemblage of black to grey argillaceous quartzite, black sooty phyllite argillaceous schists, minor limestone, and hornfels. The argillaceous guartzite and schist consist of quartz, sericite, minor calcite and less than 1% pyroxenes. Interbedded with the quartzite and schist are bands of limestone and white massive quartzite. Hornfelsing was observed, but the actual contact between the Laib Formation and the Nelson Intrusion was not seen.

<u>Nelson Batholith (Lower Cretaceous)</u>: The intrusion is a massive, medium-grained, leucocratic granite. The

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uniform mineralogy and texture consists of alkalifeldspars, plagioclase and biotite. The intrusion displays a discordant relationship at the contact and xenoliths of the Reno metasediments are seen up to 30 meters from the intrusive contact, evidence of magmatic stoping emplacement.

#### 2.3. Radiometric Results

Two McPhar TV-1A (cpm) and two SRAT-SPP's (cps) scintillometers were employed on traverses with constant monitoring of backgrounds.

Reno Formation: Anomalous radioactivity occurs in biotite rich, quartzite, in discontinous fractures 1 to 3 meters long, approximately 10 meters from the intrusive contact. Radiometric readings were found to be up to TI = 16,000 cpm (TV-IA) and 500 cps (SPP-2). Average radiometric values for the formation is TI =2,000 to 3,200 cpm (TV-1A), 70 to 120 cps (SPP-2). Nelson Batholith: No anomalous radioactivity was found. Several traverses were performed and the radiometric background ranged from Tl = 2,000 to 7,700 cpm (TV-1A), 75 to 200 cps (SPP-2). The range in readings is contributed to the varying amounts of potassium and radiogenic accessories within the intrusion. Laib Formation: No anomalous radioactivity was found. Average radiometric values for the formation are T1 = 2,000 to 3,600 cpm (TV-1A), 80 to 120 cps (SPP-2).

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#### 3. GEOCHEMISTRY

#### 3.1. Introduction

During the period of May 22nd to May 31st, 1979, a stream sediment and water sampling survey was carried out by the crew simultaneously with geological mapping (Figure 2).

#### 3.2. Survey Techniques

A total of 50 stream sediments and 48 stream water samples were collected. Water samples were collected in 6 oz. plastic bottles and sediments in cloth bags. Each sample location was recorded on a map at a scale of 1:10,000 and located with the help of an altimeter. Sample sites were flagged with date and code number.

Stream sediment samples were analysed for U, Mo, Pb, Zn, and W by Barringer Magneta in Calgary, Alberta, utilizing the -80 mesh fraction with determination by atomic absorption spectrometer.

The water samples were analysed for U using the fluorimetric method. Sample results are shown in Appendix A. Sample locations are analyses are plotted on Figure 2.

#### 3.3. Results

At this time results for U, Pb, Zn and Mo for the stream sediments and U in water have been received. W values are awaited. At present, data is being interpreted. U results are briefly summarized below:

<u>Nelson Intrusion</u>: A total of eight samples, (001, 002, 005, 012, 103, 105, 015, 501 and 504) were obtained from creeks draining within the intrusion. U values ranged from 6.8 to 102.9 ppm U.

<u>Reno Formation</u>: One sample in the roof pendant and three samples in the north east portion of LOS I were collected in the unit and gave values ranging from 4.4 ppm to 11.8 ppm U.

Laib Formation: Twenty-eight samples were obtained in the east portion of the claim group and surrounding areas. Generally the values for U are low, ranging from 1.0 to 5.4 ppm U.

The values for Pb, Zn, and Mo are shown in Appendix A.

#### SUMMARY

a) The geological mapping has shown that the Reno Formation is less extensive then previously mapped (Little 1960).

b) Radiometric prospecting of the area located no outstanding anomalous zones in the metasediments or intrusion. However, exposure is limited in some areas.

c) Significance of the geochemical results are yet to be evaluated. However, higher values appear to relate to the intrusive.

d) The Reno Formation guartzites are not favourable for con-

tact metasomatic mineralization. The Laib Formation appears more promising.

e) Work is to be done in the fall of 1979 to further follow up the anomalous geochemical results.

- 5. ITEMIZED COST STATEMENT
  - 5.1. Pre-Field Expenses
    - 5.1.1. Personnel
      - April 10 1 geologist @\$75/day \$ 75.00
    - 5.1.2. Airphotos and relevant maps \$ 100.00

#### 5.2. Field Expenses

5.2.1. Personnel

May 22-31 - 2 geologists @\$68/day	\$1	,360.00
May 22-31 - 2 assistants @\$38/day	\$	760.00
May 29 - supervising geologist @\$200/day	\$	200.00

- 5.2.2. Accommodation and Food
  - May 22-31 @\$33/day \$1,320.00
- 5.2.3. Equipment Rental

May 22-31 - 2 four wheel drive trucks @\$45/day \$ 900.00

5.2.4. Geochemical Samples

50 stream sediment samples analysed for U, Mo, Pb, Zn, W; @\$7.75/sample \$ 387.50 48 stream water samples analysed for U; @\$3.15/sample \$ 151.20

#### 5.3. Post Field Expenses

5.3.1. Drafting of Map and Report

July 23-24 - 1 draftsperson @\$45/day \$ 90.00 July 24 - 1 supervising geologist @\$200/day \$ 200.00 'AGIP CANADA LIO.

5.3.2. Miscellaneous Supplies

\$ 250.00

TOTAL

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<u>\_\_\_\$5,793,70</u>\_\_\_\_

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. EARRINGER MAGENTA

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	(4101) (00)	6.8	40	44	2				_
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	003	4.6	48	98	2				
	004	4.4	25	570	2				
	005	52.0	17	58	4		_		-
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. 1	015	50.0	48	46	2				
	014	25.0	34	20	4				
	017	1.0	94	28	3		-		
1	510	2.4	70	2,8	2				

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BARRINGER MAGENTA

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-	021	1.2	94	44	3					
	022	5.8	38	34	3					
	023	5.0	78	44	2			··· -··	[	
	024	.7	62	54	2	· · ·				
	025	3.4	90	50	2					
	026	1.9	70	34	2					
	027	5.4	74	34	3					
	028	2.4	160	34	5	< 4	L.			
	029	2.4	92	28	2					
	030	1.8	. 84	32	2					
	031	3.2	160	34	2					
	032	5.4	74	34	2					
	033	3.6	68	38	2					
	034	3.4	110	36	2					
	035	1.8	80	34	2					
	635	1.5	54	38	2					

BARRINGER MAGENTA

SAMPLE TYPE:								
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502	4.2	80	40	2				
503	1.0	44	30	2				
504	6.0	. 40	26	2				
505	.8	32	20	2				
506	2.4	52	34	2				
507	1.2	3,2	30	2				
508	1.4	58	24	2				
509	1.9	62	32	2				<u> </u>
510	1.0	40	26	2				
511	3.2	110	10	2				
512	3.4	86	32	2				
5/3	4.4	94	36	2			·	
514	4.8	58	30	2				_ _
515	4.4	83	26	3				$\downarrow$
514	3,3	62	36	2				- -
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415	,. <del>.</del>	32	26	2				
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BARRINGER MAGENTA

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	C03	2.6		120	.5		524	-'	
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BARRINGER MAGENTA

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ŗ—	SAMPLE NUMBER	2L Ppm	In ppm	Pb	Mo	ω		
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, , ,	R-001	7.4	72	50	2			

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#### APPENDIX B

I, Morris Phillip Mudry, received a Bachelor of Science degree in May, 1978, in the discipline of Geology from The University of Calgary, Calgary, Alberta. My experience is five summers in uranium exploration and I was party leader for the program on the LOS Claims. I am now currently working for AGIP Canada Ltd., Calgary, Alberta, as party leader.

M. P. Mudry



![](_page_16_Figure_1.jpeg)

![](_page_16_Figure_2.jpeg)

![](_page_17_Figure_0.jpeg)