

## FLUORITE CLAIMS

Golden Mining Division

N.T.S. 82/J/3/E

D. Bending

November 1978

	<u>Record No.</u>	<u>Date Recorded</u>
Work performed on:		
Deep Purple claim	154	July 21, 1977
Candy claim	183	Oct. 13, 1977

Latitude:  $50^{\circ}13' N$ , Longitude:  $115^{\circ}8' W$ .

Operator: Rio Tinto Canadian Exploration Limited.

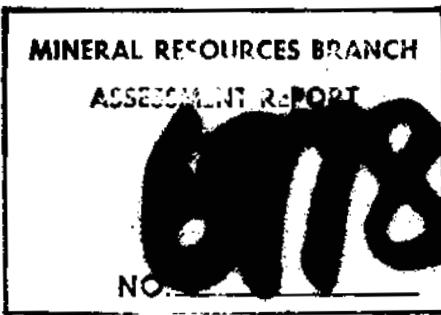


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### SUMMARY

The 1978 field programme on the Deep Purple and Candy claims consisted of 1:10,000 scale geological mapping, prospecting and soil sampling in the most favourable area. Mapping revealed patterns of fluorite float distribution with respect to rock type, distinctive stratigraphic controls, and three small showings of fluorite and barite in place. Fluorite occurrences are probably subeconomic in size but a Pb-Zn association reflected in geochemical data may be significant. Exposure is very poor and trenching is currently being carried out to reveal the probable source of the fluorite and barite and to follow up Pb and Zn soil anomalies.

## 1. INTRODUCTION

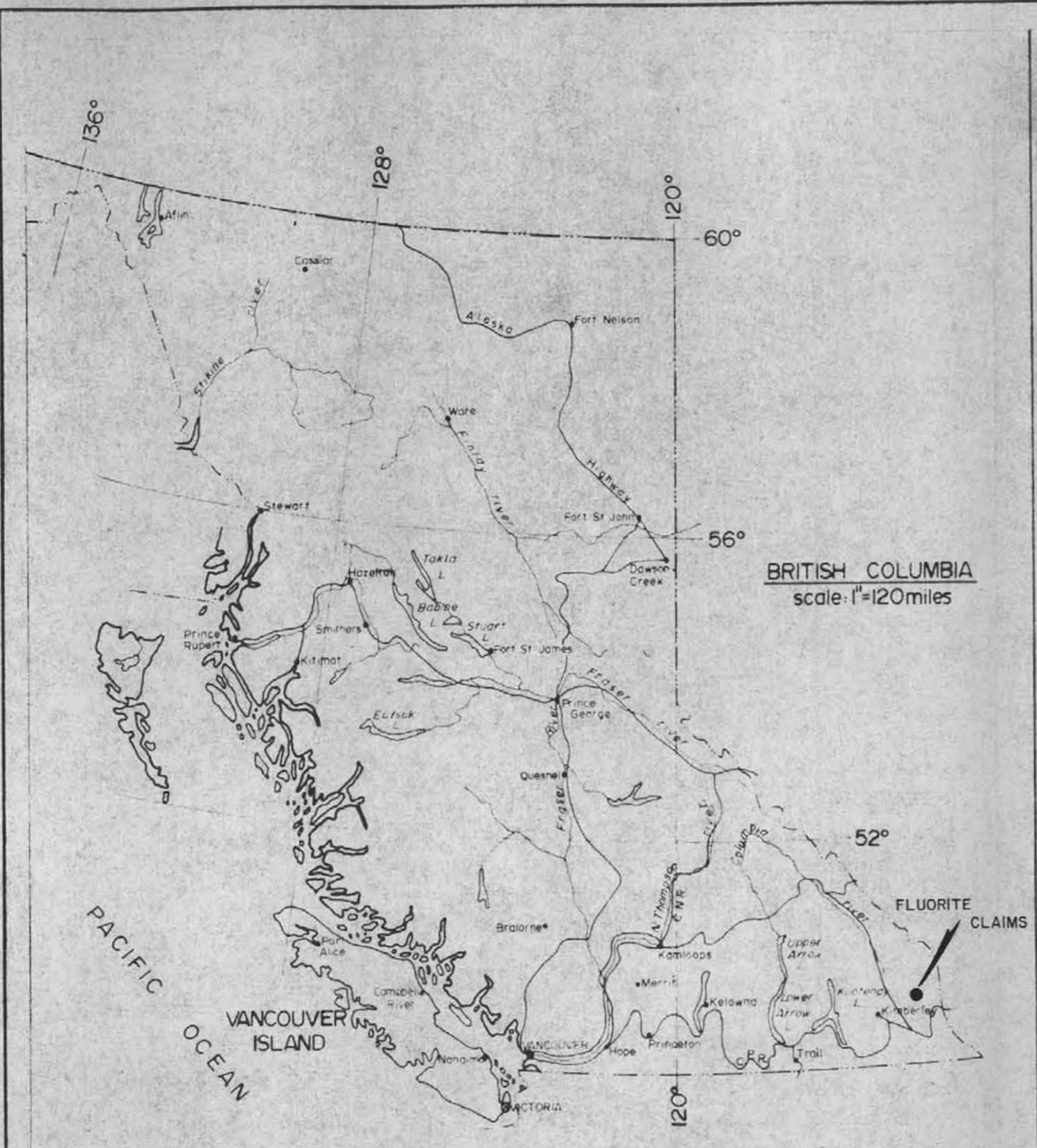
In 1977, Rio Tinto Canadian Exploration Limited sponsored the Graf Pb-Zn reconnaissance in the Rocky Mountains of south east British Columbia. One result of the work was the staking of the Deep Purple and Candy claims on a poorly exposed fluorite showing in Middle Devonian carbonates in the upper parts of Rock Canyon Creek, 30 miles east of Canal Flats, B. C. The 1978 field programme (outlined in this report) consisted of an evaluation of the occurrence by means of 1:10,000 scale geological mapping, prospecting and soil sampling.

## 2. LOCATION AND ACCESS

The Deep Purple and Candy claims lie on the upper reaches of Canyon Creek (Figure 1). They are accessible by conventional vehicles, about 7 km up a branch of the White River development road, 40 km east of Canal Flats. Latitude and longitude are approximately  $50^{\circ}13'N$ ,  $115^{\circ}8'W$ . N.T.S. coordinates are 82/J/3/E.

## 3. HISTORY AND PREVIOUS WORK

Previous work is summarized in the report of the 1977 regional programme (Graf, 1978). Considerable staking and drilling have resulted from discoveries south of a sphalerite showing at Monroe Lake owned by Silver Standard Mines Ltd. A regional study of the area by the Geological Survey of Canada is in press at the time of writing.



**MINERAL RESOURCES BRANCH**  
**ASSESSMENT REPORT**

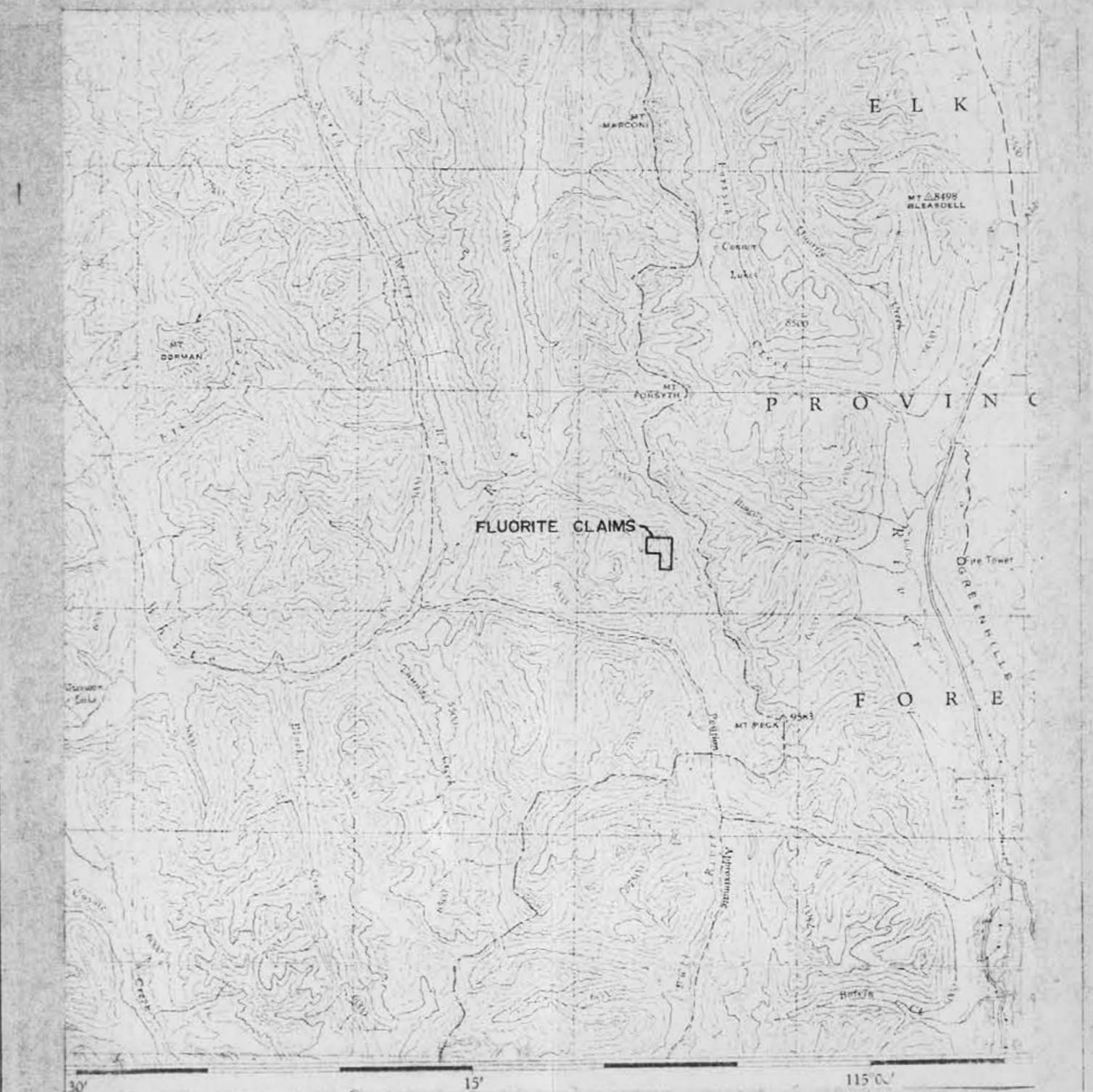


FIG. I

BIO-TINTO CANADIAN EXPLORATION LTD

## **FLUORITE CLAIMS**

## LOCATION MAP

NOV. 1978 R.V.L. / s.g. DWG L-6532

#### 4. CLAIMS

The claims listed below are shown in Figure 2.

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Date Recorded</u>
Deep Purple	18	154	July 21, 1977
Candy	8	183	Oct. 13, 1977

#### 5. WORK CARRIED OUT BY RIOCANEX IN 1978

The 1978 field programme on the Fluorite claims consisted of 1:10,000 scale mapping of outcrops and mineralized float, soil sampling at the 'B' and 'C' horizons, on a 50m x 50m grid (closed to 25m x 50m in certain areas) and stream silt sampling to refine the definition of anomalies recognized in 1977.

A five-man crew, of which the writer was party chief, worked from a camp near the main showings for three weeks during May and June 1978. Nine hundred sixty-six soil samples were taken, and 38 stream silts. The work was supervised by R. V. Longe.

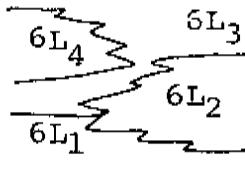
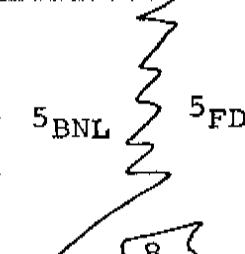
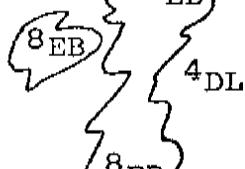
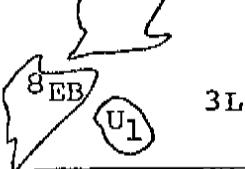
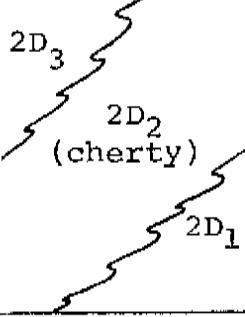
#### 6. GEOLOGY

The geology of the Fluorite project area is shown in Figure 3. The rocks are steeply dipping Devonian and Silurian platform carbonates. In general these rocks probably correlate with the Beaverfoot, Harrogate, and Burnais formations, and the Fairholme group.

Table I summarizes the stratigraphic units recognized on the property. These are related in only a general way with regional formations.

TABLE I

## Stratigraphic Units Recognized on the Fluorite Claims

Stratigraphic Relationships	Description
8 <sub>EB</sub>	Evaporitic breccias.
7 <sub>L</sub>	Devonian Fairholm Group Uniform massive pale grey predominantly crinoidal crystalline Limestone. Small shears and tension gashes host masses of white sparry calcite.
	Overlying the Fetid Dolostones is a complex of interfingering subtidal and transitional limestones, shales, and burrowed dolomitic limestones. Main rock types are: Dark Shaly Limestone (6L <sub>1</sub> ), tan weathering Grey Shale (6L <sub>2</sub> ), grey finely crystalline burrowed Dolomitic Limestone (6L <sub>3</sub> ), grey finely crystalline Burrowed Limestone (6L <sub>4</sub> ).
	Burnais; not rigorously correlated to regional formations. Two laterally equivalent facies have been mapped: the southeast end is a Bioclastic and Nodule Lime Mudstone and Dolostone (5 <sub>BNL</sub> ). The North Extension and regionally dominant facies is a Fetid Dark Grey Sucrosic Dolostone (5 <sub>FD</sub> ) with birdseye textures, lenses of pseudobreccia, calcite pods, fetid odor.
	Diverse interfingering of nodular dolomitic occasionally fossiliferous Lime Mudstones (4 <sub>DL1</sub> ), finely crystalline Dolostones (4 <sub>DL2</sub> ), thin lenses of Quartzite (4 <sub>DL3</sub> ), and rare Limy Shales (4 <sub>DL4</sub> ).
	Bioclastic Lime Mudstones (3 <sub>L</sub> ). Crinoidal and brachiopod-bearing shaly, nodular limestones with some dolomitic sections. Laterally continuous and locally useful for marker beds.
	Silurian (Beaverfoot) Upper margin is brown weathering dolostone, locally quartzitic, probably Silurian/Devonian Boundary. Pale grey sucrosic or finely crystalline dolostone with rare relic brachiopods and crinoid ossicles. Three facies mapped: 2D <sub>1</sub> and 2D <sub>3</sub> are essentially identical grey finely crystalline Dolostone; 2D <sub>2</sub> is an irregularly distributed slightly pyritic cherty banded Dolostone.
1L	Creamy grey finely crystalline Limestone, some delicate laminae.

## 7. MINERALIZATION

Five distinctive types of fluorite occurrence have been observed in the area. Named localities are shown in Figure 3.

### 7.1 Massive Float

The most significant type is massive finely crystalline purple and white fluorite-barite float. The source of this material is not exposed but mapping of float distribution has delineated a probable source area along the lower (stratigraphic) fringes of the evaporitic breccia zone in Candy Creek canyon.

Figure 3 shows distribution of fluorite float with large broken circles.

### 7.2 Evaporitic Breccias

In its most common type of occurrence, fluorite is found cementing evaporitic breccias in unit 8<sub>EB</sub>. This mineralization usually occupies irregular zones as a minor constituent in an otherwise largely barren mass, but the "breccia" showing consists of three adjacent outcrops, totalling about 20 m long and 30 wide, that are all fluorite-cemented breccia. Total fluorite content is about 10 percent.

This evaporitic breccia occurs in many localities in and near the claims and is usually accompanied by small amounts of fluorite.

### 7.3 Granular Calcite Association

Masses of white granular calcite representing recrystallized gypsum/iron material occur in association with these evaporitic rocks. Fine veins of purple fluorite occur in and near one such mass at the Spar occurrences. The margins of the calcite are diffuse and it is probably not an influx phase.

#### 7.4 Veins

Fluorite-carbonate veins occur in fractures in the fetid dolostone facies of Unit 5 in the locations referred to as the "vein" and "pool" showings. These are lenticular north-south trending fluorite-calcite veins with white calcite, purple, blue-green, and pale green coarsely crystalline fluorite. These occurrences are small and only of academic significance. They are probably exposures of a series of irregular en echelon veins in the facies of Unit 5 that follow a series of parallel and complementary fractures. The largest of these is the vein showing a lens exposed over six meters that is one meter wide at the maximum and narrows rapidly in both directions. Banding around relic fragments and irregularly scalloped vein margins indicate that both open space filling and replacement have occurred but the former was much more important.

#### 7.5 Tectonic Breccia (Dike Showing)

South of Rock Canyon Creek, in a small shear, a matrix breccia occurs cemented with purple fluorite. Referred to as the "dike" showing, this is a distinctively brecciated tabular mass in a generally brecciated outcrop, about one meter wide and extends about five meters along strike. This fluorite occurrence is interpreted by the writer to be a tectonic feature.

#### 7.6 Fracture Fillings

Thin fracture coatings of purple fluorite occur in most of the dolostone units of the area. They are not of economic importance but reflect the influence of these fracture systems in the origin of the fluorite.

## 8. GEOCHEMISTRY

Outcrop in the claims area is sporadic and strongly dependent on rock type. Most rocks associated with the known mineralization are recessive and till thickness in the canyon is substantial. The mineralized area is geochemically anomalous in lead, zinc, and fluorine. Stream silt samples taken during reconnaissance studies in 1977 showed lead and zinc anomalies in the three larger drainages fringing the property. 935 samples were taken during the 1978 season to improve the resolution of these anomalies. Figure 4 shows Fluorine values; Figure 5 Lead and, Figure 6 Zinc.

Clearly defined soil sample anomalies provide a useful supplement to geological mapping in interpretation of the mode and significance of the fluorite occurrences.

An orientation study indicated that samples containing both B and C horizon soil, analysed for lead, zinc, and fluorine will provide the most effective effort.

Sample spacing was varied according to the priority of the areas covered. Generally it was a 50 x 50m grid, closed to 25 x 50m in some areas of high priority that contained significant amounts of fluorite float and expanded to 100 x 50m to cover a breccia mass observed to contain fluorite.

Nine hundred thirty-five B or C horizon soil samples were taken.

Lead values varied from 3 ppm to 700 ppm. 50 ppm Pb is considered anomalous. Perusal of the lead data shows two sharply defined anomalies.

Zinc values varied from 6 ppm to 2600 ppm. 200 ppm Zn is considered anomalous. Pronounced anomalies coincide with those for lead.

Fluorine distribution is different and high values are much more widespread. Detrital dispersion has been significant. Moreover, fluorite occurrences

are themselves widespread. The statistics of this population are skewed by the fact that analyses were not carried beyond 4000 ppm. Accordingly anomalous levels calculated by standard deviation are artificially low.

Examination of anomaly contour plots show well defined lead and zinc anomalies in two areas: peripheral to an 8<sub>EB</sub> breccia mass, and in a fetid portion Unit 5.

## 9. DISCUSSION

The influence of stratigraphy on the fluorite inflow is pronounced, and the evaporitic breccia unit <sup>8</sup>EB is probably the source of the best grades.

The pronounced lead and zinc anomalies appear to indicate the presence of sulphide mineralization in addition to the fluorite observed. This association may be an important factor in evaluating the economic importance of the property, in addition to possibly significant analogies with other sphalerite occurrences in the area such as those around Monroe Lake.

Infilling of porosity created by removal of gypsum or anhydrite by fluorite is considered a significant process. The reason for the occurrence of fluorite on these claims and not elsewhere along strike is unclear but probably relates to the fracture systems.

A small splay from the Monroe Lake thrust and a 10° "kink" from the regional structural trend both occur near the claims. Additional work will be needed to assess the role of crosscutting structures but clearly stratigraphy is not the only influence to be considered.

The corroboration of geological interpretation and soil sampling data has provided encouragement and indicated favourable trench sites for evaluation of the source of the metal anomalies and massive fluorite.

#### 10. RECOMMENDATIONS

On the basis of the 1978 field work, it is recommended that:

1. Three trenches outlined in Figure 6 be excavated to evaluate the lead-zinc and massive float occurrences.
2. The evaporitic rocks and the Burnais Formation be evaluated as future exploration targets in a regional programme.

*David A Bending*

David A. Bending

November, 1978

Appendix I

GEOCHEMICAL SAMPLE RESULTS

# Riocanex

## Rio Tinto Canadian Exploration Limited

### LABORATORY REPORT

**SAMPLE TYPE (✓)**

- Soil &/or Stream Sediments  
 Rock  
 Water  
 \_\_\_\_\_  
 \_\_\_\_\_

Results Sent To D. BENDTNER  
At Glo OK Helvety.

Date Reported 28 June '78  
Acct. No. 8657  
Project Name SHAG FLUORITE  
Size Fraction - 80 mesh  
Extraction HNO<sub>3</sub> - HCl  
Sample Wt. 0.6 g, Volume 1.2 ml  
Analytical Method A.D.  
Analyst(s) E.F.P.

**DISTRIBUTION****STATISTICAL SUMMARY**

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

Log Normal

Normal

Element		<u>Pb</u>	<u>Zn</u>						
No. of Samples		<u>142</u>	<u>142</u>						
Mean. $\bar{x}$									
Std. Dev. $\sigma$									
$\bar{x} + 2\sigma$									

Comments: F- it follow from clay

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Report No. 78-26

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**Copy 1 (Office)**

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup> .	SAMPLE N <sup>o</sup> . (NMBR)	Pb	Zn					COMMENTS
1	7832 610	7	10					
2	611	5	6					
3	612	16	25					
4	613	29	44					
5	614	46	60					
6	615	22	32					
7	616	15	135					
8	617	38	155					
9	618	62	190					
10	619	61	135					
1	620	41	82					
2	<del>STD 2</del>	365	265					
3	621	54	112					
4	622	38	94					
5	623	16	20					
6	624	13	20					
7	625	17	28					
8	626	15	12					
9	627	18	18					
20	628	31	52					
1	629	26	30					
2	BLANK	NP	NP					
3	630	42	118					
4	631	24	60					
5	632	49	98					
6	633	19	25					
7	634	31	82					
8	635	26	36					
9	636	15	28					
30	637	18	22					
1	638	40	98					
2	639	18	42					
3	640	20	30					
4	641	21	18					
5	642	34	54					
6	643	57	180					
7	644	15	30					
8	645	61	98					
9	646	57	80					
40	7832 647	22	48					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N°. (NMBR)	Pb	Zn						COMMENTS
41	7832 648	52	75						
2	649	32	101						
3	650	31	58						
4	651	20	35						
5	652	34	56						
6	653	32	42						
7	654	25	42						
8	655	15	18						
9	656	47	80						
50	657	28	60						
1	658	17	48						
2	659	51	155						
3	<del>STD-3</del>	4	62						
4	660	18	54						
5	661	33	86						
6	662	52	125						
7	663	24	36						
8	664	26	42						
9	665	18	28						
60	666	16	25						
1	667	27	42						
2	668	35	60						
3	BLANK	N.D.	N.D.						
4	669	37	122	42					
5	670	53	28	130					
6	671	53	104	56					
7	672	54	92	104					
8	673	29	105	92					
9	674	59	80	108					
70	675	30	61	52					
1	676	28	86	76					
2	677	41	28	56					
3	678	18	28	28					
4	679	18	28	26					
5	680	20	26	28					
6	681	24	26	38					
7	682	43	44	52					
8	683	20	45	14					
9	684	54	44	45					
40	7832 685	26	—	44					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N° (NMBR)	Pb	Zn					COMMENTS
1	7832686	60	115					
2	687	34	1200					
3	688	51	175					
4	689	52	170					
5	690	48	84					
6	691	53	110					
7	692	12	16					
8	693	33	85					
9	694	25	32					
10	695	18	28					
1	696	7	14					
2	697	16	30					
3	698	8	12					
4	STD 1	28	900					
5	699	43	85					
6	700	34	50					
7	701	26	55					
8	702	12	26					
9	703	18	44					
100	704	23	68					
1	705	13	50					
2	706	27	44					
3	707	16	22					
4	BLANK	ND	ND					
5	708	25	16					
6	709	19	26					
7	710	18	32					
8	711	15	20					
9	712	36	82					
10	713	24	62					
1	714	32	92					
2	715	21	52					
3	716	44	54					
4	717	26	80					
5	718	23	64					
6	719	22	53					
7	720	23	34					
8	721	25	60					
9	722	18	28					
120	7832723	7	10					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup> .	SAMPLE N <sup>o</sup> . (NMBR)	Pl	Zn						COMMENTS
121	7832724	28	38						
2	725	46	75						
3	726	31	70						
4	727	31	70						
5	728	32	84						
6	729	22	48						
7	730	35	80						
8	731	51	122						
9	732	41	86						
130	733	33	102						
1	734	X	15						
2	735	8	6						
3	736	14	18						
4	737	20	20						
5	SPD 2	430	27.4						
6	738	38	55						
7	739	42	80						
8	740	17	35						
9	741	24	48						
140	742	51	170						
1	743	40	122						
2	744	25	130						
3	745	31	26						
4	746	23	56						
5	BLANK	NA	NA						
6	747	31	86						
7	748	36	60						
8	749	8	6						
9	750	10	14						
150	7832751	15	14						
1	7832720	34	50						
2	627	18	18						
3	645	57	94						
4	656	45	85						
5	670	51	116						
6	692	11	16						
7	704	22	61.8						
8	716	13	54						
9	736	14	18						
160	7832746	23	58						

Rio Tinto Canadian Exploration LimitedLABORATORY REPORT

## SAMPLE TYPE (✓)

- Soil &/or Stream Sediments  
 Rock  
 Water  
 \_\_\_\_\_  
 \_\_\_\_\_

Results Sent To D. B. G. D. Inter.  
At c/o O.R. Metallurgy

Date Reported 27 June 70  
Acct. No. 8651  
Project Name SHAG PLANT  
Size Fraction -82 mesh  
Extraction HNO<sub>3</sub> - HCl  
Sample Wt. 0.6 g, Volume 17 ml  
Analytical Method A.P.  
Analyst(s) E.F.Q.

## DISTRIBUTION

## STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm) Log Normal Normal

Element		$\bar{x}$	$\sigma$					
No. of Samples		142	142					
Mean, $\bar{x}$								
Std. Dev. $\sigma$								
$\bar{x} + 2\sigma$								

Comments: F+ S+1 clayey


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## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº	SAMPLE Nº (NMBR)	P1	Z					COMMENTS
1	7892463	70	128					
2	464	39	82					
3	465	54	122					
4	466	39	86					
5	468	29	22					
6	469	18	24					
7	470	22	38					
8	471	11	22					
9	472	19	26					
10	473	25	32					
1	474	100	132					
2	STD 1	28	96					
3	475	20	38					
4	476	16	35					
5	477	96	112					
6	478	28	50					
7	479	19	38					
8	480	36	135					
9	481	23	62					
20	482	24	36					
1	483	39	40					
2	BLANK	N/A	N/A					
3	484	21	25					
4	485	13	15					
5	486	16	18					
6	487	21	38					
7	488	65	64					
8	489	50	92					
9	490	76	128					
30	491	66	108					
1	492	17	38					
2	493	24	58					
3	494	42	96					
4	495	12	40					
5	496	16	30					
6	497	28	36					
7	498	6	4					
8	499	13	14					
9	500	15	30					
40	7832 SDI	26	90					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (NMBR)	Pl	Zn					COMMENTS
41	7832502	62	102					
2	503	48	64					
3	504	45	82					
4	505	37	70					
5	506	36	52					
6	507	32	90					
7	508	22	70					
8	509	15	45					
9	510	34	94					
50	511	14	14					
1	512	9	6					
2	513	60	64					
3	STD 2	27.5	29.0					
4	514	18	32					
5	515	18	32					
6	516	29	8.5					
7	517	28	48					
8	519	26	46					
9	520	26	60					
60	521	34	86					
1	522	25	76					
2	523	19	38					
3	BLANK	ND	ND					
4	524	62	82					
5	525	26	25					
6	526	17	25					
7	527	16	22					
8	528	17	28					
9	529	14	46	32				
70	530	28	66	46				
1	532	48	180	68				
2	534	67	160	180				
3	535	50	198	130				
4	536	81	160	195				
5	537	56	28	130				
6	538	21	72	28				
7	539	10	64	14				
8	540	17	25	24				
9	541	22	24	34				
80	7832542	13	✓	24				

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup> .	SAMPLE N <sup>o</sup> . (NMBR)	Pb	Zn						COMMENTS
1	7832543	16	32						
2	544	23	26						
3	546	30	38						
4	547	58	150						
5	548	64	285						
6	549	132	285						
7	550	25	38						
8	551	70	120						
9	552	19	34						
10	553	19	36						
1	554	16	26						
2	555	16	16						
3	556	16	18						
4	<u>STD 3</u>	5	54						
5	557	21	44						
6	558	30	36						
7	559	29	42						
8	560	24	26						
9	561	34	46						
100	562	52	110						
1	563	63	90						
2	564	41	50						
3	565	46	82						
4	<u>BLANK</u>	11	ND						
5	566	14	14						
6	567	9	10						
7	568	10	8						
8	569	18	18						
9	570	11	22						
10	571	19	36						
1	572	35	52						
2	573	19	40						
3	574	27	32						
4	575	40	42						
5	576	46	76						
6	577	46	62						
7	578	73	180						
8	579	58	120						
9	580	16	22						
120	1832581	19	26						

RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N°. (NMBR)	Pb	Zn					COMMENTS
121	7832582	16	32	26				
2	583	15	21	24				
3	584	22	38	34				
4	585	32	22	28				
5	586	43	52					
6	587	24	350					
7	588	34	265					
8	589	50	275					
9	590	50	235					
130	591	44	130					
1	592	26	84					
2	593	52	86					
3	594	13	14					
4	595	17	34					
5	STO 1	28	900					
6	596	17	40					
7	597	17	35					
8	598	16	36					
9	599	14	34					
140	600	58	68					
1	601	77	2100					
2	602	50	310					
3	603	47	215					
4	604	44	80					
5	BLANK	ND	ND					
6	605	33	68					
7	606	37	92					
8	607	60	112					
9	608	34	56					
150	7832609	67	65					
1	7832470	27	36					
2	496	15	16					
3	495	12	36					
4	510	33	82					
5	523	18	28					
6	536	79	180					
7	558	29	36					
8	573	19	38					
9	587	32	35					
160	7832603	47	270					

Rio Tinto Canadian Exploration LimitedLABORATORY REPORT

## SAMPLE TYPE (✓)

- Soil &/or Stream Sediments  
 Rock  
 Water  
 \_\_\_\_\_  
 \_\_\_\_\_

Results Sent To D RINDTAt C/O OK HELPER

Date Reported 30 June '78  
 Acct. No. 8651  
 Project Name SNIK FLUORITE  
 Size Fraction -82 mesh  
 Extraction HNO<sub>3</sub> - HCl  
 Sample Wt. 0.6 g, Volume 12 ml  
 Analytical Method A.A.  
 Analyst(s) E.F.D.

## DISTRIBUTION

 Log Normal Normal

## STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

Element		$\bar{x}$	$\sigma$					
No. of Samples		14	14					
Mean. $\bar{x}$								
Std. Dev. $\sigma$								
$\bar{x} + 2\sigma$								

Comments: Fit follows from clayeyReport No. 78-29Page 1 of 2

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N°. (NMBR)	Pb	Zn					COMMENTS
1	7832927	15	16					
2	928	23	36					
3	929	19	62					
4	930	27	32					
5	931	20	35					
6	932	35	48					
7	933	19	62					
8	934	49	64					
9	935	38	52					
10	936	25	40					
1	937	49	80					
2	<del>930 2</del>	<del>27</del>	<del>45</del>					
3	938	28	50					
4	939	19	36					
5	7832940	18	45					
6	<del>7832930</del>	<del>27</del>	<del>5</del>					
7	<del>934</del>	<del>52</del>	<del>64</del>					
8	BLANK	ND	ND					
9	935	37	52					
20	<del>7832939</del>	<del>18</del>	<del>38</del>					
1								
2	BLANK							
3								
4								
5								
6								
7								
8								
9								
30								
1								
2								
3								
4								
5								
6								
7								
8								
9								
40								

# Riocanex

Rio Tinto Canadian Exploration Limited

## LABORATORY REPORT

### SAMPLE TYPE (✓)

- Soil &/or Stream Sediments
- Rock
- Water
- 
- 

Results Sent To D BENDTNG  
At CIO OK Helicopter

Date Reported 30 June '78  
Acct. No. 8651  
Project Name SNA6 FLUORITE  
Size Fraction -80 mesh  
Extraction HNO<sub>3</sub> - HCl  
Sample Wt. 0.6 g, Volume 12 ml  
Analytical Method H.A.  
Analyst(s) E.F.P

### DISTRIBUTION

### STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

Log Normal

Normal

Element	Pb	Zn							
No. of Samples	142	142							
Mean. $\bar{x}$									
Std. Dev. $\sigma$									
$\bar{x} + 2\sigma$									

Comments: Fit to follow from Cleary

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Report No. 78-21

Page 1 of 5

Copy 1 (Office)

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)	Pb	Zn					COMMENTS
1	7932 752	40	80					
2	753	35	58					
3	754	50	185					
4	755	28	52					
5	756	28	94					
6	757	12	38					
7	758	40	118					
8	759	31	88					
9	760	31	64					
10	761	25	86					
1	762	20	54					
2	<del>STD 5</del>	5	58					
3	763	14	35					
4	764	14	34					
5	765	14	52					
6	766	9	54					
7	767	8	400					
8	768	3	150					
9	771	12	330					
20	774	15	310					
1	775	11	210					
2	<del>BLANK</del>	10	10					
3	776	16	76					
4	777	10	36					
5	778	10	54					
6	779	7	240					
7	780	6	215					
8	781	8	230					
9	793	9	265					
30	785	5	250					
1	786	15	240					
2	788	3	125					
3	790	22	46					
4	791	13	30					
5	792	15	36					
6	793	11	44					
7	794	7	240					
8	795	8	290					
9	796	5	350					
40	7832 797	9	425					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)	Pb	Zn					COMMENTS
4	7832 798	8	480					
2	799	6	245					
3	804	31	70					
4	805	19	36					
5	806	15	28					
6	807	15	32					
7	808	11	22					
8	809	28	82					
9	810	24	122					
50	811	29	85					
1	812	23	60					
2	813	24	46					
3	<del>STD</del> 1	27	930					
4	814	14	25					
5	815	10	48					
6	816	24	138					
7	817	16	104					
8	819	26	38					
9	820	38	75					
60	821	24	40					
1	822	19	38					
2	823	32	56					
3	BLANK	NP	NP					
4	824	36	105					
5	825	25	66					
6	826	17	42					
7	827	35	64					
8	828	39	135					
9	829	25	92					
70	830	14	82					
1	831	8	240					
2	833	21	40					
3	834	24	38					
4	835	26	38					
5	836	21	38					
6	837	22	40					
7	838	21	56					
8	839	22	32					
9	840	38	95					
40	7832 841	32	68					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (INMBR)	Ph	Zn					COMMENTS
1	7832 842	11	88					
2	843	20	52					
3	844	33	78					
4	845	15	88					
5	846	8	205					
6	866	11	16					
7	867	32	45					
8	868	27	38					
9	869	24	25					
10	870	20	16					
1	871	28	36					
2	872	22	42					
3	873	20	56					
4	STD 2	375	270					
5	874	16	26					
6	875	22	26					
7	876	18	30					
8	877	49	60					
9	878	36	50					
100	879	31	42					
1	880	25	48					
2	881	26	38					
3	882	53	75					
4	BLANK	ND	ND					
5	883	26	30					
6	884	28	42					
7	885	17	32					
8	886	21	36					
9	887	20	25					
10	888	17	20					
1	889	21	26					
2	890	18	36					
3	891	74	95					
4	892	45	65					
5	893	34	52					
6	894	35	68					
7	895	27	36					
8	896	40	88					
9	897	46	52					
120	7832 898	41	22					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)	Pb	Zn					COMMENTS
121	7832899	67	26					
2	900	28	34					
3	901	41	85					
4	902	27	38					
5	903	18	25					
6	904	62	330					
7	905	40	64					
8	906	28	32					
9	907	66	42					
130	908	15	24					
1	909	21	40					
2	910	27	38 <del>25</del>					
3	911	23	28					
4	912	26	44					
5	STD 3	6	58					
6	913	25	138					
7	914	16	32					
8	915	35	60					
9	916	36	118					
140	917	23	35					
1	918	28	62					
2	919	162	250					
3	920	22	75					
4	921	21	45					
5	BLANK	ND	ND					
6	922	20	32					
7	923	37	48					
8	924	24	34					
9	925	29	30					
150	7832926	26	26					
1	7832757	13	38					
2	777	11	34					
3	793	11	44					
4	812	25	58					
5	827	36	58					
6	846	8	210					
7	876	18	26					
8	890	18	34					
9	911	24	26					
160	7832920	22	74					



RECEIVED

JUN 21 1978

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

## CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.

ATTN:

PROJ. 8651-SHAG

FLUORITE

CERTIFICATE NO. 43296

INVOICE NO. 24030

RECEIVED June 7/78

ANALYSED June 9/78

SAMPLE NO. :	PPM F	PPM Ba
7832102.2	760	600
7832102.3	1000	750
7832103.2	680	1150
7832103.3	1000	2000
7832104.2	700	600
7832104.3	500	800
7832105.2	1200	600
7832105.3	880	550
7832106.2	1200	950
7832106.3	1080	850
7832107.2	520	450
7832107.3	560	400
7832108.2	680	400
7832108.3	360	500
7832109.2	400	2800
7832109.3	>4000	> 5000
7832110.2	>4000	> 5000
7832110.3	2550	> 5000
7832111.2	>4000	> 5000
7832111.3	>4000	> 5000
7832112.2	>4000	> 5000
7832112.3	760	2300
7832113.2	>4000	> 5000
7832113.3	910	1750
7832114.2	>4000	> 5000
7832114.3	670	2900
7832115.2	>4000	> 5000
7832115.3	>4000	> 5000
7832116.2	1350	2200
7832116.3	>4000	> 5000
7832117.2	1200	1500
7832117.3	>4000	> 5000
7832118.2 *	1000	2150
7832119.2	235	550
7832119.3	350	500
7832120.2	440	650
7832120.3	710	600
7832121.2	1150	1250
7832121.3	2550	> 5000
7832118.3 *	105	1050
STD.	340	800



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

Hart Siddle



# 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: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.

ATTN:

FLUORITE

PROJ. 8651-SHAG

CERTIFICATE NO. 43297

INVOICE NO. 24030

RECEIVED June 7/78

ANALYSED June 9/78

SAMPLE NO. :	PPM F	PPM Ba
7832122.2	900	700
7832122.3	900	700
7832123.2	1150	650
7832123.3	1000	550
7832124.2	> 4000	> 5000
7832124.3	> 4000	> 5000
7832125.2	> 4000	> 5000
7832125.3	> 4000	> 5000
7832126.2	4000	> 5000
7832126.3	> 4000	> 5000
7832127.2	1200	1350
7832127.3	1900	2800
7832128.2	3700	> 5000
7832128.3	750	2650
7832129.2	> 4000	> 5000
7832129.3	> 4000	> 5000
7832130.2	> 4000	> 5000
7832130.3	> 4000	> 5000
7832131.2	> 4000	> 5000
7832132.2	3400	> 5000
7832132.3	4000	> 5000
7832133.2	1150	4500
7832133.3	> 4000	> 5000
7832134.2	900	> 5000
7832134.3	> 4000	> 5000
7832135.2	370	1300
7832135.3	> 4000	4050



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ASSOCIATION

CERTIFIED BY:

HartRide

RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

RECEIVED

JUN 09 1978

EXTRN ANDLZ    

## SAMPLE TYPE:

 SOIL & STREAM SEDIMENTSPROJECT 8651 ROCKDATE REPORTED 8 June '78 VEGETATIONSIZE FRACTION -80 mesh WATEREXTRACTION HNO<sub>3</sub> - HClE \_\_\_\_\_ANALYTICAL METHOD A. A.ANALYST (s) E. F. A.

## STATISTICAL SUMMARY

## DISTRIBUTION

(Values for  $\bar{x}$  and  $\sigma$  in p.p.m.) LOG NORMAL NORMAL

ELEMENT	Pb	Zn					
Nº SAMPLES	67	67					
MEAN. $\bar{x}$							
STD. DEV. $\sigma$							
$\bar{x} + 2\sigma$							

COMMENTS: Ca, Cu, Ba and Fe results待 following  
chemistry labs.

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N°. (NMBR)	Pb	Zn					COMMENTS
1	7832102.2	17	30					
2	102.3	19	34					
3	103.2	19	44					
4	103.3	22	52					
5	104.2	17	32					
6	104.3	18	40					
7	105.2	27	66					
8	105.3	22	85					
9	106.2	28	66					
10	106.3	24	86					
1	107.2	18	22					
2	STO 3	5	62					
3	107.3	15	18					
4	108.2	15	18					
5	108.3	16	18					
6	109.2	23	48					
7	109.3	42	100					
8	110.2	45	102					
9	110.3	48	115					
20	111.2	50	168					
1	111.3	25	74					
2	BLANK	ND	ND					
3	112.2	43	142					
4	112.3	27	112					
5	113.2	40	115					
6	113.3	27	75					
7	114.2	43	155					
8	114.3	19	54					
9	115.2	35	115					
30	115.3	35	108					
1	116.2	47	16					
2	116.3	57	98					
3	117.2	72	155					
4	117.3	63	142					
5	118.2	64	135					
6	118.3	71	24					
7	119.2	11	24					
8	119.3	12	21					
9	120.2	14	32					
40	7832120.3	27	36					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N°.	SAMPLE N°. (NMBR)	Pb	Zn					COMMENTS
41	7832121.2	32	44					
2	121.3	31	56					
3	122.2	19	28					
4	122.3	19	32					
5	123.2	18	35					
6	123.3	12	60					
7	124.2	50	126					
8	124.3	43	145					
9	125.2	65	190					
50	125.3	40	150					
1	126.2	42	128					
2	126.3	48	120					
3	<del>STD #1</del>	27	750					
4	127.2	37	88					
5	127.3	34	96					
6	128.2	30	74					
7	128.3	7	22					
8	129.2	34	88					
9	129.3	38	108					
60	130.2	37	118					
1	130.3	37	135					
2	131.2	37	105					
3	<del>BLANK</del>	70	70					
4	132.2	56	178					
5	132.3	55	210					
6	133.2	93	165					
7	133.3	75	130					
8	134.2	118	290					
9	134.3	112	230					
10	135.2	24	55					
1	7832135.3	44	110					
2	<del>7832103.2</del>	17	72					
3	109.2	22	52					
4	114.3	18	50					
5	118.3	8	24					
6	125.2	68	188					
7	128.3	7	27					
8	132.2	56	185					
9	7832135.2	23	55					
40								



# CHEMEX LABS LTD.

R/1  
PBOVAPTE  
CC #2 SENT 1/20/78  
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

CERTIFICATE NO. 27354

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.  
ATTN: E. Paski

INVOICE NO. 43796

RECEIVED June 28/78

ANALYSED August 9/78

SAMPLE NO. :	PPM Fluorine
7832813	1050
7832814	350
7832815	405
7832816*	2700
7832819	810
7832820	1800
7832821	1100
7832822	840
7832823	840
7832824	2950
7832825	1250
7832826	350
7832827	600
7832828	1250
7832829	2150
7832830	560
7832831	440
7832833	600
7832834	605
7832835	960
7832836	660
7832837	520
7832838	940
7832839	460
7832840	1550
7832841	670
7832842	1400
7832843	1100
7832844	1850
7832845	840
7832846	590
7832866	820
7832867	440
7832868	280
7832869	820
7832870	840
7832871	520
7832872	385
7832873	340
7832817*	1200



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

Hart Bader

BY CERT IN CLOUDING



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

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

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 43797

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.  
ATTN: E. Paski

INVOICE NO. 27354

RECEIVED June 28/78  
ANALYSED August 10/78

SAMPLE NO. :	PPM Fluorine
7832874	1400
7832875	470
7832876	450
7832877	1200
7832878	790
7832879	1250
7832880	640
7832881	730
7832882	1050
7832883	1150
7832884	430
7832885	570
7832886	380
7832887	610
7832888	960
7832889	590
7832890	290
7832891	690
7832892	720
7832893	800
7832894	1600
7832895	1350
7832896	590
7832897	1000
7832898	1200
7832899	1500
7832900	900
7832901	530
7832902	980
7832903	350
7832904	640
7832905	820
7832906	960
7832907	1050
7832908	970
7832909	1250
7832910	680
7832911	560
7832912	1250
7832913	275



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

Hart Side



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

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

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.  
ATTN: E. Paski

CERTIFICATE NO. 43798

INVOICE NO. 27354

RECEIVED June 28/78

ANALYSED August 10/78

SAMPLE NO. :	PPM Fluorine
7832914	1100
7832915	1300
7832916	730
7832917	270
7832918	530
7832919	730
7832920	365
7832921	670
7832922	1850
7832923	680
7832924	920
7832925	960
7832926	1050
7832927	1000
7832928	1000
7832929	1100
7832930	710
7832931	660
7832932	840
7832933	600
7832934	375
7832935	470
7832936	370
7832937	770
7832938	315
7832939	620
7832940	710



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY:

HartBelle



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

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

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto  
615 - Two Bentall Centre  
555 Burrard St.  
Vancouver, B.C. V7X 1M8  
ATTN: E. Paski

CERTIFICATE NO. 43794

INVOICE NO. 27346

RECEIVED June 28, 1978

ANALYSED August 10, 1978

SAMPLE NO. :	PPM Fluorine
832721	620
832722	810
832723	275
832724	1050
832725	>4000
832726	1750
832727	2200
832728	2300
832729	570
832730	720
832731	3100
832732	1500
832733	1750
832734	290
832735	235
832736	690
832737	1100
832738	1800
832739	1800
832740	500
832741	700
832742	2500
832743	2500
832744	1200
832745	1450
832746	1450
832747	1650
832748	1800
832749	760
832750	940
832751	440
832752	3400
832753	1000
832754	>4000
832755	1100
832756	1150
832757	300
832758	1000
832759	780
832760	560



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CERTIFIED BY:

*Harry Bill*

BY SENT TO NEARME



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

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto  
615 - Two Bentall Centre  
555 Burrard St.  
Vancouver, B.C. V7X 1M8  
ATTN: E. Paski

CERTIFICATE NO. 43795

INVOICE NO. 27346

RECEIVED June 28, 1978

ANALYSED August 10, 1978

SAMPLE NO. :	PPM Fluorine
832761	1950
832762	720
832763	730
832764	250
832765	800
832766	410
832767	1000
832768	710
832771	970
832774	760
832775	750
832776	785
832777	260
832778	310
832779	950
832780	790
832781	1200
832783	730
832785	950
832786	760
832788	470
832790	520
832791	510
832792	390
832793	280
832794	560
832795	490
832796	960
832797	640
832798	790
832799	570
832804	1300
832805	250
832806	335
832807	460
832808	355
832809	1350
832810	1350
832811	640
832812	520



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## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 43792

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.  
ATTN: E. Paski

INVOICE NO. 26945

RECEIVED June 28/78

ANALYSED August 4/78

SAMPLE NO. :	PPM
	Fluorine
7832641	395
7832642	1150
7832643	>4000
7832644	315
7832645	830
7832646	650
7832647	410
7832648	510
7832649	1100
7832650	1850
7832651	1150
7832652	1450
7832653	1200
7832654	1100
7832655	400
7832656	660
7832657	590
7832658	510
7832659	2500
7832660	255
7832661	350
7832662	>4000
7832663	265
7832664	890
7832665	1650
7832666	1200
7832667	1200
7832668	840
7832669	850
7832670	570
7832671	900
7832672	590
7832673	590
7832674	790
7832675	330
7832676	280
7832677	2250
7832678	1150
7832679	1450
7832680	1550
STD	-



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TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.  
ATTN: E. Paski

CERTIFICATE NO. 43793

INVOICE NO. 26945

RECEIVED June 28/78

ANALYSED

SAMPLE NO. :	PPM
	Fluorine
7832681	1850
7832682	>4000
7832683	460
7832684	720
7832685	710
7832686	1000
7832687	600
7832688	1000
7832689	1800
7832690	1200
7832691	1500
7832692	280
7832693	570
7832694	410
7832695	500
7832696	185
7832697	640
7832698	330
7832699	1450
7832700	480
7832701	530
7832702	1250
7832703	1050
7832704	970
7832705	580
7832706	890
7832707	730
7832708	560
7832709	610
7832710	1650
7832711	880
7832712	2900
7832713	2250
7832714	>4000
7832715	255
7832716	750
7832717	1800
7832718	960
7832719	1200
7832720	1000



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TELEX: 043-52597

• ANALYTICAL CHEMISTS

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## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 43782

TO: Rio Tinto Canadian Exploration,  
615 - Two Bentall Centre,  
555 Burrard Street,  
Vancouver, B. C. V7X 1M8  
ATTN: E. Paski

INVOICE NO. 26862

RECEIVED June 28, 1978  
ANALYSED August 3, 1978

SAMPLE NO.:	ppm Fluorine
7832236	630
7832237	490
7832238	410
7832239	650
7832240	720
7832241	920
7832242	1850
7832243	1400
7832244	> 4000
7832245	> 4000
7832246	580
7832247	1050
7832248	2150
7832249	1150
7832250	650
7832251	660
7832252	390
7832253	640
7832254	440
7832255	580
7832256	710
7832257	650
7832258	2400
7832259	> 4000
7832260	3500
7832261	> 4000
7832262	2150
7832263	1500
7832264	850
7832265	1250
7832266	340
7832267	410
7832268	490
7832269	480
7832270	440
7832271	1000
7832272	1250
7832273	870
7832274	1150
7832275	4000



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TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto Canadian Exploration  
615 - Two Bentall Centre  
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Vancouver, B. C. V7X 1M8  
ATTN: E. Paski

CERTIFICATE NO. 43783

INVOICE NO. 26862

RECEIVED June 28, 1978

ANALYSED August 3, 1978

SAMPLE NO. :	PPM Fluorine
7832276	870
7832277	295
7832278	750
7832279	1200
7832280	760
7832281	720
7832282	530
7832283	750
7832284	730
7832285	480
7832286	620
7832287	310
7832288	1250
7832289	300
7832290	330
7832291	2700
7832292	>4000
7832293	1300
7832294	890
7832295	670
7832296	255
7832297	610
7832298	325
7832299	490
7832300	770
7832301	395
7832302	1500
7832303	1300
7832304	1050
7832305	480
7832306	1650
7832307	3600
7832308	1400
7832309	940
7832310	400
7832311	470
7832312	1150
7832313	620
7832314	470
7832315	720



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*Hank Riddle*



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TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto Canadian Exploration  
615 - Two Bentall Centre  
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Vancouver, B. C. V7X 1M8  
ATTN: E. Paski

CERTIFICATE NO. 43784

INVOICE NO. 26862

RECEIVED June 28, 1978

ANALYSED August 3, 1978

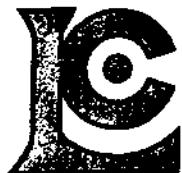
SAMPLE NO.:	PPM Fluorine
7832316	860
7832317	>4000
7832318	960
7832319	> 4000
7832320	1300
7832321	1050
7832322	850
7832323	> 4000
7832324	850
7832325	740
7832326	580
7832327	940
7832328	315
7832329	> 4000
7832330	900
7832331	1250
7832332	520
7832333	1950
7832334	1400
7832335	> 4000
7832336	1250
7832337	1150
7832338	670
7832339	60
7832340	920
7832341	1200
7832342	710
7832343	1100
7832344	1150
7832345	840
7832346	590
7832347	210
7832348	> 4000
7832349	740
7832350	620
7832351	1050
7832352	> 4000
7832353	490
7832354	460
7832355	700



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TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 43785

TO: Rio Tinto Canadian Exploration  
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555 Burrard St.,  
Vancouver, B.C.  
ATTN: E. Paski

INVOICE NO. 26862

RECEIVED June 28, 1978

ANALYSED August 3, 1978

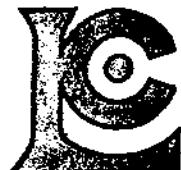
SAMPLE NO. :	PPM Fluorine
7832356	300
7832357	470
7832358	3100
7832359	900
7832360	800
7832361	420
7832362	610
7832363	840
7832364	560
7832365	1200
7832366	1200
7832367	670
7832368	530
7832369	630
7832370	550
7832371	220
7832372	335
7832373	185
7832374	560
7832375	205
7832376	865
7832377	510
7832378	205
7832379	255
7832380	240
7832381	335
7832382	470
7832383	155
7832384	200
7832385	410
7832386	530
7832387	380
7832388	465
7832389	630
7832390	450
7832391	720
7832392	900
7832393	500
7832394	365
7832395	490



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Hans Bille



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TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto Canadian Exploration  
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555 Burrard St.,  
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ATTN: E. Paski

CERTIFICATE NO. 43786

INVOICE NO. 26862

RECEIVED June 28, 1978

ANALYSED August 3, 1978

SAMPLE NO. :	PPM Fluorine
7832396	990
7832397	260
7832398	460
7832399	290
7832400	1100
7832401	480
7832402	345
7832403	520
7832404	335
7832405	660
7832406	500
7832407	155
7832408	250
7832409	1000
7832410	370
7832411	370
7832412	320
7832413	240
7832414	600
7832415	590
7832416	550
7832417	630
7832418	235
7832419	670
7832420	330
7832421	630
7832422	510
7832423	890
7832424	930
7832425	780
7832426	340
7832427	310
7832428	530
7832429	1000
7832430	1000
7832431	630
7832432	590
7832433	540
7832434	830
7832435	660



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ASSOCIATION

CERTIFIED BY:

*Hastie*



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AREA CODE: 604  
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• ANALYTICAL CHEMISTS

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## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 43787

TO: Rio Tinto Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard St.,  
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ATTN: E. Paski

INVOICE NO. 26862

RECEIVED June 28, 1978

ANALYSED August 3, 1978

SAMPLE NO.:	PPM <u>Fluorine</u>
7832436	1050
7832437	930
7832438	700
7832439	650
7832440	800
7832441	950
7832442	750
7832443	690
7832444	670
7832445	590
7832446	530
7832447	900
7832448	900
7832449	580
7832450	470
7832451	460
7832452	690
7832453	420
7832454	260
7832455	400
7832456	750
7832457	510
7832458	660
7832459	700
7832460	490
7832461	100
7832462	410
7832463	440
7832464	640
7832465	930
7832466	560
7832468	280
7832469	660
7832470	680
7832471	740
7832472	640
7832473	720
7832474	590
7832475	875
7832476	450



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*WatBille*



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TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard St.,  
Vancouver, B.C.  
ATTN: E. Paski

CERTIFICATE NO. 43790

INVOICE NO. 26888

RECEIVED June 28, 1978

ANALYSED August 3, 1978

SAMPLE NO. :	PPM Fluorine
7832561	440
7832562	670
7832563	750
7832564	740
7832565	750
7832566	150
7832567	305
7832568	440
7832569	1150
7832570	1350
7832571	1500
7832572	1400
7832573	1050
7832574	900
7832575	500
7832576	930
7832577	840
7832578	700
7832579	510
7832580	1800
7832581	1750
7832582	1450
7832583	1850
7832584	2300
7832585	830
7832586	460
7832587	430
7832588	410
7832589	630
7832590	1950
7832591	1050
7832592	650
7832593	640
7832594	660
7832595	1450
7832596	1800
7832597	1750
7832598	3450
7832599	750
7832600	560



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• ANALYTICAL CHEMISTS

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## CERTIFICATE OF ANALYSIS

TO: Rio Tinto Canadian Exploration  
615 - Two Bentall Centre  
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Vancouver, B.C.  
ATTN: E. Paski

CERTIFICATE NO. 43791

INVOICE NO. 26888

RECEIVED June 28, 1978

ANALYSED August 3, 1978

SAMPLE NO. :	PPM Fluorine
7832601	610
7832602	330
7832603	770
7832604	810
7832605	270
7832606	1100
7832607	800
7832608	840
7832609	880
7832610	310
7832611	265
7832612	1450
7832613	840
7832614	570
7832615	345
7832616	260
7832617	550
7832618	1250
7832619	1600
7832620	730
7832621	1050
7832622	1550
7832623	810
7832624	840
7832625	1900
7832626	190
7832627	290
7832628	1250
7832629	910
7832630	2000
7832631	600
7832632	650
7832633	420
7832634	920
7832635	1600
7832636	610
7832637	1450
7832638	*4000
7832639	1150
7832640	540



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AREA CODE: 604  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

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## CERTIFICATE OF ANALYSIS

TO: Rio Tinto, Canadian Exploration  
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ATTN: E. Paski

CERTIFICATE NO.	43789
INVOICE NO.	26888
RECEIVED	June 28/78
ANALYSED	August 2/78

SAMPLE NO. :	PPM
	F
7832517	1100
7832519	610
7832520	680
7832521*	530
7832523	660
7832522*	715
7832524	800
7832525	510
7832526	305
7832527	420
7832528	2050
7832529	1900
7832530	310
7832532	450
7832534	770
7832535	1050
7832536	730
7832537	2300
7832538	820
7832539	550
7832540	430
7832541	1250
7832542	1850
7832543	1700
7832544	770
7832546	205
7832547	670
7832548	570
7832549	680
7832550	80
7832551	710
7832552	1400
7832553	1050
7832554	1100
7832555	500
7832556	1450
7832557	1600
7832558	1450
7832559	1150
7832560	600



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TELEPHONE: 985-0648  
AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto, Canadian Exploration  
615 - Two Bentall Centre  
555 Burrard Street  
Vancouver, B.C.  
ATTN: E. Paski

CERTIFICATE NO.	43788
INVOICE NO.	26888
RECEIVED	June 28/78
ANALYSED	August 2/78

SAMPLE NO. :	PPM
7832477	1700
7832478	960
7832479	390
7832480	760
7832481	520
7832482	2750
7832483	610
7832484	750
7832485	310
7832486	1050
7832487	1500
7832488	1100
7832489	1100
7832490	1700
7832491	1300
7832492	910
7832493	770
7832494	860
7832495	260
7832496	365
7832497	940
7832498	390
7832499	610
7832500	1500
7832501	1600
7832502	1250
7832503	870
7832504	670
7832505	720
7832506	540
7832507	1200
7832508	540
7832509	460
7832510	390
7832511	680
7832512	450
7832513	730
7832514	2000
7832515	2550
7832516	460



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CERTIFIED BY: *HartReider*



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• GEOCHEMISTS

• REGISTERED ASSAYERS

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AREA CODE: 604  
TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 43777

TO: Rio Tinto  
615 Two Bentall  
555 Burrard St.,  
Vancouver, B.C.  
ATTN:

INVOICE NO. 26783

RECEIVED June 28, 1978

ANALYSED July 28, 1978

SAMPLE NO. :	PPM
	Fluorine
7832001	930
7832002	810
7832003	650
7832004	1100
7832005	730
7832006	700
7832007	620
7832008	155
7832009	700
7832010	630
7832011	230
7832012	550
7832013	540
7832014	420
7832015	410
7832016	590
7832017	940
7832018	460
7832019	1150
7832020	>4000
7832021	>4000
7832022	660
7832023	2400
7832024	>4000
7832025	165
7832026	710
7832027	2000
7832028	760
7832029	840
7832030	1050
7832031	1500
7832032	960
7832033	3900
7832034	>4000
7832035	205
7832036	>4000
7832037	365
7832038	1000
7832039	2750
7832040	1350
STD.	



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# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

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

## CERTIFICATE OF ANALYSIS

TO: Rio Tinto  
615 Two Bentall  
555 Burrard St.,  
Vancouver, B.C.  
ATTN:

CERTIFICATE NO. 43778

INVOICE NO. 26783

RECEIVED June 28, 1978

ANALYSED July 31, 1978

SAMPLE NO. :	PPM Flourine
7832041	960
7832042	>4000
7832043	>4000
7832044	2300
7832045	860
7832046	>4000
7832047	3200
7832048	3350
7832049	1400
7832050	3850
7832051	680
7832052	1450
7832053	>4000
7832054	>4000
7832055	350
7832056	770
7832057	>4000
7832058	920
7832059	1200
7832060	325
7832061	2600
7832062	>4000
7832063	940
7832064	1050
7832065	880
7832066	925
7832067	640
7832068	420
7832069	420
7832070	>4000
7832071	>4000
7832072	505
7832073	525
7832074	705
7832075	295
7832076	800
7832077	570
7832078	610
7832079	690
7832080	1100
STD.	



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *[Signature]*



# CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

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BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: 985-0648  
AREA CODE: 604  
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## CERTIFICATE OF ANALYSIS

TO: Rio Tinto  
615 Two Bentall  
555 Burrard St.,  
Vancouver, B.C.  
ATTN:

CERTIFICATE NO. 43779

INVOICE NO. 26783

RECEIVED June 28, 1978

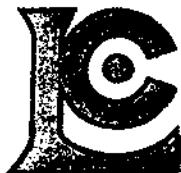
ANALYSED July 31, 1978

SAMPLE NO. :	PPM
Fluorine	
7832081	275
7832082	205
7832083	640
7832084	275
7832085	850
7832086	790
7832087	380
7832088	390
7832089	245
7832090	540
7832091	400
7832092	130
7832093	510
7832094	690
7832095	770
7832096	620
7832097	1400
7832098	710
7832099	330
7832100	>4000
7832136	950
7832137	690
7832138	1000
7832139	470
7832140	>4000
7832141	>4000
7832142	2400
7832143	1800
7832144	420
7832145	560
7832146	1100
7832147	880
7832148	>4000
7832149	1200
7832150	>4000
7832151	>4000
7832152	2700
7832153	460
7832154	920
7832155	520



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *JMB*



# CHEMEX LABS LTD.

12 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

CERTIFICATE NO. 43780

TO: Rio Tinto  
615 Two Bentall  
555 Burrard St.,  
Vancouver, B.C.  
ATTN:

INVOICE NO. 26783

RECEIVED June 28, 1978

ANALYSED July 31, 1978

SAMPLE NO. :	PPM
	Fluorine
7832156	2700
7832157	3350
7832158	260
7832159	1000
7832160	Missing
7832161	105
7832162	470
7832163	520
7832164	820
7832165	770
7832166	840
7832165	470
7832168	650
7832169	>4000
7832170	420
7832171	2400
7832172	900
7832173	>4000
7832174	>4000
7832175	720
7832176	265
7832177	150
7832178	770
7832179	440
7832180	480
7832181	1700
7832182	315
7832183	790
7832184	920
7832185	1500
7832186	2100
7832187	820
7832188	>4000
7832189	1250
7832190	460
7832191	440
7832192	720
7832193	1200
7832194	620
7832195	670



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *[Signature]*



# CHEMEX LABS LTD.

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

CERTIFICATE NO. 43781

TO: Rio Tinto  
615 Two Bentall  
555 Burrard St.,  
Vancouver, B.C.  
ATTN:

INVOICE NO. 26783

RECEIVED June 18, 1978

ANALYSED July 31, 1978

SAMPLE NO. :	PPM Fluorine
7832196	210
7832197	1100
7832198	1250
7832199	1000
7832200	1000
7832201	>4000
7832202	2000
7832203	1950
7832204	1200
7832205	285
7832206	1000
7832207	3600
7832208	760
7832209	1050
7832210	570
7832211	850
7832212	2100
7832213	1500
7832214	1450
7832215	1250
7832216	1400
7832217	>4000
7832218	>4000
7832219	8500
7832220	660
7832221	760
7832222	2650
7832223	720
7832224	800
7832225	900
7832226	720
7832227	2100
7832228	1500
7832229	1200
7832230	>4000
7832231	>4000
7832232	>4000
7832233	>4000
7832234	690
7832235	1050



MEMBER  
CANADIAN TESTING  
ASSOCIATION

CERTIFIED BY: *[Signature]*

Riocanex

RECEIVED

JUN 27 1978

Rio Tinto Canadian Exploration Limited

LABORATORY REPORT

SAMPLE TYPE (✓)

- Soil &/or Stream Sediments  
 Rock  
 Water

Results Sent To R. BEADING  
At CAMP VIE G.P.S.

Date Reported 26 June '78  
Acct. No. 8651  
Project Name S/HG FLUORITE  
Size Fraction -82 mesh  
Extraction HNO<sub>3</sub> - HCl  
Sample Wt. 0.6 g, Volume 12 ml  
Analytical Method p.p.  
Analyst(s) E.F.P.

DISTRIBUTION

STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

Log Normal

Normal

Element		$\bar{x}$	$Z_n$						
No. of Samples		142	142						
Mean, $\bar{x}$									
Std. Dev. $\sigma$									
$\bar{x} + 2\sigma$									

Comments: F follows (Chemical or Mineral Class)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Report No. 78-23

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RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup> .	SAMPLE N <sup>o</sup> . (NMBR)	Pb	Zn					COMMENTS
1	7832179	21	34					
2	180	13	22					
3	181	24	58					
4	182	22	48					
5	183	52	225					
6	184	39	130					
7	185	32	98					
8	186	67	120					
9	187	54	498					
10	188	94	110					
1	199	62	124					
2	STD 2	375	250					
3	190	29	46					
4	191	19	72					
5	192	45	88					
6	193	81	102					
7	194	66	122					
8	195	76	104					
9	196	17	30					
20	197	27	44					
1	198	22	34					
2	BLANK	44	60					
3	199	22	34					
4	200	22	32					
5	201	50	73					
6	202	27	48					
7	203	40	84					
8	204	54	190					
9	205	22	54					
30	206	53	110					
1	207	61	84					
2	208	68	104					
3	209	129	150					
4	210	73	130					
5	211	56	96					
6	212	26	36					
7	213	18	28					
8	214	22	34					
9	215	24	40					
40	7832216	25	42					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup>	SAMPLE N <sup>o</sup> (NMBR)	P <sub>1</sub>	Z <sub>n</sub>					COMMENTS
41	7832217	77	163					
2	218	45	90					
3	219	16	94					
4	220	37	92					
5	221	84	194					
6	222	70	152					
7	223	68	122					
8	224	100	135					
9	225	70	100					
50	226	36	56					
1	227	25	44					
2	228	18	31					
3	<del>STD 3</del>	4	56					
4	229	20	36					
5	230	38	60					
6	231	48	95					
7	232	43	102					
8	233	82	138					
9	234	9	34					
60	235	82	138					
1	236	67	125					
2	237	56	114					
3	BLANK	ND	ND					
4	238	58	112					
5	239	93	154					
6	240	92	152					
7	241 <del>233</del>	43	82					
8	242	35	65					
9	243	21	36					
70	244	39	66					
1	245	42	72					
2	246	17	62					
3	247	22	66					
4	248	163	255					
5	249	43	142					
6	250	71	136					
7	251	70	160					
8	252	57	106					
9	253	107	125					
90	7832254	57	135					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N°. (NMBR)	Pb.	Zn						COMMENTS
1	7832 255	62	108						
2	256	96	182						
3	257	12	28						
4	258	42	90						
5	259	34	95						
6	260	30	78						
7	261	56	80						
8	262	24	52						
9	263	33	58						
10	264	51	110						
1	265	108	184						
2	266	29	46						
3	267	32	98						
4	STD 1	20	730						
5	268	165	152						
6	269	56	110						
7	270	29	100						
8	271	53	92						
9	272	32	60						
100	273	26	22						
1	274	25	36						
2	275	55	78						
3	276	15	30						
4	BLANK	ND	ND						
5	277	11	28						
6	278	43	80						
7	279	53	130						
8	280	66	200						
9	281	94	180						
10	282	67	118						
1	283	106	172						
2	284	108	210						
3	285	55	106						
4	286	104	175						
5	287	9	14						
6	288	23	34						
7	289	7	15						
8	290	16	18						
9	291	47	101						
120	7832 292	49	132						

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB NR.	SAMPLE N <small>O</small> . (NMBR)	Ph	Zn					COMMENTS
121	7832293	93	385					
2	294	65	105					
3	295	20	144					
4	296	28	76					
5	297	73	130					
6	298	50	95					
7	299	55	114					
8	300	91	130					
9	301	92	205					
130	302	13	20					
1	303	12	24					
2	304	21	28					
3	305	22	52					
4	306	65	102					
5	STD Z	365	245					
6	307	77	165					
7	308	117	300					
8	309	105	210					
9	310	61	116					
140	311	60	108					
1	312	137	175					
2	313	77	124					
3	314	107	164					
4	315	79	115					
5	BLANK	70	100					
6	316	82	98					
7	317	81	88					
8	318	99	135					
9	319	48	210					
150	7832320	55	105					
1	7832181	36	85					
2	196	16	26					
3	209	125	135					
4	225	69	92					
5	238	53	90					
6	257	54	80					
7	266	28	46					
8	279	53	125					
9	304	23	28					
160	7832314	103	165					

Riocanex

RECEIVED

JUN 27 1978

Rio Tinto Canadian Exploration Limited

LABORATORY REPORT

SAMPLE TYPE (✓)

- Soil &/or Stream Sediments  
 Rock  
 Water

Results Sent To R BEUDING  
At Camp Viva GAS

Date Reported 26 Jun 78  
Acct. No. 8651  
Project Name SHAG FLAT, J.S.  
Size Fraction - 80 mesh  
Extraction HNO<sub>3</sub> - HCl  
Sample Wt. 0.6 g, Volume 12 ml  
Analytical Method A.A.  
Analyst(s) E.F.P.

DISTRIBUTION

STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

Log Normal

Normal

Element		<u>Pb</u>	<u>Zn</u>						
No. of Samples		<u>142</u>	<u>142</u>						
Mean, $\bar{x}$									
Std. Dev. $\sigma$									
$\bar{x} + 2\sigma$									

Comments: F to follow (cleaner or blank dry)

Report No. 78-22

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## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE N°. (NMBR)	Pb	Zn					COMMENTS
1	7832 001	21	80					
2	002	7	270					
3	003	13	190					
4	004	22	325					
5	005	21	62					
6	006	15	41					
7	007	16	40					
8	008	11	28 <del>62</del>					
9	009	13	55					
10	010	14	40					
1	011	12	52					
2	<del>SPB</del> 1	26	975					
3	012	13	55					
4	013	23	280					
5	014	12	330					
6	015	14	162					
7	016	15	75					
8	017	12	94					
9	018	16	108					
20	019	56	58					
1	020	42	74					
2	BLANK	ND	ND					
3	021	31	68					
4	022	41	85					
5	023	26	70					
6	024	30	24	75				
7	025	6	25	24				
8	026	20	77	36				
9	027	32	45	75				
30	028	14	64	48				
1	029	18	124	74				
2	030	25	56	124				
3	031	31	183	76				
4	032	21	52	122				
5	033	23	67	52				
6	034	32	14	62				
7	035	14	58	18				
8	036	36	60	78				
9	037	16	107	50				
40	7832 038	30	6	101				

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº	SAMPLE N°. (NMBR)	Pb	Zn					COMMENTS
41	7832039	42	150					
2	040	52	130					
3	041	30	64					
4	042	56	128					
5	043	61	110					
6	044	27	82					
7	045	9	24					
8	046	47	115					
9	047	39	80					
50	048	26	40					
1	049	28	74					
2	050	36	82					
3	STD 2	370	300					
4	051	43	220					
5	052	30	108					
6	053	44	114					
7	054	43	140					
8	055	19	60					
9	056	43	98					
60	057	78	115					
1	058	4	14					
2	059	17	44					
3	BLANK	ND	NA					
4	060	9	34					
5	061	30	62					
6	062	47	142					
7	063	31	68					
8	064	13	38					
9	065	21	50					
70	066	11	32					
1	067	16	58					
2	068	37	110					
3	069	34	115					
4	070	54	110					
5	071	66	158					
6	072	27	78					
7	073	33	132					
8	074	55	94					
9	075	23	58					
60	7832076	28	74					

RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB N <small>o</small> .	SAMPLE N <small>o</small> . (NMBR)	Pb	Zn						COMMENTS
1	7832077	22	44						
2	078	22	48						
3	079	28	52						
4	080	26	54						
5	081	8	12						
6	082	11	13						
7	083	14	22						
8	084	11	18						
9	085	21	36						
10	086	20	42						
1	087	11	18						
2	088	11	18						
3	089	12	12						
4	STD 3	6	56						
5	090	17	20						
6	091	15	24						
7	092	7	12						
8	093	36	175						
9	094	51	115						
100	095	26	46						
1	096	73	72						
2	097	37	62						
3	098	11	245						
4	BLANK	ND	ND						
5	099	17	32						
6	100	54	102						
7	136	19	32						
8	137	18	82						
9	138	26	70						
10	139	16	20						
1	140	43	98						
2	141	40	154						
3	142	18	54						
4	143	55	104						
5	144	20	56						
6	145	12	26						
7	146	30	42						
8	147	12	35						
9	148	59	180						
120	7832149	38	82						

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup> .	SAMPLE N <sup>o</sup> . (NMBR)	Ph	Zn					COMMENTS
121	7832150	44	114					
2	151	37	105					
3	152	104	195					
4	153	21	44					
5	154	47	110					
6	155	5.3	85					
7	156	121	195					
8	157	68	110					
9	158	30	44					
130	159	56	116					
1	161	7	10					
2	162	11	30					
3	163	12	26					
4	164	26	34					
5	<del>SPD</del> 1	27	905					
6	165	15	36					
7	166	13	20					
8	167	11	18					
9	168	40	64					
140	169	126	210					
1	170	16	28					
2	171	48	92					
3	172	26	62					
4	173	68	112					
5	BLANK	ND	ND					
6	174	73	125					
7	175	69	96					
8	176	10	12					
9	177	6	8					
150	7832178	19	36					
178	<del>7832008</del>	11	20					
2	016	15	76					
3	035	13	15					
4	052	32	88					
5	071	6.5	15.5					
6	084	9	16					
7	092	8	12					
8	144	20	56					
9	161	7	9					
160	<del>7832175</del>	70	95					

# Riocanex

Rio Tinto Canadian Exploration Limited

## LABORATORY REPORT

### SAMPLE TYPE (✓)

- Soil &/or Stream Sediments  
 Rock  
 Water  
 \_\_\_\_\_  
 \_\_\_\_\_

Results Sent To D. BENDING

At Cofok Lake, B.C.

Date Reported 27 Jun '78  
Acct. No. 8651  
Project Name SHAG FLUORITE  
Size Fraction -80 mesh  
Extraction HNO<sub>3</sub>-HCl  
Sample Wt. 0.6 g, Volume 12 ml  
Analytical Method N.D.  
Analyst(s) E.F.P.

### DISTRIBUTION

### STATISTICAL SUMMARY

(Value for  $\bar{x}$  and  $\sigma$  in ppm)

Log Normal

Normal

Element	<u>Na</u>	<u>K</u>							
No. of Samples	<u>142</u>	<u>142</u>							
Mean, $\bar{x}$									
Std. Dev. $\sigma$									
$\bar{x} + 2\sigma$									

Comments: F - salt & clayey

Report No. 78-24

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## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR.)	Ph	Zn					COMMENTS
1	7832321	39	62					
2	322	32	82					
3	323	41	102					
4	324	74	124					
5	325	60	155					
6	326	83	235					
7	327	101	285					
8	328	59	122					
9	329	77	165					
10	330	80	135					
1	331	93	220					
2	STD 3	5	60					
3	332	49	132					
4	333	32	52					
5	334	41	158					
6	335	69	192					
7	336	16	44					
8	337	19	56					
9	338	23	60					
20	339	19	54					
1	340	43	136					
2	BLANK	ND	ND					
3	341	165	700					
4	342	78	285					
5	343	143	400					
6	344	118	315					
7	345	74	190					
8	346	69	108					
9	347	28	62					
30	348	56	54					
1	349	38	68					
2	350	28	38					
3	351	24	56					
4	352	40	86					
5	353	21	46					
6	354	29	66					
7	355	51	124					
8	356	32	82					
9	357	55	135					
40	7832358	67	145					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB N <sup>o</sup> .	SAMPLE N <sup>o</sup> (NMBR)	Pb	Zn					COMMENTS
41	7832 359	55	114					
2	360	57	118					
3	361	24	40					
4	362	26	42					
5	363	38	48					
6	364	36	85					
7	365	28	46					
8	366	13	22					
9	367	40	76	92				
50	368	49	168	70				
1	369	86	122	125				
2	370	43	92	72				
3	<del>STD</del> 1	25	76	98				
4	371	21	92	44				
5	372	20	64	52				
6	373	31	80	114				
7	374	36	113	50				
8	375	29	64	28				
9	376	53	78	64				
60	377	51	76	76				
1	378	34	92					
2	379	230	530					
3	<del>BLANK</del>	ND	ND					
4	380	173	330					
5	381	36	100					
6	382	35	64					
7	383	19	20					
8	384	37	46					
9	385	33	82					
70	386	43	72					
1	387	700	2600					
2	388	290	1300					
3	389	33	158					
4	390	57	78					
5	391	44	225					
6	392	29	40					
7	393	40	54					
8	394	33	41					
9	395	131	225					
50	7832 396	53	98					

RIO TINTO CANADIAN EXPLORATION LIMITED  
LABORATORY REPORT

PARTS PER MILLION

LAB NO.	SAMPLE NO. (NMBR)	P1	Zn					COMMENTS
1	7832397	26	50					
2	398	27	52					
3	399	37	82					
4	400	135	242					
5	401	42	42					
6	402	33	42					
7	403	64	52					
8	404	53	62					
9	405	59	62					
10	406	243	64					
1	407	24	35					
2	408	16	46					
3	409	63	185					
4	<del>STO 2</del>	375	260					
5	410	29	25					
6	411	36	36					
7	412	31	36					
8	413	31	36					
9	414	190	285					
10	415	78	64					
1	416	67	90					
2	417	73	95					
3	418	16	88					
4	<del>BLANK</del>	ND	ND					
5	419	76	118					
6	420	41	98					
7	421	85	155					
8	422	82	235					
9	423	106	230					
10	<del>424</del>	106	215					
1	425	66	112					
2	426	32	70					
3	427	42	155					
4	428	44	96					
5	429	90	180					
6	430	93	300					
7	431	34	52					
8	432	57	155					
9	433	73	144					
120	7832434	108	166					

## RIO TINTO CANADIAN EXPLORATION LIMITED

## LABORATORY REPORT

PARTS PER MILLION

LAB Nº.	SAMPLE Nº. (NMBR)	Pb	Zn					COMMENTS
121	7832435	2.50	530					
2	436	6.3	114					
3	437	6.0	148					
4	438	4.1	76					
5	439	3.2	82					
6	440	3.9	82					
7	441	6.7	560					
8	442	6.6	245					
9	443	5.0	205					
130	444	3.3	76					
1	445	3.7	86					
2	446	2.7	6.5					
3	447	3.2	52					
4	448	3.0	46					
5	STD 3	4	56					
6	449	4.8	175					
7	450	3.9	135					
8	451	3.7	165					
9	452	8.2	115					
140	453	4.6	80					
1	454	2.5	36					
2	455	1.5	70					
3	456	2.7	185					
4	457	6.0	94					
5	BLANK	ND	ND					
6	458	5.0	72					
7	459	6.6	88					
8	460	3.4	76					
9	461	8	22					
150	7832462	2.9	92					
<del>2</del>	<del>7832325</del>	<del>6.2</del>	<del>146</del>					
2	335	6.7	180					
3	353	2.0	36					
4	369	4.9	80					
5	379	2.20	450					
6	396	5.2	84					
7	410	2.8	22					
8	410	4.1	95					
9	438	4.0	74					
160	7832452	8.5	115					

Appendix II

STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

D. A. G. Bending

Academic

1976 B.Sc., Geology University of Oregon  
1977 M.Sc. Programme University of Toronto  
to present

Practical

1976-1977 Gulf Resources and Chemical  
Mine and Exploration Geologist  
Kellog, Idaho

1978 Rio Tinto Canadian Exploration Ltd.  
(summer) Party Chief on Exploration for  
Mississippi Valley-type Lead and  
Zinc occurrences, S.E. British Columbia.

## STATEMENT OF QUALIFICATIONS

R. V. Longe

### ACADEMIC

1961 B.A. Natural Sciences Tripos, Cambridge University  
(Geological Sciences)

1965 M.Sc. Geology McGill University

### PRACTICAL

1969-present Rio Tinto Canadian Exploration Ltd. Vancouver BC  
Geologist involved in various aspects of mineral exploration in B.C., Yukon, and Alaska.

1967 Amax Exploration  
(summer) Geological mapping of Cuichon Batholith, B. C.

1965-1966 Selco Exploration Ltd.,  
(summers) Geological Mapping of Archean Greenstone belt south of James Bay, Ontario

1964 West African Selection Trust  
Diamond exploration in Ivory Coast and Mali,  
West Africa

1962-1963 Consolidated African Selection Trust Ltd.,  
Mine Geologist,  
Akwatia, Ghana

1961 Serra Leone Selection Trust Ltd.,  
Geologist, reserve development department  
Yangema Mine, Sierra Leone

Appendix III

SUPERVISOR'S STATEMENT

SUPERVISOR'S STATEMENT

This is to certify that the 1978 programme  
of geological mapping and geochemical sampling on  
the Deep Purple and Candy claims described in this  
report by D. Bending was carried out under my direc-  
tion.

R. V. Longe

R. V. Longe, November 1978  
(Statement of Qualifications included)


Appendix IV

COST STATEMENT

COST STATEMENT  
B. C. FLUORITE CLAIMS  
18 MAY - 19 JUNE 1978

GEOLOGICAL, GEOCHEMICAL

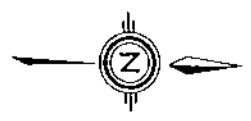
<u>SALARIES &amp; WAGES</u> (5 Men, 23 May - 18 June)	
135 Man Days @ \$36/Man Day	\$ 4887
<u>BENEFITS</u> @ 25% of Salaries & Wages	1222
<u>RIOCANEX CAMP EQUIPMENT</u>	
135 Man Days @ \$3/Man Day	405
<u>TRANSPORTATION</u>	
Redhawk 4WD Crew Cab, 27 Days @ \$25/Day	675
Repairs	590
<u>FOOD &amp; ACCOMMODATION</u>	
135 Man Days @ \$10/Man Day	1334
<u>SUPPLIES</u>	714
<u>FUEL</u>	225
<u>REPORT PREPARATION</u>	771
<u>GEOCHEMICAL ANALYSIS</u>	
Riocanex Lab, 933 soils for Pb, Zn @ \$2.85	\$2659
Bondar-Clegg, 31 soils for HG @ \$3.85	119
Chemex Lab, 866 soils for F @ \$3.50	3031
67 soils for F, BA @ \$6.50	435
Geochemical Supplies	178
Shipment of Samples via P.W.A.	50
	<u>6472</u>
<b>TOTAL:</b>	<u>\$17295</u>



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
NO. 6978

RIO TINTO CANADIAN EXPLORATION LIMITED  
FLUORITE CLAIMS  
CLAIM BOUNDARIES  
D.B. / s.g. NOV. 1978 DWG. C - 8635

N.T.S. 82 J 3E  
SCALE 1:10,000  
200 100 0 200 400 600 800 METERS



Legal corner post

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**6978**  
NO.

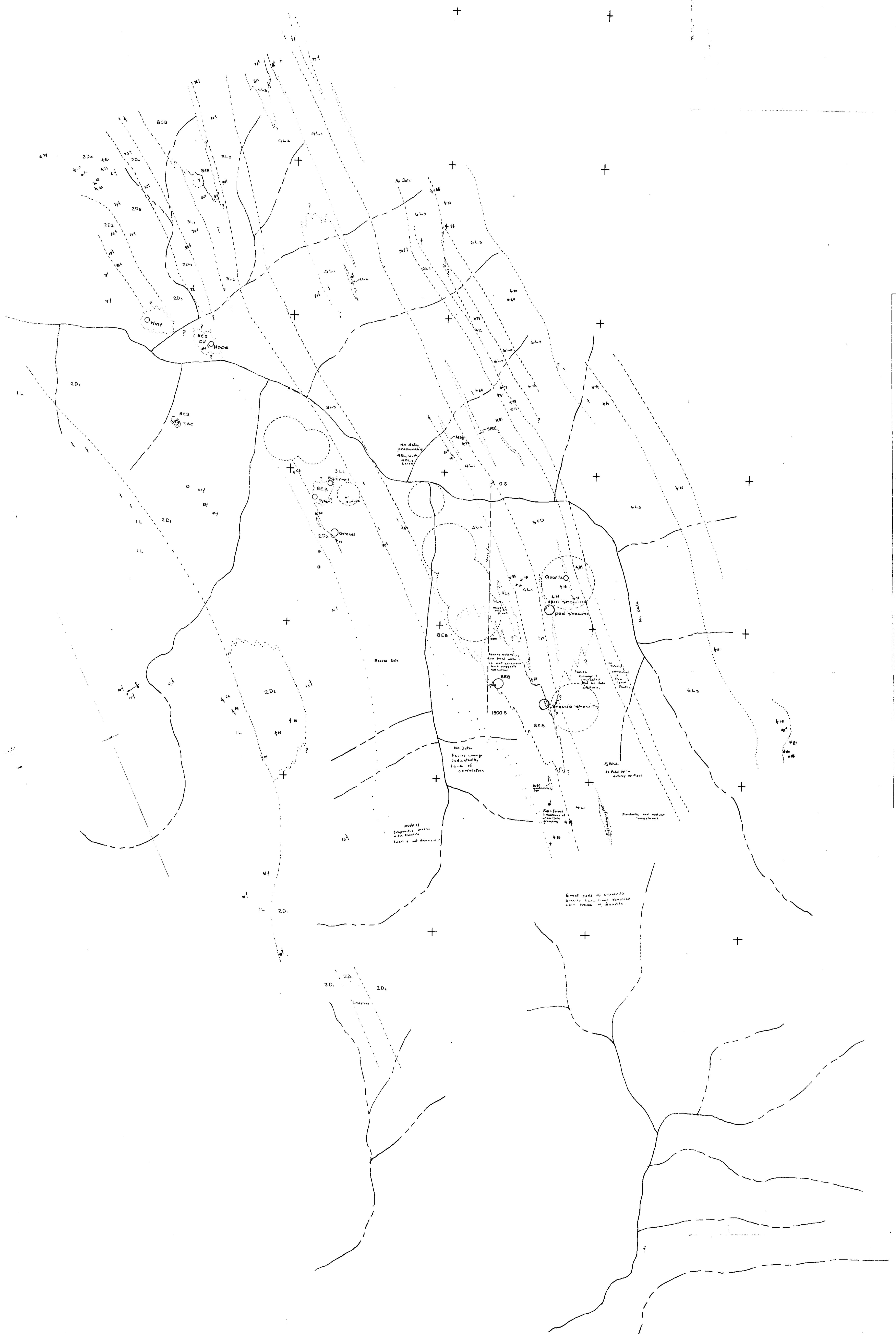
FIG. 3

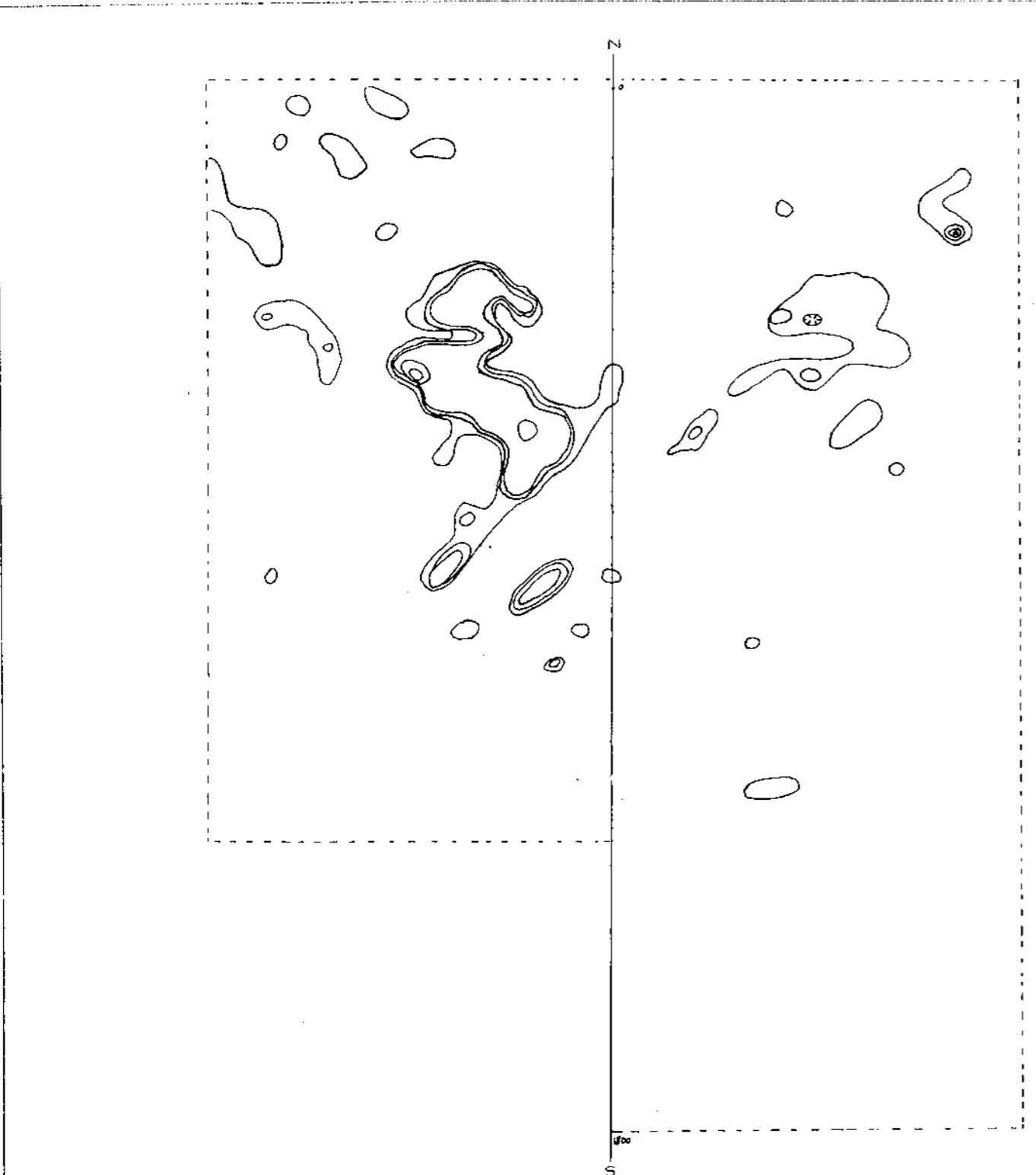
RIO TINTO CANADIAN EXPLORATION LIMITED

FLUORITE CLAIMS

GEOLOGY

D. B. NOV. 1978 DWG. G-8634





### LEGEND

— 4000 ppm F  
— 2000 ppm F

200 100 0 200 400 600 800 Metres

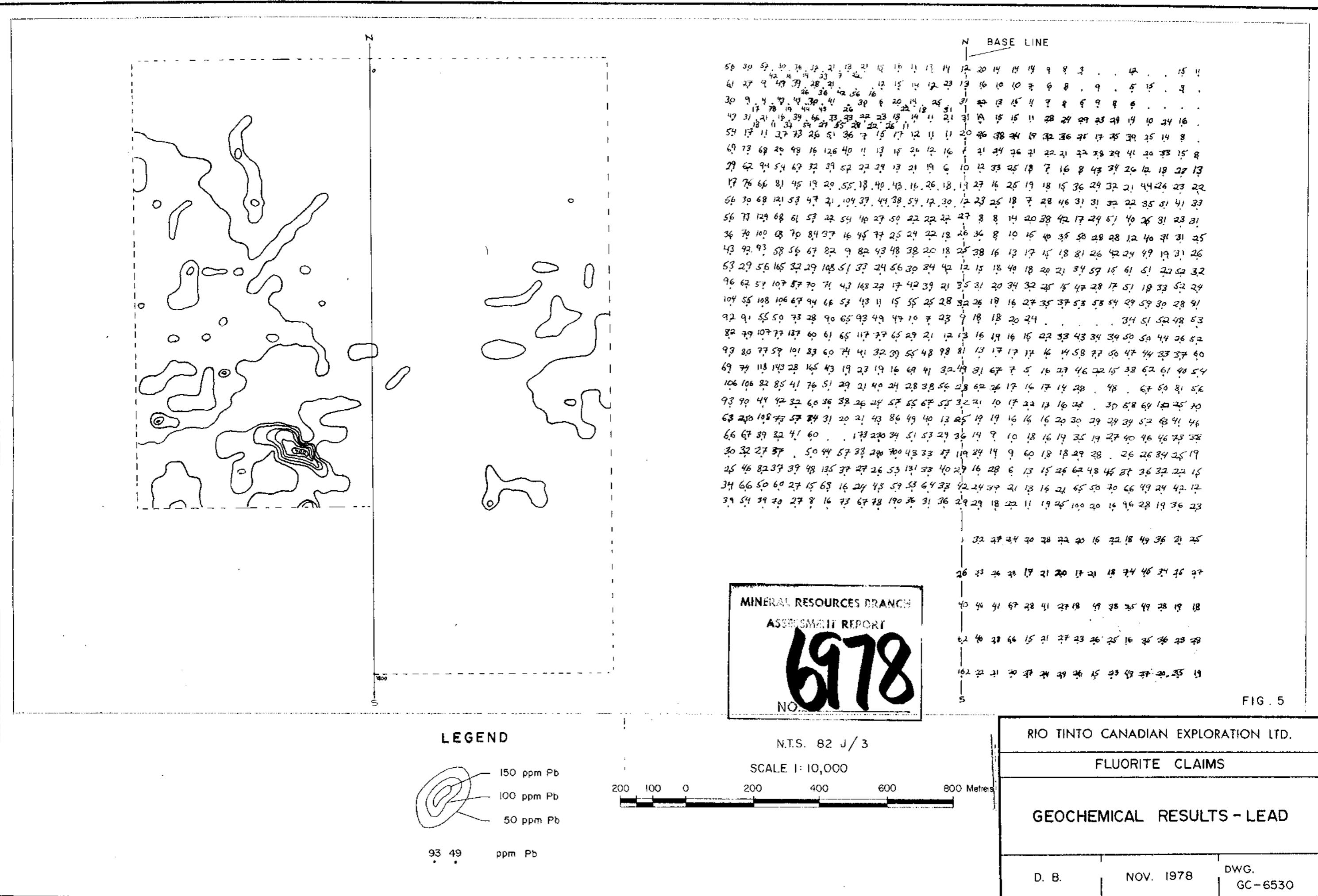
NTS. 82 J / 3

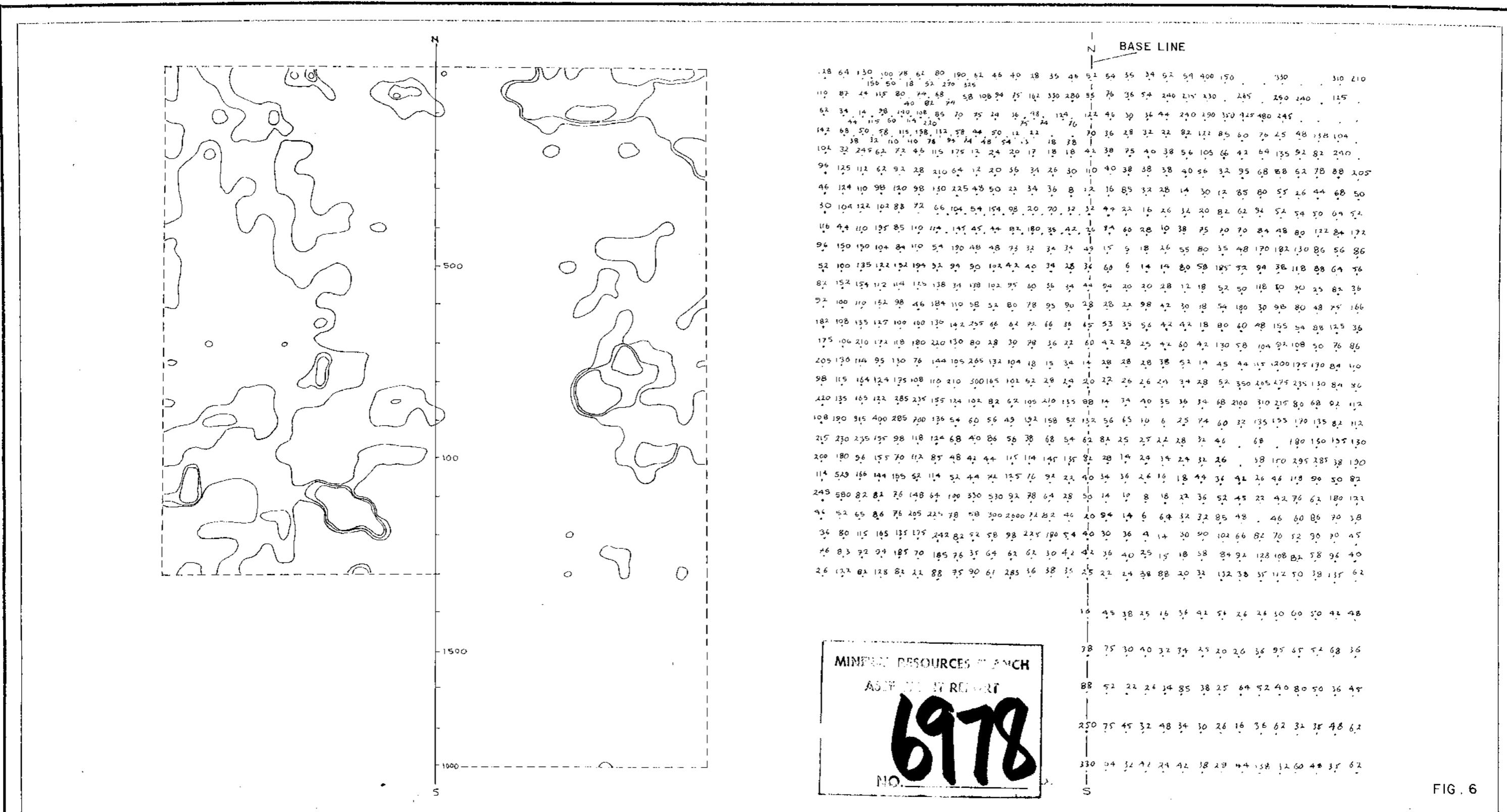
450 700 ppm F

SCALE 1:10,000

MINERAL RESOURCES BRANCH	750	670	690
ASSESSMENT REPORT	620	640	660
NO.	630	650	670
<b>6978</b>	700	720	740

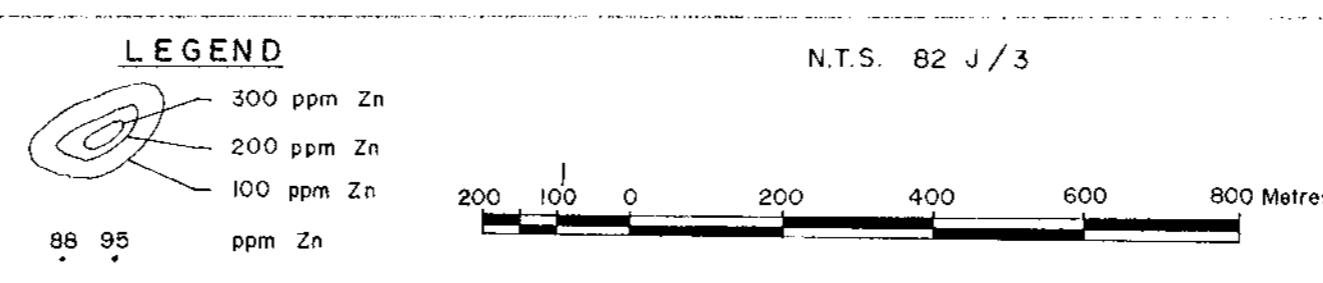
FIG. 4



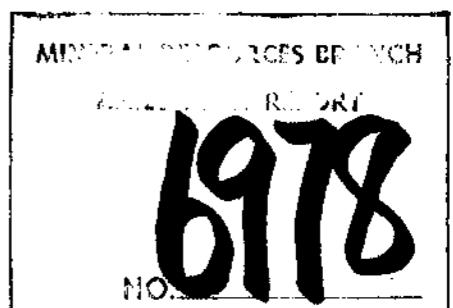
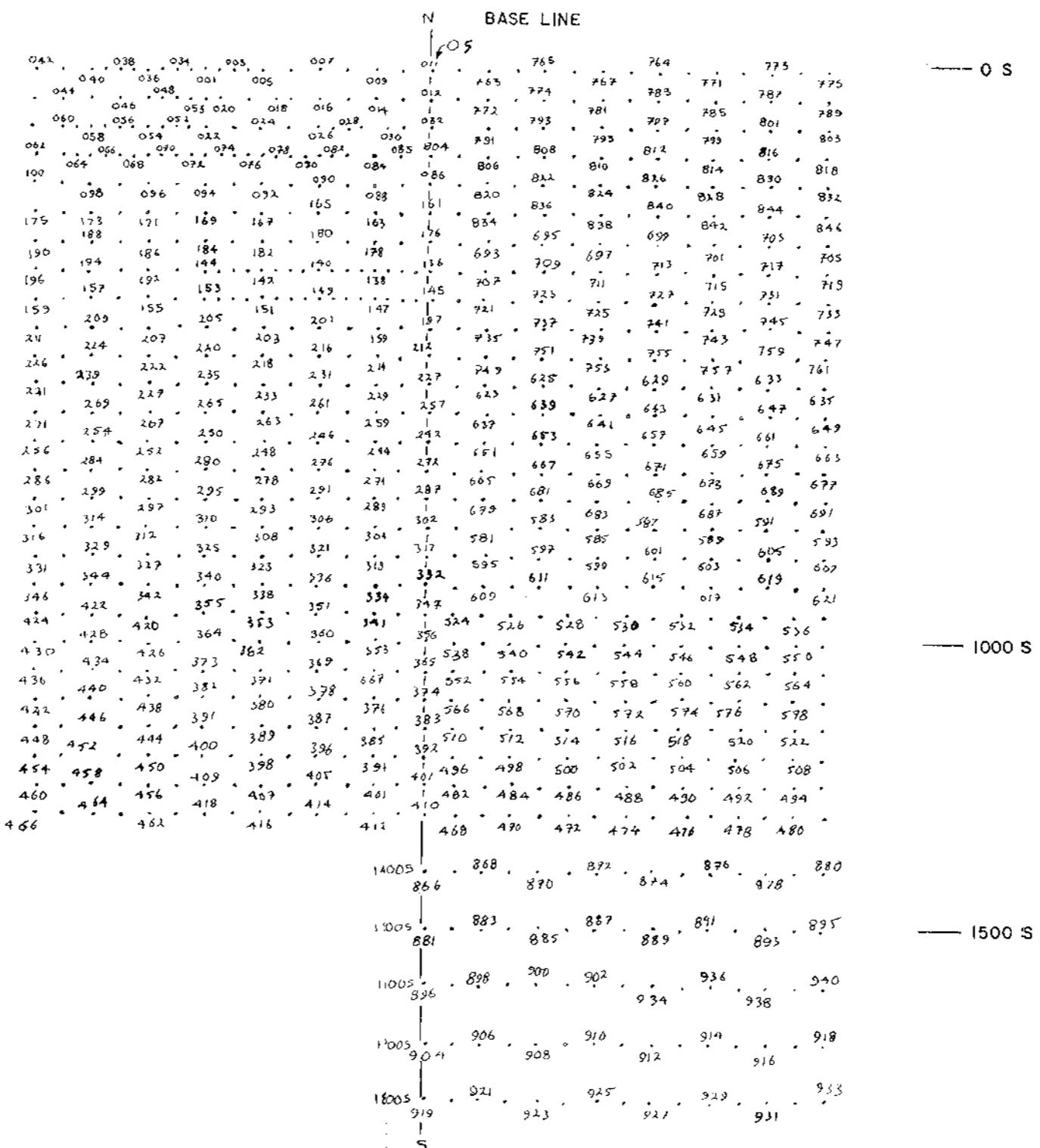


MINERAL RESOURCES OF CANADA  
AS OF JULY 1977 REPORT  
**6978**  
NO.

FIG. 6



RIO TINTO CANADIAN EXPLORATION LTD.  
FLUORITE CLAIMS  
GEOCHEMICAL RESULTS - ZINC  
D.B. NOV. 1978 DWG. GC-6529



LEGEND

310 Sample No.

N.T.S. 82 J/3

200 100 0 200 400 600 800 Metres

RIO TINTO CANADIAN EXPLORATION LTD.

FLUORITE CLAIMS

GEOCHEMICAL SAMPLE LOCATIONS

D. B. NOV. 1978

DWG.  
GC-6531

FIG. 7