REPORT
on the
GEOLOGY and GEOCHEMISTRY

of the

I.R. 3 AND 4 CLAIMS
(Record n° 6528-6529)
1990

Located in the Telegraph Creek area
British Columbia
Liard Mining Division
NTS 104 G/12W

at
57° 44' North Latitude
131° 50' West Longitude

for
Integrated Resources Ltd.

700 T.D. Tower
10205 101 Str.
Edmonton Alberta
T5J-2Z1

by
Phil Van Angeren P.Geol.

December 27, 1990

TABLE of CONTENTS

LIST of FIGURES

SUMMARY:

Placer gold deposits have been known to exist in the Telegraph Creek area of northern British Columbia, since the late 1800's. Mineral exploration in the 1950's and early 1980's established that the prospects for the occurrence of precious and base-metal mineralization in this region are good. Porphyry, vein, and replacement type ores have become the main exploration targets. Pre-1990 investigations did not fully evaluate the extent of the potential for such ores in the vicinity of the I.R. 3-4 claims, near Mt. Barrington.

In 1989, Integrated Resources Ltd. acquired the I.R. 3 and 4 mineral claims; a total of 40 contiguous units. No prior exploration had been documented on the claim block. Work on the property in 1990 was carried out intermittently between July 28 and October 5, by a four man crew. This involved geological mapping and the collection of 12 silt and 14 rock samples. Exploration is hampered by difficult terrain.

These I.R. claims are underlain by a thick sequence of bland-looking, Permian limestones. There is little or no evidence of intrusive or hydrothermal activity. The geology is deemed unfavourable for the presence of base-metal or precious-metal mineralization, a conclusion substantiated by low geochemical values.

Further work on the property is unwarranted, except possibly for minor prospecting along the trace of a regional fault-structure in the northern portion of the claim block.

INTRODUCTION:

The author has been retained by Integrated Resources Ltd. (Integrated) of Edmonton, Alberta, to complete this report regarding the preliminary geological exploration of their I.R. 3 and 4 mineral claims located near Telegraph Creek, northwestern British Columbia (Figure 1).

Reconnaissance-level geological mapping and geochemical sampling (silt and rock) was completed on the two claims between July 28 and October 5 1990 (on an intermittent basis). The work was carried out by a four-man crew, supervised by the writer.

Records at the British Columbia Ministry of Energy, Mines and Petroleum Resources show the following claims to belong to Integrated Resources Ltd. (see Figure 2):

Claim Name	Record N°	Units	Record Date	Expiry Year
I.R. 3	6528	20	Oct 8, 1989	1990*
I.R. 4	6529	20	Oct 8, 1989	1990*

* Prior to filing of this report.

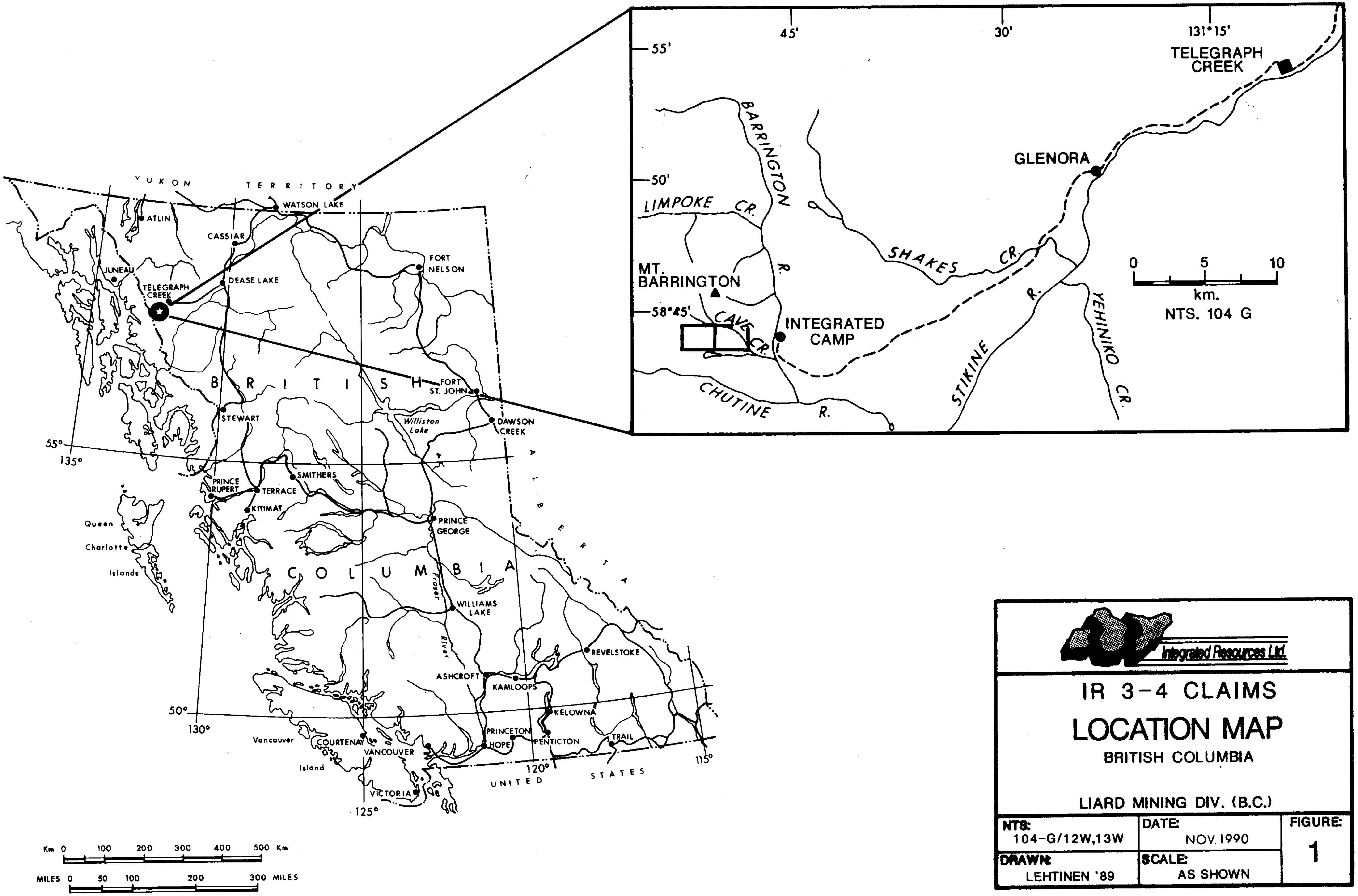
The legal aspects of these claims are not known to the author.

The property was staked in 1989 on the basis of encouraging exploration results from work completed in the 1980's by DuPont of Canada and Integrated in an area immediately north of the claim block.

LOCATION, ACCESS and PHYSIOGRAPHY:

The I.R. claims are located 45 km west of Telegraph Creek and 7.5 km northwest of the junction of the Barrington and Chutine Rivers in northern British Columbia (Figure 1). This is at latitude 57° 44' North and longitude 131° 50' West on NTS map sheet 104 G/12W in the Liard Mining Division. Mt. Barrington is 3 km to the north.

Access to the claim group is by helicopter from Integrateds' placer mining camp established on the Barrington River, 4 km to the east. The camp is itself reachable via an all-vehicle gravel road from Telegraph Creek. An airstrip suitable for small fixed-wing aircraft exists on the road near the camp. Supplies, however, are obtained at Dease Lake, on Highway 37, some 90 km northeast of Telegraph Creek.



Integrated Resources Ltd.

IR 3-4 CLAIMS

LOCATION MAP

BRITISH COLUMBIA

LIARD MINING DIV. (B.C.)

NTS: 104-G/12W,13W	DATE: NOV. 1990	FIGURE: 1
DRAWN: LEHTINEN '89	SCALE: AS SHOWN	

The claims are situated within the Boundary Ranges of the Coast Mountains where treeline varies from 1000 to 1200 m ASL and where active glaciation is locally prevalent above 1500 m. Vegetation consists of dense growths of stunted conifers, with alpine mosses and shrubs above the treeline.

Topography is rugged, ranging from 200 m at the camp to 1700 m at the northwestern corner of the property. Summers are short, cool and wet. Although snow accumulation is less pronounced than in the main Coast Ranges, shaded creeks may contain packed snow well into late summer.

EXPLORATION HISTORY:

Exploration history in the area dates back to the early 1890's when placer gold was discovered on Stikine River gravel bars below Telegraph Creek. Placer gold deposits in the lower Barrington River have been worked sporadically since 1903 (Lehtinen,1989). These are currently being mined by Integrated.

The area of interest was last mapped by a government agency (in this case the G.S.C.) in the early 1970's (Souther,1972).

Mineral exploration saw a peak in activities during the 1950's following the discovery of the Galore Creek porphyry copper deposit by Kennco Exploration Ltd. and Hudson Bay Mining & Smelting Co. Ltd.(in 1955). Galore Creek is situated 85 km south of Mt. Barrington. Some of the early "porphyry copper" exploration included the Mt. Barrington area. In the 1960's, geochemical sampling, an "IP" geophysical survey and diamond-drilling were completed in granitic intrusives at the "Poke" and "Limpoke" occurrences, 8 and 4 km north of the current claim block (eg;Hallof,1966 and Souther,1972; also Figure 3). It is apparent that insufficient concentrations of copper were found to warrant continued work.

Exploration subsequently lay dormant until the early 1980's when regional silt-sampling surveys were conducted in an effort to locate precious metal mineralization. Teck Corp., DuPont of Canada Exploration and more recently, Integrated Resources Ltd., have all staked and briefly explored the region centered on Mt. Barrington (Folk,1981; Strain,1981; Korenic,1982; Wetherly,1989 and Lehtinen,1989). Emphasis has been on gold-silver-bearing copper-porphyry and vein mineralization.

Strain and Korenic reported that mineralization consisted of sweat-like pods of massive, auriferous pyrrhotite in hornfelsed sediments. These were found to be collectively uneconomic by Korenic. Similar conclusions should have been drawn by Wetherly and Lehtinen.

There are no records of exploration activity on the I.R. 3-4 claims. The 1990 exploration program was conducted to obtain basic information on the geology and mineral potential of the claims. Work comprised prospecting, geological mapping and geochemical sampling.

REGIONAL GEOLOGY:

Geology:

The Telegraph Creek region was mapped by the Geological Survey of Canada in the early 1970's (Souther,1972). Geology in the Mt.Barrington area is shown in Figure 3. The following is derived mostly from Souther.

The district lies within the Stikine Arch, at the junction of the Intermontane Belt (accretion terrain) to the east and the Coast Plutonic Belt (island arc root) to the west. The Stikine Arch consists of late Paleozoic to mid-Jurassic oceanic volcanics and related sediments representing island arc and back-arc deposits. They are locally overlain by a variety of subareal volcanics and sediments of post-late Jurassic age. Most pre-Cretaceous strata are intruded by mid-Triassic to early Cretaceous plutons of varied affinities.

Stratigraphy:

The Paleozoic sediments comprise Permian sericite schist and greenstone, overlain by a thick formation of well-bedded limestone (units 2 & 3; fig.3).

The Permian sediments are unconformably overlain by mid-Triassic shales (4) and by ribbon-chert, argillite and minor limestone of probable late Triassic age (formations 5 to 7). These are in turn unconformably overlain by the late Triassic Stuhini Group which consists of andesitic volcanic and volcaniclastic rocks (units 8 and 9).

The Stuhini Group is locally overlain by Jurassic conglomerates and mafic volcanics (units 13 to 16) as well as Cretaceous subareal felsic volcanics (Sustut and Sloko Groups;20, 21 and 22). None of units 13 to 21 have been recognized in the Telegraph Creek area.

Intrusive Rocks:

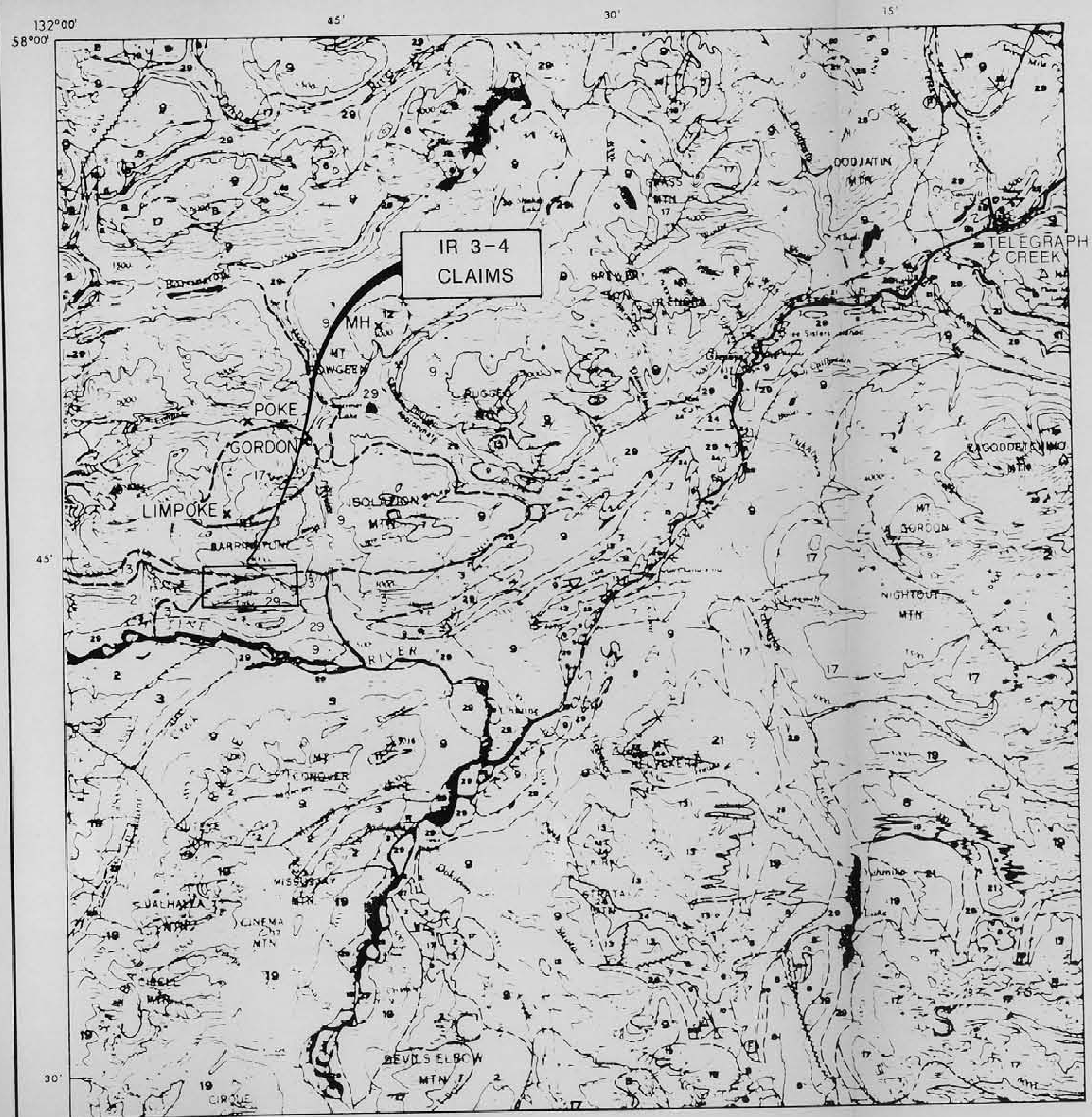
Three intrusive episodes characterize the region: a mid-Triassic to mid-Jurassic granodiorite and syenite suite believed to be coeval with the Stuhini Group (suites 10 to 12); the Jurassic to Tertiary Coast Plutonic Complex of dioritic affinities (suite 17); quartz monzonite, aplite and diorite plugs/dikes dated as post-Jurassic by Souther (units 19,22 and 23).

No intrusive rocks have been recognized on the I.R. 3-4 claims.

Structure and Metamorphism:

Structural patterns in the region are dominated by isoclinal folds. This deformation has affected all stratified Stikine Arch formations and is evidenced by the west-trending, upright attitudes of Permian limestones and Stuhini Group strata. Post-intrusive deformation is characterized by regional-scale, vertical, north-trending, faults and shear zones. Similar structures also strike northwest. Many are typified by orange-weathering, carbonate alteration.

All rocks have undergone zeolite regional metamorphism. Greenschist metamorphism is restricted to early Paleozoic formations (unit A). Quartz-biotite hornfelsing has occurred in the Stuhini



LEGEND
(Adapted from Souther, 1972)

QUATERNARY
PLEISTOCENE and RECENT

29 Fluviatile gravel; glacial outwash; colluvium

CRETACEOUS and TERTIARY

(SLOKO GROUP)
22/23 Biotite leucogranite, dikes and sills
Porphyritic andesite, dikes and sills

(SUSTUT GROUP)
21 Conglomerate; sandstone; shale

20 Quartz-feldspar porphyry; rhyolite; in part equivalent to 22

19 Biotite-hornblende quartz-monzonite

JURASSIC and/or CRETACEOUS

17 Granodiorite; quartz diorite; leucogranite

JURASSIC

13/16 Conglomerate; siltstone; basalt; greywacke

LATE TRIASSIC to MIDDLE JURASSIC

12 Syenite; orthoclase porphyry; monzonite

(HICKMAN BATHOLITH SUITE)
10/11 Hornblende granodiorite; diorite; pyroxenite

TRIASSIC
UPPER TRIASSIC

(STUHINI GROUP)
9 Undifferentiated sedimentary and volcanic rocks

8 Augite andesite tuffs, flows and related clastics

7 Siltstone; ribbon chert; greywacke; limestone

6 Limestone; impure limestone

5 Greywacke; siltstone; tuff; shale

MIDDLE TRIASSIC

4 Black shale; siltstone

PERMIAN

3 Thick bedded limestone

2 Phyllite; schist; greenstone

SCALE 1:250,000

MILES 0 5 10

0 5 10 KILOMETRES

SYMBOLS

Integrated Resources Ltd.

MT. BARRINGTON AREA
REGIONAL GEOLOGY
LIARD MINING DIVISION, B.C.
ADAPTED FROM LEHTINEN 1989

DRAWN	N.T.S.	DATE	FIG No.
J.W.	104G/12	NOV 1989	3

group, at their contact with coeval and later intrusions. This is particularly evident on Mt. Barrington.

Mineralization:

Mineral deposits associated with the geological environment encountered near Mt. Barrington may be classed into four groups: porphyry copper-silver-gold deposits associated with syenitic and monzonitic intrusives (such as the Galore Creek deposits); auriferous, quartz-carbonate stockworks and replacements in shear zones (such as the Polaris-Taku); massive, shear hosted polymetallic sulphide ores in Stuhini andesites (such as the Tulsequah Chief deposit); skarn deposits in calcereous horizons. The latter was perceived to represent the most likely candidate for exploration on the I.R. claims (on the basis of geological evidence).

> Skarn deposits: (Ray,1990); Though poorly documented, these are likely to occur in calcareous sediments of early Triassic age or older, at their contact with Triassic-Jurassic dioritic plutons. Copper-gold skarns are accompanied by arsenic, bismuth and occasionally, cobalt.

Significantly, mineralization occurring in carbonate assemblages of the Stikine Arch are usually in close proximity to intrusive rocks. The prime goal at I.R. 3-4 was therefore to locate such an environment.

PROPERTY GEOLOGY:

The geology of the I.R. 3-4 claims is shown on Figure 4. Geological formations have been classed and "dated" on the basis of similarities to formations described by Souther (1972). The claim group is underlain almost exclusively by limestone of probable Permian age and by sediments belonging to the Stuhini Group. Groups A to 2 in figure 4 are believed to be equivalent to Southers' n° 2, 3, 7 and 8 (respectively).

Stratigraphy:

The oldest strata on the property are thought to be the metamorphosed sediments and volcanics included in group "A". Greenstone and cream-colored, quartz-sericite schist occur as a thin, fault-bound wedge in I.R. 4. The schist has a definite "tuffaceous" appearance.

The metamorphic wedge is enclosed within a very thick sequence of west-trending carbonate (B). These are thick-bedded, bland, gritty and bioclastic white limestones representative of a shelf environment. The limestones are in fault contact to the north with cherts (1a) and mixed greywackes and andesite tuffs (1c,2b) of the Stuhini Group. Unit 1a is grey-green in color and consists of well-bedded, silty to microcrystalline chert. Minor disseminated pyrite is locally present. Greywackes are impure sandstones and siltstones, derived from and interbedded with, unit 2b. The andesites are fine-grained, dark green to maroon tuffs.

Structure and Metamorphism:

All strata trend to the west, are steeply dipping and are affected by complex folding. Of note is the high degree of faulting which has disrupted sediments and volcanics alike. Most faults have a NW bearing.

A major, NE-striking, regional fault extends across the NW corner of I.R. 4. It juxtaposes Permian carbonates against Triassic sediments. This fault is mostly covered but may be considered a viable exploration target since it is accompanied by local brecciation and by minor quartz-carbonate alteration.

Mineralization:

No zones of hydrothermal brecciation or alteration have been observed on the property other than on the main fault zone. Disseminated pyrite mineralization is confined to unit A which was sampled to no avail (samples 70700 & 70851; figure 4). Similarly, the exposed and altered portion of the main fault zone returned background concentrations of analyzed elements (n° 70699 & 70852). All other rock samples have corresponding low values.

GEOCHEMISTRY:

A total of 12 silt samples and 14 rock samples were collected from the I.R. 3 and 4 claims (see figure 4). Analytical procedures and results are tabulated in Appendix A.

Sampling procedures:

Silts were obtained as 500 gm samples from "silt bars" in both dry and active creeks. Rocks were usually taken over true thickness (eg; chip sample) or as hand-sized "representative" samples (eg; grab). They averaged 3 kg in weight. Each silt specimen was placed in numbered, wet-strength, sample envelopes; rock samples gathered in heavy plastic bags. All collection sites were flagged, indicating their respective sample numbers. Samples were shipped to Loring Laboratories of Calgary, Alberta for preparation and for analyses of Au, Ag, Cu, Pb, Zn and As.

Results:

All rock and silt samples were taken from areas of change in lithological character or from seemingly altered or mineralized structures.

Elements occur at background concentrations at all sample sites. Silt n° 70633 (180 ppb Au) is from Cave Cr, known for its high levels of metals (Korenic,1982) and is therefore of limited significance.

No obvious, exposed zones of precious-metal or base-metal mineralization was detected on the property. It should be emphasized, however, that geochemical exploration was limited in extent.

CONCLUSIONS and RECOMMENDATIONS:

Conclusions:

The claims are underlain by a thick sequence of Permian carbonates which have limited mineral potential. There is little evidence of intrusive or hydrothermal activity, both of which are judged to be necessary for the occurrence of mineralization in this geological environment (Ray, 1990).

In view of the low metal values and of a lack of geological "signatures" related to mineralization, it is concluded that the potential for metallic mineralization on the I.R. 3 and 4 claims is limited at best.

Recommendations:

No further work is recommended for the claim block, except perhaps for minor prospecting along the trace of the main fault zone in I.R. 4. This should be completed in order to locate alteration zones.

Respectfully Submitted

Phil van Angeren P.Geol.

December 27, 1990

REFERENCES:

Folk P., 1981: "*Geochemical Report on the LIMP 2 Claim.*"
B.C. Min. Res. Br.; Assessment Report n° 9,092.

Hallof P.G., 1966: "*Report on the Induced Polarization and Resistivity Survey on the GORDON Claim group, Limpoke Cr. Area.*"
B.C. Min. Res. Br.; Assessment Report n° 847.

Korenic J.A., 1982: "*Assessment Report of Geological, Geochemical and Geophysical Work Performed on the TUFF 1 Claim.*"
B.C. Min. Res. Br.; Assessment Report n° 10,475.

Lehtinen J., 1989: "*1989 Geological and Geochemical Report on the GOAT 1 to GOAT 11 Claims.*"
Private Report prepared for Integrated Resources; dated Nov. 1989.

Ray G., 1990: "*West Coast Skarns.*"
The Northern Miner Magazine; April 1990, pp 22-27.

Souther J.G., 1972: "*Telegraph Creek Map-Area, British Columbia.*"
Geol. Surv. of Can.; Paper 71-44.

Strain D.M.,1981: "*Geological and Geochemical Report on the TUFF Claims.*"
B.C. Min. Res. Br.; Assessment Report n° 9200.

Wetherly M., 1989: "*Qualifying Report on the GOAT Claims.*"
Private Report prepared for Integrated Resources; dated January 13, 1989.

STATEMENT of COSTS:

For the I.R. 3 and 4 claims
During the period July 28-October 5, 1990

Wages:		
P. van Angeren P.Geol.		
3 d @ $280.00/d:	$840.00	
J. Davies - geologist		
2 d @ $228.25/d:	456.50	
T. Bell - prospector		
1 d @ $261.00/d:	261.00	
R. Lewis - prospector		
2 d @ $261.00/d:	522.00	
	....	$2079.50
Field Costs:		
Room and Board		
8 m.d. @ $75.00/md:	450.00	
Misc. supplies		
& freight @ :	95.00	
Helicopter,		
TransNorth Air B-206		
1.6 hrs @ $646.50/hr:	1034.40	
Geochemical Analyses		
12 silts @ $19.45/smpl:	233.40	
14 rocks @ $23.75/smpl:	332.50	
	....	$2145.30
Report Preparation:		
Metric Mapping		
map preparation @ :	201.25	
	....	$201.25
	TOTAL:............	$4426.05

Note: prospector wages include their own supplies and overhead costs. Helicopter costs include fuel.

December 27, 1990

Phil van Angeren P.Geol.

CERTIFICATE

I, ***Phil van Angeren***, residing at 2123 Deerside Dr. S.E., Calgary, Alberta hereby certify that:

i) I am a geologist having practised my profession for the last 14 years.

ii) I am a graduate of McGill University, Montreal, having graduated with a B.Sc. in Geology with Honours, in 1977.

iii) I have been a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1985.

iv) I have no interests, direct or indirect, in the securities or properties of Integrated Resources Ltd., nor do I expect any.

v) I am the author of this document, which is based on personal examination of the property and on compilation of historical data made available by the company.

Signed and dated at Calgary, Alberta, on the 27th day of December, 1990.

Phil van Angeren P.Geol.

December 27, 1990

APPENDIX'A

ANALYTICAL PROCEDURES

&

ANALYTICAL RESULTS

629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2

LORING LABORATORIES LTD.

Phone 274-2777

Preparation Procedures for Geochemical Samples

1 - Soil And Silts:

a) The soil sample bags are placed in dryer to dry at 105°C.

b) Each sample is passed through an 80 mesh nylon seive. The +80 mesh material is discarded.

c) The -80 mesh sample is placed into a coin envelope and delivered to the laboratory for analysis.

2 - Lake Sediments:

a) The sediment sample bags are placed into the dryer at 105°c until dry.

b) The dried material is transferred to a ring and puck pulverizer and ground to -200 mesh.

c) The -200 mesh pulp is then rolled for mixing, placed into a coin envelope, and taken to the laboratory for analysis.

3 - Rocks and Cores:

a) The samples are dried in aluminum disposable pans at 105°C.

b) They are then crushed to 1/8" in jaw crusher.

c) the 1/8" material is mixed and split to sample pulp size.

d) The sample is then pulverized to 100 mesh, using a ring and puck pulverizer.

e) The -100 mesh material is rolled on rolling mat and transferred to sample bag. The sample is then sent to the laboratory for analysis.

LORING LABORATORIES LTD.

629 Beaverdam Rd. N.E.
Calgary 67, Alberta

Phone 274-2777

METHODS OF ANALYSIS FOR GEOCHEMS

1. COPPER, LEAD, ZINC, NICKEL, COBALT, SILVER

500 milligrams of -80 mesh material are weighed into coor cups, placed in muffle at 500°C to remove organics. The oxidized samples are then transfered to test tubes, aqua regia added and digested in water bath at 100°C for three hours.

The test tubes are then bulked to the 10 ml. level, mixed and allowed to settle overnite.

The samples are then put through the atomic absorption with appropriate standards and reported in PPM.

2. MOLYBDENUM GEOCHEMS

The same sample weight is used; the organics are also removed; aqua regia is also used, but just prior to bulking up to 10 mls. volume, 3 mls. of aluminum chloride solution is added to enhance the molybdenum atom. After standing overnite the samples are put through the atomic absorption using a nitrous oxide and acetylene flame. Reported in PPM Mo.

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629 Beaverdam Rd. N.E.
Calgary, Alberta T2K 4W2

Phone 274-2777

Au Geochems (Soils & Sediments)

1. Weigh 10 g sample to fire assay crucible (carry blank)
2. Place crucibles in fire assay furnace at fusion temperature for 15 minutes.
3. Allow crucibles to cool on steel table.
4. Add 1 tablespoon flux and 1 inquart to each crucible.
5. Fuse for ½ hr. at fusion temperature.
6. Pour pots, remove slag and cupel.
7. Place beads into 50 ml flasks.
8. Pipette stds. and blank into 50 ml flasks.

   1 ml of 10 ppm = 1000 ppb
   1 ml of 5 ppm = 500
   1 ml of 1 ppm = 100
   0 ml = 0

9. Add 5 mls H_2O, 3 mls HNO_3 and place on 1 switch plate for 5 minutes. Take off plate. Add 5 mls HCl.
10. Digest until total dissolution approximately ½ hr.
11. Bulk flasks to approximately 25 mls with distilled H_2O. Cool to room temperature.
12. Add 5 mls MIBK. Stopper and shake each flask for exactly 1 minute.
13. Allow MIBK to settle.
14. Set 1100 AA unit as follows:

    mu - 2428
    slit - .5
    lamp MA - 3
    flame - air-acetylene - extremely lean

Stds. 100 ppb - 10
1000 ppb - 100
500 ppb - reading

As - digestion procedure;

---

1) WEIGH .5000 gm IN 150 ml BEAKER .

2) ADD .5 gm OF POTASSIUM CHLORATE ($KClO_3$).

3) WET DOWN WITH DISTILLED WATER, ADD 15 ml NITRIC ACID (HNO_3).

4) TAKE TO DRYNESS OVERNITE ON A 1 SWITCH HOT PLATE.

NEXT MORNING :

5) 1 SHOT (5 - 10 ml) OF HCl, LET DRY ON 1 SWITCH PLATE.
REPEAT THE ABOVE STEP.

6) WET DOWN, ADD 15 ml HCl, COVER AND BOIL ON A 2 SWITCH PLATE, FOR 10 MINUTES.

7) AFTER BOILING, WASH OFF LIDS AND TRANSFER TO 100 ml FLASKS WITH DISTILLED WATER, LET COOL.

8) BULK TO 100 ml WITH DIST. WATER AND SHAKE 20 TIMES.

SEE NEXT PAGE FOR ANALYSIS PROCEDURE.

SOLUTIONS:

- KI : 150 gm TO 1000 ml (DISTILLED WATER).
- $SnCl_2$: 80 gm INTO 2500 BEAKER, ADD 50 ml HCl AND DISSOLVE, TRANSFER SOLUTION TO A 200 ml FLASK AND BULK TO 200 ml WITH DISTILLED WATER.
- SDDC : DISSOLVE 5 gm SDDC INTO 1000 ml PYRIDINE AND SMELL THE FLOWERS.

As - SDDC analysis procedure

9) TRANSFER 25 ml OF THE SAMPLE TO A 125 ml ERLENMEYER AND ADD 25 ml OF DISTILLED WATER.

10) STANDARD: PIPET 1 ml OF 10 ppm STD. INTO 125 ml ERLENMEYER, ADD 49 ml OF DISTILLED H2O.
BLANK: 50 ml OF DISTILLED WATER INTO 125 ml ERLENMEYER.

11) ADD 5 ml CONCENTRATED HCl TO SAMPLES.
ADD 8-10 ml CONC. HCl TO THE STANDARD AND BLANK.

12) ADD 3 ml KI solution (150 gm/liter) TO SAMPLES, STD AND BLANK.

13) ADD 1 ml STANNOUS CHLORIDE (40%) TO ALL FLASKS.

14) LET SAMPLE STAND FOR 20 min TO ENSURE COMPLETE REDUCTION OF THE As AFTER THE SnCl2 HAS BEEN ADDED.

15) PUT 5 ml PYRIDINE SOLUTION (SDDC IN PYRIDINE) IN EACH CUVETTE.

16) PLACE 2 DROPS OF LEAD ACETATE SOLUTION INTO THE GLASS WOOL PLUG OF THE ARSENIC GENERATOR APPARATUS.

17) ADD 1 LEVEL SPOON OF ZINC METAL TO THE ERLENMEYER FLASK, AND QUICKLY PLACE STOPPER OF APPARATUS ON THE FLASK AND ENSURE THAT THE TIP OF THE APPARATUS IS IN THE PYRIDINE SOLUTION.

18) ENSURE A TIGHT SEAL HAS BEEN MADE, BY WATCHING FOR VIGOROUS BUBBLES.

19) ALLOW 30 min FOR REACTION (BUBBLING) TO REACH COMPLETION.

20) READ ABSORBANCE ON SPEC-20 @ 535 nm WAVELENGTH.

CALCULATION:

$$\frac{\text{ABSORBANCE OF SAMPLE} \times 10}{\text{ABSORBANCE OF STANDARD}} = \text{ug As}$$

$$\text{ppm As} = \frac{\text{ug As}}{\text{SAMPLE WEIGHT}} \times \frac{100}{\text{SAMPLE ALIQUOT}}$$

To: INTEGRATED RESOURCES,
700, 10205 - 101 Street
Edmonton, Alberta T5J 2Z1
Attn: Robert Lintell
cc: P. Van Angeren

File No. 33707
Date September 28, 1990
Samples Silt + Rock
Smithers Ref# 0025
Project IR 3-4

Certificate of Assay
LORING LABORATORIES LTD.

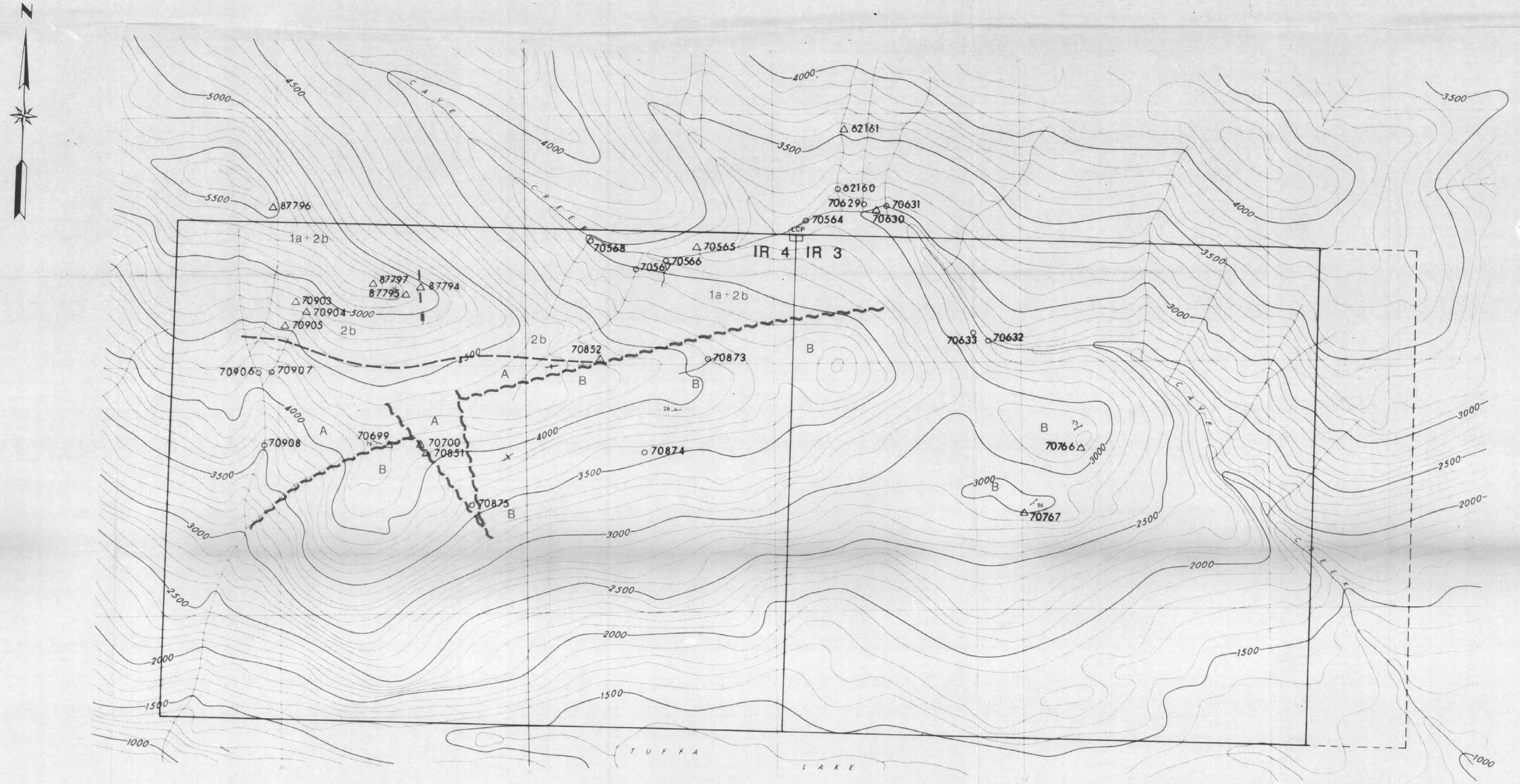
Page # 1

SAMPLE NO.	PPB Au	PPM Ag	PPM Cu	PPM Pb	PPM Zn	PPM As
Geochemical Analysis						
70564	20	0.8	79	5	137	39
70566	10	0.6	36	2	90	17
70567	5	0.8	50	4	164	31
70568	<5	0.6	50	5	137	34
70632	180	0.6	63	12	140	19
70633	5	0.3	43	28	184	5
70873	<5	0.1	15	9	80	1
70874	<5	0.5	30	6	128	11
70875	<5	0.2	28	3	168	10
70906	10	0.9	83	10	246	20
70907	15	0.9	90	18	370	43
70908	10	0.8	77	14	240	25
70565	10	0.1	39	-	59	7
70699	<5	0.1	10	-	79	4
70700	5	<0.1	73	-	209	<1
70766	<5	<0.1	5	-	17	3
70767	<5	<0.1	9	-	24	4
70851	<5	<0.1	26	-	139	6
70852	25	<0.1	31	-	84	5
70903	10	0.4	90	-	26	9
70904	10	0.2	46	-	18	10
70905	10	0.3	20	-	44	17

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Assayer



		GEOCHEMICAL ANALYSES					
		PPB	PPM	PPM	PPM	PPM	PPM
SILTS		Au	Ag	Cu	Pb	Zn	As
70584		20	0.8	79	5	137	39
70566		10	0.6	36	2	90	17
70567		5	0.8	50	4	164	31
70568		<5	0.6	50	5	137	34
70632		180	0.6	63	12	140	19
70633		5	0.3	43	28	184	5
70873		<5	0.1	15	9	80	1
70874		<5	0.5	30	6	128	11
70875		<5	0.2	28	3	168	10
70906		10	0.9	83	10	246	20
70907		15	0.9	90	18	370	43
70908		10	0.8	77	14	240	25
ROCKS	TYPE*						
70585	0.4-calv	10	0.1	39	-	59	7
70699	1.0-lmst	<5	0.1	10	-	79	4
70700	1.0-rhy	5	<0.1	73	-	209	<1
70766	G -lmst	<5	<0.1	5	-	17	3
70767	G -lmst	<5	<0.1	9	-	24	4
70851	1.0-rhy	<5	<0.1	26	-	139	6
70852	1.0-chrt	25	<0.1	31	-	84	5
70903	0.6-qtzv	10	0.4	90	-	26	9
70904	1.0-chrt	10	0.2	46	-	18	10
70905	1.0-chrt	10	0.3	20	-	44	17
87794	G -calv	10	0.2	22	4	64	10
87795	G -lmst	15	0.2	60	6	45	15
87796	0.3-chrt	5	0.2	28	8	63	20
87797	1.0-qtzv	5	0.2	30	4	28	20

* 1.0: width in metres
G : grab
chrt: chert
lmst: limestone
rhy: rhyolite
qtzv: quartz vein
calv: carbonate vein

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,810

LEGEND

LATE TRIASSIC (Stuhini Group)

2 Volcanic Rocks a;rhyolite tuffs +/- flows
b;andesite tuffs (ash & crystals)

1 Sediments a;chert

PERMIAN (Stikine Assemblage)

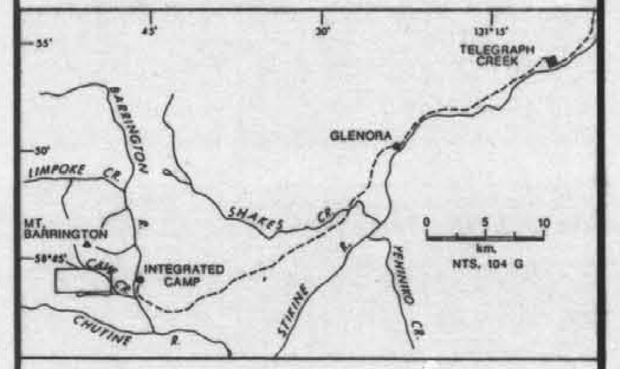
B Limestone

A Sericite schist & greenstone

SYMBOLS

Geological contact (defined,assumed)
Bedding (inclination)
Foliation (inclination)
Fracturing (inclination)
Fault/Shear zone (+/- breccia)
Quartz-carbonate vein
Rock Sample
Silt Sample

Contour interval in feet.



100 0 200 500
meters

Integrated Resources Ltd.

IR 3&4 CLAIMS
GEOLOGY &
GEOCHEMISTRY

LIARD MINING DIV. (B.C.)

NTS: 104 G/12W	DATE: NOV.1990	FIGURE: 4
DRAWN: PVA	SCALE: 1:10,000	