

# 2387

R E P O R T

ON THE

1 9 6 9

EXAMINATION, GEOCHEMICAL AND  
GEOLOGICAL SURVEYS  
of the  
IRA CLAIM GROUP  
Atlin Mining Division  
Northern British Columbia

104N / 11W

on behalf of

REPUBLIC RESOURCES LIMITED

Claims	- Ira 1 - 8
Record Numbers	- 12342 E - 12349 E
Location	- 12 miles north-east of Atlin, B.C.
Reference Co-ordinates	- 59° 45' N - 133° 30' W

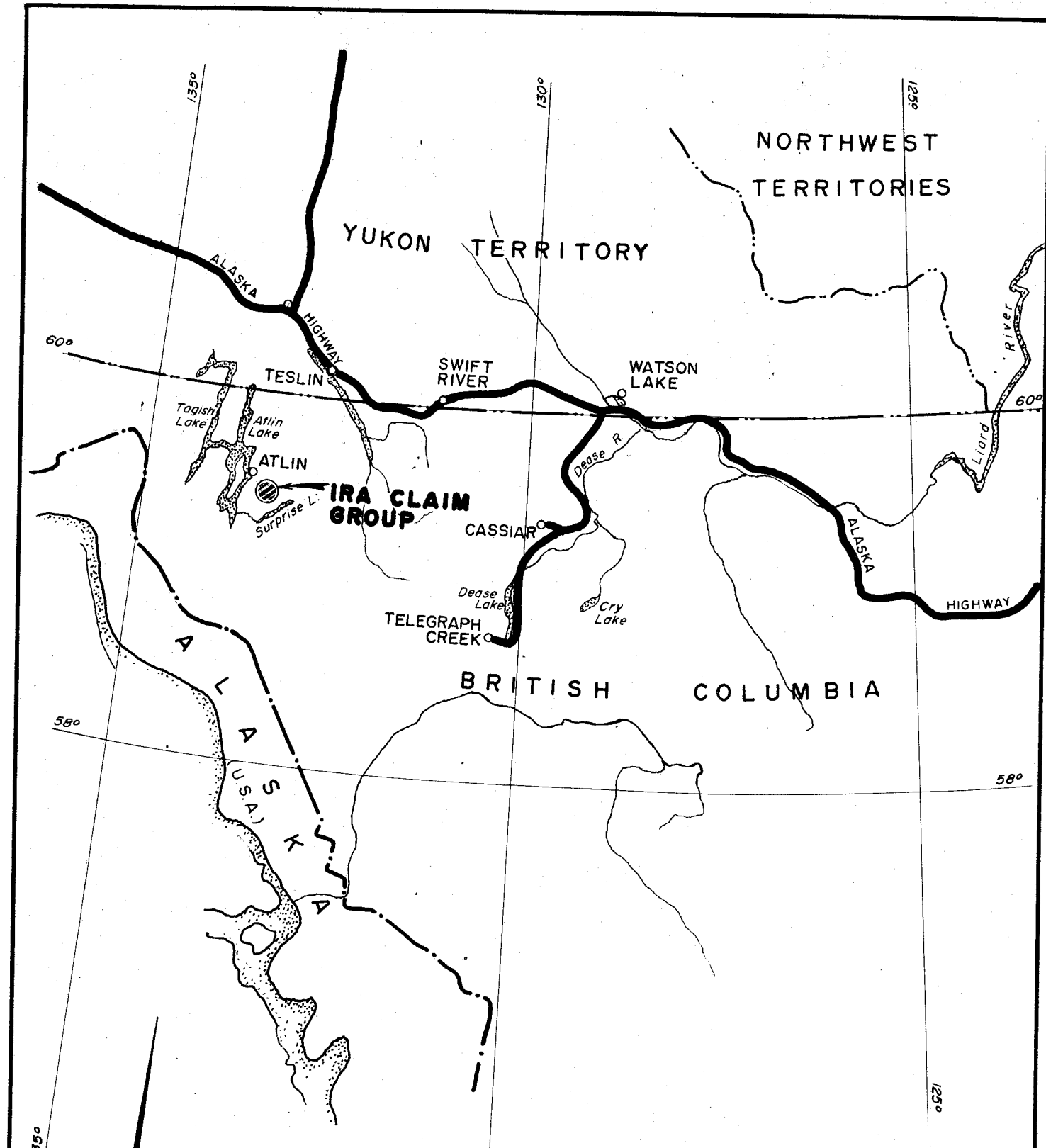
Vancouver, British Columbia  
April 24, 1970

J. R. Glass, B.Sc.  
Consulting Geologist

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<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <b>2387</b> MAP</p>
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Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. **2387** MAP **#1**

metals, petroleum & hydraulic resources consulting limited		
<b>REPUBLIC RESOURCES LTD.</b>		
<b>PROPERTY LOCATION PLAN</b>		
By: J. R. Glass	job No	
Scale: 1"=63.13 miles	<b>C-71</b>	Date: April, 1970

## I N T R O D U C T I O N

On instructions from Republic Resources Limited the writer travelled to Whitehorse, Yukon Territory on October 21, 1969 and carried out a property examination and controlled reconnaissance geological-geochemical survey on the Ira Group of claims located near Atlin, British Columbia. The field work was completed on October 26, 1969.

## S U M M A R Y A N D C O N C L U S I O N S

Geological examination and preliminary geochemical surveys have shown the following:

1. The general area in which the Ira claims are located is known to contain economic mineralization of molybdenum, tungsten and gold.
2. The claims are located 1/2 to 3/4 of a mile from the Adanac mineralized zone reported to contain more than 70 million tons of material containing 0.16% molybdenum. The trend of this mineralized zone is not known to the writer.
3. There are areas in the Ira claim group which contain anomalous amounts of molybdenum in the soil. These areas are 500 feet in elevation above the Adanac ground and therefore cannot be caused by leakage and down slope contamination from the Adanac deposit.
4. The rocks underlying the Ira claim group are part of the same coast range batholith which hosts the Adanac mineralization, i.e. alaskite-porphyry.
5. Information gathered during this preliminary survey indicates that molybdenum mineralization similar to that of the Adanac ground is suggested on the Ira group of claims.

### R E C O M M E N D A T I O N S

1. Establish by surveying the exact boundaries of the Ira group of claims.
2. Perform a detailed soil survey over the claim group. This would involve sampling the soil at 100 foot intervals along lines spaced 400 feet apart and filling in around known anomalous zones.
3. Attempt to arrive at some financial agreement with Adanac whereby they diamond drill the Ira claims and mine any ore found as a result of this exploration work.

1

REPORT ON THE EXAMINATION, GEOCHEMICAL AND GEOLOGICAL  
SURVEYS OF THE IRA CLAIM GROUP

LOCATION

The claims are located some 12 miles north-east of Atlin, British Columbia, at the head of Boulder Creek which flows into the western end of Surprise Lake.

The claims are at an elevation of from 5,300 feet to 6,100 feet above sea level, in steep mountainous terrain.

Access to the claims can best be gained by helicopter or by four-wheel drive vehicle from Whitehorse or Atlin. A four-wheel drive vehicle can travel part way up the old road at the head of Boulder Creek to within a mile of the claim group.

REGIONAL GEOLOGY

Palaeozoic sediments and ultra basic intrusives are intruded by undifferentiated granitic rocks of the coast batholith. These granitic rocks are later intruded by Cretaceous alaskites and quartz-monzonites. Minor Tertiary volcanics rest on top of the alaskite near Ruby Creek.

To date molybdenum mineralization has been found mainly in the alaskite and associated granitic rocks nearby. This is a favour-

able association which is found in untold instances throughout the Cordilleran geological province.

#### LOCAL GEOLOGY

The rocks underlying the claim group consist of medium to coarse grained alaskite-porphry. To the east of the claims there is an ultra-mafic serpentinized basic intrusive. This intrusive has caused a rusty brown alteration zone in the nearby alaskite.

Weathering is very intense at this elevation. In most cases the outcrops have been broken down mechanically, leaving a bubble-strewn surface. This mantle of fragmentary rock masks whatever structural breaks and mineralized conditions might exist in the underlying ledge-rock.

#### MINERALIZATION SHOWINGS

1. Adanac - The most significant mineralized showing found to date in this general area is on the property presently owned by Adanac Mining & Exploration Ltd. It is reported that Adanac has proven by diamond drilling more than seventy million tons of material containing 0.16% molybdenum, and that there is additional material known to be mineralized. The ultimate tonnage and grade of material is yet to be established. The area in which this "ore zone" has been found is



located approximately 1/2 to 3/4 of a mile north of the Ira group of claims and has the same type of host rock, i.e. alaskite-porphyry. The trend of the "ore zone" is not yet known to the writer.

2. Tungsten - Locally there is an old abandoned working located a few hundred feet past the eastern boundary of the Ira claim group. This old working is on the ground currently held by Canadian Johns Manville Co. Ltd. It is reported that patchy tungsten mineralization is associated with a quartz vein varying in width from two to four feet.

There is a small showing of tungsten in quartz on the southern boundary of the Ira claim group. A minor amount of trenching has been done on this showing.

3. Gold - Placer gold was taken from Boulder Creek intermittently from 1899 until 1953. These workings are located some three miles south of the Ira group of claims, near the contact of the alaskite and the serpentinite.

#### GEOLOGICAL MAPPING

During the short 1969 programme a number of traverses were made across the claim group and on the adjoining ground. The weathering in this part of the country is intense causing the outcrops to break

down into blocks and boulders. This debris has rolled down the steep slopes and presently forms large talus fans and boulder fields which mask the underlying rock formations. Because of this only a general picture of the geology can be gleaned at the present stage. No minor structures such as veins, dykes, silicified fractures, jointing or faulting can be accurately located.

The observed outcrop and general geology has been plotted on a map scale of 1 inch = 500 feet and is included with this report.

#### GEOCHEMISTRY

Soil samples were taken along four lines 600 to 1200 feet apart, running the length of the claim group and parallel to the main ridge. This work provided the means of determining the distribution of molybdenum in the soils. Recovered samples were taken to Crest Laboratories (B.C.) Ltd. in Vancouver where they were analyzed for total molybdenum using the hot  $\text{HClO}_4 - \text{HNO}_3$  digestion method.

The results of these analyses have been plotted on a map of a scale 1 inch = 500 feet which is included with this report.

One area on claims 1 and 3, at least 2000 feet in length, contains notably high amounts of molybdenum in the soil. This area is definitely of interest since it contains up to 15 times the back-

ground values. Future work should be designed to define the limits of this anomalous zone.

Another area, approximately 800 by 1200 feet, on claims 2 and 4, contains soil molybdenum up to 2 1/2 times background. This area is in the vicinity of the known tungsten mineralization. It is suggested that the molybdenum in this sector might be associated with silicification and fracturing of the country rock observed around the tungsten mineralized vein.

Two other small anomalous molybdenum-bearing areas exist in the Ira Claim Group - one in the centre of claim 5 and the second toward the eastern boundary of claim 8.

All of these zones are at least 500 feet in elevation above the Adanac zone so there is no chance that they represent contamination from the Adanac mineralization.

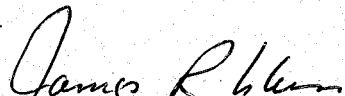
Due to the brevity of the programme and the weather conditions prevailing at the time of year the property was surveyed (the ground being frozen and snow covered to some degree), the limits of the anomalous areas were not fully defined. Future work should include a detailed soil survey over the outcrop claim group to establish the size and location of the anomalous zones.

C E R T I F I C A T E

I, James R. Glass, of 966 Bakerview Drive, Richmond, British Columbia certify that:

1. I graduated from McGill University in Montreal in <sup>1961</sup>~~1960~~ and hold a degree of Bachelor of Science in Geology. *J.R.G.*
2. I am a Fellow of the Geological Association of Canada.
3. I have practiced my profession since graduation.
4. I have based my report, conclusions and recommendations on a personal examination and survey of the Ira Claim Group, together with general published and reliable verbal information on the local and general Atlin Area.
5. I hold no beneficial interest in the subject property or in the companies mentioned in my report nor do I expect to receive any such interest.

Richmond, British Columbia  
April 24, 1970


  
James R. Glass, B.Sc.

C E R T I F I C A T E

I, E. D. Black, of 31 Windridge Drive, Markham, Ontario,  
certify that:

1. I graduated from McGill University in Montreal in 1958 and hold a degree of Master of Science in Geology.
2. I am a member of the Geological Association of Canada and the Association of Professional Engineers of the Province of Ontario and a candidate of the Association of Professional Engineers of the Province of British Columbia.
3. I have practiced my profession since graduation.
4. I have examined the present report by Mr. J. R. Glass, consulting geologist to the firm of Metals, Petroleum & Hydraulic Resources Consulting Limited, the information provided therein and the general published information available to me on the Atlin area. In general, I concur with Mr. Glass' summary, conclusions and recommendations for the Ira Claim Group.
5. I hold no beneficial interest in the subject property or the company or companies mentioned in this report and I do not expect to receive any such interest.

Toronto, Ontario, Canada  
April 29, 1970

  
E. D. Black, P. Eng.  
REGISTERED PROFESSIONAL ENGINEER  
PROVINCE OF ONTARIO

# CREST LABORATORIES (B.C.) LTD.

B.C. REGISTERED ASSAYERS  
INDUSTRIAL and RESEARCH CHEMISTS

1068 HOMER STREET  
VANCOUVER 3, B.C.  
November 10, 1969

Metals, Petroleum, & Hydraulic Resources Consulting Ltd.  
Apt. D - 1243 East 27 Street  
NORTH VANCOUVER, B.C.

Attention: Mr. Glass:

Lot No. 109 G:

Geochemical Analysis for Molybdenum:

Mesh Size: -80  
Analytical Method: Colorimetric  
Digestion Method:  $\text{HClO}_4 - \text{HNO}_3$

Samples Received: Nov. 5/69  
Samples Analyzed: Nov. 8/69

Sample Number:	Molybdenum, ppm	Sample Number:	Molybdenum, ppm
L1 - S3	5	L3 - S7	2
S4	2	L3 - S8	2
S5	Vegetation	L4 - S1	2
S6	25	S3	2
S7	30	S4	2
S8	25	S5	2
S9	25	L4 - S6	2
S10	25	L5 - S1	2
L1 - S11	35	S2	2
S12	25	S3	2
S13	12	S4	2
S14	15	S5	2
S15	15	S6	2
L1 - S16	15	S7	1
L2 - S1	Vegetation	S8	1
S2	Vegetation	S9	1
S3	Vegetation	S10	2
L2 - S5	Vegetation	S11	2
L3 - S2	5	S12	2
S3	7	S13	5
S4	5	S14	2
S6	2	S15	5

2387

ADANAC MINING  
AND  
EXPLORATION LTD.

CANADIAN

JOHNS-  
MANVILLE  
CO. LTD.

IRA N°1	IRA N°3	IRA N°5	IRA N°7
IRA N°2	IRA N°4	IRA N°6	IRA N°8

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2387 MAP #2

metals, petroleum & hydraulic  
resources consulting limited

REPUBLIC RESOURCES LTD.

**CLAIM MAP**

REGISTERED PROFESSIONAL ENGINEER  
E. D. BLACK

BY: J.R. Glass  
SCALE: 1"=1500'

APPROVED  
DATE: April 1970

NOTE: After B.C. Government Claim Map 78 MI

M.P. & H.R. Ltd.  
 Lot No. 109 G  
 November 10, 1969  
 Page 2....

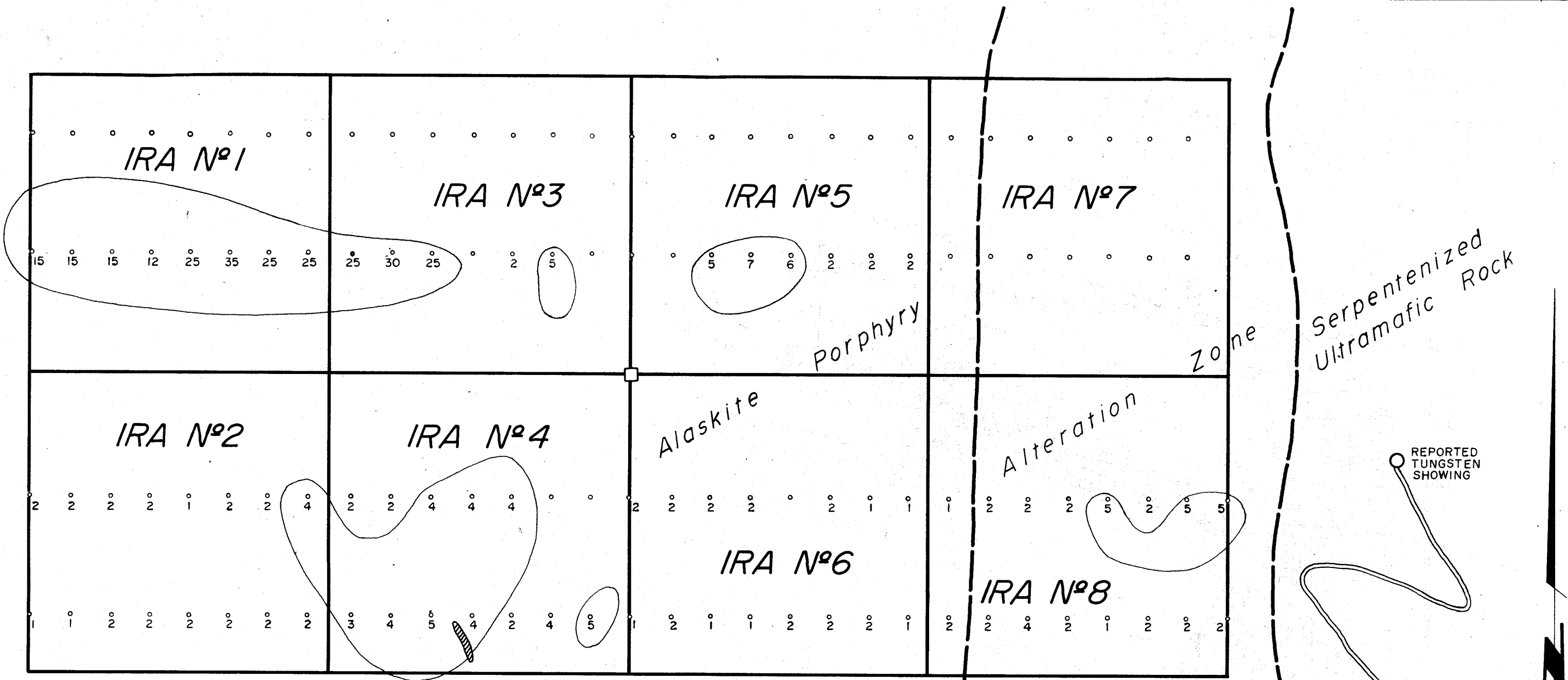
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L5 - S16	5	L7 - S7	3
L6 - S1	2	S8	2
S2	2	S9	2
S3	2	S10	2
S4	1	S11	2
S5	2	S12	2
S6	4	S13	2
S7	2	S14	1
S8	2	S15	1
S9	1	L7 - S16	1
S10	2	L8 - S1	2
S11	2	S2	2
S12	2	S3	2
S13	1	S4	2
S14	1	S5	2
S15	2	S6	1
L6 - S16	1	S7	2
L7 - S1	5	S8	2
S2	1	S9	4
S3	2	S10	2
S4	4	S11	2
S5	5	S12	4
S6	4	S13	4
		S14	4

Yours truly,  
 CREST LABORATORIES (B.C.) LTD.



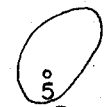


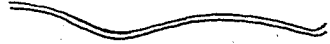
Alfred A. Burgoyne  
 Geologist-Geochemist

AAB/seb





**LEGEND**

-  **IRA No. 2** Claim Line, Claim Post and Claim Number
-  Soil Sample Location and Molybdenum Assay in p.p.m.
-  Molybdenum Anomaly
-  Silification Zone
-  Geological Contact
-  Access Road

**2387**

Department of  
**Mines and Petroleum Resources**  
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 NO. **2387** MAP **#3**

metals, petroleum & hydraulic resources consulting limited  
**REPUBLIC RESOURCES LIMITED**  
 Map Showing  
**GEOCHEMICAL & GEOLOGICAL SURVEYS**  
**IRA CLAIM GROUP**  
 ATLIN - B.C.  
 BY: J.R. GLASS job No. C-71  
 SCALE: 1" = 500' DATE: APRIL, 1970