

G E O C H E M I C A L S U R V E Y

"ALICE" GROUP (91 CLAIMS)

Map Area: 115-P-16

Lat: 63° 52' N. Long: 136° 05' W.

By: D. R. Morgan, B.Sc.

Survey begun: June 12, 1964
Survey completed: August 12, 1964

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MAPS:

1. Claim Map of Alice Group showing claims on which work was performed.
2. Map of results of geochemical survey.

INTRODUCTION

This report describes a geochemical survey conducted on the Alice Claim Group, twenty miles north of Mayo, during 1964.

The work was carried out under the supervision of the writer.

LINE CUTTING

East-west base lines were cut and chained and picket lines run at 400 foot intervals. Sampling was carried out simultaneously with line cutting on the picket lines.

Base line cut and chained	-	17,200 feet
Picket lines cut and chained	-	210,000 feet

SAMPLING PROCEDURE

Sampling was carried out with pick mattocks which were found quite satisfactory for penetrating the organic layer of soil cover. Mattocks were cleaned at each location to avoid contamination.

LABORATORY PROCEDURE

All samples were processed in the Company's geochemical laboratory at the main Peso camp.

The procedure described in G.S.C. Bulletin 39 was followed in testing for zinc and lead.

LABORATORY PROCEDURE
(cont'd)

The procedure described below is quoted from this G.S.C. Bulletin.

DETAILED CHEMICAL PROCEDURE

SAMPLING:

1. Allow the field sample to dry in paper bags in a hot dry place.
2. After preliminary drying, place sample on a large piece of wrapping paper and crush lumps with a wooden rolling pin.
3. Pass sample through a 2 mm. aluminum sieve to remove stones, etc.
4. Mix thoroughly and quarter sample; discard opposite quarters; repeat the mixing and quartering until a sample of 5 to 10 grams remains. Place sample in glass sample bottle and discard sheet of wrapping paper. Clean rolling pin.
5. Dry the 5- to 10-gram sample in an oven for at least one hour.
6. Grind sample in an agate mortar to pass 80 mesh.
7. Weigh out a 0.5-gram sample from the ground sample and place in a 100 ml. pyrex beaker.

DIGESTION:

1. To the 0.5-gram sample in the 100 ml. beaker add 30 ml 1:7 dilute nitric acid. Place a cover glass over the beaker and boil gently for one hour.

DETAILED CHEMICAL PROCEDURE
DIGESTION
(cont'd)

2. After cooling filter the solution into a 100 ml. volumetric flask, through a Whatman No. 41 filter paper, transfer the residue in the beaker to the paper and wash with a few millilitres of metal-free water. Discard the residue.
3. Dilute the solution to 100 ml. with metal-free water. Aliquots of this solution are taken for the various tests.

ZINC TEST:

1. Prepare a series of zinc standards, add the reagents for this test described below, and shake with 5 ml. 0.0016 per cent dithizone solution, or prepare a zinc standard that upon reaction with dithizone gives the blue-grey transition colour. Transfer the standards to 50 ml. Nessler tubes.
2. To an aliquot of the sample solution in a glass-stoppered 100 ml. pyrex graduate add 20 ml. metal-free water, one drop ammonium citrate, and three drops of thymol blue.
3. Add 2 N ammonium hydroxide until the solution is a clear yellow.
4. Add ten drops sodium acetate-acetic acid buffer, 5 ml. of 1 N sodium thiosulphate, and 5 ml. 0.0016 per cent dithizone solution.
5. Shake for one minute, transfer to a 50 ml. Nessler tube, allow the organic layer to settle, and compare with the standards prepared in 1.

LEAD TEST:

1. Prepare a series of lead standards, add the reagents described for this test, and shake with a 5 ml. 0.0016 per cent dithizone solution. Transfer standards to 50 ml. Nessler tubes.

DETAILED CHEMICAL PROCEDURE
LEAD TEST
(cont'd)

2. Transfer an aliquot of the sample solution to a 250 ml. erlenmeyer flask, add 3 drops thymol blue, 1 drop ammonium citrate, 5 to 10 drops hydroxylamine hydrochloride, and enough metal-free water to make the volume to 20 ml. Add 2 N ammonium hydroxide to make the solution just basic (1st blue colour).
3. Heat the solution just to the boiling point and cool to room temperature in a cold water bath.
4. Transfer the solution to a 100 ml. glass-stoppered pyrex graduate, add 5 ml. ammoniacal potassium cyanide solution, followed by 5 ml. 0.0015 per cent dithi-zone solution, and shake for 30 seconds.
5. Transfer solution to a 50 ml. Nessler tube, allow the organic layer to settle and compare with standards prepared in 1.
6. If the organic layer has a yellowish colour the test should be repeated using more hydroxylamine hydrochloride.

INTERPRETATION OF RESULTS

This Survey revealed no anomalies that are considered by the writer to be sufficiently important to justify more detailed work.

QUALIFICATIONS AND EXPERIENCE
OF THE GEOLOGIST IN CHARGE

David R. Morgan, Geologist

B.Sc. McGill, 1954 (Honours Geology)
 Born: January 16, 1930, Kolar Gold Fields, S. India.
 Height: 5' 10" Weight: 160 lbs.
 Licences: B. C. Driver's Licence
 Private Pilot's Licence
 Interests: Photography, Judo.

<u>Date</u>	<u>Company</u>	<u>Area</u>	<u>Type of Work</u>
May - Sept/52	Quebec Dept. Mines	Chibougamau, Quebec.	Student assistant to R. Smith on detailed mapping of base metals area.
May - Sept/53	Labrador M. & Exp. Co.	Labrador	Student assistant on detailed mapping 60 miles east of Knob Lake.
May - Sept/54	Britannia M & S Co.	Howe Sound, B. C.	Mapping & supervision of drilling on bank of Van- couver copper prospect under A. Killin and D. Markland.
May - Sept/55	Jackson Basin M. Co.	Slocan, B.C.	Supervision of exploration on radioactive pegmatite pros- pect in Lemon Creek area.
Sept - Jan/56	Trojan Exp.	Highland Valley, B. C.	Detailed mapping & general exploration on Porphyry type copper prospect.
Jan - May/56	Jackson M. Ltd.	Highland Valley, B.C.	Supervisor of geochemical exploration on "Imperial" and "Transvaal" copper prospects.
May - Sept/56		Merritt, B. C.	Supervision of geological mapping of claims covering a copper-tungsten prospect, Swakum Mountain.
Oct - Apr/57	Cons. Halliwell	Haiti, West Indies	Mine Geologist. Supervision of 4 surface drills & Underground geological mapping. Logging of core & preparation of plans, sections & weekly reports.

QUALIFICATIONS AND EXPERIENCE
OF THE GEOLOGIST IN CHARGE
(cont'd)

<u>Date</u>	<u>Company</u>	<u>Area</u>	<u>Type of Work</u>
July - Sept/57	Continental Mining & Ex.	Sioux Look Out, Ont.	Geological mapping of claims by contract
June - Sept/58	Ultra Shawkey	Baffin I., N.W.T.	Prospecting & mapping of magnetite prospects. Drill supervision.
Apr/59 - Mar/61	James Richardson	Toronto	Research on mining securities under H. Reimer. Writing of reports on mining companies with evaluations of ore poten- tial, management, financial structure & cash flow pro- jections.
May - Sept/61	Peel Resources	Merritt, B.C.	Supervision of magnetometer & geochemical survey on claims lying to north of Craigmont. Prospect evalua- tions.
June - Oct/63	Belle Tahsis	Windermere	Surface & underground map- ping on Ptarmigan high grade silver prospect.
April /64	Peso Silver Mines Ltd.	Yukon	

NAMES AND ADDRESSES OF THOSE
TAKING PART IN THE SURVEY

<u>Name</u>	<u>Addresses</u>
John Brock	c/o Paso Silver Mines Ltd., 420 - 475 Howe Street, Vancouver 1, B. C.
Sonny Baxter	" " "
David Charlie	General Delivery, Mayo, Y. T.
David Moses	" " "

PESO SILVER MINES LTD. (N.P.L.)

ADMINISTRATIVE OFFICES:
420 - 475 HOWE STREET
VANCOUVER 1, B.C., CANADA
TELEPHONE MUTUAL 1-1385

REGISTERED OFFICE:
916 - 475 HOWE STREET
VANCOUVER 1, B.C., CANADA

April 27, 1965

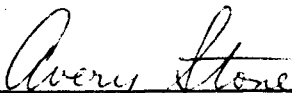
Application for a Certificate of Work

A F F I D A V I T

I, AVERY STONE, Executive Vice President of Peso Silver Mines Limited, in the City of Vancouver, Province of British Columbia, make oath and say:


That Peso Silver Mines Ltd. has done or caused to be done work on the ALICE mineral claims, situate at McQuesten River in the Mayo Mining District, Yukon, to the value of at least \$100 for each mineral claim, since the 26th day of August, 1964.

A detailed statement of such work is attached and marked Exhibit A.



Avery Stone

Sworn and subscribed to at Vancouver
this 27th day of April 1965



A Commissioner for taking Affidavits
within British Columbia

PESO SILVER MINES LTD. (N.P.L.)

ADMINISTRATIVE OFFICES:
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TELEPHONE MUTUAL 1-1385

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916 - 475 HOWE STREET
VANCOUVER 1. B.C., CANADA

EXHIBIT A

April 14, 1965.

The Mining Recorder,
Mayo, Y. T.

Dear Sir:

In regard to the Alice Claims, the total expenses on the property were mistakenly applied to the assessment costs.


The costs that were strictly applicable to the Geochemical Survey amount to \$15,698.00. The details of these costs appear on the attached sheet.

This work was done on 35 claims and distributed at \$448.00 per claim. The original groupings are unaffected and the revised figures are applicable as listed below:

<u>Claims on which work performed</u>	<u>Value</u>
"Alice" and Alice 1, 2, 30, 31	\$ 2,240
Alice 3, 4, 6, 20, 21, 22	2,688
Alice 5, 7, 8, 9, 10, 23	2,688
Alice 12, 13, 18, 19, 28, 29	2,688
Alice 14, 15, 24, 25, 33	2,240
Alice 11, 16, 17, 26, 27, 34	2,688
Alice 32	<u>450.</u>
Total	<u>\$15,682</u>

You will recall that we requested that all claims be brought to the common expiry date of August 26th.

This is Exhibit "A" referred to in
the affidavit of Avery Stone
sworn to before me herein this 27
day of April, 1965


A Commissioner for taking Affidavits
for British Columbia

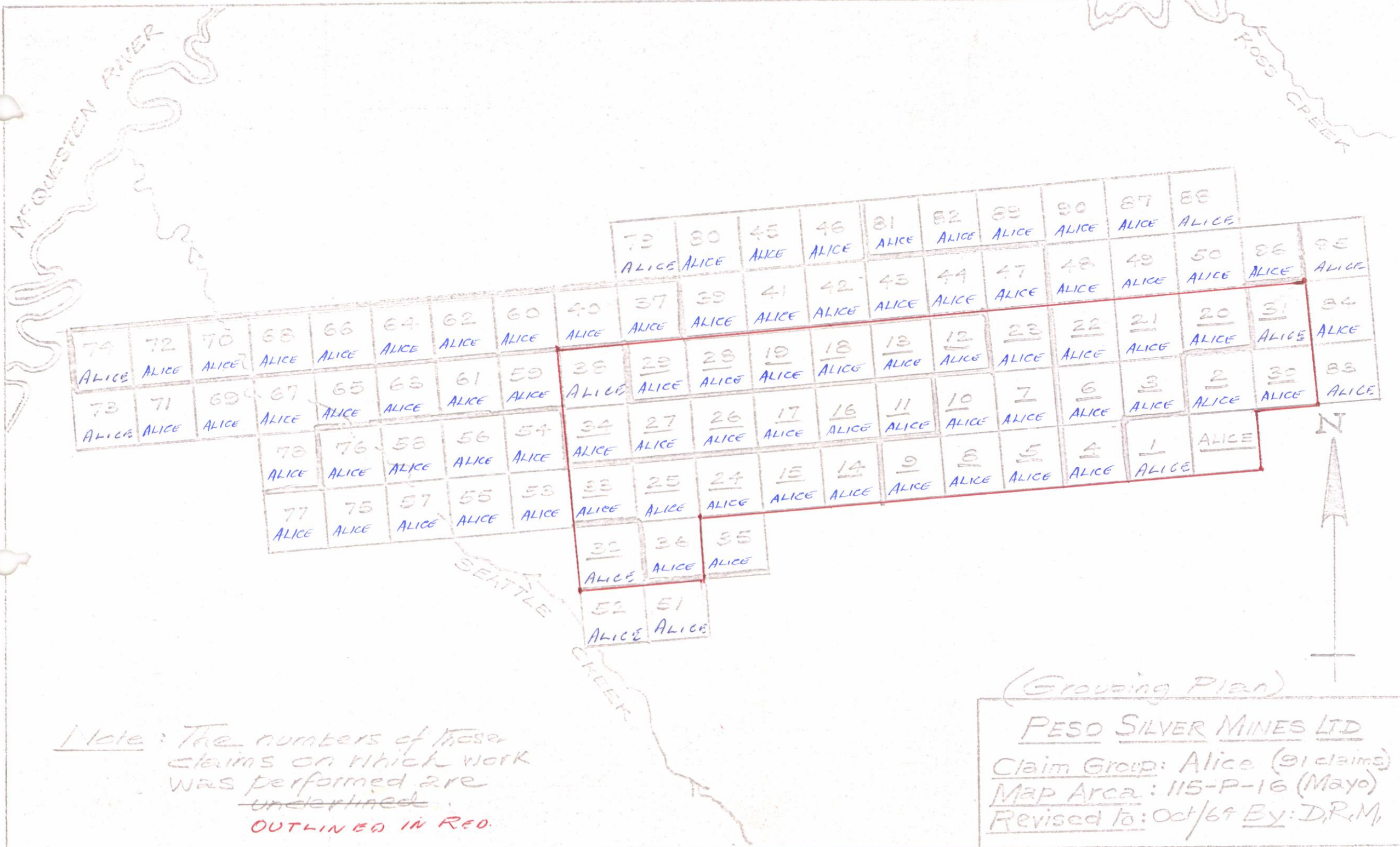
The revised figures thus bring the entire Alice Group to a common expiry date on August 26, 1965, thus

<u>Claims</u>	<u>Number of Claims</u>	<u>Number of Years Assessment</u>	<u>Value</u>
"Alice" & Alice 1 - 50	51	2	\$10,200
Alice 51 - 90	40	1 1/4	<u>5,000</u>
Total			<u><u>\$15,200</u></u>

Yours very truly,

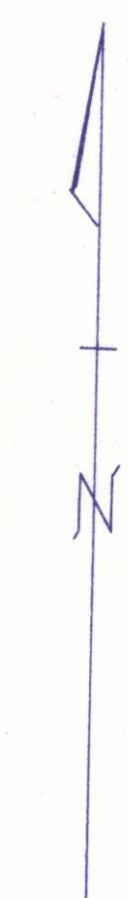
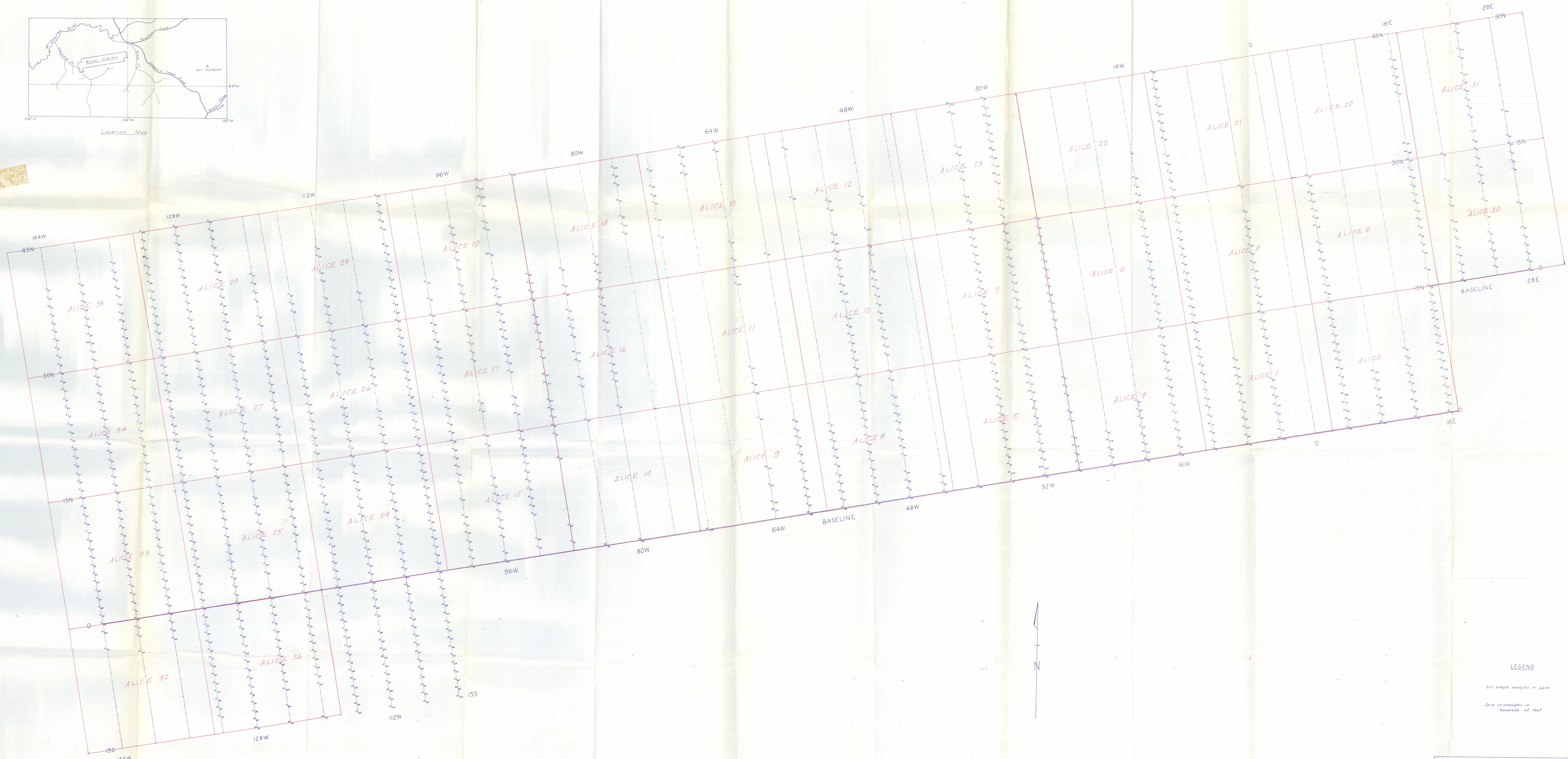
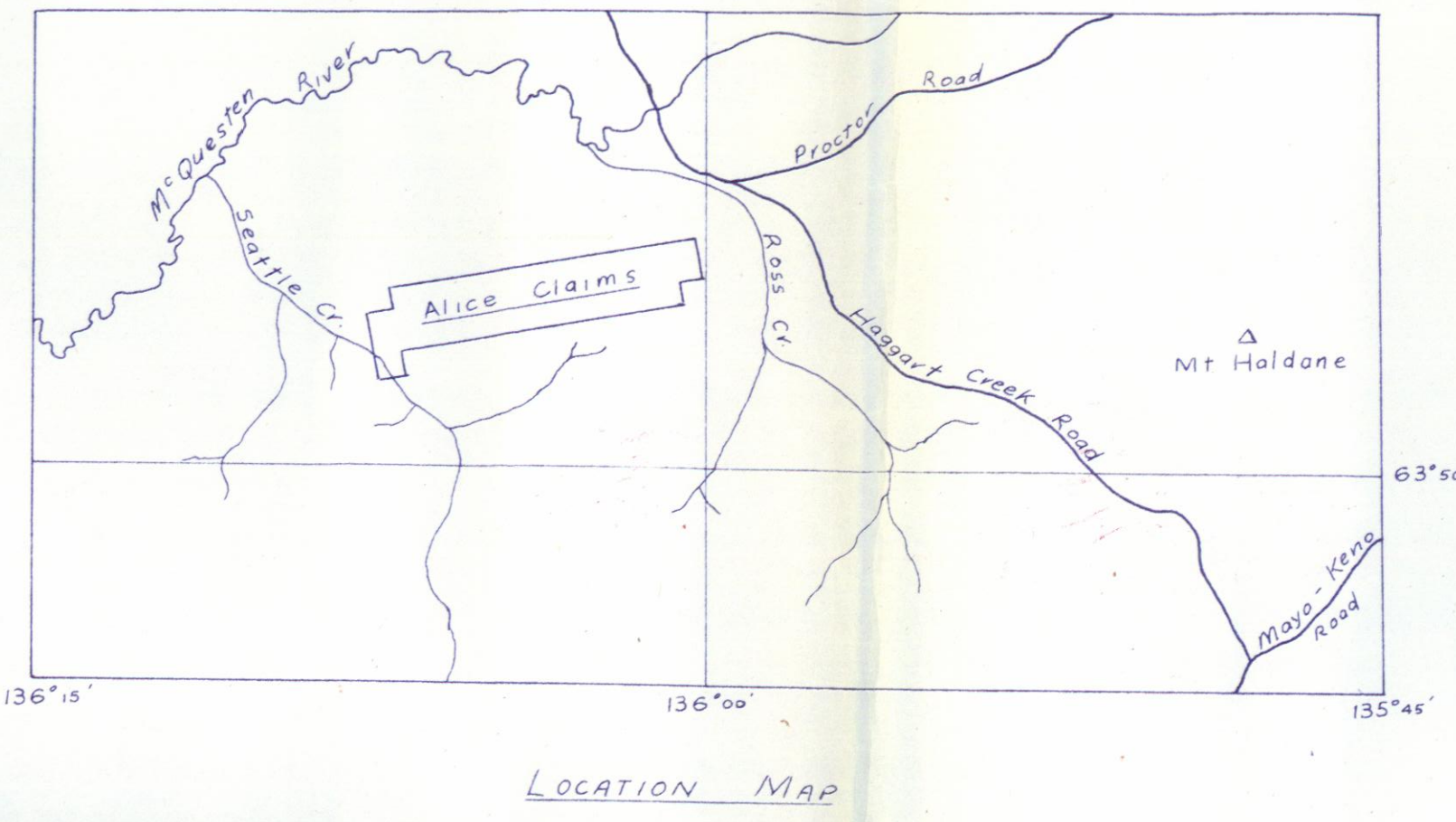
PESO SILVER MINES LTD.,

D R Morgan per AS
D. R. Morgan,



Note: The numbers of those claims on which work was performed are underlined **OUTLINED IN RED.**

(Grouping Plan)
PESO SILVER MINES LTD
 Claim Group: Alice (91 claims)
 Map Area: 115-P-16 (Mayo)
 Revised to: Oct/69 By: D.R.M.



LEGEND

Soil sample analyses in ppm μ Zn

Grid coordinates in hundreds of feet.

PESO SILVER MINES LTD (NPL)

Mayo Yukon

ALICE CLAIMS
GEOCHEMICAL SURVEY 1964

Scale 1" = 300' July 1964 Drawn S. Barber
D. A. Hull