

TITLE PAGE

This Report covers the work performed on the MITZI NO. 1 (6 Units) and the VERUNA NO. 1 (2 Units) Claims, during the past year:

Physical Work  
Prospecting and Mapping  
Geochemical Surveys

LOCATION:

Trail Creek Mining Division

N.T.S. 82F/4W

Latitude: 49° 0' 30" Longitude: 117° 51'

OWNER OF CLAIMS:

Sage Resources Ltd.  
620 - 475 Howe Street  
Vancouver, B.C. V6C 2B3

OPERATOR:

Sage Resources Ltd.

CONSULTANTS:

Siak S. Tan, P. Eng. - Geology and Mineralization  
D. Perkins - Geochemical Orientation and  
Geochemical Soil Sampling.

AUTHORS:

Section 1. Siak S. Tan, P. Eng.  
A. J. Valley, P. Eng.  
Section 2. D. Perkins, B.Sc.  
A. J. Valley, P. Eng.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

11,723

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INTRODUCTION

General Geographical Position and Access

The Claims are situated on the east slope of Mount Sophia, about 8 kilometers south-southwest of the town of Rossland, B.C., in the Trail Creek Mining Division of South Central British Columbia, and are accessible from the town of Rossland through 14 kilometers of paved and 2 kilometers of gravelled road, as indicated on Index Map 82F/4W.

The topography could generally be described as being between rolling and rugged. Elevation is between 760 meters to approximately 1060 meters above sea level, on the west side of the property. The slopes are fairly heavily timbered and there is approximately ten percent rock outcrop.

Property Definition

The property consists of the following claims:

<u>Claim</u>	<u>Number of Units</u>	<u>Record Nos.</u>
Mitz No. 1	6	667
Veruna No. 1	2	668
Mitzi No. 2	15	676

The Mitzi No. 1 Claim overstaked the crown granted claim L 4078 and the reverted crown grant L 4675 (which was purchased by Sage Resources in June 1982, but forfeited because of inadvertent late filing of assessment).

History of the Property

The property surrounding the Mountain Trail Crown Grant L4078 and the Lonestar Reverted Crown Grant L 4675, was previously owned by Lake Kozak Mines Ltd., in 1969.

The British Columbia Department of Mines annual report for 1946 reported that a 65 ton shipment was made from the adjoining Mountain Trail crown granted claim to the Cominco Smelter at Trail, B.C. This shipment yielded 7 ounces of gold, 33 ounces of silver, and 7800 pounds of copper. The work consisted of two shallow inclined shafts that were sunk on iron stained but weakly mineralized steeply dipping shear zones, striking at 330 Azimuth. The size of the dumps indicate only minimal underground workings, according to S. S. Tan.

Prior to 1910, it has been reported that a number of hand sorted shipments were made to the smelter located at Westport, Washington, but the records were apparently destroyed in the fire that destroyed the smelter.

Owner - Operator of the Property

The Owner/Operator of the Property (Mitzi No. 1, Veruna No. 1 and Mitzi No. 2 Claims) is Sage Resources Ltd., of Vancouver, B.C.

BRIEF ECONOMIC ASSESSMENT OF PROPERTY

Only one mineralized occurrence of any consequence was found while prospecting the Mitzi No. 1 and the Lonestar claims. This showing is located in the southwest quarter of Unit 2 of the Mitzi No. 1 claim, and lies some 150 meters south of the southeast boundary of the Mountain Trail crown grant, and approximately 30 meters east of the Old Mountain Trail Road. Only minor mineralization (pyrite) was observed otherwise.

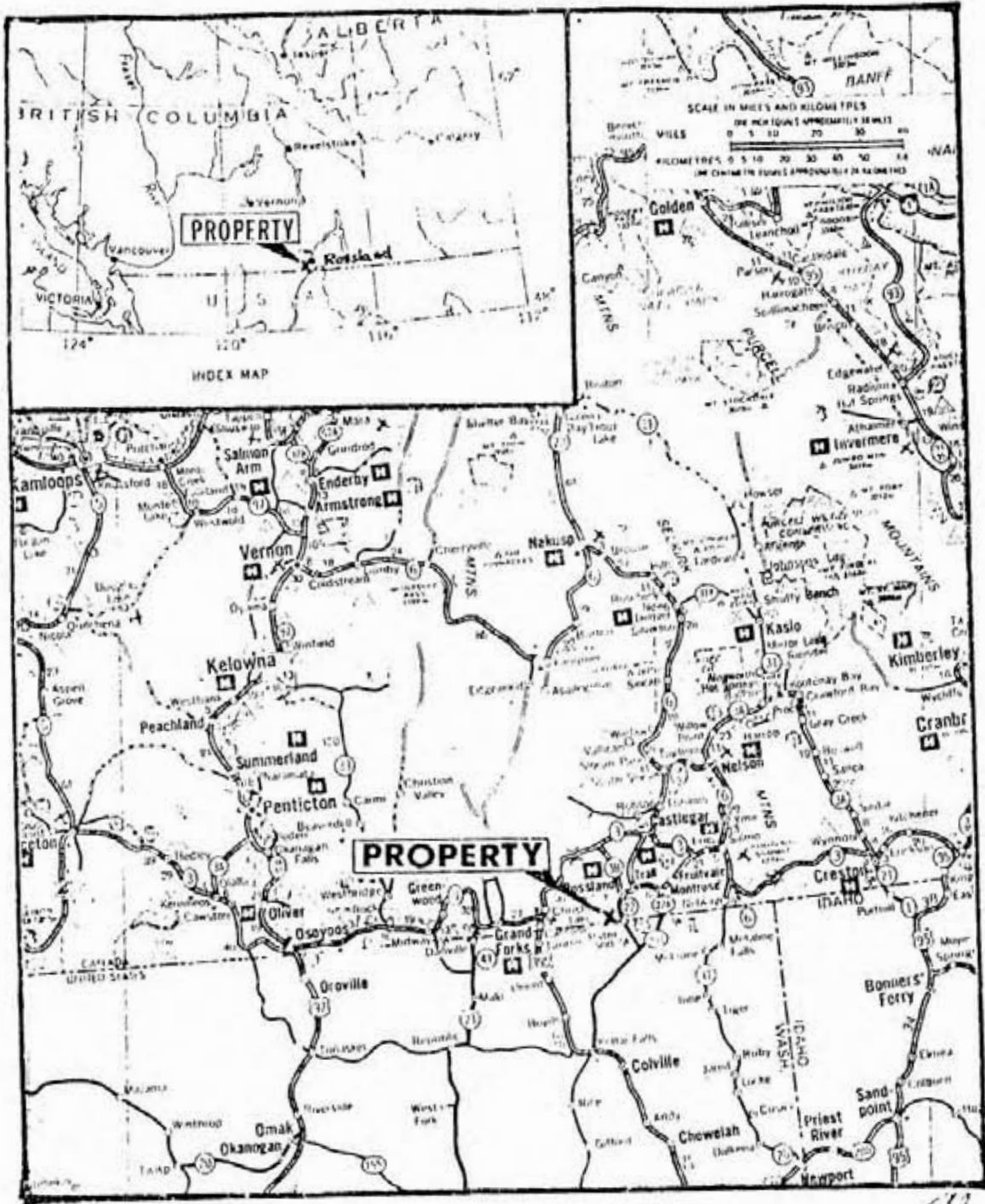
The above showing on the Mitzi No. 1 claim occurs in an andesite outcrop and is approximately 3.5 meters wide. A chip sample taken by S. S. Tan, P. Eng., analyzed:

0.29 % Cu  
2.84 % Pb  
1.63 % Zn  
0.8 oz./ton Ag  
0.005 oz./ton Au

(See Prospecting Map No. 1 in No. 1 Pocket for location)

As the outcrop dips into the overburden at both ends, S. S. Tan recommended a geochemical survey, as the first step in evaluating the occurrence. This survey was carried out in June and July, 1983, under the direction and supervision of D. Perkins, B. Sc., Geology.

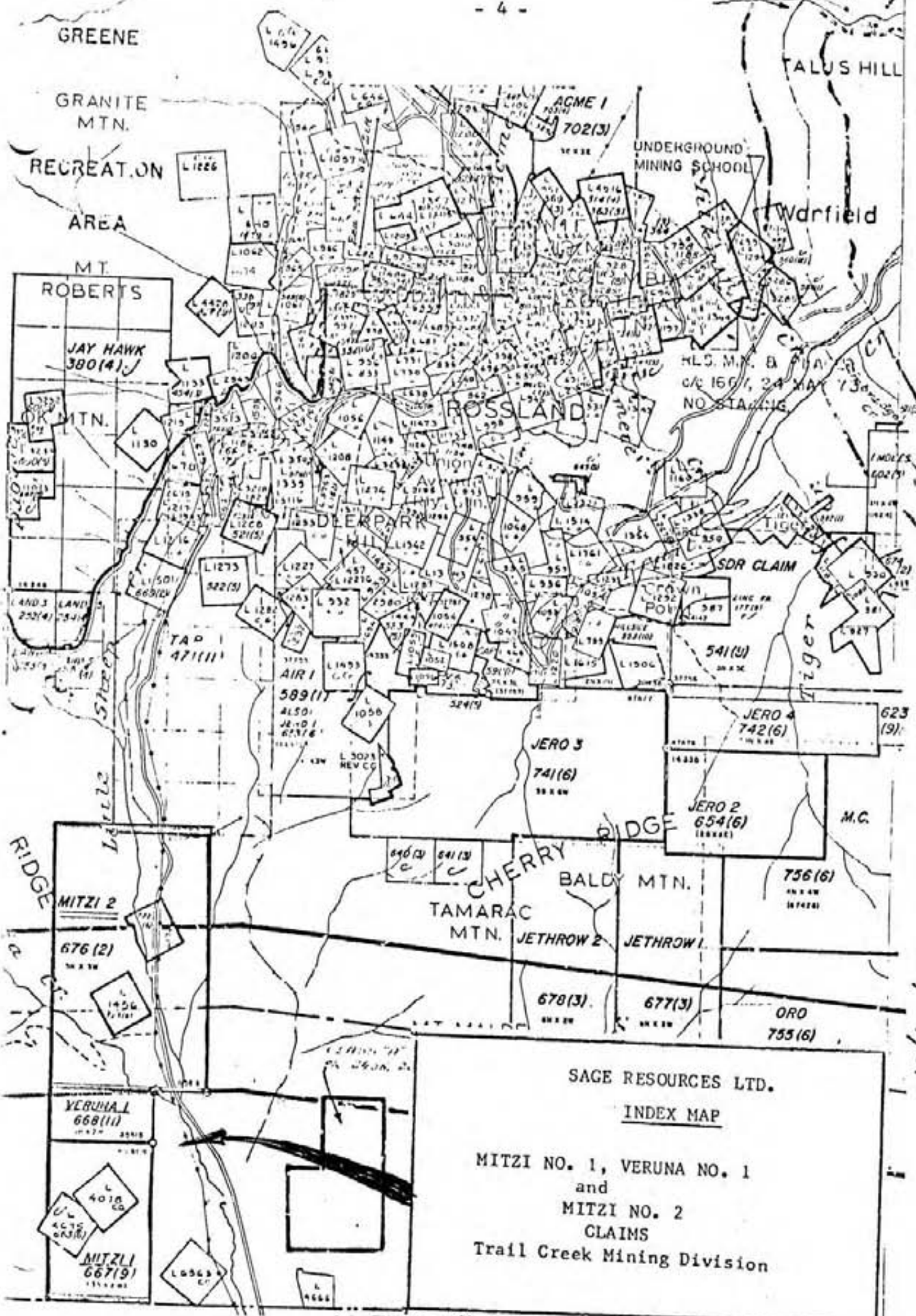
For further economic assessment, see pages 3 to 5 of Tan's Report enclosed.



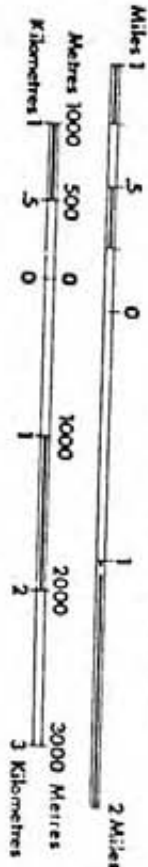
**PLACE - FIX MAP**

SAGE RESOURCES LTD.  
MITZI # 1 CLAIM  
Mt. Sophie Area  
Trail Creek M.D., B.C.

FIGURE 1



MINERAL CLAIM  
 MINERAL CLAIM  
 MINERAL CLAIM  
 CORNER POST  
 POST & TAG NUMBER GIVEN



UNLESS VERIFIED OR SURVEYED, THE MAP POSITION OF A LEGAL CORNER POST IS BASED ON THE LOCATOR'S CLAIM FOR FURTHER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION CONCERNED.

DATE OF MICROFILM: 83/09/01

dary 82F/4W 117° 45' 49° 00'

SUMMARY OF WORK PERFORMED

SECTION ONE

1. Physical Work

- (a) Road Clearing : Approximately 1.5 kilometers of the old Mountain Trail Road to the property, across the Veruna No. 1, Mountain Trail crown grant and Mitzi No. 1 was blocked by numerous windfalls and some boulders, had to be removed to provide access to the Mitzi No. 1 claim, where the main showing was located.
- (b) Line-cutting: Approximately 400 meters of base line was axed out and cleared. (See Prospecting Map No. 1 in Pocket)

2. Prospecting and Mapping

Prospecting and mapping was carried out on the Mitzi No. 1, and the reverted crown grant L4675 (Subsequently lost due to late filing). Several traverses were made across the claim in an east-westerly direction. Outcropping and the general geology was mapped, and a number of rock samples were taken for assay. (See Prospecting Map No. 1) As a result of prospecting, one mineral showing was located at the south-west quarter of Unit 2, which the observers felt warranted further investigation.

3. Engineering Report

An Engineering Report on the Mitzi No. 1 Claim was written by S. S. Tan, P. Eng., after visiting the property with the writer. ( See Tan's Report included) This Report recommended a \$76,000 work program, as outlined on pages 4 & 5 of the Report.

  
Signed: A. J. Valley, P. Eng.

## SECTION TWO

### Geochemical Orientation

In June 1983, eight shallow pits, two to four feet in depth were hand excavated and soil samples were taken from three horizons, under direction and supervision of the undersigned. The forty five samples taken were submitted for geochemical analysis, to Chemex Labs Ltd., in North Vancouver, B.C. (See Geochemical Map No. 1 for location of pits). Samples were assayed for copper, lead, zinc, silver and gold. This sampling determined the system of analysis and most favourable horizon.

### Geochemical Soil Sampling Survey

In July 1983, based on the orientation survey, 156 soil samples were taken on a grid spacing of 50 and 25 meters, from the lower "B" Horizon. (See Prospecting Map No. 1 - Pocket No. 1)

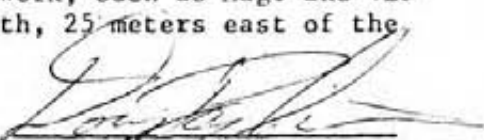
All samples were packaged in kraft sample bags and submitted to Chemex Labs Ltd., North Vancouver, B.C. The samples were dried to 60 degrees centigrade, ringed and sieved to -80 mesh and weighed to half a gram. They were then digested in hot dilute aqua regia in a boiling water bath and diluted to 10 mls. with demineralized water. Determination of the elements: Cu, Pb, Zn, Ag, and Au was done by atomic absorption.

The resulting values from the geochemical program were plotted on the accompanying Geochemical Maps 1 to 5 on a scale of 1 : 2000 (See Pocket No. 2). Contour Intervals were then plotted on the respective maps. The Contour Intervals were determined from Bar Graphs of the element values, in parts per million, versus number of occurrences - shown on the right hand side of each Geochemical Map.

From previous experience, lead responses appear to be the best indicator of stratiform sulfide mineralization, however, in this case there is good location coincidence with the zinc and copper also.

The above Geochemical Contour Maps indicate a reasonable anomolous area around the main showing, of some 175 by 200 meters. The centre of the anomolous area appears to lie slightly to the northeast of the showing. Another smaller anomolous area for lead and zinc appears approximately 200 meters to the south of the main area, and could indicate the southern extension of the mineralized zone. Gold values were low and quite spotty.

The Main anomolous area warrants further work, such as Mag. and VLF-EM, and requires trenching at 100 meters north, 25 meters east of the showing.



Douglas A. Perkins, B. Sc.



VALUATION OF WORK

Road Work

August 31, 1982 - 3 Man days with chain saw @ \$80.00/day - \$ 240.00

Prospecting & Mapping

June 14, 1982 - 2 Man days

August 31 - Sept 2, 1982 - 7 Man days

October 31 - Nov 2, 1982 - 5 Man days

14 Man days @ \$80.00/day - \$1120.00

Le Mothe Mapping Service - \$ 100.00

Engineering Report - \$1500.00

Assay Charges (Chemex Labs) - \$ 87.90

Travel, Lodging & Meals - \$ 641.58

Geochemical Orientation Survey

June 28 - 30, 1983 - 4 Man days @ \$80.00/day - \$ 320.00

3 Days (Geologist) @ \$150/day - \$ 450.00

Assay Charges (Chemex Labs) - \$ 563.40

Travel, Lodging & Meals - \$ 266.68

Geochemical Soil Sampling Survey

July 15 - 19, 1983 - 8 Man days @ \$80.00/day - \$ 640.00

Assay Charges (Chemex Labs) - \$3051.15

Travel, Lodging & Meals - \$ 738.23

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\$9718.94

Less value of work on L 4675, disallowed - \$(700.00)

Cost of preparing Assessment Report - \$1000.00

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TOTAL VALUE OF WORK PERFORMED \$10,018.94

QUALIFICATIONS

I, Albert J. Valley, residing at 3265 Westmount Road, West Vancouver, British Columbia, hereby certify that:

1. I am a graduate in Chemical Engineering (B. A. Sc.), from the University of Toronto, 1951.
2. I am a Registered Professional Engineer in the Association of Professional Engineers of the Province of British Columbia - No. 2944, in the Chemical Engineering Division.
3. I have been engaged in the Engineering Profession from 1951 until 1980, and was employed in the Petrochemical Industry in the United States for 5 years, and in the Chemical Industry in Canada, for 24 years.
4. I have taken the British Columbia and Yukon Chamber of Mines "Prospecting and Mining School" in 1968 and 1969.
5. I have taken the "Geophysical Methods in Prospecting" Course at the British Columbia Institute of Technology, in 1970.
6. I have been involved in the Mining Industry by prospecting, investing, and association, for the past 25 years.

Dated at Vancouver, B.C., this 22nd day of September 1983.

  
A. J. Valley, P.Eng.

STATEMENT OF QUALIFICATIONS


I, DOUGLAS A PERKINS, geologist, with business address in Vancouver, British Columbia, and residential address in Vancouver, British Columbia, hereby certify that:

- 1) I graduated from the University of British Columbia, in 1979 with a B.Sc. majoring in Geology.
- 2) From 1979 to the present I have been actively engaged as a geologist in mineral exploration in British Columbia and the Yukon Territory.
- 3) I personally participated in the field work on the Mitzi No. 1 claim of SAGE RESOURCES LTD., and have interpreted data resulting from this work.
- 4) I am a member of the Geological Association of Canada.

  
Douglas A. Perkins

AFFIDAVIT SUPPORTING SUMMARY OF COSTS

I, Albert J. Valley, P. Eng., and Director of SAGE RESOURCES LTD., Vancouver, British Columbia, do hereby state that, to the best of my knowledge, the statement of costs in this report, is a true account of the expenditures incurred on the Mitzi No. 1 and Veruna No. 1 Claims.

  
Albert J. Valley

  
Date

SAGE RESOURCES LTD.

REPORT ON THE MIT/I # 1 AND LONE STAR CLAIMS

Mount Sophie Area, Trail Creek M.D., B.C.

NTS.82F/4W: Lat. 49° 0' 30"; Long. 117° 51'

BY: SIAK S. TAN, P.Eng.

November 22, 1982

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**SIAM S. TAN, P.Eng.**  
**CONSULTING & MANAGEMENT ENGINEER**

310-1965 WEST EIGHTH AVENUE · VANCOUVER · CANADA V6J 1W2 · Phone (604) 736-0848

November 22, 1982

The President and Directors,  
Sage Resources Ltd.  
812 - 409 Granville Street,  
Vancouver, B.C. V6C 1T2.

Dear Sirs:

In accordance with your instructions the writer has prepared and submits herewith the ensuing report on your Mitzi #1 and Lone Star mineral claims, sited on the east slope of Mount Sophie about 8 Km. south-southwest of the town of Rossland, British Columbia. The report is based on my examination of the property during October 30 and 31, 1982, on a personal knowledge of the area and on the study of publications cited in the bibliography. Mr. A. J. Valley and Mr. R. Tuschek accompanied the writer during the visit to the property.

SUMMARY:

The Mitzi # 1 and Lone Star claims, in the Trail Creek Mining Division of south central British Columbia, are accessible from the town of Rossland through 14 Km. of paved and 2 Km. of gravelled road.

Jurassic intermediate to basic volcanic rocks of the Rossland Group underlie most of the property area. Carboniferous age pelitic, arenaceous and calcareous sedimentary rocks of the Mount Roberts Formation are found near the eastern perimeter of the property. These rocks were intruded by Tertiary porphyritic diorite and leucocratic granite stocks. A preliminary study of air-photos disclosed three prominent sets of lineaments, striking north-south, northwest and east-west, traverse across the property. Some of these are caused by fault and shear zones.

A 3.5 metres wide mineralized showing, at 05° Az. strike and dipping 75° east, occurs in a small andesite outcrop at the southwest quarter of claim unit 2. Mineralization consists of galena, sphalerite, pyrite, chalcopyrite and pyrrhotite occurring as dissemination and stringers with quartz veinlets within a shear zone. Fine grained disseminated pyrite and pervasive wall rock silicification extend for two to three metres beyond both walls as a hydrothermal alteration halo. A chip sample taken across a true width of 3.5 metres from the showing returned 2.84% Pb, 1.63% Zn, 0.8 oz.Ag/ton and 0.005 oz.Au/ton. The strike and dip extension remains untested for the possible occurrence of economic mineralization. A 65 tons shipment made from the adjoining Mountain Trail claim to the Cominco smelter at Trail returned 7 ounces gold, 33 ounces silver and

7800 pounds copper for an average grade of 0.108 oz. Au/ton, 0.51 oz. Ag/ton and 6 % Cu (source: B.C. Dept. Mines Annual Report for 1946). This shipment was obtained from two shallow inclined shafts that were sunk on iron stained shear zones striking 330° Az. Based on observations to date it appears that sulphide mineralization is stronger in the 05° Az. strike shear zone than the 330° Az. strike shear zone.

The intersections of shear zones, areas near the intrusive margins and the limestone contact with the intrusive rocks are favourable loci for hosting mineralizations. The property is thus located in a geologically favourable setting and merits an exploration program to search for the possible occurrence of economic mineralization at these loci and along the strike and down dip extension of the showing. A phased exploration program is recommended. Phase I is estimated to cost \$26,000.00 and contingent upon obtaining satisfactory results from this phase the follow-up Phase II program is estimated to cost \$50,000.00.

LOCATION AND ACCESS:

N.T.S. 82 F/4W                      Approximate Co-ordinates: Long. 117° 51'  
- at property centre -              Lat. 49° 0' 30"

The Mitzi # 1 and Lone Star mineral claims are 8 Km. south southwest of Rossland in the West Kootenay District of south central British Columbia. The property lies on the east slope of Mount Sophie. Its southern perimeter is located at the Canada-U.S.A. international boundary. Road access from Rossland is through travelling southerly towards the Paterson border crossing on Highway 22 for a distance of 14 Km. thence along a logging road for 2 Km. Logging is presently being done in the area. Most parts of the property are accessible through recent and abandoned logging roads. Rossland is west of and about 10 Km. by road from the city of Trail where Cominco operates its lead-zinc smelter complex.

PROPERTY:

The property consists of the 6 units Mitzi # 1 claim and the Lone Star (lot 4675) reverted crown granted claim. The Mitzi claim block overstaked the Lone Star and the Mountain Trail (lot 4078) c.g. claims. The property is located in the Trail Creek Mining Division.

<u>Claim Name</u>	<u>No. Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Mitzi # 1	6	667	Sept. 14, 1983
Lone Star	1	Lot.4675	(reverted crown grant)

In view of the aforesaid overlap in staking on the crown granted claims the actual claim area is only 5 claim units. The writer examined the Legal Corner Post (tag #85809) and part of the northern location line of the Mitzi # 1 claim. It appears the claim was staked in accordance to the Minerals Act. Figure 2 depicts the relative claim locations.



### PHYSICAL FEATURES:

The terrain is moderately rugged, consisting of densely forested steep to gentle slopes. Elevations range from 760 metres on the east to 1060 metres on the west side of the property. Tributaries of Sophie Creek provide drainage for the area. Timber and water for mining and exploration purposes are thus readily available locally.

### HISTORY AND PREVIOUS WORK:

The British Columbia Department of Mines Annual Report for 1946 reported that a 65 tons shipment was made from the adjoining Mountain Trail crown granted claim to the Cominco smelter at Trail. This shipment yielded 7 ounces of gold, 33 ounces of silver and 7,800 pounds of copper. The workings consist of two shallow inclined shafts that were sunk on iron stained but weakly mineralized steeply dipping shear zones striking at  $330^{\circ}$  Az. The sizes of the dumps indicate only minimal underground workings were completed. A shallow inclined prospect shaft is located at the eastern corner of the Lone Star claim. It was sunk on an iron stained but weakly mineralized shear zone in unaltered basalt.

### GEOLOGY AND MINERALIZATIONS

The regional geology of the area is documented in Map 23-1963, accompanying Paper 63-13, published by the Geological Survey of Canada.

Jurassic rocks of the Rossland Group consisting of andesite, latite, basalt, augite porphyry, agglomerate, flow breccia and lesser interbedded siltstone, underlie most of the property area. These rocks strike  $350^{\circ}$  az. and dip  $50^{\circ}$  to  $60^{\circ}$  east. The Carboniferous age Mount Roberts Formation is found near the eastern perimeter of the property. It includes argillaceous quartzite, siltstone, black slaty argillite, greywacke, chert pebble conglomerate, limestone and chert. Lower Tertiary leucocratic granite of the Sheppard Intrusion and later porphyritic diorite intruded the Rossland Group and the Mount Roberts Formation at the east and southeast side of the property. A preliminary study of air-photos indicates three dominant sets of lineaments traverse across the property area, striking north-south, northwest and east-west. Some of these lineaments may be caused by fault and shear zones.

A mineralized shear zone showing occurs at the southwest quarter of claim unit 2 of the Mitzi # 1 claim. A chain and Brunton compass survey determined that the showing lies approximately 170 metres south of the southeast boundary of the Mountain Trail claim and 35 metres east of the main access road. The showing is located in a small andesite outcrop. It strikes  $05^{\circ}$  Az. dips  $75^{\circ}$  east and is 3.5 metres wide. Mineralization consists of galena, sphalerite, chalcopyrite, pyrite and pyrrotite occurring as dissemination and stringers with quartz veinlets within the shear zone. Fine grained pyrite dissemination and pervasive silicification of wall rocks extend for two to three metres beyond both walls as a hydrothermal alteration halo. A chip sample taken across the 3.5 metres

true width of the showing returned an average of 2.84% Pb, 1.63% Zn, 0.29% Cu, 0.80 oz.Ag/ton and 0.005 oz.Au/ton. This showing differs from that found at the Mountain Trail claim, sited about 300 metres to the north-northwest, where two inclined shafts were sunk on steep dipping iron stained shear zones striking 330° Az. The B.C. Dept. of Mines Annual Report for 1946 reported that a 65 tons shipment from the Mountain Trail workings yielded an average grade of 0.108 oz.Au/ton, 0.51 oz.Ag/ton and 6% Cu. Based on field observations to date it appears that the mineralization is stronger in the 05° Az. striking shear zone than the 330° Az. striking shear zone. Their intersections are inferred to be important loci for hosting mineralizations.

CONCLUSIONS AND RECOMMENDATIONS:

The Mitzi # 1 claim contains a mineralized showing. The mineralization appears to be controlled by the 05° Az. striking shear zone at the showing with weaker mineralization being found in shear zones at 330° Az. strike at the adjoining Mountain Trail claim workings. Three dominant sets of air-photo lineaments, traversing north-south, northwest and east-west, are indentified within the property area. The intersections of shear zones, areas near the intrusive margins and limestone contacts with the intrusive rocks are favourable loci for hosting mineralization within the property area. The property is thus located in a geologically favourable setting and merits an exploration program to search for the possible occurrence of economic mineralizations at these loci and along the strike and down dip extensions of the showing.

A phased exploration program, in which the succeeding phase is contingent upon obtaining satisfactory results of the preceeding, at the following cost estimates is recommended.

PHASE I

1. Photo-geology (lineament density study) and preparation of topographic base map .....	\$2,000.00
2. Grid and Base Lines .....	2,000.00
3. Geological Mapping and Prospecting .....	4,000.00
4. Geochemical Survey - soil and rocks .....	5,000.00
5. Geophysical Surveys - VLF-EM and Mag. ....	6,000.00
6. Additional Staking 20 units (protective) .....	2,000.00
7. Engineering, supervision and reports .....	2,000.00
8. Contingencies .....	3,000.00
	<hr/>
TOTAL PHASE I .....	\$26,000.00

PHASE II: Its implementation is contingent upon obtaining satisfactory results from Phase I.

1. Detailed (definition) Geophysical and  
Geochemical Surveys ..... \$5,000.00
2. Trenching, Stripping and Road Building ..... 2,500.00
3. Test Diamond Drilling: 300 metres @ \$120 ..... 36,000.00
4. Sampling and Assaying ..... 2,500.00
5. Engineering, supervision and reports ..... 4,000.00

TOTAL PHASE II .... \$50,000.00

TOTAL PHASE I AND II .... \$76,000.00

Respectfully Submitted,

*S. S. Tan*

S. S. Tan, P.Eng.

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  Paper 63- 13
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# CHEMEX LABS LTD.

212 BROOKSBANK AV  
NORTH VANCOUVER, B  
CANADA V7J 2

TELEPHONE: (604) 984-0  
TELEX: 043-525

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : SAGE RESOURCES LTD.

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

*310-1765 W 5<sup>th</sup> Ave  
Vet, B.C.  
V6C 1W2*

CERT. # : A8214454-00  
INVOICE # : I8214454  
DATE : 22-NOV-82  
P.O. # : NONE

ATTN: AL VALLEY CC: SIAK, S. TAN, P. ENG.

Sample description	Prep code	Cu %	Pb %	Zn %	Ag FA oz/T	Au FA oz/t	
SR - 1	207	0.29	2.84	1.63	0.80	0.005	--

*S.S. Tan*



MEMBER  
CANADIAN TESTING  
ASSOCIATION

.....  
Registered Assayer, Province of British Colum

CERTIFICATE OF QUALIFICATIONS

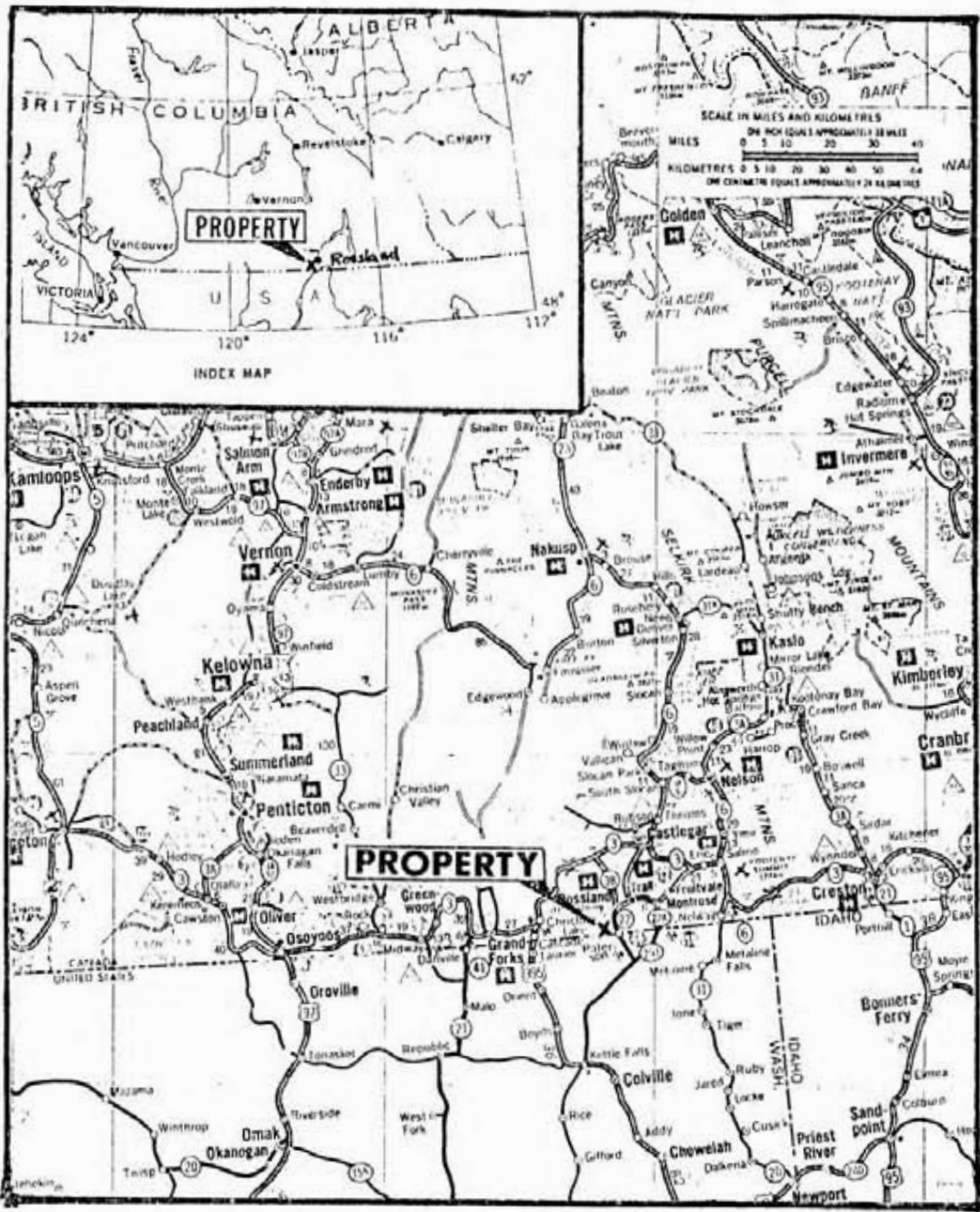
I, Siak S. Tan, residing in the City of Vancouver, Province of British Columbia, hereby certify that:-

1. I am a consulting Geological Engineer with offices at 310 - 1965 West 8th. Avenue, Vancouver, B.C., V6J 1W2.
2. I was graduated in Geology (B.Sc., 1964) from Carleton University, Ottawa and completed one year of post-graduate studies (1964-65) at the University of Toronto and have been practicing my profession since that date.
3. I am a registered member of the Association of Professional Engineers of the Province of British Columbia in the Geological Engineering Division.
4. I have been engaged in my profession for the past 16 years, having been employed by various mining companies and consulting engineering firms in my capacity as a geological engineer and geologist.
5. I have no interest direct or indirect in the described property or securities of Sage Resources Ltd. nor do I expect to receive any such interest.
6. The attached report on the Mitzi #1 & Lone Star claims is based on my personal examination of the property on Oct. 30 and 31, 1982, on the study of publications acknowledged in the bibliography and on a personal knowledge of the area.

Dated at Vancouver, B.C., this 22nd, day of November 1982.

*S. S. Tan*

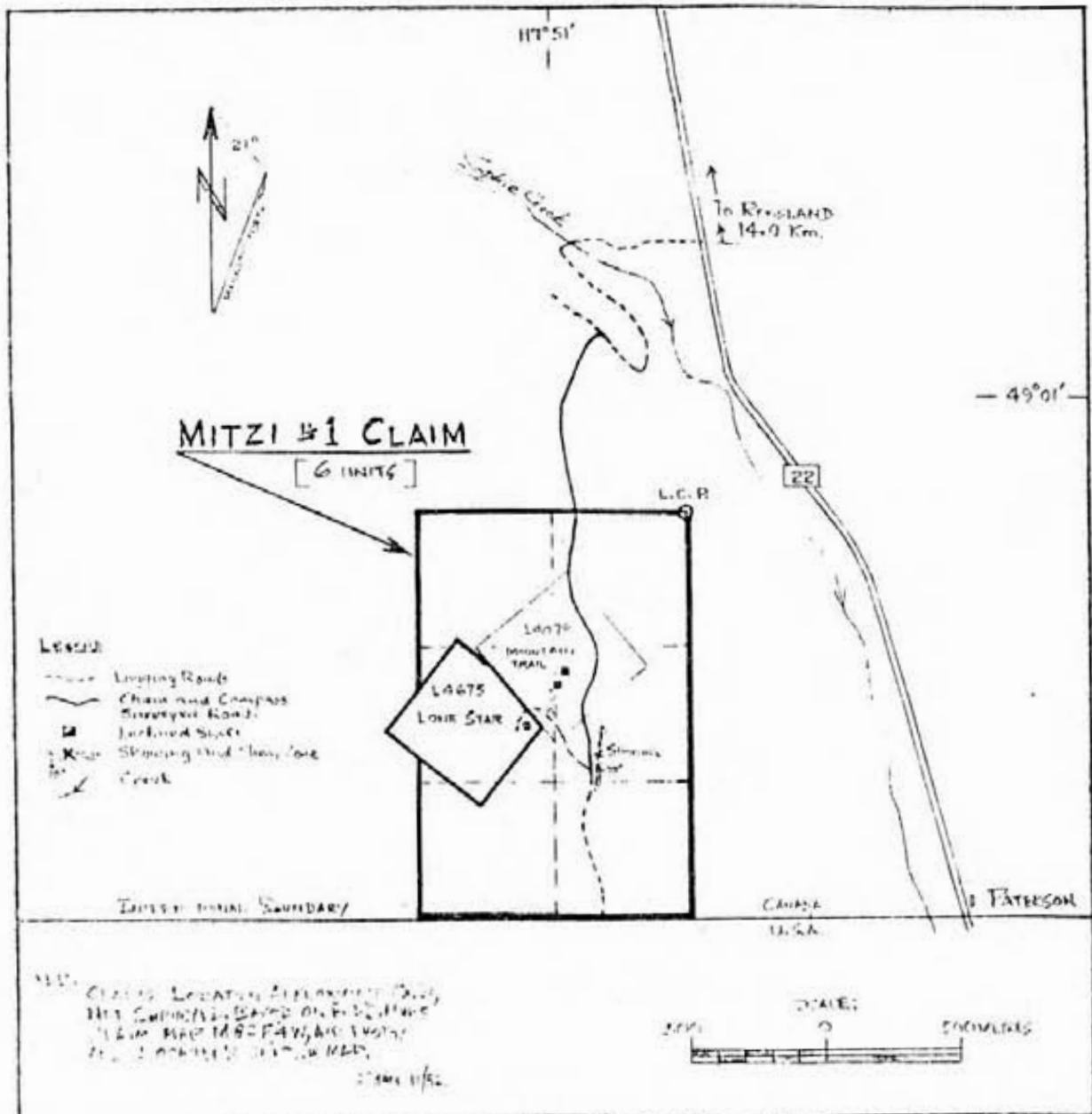
S. S. Tan, P.Eng.



**PLACE - FIX MAP**

SAGE RESOURCES LTD.  
 MITZI # 1 CLAIM  
 Mt. Sophie Area  
 Trail Creek M.D., B.C.

FIGURE 1

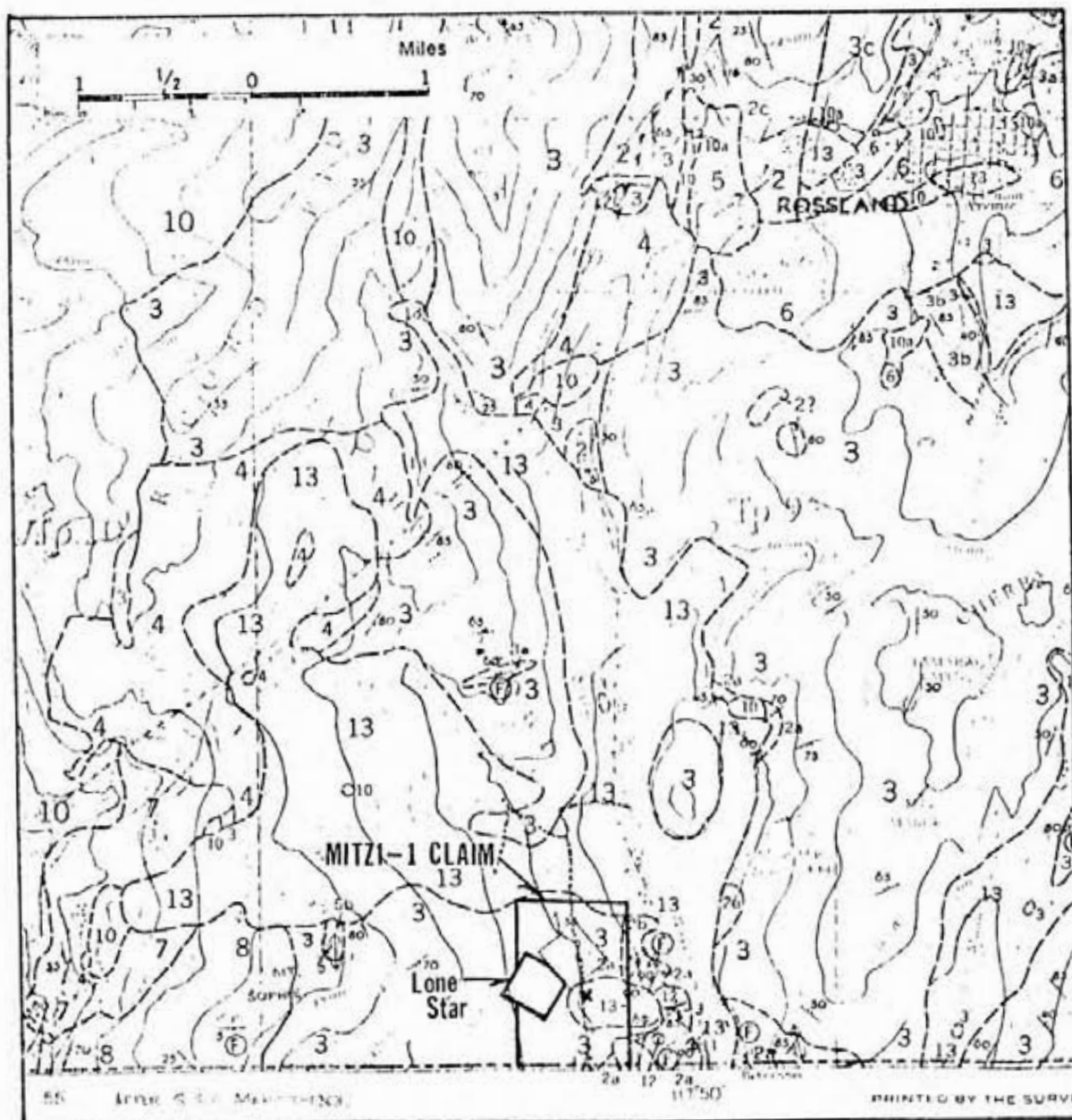


## CLAIMS LOCATION

SAGE RESOURCES LTD.  
MITZI # 1 CLAIM  
Mt. Sophie Area  
Trail Creek M.D., B.C.

FIGURE 2





## REGIONAL GEOLOGY

SAGE RESOURCES LTD.

MITZI # 1 CLAIM  
Mt. Sophie Area  
Trail Creek M.D., B.C.

FIGURE 3.

CENOZOIC	QUATERNARY PLEISTOCENE AND RECENT	
	13	Till, gravel, sand, and silt
	TERTIARY - LOWER TERTIARY	
	12	Porphyritic diorite
	11	SHEPPARD INTRUSIONS: leucocratic granite
	10	CORYELL PLUTONIC ROCKS: syenite, locally porphyritic; some granite, monzonite, and quartz monzonite; 10a, porphyritic (biotite-augite) monzonite
	EOCENE (?)	
	9	Agglomerate and lava flows (DALY'S MIDWAY GROUP?); minor basal dacitic tuff
	CRETACEOUS OR EARLY TERTIARY UPPER CRETACEOUS (?)	
	8	SOPHIE MOUNTAIN FORMATION: conglomerate; minor shale
MESOZOIC	JURASSIC OR CRETACEOUS UPPER JURASSIC OR CRETACEOUS	
	7	Quartz-feldspar porphyry, light to medium green
	6	Monzonite, mainly medium grained
	5	NELSON PLUTONIC ROCKS: quartz diorite, diorite and granodiorite; 5a, porphyritic biotite granite; 5b, feldspar porphyry, may not be Nelson
	4	Ultrabasic rocks; serpentinite
PALAEOZOIC	JURASSIC LOWER AND (?) MIDDLE JURASSIC ROSSLAND GROUP	
	3	Andesite, latite, and basalt flows, agglomerate, flow breccia, augite porphyry; minor interbedded siltstone; 3a, siltstone of Sinemurian (early Lower Jurassic) age; 3b, siltstone with much interbedded lava; 3c, augite porphyry; 3d, argillite and shale of Toarcian (late Lower Jurassic) age
CARBONIFEROUS		
2	MOUNT ROBERTS FORMATION: 2a, argillaceous quartzite and siltstone, black slaty argillite, greywacke, and chert pebble conglomerate; minor limestone and chert; 2b, mainly limestone; 2c, argillaceous quartzite, grey massive quartzite; minor lava and agglomerate	

LEGEND TO ACCOMPANY FIGURE 3

FIGURE 4.

- PAGES 25 ON -  
**CHEMEX LABS LTD.**



212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

Invoice # : I8312460

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

Date : 13-JUL-83  
P.C. # : NONE  
Project

*Rossland*

Invoice for analytical work reported on certificate(s) A8312460-001

Quantity	Analysed for code description	unit price	amount
1	383 - Ag FA oz/T		
	396 - Au FA oz/T	10.50	10.50

Sample preparation and other charges :

1	207 - Assay - PULVERIZE	3.75	3.75
---	-------------------------	------	------

TOTAL \$ 14.25

Please pay this amount ----> \$ 14.25

NETS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts

*Paid July 20/83*



MEMBER  
CANADIAN TESTING  
ASSOCIATION



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TELEPHONE: (604) 984-0221  
TELEX: 043-52597

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GEOCHEMISTS

REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

Invoice # : 18312459

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

*Rock Sample, Roseland*

Date : 13-JUL-83  
P.C. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8312459-001

Quantity	Analysed for code description	unit price	amount
4	002 - Cu	ppm	
	004 - Pb	ppm	
	005 - Zn	ppm	
	006 - Ag	ppm	
	017 - AU-AA	ppb	9.60
			38.40

Sample preparation and other charges :

4	205 - Rock geochem - RING	2.50	10.00
---	---------------------------	------	-------

TOTAL \$ 48.40

Please pay this amount ----> \$ 48.40

TERMS -- NET 30 DAYS  
1.5 % per month (13 % per annum) charged on overdue accounts

*Paid July 20/83*  
*[Signature]*



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GEOCHEMISTS

REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

620-475 HCWE STREET  
VANCOUVER, B.C.  
V6C 2B3

*Russland*

Invoice # : 13312458

Date : 13-JUL-83  
P.C. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8312458-001 to -002

Quantity	Analysed for code description	unit price	amount
45	002 - Cu ppm		
	004 - Pb ppm		
	005 - Zn ppm		
	006 - Ag ppm		
	017 - AU-AA ppb	9.60	432.00

Sample preparation and other charges :

5	201 - soil + sediment -80 mesh	0.60	3.00
16	204 - -80 mesh sieve + ring	2.00	32.00
24	217 - Soil - ring	2.00	48.00

TOTAL \$ 515.00

Please pay this amount ----> \$ 515.00

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts

*paid July 20/83*



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*515.00*  
*10/83*



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\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

\*\* Invoice # : 18312891

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2R2

*Rowland*

Date : 28-JUL-83  
P.C. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8312891-001 to -004

Quantity	Analysed for code description	unit	price	amount
159	006 - Ag ppm			
	017 - AU-AA ppb		6.90	1097.10

Sample preparation and other charges :

159	217 - Soil - ring		2.00	318.00
-----	-------------------	--	------	--------

TOTAL \$ 1415.10

Please pay this amount -----> \$ 1415.10

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts

*Paid Aug 8/83*



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

\*\* Invoice # : 18312890

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

*Roselent*

Date : 28-JUL-83  
P.C. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8312890-001 to -004

Quantity	Analysed for code description	unit price	amount
159	002 - Cu	ppm	
	004 - Pb	ppm	
	005 - Zn	ppm	
	006 - Ag	ppm	
	017 - AU-AA	ppb	
		9.60	1526.40

Sample preparation and other charges :

159	201 - soil + sediment -80 mesh	0.60	95.40
-----	--------------------------------	------	-------

TOTAL \$ 1621.80

Please pay this amount \$ 1621.80

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts

*Paid Aug 8/83*



MEMBER  
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ASSOCIATION



# CHEMEX LABS LTD.

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NORTH VANCOUVER, B.C.  
CANADA V7J 2G1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

\*\* Invoice # : 18312892

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

*Rossler!*

Date : 27-JUL-83  
P.C. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8312892-001

Quantity	Analysed for code description	unit price	amount
1	393 - Ag FA oz/T		
	396 - Au FA oz/T	10.50	10.50

Sample preparation and other charges :

1 207 - Assay - PULVERIZE

3.75 3.75

TOTAL \$ 14.25

Please pay this amount ----> \$ 14.25

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts

*Paid Aug 8/83*



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TELEPHONE: (604) 984-0221  
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.  
812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

*Rossland*

Invoice # : I8310870

Date : 12-APR-83  
P.O. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8310870-001

Quantity	Analysed for code description	unit price	amount
1	301 - Cu %		
	383 - Ag FA oz/T		
	396 - Au FA oz/T	15.75	15.75

Sample preparation and other charges :

1	207 - Assay - PULVERIZE	3.75	3.75
---	-------------------------	------	------

TOTAL \$ 19.50

Please pay this amount ----> \$ 19.50  
=====

TERMS -- NET 30 DAYS

1.5 % per month (18 % per annum) charged on overdue accounts

*Paid April 18/83*

*SAGE*

# CHEMEX LABS LTD.

212 BROOKSBANK AV.  
NORTH VANCOUVER, B.  
CANADA V7J 2

TELEPHONE: (604) 984-0  
TELEX: 043-525

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : PETRO-LUX ENERGY CORP.

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

*Received*

Invoice # : 18214094

Date : 26-OCT-82  
P.O. # : NONE  
Project NONE

Invoice for analytical work reported on certificate(s) A8214094-001

Quantity	Analysed for code description	unit price	amount
1	002 - Cu ppm		
	004 - Pb ppm		
	005 - Zn ppm		
	006 - Ag ppm		
	017 - AU-AA ppb	9.15	9.15

Sample preparation and other charges :

1	205 - Rock geochem. - RING	2.50	2.50
---	----------------------------	------	------

TOTAL \$ 11.65

Please pay this amount ----> \$ 11.65

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts

*Paid November 1, 1982  
Bank of B.C. Chequing Acct.  
SAGE RESOURCES LTD*



MEMBER  
CANADIAN TESTING  
ASSOCIATION

# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
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CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

ANALYTICAL CHEMISTS

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REGISTERED ASSAYERS

\*\*\* INVOICE \*\*\*

To : SAGE RESOURCES LTD.

Invoice # : 18214454

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

Date : 22-NOV-82  
P.O. # : NONE  
Project

*Handled*

Invoice for analytical work reported on certificate(s) A8214454-001

Quantity	Analysed for code description	unit price	amount
1	301 - Cu %		
	312 - Pb %		
	316 - Zn %		
	383 - Ag FA oz/T		
	396 - Au FA oz/t	25.00	25.00

Sample preparation and other charges :

1 207 - Assay - PULVERIZE 3.75 3.75

TOTAL \$ 28.75

Please pay this amount ----> \$ 28.75

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts

*Paid in full  
Dec 2/82  
Bank of B.C. cheque*



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ASSOCIATION



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TELEX: 043-52597

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GEOCHEMISTS

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\*\*\* INVOICE \*\*\*

To : PETRO-LUX ENERGY CORP.

\*\* Invoice # : I8211346

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

*Rossland*

Date : 16-JUN-82  
P.O. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8211346-001

Quantity	Analysed for code description	unit price	amount
2	301 - Cu %		
	316 - Zn %		
	383 - Ag FA oz/T		
	396 - Au FA oz/t	20.00	40.00

Sample preparation and other charges :

2	207 - Assay - PULVERIZE	3.75	7.50
---	-------------------------	------	------

TOTAL \$ 47.50

Please pay this amount ----> \$ 47.50

TERMS -- NET 30 DAYS

2.0 % per month (24 % per annum) charged on overdue accounts

*paid*



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GEOCHEMISTS

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## CERTIFICATE OF ASSAY

TO : SAGE RESOURCES LTD.

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

CERT. # : A8310870-001  
INVOICE # : I8310870  
DATE : 12-APR-83  
P.O. # : NONE

Sample description	Prep code	Cu %	Ag FA oz/T	Au FA oz/T			
MITZI #1	207	0.01	0.02	0.003	--	--	--

MEMBER  
CANADIAN TESTING  
ASSOCIATION

*St. S. Manini*  
.....  
Registered Assayer, Province of British Columbia



# CHEMEX LABS LTD.

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NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

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• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

CERT. # : A8312391-001  
INVOICE # : 18312891  
DATE : 28-JUL-83  
P.C. # : NONE

*Handwritten signature: Rossland*

+80 MESH FRACTION

Sample description	Prep code	Ag ppt	AU-AA ppb				
15 0W	217	0.1	<10	--	--	--	--
15 1W	217	0.2	<10	--	--	--	--
15 2W	217	0.5	<10	--	--	--	--
15 3W	217	0.2	10	--	--	--	--
15 4W	217	0.3	<10	--	--	--	--
15 5W	217	0.2	<10	--	--	--	--
15 6W	217	0.6	<10	--	--	--	--
15 7W	217	0.7	<10	--	--	--	--
15 8W	217	0.4	<10	--	--	--	--
15 9W	217	0.2	<10	--	--	--	--
15 10W	217	4.1	<10	--	--	--	--
15 1E	217	0.6	<10	--	--	--	--
15 2E	217	0.8	<10	--	--	--	--
15 3E	217	0.2	<10	--	--	--	--
15 4E	217	0.2	<10	--	--	--	--
15 5E	217	0.2	<10	--	--	--	--
15 6E	217	0.2	<10	--	--	--	--
15 7E	217	0.1	<10	--	--	--	--
15 8E	217	0.1	<10	--	--	--	--
15 9E	217	0.2	10	--	--	--	--
15 10E	217	0.2	<10	--	--	--	--
25 0W	217	0.3	<10	--	--	--	--
25 1W	217	0.2	<10	--	--	--	--
25 2W	217	0.4	<10	--	--	--	--
25 3W	217	0.2	<10	--	--	--	--
25 4W	217	0.3	<10	--	--	--	--
25 5W	217	0.3	<10	--	--	--	--
25 6W	217	0.2	<10	--	--	--	--
25 7W	217	0.1	<10	--	--	--	--
25 8W	217	0.7	<10	--	--	--	--
25 9W	217	0.4	<10	--	--	--	--
25 10W	217	0.3	<10	--	--	--	--
25 1E	217	0.3	10	--	--	--	--
25 1E A	217	0.7	<10	--	--	--	--
25 2E	217	0.3	<10	--	--	--	--
25 3E	217	0.3	<10	--	--	--	--
25 4E	217	0.2	<10	--	--	--	--
25 5E	217	0.2	50	--	--	--	--
25 6E	217	0.2	<10	--	--	--	--
25 7E	217	0.7	<10	--	--	--	--



Certified by .....



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• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2G3

*Russland  
Hutchinson*

CERT. # : A8312890-004

INVOICE # : 18312890

DATE : 28-JUL-83

P.O. # : NONE

### -80 MESH FRACTION

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
2N 5W	201	23	37	220	0.2	30	--
2N 6W	201	48	21	143	0.3	<10	--
2N 7W	201	40	20	155	0.2	<10	--
2N 8W	201	30	19	192	0.3	10	--
2N 9W	201	69	189	250	0.5	<10	--
2N 10W	201	47	25	122	0.4	<10	--
2N 0E	201	30	26	100	0.3	20	--
2N 1E	201	36	77	410	0.3	20	--
2N 2E	201	30	49	335	0.4	<10	--
2N 3E	201	31	25	170	0.6	<10	--
2N 4E	201	36	33	150	0.5	10	--
2N 5E	201	36	93	190	0.3	10	--
2N 6E	201	32	32	158	0.2	10	--
2N 7E	201	31	13	130	0.2	<10	--
2N 8E	201	37	18	95	0.2	20	--
2N 9E	201	42	16	100	0.4	10	--
2N 10E	201	42	30	102	0.2	<10	--
3N 0W	201	40	21	180	0.4	<10	--
3N 1W	201	31	17	105	0.2	<10	--
3N 2W	201	33	17	115	0.2	<10	--
3N 3W	201	45	21	130	0.1	<10	--
3N 4W	201	40	31	148	0.1	<10	--
3N 5W	201	25	53	108	0.2	<10	--
3N 6W	201	31	16	125	0.3	<10	--
3N 7W	201	33	23	153	0.4	<10	--
3N 8W	201	42	32	233	0.3	<10	--
3N 9W	201	60	21	150	0.3	<10	--
3N 10W	201	42	27	138	0.5	<10	--
3N 0E	201	34	14	203	0.5	<10	--
3N 1E	201	22	49	320	0.2	<10	--
3N 2E	201	23	22	253	0.3	<10	--
3N 3E	201	103	73	280	0.2	<10	--
3N 4E	201	34	153	198	0.5	<10	--
3N 5E	201	33	77	145	0.3	<10	--
3N 6E	201	21	3500	175	1.4	<10	--
3N 7E	201	29	17	140	0.2	<10	--
3N 8E	201	40	56	270	0.6	<10	--
3N 9E	201	135	71	270	0.7	<10	--
3N 10E	201	41	28	140	0.2	<10	--



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TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V5C 2B3

CERT. # : 48312890-003

INVOICE # : 18312890

DATE : 28-JUL-83

P.C. # : NCNE

*Rosland Huchler*

-60 MESH FRACTION

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
0N 3W	201	60	37	210	0.3	<10	--
0N 9W	201	35	23	120	0.2	<10	--
0N 10W	201	76	94	1030	0.4	10	--
0N 1E	201	72	140	1350	0.5	<10	--
0N 2E	201	28	45	340	0.1	<10	--
0N 3E	201	31	74	300	0.4	<10	--
0N 4E	201	55	49	140	0.5	<10	--
0N 5E	201	30	33	199	0.2	<10	--
0N 6E	201	28	15	138	0.3	<10	--
0N 7E	201	31	14	80	0.4	<10	--
0N 8E	201	33	22	130	0.2	<10	--
0N 9E	201	42	21	128	0.4	<10	--
0N 10E	201	142	120	2100	0.3	<10	--
1N 0W	201	28	51	155	0.1	30	--
1N 1W	201	96	16	65	0.7	<10	--
1N 2W	201	29	18	185	0.2	<10	--
1N 3W	201	45	20	195	0.3	<10	--
1N 4W	201	240	34	175	1.0	<10	--
1N 5W	201	48	23	205	0.5	<10	--
1N 6W	201	78	31	390	0.5	<10	--
1N 7W	201	97	38	223	0.2	10	--
1N 3W	201	44	31	270	0.3	<10	--
1N 7W	201	72	37	138	0.5	<10	--
1N 10W	201	35	18	555	0.2	10	--
1N 0E	201	28	51	205	0.4	<10	--
1N 1E	201	40	740	710	0.9	<10	--
1N 2E	201	64	82	630	8.3	<10	--
1N 3E	201	35	41	750	0.5	<10	--
1N 4E	201	28	25	210	0.3	10	--
1N 5E	201	35	25	155	0.3	<10	--
1N 6E	201	16	26	365	0.2	20	--
1N 7E	201	80	31	805	0.6	<10	--
1N 8E	201	41	18	265	0.3	20	--
1N 9E	201	46	15	210	0.4	<10	--
1N 10E	201	42	14	120	0.2	<10	--
2N 0W	201	33	21	100	0.3	20	--
2N 1W	201	34	17	145	0.4	10	--
2N 2W	201	35	18	158	0.3	100	--
2N 3W	201	32	25	150	0.3	<10	--
2N 4W	201	56	48	163	0.4	10	--

Certified by *Hart Bichler*







# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
 NORTH VANCOUVER, B.C.  
 CANADA V7J 2C1  
 TELEPHONE: (604) 984-0221  
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.  
 620-475 HOWE STREET  
 VANCOUVER, B.C.  
 V6C 2B3

*Russland  
 Gevehen*

CERT. # : A8312890-002  
 INVOICE # : 18312890  
 DATE : 28-JUL-83  
 P.C. # : NONE

-80 MESH FRACTION

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA cpb	
25 8E	201	35	16	105	0.2	<10	--
25 9E	201	49	19	190	0.5	<10	--
25 10E	201	33	12	210	0.4	<10	--
35 0W	201	29	30	235	0.2	<10	--
35 1W	201	29	19	128	0.1	<10	--
35 2W	201	35	20	93	0.2	<10	--
35 3W	201	28	20	127	0.3	<10	--
35 4W	201	35	19	218	0.2	<10	--
35 5W	201	33	16	125	1.7	<10	--
35 6W	201	38	20	125	0.4	20	--
35 7W	201	36	16	214	0.2	<10	--
35 8W	201	40	59	660	0.2	<10	--
35 9W	201	126	99	348	0.7	500	--
35 10W	201	33	13	72	0.2	<10	--
35 1E	201	29	132	860	0.3	10	--
35 2E	201	32	220	500	0.4	<10	--
35 3E	201	50	27	215	0.2	<10	--
35 4E	201	33	34	205	0.3	<10	--
35 5E	201	26	39	205	0.2	<10	--
35 6E	201	41	36	153	0.4	<10	--
35 7E	201	28	18	145	0.3	<10	--
35 8E	201	38	18	105	0.2	<10	--
35 9E	201	39	12	118	0.2	<10	--
35 10E	201	21	52	375	0.2	<10	--
45 0W	201	35	19	408	0.8	<10	--
45 1W	201	31	17	180	0.3	<10	--
45 2W	201	32	17	120	0.2	<10	--
45 3W	201	35	17	98	0.2	<10	--
45 4W	201	48	22	110	0.3	<10	--
45 1E	201	56	73	740	0.3	<10	--
45 2E	201	47	32	188	0.8	<10	--
45 3E	201	42	27	255	0.5	<10	--
45 4E	201	35	10	263	0.3	<10	--
0N 1W	201	103	55	510	0.2	<10	--
0N 2W	201	94	23	600	0.4	<10	--
0N 3W	201	138	40	660	0.5	10	--
0N 4W	201	23	10	135	0.1	<10	--
0N 5W	201	29	14	225	0.2	<10	--
0N 6W	201	32	25	337	0.3	<10	--
0N 7W	201	74	38	290	0.5	<10	--

*Hart Buchler*

Certified by .....



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

CERT. # : A8312890-001

INVOICE # : 18312890

DATE : 28-JUL-83

P.C. # : NCNE

*Handwritten signatures: "P. ...", "Geochem"*

-80 MESH FRACTION

Sample description	Prep code	Cu ppr	Pb ppm	Zn ppr	Ag ppm	AU-AA ppb	
1S 0W	201	37	24	220	0.4	<10	--
1S 1W	201	60	20	203	0.2	<10	--
1S 2W	201	149	20	245	0.6	<10	--
1S 3W	201	62	21	305	0.1	10	--
1S 4W	201	66	30	135	0.5	<10	--
1S 5W	201	36	24	238	0.2	<10	--
1S 6W	201	69	26	425	0.5	<10	--
1S 7W	201	129	36	290	0.7	<10	--
1S 8W	201	35	22	145	0.3	<10	--
1S 9W	201	92	26	850	0.2	<10	--
1S 10W	201	40	14	655	0.4	10	--
1S 1E	201	78	26	245	0.3	<10	--
1S 2E	201	30	25	185	0.1	10	--
1S 3E	201	31	35	175	0.2	<10	--
1S 4E	201	41	57	165	0.1	<10	--
1S 5E	201	37	29	128	0.3	<10	--
1S 6E	201	32	17	138	0.1	<10	--
1S 7E	201	43	17	102	0.2	<10	--
1S 8E	201	37	15	102	0.2	<10	--
1S 9E	201	44	25	175	0.3	<10	--
1S 10E	201	23	18	153	0.2	<10	--
2S 0W	201	39	29	175	0.2	<10	--
2S 1W	201	30	16	135	0.2	<10	--
2S 2W	201	26	17	150	0.1	<10	--
2S 3W	201	36	12	150	0.2	<10	--
2S 4W	201	38	18	155	0.1	<10	--
2S 5W	201	40	12	132	0.2	<10	--
2S 6W	201	32	14	175	0.2	<10	--
2S 7W	201	40	25	193	0.1	<10	--
2S 8W	201	56	16	130	0.1	<10	--
2S 9W	201	72	62	330	0.3	<10	--
2S 10W	201	41	15	140	0.5	<10	--
2S 1E	201	31	33	135	0.3	<10	--
2S 1E A	201	37	16	175	0.4	<10	--
2S 2E	201	31	40	118	0.2	<10	--
2S 3E	201	33	54	173	0.3	<10	--
2S 4E	201	30	28	168	0.2	<10	--
2S 5E	201	27	21	125	0.4	<10	--
2S 6E	201	34	19	120	0.2	<10	--
2S 7E	201	46	17	148	0.5	<10	--

*Handwritten notes: "No 2 190", "10", "12", "13", "14", "15", "16", "17", "18", "19", "20"*

Certified by .... *Handwritten signature: Hart Bichler*





# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TC : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

*See also  
presentation*

CERT. # : A8312459-001  
INVOICE # : I8312459  
DATE : 13-JUL-83  
P.C. # : NONE

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
M4 - 5	205	580	9700	2560	7.9	<10	--
M3 - 4	205	1170	550	910	5.5	<10	--
MF - 4	205	100	66	340	0.9	<10	--
MG - 5	205	46	22	80	0.4	<10	--



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221

TELEX: 043-5259

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

CERT. # : A8312458-002  
INVOICE # : 18312458  
DATE : 13-JUL-83  
P.O. # : NONE

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
MH - 2 -80	204	28	47	213	0.2	<10	--
MH - 2 +80	217	28	48	214	0.1	<10	--
MH - 3 -20	204	45	56	<u>241</u>	0.2	(20)	-80
MH - 3 +80	217	35	50	168	0.1	10	--
MH - 4 -80	201	55	51	152	0.3	(20)	-80



Certified by Hart Bichler



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : SAGE RESOURCES LTD.

620-475 HOWE STREET  
VANCOUVER, B.C.  
V6C 2B3

*Washed  
Oxidation Product*

CERT. # : A8312458-001  
INVOICE # : 18312458  
DATE : 13-JUL-83  
P.C. # : NONE

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
MA - 1	217	140	5600	97	2.2	<10	--
MA - 2 -80	204	148	4900	76	4.8	10	--
MA - 2 +80	217	150	5400	65	3.9	10	--
MA - 3 -80	204	305	6100	37	8.4	<10	--
MA - 3 +80	217	320	6400	37	6.2	<10	--
MA - 4 -80	201	2700	>10000	21	14.0	20	--
MB - 1	217	185	1050	43	2.3	<10	--
MB - 2 -80	204	450	1100	27	3.3	<10	--
MB - 2 +80	217	490	1380	47	3.2	10	--
MB - 3 -80	204	970	1300	74	5.8	<10	--
MB - 3 +80	217	950	2480	163	6.3	<10	--
MC - 1	217	250	138	830	1.2	<10	--
MC - 2 -80	204	320	73	1100	1.1	<10	--
MC - 2 +80	217	190	44	700	1.0	10	--
MC - 3 -80	204	285	45	1000	1.1	<10	--
MC - 3 +80	217	165	27	650	1.0	<10	--
MD - 1	217	640	1500	1550	4.6	<10	--
MD - 2 -80	204	920	1300	2850	3.4	10	--
MD - 2 +80	217	660	1680	2270	2.2	<10	--
MD - 3 -80	204	930	1150	2670	3.2	<10	--
MD - 3 +80	217	640	1100	1870	1.7	20	--
MD - 4 -80	201	945	530	4300	0.6	<10	--
ME - 1	217	465	1450	2600	2.0	<10	--
ME - 2 -80	204	500	1350	2400	2.2	<10	--
ME - 2 +80	217	625	2150	2300	3.7	<10	--
ME - 3 -80	204	355	580	5100	0.3	50	--
ME - 3 +80	217	175	450	2250	0.3	<10	--
ME - 4 -80	201	203	445	1800	0.2	<10	--
MF - 1	217	510	720	5100	1.2	<10	--
MF - 2 -80	204	780	216	8700	0.6	<10	--
MF - 2 +80	217	660	275	7600	0.4	<10	--
MF - 3 -80	204	660	180	7600	0.5	10	--
MF - 3 +80	217	490	268	7350	0.6	<10	--
MG - 1	217	32	83	180	0.3	<10	--
MG - 2 -80	204	44	22	180	0.3	10	--
MG - 2 +80	217	34	19	124	0.1	10	--
MG - 3 -80	204	55	21	155	0.3	80	--
MG - 3 +80	217	40	20	113	0.1	<10	--
MG - 4 -80	201	67	22	100	0.1	20	--
MH - 1	217	32	55	268	0.3	10	--

*515, 510, 510*

*Hart Buchler*

Certified by .....





# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C

TELEPHONE: (604) 984-022  
TELEX: 043-5259

- ANALYTICAL CHEMISTS

- GEOCHEMISTS

- REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : PETRO-LUX ENERGY CORP.

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

CERT. # : A8214094-001  
INVOICE # : I8214094  
DATE : 26-OCT-82  
P.O. # : NONE  
NONE

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm	AU-AA ppb	
NEW FIND	205	1800	>10000	>10000	13.8	<10	--



MEMBER  
CANADIAN TESTING  
ASSOCIATION

Certified by *Hart Buchler* .....



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : SAGE RESOURCES LTD.

812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

CERT. # : A8214454-001  
INVOICE # : I8214454  
DATE : 22-NOV-82  
P.O. # : NONE

ATTN: AL VALLEY CC: SIAK, S. TAN, P. ENG.

Sample description	Prep code	Cu %	Pb %	Zn %	Ag FA oz/T	Au FA oz/t	
SR - 1	207	0.29	2.84	1.63	0.80	0.005	--



MEMBER  
CANADIAN TESTING  
ASSOCIATION

*[Signature]*  
.....  
Registered Assayer, Province of British Columbia



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-5259

ANALYTICAL CHEMISTS

GEOCHEMISTS

REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : SAGE RESOURCES LTD.

312-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

CERT. # : A8310870-001  
INVOICE # : I8310870  
DATE : 12-APR-83  
P.O. # : NONE

Sample description	Prep code	Cu %	Ag FA oz/T	Au FA oz/T			
MITZI #1	207	0.01	0.02	0.003	--	--	--

*Paid April 12/83  
A W*

*Alan Morrison*  
.....  
Registered Assayer, Province of British Columbia



MEMBER  
CANADIAN TESTING  
ASSOCIATION





# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604)984-0221  
TELEX: 043-5259

ANALYTICAL CHEMISTS - GEOCHEMISTS - REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : PETRO-LUX ENERGY CORP.  
812-409 GRANVILLE ST.  
VANCOUVER B.C.  
V6C 1T2

*(NAME CHANGE TO  
SAGE RESOURCES LTD)  
1982*

CERT. # : A8211346-001  
INVOICE # : 18211346  
DATE : 16-JUN-82  
P.O. # : NONE

Sample description	Prep code	Cu %	Zn %	Ag FA oz/T	Au FA oz/t		
PETRO-LUX 1	207	0.13	2.74	0.60	<0.003	--	--
PETRO-LUX 2	207	0.34	1.20	0.56	<0.003	--	--

*R. J. Swaites*

.....  
Registered Assayer, Province of British Columbia





MITZI NO. 2 CLAIM  
(15 Units)

VERUNA NO. 1 CLAIM  
(2 Units)

\* Approx point  
at which work  
on road commenced.

14.6 TO ROSSLAND

SADAME CREEK

22

49° 01'

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

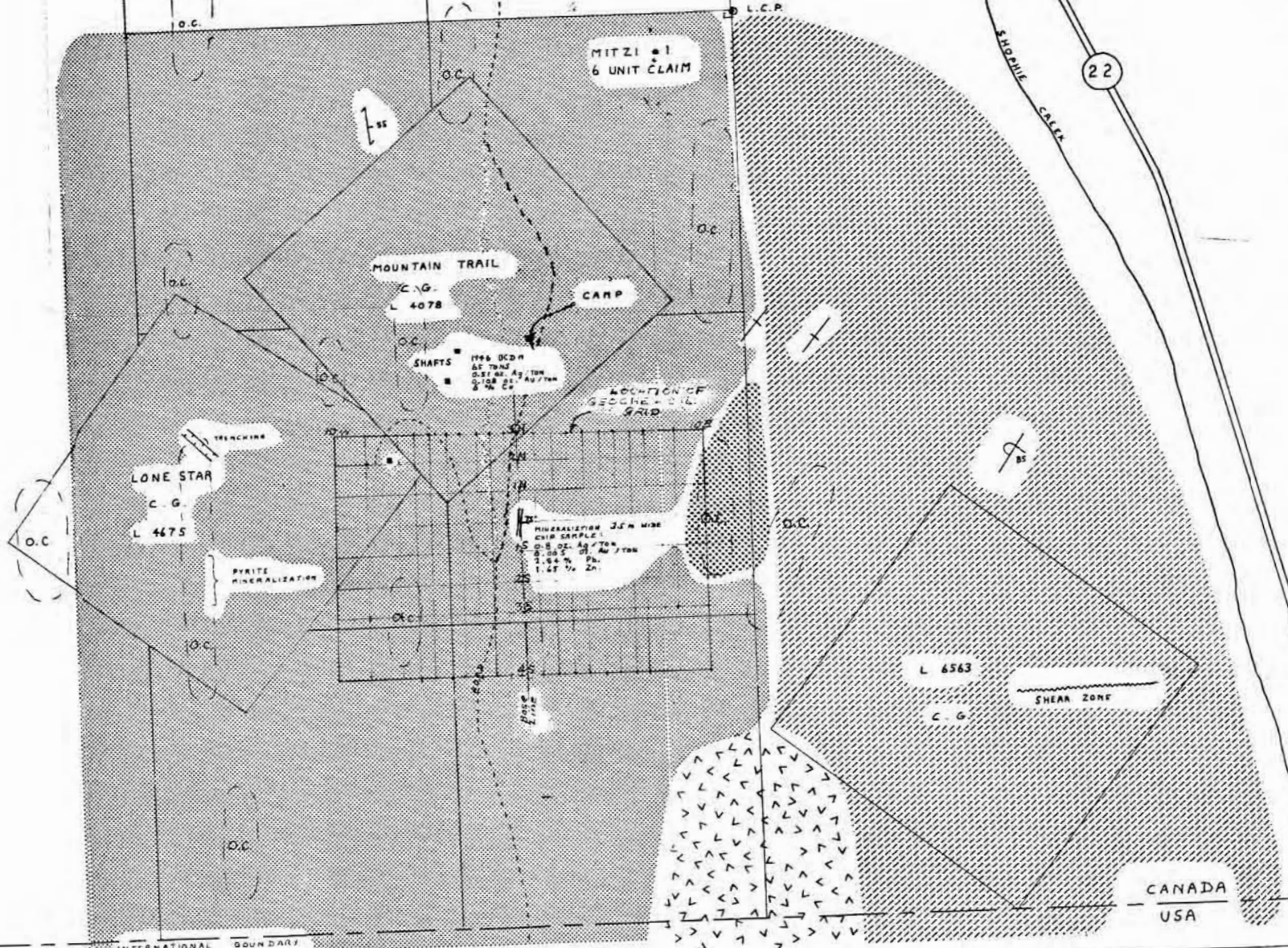
**11,723**

LOWER TERTIARY  
GRANITE

JURASSIC  
ANDESITE

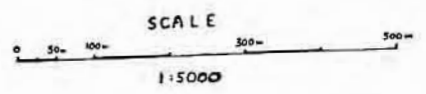
JURASSIC  
DIORITE

CARBONIFEROUS  
ARGILLITE



**LEGEND:**

1. LOCATION OF MINERAL SHOWING, WITHIN GRID, WAS LOCATED BY CHAIN & COMPASS SURVEY.
2. 1N, 2N, 1S, 2S, WITHIN GRID, INDICATES 50 METER SPACING NORTH OR SOUTH OF 0-0 POINT AT CENTER OF SHOWING.



DRAWN BY  
**DEAN DE LA MOTTE**  
mineral exploration services  
FROM A.J. VALLEY FIELD NOTES  
MARCH 1 1983

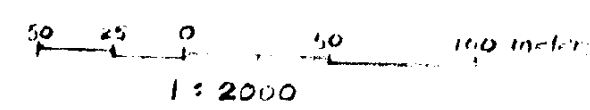
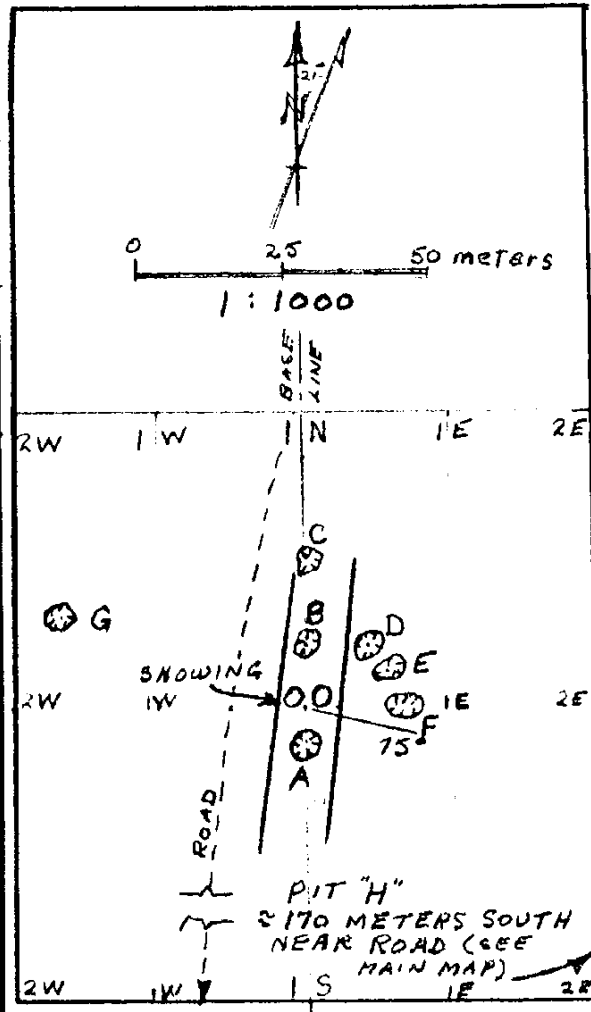
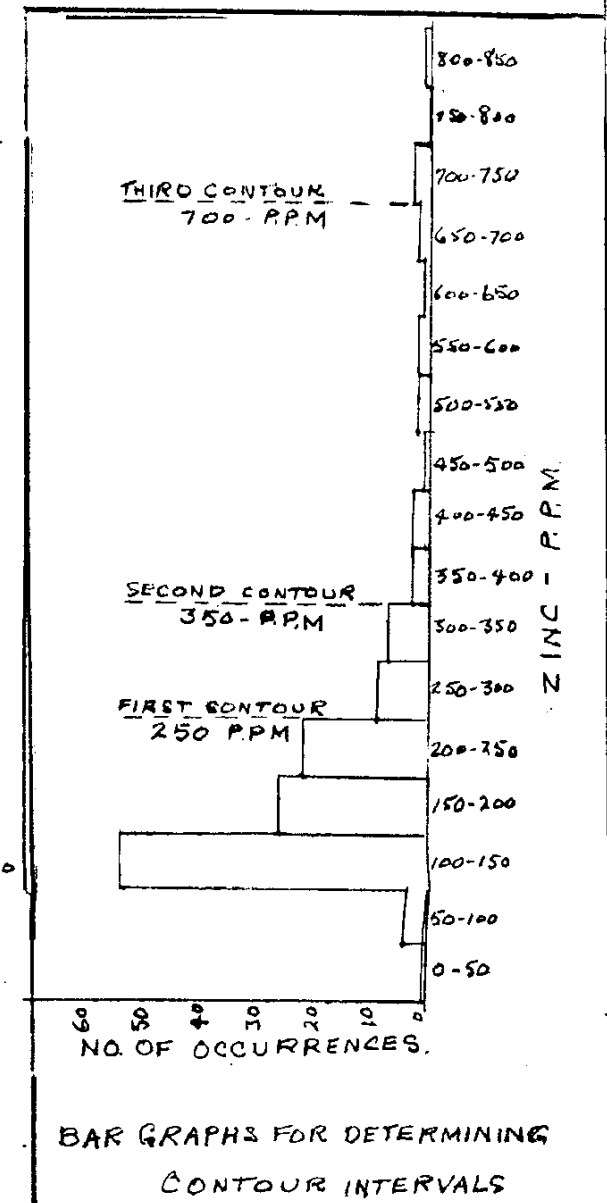
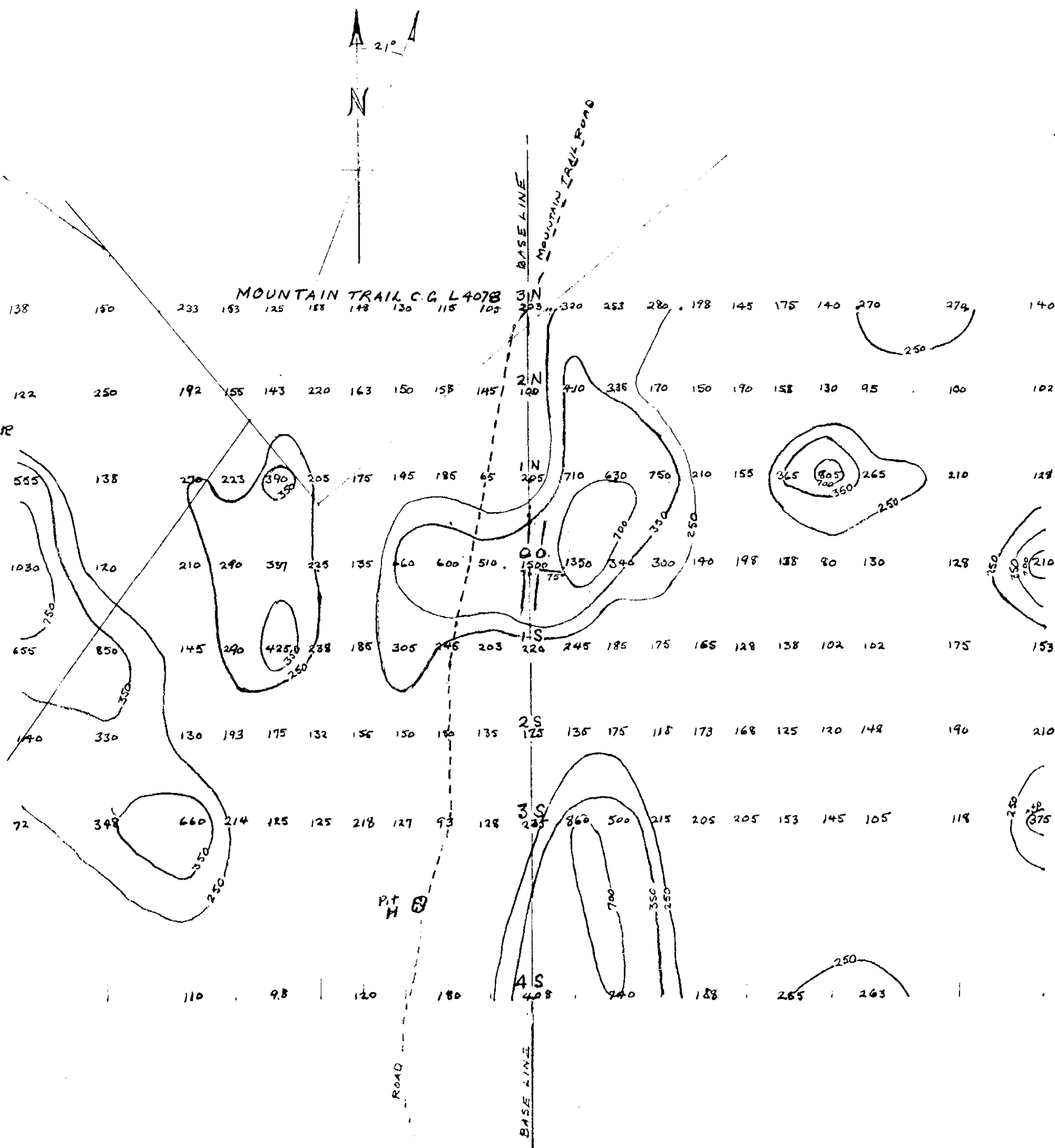
SAGE RESOURCES LTD  
MITZI NO. 1 & VERUNA NO. 1  
CLAIMS  
TRAIL CREEK MINING DIV - B.C.  
PROSPECTING  
MAP NO. 1  
DRAWN BY: B. J. J. J.  
CHECKED BY: G. W.  
DATE: MAR. 1, 1983

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,723

LONE STAR  
R.C.G.  
L 4675

MOUNTAIN TRAIL C.G. L 4078



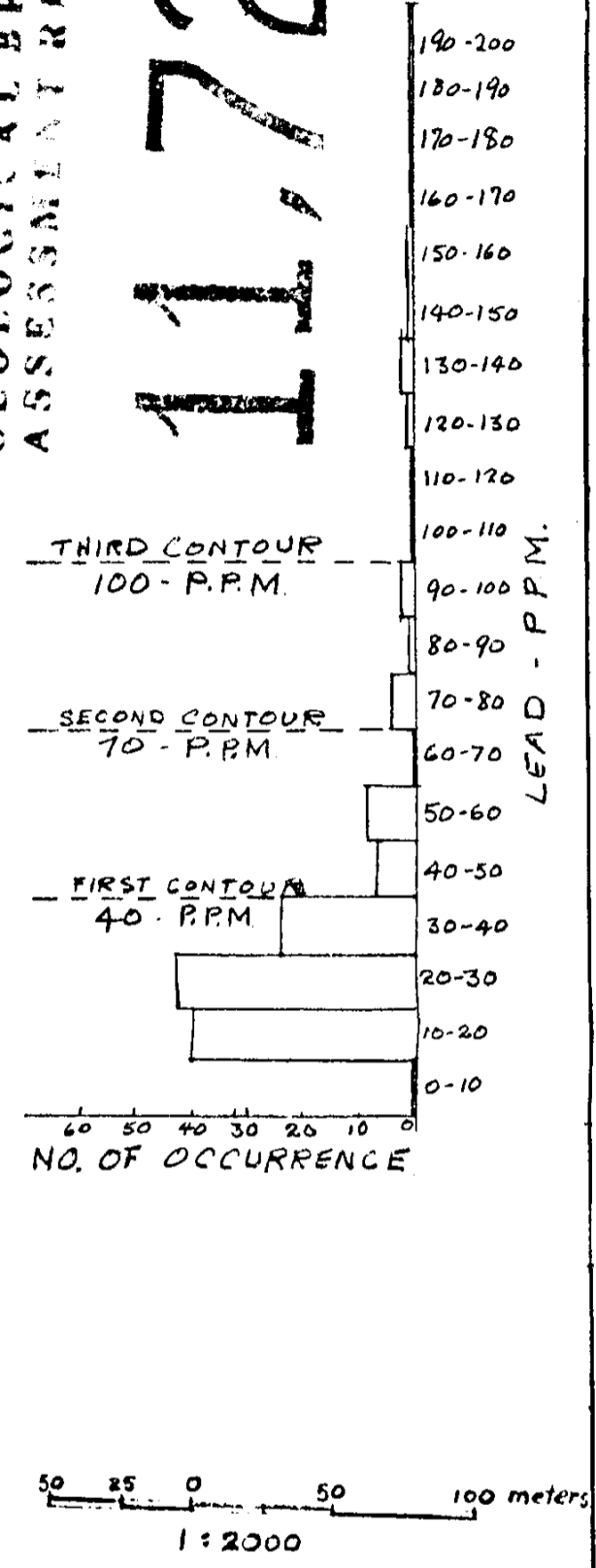
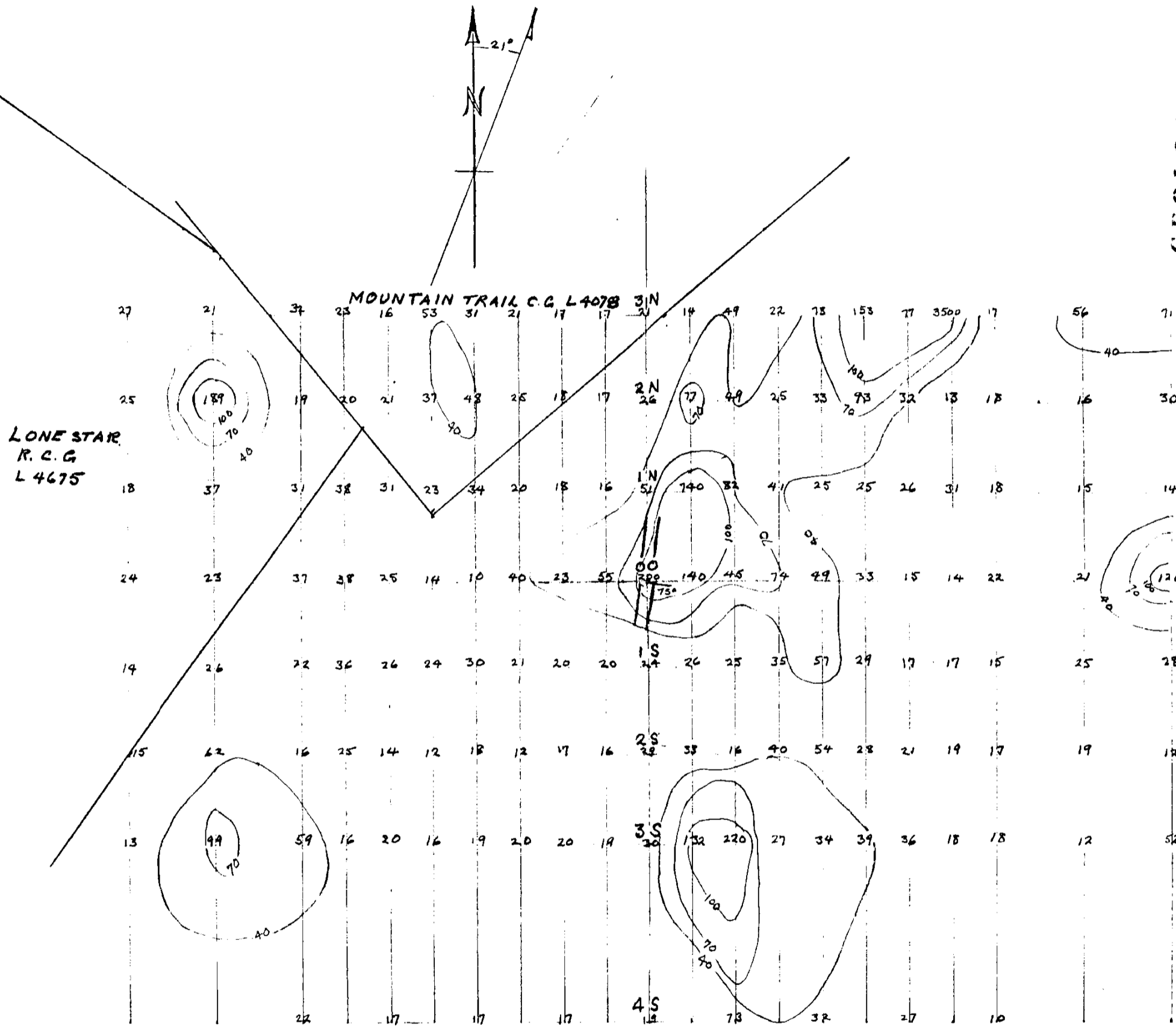
SAGE RESOURCES LTD  
MITZI NO. 1 CLAIM  
Trail Creek Mining Division - B.C.  
GEOCHEMICAL MAP  
ZINC - P.P.M.

NO. 1

Drawn By: A. J. VALLEY  
Checked By: J. P. KANE  
Date: SEPT. 26, 1982

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

111723



SAGE RESOURCES LTD  
NITZI NO. 1 CLAIM  
Trail Creek Mining Division - B.C.

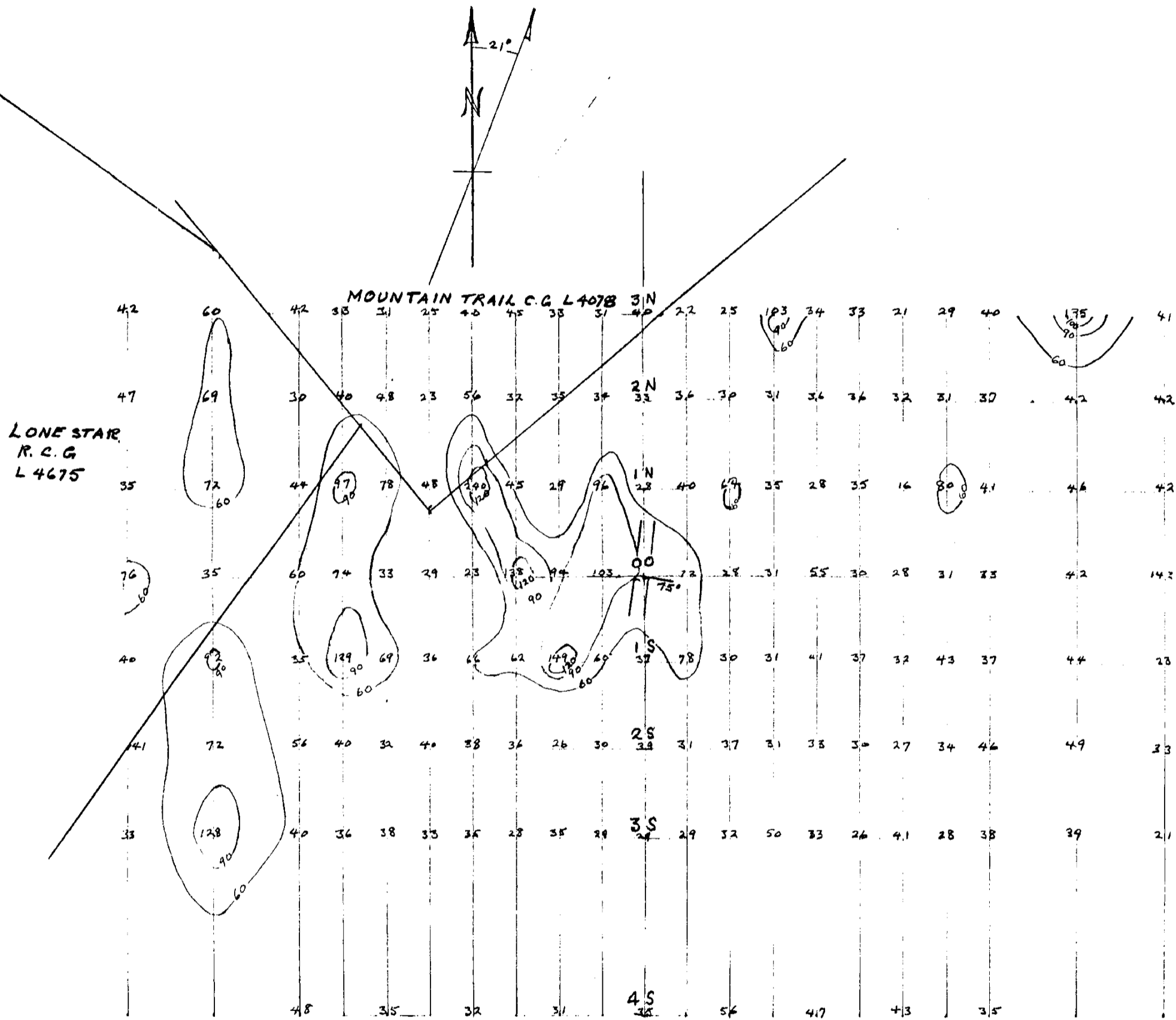
GEOCHEMICAL MAP  
LEAD - P.P.M.

NO. 2

Drawn By: A.J. VALLEY  
Checked By: D. FERRIS  
Date: SEPT 26 1983

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,723



THIRD CONTOUR  
120 P.P.M.

SECOND CONTOUR  
90 P.P.M.

FIRST CONTOUR  
60 P.P.M.

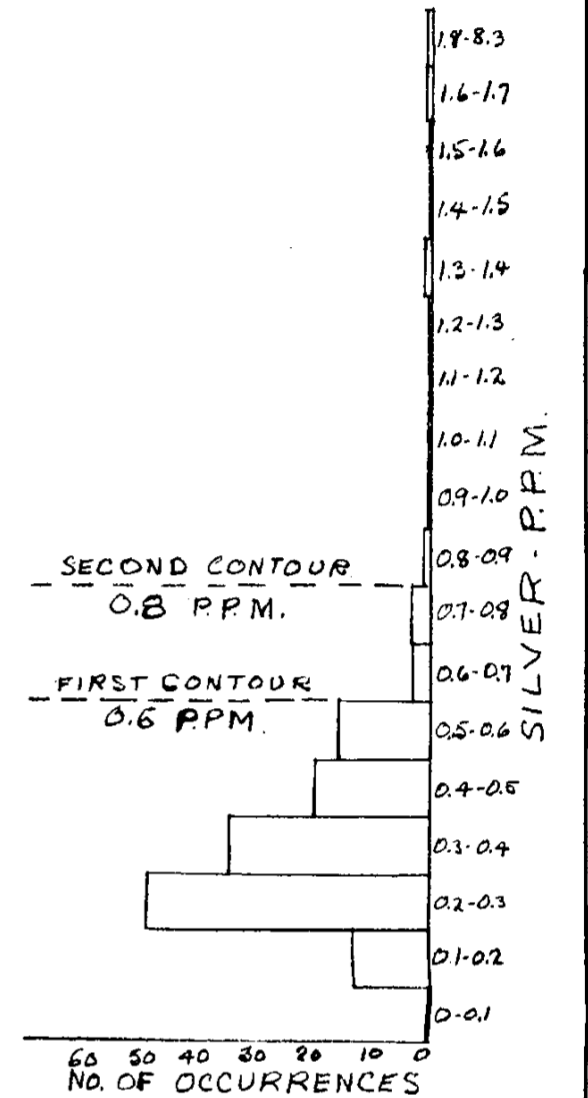
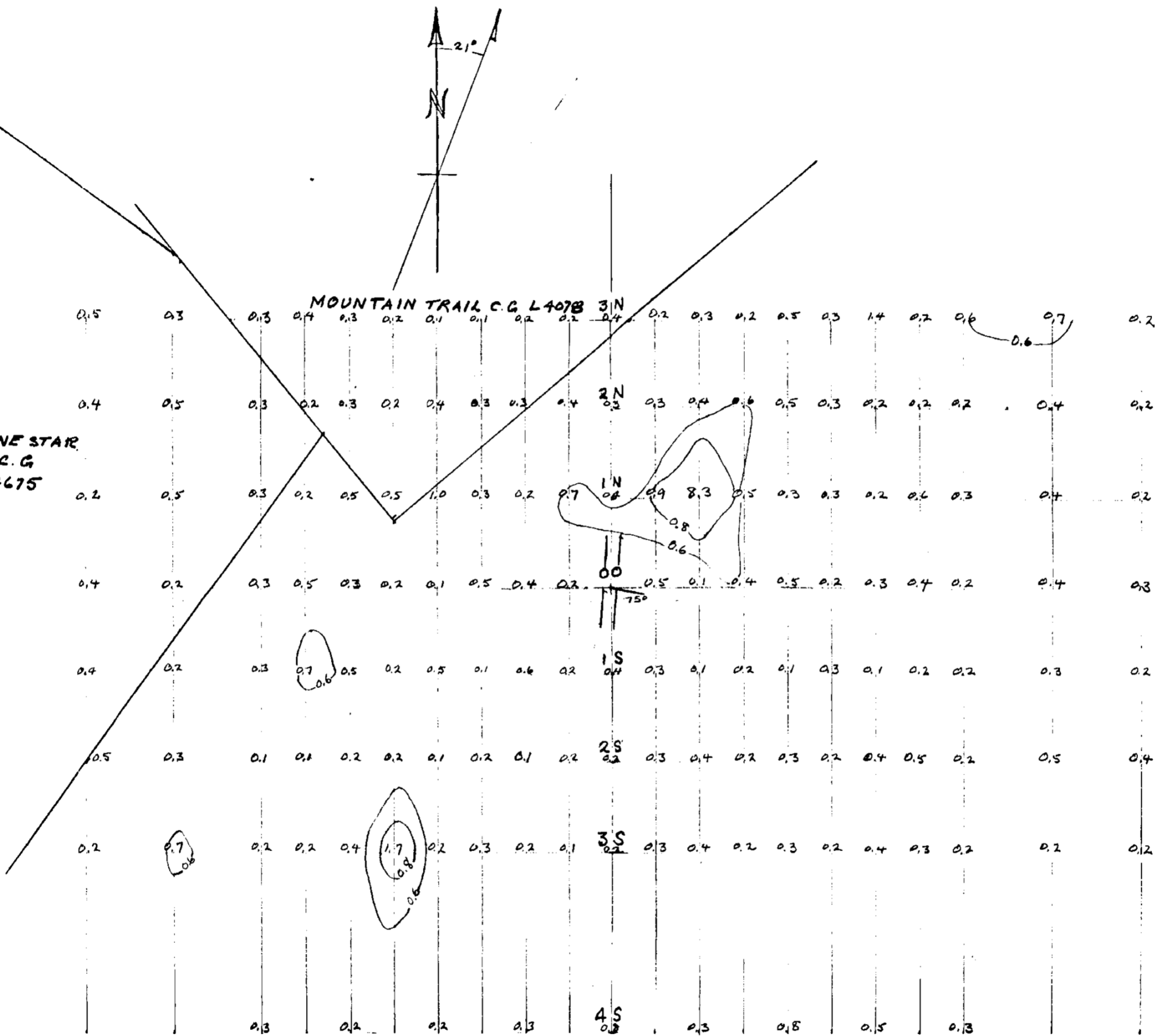
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120-130  
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100-110  
90-100  
80-90  
70-80  
60-70  
50-60  
40-50  
30-40  
20-30  
10-20  
0-10

COPPER P.P.M.

SAGE RESOURCES LTD	
NITEL NO. 1 CLAIM	
Trail Creek Mining Division - B.C.	
GEOCHEMICAL MAP	
COPPER - P.P.M.	
NO. 3	Drawn By: A. J. VALLEY Checked By: D. PERKINS Date: SEPT 27, 1983

LONE STAR  
R.C.G.  
L 4675

MOUNTAIN TRAIL C.G. L 4078 3N



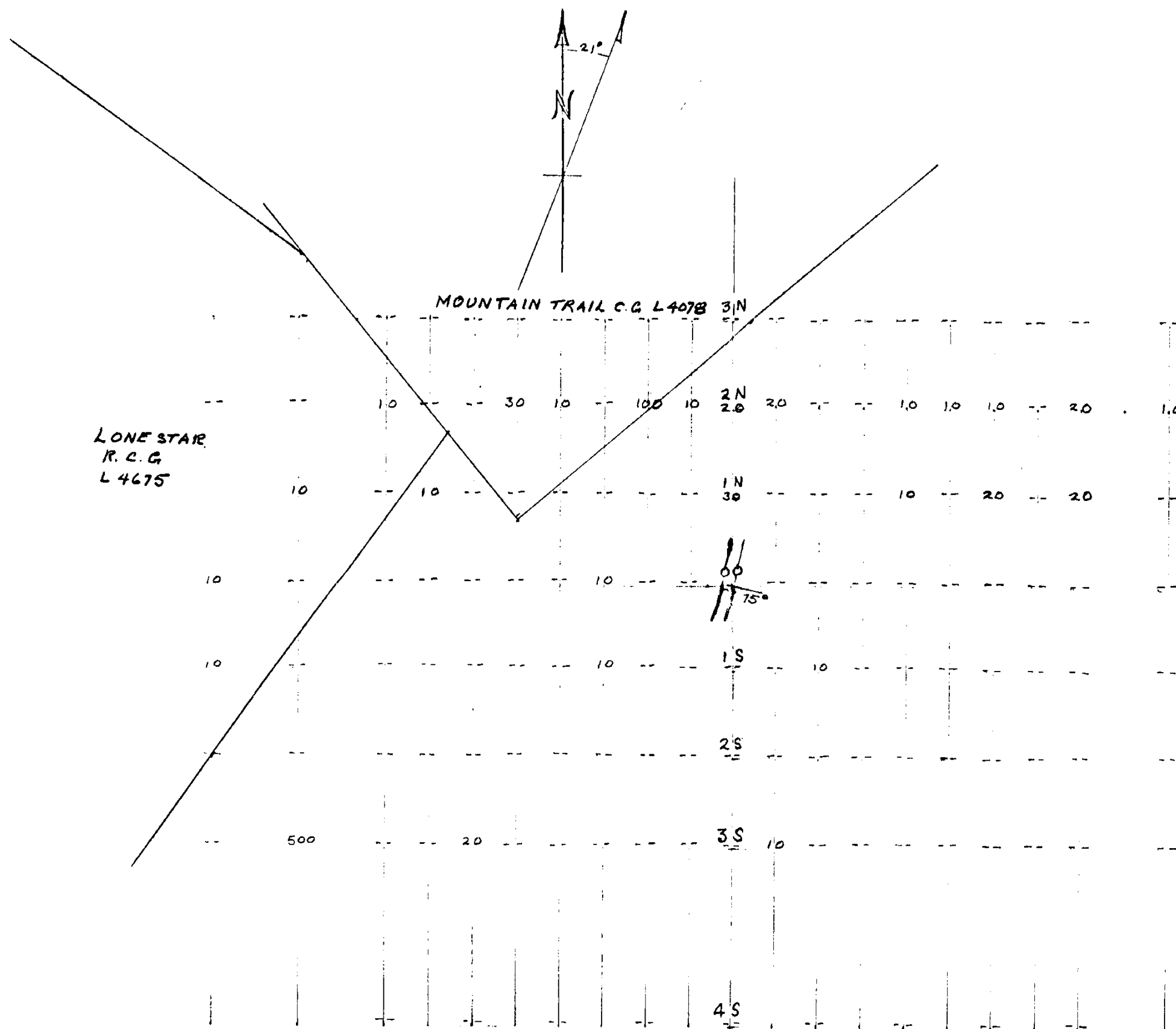
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SAGE RESOURCES LTD  
MITZI NO. 1 CLAIM  
Trail Creek Mining Division - B.C.

GEOCHEMICAL MAP  
SILVER - P.P.M.

NO. 4

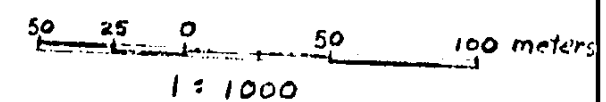
Drawn By: \_\_\_\_\_  
Checked By: \_\_\_\_\_  
Date: \_\_\_\_\_



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,723

LEGEND  
-- INDICATES  $\geq 10$  PPB.



SAGE RESOURCES LTD	
NITZI NO. 1 CLAIM	
Trail Creek Mining Division - B.C.	
GEOCHEMICAL MAP	
GOLD-PPB	
NO. 5	Drawn By:
	Checked By:
	Date: