2289

SUMMIT OILS LTD.

PARROTT LAKE PROPERTY

GEOCHEMICAL, GEOLOGICAL, & GEOPHYSICAL

REPORT

BY

PACIFIC GEOCHEMICAL SERVICES LTD.

January 21, 1970.

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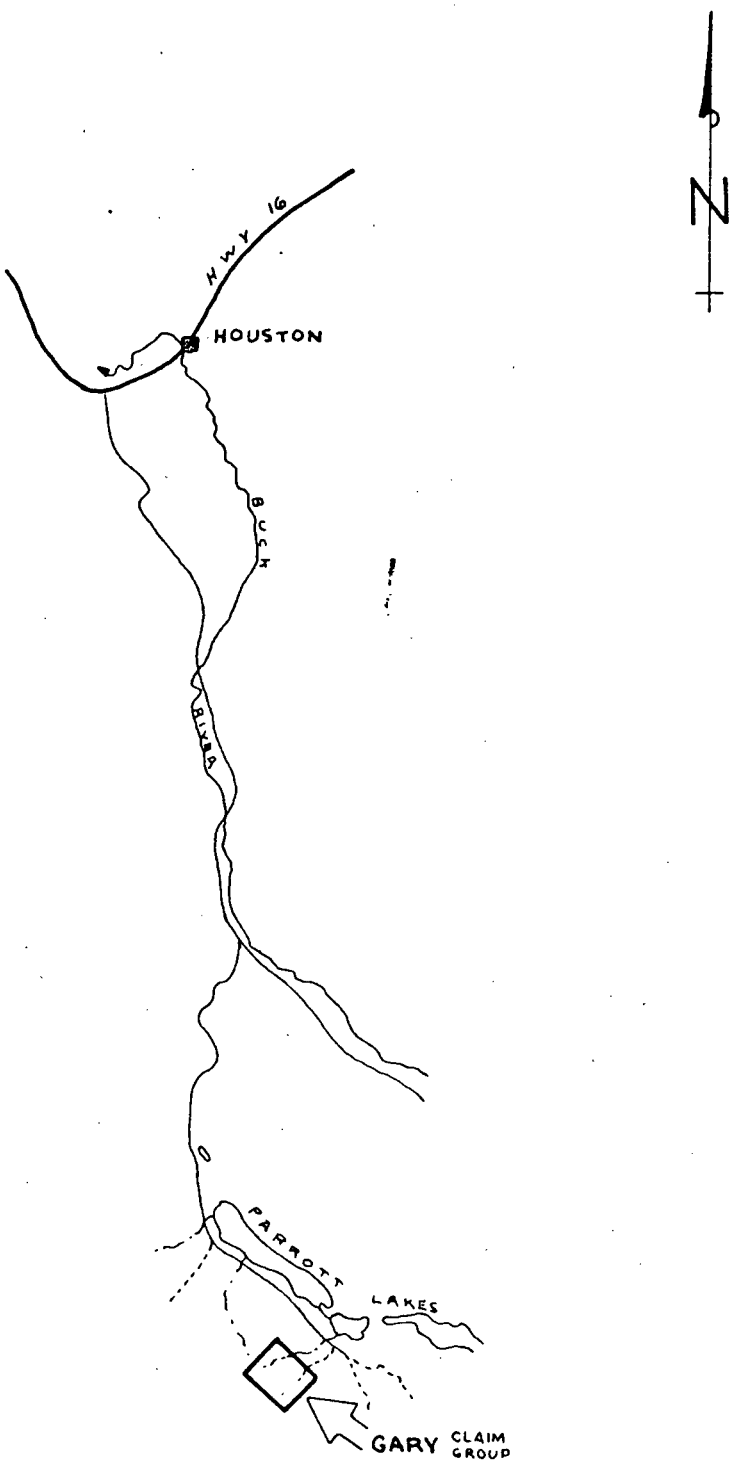
ILLUSTRATIONS



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2289 MAP #1

SUMMIT OILS LTD
PARROTT LAKE
PROPERTY LOCATION MAP
1" — 4mi

FIG. 1

INTRODUCTION

The Gary Claims were staked by Summit Oils Ltd., with the objective of claiming ground containing an intersection of two major magnetic trends. The trends, which were discovered upon release of G.S.C. airborne magnetic survey Map 5317-G, are probably due to large faults. The objective of the exploration program outlined in this report, was to determine the significance of the magnetic trends, and further, to outline any areas within the property that were geochemically anomalous.

A crew of five men were employed on the property to carry out the program which entailed geochemical, geological, geophysical work, as well as the surveying and cutting of a base line to establish control.

LOCATION AND ACCESS

The Gary Mineral Claims are located at 54° 07' North Latitude, 126° 38' West Longitude. They are positioned 20 miles south of Houston, B.C.

A good gravel road runs from Houston to Goosly Lake. Twelve miles south of Houston there is a branch road which runs to Parrott Lakes. Four wheel drive is required for the last five miles. From the lake, access to the property was made by foot.

PROPERTY

A block of 16 Mineral Claims were staked and recorded during September, 1969. A brushed-out, chained and flagged base line was cut on the property and 100' stations were established on this line. The claims were surveyed by chain and Brunton Compass and were tied in to the base line. The claim boundaries are positioned on the ground as shown in Figure 2.

GEOCHEMICAL PROFILE

There were two soil profiles taken on the property. Their locations are shown in Figure 2. The profile pits were dug to a depth of 16" and the different horizons were sampled.

The soils on the property are essentially sandy clays with a light covering of organic material. In profile #1 the " A_o & A_1 " horizons were about two inches thick, and in profile #2, less than one inch thick. The underlying horizons were well defined. In profile #1 the " A_2 " horizon was a half inch of red brown clay. The " B " horizon consisted of 7" of medium brown oxidized sandy clay, and the " C " horizon which carried through the bottom of the pit was a much less oxidized sandy clay. Profile #2 was similar with the exception of the " A_2 " horizon being a half inch of light gray sandy clay. The " B & C " horizons were similar, but were a lighter shade of brown. Rounded pebbles were found in the sandy clays indicating glacial deposition of the soils.

The individual horizons were sampled and analysis of these horizons showed a concentration of copper and zinc ions in the " B " horizon.

All profile samples were analyzed for various metals and PH tests were run on them to determine the nature and extent of ion mobility in the soils of the property. The PH was found to be " 5 " in all samples. Copper and zinc ions tend to travel with relative ease in such an acid environment.

GEOCHEMICAL SURVEY

Traverses were run by experienced field assistants using the pace and compass method. The sample lines tied in to the base line and claim lines for control. Fifty three soil samples were taken at 500' intervals on these traverses, with their locations flagged and coded. Five silt samples were taken over the property and their locations are shown in Figure #2.

The sample holes were dug with a rock hammer, and the samples were taken by hand and placed in a water resistant bag, where they remained until analysis.

The samples were packaged and shipped to Chemex Laboratories Ltd. of North Vancouver, B.C., where drying, sieving, and analysis by atomic absorption was carried out under the supervision of professional chemists.

The background value for copper was found to be 20 p.p.m., and zinc was 100 p.p.m. The intensities ranged from 6 - 45 p.p.m. copper, and 53 - 220 p.p.m. zinc. Silver intensities ranged from 0 - 2.0 p.p.m.

GEOLOGY

The most recent map covering the geology of this area has been published by the B.C. Department of Mines and Petroleum Resources. This map drawn to a scale of 1" = 4 miles, as map 69-1, shows a wide expanse of rocks of the Hazelton formation extending southerly from Smithers to Parrott Lake. These rocks are red to green andesite flows and tuffs, with interbedded sedimentary rocks all of Jurassic age. A number of faults and lineaments and small igneous masses, intrusive into the volcanic and sedimentary series are shown through this area.

This map shows the surface at the position of the claim block southwest of Parrott Lake to be drift covered. Our prospecting and geological mapping confirmed that with one exception the claim block is void of outcrop. The outcrops on the property were on the Gary #10 Mineral Claim. These rocks were tan granular slightly vesicular volcanics of Tertiary age.

During the time our prospectors were on the property they did not recognize mineralization.

GEOPHYSICS

The B.C. Department of Mines and the Department of Energy, Mines and Resources of the Federal Government have jointly conducted an airborne magnetic survey over this region. Geophysical Map 5301-G published to a scale of 1" = 1 mile, shows two magnetic trends converging in the area of the property.

A Scintrex MF-1R-100 fluxgate magnetometer was used to run a survey on the base line. The location of the magnetic profile is shown in red on Figure 2. The purpose of the profile was to check the correlation between ground and aeromagnetics and to check for possible structure, such as faults and contacts.

The ground magnetic readings were taken at 100' intervals using an established base station to check for the intensity of the diurnal variation. Readings over the property ranged from 1300 - 7300 gammas. The profile was plotted as shown on Figure 5.

CONCLUSIONS

A - GEOCHEMISTRY

1 - From analysis and PH testing of samples taken from two profiles on the property a sampling depth of 6 - 10 " (" B " horizon) was found to be the most likely sampling medium to give reliable geochemical readings.

2 - Surface anomalies can be expected to have limits extended from the source due to the ease with which copper and zinc ions will travel in the soils of the property.

3 - Round float encountered in sample holes over most of the property suggests glacial deposition of materials.

4 - Geochemical response on the property was minimal and the few erratic highs that did appear are not believed to be attributed to significant mineralization.

B - GEOPHYSICS

1 - There is an apparent correlation between ground and aeromagnetics. However, due to the small scale (approximately 10x smaller) of the aeromagnetic map, the aeromagnetic profile is very smooth and does not show any abrupt changes. The ground magnetic profile however, does show many such changes.

2 - The abrupt changes on the ground magnetic profile are probably due to major faulting caused by the uplifting of the Tekaiziyis Range to the south of the property.

RECOMMENDATIONS

The property itself does not show enough geochemical response to be significant, however, the surrounding areas may produce more favorable situations. Therefore, a program of stream follow-up and silt testing combined with soil sampling and testing in anomalous areas, followed by claim staking is recommended for the general area which lies southwest of Parrott Lakes.

Project management carried out by G.L. Anselmo, BA, President of Pacific Geochemical Services Ltd., under the supervision of W.G. Stevenson, P.Engineer.

STATEMENT OF SUPERVISOR'S QUALIFICATIONS:

I, Garry L. Anselmo, DO HEREBY CERTIFY:

- That I have studied three years at U.B.C. in geology and geochemistry.

- That I am a graduate of Simon Fraser University.

- That I have worked two years at Britannia Beach with Anaconda American Brass Ltd., doing geochemical lab and field work.

- That I have worked two summers with Kennco Explorations (Western) Ltd. and one summer with Amax Explorations Ltd. in field explorations.

- That I am president and field manager for Pacific Geochemical Services Ltd. of 1424 Crown St., North Vancouver, British Columbia.

Garry L. Anselmo

G.L. Anselmo, BA
President

STATEMENT OF OPERATOR'S QUALIFICATIONS

I, Alexander M. Homenuke, DO HEREBY CERTIFY:

- That I attended the British Columbia Institute of Technology for two years.

- That I am a graduate of that Institute in Mining Technology.

- That I worked four summers as a helper for Canadian Longyear Ltd. diamond drilling.

- That I spent two months with Silver Standard Mines Ltd. and one summer with Amax Explorations Ltd. as a field assistant on reconnaissance.

- That upon graduation from B.C.I.T. I was employed by Pacific Geochemical Services Ltd. on permanent staff.

A.M. Homenuke

A.M. Homenuke

CERTIFICATE

I William G. Stevenson, DO HEREBY CERTIFY:

- That I am a Consulting Geological Engineer with offices at Suite 209 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.

- That I am a graduate of the University of Utah, 1946, with a B.S.Degree.

- That I am a registered Professional Engineer in the Association in British Columbia.

- That I have practised my profession for 22 years.

- That I have no direct, indirect or contingent interest in the Gary Mineral Claims or in the securities of Summit Oils Ltd., nor do I intend to receive any such interest.

- That this report dated January 21,1970, is based on a study of published and unpublished maps and reports, discussions with colleagues, and from a helicopter reconnaissance that I conducted on August 3, 1969.
DATED at Vancouver, British Columbia, this 21st. day of January, 1970.

W.G.Stevenson & Associates Ltd.,
Consulting Geologists

W.G.Stevenson, P.Eng.

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SUMMIT OILS LTD

PARROTT LAKE PROPERTY

GEOCHEMICAL SURVEY

ZINC

Sample site — ppm: 20 Cu, 100 Zn, 0.5 Ag

ppm: 140, 120, 100

Logging trail

Base line

Claim line

5 4 3 2 1 0 500 1000

1" — 500'

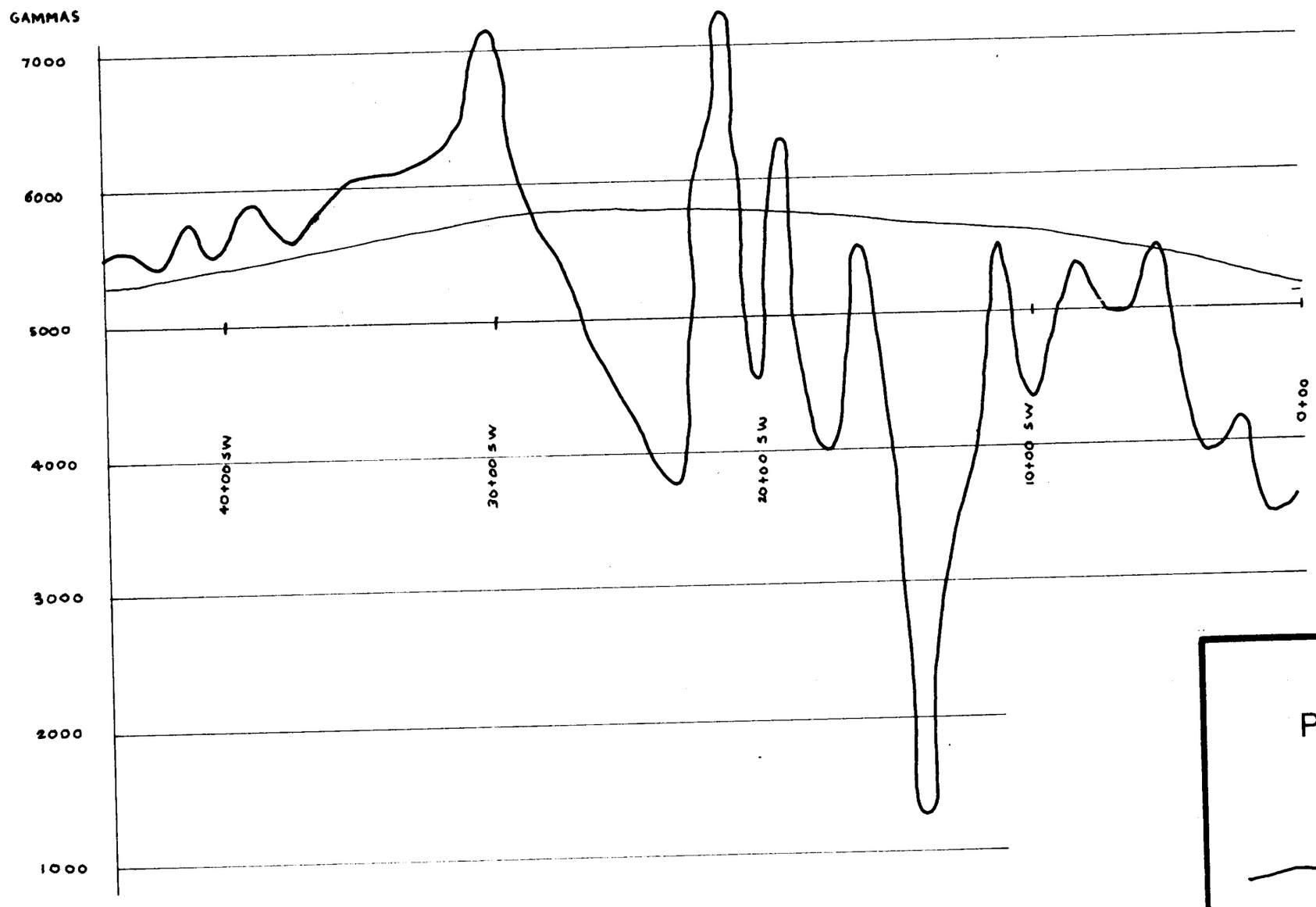
FIG. 4

Drafting - AMH + GLA | 26-1-70

Pacific Geochemical Services Ltd.

Gary L. Anselmo

To accompany report by W. G. Stevenson and G. L. Anselmo on the Gary claim group, 1 mi. SW of Parrott Lakes, Omineca Mining Division, dated January 21/70



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Department of
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SUMMIT OILS LTD
PARROTT LAKE PROPERTY
MAGNETIC PROFILE

Ground Profile

Aerial Profile (From GSC map 5301 G.)

Profile Location shown on Fig. 2

Gary L. Anselmo

To accompany report by W.G. Stevenson + G.L. Anselmo on the Gary claim group, SW of Parrott Lakes, Omineca Mining Division, dated January 21/70

FIG. 5

Drafting – AMH	22-1-70
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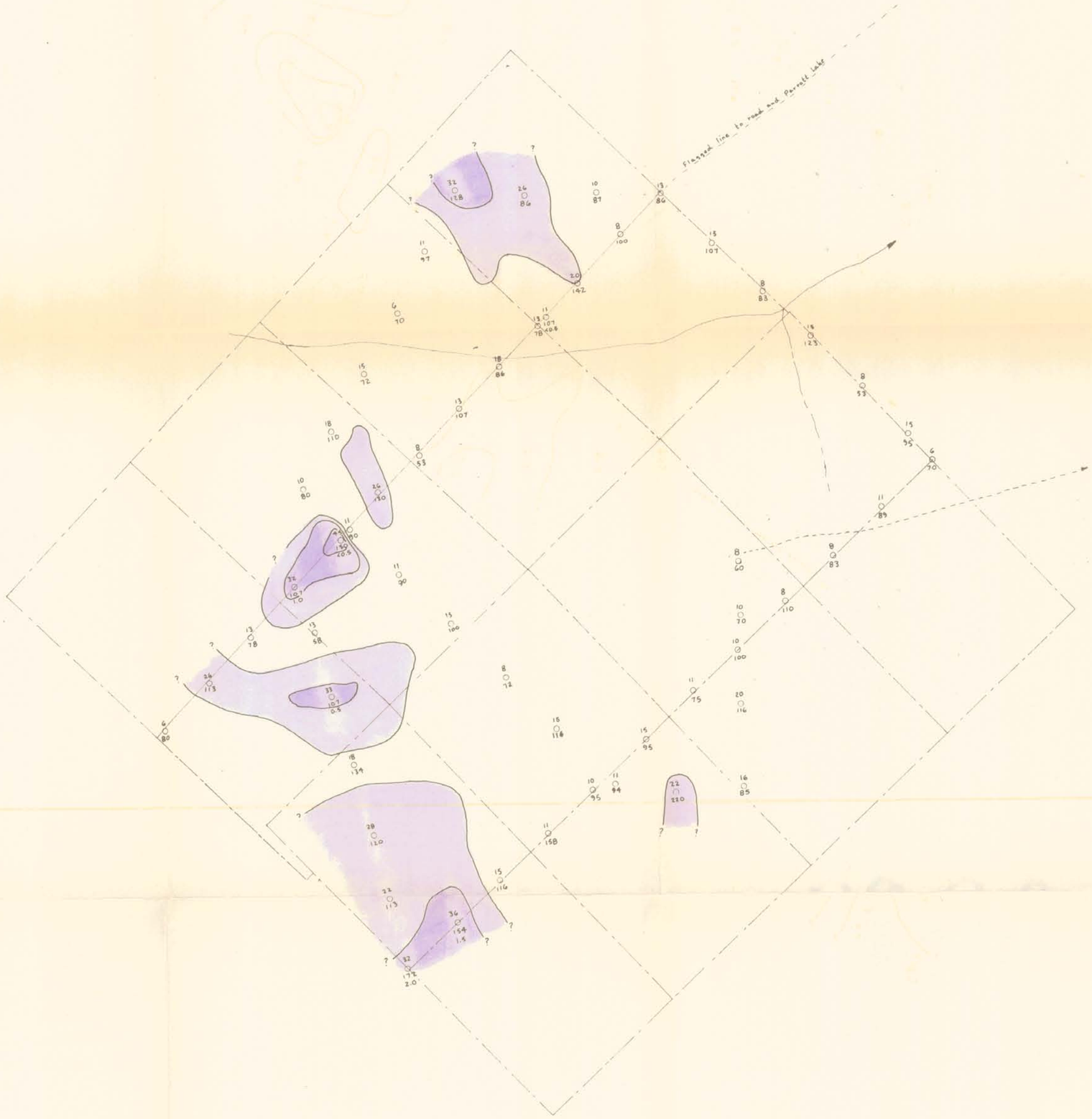

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SUMMIT OILS LTD

PARROTT LAKE PROPERTY

GEOCHEMICAL SURVEY

COPPER

Sample site — ppm 20 Cu, 100 Zn, 0.5 Ag

ppm: 40, 30, 20

Logging trail

Base line

Claim line

5 4 3 2 1 0 500 1000

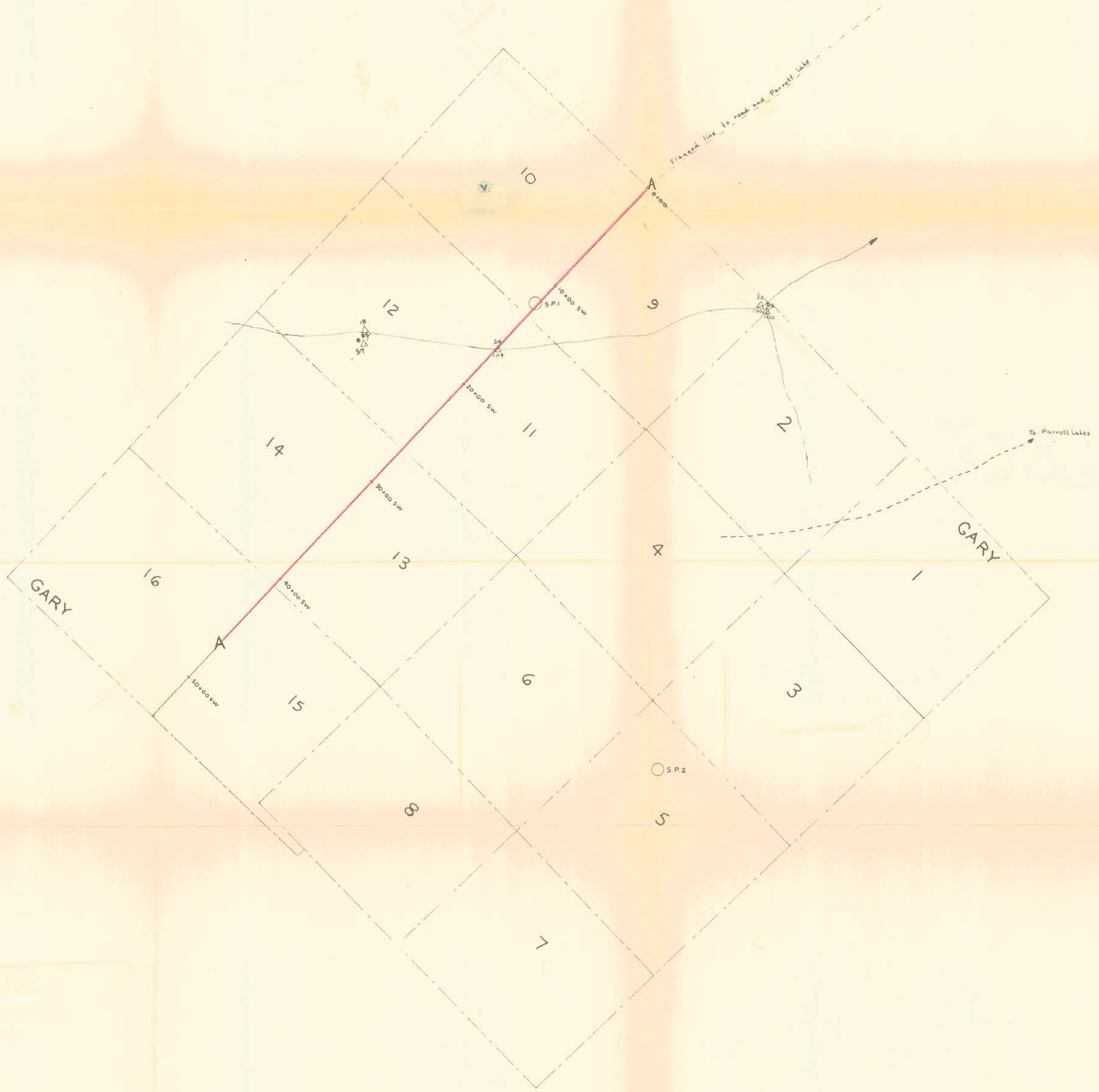
1" — 500'

FIG. 3

Drafting – AMH + GLA	26-1-70
Pacific Geochemical Services Ltd.	

Gary L. Anselmo

To accompany report by W. G. Stevenson and G. L. Anselmo on the Gary claim group, 1 mi. SW of Parrott Lakes, Omineca Mining Division, dated January 21/70



V TERTIARY VOLCANICS

A——A Location of magnetic profile

SUMMIT OILS LTD

PARROTT LAKE PROPERTY

CHAIN AND COMPASS CLAIM SURVEY

Soil profile ○ S.P.2

Silt sample ppm 20 Cu △ 70 Zn

Base line

Claim line

Logging trail

Limit of outcrop

5 4 3 2 1 0 500 1000

1" ——— 500'

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Gary L. Anselmo

To accompany report by W.G. Stevenson and G.L. Anselmo on the Gary claim group, 1 mi. SW of Parrott Lakes, Omineca Mining Division, dated January 21/70

FIG.2

Drafting - AMH	21-1-70
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