ASSESSMENT REPORT

ROCK GEOCHEMISTRY ON THE KODAH #1 CLAIM (15 UNITS)

OMINECA MINING DIVISION

by

JOAN CARNE

LOCATION:

N.T.S. 94E/6W 57^o23' N Latitude 127⁰15' W Longitude

OWNER/OPERATOR: SEREM LTD.

DATES WORK PERFORMED: 26 August 1981

19th September 1981

DATE OF REPORT: October 27, 1981



TABLE OF CONTENTS

| | Pa | ige |
|--------------------------------------|----|--------|
| INTRODUCTION | | 1 |
| GEOLOGY | | 4 |
| GEOCHEMICAL SURVEY | | 4 |
| RESULTS AND INTERPRETATION | | 6 |
| CONCLUSIONS AND RECOMMENDATIONS | | 7 |
| STATEMENT OF EXPENDITURES | | 8 |
| CERTIFICATE OF QUALIFICATIONS | | 9 |
| | • | |
| LIST OF FIGURES | | 4 |
| Figure 1. Location Map, Kodah Claims | | 2 |
| Figure 2. Claims Map: Kodah Claims | | 3 |
| | | 5 |
| Figure 3. Grid Area Location Map | | _ |
| Figure 4. Rock Geochemistry: Gold | In | Pocket |
| Figure 5. Rock Geochemistry: Silver | In | Pocket |

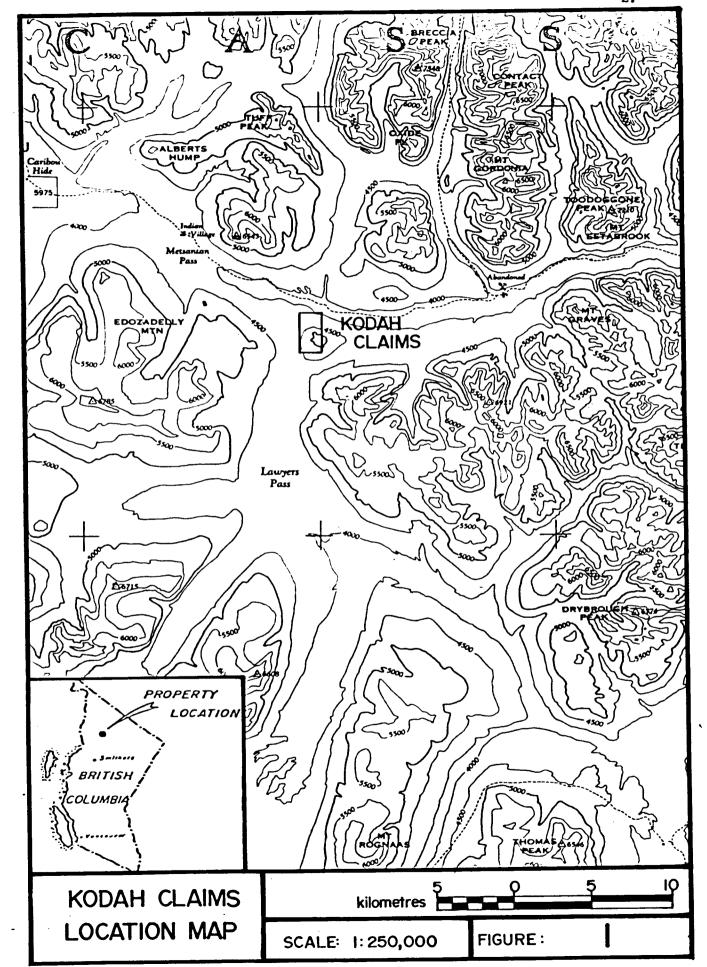
INTRODUCTION

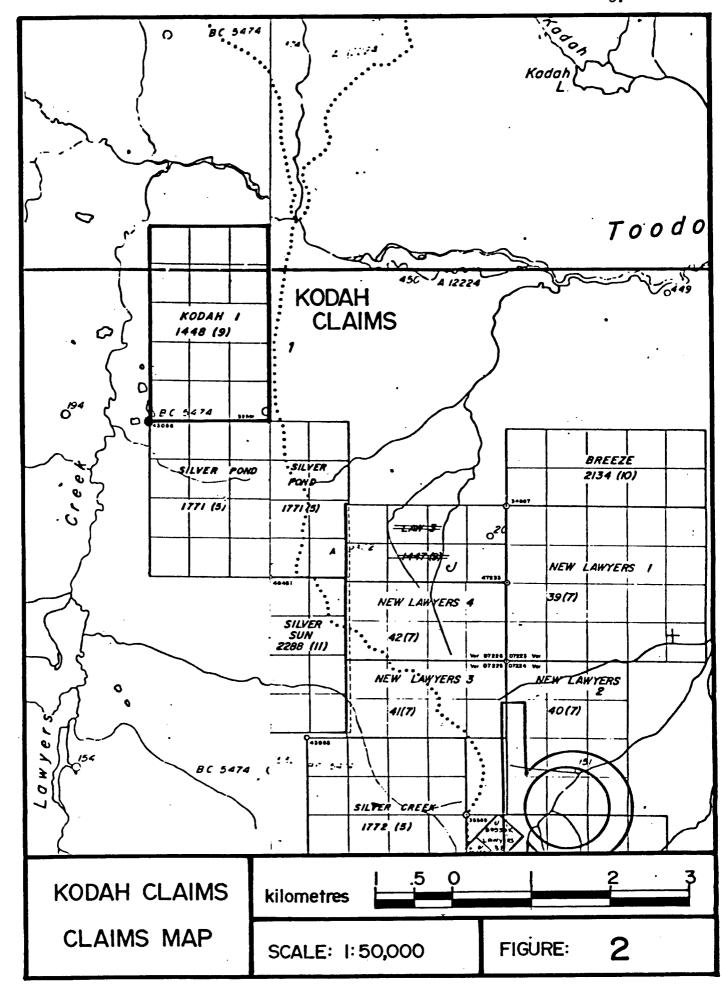
The Kodah #1 Claims are located immediately southeast of the junction of Lawyers Creek and the Toodoggone River at 57°23' N latitude and 127°15' W longitude in the Omineca Mining Division, Toodoggone River Map Sheet 94E/6W (see Figure 1). Elevations range from approximately 1200 to 1500 metres and the property is tree covered. There is, however, abundant outcrop across most of the claims.

Access to the property is by fixed wing from Smithers to Sturdee Valley airstrip, 280 km, and by helicopter from Sturdee Valley to the property, 20 km.

The Kodah #1 claims were staked in August, 1978 and recorded September 28, 1978 by Serem Ltd. to cover ground previously held by Kennco Explorations (Western) Ltd. They are currently owned and operated by Serem Ltd. (Figure 2). During 1971-1973, Kennco surveyed a grid and conducted silt and soil geochemical surveys, a magnetometer survey and mapping of the area (Assessment Reports # 3316, 3361 and 3836). In 1979, Serem Ltd. carried out a closer spaced soil grid over areas found anomalous by Kennco (Assessment Report # 7703).

During the 1981 field season, Serem prospected and carried out a rock geochemical sampling survey in areas with high soil geochemistry. A total of 88 rock samples were collected on the pre-existing grid at 100-foot sample intervals. These samples were analysed for gold and silver.



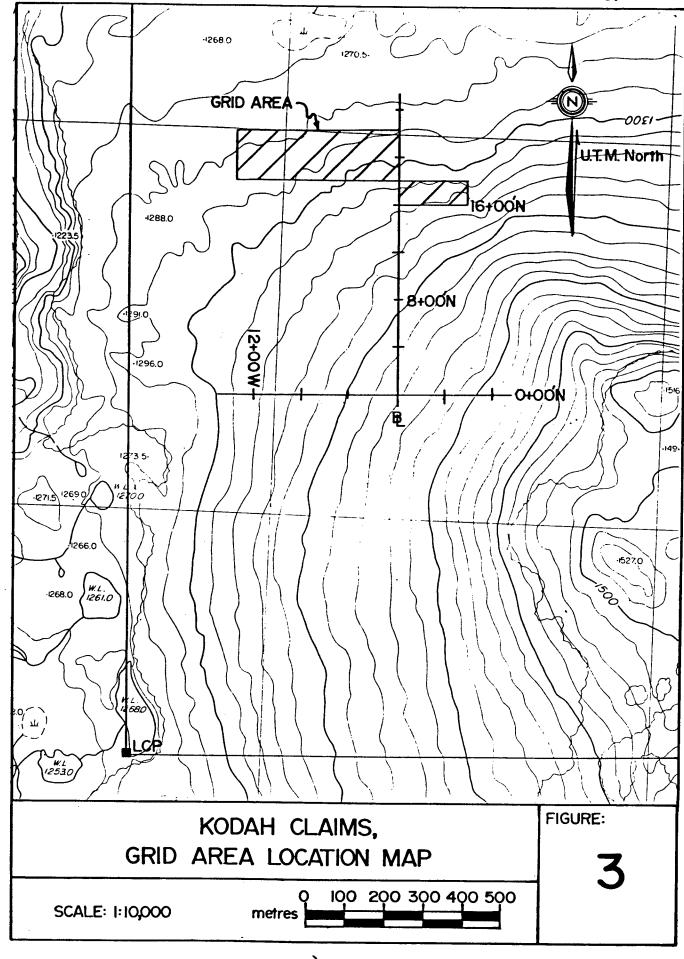


GEOLOGY

The Kodah #1 claims are underlain by flows and pyroclastic volcanic rocks of the Jurassic Toodoggone Volcanics. These include dominantly crystal, crystallapilli tuffs and flows of andesitic composition, characterized by iron stained, pink-orange feldspar. Chlorite and epidote alteration are nearly ubiquitous. Minor quartz veining and disseminated pyrite occurs locally. The slope may be a dip slope in part. Large fractures run northwesterly across the property.

GEOCHEMICAL SURVEY

Although the rocks generally do not appear to be mineralized, high silver and gold geochemical values in soil can not be ignored. Thus a systematic sampling of bedrock was undertaken to ascertain whether mineralization may be completely invisible (for location, see Figure 3). Rock samples were collected along sections of 7 lines of the old Kennco soil grid, which is still visible. A sample spacing of 100 feet was used to coincide with the old sampling. Where quartz veining was present, samplers collected the most silicified material rather than random or representative samples. Approximately three pounds of material were collected at each site and were placed in plastic sample bags. All samples were then shipped to Min-En Laboratories of North Vancouver for gold and silver analysis. The analytical procedure is described below:



The rock samples are crushed and pulverized by ceramic plated pulverizer.

For gold, a suitable sample, weight 5 or 10 grams, is pretreated with ${\rm HNO_3}$ and ${\rm HClO_4}$ mixture.

After pretreatment, the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Sample solutions are prepared with Methyl Iso-Butyl Ketone for the extraction of gold.

With a set of suitable standard solutions, gold is analysed by Atomic Absorption instruments. The obtained detection limit is 5 ppb.

For silver, samples weighing 1.0 gram are digested for 6 hours with HNO₃ and HClO₄ mixture.

After cooling, the samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers using the CH₂H₂-Air Flame combination for silver.

RESULTS AND INTERPRETATION

Gold and silver values for rock samples are plotted on Figures 4 and 5. They are uniformly low with the exception of silver values of 5.6 ppm and 7.0 ppm on two samples. These values are still quite low. They coincide with areas of high soil geochemistry, but are much lower than soil values. It is thought that higher soil values are associated with the northwesterly trending fractures and may reflect mineralization in rocks underlying those exposed on surface.

CONCLUSIONS AND RECOMMENDATIONS

Surface mineralization appears to be very minimal on the Kodah #1 claims though high soil values across much of the claim area suggest the possibility of mineralization at depth. Minor silicification and quartz veining on surface exposures could be higher level and lower grade than underlying mineralization. Further work should include very detailed mapping and possibly diamond drilling, though drill targets are somewhat ambiguous.

STATEMENT OF EXPENDITURES

| Wages | | | | | | | | |
|--------------------------|-------------------|------------------------|----------------|---------|----------------|-------|-----|------|
| C. Chisholm | Aug. 2 | 26, 1981 | prospecting, | 1 day | @ \$ 56 | \$ 56 | | |
| S. Crawford | Sep. 1 | L9, 1981 | sampling | 1 day | @ \$ 92 | 92 | | |
| E. DeBock | Sep. 1 | L9, 1981 | sampling | l day | @ \$ 94 | 94 | | |
| M. Sangster | Sep. 1 | L9, 1981 | sampling | 1 day | @ \$ 62 | 62 | | |
| J. Carne | | | Supervision | l day | @ \$106 | 106 | , | |
| | | | | | | | \$ | 410 |
| <u>Analyses</u> | • | | | | | | | |
| 88 rock geoche | emical s | samples a | analysed for i | Au, Ag | @ \$9.25 | | | 814 |
| | | · | | • | | | | |
| Room and Board | | | | | | | | |
| 5 man days 0 | \$52 | | | | | | | 260 |
| | | | | | | , | • | |
| Transportation | | | | | _ | | | 405 |
| Helicopter: | I hours | s @ \$475 _/ | hour, includ | ing fue | 5T | | | 475 |
| mana anno al de Mana | | | | | | | | |
| Topographic Map | | | | | | | | |
| 1:10,000 scal Burnett | e, 10 m Resour | | rs prepared b | У | | | | 150 |
| | | | | | | | | |
| Report Preparati | ion | | | | | | | |
| J. Carne | 1 day @ | 9 \$106 | | | | | | 106 |
| | | | | | | | | |
| Drafting | | • | | | | | _ | 85 |
| | | | | To | tal | | \$2 | ,300 |
| | | | | | | | | |

CERTIFICATE OF QUALIFICATIONS

- I, JOAN F. CARNE, of Vancouver, B.C., hereby certify that:
 - I hold a B.A. degree in geology from Middlebury College, Middlebury, Vermont, and an M.Sc. degree in geology from the University of British Columbia.
 - I am a geologist, employed by SEREM Ltd. of
 300 535 Thurlow Street, Vancouver, B.C. V6E 3L2.
 - 3. I have worked in geology and mineral exploration for five years.
 - 4. I have no financial interest in the claims covered by this report or in SEREM Ltd.
 - 5. The field work described in this report was carried out under my supervision.

Dated this 27th day of October, 1981 at Vancouver, B.C.

Joan F. Carne, Geologist.

