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R. W. PHENDLER, P.Eng., GEOLOGICAL CONSULTANT, EXPLORATION AND MINING 7360 DECOURCY CRES., RICHMOND, B.C. V7C 4E9 (604) 271-2588

REPORT

on

ASSESSMENT WORK (GEOCHEMICAL)

on the

DEL (20 units, PEP (20 units, TIP (20 units), MOR (20 units),

ORIENTAL and ORIENTAL #1 to #5 CLAIMS

73E /14E, 11E 0.5 to 6 KM NE of SWEENEY LAKE,

OMINECA MINING DIVISION

BRITISH COLUMBIA

(53° 45' N, 127° 08' W)

for

GEOKOR ENERGY HOLDINGS LTD.

Owners: GEOKOR ENERGY HOLDINGS, I. SHEARING & C.H. STANLEY

by

R.W. PHENDLER, P. ENG.

(author and supervisor)

Vancouver, Canada



March 20, 1982

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INTRODUCTION

Between September 24 and October 8, 1981 a geochemical survey was carried out on the Sibola - Comb Creek property of Geokor Energy Holdings. This work was carried out by Nusun Drilling and Exploration Ltd. and was part of the recommendations included in a report on the property dated November 5, 1980 by the writer. Geologist G. Boggaram acted as on-site chief under the supervision of the writer.

LOCATION AND ACCESS

The Sibola - Comb Creek property is located about 80 kilometers southwest of Houston in central British Columbia. Houston is located about halfway between Prince George and Prince Rupert on Highway 16.

Road access to the property is provided by a good gravel road which leaves highway 16 6.5 kilometers west of Houston, follows Morice River for 32 kilometers and then heads southeast past Owen Lake to Nadina River. The road up Nadina River is followed past Nadina Lake to Sweeney Lake and then north to the property. The last few kilometers require the use of a four wheel drive vehicle.

SURVEY PROCEDURE

A base line was established in a north-south direction up the west side of the Del and Tip claims and twenty-seven eastwest cross lines were cut at 100 meter intervals. A total of 58 kilometers of grid was established by compass and chain with geochemical samples collected at 100 meter spacing on the cross lines. A total of 492 samples was collected using a geochemical sampling grub hoe (mattock) from the "B" soil horizon. This was usually located from 8 to 15 centimeters below the surface and a sample

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weighing about 220 grams was collected and placed in wet strength Kraft paper bags with the grid co-ordinates marked thereon.

TESTING PROCEDURE

All samples were analyzed by Chemex Labs Ltd., North Vancouver, B.C. The samples were oven dried, screened to -80 mesh and analyzed for copper, gold, silver, lead, zinc and molybdenum.

For Mo, Cu, Pb, Zn and Ag one gram of the samples was digested in perchloric and nitric acid, diluted and analyzed by atomic absorption. The Pb and Ag results were corrected for background absorption. The Au samples were analyzed by neutron activation. Ten grams of the sample was fused with litharge, carbonate and a siliceous flux and the resulting button was cupelled into a bead. This bead plus a blank lead was irradiated in a thermal neutron flux and the gamma emissions of the irradiated bead were counted utilizing a germanium lithium detection method and quantified for Au. The detection limit is 1 ppb.

EVALUATION OF RESULTS

Frequency distribution and log probability plots for the various elements were drawn. Anomalous values were determined by the break in the upper part of the curve of the log probability plots.

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COPPER (see fig. 3)

It was determined that readings greater than 250 ppm copper were anomalous (47 samples) and were grouped into three distinct zones as follows:

- A north-south zone measuring 1000 meters by 400 meters along the west central part of the survey area.
- A zone composed of three small groups in the east central part of the survey area.
- A small zone in the northwest corner of the survey area consisting of seven anomalous samples.

GOLD (see fig. 4)

Values in excess of 15 ppb gold were considered to be anomalous. Other than a number of one and two reading isolated anomalous zones, three distinct anomalies were located as follows:

- A distinct zone on the west central part of the area surveyed measures 700 meters (N-S) by 250 meters.
- 2) A narrow elongate zone 700 meters long in the central area.
- An irregular zone consisting of four anomalous readings in the southeast corner of the area surveyed.

SILVER (see fig. 5)

Anomalous values are considered to be those greater in value than 0.6 ppm silver. Four significant anomalous zones are in evidence as follows:

- A zone measuring 700 meters (NS) and about 200 meters wide is located in the southwest quadrant of the area surveyed.
- Three zones occur in the north central part of the area surveyed, one (westerly) measuring 700m x 200m, the central 500m x 200m and the easterly about 400m x 500m.

ZINC (see fig. 7)

Zinc values in excess of 115 ppm have been determined to be anomalous. Three zones of interest are apparent as follows:

- A northerly striking zone along the southwest edge of the area surveyed is about 1,000 meters long (NS) by 150 meters wide.
- 2) The entire northeast quadrant of the area surveyed is made up of 75% anomalous readings. Most are only slightly above the anomalous cut-off but the dimensions of the zone are impressive.
- 3) An anomalous zone is located coincident with the lead anomaly in the extreme northwest corner of the TIP claim.

LEAD (see fig. 6)

It has been considered that samples with values greater than 25 ppm lead are anomalous. Three significant anomalous zones have been detected as follows:

- A group of three or four zones in the southwest quadrant of the survey grid are of moderate interest.
- Ten anomalous values are grouped in the northeast corner of the grid and measure about 400m x 200m.
- 3) An interesting anomalous zone 300m x 200m is open to the east and south and is located in the northwest corner of the TIP claim.

MOLYBDENUM (see fig. 3)

With a background of 3.0 ppm for molybdenum, all values in excess of 15 ppm are considered to be anomalous.

A strong anomaly exists in the west central part of the area surveyed, having an east-west strike and measuring 1,100 meters long and about 150 meters in width.

GENERAL EVALUATION

The surveyed area is underlain by mixed volcanic rocks of the Hazelton series and soil development is considered to be good. The topography is of moderate relief and vegetation cover is light in the valleys to absent on the tops of the gently rounded hills.

Coincident anomalous values along the west portion of the surveyed area exist for copper, gold, silver, lead and zinc.

Significant anomalous values exist in the northeast corner of the surveyed area for silver, lead and zinc.

The northwest corner of the TIP claim contains strong co-incident anomalies for lead and zinc and a few anomalous readings for copper and gold.

The strong molybdenum anomaly follows Whiting Creek and may be due to disbursement of this highly mobile element.

It is suggested that more closely spaced geochemical samples be taken in those areas mentioned above.

COST STATEMENT

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Nusun Drilling & Exploration Ltd.	(see page)
Labour		\$3,600.00
Rentals		706.20
Expenses -Branner & Boggaram		1,418.17
Report, Plotting, Interpreration,		
Draughting, Calculations		4,050.00
Chemex Labs Ltd.		5,042.02
	TOTAL	\$14,816.39

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NUSUN DRILLING & EXPLORATION LTD.

#305-1212 WEST BROADWAY, VANCOUVER, B.C. V6H 1G6 PHONE: (604) 733-7811

December 31, 1981.

In Account With: GEOKOR ENERGY HOLDINGS LTD. 305 - 1212 West Broadway Vancouver, B.C. V6H 1G6	
Re: Geochem Sibola TIP, MO Orienta	ical Survey Mtn. Claims R, DEL, PEP, <u>1 Claims</u>
LABOUR G. Boggeram Geologist 6 days @ \$150/day.	
Sept. 24-26, Oct. 6-8 C. Sarter, Field Assistant \$9.00/hour, 10 hours/day,	\$ 900.00
R. Varnel, Field Assistant \$9.00/hour, 10 hour/day, 15 days, Sept. 24 - Oct. 8	<u>1,350.00</u>
RENTALS	\$3,000.00
Blazer 4x4, 15 days @ \$15/day Trailer 15 days @ \$30/day accomodation for four	225.00 450.00
4x4, 208 km @ \$0.15/km	<u> </u>
<u>EXPENSES</u> As per attached	1,418.17
<u>REPORT</u> Topographic Map, C. Stanley Blowup and Draughting, Geochèm. calculations and Draughting.	600.00
C. Stanley, lOdays @ \$150/day G. Boggeram, lday @ \$150/day R. Phendler	1,500.00 150.00 <u>1,800.00</u> _4,050.00

TOTAL INVOICE

<u>\$9,774.37</u>

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KEVAN BRANNER

TO: NUSUN DRILLING LTD.

RE: EXPENSES ON SIBOLA MT.

	October 31st, 1981
Gas	ş 198.34
Car repairs	426.06
Food	386.58
Field supplies	499.27
	\$1,510.25
Less: advanced (Nusun)	500.00
Balance owing	\$1,010.25

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Lus Engines 310.06 \$ 1,200,19 MJ Gupta Engenes 217.98 \$ 1,418.17

332. Jun 6/32 # 1.010.25

Gupta Boggaram	
To: Nusun Drilling Ltd.	
Re: Sibola Mt. Project	October
	\$250.00

Advance

Less: Motel	\$39.22
Food	81.05
Gas	97.71

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Balance

217.98 \$ 32.02 R. - Synt on Cet 16, 198.

15, 1981

March 25, 1982

Geokor Energy Holdings 305 - 1212 W. Broadway Vancouver, B.C. V6H 1G7

Attention: Mr. C. Stanley

INVOICE No. 242

Re: Professional services of R.W. Phendler, P. Eng. for the laying out of the geochemical survey, discussions regarding field procedure, analyzing results of the program and preparation of the assessment report.

Equivalent - 5 days @ \$350/day..... \$1,750.00

Recoverable expenses

I, R.W. PHENDLER, P. ENG., of 7360 Decourcy Crescent, in the Municipality of Richmond, in the Province of British Columbia, hereby certify as follows:

- THAT I am a registered member of the Association of Professional Engineers of British Columbia - No. 4421.
- THAT I am a graduate of McGill University, Montreal, Canada, with a Bachelor of Science degree in Geology.
- THAT I have worked continuously as a geologist for the past
 28 years.
- 4) THAT I examined the Sibola- Comb Creek property on September 12, 1980, supervised and planned the work and interpreted the results.

Row Do. R.W P. Eng. . Phendler

QUALIFICATIONS OF GUPTA BOGGARAM

Mr. Gupta Boggaram is a resident at 9731 No. 3 Road, Richmond, B.C. V7A 1W2. During 1980 and 1981 he has been employed by Gold Leaf Mining Explorations Ltd., Nusun Drilling Ltd., Geokor Energy Holdings Ltd., and Bishop Mines Ltd. on various projects. He is well qualified as a geologist. He graduated from the University of Mysore (India) in 1961 with a Master's Degree in Geology. From 1961 to 1970 he gained experience as a project geologist working on various projects in India, West Germany, Canada and the United States including Pine Point Mines. From 1970 to 1976 he worked on a contract basis with various consulting geologists on exploration projects in British Columbia, Yukon and the Northwest Territories. From 1976 -1979 he worked in Zambia, Africa and returned to Canada in 1979 where he continues to practice his profession.

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