GEOLOGICAL BRANCH ASSESSMENT REPORT

111 COL PROPERTY

COIN #1-4 MINERAL CLAIMS

GEOLOGICAL AND GEOCHEMICAL SURVEYS

AINSWORTH AREA

SLOCAN M. D.

82 F/15W

Long. 116º58'

Lat. 49°48'

OWNER:

Mrs. E. B. Carter

OPERATOR:

Gower, Thompson & Associates Ltd.

CONSULTANT:

Gower, Thompson & Associates Ltd.

AUTHOR:

Stephen C. Gower

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INTRODUCTION

The Coin property has produced low tonnages of silver ore from a high grade shear zone. Detailed examination of the property has indicated the potential to host economic concentrations of lower grade silver ore in the adjacent argillaceous and cherty limestones (Unit 4D). Samples were selected in this survey to identify the mineral compositions in the various rock groups and determine significant pathfinders in the search for additional ore.

CONCLUSIONS

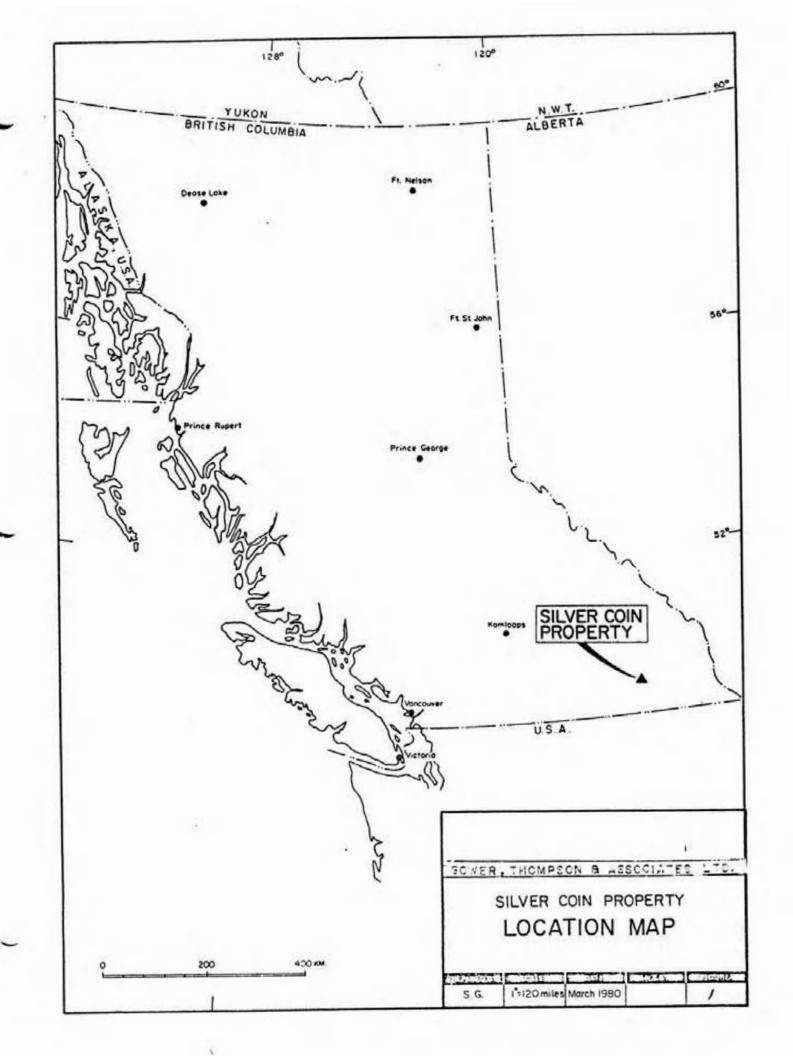
The property deserves further follow-up to explore for additional pods of high-grade silver in the shear zone and higher tonnages of lower-grade material in the adjacent sediments.

RECOMMENDATIONS

The property should be carefully geologically mapped and a detailed rock geochemical sampling program carried out. Pits should be blasted in areas of shallow over-burden to test zones already known to carry anomalous concentrations of silver in soil.

LOCATION

The Coin property is located four miles west of Kootenay Lake on the north side of Woodbury Creek. Access to the property is by a 4-wheel drive road along Woodbury Creek



LOCATION, contd.

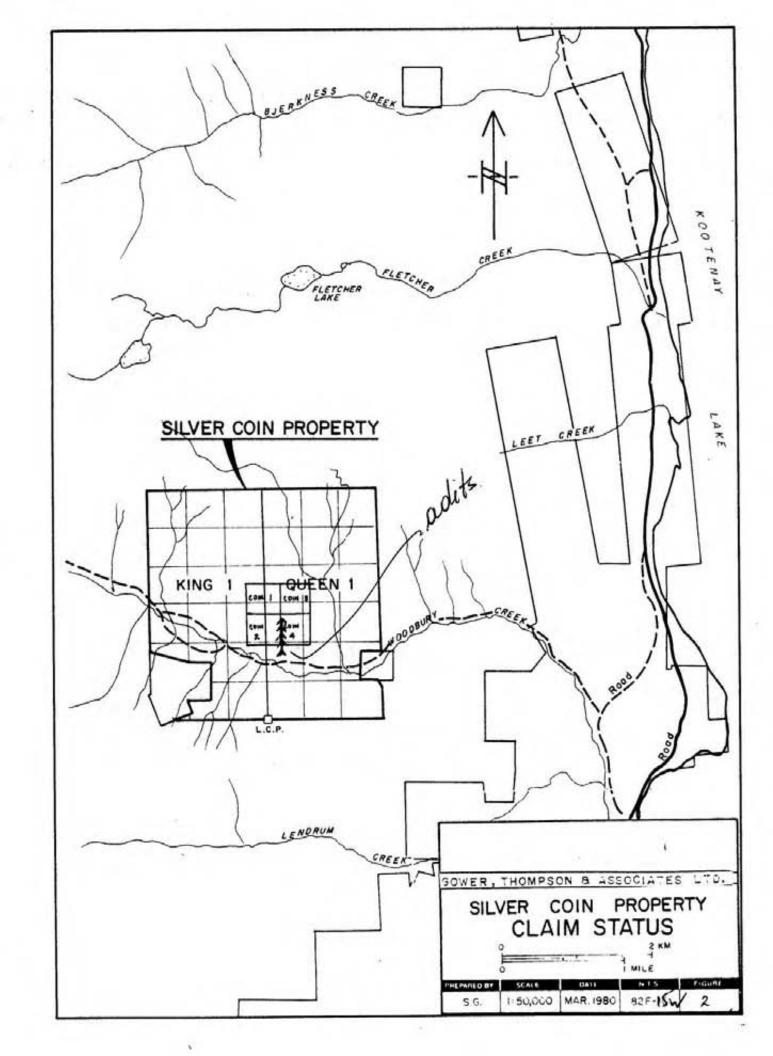
at a point where it leaves Highway 31 north from Balfour. The centre of the property is reached on foot by a bull-dozer trail which extends almost to Adit Level #2. The access road at the time of writing this report was cut by a slide about 1-1/2 miles from Highway 31.

PROPERTY STATUS

The property consists of four old-style, two-post claims (Coin #1-4) and two four-post claims each containing 18 units (King #1, Queen #1).

HISTORY OF PREVIOUS WORK

In the late 1890's, prospectors discovered float boulders in Woodbury Creek containing native silver. Subsequent follow-up resulted in the discovery of the shear zone mineralized with galena, tetrahedrite and native silver. Underground mining was carried out with hand steel on five levels over a period of 40 years; however, shipping grade material was recovered only from Levels #4 and #5. High-grade material was selected from these levels from which 32 tons shipped returned 4597 ounces of silver, 7111 pounds of lead and 1958 pounds of zinc. This averages in grade 10% lead, 3% zinc and 140.0 oz./ton Ag. The property was abandoned during the Second World War and remained inactive until the middle 1950's when it was explored by a junior mining company under the name of Silver Coin Exploration. This company mined out the roof of the adit at Level #3 and shipped out 15 tons of



HISTORY OF PREVIOUS WORK, contd.

ore which averaged 20.0 oz./ton Ag. Subsequent to the shipment, the promoter of the company left the country taking with him all available funds. The property was acquired by Bill Carter in 1979.

MINERALIZATION

Mineralization observed in the shear zone consists of galena, sphalarite, chalcopyrite, pyrite, azurite malachite and hydrozincite. This mineralization is hosted in a limey carbonaceous shear cut by veins and swarms of quartz. A high-grade zone is present in the workings at Level #4 adjacent to the slickensided hanging wall where fault gouge contains up to 173.0 oz./ton Ag over narrow widths.

OLD WORKINGS

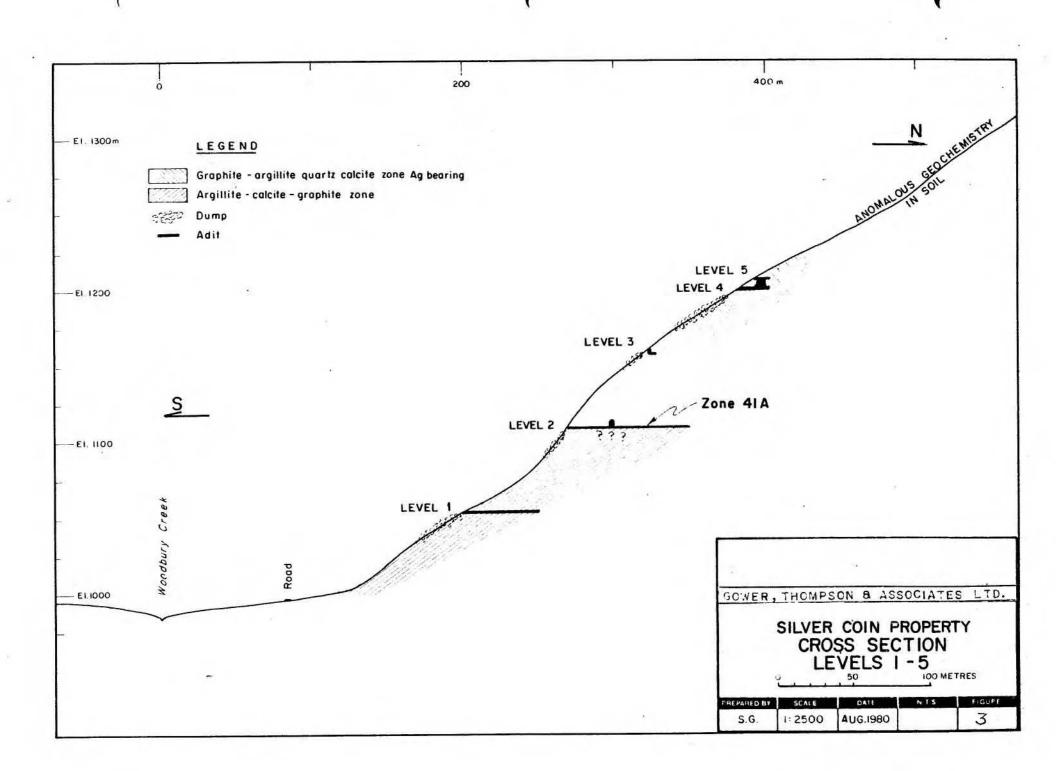
A brief description of the workings based on previous sampling by the author is as follows:

- Level #1 Elevation 1,045 metres, length 53.0 metres.

 This adit follows an argillaceous shear zone approximately two metres in width. Sample values range from 0.12 to 0.32 oz./ton Ag.
- Level #2 Elevation 1,110 metres, length 80 metres.

 This working follows the same structure as
 Level #1. The zone consists of sheared
 argillite cemented by gouge and calcite.

 Sample values range from trace to 2.15
 oz./ton Ag (Zone 41A).



OLD WORKINGS, contd.

- Level #3 Elevation 1,150 metres, existing length 3 metres.

 This zone has been mined in a previous exploration program. Samples from the present backs assayed only 0.18 to 1.12 oz./ton Ag in highly leached material. Previous sampling of fresher material reported averaged 15.0 to 20.0 oz./ton Ag. This is supported by random dump samples by the author, which averaged 19.5 oz./ton Ag.
- Level #4 Elevation 1,190 metres, length 23 metres to cave-in. This level follows a zone of sheared argillite mineralized with veinlets of quartz and calcite. Sampling by the author in 1979 and 1980 of roof and backs where accessible averaged about 4.0 oz./ton Ag across 1.0 to 1.5 metres over the length of the adit. Narrow quartz veins and gouge zones carry much higher values commonly averaging 20.0 to 30.0 oz./ton Ag with the highest value being 173.0 oz./ton Ag. Previous records of mining indicate a zone of massive sulphide was removed from this level which averaged 10% Pb, 3% Zn and 140.0 oz./ton Ag. Further exploration on the property should focus on discovering additional pods between Levels #3 to #5.
- Level #5 Elevation 1,200 metres, length nil. This level may be stoped into from Level #4 and access from surface is blocked by caved material.

 Attempts to dig out the caved material resulted in further slumping. Material in the dump from this level averaged 5.5 oz./ton Ag.

POSSIBILITIES OF BULK OCCURRENCES OF LOWER GRADE MATERIAL

Mapping by the author has indicated that an interbedded chert, argillite and limestone unit exists adjacent to the mineralized shear on its east side. This unit is tentatively correlated on the government map with unit (4D) located on the south side of Woodbury Creek, southeast of the old workings. Geochemical sampling of this unit between Level #2 and the bulldozer road creek indicates the sediments are carrying anomalous levels of silver and lead. The major zone of interest indicated by previous soil sampling is situated north and east of Levels #4 and #5 where soil samples range up to 133.2 ppm Ag.

ANALYTICAL PROCEDURES

Thirty rock samples were collected from the property and shipped to Min-En Laboratory for ICP analysis. The samples were analyzed for Ag, Al, As, B, Bi, Ca, Cd, Co, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, U, V, and Zn. An additional description of the analytical method is included in the appendices.

SAMPLE NOTES

S-83-1 - Sample from highly leached hanging wall adjacent to zone at Adit Level #5. Sample consists of altered argillite cut by yellowish stringers of jarosite and occasional veinlets of calcite and quartz.

SAMPLE NOTES, contd.

- S-83-2 Sample from cherty footwall adjacent to zone at Level #5. The sample consists of black argillite with seams of graphite.
- S-83-3 Sample of zone from Level #5 consisting of limey breccia cut by quartz stringers.
- S-83-4 Sample of main zone Level #5 consisting of vuggy breccia.
- S-83-5 Sample of footwall Level #4 consisting of cherty siltstone.
- S-83-6 Sample of hanging wall argillite from Level #4.
- S-83-7 Sample of 20 cm wide quartz stringer zone above portal mineralized with specks of malachite and azurite.
- S-83-8 Sample of vein breccia from main zone Level #4.
- S-83-9 Sample of graphitic argillite Level #4.
- S-83-10 Sample of highly leached altered limey greyish argillite across 1.0 metre sample length.
- S-83-11 Same zone as S-83-10 for an additional 2.0 metres east.
- S-83-12 Sample of black argillite above trail about 8.0 metres west of S-83-11.

SAMPLE NOTES, contd.

- S-83-13 Sample of grey-black argillite cut by 2 quartz stringers.
- S-83-14 Sample of 10 cm quartz vein about 2.0 metres west of S-83-13.
- S-83-15 Sample of argillite hosting vein at sample S-83-14.
- S-83-16 Sample of bluish-black argillite on trail about 5.0 metres west of Level #3.
- S-83-17 Sample of argillite cut by limey stringers from the shear zone at Level #3. The sample contains seams of yellowish jarosite and graphite and vugs of calcite crystals.
- S-83-18 Sample of fragmental limestone from Level #3.
- S-83-19 Sample of cherty argillite below Level #3.
- S-83-20 Sample of footwall cherty argillite from Level #2.
- S-83-21 Sample of hanging wall argillite from Level #2.
- S-83-22 Sample of limey argillite 8.0 metres east of Level #2 on trail.
- S-83-23 Sample of cherty sediment cut by quartz stringers 12.0 metres east of Level #2 on trail.

SAMPLE NOTES, contd.

- S-83-24 Sample of blackish argillite at end of bulldozer trail.
- S-83-25 Sample of altered banded blue-grey limestone.
- S-83-26 Sample of talcose whitish rock probably dyke rock.
- S-83-27 Sample of brownish weathering ultramafic dyke rock.
- S-83-28 Sample of altered blue-grey limestone.
- S-83-29 Sample of banded blue-grey limestone at creek.
- S-83-30 Sample of breccia zone with visible galena at Level #5.

GENERAL GEOLOGY

Geological evaluation indicates the silver mineralization on the SILVER CONN property appears to be related to hornblendite phases of the Nelson Batholith contained within a metamorphic aureole. Hornblendite grading to hornblende diorite occurs as lenticular dyke-like masses along the margin of the batholith near Woodbury Creek. North of the creek the hornblendite forms medium to coarse grained outcrops which weathers into peculiar rounded forms. The hornblendite contains biotite, hornblende and minor amounts of andesine. South of Woodbury Creek the lenses consist of mottled diorites locally containing minor quartz. One of the lenses north of Woodbury Creek cuts porphyritic rock of the Nelson Bathclith which has a chilled margin. In other locations the fornblendite contains inclusions of granodiorite which indicates intrusion after the batholith was consolidated.

A zone of thermal metamorphism encloses most of the known occurrences of silver on the property. This zone of contact metamorphism follows the eastern side of the batholith and reaches its greatest width on the SILVER COIN property, (% mile). South of Woodbury Creek the zone narrows and south of Coffee Creek it appears to be less than 20 feet wide.

The contact metamorphism has been described one mile north of the SILVER COIN property by Templeman-Kluit (1961). In the lowest grade of metamorphism, argillaceous rocks contain quartz, biotite, muscovite, albite and eipdote, and calcareous rocks contain tremolite. Higher grade argillaceous rocks closer to the batholith contain minor amounts of cordierite, and alusite and locally hornblende. In the highest grade of metamorphism, garnet and sillimanite are found in the calcareous rocks and diopside, garnet scapolite and plagioclase occur in the calcareous rocks.

WORK PROGRAM

GEOLOGY

The property is underlain by argillaceous and limey units of the Slocan sedimentary series where they are in contact with the basinal volcanics of the Kaslo series. The sediments are cut by ultramafic dykes probably related to the nearby hornblendite intrusive rocks. The shear zone is hosted in mauve-grey calcareous argillites on the hanging wall and a siliceous chert breccia unit on the footwall. Between the chert breccia and the Kaslo volcanics which form the hinge for a major anticlinal structure is at enclosed bed of altered limestone. The shear zone traverses across the western limb of the anticline progressing towards the hinge as it travels upslope. East of the hinge, altered Slocan black argillites are in contact with an intrusive sill.

GEOPHYSICS

A limited amount of C.E.M. Horizontal Shootback coverage was carried out in the vicinity of the adits to determine if the method would respond to the narrow low sulphide silver veins observed in the adits. A coil separation of 50 metres and an operating frequency of 5010 HZ were utilized based on the known parameters such as low sulphide content, narrowness of shear zones and the time constraint. In general it was discovered that the shear zones possessed a strong E.M. response. The altered Kaslo volcanics in the hinge of the anticline also formed a good conductor due to the presence of thick continuous seams of graphite.

A magnetometer survey was carried out utilizing the existing soil geochemical survey grid.

Alpha Cour

STATEMENT OF COSTS

WAGES: S. C. Gower - May 11, 12, 13	
3 days @ \$300/day	\$ 900.00
E. M. Thompson - May 11, 12, 13	
3 days @ \$100/day	\$ 300.00
<u>SUPPORT</u> : 3 days @ \$45/day	\$ 135.00
<u>MOTEL</u> :	\$ 37.10
ASSAYS: 30 Rock samples @ \$7.50/sample	
ICP analysis	\$ 225.00
REPORT PREPARATION: 4 days @ \$100/day	\$ 400.00
<u>DRAFTING</u> : 10 hrs. @ \$10/hour	\$ 100.00
<u>TYPING</u> : 3 hrs. @ \$10/hour	\$ 30.00
COPYING & PRINTING:	\$ 20.00
TRAVEL: 1,000 miles @ 40¢/mile	\$ 400.00

Stephen C. Howen .

STATEMENT OF QUALIFICATIONS

I, STEPHEN C. GOWER, am a resident of British
Columbia and a Graduate from the University of
British Columbia with a Batchelor of Science
Degree in Geology. I have practised my profession
as Geologist for the past 12 years for major
mining companies and am currently a partner in
Gower, Thompson & Associates Ltd.

Style O Sowe.

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

October, 1982.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 24 ELEMENT ICP

Ag, Al, As, B, Bi, Ca, Cd, Co, Cu, Fe, K, Mg, Mn, Mo,

Na, Ni, P, Pb, Sb, Sr, Th, U, V, Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with ${\rm HNO_3}$ and ${\rm HClO_4}$ mixture.

After cooling samples are diluted to standard volume. The folutions are analysed by Computer operated Jarrell Ash 900 ICP. Inductively coupled Plasma Analyser. Reports are formated by routine computer dotline print out.

MINEN LABS ICP REPORT

PAGE 1 OF 2

FILE NAME: 3-270/R ACT NAME: GEO3 DATE: MAY 24, 1983 COMPANY: WESTERN HORIZONS LTD

PROJECT:

--- CONCENTRATION IN PPM ----

AS	AL	AS	В	BI	CA	CD	CO	CU	FE	K	M6
9-83-1 5.0	1830	0	3	0	189000	8.1	3	36	16600	126	77900
S-83-2 6.8	1080	0	4	0	164000	13.2	3	21	15300	256	88500
S-83-3 97.9	921	0	8	0	251000	371.0	4	1200	19600	183	67500
S-83-4 130.0	1170	7	4	103	83100	86.1	2	5850	20300	354	44700
S-83-5 8.9	311	0 ,	3	0	180000	10.7	2	90	16000	46	97500
5-83-66.3	3840	0	5	0	251000	8.5	4	36	16600	1290	69200
S-83-7 42.7	552	2	1	14	57100	18.7	1	1010	11300	132	31100
S-83-8 to 92.2	1380	31	0	21	20200	37.3	1	1150	8150	395	10200
S-83-9 16.6	1100	0	2	. 0	180000	25.4	4	57	17000	35	96700
5-83-10. 5 4-1 8.6	495	0	2	0	251000	8.8	3	11	17800	84	88300
S-83-11 - 5.2	534	0	2	0	192000	8.1	3	11	16600	16	94700
S-83-12 1 1 1 1 1 0	64300	0	44	24	23600	2.4	24	61	111000	15800	15900
9-83-13	26600	0	18	13	10000	1.0	11	114	48600	5780	7410
5-83-14 1.3	1910	0	0	1	1110	0	1	13	5990	384	924
S-83-15 2.5	18900	0	13	0	141000	3.0	10	11	49900	6980	24300
S-83-16 2.2	59000	0	39	24	18000	3.3	25	9	118000	16300	15800
S-83-1702 - 14.8	7760	0	. 7	0	205000	15.0	5	30	21900	1010	57700
S-83-18 14.1	1720	16	2	0	270000	53.2	4	20	19400	150	28000
(S-83-19 mar abole In once 4.7	307	0	2	0	270000	8.2	4	5	16800	65	143000
S-83-20 5.1	300	0	2	0	197000	8.8	4	6	16700	62	102000
- S-83-21 A-MC 3.8	22400	0	14	0	270000	6.7	6	22	27300	3580	40600
S-83-22 1 10 4 3.1	734	0	2	0	201000	6.8	3	6	15400	159	79600
S-83-23 3 3.7	301	0	1	0	218000	7.2	4	4	16000	39	89100
S-83-24 care diameter 4.1	551	0	3	0	270000	8.2	4	6	16500	89	143000
S-83-25.6040-9 45 4.0	249	0	2	0	270000	8.2	4	4	16800	28	103000
S-83-26 The 3.6	9580	0	6	0	126000	6.3	4	5	16700	596	144000
S-83-27:41:415 4.5	9930	0	7	0	270000	7.7	5	5	17800	588	143000
S-83-28 4.5	469	0	4	0	270000	8.2	4	5	16800	74	143000
S-83-29 4.9	743	21	2	0	270000	5.2	4	6	19900	283	29100
-30 LEV#5 1 42.1	868	0	2	5	270000	54.3	3	2270	18500	180	66800

FILE NAME: 3-270/R ACT NAME: GED3

DATE: MAY 24, 1983 COMPANY: WESTERN HORIZONS LTD

PROJECT:

--- CONCENTRATION IN PPM ----

	HN	MO	NA	NI	P	PB	SB	SR	TH	u	V	ZN
S-83-1	85	6	9	2	481	45	10	139	33	0	28.6	86
5-83-2	112	4	13	0	704	87	12	79	33	0	36.0	73
S-83-3	757	244	11	3	1320	2840	34	175	42	0	25.5	2650
5-83-4	188	41	12	4	1330	26400	651	142	22	0	27.9	1660
S-83-5	56	5	14	0	205	331	18	57	32	0	19.8	31
S-83-6	58	7	7	8	1100	149	15	123	48	0	39.2	51
S-83-7	164	19	7	5	414	5080	248	117	17	1	16.0	491
S-83-8	262	11	11	11	1170	6340	611	115	8	21	16.6	708
5-83-9	96	4	10	0	257	190	19	138	32	0	26.0	290
S-83-10	184	4	11	0	274	87	13	43	42	0	23.5	140
5-83-11	142	4	9	0	95	61	12	26	34	0	18.9	29
S-83-12	260	4	0804	41	569	0	0	222	13	20	129.0	23
S-83-13	184	3	1960	23	489	0	0	83	8	6	54.8	11
S-83-14	58	1	73	7	144	0	1	4	2	3	4.5	6
S-83-15	163	6	1290	22	1470	2	0	155	24	0	57.8	14
S-83-16	325	3	5950	40	539	12	0	227	13	17	116.0	39
S-83-17	267	3	39	21	1660	230	17	354	37	0	44.1	190
S-83-18	660	2	19	11	673	384	34	117	38	0	23.4	357
S-83-19	70	0	18	0	25	98	5	20	31	0	19.5	0
S-83-20	77	0	21	0	43	98	9	80	39	0	22.6	0
S-83-21	102	0	15	24	560	60	5	89	51	0	74.8	42
5-83-22	39	0	18	0	282	78	7	61	40	0	18.6	0
5-83-23	9	0	6	0	121	82	7	26	40	0	16.6	0
5-83-24	. 57	0	11	0	247	91	4	7	28	0	26.6	0
5-83-25	8	0	18	0	80	87	8	18	48	0	15.8	(
5-83-26	20	0	45	0 .	1070	70	0	317	0	0	23.5	0
S-83-27	23	0	47	0 '	1200	76	0	283	20	0	24.9	0
S-83-28	8	0	29	0	21	104	4	119	28	0	16.2	0
S-83-29	231	2	16	9	640	68	9	2820	9	175	12.0	76
LEV#5	247	14	18	3	740	6970	460	112	50	0	27.2	1010

