183-530-11477
9

A GEOCHEMICAL REPORT ON THE

CAYUSE CLAIM

KAMLOOPS MINING DIVISION

NTS 92 I/15W

Latitude 50° 55' N
Longitude 120° 56' W
Owner: Packard Resources Ltd.
Operator: Asarco Exploration Co. of Canada Ltd.

by

Robert A. Dickinson (Geologist)
of
TRM Engineering Ltd.
#701 - 744 West Hastings Street
Vancouver, B.C.

September 21, 1983

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,477

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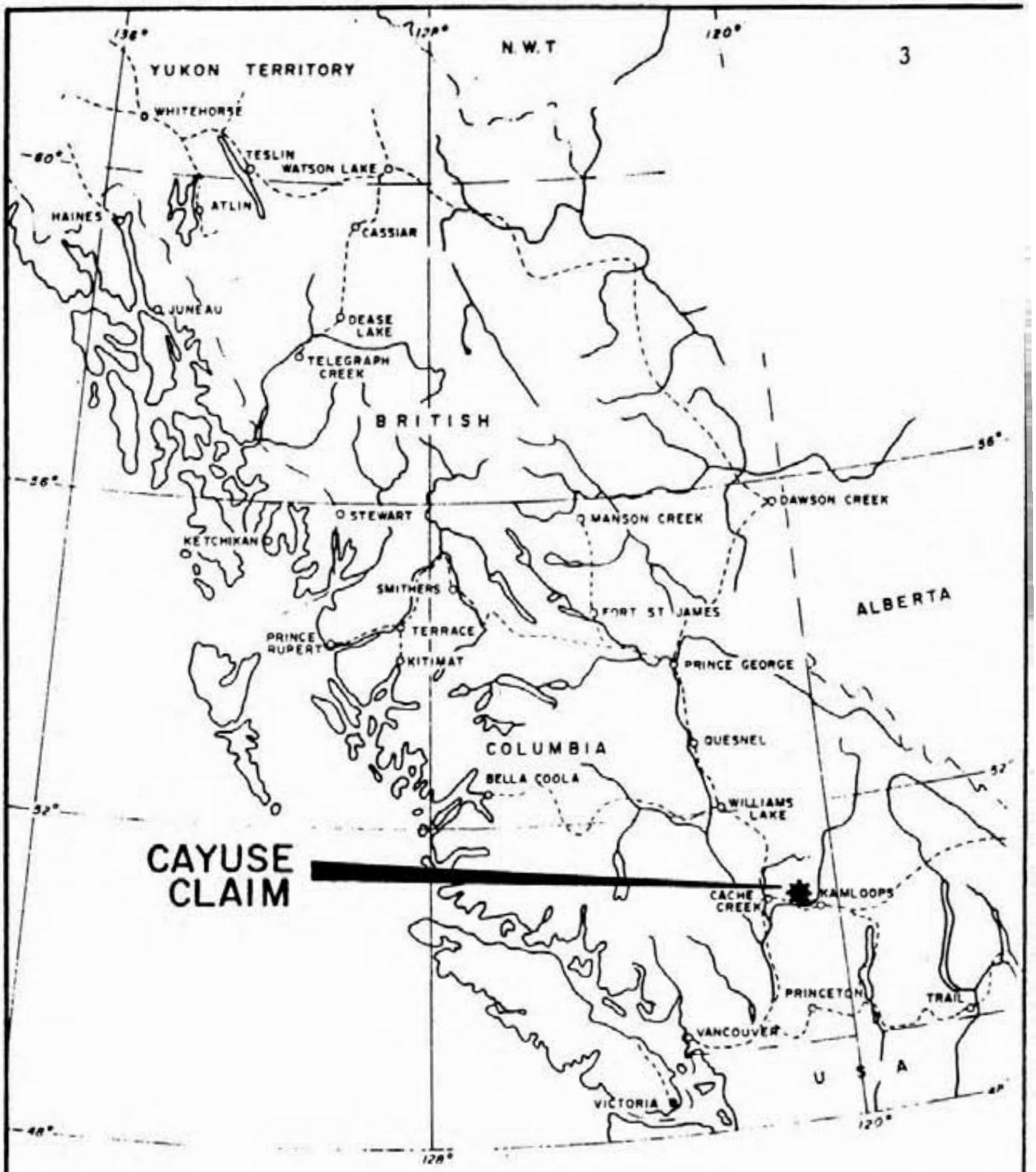
INTRODUCTION

Packard Resources Ltd. (formerly Churchill Petroleum Inc.) is the 100% owner of the Cayuse claim. During the summer of 1983 Asarco Exploration Co. of Canada Ltd. requested permission to preliminary evaluate a portion of the claim for its precious metal potential by soil sampling. Permission was granted by Packard and Asarco workers collected 88 soil samples and 2 rock samples. These samples were analyzed by Acme Analytical Laboratories Ltd. for Asarco for 31 elements. Asarco gave permission to Packard to use their work for this assessment filing. The writer, Robert Dickinson (geologist) was requested by Packard to compile the data and report on it. Geological descriptions used herein for background purposes are taken wholly from an earlier report; "Report on the Cayuse Claim, for Churchill Petroleums Inc., by J.B.P. Sawyer, P. Eng." and dated July 19th, 1982.



CAYUSE CLAIM

CRISS CREEK AREA, KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

GENERAL LOCATION SKETCH

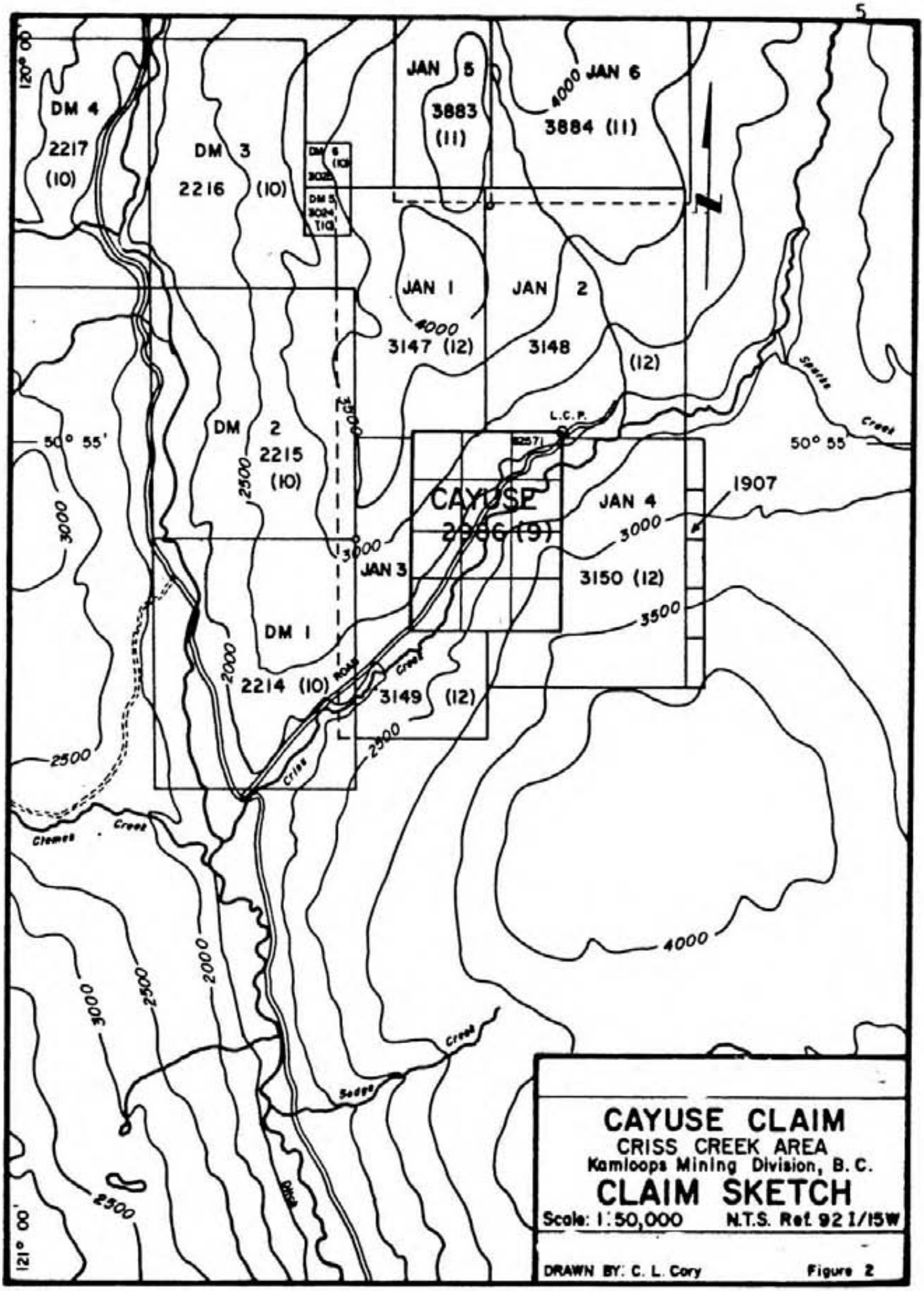
SCALE: 1" = 125 MILES

PROPERTY

The Cayuse claim is located in the Kamloops Mining Division. Pertinent claim information is:

Claim	Record No.	Units	Record Date	Expiry Date
Cayuse	2986	12	Sept. 24/80	Sept. 24/83

The claim is plotted on B.C. Department of Mines claim map 92I 15N.



CAYUSE CLAIM

CRISS CREEK AREA

Kamloops Mining Division, B. C.

CLAIM SKETCH

Scale: 1:50,000 N.T.S. Ref 92 I/15W

DRAWN BY: C. L. Cory

Figure 2

LOCATION AND ACCESS

The property is located 11 miles north-northwest of Savona at the western end of Kamloops Lake, on Criss Creek which is a tributary of the Deadman River which flows into Kamloops Lake. It is approximately 32 air miles northwest of Kamloops and some 40 miles from Kamloops by road. The coordinates of the Legal Corner Post are 50°55'N, 120°56'W approximately.

Access to property can easily be had from Savona, which is one the Trans Canada Highway #1, via the Deadman Creek road and a secondary ranching road which leaves the Deadman Creek road at the junction of Deadman Creek and Criss Creek, and traverses along the north side of Criss Creek. The Deadman Creek road leaves the Trans Canada Highway approximately 5½ miles west of Savona, and the distance from this junction to the junction of the Deadman Creek road and the Criss Creek road is approximately 8 miles. From this junction to the Legal Corner Post along the Criss Creek ranching road is 4.2 miles.

PHYSIOGRAPHY

The Cayuse claim is in the southern part of the Interior Plateau within the Intermontane Physiographic System. Elevations in the property area range between 2000 feet and 4000 feet, the terrain being characterized by generally broad, well forested hills, and locally, steep sided valleys. Vegetation includes fir and predominantly Ponderosa pine as well as some deciduous trees. Mean annual precipitation in the area is in the range 30 to 40 centimetres.

HISTORY AND PREVIOUS WORK

This particular part of British Columbia has a fairly long history of mining and has been the focus of prospecting and claim staking activity since the turn of the century. The geological features which attracted earlier attention are the occurrences of mercury mineralization (cinnabar, and realgar) and more recently the occurrence of antimony and silver mineralization. McClaren and Visagie (1975) have commented that coexistence of mineral assemblages including stibnite, realgar, and cinnabar is uncommon in the Wester Cordillera although it is known in part of Nevada.

Apparently the first mineral claims in the area were staked as early as 1896 to cover cinnabar showings which were then worked up to the turn of the century. The area was restaked in 1929 by the Mercury Mining Syndicate of Vancouver, B.C., which group in the ensuing period up to 1938 carried out some exploration which included driving short adits, and sampling. Assays are reported from the claims containing as much as 8.22 oz./ton silver. Little seems to have been done in the area from the late thirties until it was restaked in 1972 by Andex Mines Ltd. This company carried out an exploration program in that year consisting of geological mapping, geochemical soil sampling, and drilling of one short hole. Apparently the geochemical work returned anomalous values in silver. In 1974 and 1975 the area was covered by the Horace and H claims which were staked specifically to cover the high silver geochemical anomaly outlined by the earlier Andex Mines Ltd. work.

Over the past three years there has been some renewed exploration activity in the area carried out by major mining groups. The original Cayuse claim is now entirely surrounded by claims. Exploration is being directed towards exploring the possibilities for epithermal gold deposits. The association of this type of deposit with mercury mineralization has been explored by that company extensively in Nevada, and in seeking areas of similar association in the Cordillera of British Columbia the Criss Creek area was selected on the basis of the regional geology.

GEOLOGY

Regional Geology

The property lies in the northern part of NTS quadrangle 921 and has been geologically mapped by W.E. Cockfield in the late 1930's and early 1940's. The northwestern corner of his map 886A, Nicola, published as part of GSC Memoir 249, Geology and Mineral Deposits of Nicola map-area, British Columbia, covers the Deadman River - Criss Creek area including that of the Cayuse claim. Reference to this map shows the area to be underlain by upper Triassic volcanic rocks of the Nicola Group, which are the host rocks for the known conglomerate, sandstone, and shale, and Miocene or earlier rhyolites, andesites, basalts, and associated tuffs and breccias of the Kamloops Group. Small bodies of granitic intrusive rocks of upper Cretaceous or Tetiary age cut the Nicola Group rocks and Cretaceous sediments in the general Criss Creek - Carabine Creek area. It is these rocks and related rocks within their contact zones which has been the focus of the most recent work aimed at exploring the possibility for epithermal gold deposits.

Structurally the area has been affected by numerous fracture zones which appear to have quite vairable strike but with a general preponderance of northeasterly-southwesterly striking features.

Mineralization in the general area includes many veins and disseminations of copper minerals in the Nicola Group volcanics, mercury occurrences which also occur chiefly in the Nicola Group rocks and in Cretaceous and Tertiary sediments and volcanics, industrial minerals including gypsum, sodium-sulphate, etc., and some coal which occurs in a Tertiary sedimentary basin near Merritt, some 50 miles or so the the south of the Cayuse claim.

Local Geology

Observations in the claim area have been based on fairly abundant outcrop exposures along the Criss Creek valley, and in the banks of the present road and older road cuts in the area as well as along some of the claim lines. The rocks are predominantly Nicola Group volcanics which exhibit considerable variation in texture, alteration, and

mineralization. The volcanic rocks which probably represent the normal Nicola volcanic sequence in the area are green to grey-green, medium grained, finely porphyritic rocks. Some more tuffaceous beds are observed in some outcrops and in places fairly strong weathering has oxidized contained sulphide minerals giving the rocks a rusty brown colouration. In the area of the legal corner post for the Cayuse claim, which is 4.12 kilometres above, i.e. upstream along Criss Creek, the junction of Criss Creek and Deadman River, the volcanics are fairly siliceous, highly weathered and limonitic. Approximately 0.5 kilometres further south along the road, volcanics outcropping in the bank of an old road or trail, located some 40 or 50 feet higher up the bank than the presently existing road, are highly altered and siliceous, the outcrops having a yellow-brown colouration due to abundance of limonite from oxidized sulphides. Further to the west and southwest along this old road these same volcanics are extremely highly altered and strongly sheared with foliations striking approximately 107° and dipping steeply to the north. In this particular area a number of highly altered, whitish coloured veins, probably of dolomitic material, occur having a strike of 090° plus or minus 15° approximately. Associated with these highly altered and sheared volcanics and veins are reddish to orange-red streaks of mercury mineralization. The most striking feature of these occurrences is the intensity of alteration in these strongly foliated rocks.

No exposures of intrusive rocks have been observed.

GEOCHEMICAL SURVEY

On June 23, 24 and August 25, 1983, Asarco Exploration Co. of Canada Ltd. collected 88 soil samples and 2 rock chip samples from the Cayuse claim. Soil samples were collected at 50 metre intervals from the "B" horizon along 5 east-west and north-south lines (see Figure 3). Sample sites were marked by flagging.

Rock sample #76979 was collected at station line C3, 1150 W, 522 S. It is a metre chip sample across quartz veining in an old trench and adit. Rock sample #76980 was collected at station line C3, 817 W, 475 S. It is a 0.3 metre chip sample of a silicified zone with stibnite exposed by an old trench.

All samples were analyzed for 31 elements by standard methods by Acme Analytical Laboratories Ltd. The results of these analysis and a description of the methods used are attached as Appendix A. Gold was analyzed for by both ICP and combined Fire Assay-Atomic Absorption methods. Silver was analyzed for by both ICP and Atomic Absorption methods. Mercury was analyzed for by Atomic Absorpotion methods.

The limited orientation type sampling within this wide spaced grid does not allow statistical analysis to be undertaken. However, gold, silver, mercury and arsenic values have been potted on Figures 4, 5, 6 and 7 respectively and areas which could be anomalous outlined.

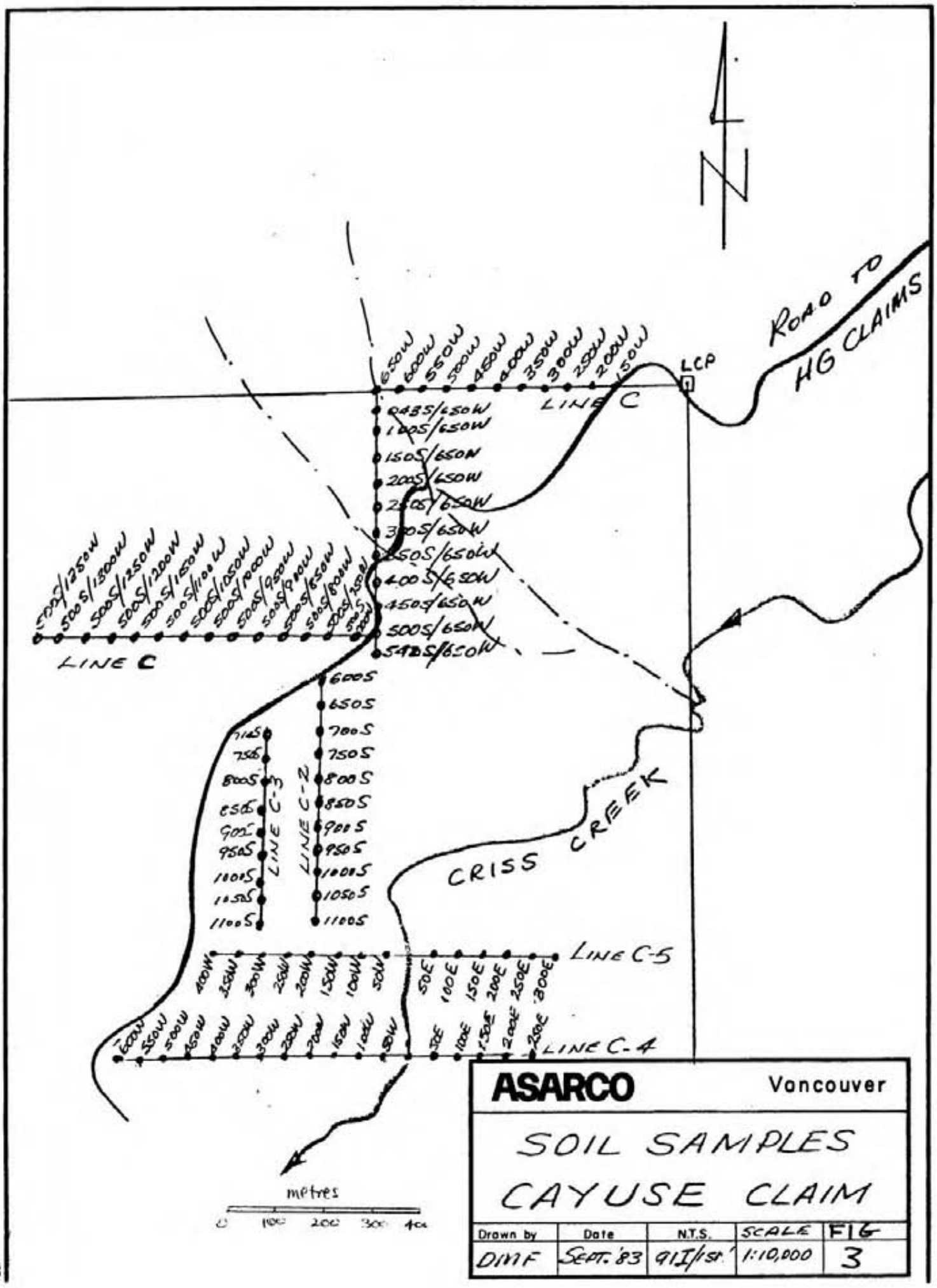
RESULTS

Gold values range from 1 to 47 ppb. The one 47 ppb value may be a result of a "placering" in Criss Creek.

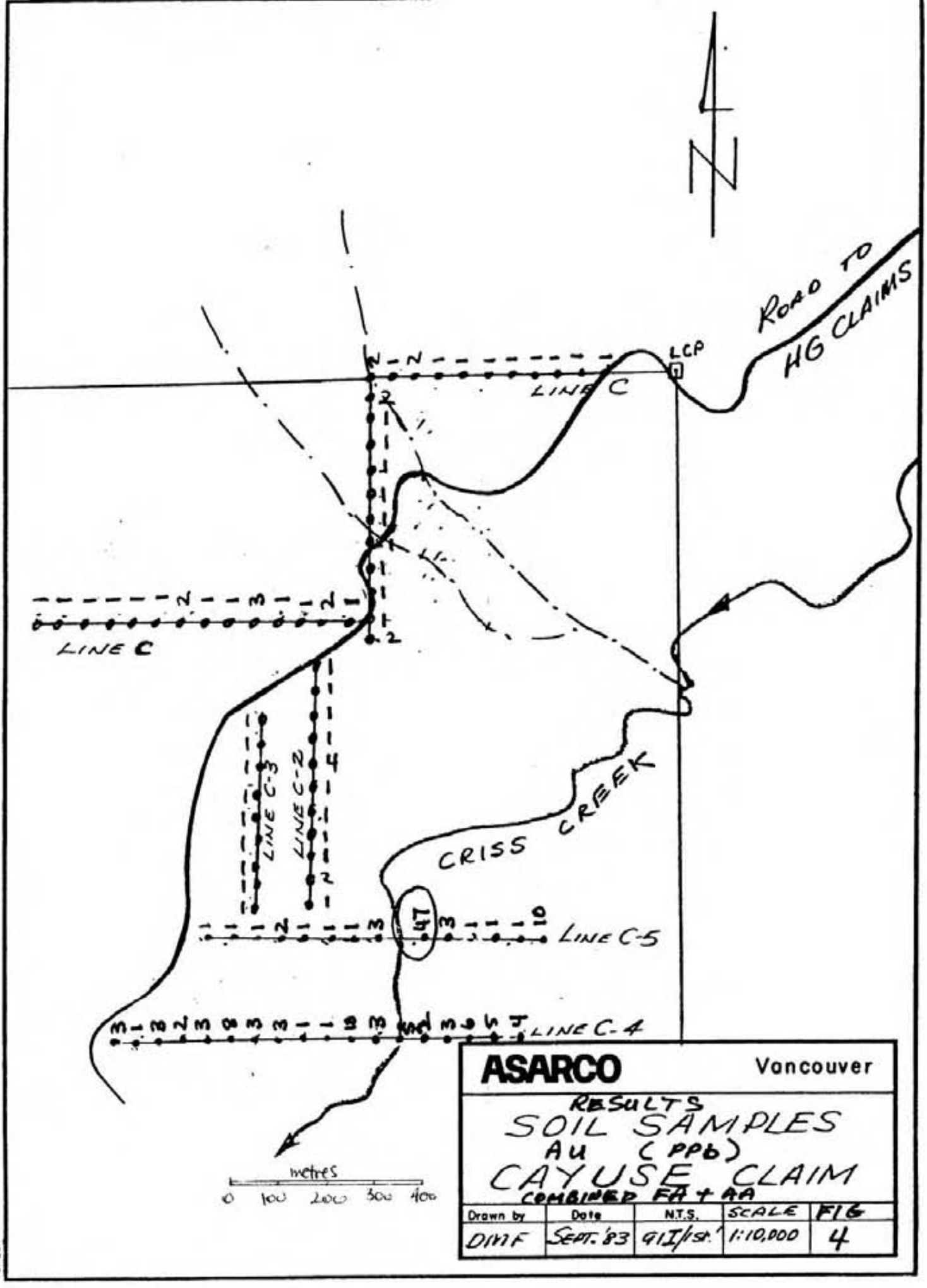
Silver values range from .1 to .6 ppm. No definite trend appears to exist.

Arsenic values range from 5 to 478 ppm. Most of the highs are on Line C2 in an area of anomalous mercury values.

Mercury values range from 50 to 43,000 ppb. Most of the higher values line up along a north-south trend and may be indicating a fault zone.



ASARCO			Vancouver	
SOIL SAMPLES CAYUSE CLAIM				
Drawn by	Date	N.T.S.	SCALE	FIG
DMF	SEPT. '83	91I/SE	1:10,000	3



ASARCO Vancouver

RESULTS

SOIL SAMPLES

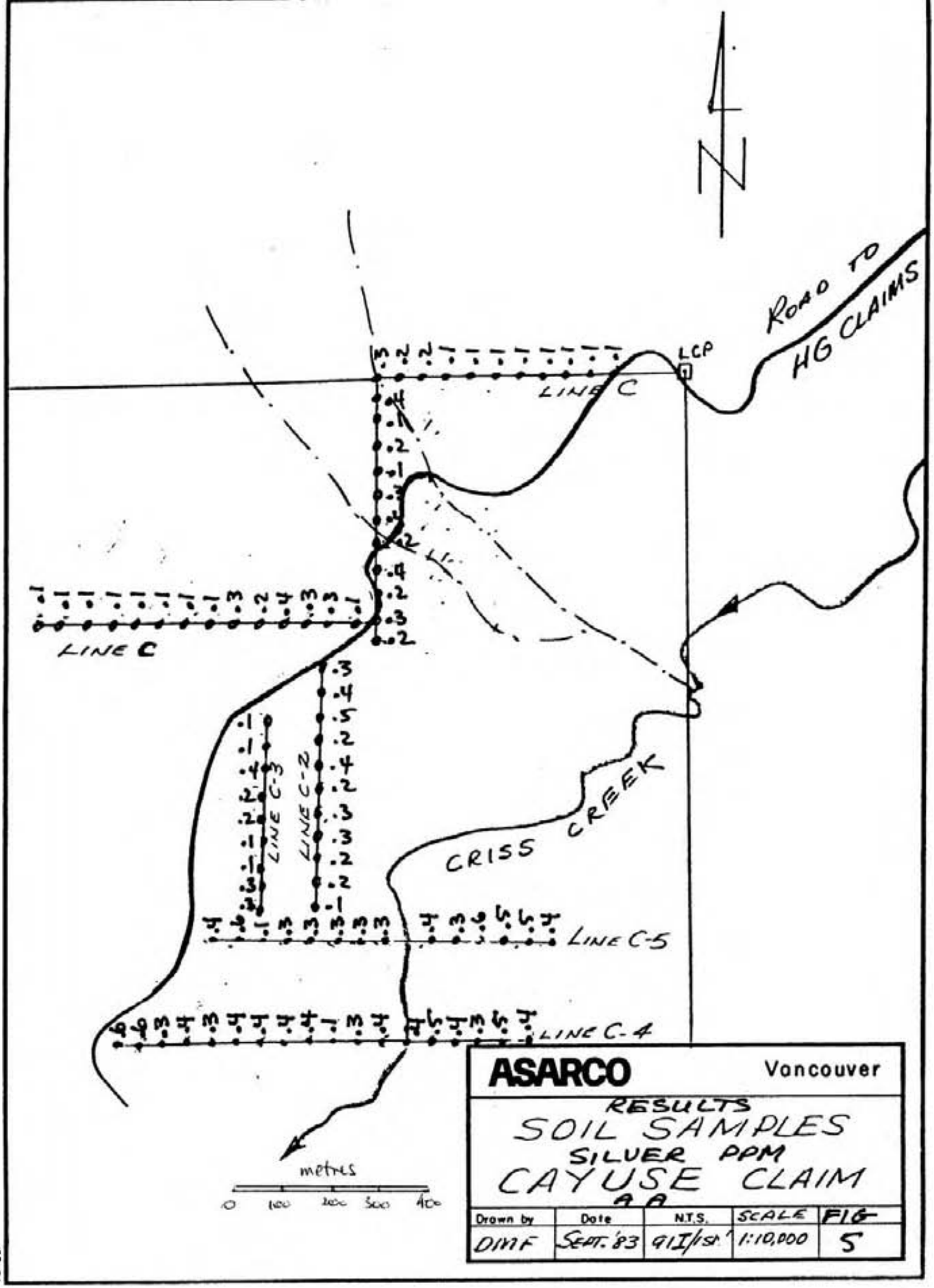
Au (PPb)

CAYUSE CLAIM

COMBINED FA + AA

Drawn by	Date	N.T.S.	SCALE	FIG
DIMF	SEPT. '83	91I/1E	1:10,000	4

VanCal

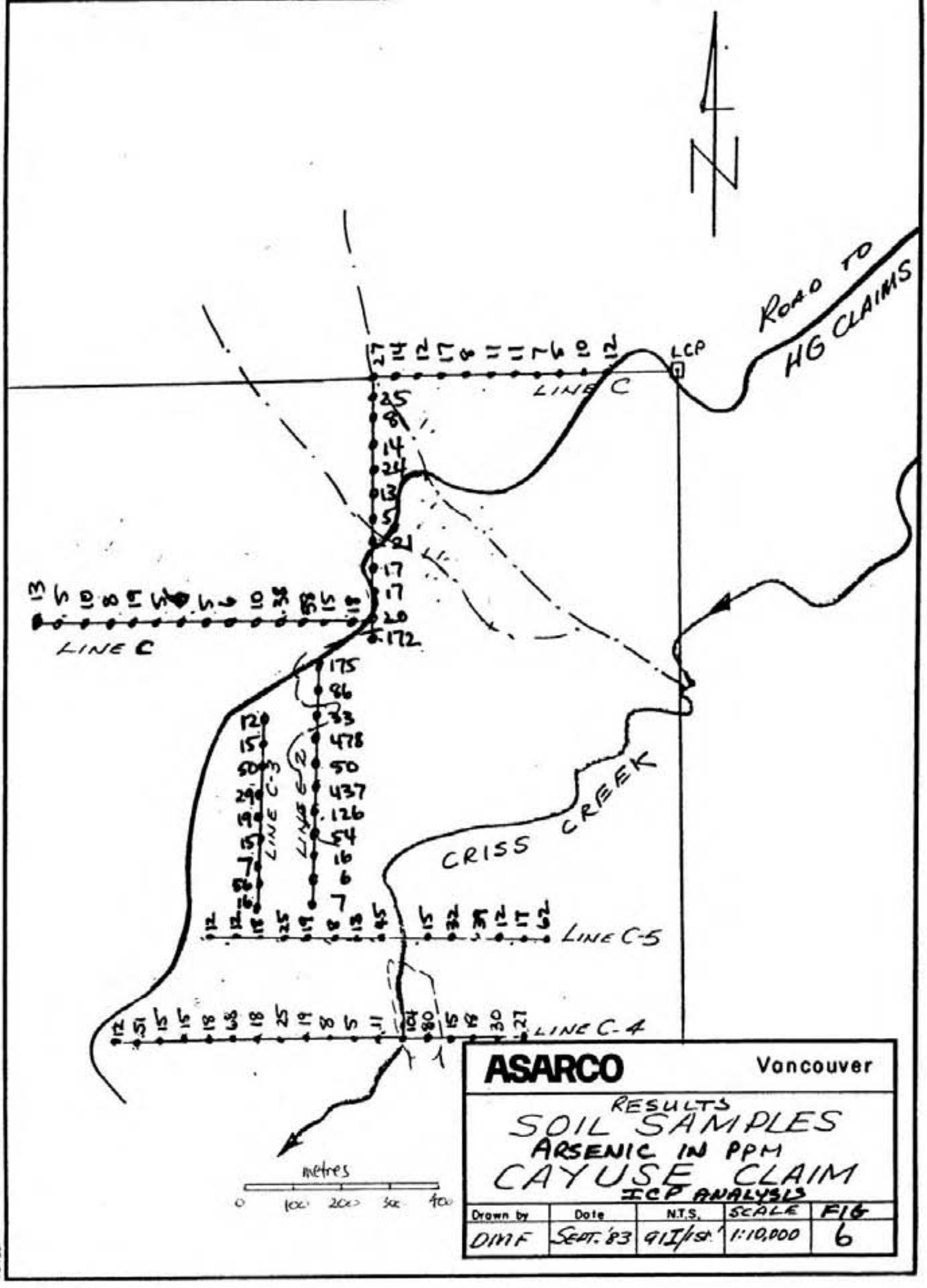


ASARCO Vancouver

RESULTS
SOIL SAMPLES
SILVER PPM
CAYUSE CLAIM
9A

Drawn by	Date	N.T.S.	SCALE	FIG
DMF	SEPT. '83	91I/SW	1:10,000	5

VanCal



ASARCO Vancouver

RESULTS

SOIL SAMPLES

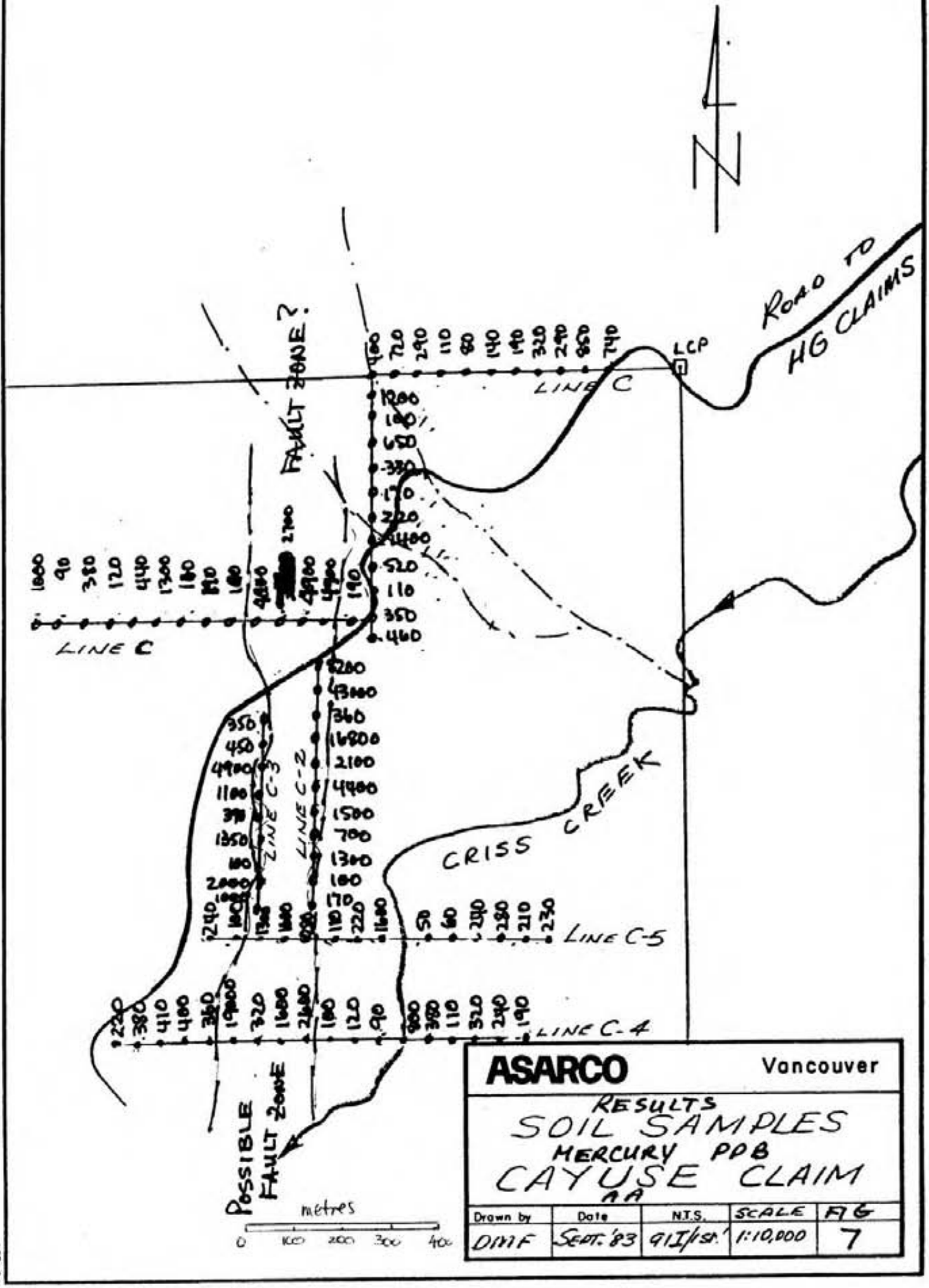
ARSENIC IN PPM

CAYUSE CLAIM

ICP ANALYSIS

Drawn by	Date	N.T.S.	SCALE	FIG
DMF	SEPT. '83	91I/SW	1:10,000	6

VanCal


N
ROAD TO HG CLAIMS
LCP
FAULT ZONE?
LINE C
LINE C
LINE C-3
LINE C-2
LINE C-5
LINE C-4
CRISS CREEK
POSSIBLE FAULT ZONE
metres
0 100 200 300 400
ASARCO
Vancouver
RESULTS
SOIL SAMPLES
MERCURY PPB
CAYUSE CLAIM
AA
Drawn by: DMF
Date: SEPT. '83
N.T.S.: 91I/SW
SCALE: 1:10,000
FIG 7

CONCLUSIONS

No definite gold and silver anomalous zones have been indicated by this soil geochem survey. A wide north-south fault zone may be indicated by high mercury and arsenic values.

RECOMMENDATIONS

A similar style geochemical survey should be undertaken over the remainder of the claim. Rock exposures should be chip samples within the postulated fault zone and analyzed for gold and silver.

CERTIFICATE

I, Robert A. Dickinson, DO HEREBY CERTIFY:

1) That I am a consulting geologist with a business office at #701 - 744 West Hastings Street, Vancouver, British Columbia, V6C 1V5, and a Principal of TRM Engineering Ltd.

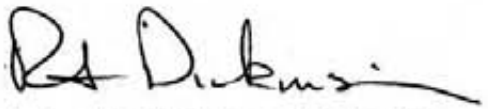
2) That I am a graduate in geology (Honours, B.Sc. 1972) of the University of British Columbia.

3) That I am a Fellow of the Geological Association of Canada.

4) That I have practised my profession as a geologist for the past 11 years.

5) That I am a Director and shareholder of Packard Resources Ltd., owner of the subject property.

6) That the statement of costs found as Appendix 2 to this report is correct.



Robert A. Dickinson, Geologist

Date at Vancouver, British Columbia, this 21st day of September, 1983.

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APPENDIX I

LISTING OF GEOCHEMICAL ANALYSES BY SAMPLE STATION

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH:253-3158 TELEX:04-53124

JUL 4 1983

D.M.F.

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppb.
AU** ANALYSIS FROM 10 GRAM FA+AA. AG* ANALYSIS BY AA. HG* ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - SOIL AND ROCK

DATE RECEIVED JUNE 24 1983 DATE REPORTS MAILED June 30/83 ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

ASARCO EXPLORATION PROJECT # CAYUSE FILE # 83-0931 PAGE # 1

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb	Hg* ppb	Ag* ppm
C 714S	1	29	4	95	.1	19	15	1361	3.87	12	8	ND	2	47	1	2	2	72	.75	.04	7	27	.70	183	.09	15	2.19	.02	.36	2	1	350	.1
C 750S	1	35	3	91	.1	23	16	1014	4.59	15	6	ND	2	41	1	2	2	78	.70	.05	7	31	.77	150	.10	13	2.36	.02	.38	2	1	450	.1
C 800S	1	51	7	73	.1	24	20	949	4.95	50	6	ND	2	45	1	2	2	105	2.77	.05	6	26	1.19	142	.07	13	2.28	.02	.20	2	1	4900	.4
C 850S	1	40	6	86	.1	24	20	1020	4.80	29	5	ND	2	42	1	4	2	91	.85	.04	6	26	.75	117	.06	13	1.90	.02	.28	2	1	1100	.2
C 900S	1	50	4	79	.1	24	21	1278	5.06	19	17	ND	2	60	1	2	2	105	2.67	.06	6	28	1.20	170	.06	17	2.40	.02	.25	2	1	390	.2
C 950S	1	36	7	80	.1	23	19	1151	4.42	15	3	ND	2	35	1	3	2	95	.50	.04	7	32	.88	144	.11	6	1.99	.02	.21	2	1	1350	.1
C 650N	1	100	6	70	.1	21	23	872	4.59	27	14	ND	2	113	1	2	2	116	2.50	.10	13	24	.91	408	.01	15	2.38	.02	.36	2	2	400	.3
C 600N	1	37	7	56	.2	34	15	616	3.56	14	11	ND	2	166	1	2	2	81	3.12	.07	11	42	.89	295	.09	9	1.42	.05	.14	2	1	720	.2
C 550N	1	24	7	69	.1	27	17	996	3.82	12	2	ND	2	43	1	2	2	87	.48	.03	10	38	.55	226	.12	9	1.74	.03	.31	2	2	290	.2
C 500N	1	30	8	75	.1	25	15	806	3.91	17	6	ND	2	45	1	3	2	78	.62	.05	10	38	.60	209	.10	26	1.87	.03	.51	2	1	110	.1
C 450N	1	22	5	85	.1	21	14	1147	3.62	8	2	ND	2	49	1	2	2	76	.55	.03	10	35	.57	207	.13	14	1.86	.03	.36	2	1	80	.1
C 400N	1	22	6	82	.1	22	14	1088	3.56	11	3	ND	2	34	1	2	2	72	.49	.03	10	33	.57	195	.12	12	1.82	.03	.33	2	1	140	.1
C 350N	1	29	5	64	.1	24	14	722	4.12	11	2	ND	2	36	1	2	2	82	.52	.03	10	34	.60	156	.13	11	2.00	.03	.35	2	1	190	.1
C 300N	1	28	8	59	.1	23	15	773	4.10	7	5	ND	2	37	1	2	2	77	.61	.03	11	33	.60	152	.12	10	1.97	.03	.34	2	1	320	.1
C 250N	1	21	7	69	.1	22	13	634	3.67	5	2	ND	2	38	1	2	2	75	.53	.03	10	35	.49	151	.14	11	1.81	.03	.32	2	1	290	.1
C 200N	1	38	7	60	.1	30	18	797	4.01	10	9	ND	2	73	1	2	2	86	2.15	.07	10	32	.99	211	.09	8	1.87	.03	.21	2	1	850	.1
C 150N	1	33	6	57	.2	32	14	598	3.46	12	6	ND	2	138	1	2	2	75	3.52	.08	9	35	.82	330	.10	8	1.31	.04	.11	2	1	740	.1
C 500S 1350W	1	44	7	89	.1	25	18	1112	4.84	13	3	ND	2	45	1	2	2	85	.90	.07	10	30	.92	217	.07	17	2.62	.02	.51	2	1	1000	.1
C 500S 1300W	1	17	6	133	.1	21	13	1562	3.36	5	8	ND	2	46	1	2	2	54	.80	.03	9	27	.57	264	.08	11	1.89	.02	.34	2	1	90	.1
C 500S 1250W	1	23	6	102	.1	20	13	1110	3.87	10	8	ND	2	34	1	2	2	72	.53	.03	10	31	.63	166	.10	6	1.91	.02	.29	2	1	380	.1
C 500S 1200W	1	19	7	114	.1	18	13	1869	3.56	8	2	ND	2	36	1	2	2	61	.55	.03	10	25	.59	230	.09	10	1.94	.02	.33	2	1	120	.1
C 500S 1150W	1	42	7	74	.1	15	17	1363	4.63	19	2	ND	2	87	1	2	2	77	4.70	.08	8	17	1.23	192	.04	8	2.02	.02	.10	2	1	440	.1
C 500S 1100W	1	28	7	115	.1	19	16	1824	4.04	5	8	ND	2	66	1	2	2	68	1.01	.07	8	25	.93	275	.08	16	2.33	.02	.42	2	1	1300	.1
STD A-1/FA-AU	1	30	41	190	.3	37	14	1082	2.83	9	2	ND	2	38	1	2	2	63	.65	.09	8	69	.71	281	.07	6	1.97	.01	.19	2	52	60	.3

ASARCO EXPLORATION PROJECT # HG-CAYUSE FILE # 83-0931

PAGE

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb	Hg* ppb	Ag* ppm
C 500S 1050W	1	23	6	133	.1	26	13	1565	3.72	6	2	ND	2	50	1	2	2	54	.61	.04	8	30	.69	256	.11	13	2.21	.03	.45	2	2	110	.1
C 500S 1000W	1	28	5	69	.1	17	12	1069	3.58	5	2	ND	2	42	1	2	2	63	.59	.03	6	27	.66	124	.11	16	2.24	.03	.33	2	1	190	.1
C 500S 950W	1	41	7	83	.1	21	17	1680	4.21	6	2	ND	2	58	1	2	2	77	.84	.04	7	30	1.05	174	.12	27	2.74	.03	.38	2	1	100	.3
C 500S 900W	1	38	4	75	.1	28	17	931	4.49	10	3	ND	2	43	1	2	2	76	.60	.04	10	36	.94	153	.11	16	2.36	.03	.36	2	3	4000	.2
C 500S 850W	1	68	7	90	.1	22	22	1063	5.66	38	4	ND	2	38	1	2	2	129	1.26	.04	7	37	1.43	190	.04	30	2.59	.01	.29	2	1	2700	.4
C 500S 800W	1	76	10	86	.1	17	17	1096	5.47	38	2	ND	2	38	1	2	2	114	1.25	.05	7	20	1.01	223	.04	23	2.45	.02	.39	2	1	4900	.3
C 500S 750W	1	36	7	79	.1	21	15	1037	4.44	15	4	ND	2	36	1	2	2	79	.51	.03	9	26	.78	204	.08	9	2.07	.03	.28	2	2	4700	.3
C 500S 700W	1	40	7	79	.1	23	17	1115	5.08	18	6	ND	2	33	1	2	2	91	.57	.06	8	26	.96	170	.07	11	2.17	.02	.32	2	1	190	.1
C 043S 650W	1	101	7	78	.1	20	21	883	4.64	25	6	ND	2	178	1	2	2	115	2.91	.16	12	19	1.00	328	.01	15	1.73	.03	.28	2	2	1200	.4
C 100S 650W	1	33	5	70	.1	33	17	727	4.58	8	2	ND	2	45	1	2	2	80	.65	.04	11	41	.84	155	.14	11	2.26	.04	.43	2	1	100	.1
C 150S 650W	1	36	5	58	.1	32	16	605	3.88	14	2	ND	2	147	1	2	2	75	3.57	.09	10	35	1.30	233	.11	18	1.82	.15	.26	2	1	650	.2
C 200S 650W	1	53	10	76	.1	40	23	759	5.25	24	5	ND	2	69	1	2	2	102	2.44	.07	11	38	1.20	194	.06	16	2.41	.03	.32	2	1	330	.1
C 250S 650W	1	50	5	68	.1	20	16	650	4.45	13	2	ND	2	36	1	2	2	97	.48	.07	10	32	.59	210	.03	16	1.94	.02	.48	2	1	170	.3
C 300S 650W	1	41	7	60	.1	31	18	778	4.58	5	2	ND	2	42	1	2	2	81	.71	.04	11	40	.84	149	.08	9	2.22	.03	.32	2	1	220	.4
C 350S 650W	1	65	5	63	.1	26	20	794	4.28	21	5	ND	2	172	1	2	2	96	3.72	.12	11	26	1.75	212	.04	15	1.55	.04	.19	2	1	1400	.2
C 400S 650W	1	33	5	86	.1	20	15	993	4.64	17	2	ND	2	90	1	2	2	80	1.26	.05	11	27	.67	171	.07	25	2.21	.03	.39	2	1	520	.4
C 450S 650W	1	22	9	72	.1	19	14	985	3.69	17	2	ND	2	53	1	2	2	62	.78	.04	10	33	.63	222	.09	14	2.19	.03	.28	2	1	110	.2
C 500S 650W	1	24	11	81	.1	17	13	997	3.52	20	2	ND	2	41	1	2	2	56	.76	.04	11	29	.55	258	.09	9	2.18	.03	.18	2	1	350	.3
C 542S 650W	1	73	11	99	.1	24	22	1382	5.62	172	2	ND	2	38	1	2	2	94	.85	.07	10	26	.84	530	.09	8	2.21	.03	.26	2	2	460	.2
C-2 600S	1	50	7	94	.1	20	19	916	6.35	175	2	ND	2	67	1	2	2	149	2.09	.05	6	27	.78	282	.09	16	1.79	.04	.22	2	1	8200	.3
C-2 650S	1	41	6	93	.1	20	21	1046	5.26	86	2	ND	2	54	1	2	2	121	1.66	.05	6	27	.96	139	.05	17	1.90	.01	.28	2	1	43000	.4
C-2 700S	1	63	9	70	.2	21	19	1095	4.66	33	2	ND	2	89	1	2	2	123	10.28	.06	7	39	1.93	154	.01	28	2.70	.01	.09	2	1	360	.5
C-2 750S	1	73	8	102	.1	11	24	1345	6.90	478	2	ND	2	33	1	14	2	183	1.82	.03	5	7	.95	214	.01	16	1.96	.01	.25	2	1	16800	.2
C-2 800S	1	58	8	90	.1	9	22	1372	6.32	50	4	ND	2	36	1	2	2	134	2.25	.05	5	9	1.04	196	.01	13	2.26	.01	.21	2	4	2100	.4
C-2 850S	5	64	7	86	.1	21	26	1435	5.94	437	2	ND	2	66	1	28	2	129	4.79	.05	4	23	1.01	236	.01	27	1.75	.01	.31	2	1	4400	.2
C-2 900S	2	145	9	93	.1	19	37	2100	6.33	126	3	ND	2	95	1	11	2	120	3.71	.11	10	10	.91	627	.01	23	.94	.01	.19	2	1	1500	.3
C-2 950S	1	179	6	71	.2	13	21	930	5.39	54	2	ND	2	134	1	2	2	118	5.75	.09	12	10	.95	248	.01	22	1.42	.01	.13	2	1	700	.3
C-2 1000S	1	47	4	81	.1	23	17	946	5.13	16	2	ND	2	41	1	2	2	88	.82	.07	7	31	.98	162	.07	16	2.32	.02	.38	2	1	1300	.2
C-2 1050S	1	34	4	89	.1	43	18	977	4.81	6	2	ND	2	68	1	2	2	77	.69	.07	12	48	.86	207	.19	10	2.09	.04	.42	2	2	100	.2
C-2 1100S	1	43	8	107	.1	22	16	1268	4.44	7	2	ND	2	48	1	2	2	74	.61	.04	10	31	.84	275	.08	8	2.34	.03	.28	2	1	170	.1
C-3 1000S	1	53	5	70	.1	15	21	1059	5.35	7	3	ND	2	32	1	2	2	105	2.33	.04	4	17	1.59	75	.01	7	2.84	.01	.14	2	1	100	.1
C-3 1050S	1	35	10	71	.1	19	19	1088	5.59	56	2	ND	2	57	1	2	2	112	3.34	.05	5	32	.99	76	.03	11	1.79	.02	.13	2	1	2000	.3
C-3 1100S	1	59	6	61	.1	25	22	1384	4.83	16	2	ND	2	106	1	2	2	98	6.56	.06	5	42	1.41	70	.04	14	1.72	.02	.17	2	1	1000	.3
76979 ROCK	1	2	4	52	.3	5	7	971	2.95	7	2	ND	2	81	1	2	2	26	18.75	.01	2	1	6.53	6	.01	3	.13	.03	.01	2	2	5500	.7
76980 ROCK	1	42	11	49	.1	11	15	1173	4.20	241	2	ND	2	43	1	4356	2	120	7.32	.02	2	22	2.54	233	.01	5	.45	.02	.08	7	1	21500	.3
STD A-1	1	30	37	188	.3	37	13	1069	2.85	9	2	ND	2	38	1	2	2	62	.67	.09	8	75	.73	281	.07	6	2.01	.02	.19	2	2	55	.3

SAMPLE FROM 1150W & 1175 OF OLD WORKINGS (TRENCH)

TRENCH, 0.3 MTS SILICIFIED ZONE WITH STIBNITE

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH:253-3158 TELEX:04-53124

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppb.
AU## ANALYSIS FROM 10 GRAM FA+AA. AG# ANALYSIS BY AA. HG# ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - P1-P5 SOIL P6 ROCK

DATE RECEIVED AUG 26 1983 DATE REPORTS MAILED Sept 1/83 ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

ASARCO FILE # 83-1850

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sn PPM	Au## ppb	Hg# ppb	Ag# ppm
C-4 600W	1	136	11	84	.4	42	32	1170	6.39	12	2	ND	2	61	1	2	2	190	5.88	.04	2	84	4.26	82	.01	9	5.02	.01	.08	2	2	3	220	.6
C-4 550W	1	188	8	46	.5	8	19	910	4.59	51	2	ND	2	237	1	2	2	80	6.44	.05	2	4	1.74	73	.01	13	1.96	.01	.04	2	2	1	380	.6
C-4 500W	1	36	10	60	.3	25	16	903	4.28	15	2	ND	2	110	1	2	2	86	4.77	.09	8	31	1.00	127	.12	8	1.61	.03	.08	2	2	3	410	.3
C-4 450W	1	53	8	74	.3	34	18	1015	4.63	15	3	ND	2	62	1	2	2	91	1.69	.06	9	44	1.24	140	.14	8	2.30	.04	.24	2	2	2	400	.4
C-4 400W	1	52	8	79	.3	35	18	1083	4.67	18	4	ND	2	49	1	6	2	93	.59	.06	10	50	1.07	147	.15	5	2.30	.03	.25	2	2	3	360	.3
C-4 350W	1	145	5	63	.2	48	40	1585	5.35	68	13	ND	2	132	1	25	2	149	3.62	.05	2	101	1.14	286	.01	14	1.39	.01	.11	2	2	8	9000	.4
C-4 300W	1	101	8	83	.2	43	27	1249	5.88	18	2	ND	2	41	1	6	2	139	1.50	.04	7	102	1.73	130	.04	10	2.72	.02	.22	2	2	3	320	.4
C-4 250W	1	64	4	85	.2	26	18	954	5.77	25	2	ND	2	35	1	5	2	115	.75	.05	7	41	1.12	131	.07	10	2.58	.02	.24	2	2	3	1600	.4
C-4 200W	1	49	5	88	.4	28	18	891	5.59	19	2	ND	2	38	1	8	2	101	.52	.05	9	43	1.08	158	.09	8	2.47	.03	.27	2	2	1	2600	.4
C-4 150W	1	27	8	84	.3	56	15	530	4.47	8	2	ND	2	61	1	3	2	67	.51	.05	17	66	.92	226	.17	7	2.49	.03	.29	2	2	1	100	.1
C-4 100W	1	37	6	67	.1	54	14	414	4.74	5	2	ND	2	63	1	4	4	84	.58	.03	15	67	1.06	202	.18	4	2.69	.04	.12	2	2	10	120	.3
C-4 50W	1	26	8	72	.4	37	14	536	4.43	11	2	ND	2	50	1	4	4	78	.45	.03	13	62	.80	121	.25	3	2.11	.04	.22	2	2	3	90	.4
C-4 0E	1	144	7	89	.6	33	21	1180	6.02	104	2	ND	2	76	1	4	2	109	1.67	.04	16	36	.86	222	.08	15	2.35	.02	.24	2	2	5	800	.4
C-4 50E	1	140	9	70	.5	32	20	983	5.32	80	2	ND	2	1	1	6	2	100	4.59	.08	19	39	.81	195	.05	20	2.08	.02	.20	2	2	2	380	.5
C-4 100E	1	41	4	85	.2	26	12	527	4.29	15	2	ND	2	44	1	3	2	64	.53	.02	10	38	.61	184	.15	7	2.85	.04	.18	2	2	3	110	.4
C-4 150E	1	62	6	60	.2	38	14	533	4.96	18	2	ND	2	43	1	9	2	97	.65	.04	10	48	.78	155	.17	6	1.88	.03	.18	2	2	6	320	.3
C-4 200E	1	66	8	70	.4	33	13	370	4.90	30	2	ND	2	44	1	7	2	82	.60	.03	13	36	.70	211	.15	7	2.74	.03	.24	2	2	5	240	.5
C-4 250E	1	67	6	111	.1	17	11	492	4.78	27	4	ND	2	37	1	3	2	84	.67	.04	8	22	.52	210	.09	11	2.49	.03	.32	2	2	4	190	.4
STD A-1/FA-AU	1	30	39	184	.3	36	12	1098	2.82	10	2	ND	2	38	1	2	2	59	.59	.09	8	75	.75	278	.08	6	2.07	.02	.19	2	2	54	55	.3

ASARCO FILE # 83-1850

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sn PPM	Au†† ppb	Hg† ppb	Ag† ppm
C-5 400W	1	36	6	81	.4	27	15	856	4.52	12	7	ND	2	30	1	2	2	83	.50	.04	7	39	.81	118	.15	6	1.86	.03	.31	2	2	1	240	.4
C-5 350W	1	37	6	105	.5	29	16	937	4.21	12	13	ND	2	56	1	2	2	73	.66	.05	8	33	.91	145	.12	7	1.80	.03	.29	2	2	1	100	.6
C-5 300W	1	18	3	39	.2	7	8	751	2.95	18	5	ND	2	30	1	4	2	73	1.29	.10	13	8	.37	182	.01	7	.90	.01	.12	2	2	1	1300	.1
C-5 250W	1	60	9	81	.2	30	26	1738	5.78	25	2	ND	2	74	1	2	2	128	1.87	.06	5	46	.96	132	.09	7	1.46	.02	.14	2	2	2	1600	.3
C-5 200W	1	60	6	89	.1	37	33	2201	6.66	19	2	ND	2	68	1	2	2	151	2.91	.05	3	61	2.47	131	.03	10	2.83	.01	.13	2	2	1	280	.3
C-5 150W	1	25	5	87	.4	30	14	858	4.29	8	13	ND	2	57	1	2	2	67	.60	.03	12	43	.65	215	.19	6	2.53	.03	.25	2	2	1	110	.3
C-5 100W	1	39	8	83	.2	43	18	1015	5.02	13	5	ND	2	66	1	2	2	84	.58	.06	10	53	.92	205	.21	6	2.26	.04	.40	2	2	1	220	.3
C-5 50W	1	113	12	98	.4	22	18	720	6.48	45	2	ND	2	33	1	2	2	125	.62	.09	21	24	.33	551	.03	8	1.44	.01	.17	2	2	3	1600	.3
C-5 50E	1	29	1	73	.3	44	19	702	4.92	15	5	ND	2	69	1	2	3	105	.57	.09	11	62	.99	164	.33	3	1.46	.05	.14	2	2	47	50	.4
C-5 100E	1	86	5	76	.3	20	16	663	5.05	32	2	ND	2	35	1	2	2	89	.74	.03	9	29	.64	161	.09	9	2.02	.02	.34	2	2	3	60	.3
C-5 150E	1	121	6	53	.4	16	16	929	4.40	39	2	ND	2	184	1	2	2	125	8.52	.11	13	22	.87	116	.03	9	1.04	.01	.08	2	2	1	240	.6
C-5 200E	1	67	6	80	.2	22	14	579	4.49	12	2	ND	2	44	1	2	2	72	.59	.04	11	37	.96	177	.16	9	2.38	.03	.31	2	2	1	280	.5
C-5 250E	1	105	7	68	.3	18	12	513	4.85	17	2	ND	2	35	1	2	2	82	.51	.03	9	33	.76	161	.15	10	2.24	.03	.47	2	2	1	210	.5
C-5 300E	1	221	8	120	.1	16	17	1004	6.13	62	4	ND	2	44	1	2	2	103	.70	.04	8	18	.59	360	.08	13	2.25	.01	.47	2	2	10	230	.4
STD A-1/FA-AU	1	31	39	187	.3	36	13	1060	2.84	10	2	ND	2	38	1	2	2	59	.58	.09	8	74	.73	279	.08	6	1.98	.02	.20	2	2	52	55	.3

APPENDIX 2

STATEMENT OF COSTS

STATEMENT OF COSTS

Personnel	
D.M. Fletcher (Geologist) June 23, 24, ½ Aug 25 @ $200/day	$ 600
M. Lancaster (Geologist) Aug 25 @ $200/day	200
D.J. Fletcher (Sampler) June 23, 24 @ $50/day	100
Analyses	
88 soil samples @ $15/sample	1,320
2 rock samples @ $15/sample	30
Report Writing	
R.A. Dickinson	100
Secretarial	50
TOTAL COST	$ 2,400

Certified Correct

R.A. Dickinson

September 21, 1983