

GEOCHEMISTRY

OF THE

SB CLAIM

NANAIMO MINING DIVISION

N.T.S. 92 F/7E

Latitude 49°20'N

Longitude 124°43'W

CLAIM OWNER AND OPERATOR

ASARCO EXPLORATION COMPANY OF CANADA LIMITED

JANUARY 26, 1983

D. M. FLETCHER

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,024

TABLE OF CONTENTS

	<u>PAGE</u>
SUMMARY	1
LOCATION AND ACCESS	1
CLAIMS AND OWNERSHIP	1
GENERAL SETTING	1
HISTORY	2
GEOCHEMICAL FIELD PROCEDURE	2
ANALYTICAL PROCEDURES	3
STATISTICAL EVALUATION OF RESULTS	3
CONCLUSION	5

<u>ILLUSTRATIONS</u>	<u>TITLE</u>	<u>SCALE</u>	<u>LOCATION</u>
ATTACHMENT A	LOCATION	1:50,000	In Body
ATTACHMENT B	GRID MAP	1:10,000	In Pocket
ATTACHMENT C	GOLD GEOCHEM	1:10,000	In Pocket
ATTACHMENT D	SILVER GEOCHEM	1:10,000	In Pocket
ATTACHMENT E	MERCURY GEOCHEM	1:10,000	In Pocket
ATTACHMENT F	ANTIMONY GEOCHEM	1:10,000	In Pocket
ATTACHMENT G	ARSENIC GEOCHEM	1:10,000	In Pocket
ATTACHMENT H	ZINC GEOCHEM	1:10,000	In Pocket
ATTACHMENT I	BARIUM GEOCHEM	1:10,000	In Pocket

APPENDIX 1 - STATEMENT OF EXPENDITURES

APPENDIX 2 - STATEMENT OF QUALIFICATIONS

SUMMARY

The SB Claim was staked to cover a sequence of Sicker Volcanics hosting antimony sulfide mineralization that may be auriferous.

A soil grid was established over the claim and approximately 275 samples were taken and analysed for 32 elements.

Geochemical response for pathfinder elements associated with gold mineralization is not overly encouraging, however detailed prospecting of the claim and mapping is warranted.

LOCATION AND ACCESS

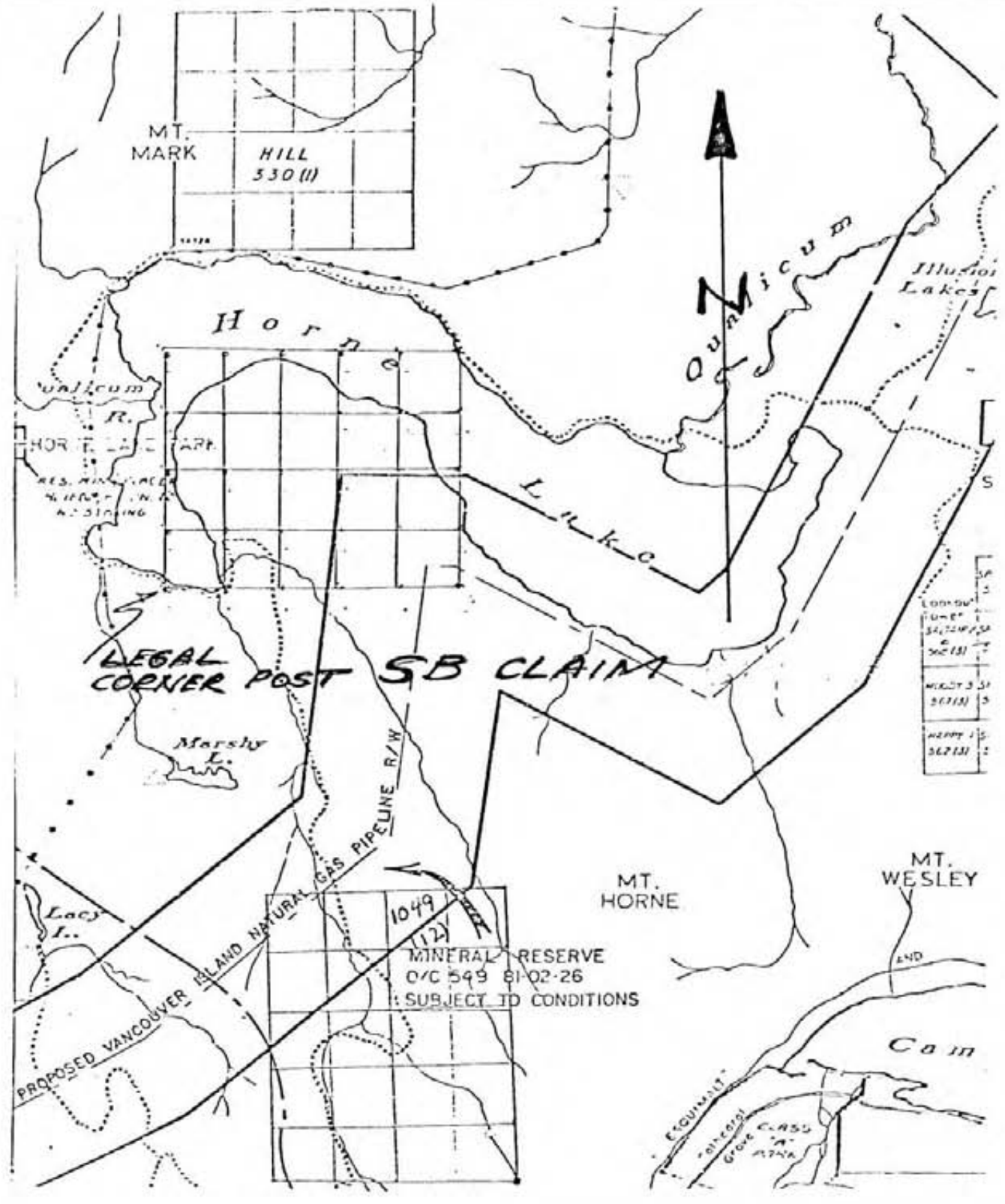
The SB claim is situated on the south side of Horne Lake in the Alberni Land District. The property is positioned in the Nanaimo Mining Division (N.T.S. 92F/7E) and can be reached by logging roads extending from Port Alberni a distance of approximately 15.0 kilometers.

CLAIMS AND OWNERSHIP

The SB claim consisting of 20 units is held and operated by Asarco Exploration Company of Canada Limited. The claim was staked by Asarco on May 11, 1982 and is held under record number 1173 issued May 13, 1982. See Attachment "A".

GENERAL SETTING

The SB Property lies astride a sequence of Sicker volcanics consisting of volcanic breccia, tuff, argillite and andesite porphyry. Minor antimony mineralization is hosted within the Sicker volcanics.



100-00	5
10-8	5
34,720/50	5
56213	5
40023 51	5
56713	5
4000 1	5
56713	2

1049
112
MINERAL RESERVE
O/C 549 81-02-26
SUBJECT TO CONDITIONS

ASARCO		Vancouver	
LOCATION SB CLAIM			
Drawn by	Date	N.T.S.	SCALE
D.M.F.	JAN '83	92F/7E	1:50,000

A major north-south trending fault bisects the claim. The claim encompasses a northwest trending knoll that rises approximately 400 feet above Horne Lake. The area was logged and is now covered with a veneer of debris interwoven with thick clustered salal.

HISTORY

Two stibnite-quartz veins with arsenopyrite were tested by a short adit driven in 1939. Minfile reports that small amounts of copper, lead, zinc, arsenic, gold and silver show in assay.

Asarco's geochemical sampling of the property was executed primarily to test for lateral extent of sulfide bodies carrying precious metal values by utilizing pathfinder geochemical elements normally associated with gold mineralization.

GEOCHEMICAL FIELD PROCEDURE

An enlargement at a scale of 1:10,000 was prepared utilizing a standard 1:50,000 topographic map with contour intervals at 100 foot elevations.

A soil survey grid was established by topo-chain and compass. Approximately 275 soil samples were taken at 50 meter intervals with variable line spacing up to 550 meters. See Attachment "B". Each soil sample was taken at a depth of 15-20 centimeters, bagged, packaged and dispatched to Acme Analytical Laboratories in Vancouver for analyses.

SB CLAIM

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, Sr, Cr AND B. Au DETECTION 3 PPM. ANALYSIS FROM 10 GRAM FA+AA. AGL ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - SOIL

DATE RECEIVED AUG 30 1982

DATE REPORTS MAILED Sept 5/82

ASSAYER D. Tope

DEAN TOYE, CERTIFIED B.C. ASSAYER

ASARCO EXPLORATION PROJECT # SB PROSPECT FILE # 02-0984

PAGE # 1

Table with columns: SAMPLE #, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, Zr, Al, Na, K, W, Au1, Ag1, Ag1. Rows include sample IDs like S2000E, S2004E, S2006E, S2008E, S2010E, S2012E, S2014E, S2016E, S2018E, S2020E, S2022E, S2024E, S2026E, S2028E, S2030E, S2032E, S2034E, S2036E, S2038E, S2040E, S2042E, S2044E, S2046E, S2048E, S2050E, S2052E, S2054E, S2056E, S2058E, S2060E, S2062E, S2064E, S2066E, S2068E, S2070E, S2072E, S2074E, S2076E, S2078E, S2080E, S2082E, S2084E, S2086E, S2088E, S2090E, S2092E, S2094E, S2096E, S2098E, S2100E.

#SARCO EXPLORATION

PROJECT # SB PROSPECT

FILE # 82-0984

PAGE 11 2

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	AuII ppb	HgI ppb	AgI ppb
82000	1	87	10	47	.2	32	15	2625	5.04	7	2	ND	2	14	1	2	2	119	.52	.03	13	68	.33	353	.22	4	3.83	.02	.04	2	2	90	.1
82001	1	97	10	34	.2	35	19	402	6.68	11	2	ND	2	17	1	2	2	177	.44	.03	3	77	.46	205	.30	2	4.86	.02	.04	2	7	70	.1
82002	1	48	9	36	.2	21	10	435	2.96	11	2	ND	2	13	1	2	2	85	.79	.03	3	39	.68	83	.18	4	2.16	.02	.02	2	2	60	.1
82003	1	60	8	45	.2	21	11	838	3.62	13	2	ND	2	13	1	2	2	118	.63	.09	4	45	.62	90	.20	4	3.10	.02	.03	2	1	100	.1
82004	1	60	10	45	.2	25	11	623	3.62	10	2	ND	2	12	1	2	2	118	.55	.05	4	50	.72	86	.22	5	2.83	.02	.03	2	4	85	.1
82005	1	59	10	45	.2	24	12	558	4.01	7	2	ND	2	13	1	2	2	124	.61	.05	4	48	.76	84	.23	4	2.77	.02	.04	2	80	65	.1
82006	1	56	9	44	.3	25	12	642	3.92	15	2	ND	2	12	1	2	2	122	.56	.05	5	50	.70	98	.23	4	3.17	.02	.04	2	2	90	.1
82007	1	60	8	40	.2	22	11	601	3.62	11	2	ND	2	13	1	2	2	114	.53	.05	4	44	.64	102	.21	4	2.78	.01	.04	2	3	85	.1
82008	1	65	8	43	.2	24	11	541	3.62	10	2	ND	2	12	1	2	2	119	.47	.05	5	48	.64	102	.23	4	2.97	.01	.04	2	1	75	.1
82009	1	31	39	160	.5	34	12	933	2.80	12	2	ND	2	36	1	2	2	56	.65	.10	8	79	.78	291	.69	11	2.04	.02	.21	2	1	55	.4
82010	1	48	11	43	.2	24	12	759	4.23	10	2	ND	2	14	1	2	2	122	.55	.04	6	55	.56	166	.21	3	3.28	.02	.03	2	1	50	.1
82011	1	33	9	55	.1	20	9	440	4.55	4	2	ND	2	10	1	2	2	138	.40	.07	2	52	.38	111	.25	6	3.95	.01	.03	2	1	30	.1
82012	1	13	11	72	.2	16	16	2124	3.62	2	2	ND	2	15	1	2	2	85	.50	.04	7	47	1.39	343	.01	6	2.72	.02	.07	2	1	80	.1
82013	1	47	10	62	.1	15	13	1398	5.82	3	2	ND	2	13	1	2	2	99	.35	.09	8	34	.61	220	.02	4	2.21	.02	.05	2	4	50	.1
82014	1	12	11	42	.2	11	11	3601	2.66	4	2	ND	2	14	1	2	2	84	.45	.04	4	31	.42	281	.02	4	1.77	.02	.04	2	1	60	.1
82015	1	23	9	49	.1	20	10	501	4.34	8	2	ND	2	12	1	2	2	125	.40	.05	3	51	.51	166	.16	4	3.52	.01	.03	2	1	40	.1
82016	1	6	7	43	.2	5	7	3155	2.58	2	2	ND	2	12	1	2	2	60	.31	.04	6	17	.33	212	.01	3	1.29	.01	.06	2	1	50	.1
82017	1	59	8	46	.2	27	11	701	4.45	16	2	ND	2	12	1	2	2	133	.45	.11	4	60	.68	72	.23	8	4.23	.01	.05	2	2	80	.1
82018	1	31	6	33	.1	13	6	573	4.14	7	2	ND	2	11	1	2	2	113	.31	.07	3	43	.34	55	.13	4	2.70	.01	.02	2	3	60	.1
82019	1	9	13	66	.2	8	9	8000	3.27	3	2	ND	2	18	1	2	2	81	.27	.10	5	24	.54	237	.04	5	1.78	.01	.03	2	1	80	.1
82020	1	72	10	72	.2	22	12	946	4.30	10	2	ND	2	10	1	2	2	102	.37	.18	4	46	.67	122	.12	4	2.97	.01	.04	2	4	80	.1
82021	1	50	10	40	.1	15	7	610	4.92	14	2	ND	2	8	1	2	2	126	.30	.28	3	49	.50	68	.16	14	3.22	.01	.03	2	1	110	.1
82022	1	54	8	76	.2	14	7	482	4.55	7	2	ND	2	8	1	2	2	114	.21	.19	4	45	.24	62	.15	4	3.13	.01	.03	2	1	60	.1
82023	1	56	9	40	.2	22	11	521	3.72	12	2	ND	2	9	1	2	2	108	.39	.07	4	47	.65	73	.20	4	3.14	.01	.02	2	3	120	.1
82024	1	62	11	46	.2	22	10	546	4.19	12	2	ND	2	10	1	2	2	120	.37	.09	4	55	.60	78	.21	4	3.65	.02	.03	2	1	100	.1

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 ML WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Sr, Cr AND B. Au DETECTION 3 ppm.
AA** ANALYSIS FROM 10 GRAM FA+AA. AG* ANALYSIS BY AA. HG* ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - SOIL

DATE RECEIVED OCT 1 1982 DATE REPORTS MAILED Oct 14/82 ASSAYER D. Jay DEAN TOYE, CERTIFIED B.C. ASSAYER

		ASARCO EXPLORATION													PROJECT # VILLALTA-GRID NO		SB-LINE NO		FILE # 82-1276													PAGE # 1		
SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe ppm	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 %	N ppm	Au** ppb	Hg* ppb	Ag* ppm	
SE1*02	1	34	6	58	.1	31	15	2989	3.80	31	2	ND	2	25	1	2	2	107	.42	.04	6	51	.57	288	.10	2	2.36	.01	.04	2	2	120	.1	
SE1*25E	1	37	2	55	.1	27	12	891	3.67	10	2	ND	2	21	2	2	2	108	.63	.05	5	42	.50	131	.24	2	3.01	.02	.03	2	1	85	.1	
SE1*37.5E	1	40	4	51	.2	31	12	662	3.91	5	2	ND	2	14	2	3	2	126	.47	.03	4	56	.56	105	.27	2	3.16	.02	.02	2	2	60	.1	
SE1*53E	1	22	5	59	.1	22	12	1660	4.13	3	2	ND	2	15	2	2	2	131	.50	.05	4	48	.37	110	.29	2	2.29	.02	.02	2	1	50	.1	
SE1*62.5E	1	34	6	40	.2	28	13	637	4.00	2	2	ND	2	22	2	2	2	132	.65	.03	5	58	.47	128	.25	2	3.42	.02	.02	2	2	70	.1	
SE1*75E	1	26	7	57	.1	23	13	3406	4.00	2	2	ND	2	29	2	2	2	120	.75	.05	5	45	.43	286	.22	2	2.08	.02	.02	2	1	80	.1	
SE1*87.5E	1	38	5	55	.2	21	11	1185	3.82	33	2	ND	2	16	2	2	2	113	.45	.13	4	44	.31	164	.20	2	2.78	.01	.03	2	3	140	.1	
SE1*100E	1	47	6	125	.3	24	16	5203	4.04	78	2	ND	2	23	2	4	2	94	.65	.22	8	40	.33	277	.20	2	2.93	.02	.03	2	2	100	.3	
SE1*112.5E	1	58	3	52	.2	32	14	748	3.91	7	2	ND	2	12	2	10	2	120	.47	.07	6	53	.57	108	.24	2	3.89	.01	.03	2	54	120	.1	
SE1*125E	1	35	6	85	.2	30	14	1870	4.57	16	2	ND	2	13	2	2	2	106	.43	.09	6	43	.37	376	.15	2	2.56	.01	.05	2	2	110	.3	
SE1*137.5E	1	17	7	50	.2	26	14	4301	3.85	60	2	ND	2	19	1	2	2	99	.57	.05	6	39	.25	264	.17	2	1.74	.01	.03	2	1	130	.1	
SE1*150E	1	39	3	29	.1	18	9	560	3.09	2	2	ND	2	15	1	2	2	103	.68	.04	5	30	.49	66	.24	2	2.47	.02	.02	2	1	60	.1	
SE1*162.5E	1	49	5	29	.3	27	11	247	3.62	5	2	ND	2	16	2	2	2	124	.44	.02	6	63	.49	147	.29	2	3.98	.02	.03	2	2	100	.1	
SE1*175E	1	15	4	33	.1	15	9	963	3.39	2	2	ND	2	20	1	2	2	107	.55	.02	4	32	.25	95	.22	2	1.57	.02	.02	2	1	50	.1	
SE1*187.5E	1	30	5	60	.2	24	11	947	4.03	4	2	ND	2	17	2	2	2	126	.54	.04	4	37	.43	106	.28	2	2.39	.02	.03	2	1	70	.1	
SE2*200E	1	26	6	47	.2	14	11	822	4.31	2	2	ND	2	12	2	2	2	141	.37	.03	5	34	.20	72	.30	2	1.86	.01	.02	2	1	60	.1	
SE2*40*	1	39	4	25	.3	14	6	192	2.00	2	2	ND	2	25	1	2	2	68	1.03	.06	6	34	.49	92	.17	2	2.35	.02	.03	2	3	80	.1	
SE2*50*	1	32	7	61	.1	16	11	505	3.99	2	2	ND	2	14	2	2	2	126	.43	.04	4	31	.42	179	.25	2	2.51	.01	.02	2	3	80	.1	
SE2*100*	1	26	10	44	.2	34	14	3296	2.65	4	2	ND	2	30	1	2	2	59	1.16	.06	4	27	.71	384	.10	2	1.98	.02	.08	2	2	60	.1	
SE2*150*	1	25	6	56	.1	15	11	1006	3.41	2	2	ND	2	12	1	2	2	97	.34	.10	4	33	.32	163	.18	2	2.38	.01	.03	2	1	50	.1	
SE2*200*	1	10	9	16	.1	5	4	220	1.85	2	2	ND	2	19	1	2	2	62	.41	.05	4	10	.18	206	.04	2	1.62	.01	.07	2	1	50	.1	
SE2*250*	1	13	8	41	.2	10	7	718	3.53	2	2	ND	2	16	1	2	2	112	.45	.05	4	28	.29	181	.16	2	2.03	.01	.03	2	2	60	.1	
SE2*300*	1	42	8	80	.3	28	14	469	4.54	6	2	ND	2	15	2	2	2	116	.46	.07	7	47	.56	164	.25	2	3.80	.02	.04	2	2	130	.1	
SE2*350*	1	65	12	55	.3	36	16	1064	5.65	38	2	ND	2	12	2	2	2	158	.39	.06	9	84	.82	172	.14	2	3.38	.01	.03	2	1	80	.1	
SE2*400*	1	16	5	55	.1	10	11	1838	3.27	2	2	ND	2	17	1	2	2	91	.51	.06	7	23	.27	192	.09	2	1.70	.02	.05	2	2	70	.1	
SE2*450*	1	53	7	497	.2	23	13	2420	3.98	3	2	ND	2	31	5	2	2	99	1.11	.06	12	39	.43	285	.20	2	3.08	.02	.03	2	9	360	.3	
SE2*500*	1	33	8	71	.2	14	10	401	6.17	2	2	ND	2	14	2	2	2	156	.32	.17	4	36	.33	78	.23	2	3.44	.01	.02	2	6	70	.1	
SE2*550*	1	26	8	73	.1	19	14	1646	2.86	2	2	ND	2	24	1	2	2	89	.46	.08	4	35	.55	171	.16	2	2.28	.01	.05	2	1	120	.1	
SE2*600*	1	26	5	45	.2	18	10	782	3.57	2	2	ND	2	14	2	2	2	111	.38	.09	4	35	.33	113	.23	2	3.13	.01	.02	2	1	40	.1	
SE2*650*	1	38	3	47	.1	22	10	684	3.69	2	2	ND	2	12	2	2	2	114	.41	.07	4	39	.41	118	.23	2	2.95	.01	.02	2	1	40	.1	
SE2*700*	1	47	6	39	.2	24	13	884	4.74	2	2	ND	2	18	2	2	2	128	.48	.04	10	44	.44	202	.16	2	3.24	.01	.04	2	8	1600	.2	
SE2*750*	1	46	4	57	.1	29	14	1129	4.56	2	3	ND	2	14	2	2	2	135	.47	.04	6	53	.46	158	.26	2	3.84	.01	.03	2	5	60	.1	
SE2*800*	1	51	6	45	.3	28	15	480	4.83	2	2	ND	2	15	2	2	2	137	.50	.03	9	72	.41	131	.27	2	4.41	.02	.02	2	3	160	.2	
SE2*850*	1	30	6	58	.2	22	14	1694	4.34	2	2	ND	2	25	2	5	2	139	.75	.04	6	42	.37	169	.25	2	2.60	.02	.03	2	2	110	.1	
SE2*900*	1	42	3	56	.1	29	13	942	4.11	2	2	ND	2	16	2	2	2	131	.61	.05	5	47	.49	151	.26	2	3.66	.02	.03	2	2	65	.1	
SE2*950*	1	18	3	48	.1	16	12	1233	3.90	2	2	ND	2	21	2	2	2	129	.59	.03	3	32	.26	98	.33	2	1.73	.02	.01	2	1	70	.1	
SE2*1000*	1	36	5	43	.2	24	11	876	3.47	16	2	ND	2	15	1	2	2	112	.61	.04	4	34	.45	144	.25	2	2.62	.02	.02	2	2	110	.1	
STD A-1	1	31	39	187	.4	36	13	1026	2.73	10	2	ND	2	34	2	2	2	55	.57	.10	8	72	.76	269	.08	4	1.91	.02	.20	2	1	55	.3	

ASARCO EXPLORATION PROJECT # VILLALTA-GRID NO SB-LINE NO FILE # B2-1276

PAGE # 2

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 %	M ppm	Au** ppb	Hg* ppb	Ag* ppm
SB2+1050m	1	57	7	65	.2	48	21	2530	6.20	55	3	ND	2	18	2	6	2	133	.22	.06	3	85	.53	300	.01	4	2.11	.01	.10	2	4	150	.1
SB2+1100m	1	31	8	35	.2	25	12	363	4.52	5	3	ND	2	13	2	7	2	121	.31	.04	5	45	.32	86	.20	3	3.00	.01	.02	2	1	80	.1
SB2+1150m	1	29	4	27	.2	17	8	184	2.14	10	2	ND	2	20	1	5	2	61	.79	.02	4	33	.70	73	.13	4	1.62	.02	.02	2	3	350	.1
SB3+0m	1	39	2	35	.2	22	11	271	2.51	3	2	ND	2	15	1	2	2	83	.73	.03	3	33	.85	78	.22	3	1.72	.02	.02	2	2	40	.1
SB3+50m	1	25	3	31	.2	19	8	229	2.49	2	2	ND	2	19	1	2	2	74	.89	.02	3	31	.76	74	.20	3	1.62	.04	.03	2	1	40	.1
SB3+100m	1	17	6	25	.2	14	8	195	3.71	2	3	ND	2	11	2	2	2	130	.35	.01	3	29	.35	106	.23	2	1.80	.01	.02	2	1	60	.1
SB3+150m	1	38	5	40	.2	21	11	653	3.74	2	2	ND	2	11	2	2	2	116	.42	.04	3	33	.49	99	.24	2	2.38	.01	.03	2	2	50	.1
SB3+200m	1	35	8	53	.2	24	11	838	3.45	2	3	ND	2	16	2	2	2	92	.83	.05	6	35	.75	164	.23	2	2.29	.02	.03	2	3	70	.1
SB3+250m	1	25	11	51	.3	17	10	1093	3.23	2	2	ND	2	15	1	2	2	94	.74	.04	4	29	.39	172	.18	2	2.18	.01	.02	2	1	60	.1
SB3+300m	1	25	22	131	.3	14	15	3213	3.23	2	3	ND	2	9	2	2	2	76	.36	.11	7	22	.26	254	.14	3	1.96	.01	.03	2	65	90	.1
SB3+350m	1	20	21	99	.4	13	12	1841	3.59	4	2	ND	2	13	2	2	2	103	.45	.05	5	30	.39	219	.15	3	1.94	.01	.03	2	1	65	.1
SB3+400m	1	30	20	238	.5	12	16	10235	2.22	3	2	ND	4	34	3	2	3	47	1.33	.08	9	15	.20	1157	.05	3	1.51	.01	.06	2	1	130	.4
SB3+450m	1	40	7	68	.2	19	11	998	3.74	4	2	ND	2	12	2	2	2	106	.43	.19	2	32	.45	171	.18	3	2.24	.01	.03	2	2	35	.1
SB3+500m	1	75	12	61	.3	19	13	5433	3.33	2	2	ND	2	32	2	2	2	81	1.40	.09	20	31	.38	417	.15	5	2.36	.01	.04	2	1	90	.4
SB3+550m	1	27	16	87	.2	13	15	6015	3.71	3	2	ND	2	14	1	2	2	84	.48	.12	8	26	.31	237	.12	2	1.90	.01	.04	2	1	60	.2
SB3+600m	1	13	6	64	.2	10	10	1944	3.41	7	2	ND	2	16	1	2	2	99	.39	.05	3	27	.28	162	.16	2	1.49	.01	.02	2	1	60	.1
SB3+650m	1	13	6	30	.2	8	4	205	2.63	2	2	ND	2	13	1	2	2	82	.33	.04	3	20	.22	60	.13	2	1.14	.01	.02	2	1	20	.1
SB3+700m	1	28	7	31	.1	12	6	423	3.80	2	2	ND	2	10	2	2	2	115	.30	.07	3	33	.32	65	.19	2	2.55	.01	.02	2	2	80	.1
SB3+750m	1	11	6	35	.1	5	5	631	2.04	3	2	ND	2	12	1	2	2	56	.32	.05	4	16	.16	61	.10	2	1.03	.01	.03	2	13	40	.1
SB3+800m	1	24	7	50	.1	14	8	377	3.53	2	3	ND	2	11	2	2	2	105	.34	.09	3	29	.36	88	.17	4	2.17	.01	.03	2	1	120	.1
SB3+850m	1	57	5	33	.2	22	9	560	2.93	2	2	ND	2	15	1	2	2	80	.68	.03	8	32	.62	102	.20	3	2.29	.02	.02	2	2	40	.1
SB3+900m	1	21	5	70	.1	15	9	1187	3.42	2	3	ND	2	11	1	2	2	86	.33	.14	4	29	.21	176	.20	2	2.02	.01	.02	2	2	60	.1
SB3+950m	1	12	7	38	.2	11	8	738	3.15	2	2	ND	2	13	1	2	2	88	.41	.07	3	24	.24	80	.20	2	1.36	.01	.02	2	1	40	.1
SB3+1000m	1	49	8	45	.2	21	11	1942	3.54	3	2	ND	2	15	2	2	2	89	.57	.06	6	33	.54	152	.20	3	2.57	.02	.03	2	35	180	.1
SB3+1050m	1	21	6	92	.2	16	13	2616	3.49	2	2	ND	2	16	1	2	2	78	.50	.10	7	46	.50	280	.05	3	2.29	.01	.04	2	2	75	.1
SB3+1100m	1	25	5	55	.2	9	9	914	3.45	2	2	ND	2	10	1	2	2	51	.14	.06	3	14	.20	254	.01	4	1.52	.02	.05	2	2	40	.1
SB3+1150m	1	38	7	39	.3	24	11	598	3.68	2	2	ND	2	11	2	2	2	118	.38	.03	4	40	.40	114	.24	2	3.13	.01	.02	2	1	60	.1
SB3+1200m	1	74	7	59	.1	29	14	1036	4.22	2	2	ND	2	12	2	2	2	126	.43	.09	6	47	.63	148	.21	3	3.82	.01	.04	2	3	80	.1
SB3+1250m	1	46	7	96	.1	25	12	1932	3.59	2	2	ND	2	11	1	2	2	97	.34	.23	3	37	.39	168	.19	2	2.98	.01	.03	2	2	45	.1
SB3+1300m	1	18	9	74	.1	27	23	4807	4.65	189	2	ND	2	25	2	29	2	59	.59	.10	6	27	.11	333	.01	4	1.01	.01	.11	2	1	180	.1
SB3+1350m	1	30	8	69	.1	22	12	1182	3.59	2	2	ND	2	15	1	2	2	94	.44	.15	4	36	.54	146	.14	2	2.48	.01	.04	2	1	40	.1
SB3+1400m	1	46	9	51	.2	28	11	1158	3.99	8	2	ND	2	18	2	2	2	112	.40	.12	5	41	.51	183	.19	3	2.92	.01	.04	2	1	55	.1
SB3+1450m	1	16	6	47	.2	17	9	389	2.95	2	2	ND	2	18	1	2	2	87	.41	.02	4	34	.42	97	.12	2	1.93	.01	.02	2	1	30	.1
SB3+1500m	1	54	6	34	.3	28	11	281	3.03	2	2	ND	2	34	1	2	2	95	1.07	.04	10	49	.79	108	.15	4	2.85	.02	.02	2	2	100	.1
SB4+0m	1	30	7	24	.1	17	7	175	1.79	2	2	ND	2	12	1	2	2	59	.44	.06	7	35	.55	40	.15	2	3.90	.02	.01	2	735	60	.1
SB4+50m	1	25	11	31	.1	10	10	235	4.98	2	3	2	2	14	2	2	2	129	.35	.03	4	32	.16	111	.20	2	4.07	.01	.02	2	3	60	.1
SB4+100m	1	25	8	56	.2	19	13	1285	3.54	3	2	ND	2	13	1	2	2	109	.45	.06	4	33	.37	168	.23	4	2.23	.01	.02	2	1	65	.1
STD A-1	1	31	40	182	.4	35	12	1013	2.70	9	2	ND	2	35	2	2	2	55	.56	.10	8	72	.76	275	.08	7	1.94	.01	.20	2	1	50	.3

ASARCO EXPLORATION PROJECT # VILLALTA-GRID NO SE-LINE NO FILE # 82-1276

PAGE # 3

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+ ppm	Hg+ ppm	Ag+ ppm
SE4150w	1	16	9	76	.1	17	11	1022	4.55	5	2	ND	2	12	1	2	3	94	.39	.47	4	56	.38	104	.16	2	2.48	.01	.03	2	5	90	.3
SE4120w	1	42	5	58	.1	27	13	682	4.40	7	2	ND	2	12	2	2	2	128	.50	.10	4	43	.50	85	.26	2	3.34	.01	.02	2	2	70	.1
SE4125w	1	25	5	85	.1	25	15	1412	4.18	2	2	ND	2	16	1	2	3	116	.62	.08	4	43	.41	145	.25	2	2.87	.01	.03	2	2	70	.3
SE4130w	1	44	7	55	.1	21	14	1793	3.92	3	2	ND	2	21	1	2	2	107	1.26	.05	9	42	.43	119	.20	2	2.79	.01	.02	2	1	80	.4
SE4135w	1	33	7	63	.1	18	15	704	4.92	2	2	ND	2	14	1	2	3	130	.44	.04	7	58	.31	101	.27	2	3.14	.01	.01	2	1	80	.3
SE4140w	1	20	12	51	.1	13	10	882	3.77	2	2	ND	2	16	1	2	2	102	.53	.06	5	33	.24	100	.23	2	1.74	.02	.02	2	1	40	.3
SE4145w	1	48	6	53	.1	21	13	675	4.61	2	2	ND	2	13	1	2	2	134	.54	.09	7	39	.39	119	.27	2	3.07	.01	.03	2	1	80	.2
SE4150w	1	12	8	36	.1	11	8	567	3.59	2	2	ND	2	14	1	2	2	108	.47	.05	4	27	.26	148	.18	2	1.61	.01	.03	2	11	30	.3
SE4155w	1	67	8	53	.1	23	15	1203	4.46	4	4	ND	2	26	2	2	3	134	.80	.10	5	39	.54	318	.20	2	3.62	.01	.05	2	5	110	.2
SE4160w	1	52	11	73	.1	21	25	2681	4.12	2	3	ND	2	18	2	2	3	88	.48	.16	11	27	.28	238	.19	2	3.56	.01	.04	2	7	120	.2
SE4165w	1	6	5	14	.1	3	2	248	.87	2	2	ND	2	37	1	2	2	32	.50	.02	3	7	.09	99	.03	2	1.14	.01	.02	2	5	30	.2
SE4170w	1	22	6	55	.1	8	14	4578	3.07	2	2	ND	2	22	1	2	2	66	.46	.13	6	24	.37	339	.09	2	1.76	.02	.05	2	4	140	.2
SE4175w	1	42	6	44	.1	14	8	468	4.24	2	3	ND	2	14	1	2	2	127	.42	.10	4	33	.28	131	.21	2	2.35	.01	.02	2	5	60	.3
SE4180w	1	9	7	55	.1	7	10	820	3.74	3	2	ND	2	7	1	2	2	53	.13	.05	17	10	1.00	125	.01	2	2.12	.02	.07	2	4	40	.2
SE4185w	1	31	9	60	.1	19	22	545	5.91	2	2	ND	2	13	2	2	2	149	.45	.09	9	40	.40	212	.23	2	3.07	.01	.04	2	4	100	.3
SE4190w	1	14	12	81	.1	8	13	2531	3.45	2	2	ND	2	18	1	2	2	54	.79	.07	27	8	.54	411	.01	2	2.32	.03	.09	2	3	75	.3
SE4195w	1	34	13	58	.2	7	13	1928	2.96	2	2	ND	2	20	1	2	2	50	.68	.04	7	11	.65	667	.01	2	2.33	.02	.07	2	5	100	.2
SE4100w	1	26	8	45	.2	15	9	519	4.14	2	3	ND	2	12	1	2	2	122	.40	.08	4	32	.28	106	.22	2	2.11	.01	.02	2	2	60	.4
SE4105w	1	26	9	56	.1	21	10	888	4.49	2	3	ND	2	12	2	2	2	115	.41	.09	4	41	.42	99	.21	2	2.73	.01	.03	2	1	75	.3
SE4110w	1	10	8	45	.1	10	7	1583	4.24	2	2	ND	2	12	1	2	2	119	.39	.14	3	29	.25	106	.18	2	1.82	.01	.02	2	6	65	.1
SE4115w	1	32	10	65	.2	16	13	1558	4.16	6	3	ND	2	12	1	2	2	110	.42	.15	5	31	.33	161	.14	2	2.69	.01	.03	2	4	100	.3
SE4120w	1	13	8	50	.1	11	9	1483	2.87	2	2	ND	2	14	1	2	2	87	.44	.05	4	24	.30	111	.18	2	1.72	.02	.03	2	4	80	.1
SE4125w	1	48	10	77	.1	32	14	928	5.20	5	2	ND	2	13	2	2	2	128	.50	.17	5	53	.51	127	.23	2	3.73	.01	.03	2	1	85	.3
SE4130w	1	16	16	49	.1	8	9	5169	2.36	2	2	ND	2	12	1	2	3	68	.24	.08	7	19	.40	196	.01	2	1.68	.02	.05	2	1	90	.3
SE4135w	1	19	7	50	.1	15	11	1409	3.33	2	3	ND	2	17	1	2	2	93	.52	.06	6	31	.53	172	.04	2	2.17	.02	.05	2	2	55	.3
SE4140w	1	46	12	69	.1	25	11	3679	3.32	2	3	ND	2	34	1	2	2	76	1.53	.06	26	39	.41	277	.17	2	2.85	.02	.03	2	1	220	.4
SE4145w	1	8	7	34	.1	7	7	2374	2.03	2	2	ND	2	18	1	2	2	60	.48	.05	4	17	.27	110	.09	2	1.17	.01	.03	2	2	50	.1
SE4150w	1	19	6	46	.1	14	9	1547	2.77	2	2	ND	2	17	1	2	2	78	.54	.09	4	27	.49	98	.12	2	1.83	.02	.03	2	1	60	.1
SE4155w	1	38	12	70	.1	21	13	2898	4.53	2	2	ND	2	20	2	2	3	105	.46	.14	7	50	.50	258	.11	2	3.42	.01	.06	2	1	100	.1
SE4160w	1	49	6	80	.1	23	14	1380	4.78	2	3	ND	2	14	1	2	2	114	.48	.15	6	43	.32	136	.25	2	2.91	.02	.03	2	3	70	.4
SE4165w	1	68	4	89	.1	26	14	1413	4.15	2	3	ND	2	13	1	2	3	111	.48	.24	5	40	.45	121	.24	2	3.09	.01	.03	2	1	90	.2
SE4170w	1	34	7	107	.1	33	17	1719	4.63	4	3	ND	2	17	2	2	3	122	.47	.16	5	46	.39	151	.24	2	3.20	.02	.04	2	3	60	.1
SE4175w	1	57	2	75	.1	35	15	632	4.75	2	3	ND	2	14	2	2	2	150	.51	.12	4	53	.48	110	.33	2	4.56	.01	.03	2	1	45	.2
SE4180w	1	48	6	72	.1	28	16	2048	4.79	3	2	ND	2	16	2	2	3	147	.57	.20	4	46	.47	121	.29	2	3.97	.02	.02	2	2	65	.3
SE4185w	1	40	7	107	.1	28	16	2514	4.11	2	2	ND	2	14	1	3	3	117	.46	.18	6	48	.41	179	.24	2	3.59	.01	.03	2	1	60	.3
SE4190w	1	74	5	78	.1	31	16	1057	4.64	2	4	ND	2	11	2	2	3	148	.45	.19	5	50	.39	90	.31	2	4.73	.01	.02	2	3	75	.3
SE4195w	1	14	6	79	.1	12	12	3796	2.87	2	2	ND	2	20	1	2	2	79	.72	.18	4	25	.26	142	.22	2	1.60	.01	.03	2	1	60	.3
SIC A-1	1	30	40	190	.3	36	13	1032	2.74	8	2	ND	2	32	2	2	2	55	.65	.11	8	74	.75	249	.08	3	1.89	.02	.19	2	1	55	.4

ASARCO EXPLORATION

PROJECT # VILLALTA-GRID NO

SB-LINE NO

FILE # 82-1276

PAGE # 4

SAMPLE #	No ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn 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
S94+2100m	1	33	5	81	.2	20	12	911	3.52	2	2	ND	2	15	2	2	2	103	.59	.11	3	32	.39	53	.28	2	2.65	.01	.02	2	3	40	.4
S94+2125m	1	39	6	100	.1	22	14	2295	3.72	2	2	ND	2	23	2	2	2	104	.60	.05	6	35	.37	120	.28	2	2.72	.01	.04	2	1	70	.3
S94+2100m	1	25	6	47	.2	28	20	2102	5.72	18	2	ND	2	17	2	2	2	195	.62	.04	5	55	.42	128	.23	2	3.76	.01	.03	2	2	110	.3
S94+2150m	1	28	2	37	.6	20	9	238	2.63	7	2	2	2	21	1	2	2	100	1.22	.02	4	31	.85	43	.31	2	2.16	.03	.01	2	3	50	.5
S95+0m	1	26	2	33	.3	18	9	292	2.55	2	2	ND	2	21	1	2	2	83	1.10	.02	11	33	.80	58	.21	2	2.22	.01	.03	2	2	60	.2
S95+50m	1	20	9	51	.1	12	12	4337	2.86	4	2	ND	2	28	1	2	2	87	.92	.04	7	25	.39	326	.16	2	1.94	.02	.03	2	1	80	.3
S95+100m	1	38	3	68	.3	21	15	601	3.89	2	2	ND	2	15	2	2	2	118	.65	.06	7	39	.56	98	.23	2	3.19	.01	.03	2	1	95	.3
S95+150m	1	47	7	77	.2	22	14	1551	3.78	2	2	ND	2	19	1	2	2	99	.73	.25	6	38	.44	289	.17	2	3.07	.01	.04	2	3	70	.2
S95+200m	1	56	6	58	.2	23	13	1013	3.90	3	3	ND	2	15	2	2	2	116	.57	.13	6	39	.71	203	.19	2	3.48	.01	.04	2	3	120	.4
S95+250m	1	10	15	68	.1	7	11	3308	1.77	2	2	ND	2	32	1	2	2	43	.92	.10	7	11	.36	509	.03	2	2.14	.01	.11	2	1	120	.2
S95+300m	1	43	16	71	.2	12	16	3058	4.03	2	2	ND	2	27	2	2	2	88	.77	.13	8	16	.49	395	.04	2	3.21	.01	.13	2	1	130	.2
S95+350m	1	51	6	60	.2	24	20	727	4.83	2	2	ND	2	13	2	2	2	135	.35	.13	13	44	.57	78	.22	2	4.60	.01	.03	2	7	170	.4
S95+400m	1	57	6	51	.2	24	12	237	5.56	2	2	ND	2	16	2	2	2	158	.33	.06	5	52	.44	95	.19	2	4.32	.01	.03	2	2	100	.2
S95+450m	1	78	9	71	.3	21	29	1855	5.00	5	2	ND	2	15	2	2	2	133	.30	.22	8	48	.43	107	.16	2	4.65	.01	.03	2	1	150	.4
S95+500m	1	24	11	45	.2	20	13	549	4.97	2	3	ND	2	20	2	2	2	167	.38	.04	5	42	.35	137	.19	2	3.16	.01	.04	2	6	60	.3
S95+550m	1	17	12	41	.3	9	6	646	4.03	2	2	ND	2	30	1	2	2	132	.77	.12	4	27	.38	92	.08	2	2.95	.01	.04	2	1	140	.3
S95+600m	1	11	8	23	.3	5	3	237	2.29	2	2	ND	2	31	1	2	2	92	.58	.03	4	19	.23	30	.09	2	1.75	.01	.02	2	2	50	.1
S95+650m	1	11	17	31	.2	4	4	672	1.90	2	2	ND	2	41	1	2	2	84	1.30	.06	4	11	.27	125	.06	2	2.87	.01	.05	2	1	60	.2
S95+700m	1	54	10	55	.1	18	10	1139	4.72	2	2	ND	2	16	2	2	2	140	.43	.13	5	46	.51	91	.16	2	4.22	.01	.04	2	5	65	.4
S95+750m	1	47	9	53	.2	19	11	1000	3.76	4	2	ND	2	17	1	2	2	110	.49	.10	5	50	.71	96	.14	2	3.47	.01	.04	2	1	130	.2
S95+800m	1	68	12	62	.2	24	11	584	5.31	2	4	ND	2	14	2	2	2	159	.33	.11	5	61	.55	66	.23	2	5.60	.01	.02	2	4	80	.3
S95+850m	1	59	9	48	.2	22	12	398	4.56	2	2	ND	2	14	2	2	2	140	.44	.09	5	52	.55	59	.21	2	4.49	.01	.02	2	2	90	.3
S95+900m	1	47	9	57	.3	24	13	460	4.55	2	2	ND	2	13	2	2	2	130	.48	.07	6	44	.56	83	.22	2	3.96	.01	.02	2	1	80	.4
S95+950m	1	53	13	49	.2	15	8	1262	3.92	2	2	ND	2	17	2	2	2	111	.45	.13	6	38	.39	94	.14	2	3.59	.01	.04	2	3	150	.3
S95+1000m	1	55	7	56	.2	25	12	938	3.68	4	2	ND	2	13	1	2	2	113	.42	.07	5	43	.55	100	.20	2	3.93	.01	.03	2	2	90	.3
S95+1050m	1	63	9	72	.1	34	15	396	5.03	2	2	ND	2	14	2	2	2	146	.46	.07	7	60	.62	108	.28	2	5.34	.01	.04	2	3	160	.2
S95+1100m	1	74	9	54	.3	38	16	423	5.38	10	2	2	2	14	3	2	2	164	.43	.06	6	68	.62	138	.30	2	6.47	.02	.03	2	1	110	.5
S95+1150m	1	39	9	48	.3	23	12	574	5.09	2	2	ND	2	14	2	2	2	158	.38	.05	5	54	.44	111	.25	2	3.46	.01	.02	2	2	60	.2
S95+1200m	1	45	8	57	.2	26	13	614	4.08	2	2	ND	2	14	2	2	2	125	.47	.04	5	45	.51	99	.24	2	3.74	.01	.02	2	1	90	.3
S95+1350m	1	28	9	45	.1	18	9	252	4.90	2	2	ND	2	19	2	2	2	162	.43	.04	5	43	.33	124	.24	2	3.01	.02	.03	2	2	50	.2
S95+1400m	1	16	19	57	.1	7	10	6477	2.47	2	2	ND	3	41	1	2	2	60	.63	.09	6	17	.27	427	.02	2	2.41	.01	.09	2	1	120	.1
S95+1450m	1	27	12	51	.2	17	16	1793	3.68	2	2	ND	2	20	2	2	2	111	.76	.09	7	29	.76	200	.11	2	2.40	.03	.09	2	1	55	.3
S95+1500m	1	62	7	48	.2	27	12	799	3.50	2	2	ND	2	17	2	2	2	121	.56	.06	8	48	.66	149	.26	2	3.95	.02	.06	2	1	80	.4
S95+1550m	1	28	12	82	.1	11	11	4392	3.77	2	2	ND	2	21	2	2	2	95	.51	.19	5	33	.19	204	.21	2	2.34	.01	.03	2	1	70	.5
S95+1600m	1	53	10	43	.2	25	12	796	3.75	2	2	ND	2	18	2	2	2	117	.82	.07	8	46	.56	196	.22	2	3.54	.02	.03	2	1	70	.2
S10 A-1	1	31	39	189	.4	36	13	1034	2.74	7	2	ND	2	34	2	2	2	56	.64	.10	9	74	.77	269	.08	3	2.20	.02	.20	2	1	55	.4

ASARCO EXPLORATION PROJECT # VILLALTA-GRID NO SB-LINE NO FILE # 82-1276

PAGE # 5

SAMPLE #	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn 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 %	M ppm	Au** ppb	Hg* ppb	Ag* ppm
S85+1850	1	53	5	31	.2	16	9	2276	3.03	2	2	ND	2	20	1	2	2	81	1.10	.05	13	34	.24	173	.15	2	2.39	.01	.02	2	1	90	.4
S85+1900	1	49	3	30	.2	18	10	522	3.03	2	2	ND	2	18	1	2	2	89	.91	.03	5	37	.39	149	.17	3	2.56	.01	.02	2	4	80	.1
S85+1950	1	43	2	37	.1	27	12	476	4.46	2	4	ND	2	11	2	2	2	131	.43	.05	6	61	.45	168	.27	2	3.74	.01	.03	2	3	70	.2
S85+2000	1	61	3	37	.1	22	11	239	3.87	2	3	ND	2	7	1	2	2	124	.26	.02	6	47	.44	72	.23	2	3.30	.01	.02	2	3	110	.2
S85+1850	1	50	3	32	.1	20	12	267	4.85	2	2	ND	2	8	2	2	2	147	.24	.02	5	44	.22	93	.26	2	3.33	.01	.01	2	4	70	.1
S85+1900	1	59	5	34	.1	25	10	419	3.64	2	3	ND	2	12	1	2	2	116	.42	.06	3	39	.49	61	.21	2	2.88	.01	.03	2	2	60	.2
S85+1950	1	56	18	86	.2	14	19	10273	3.43	7	2	ND	3	48	2	2	4	46	1.00	.11	11	18	.51	678	.02	3	1.88	.01	.08	2	1	280	.3
S85+2000	1	54	4	48	.1	23	12	897	3.14	2	2	ND	2	16	1	2	2	88	.47	.05	6	39	.65	124	.15	3	2.58	.01	.04	2	2	40	.1
S85+2050	1	22	5	45	.1	17	8	517	2.45	3	2	ND	2	12	1	2	2	70	.39	.05	3	26	.36	76	.16	2	1.87	.01	.03	2	5	50	.1
S85+2100	1	31	4	44	.1	24	11	420	3.20	2	2	ND	2	11	1	2	2	98	.33	.04	3	40	.49	101	.20	2	2.76	.01	.02	2	4	40	.1
S85+2150	1	32	1	48	.1	20	9	329	3.02	2	3	ND	2	8	1	2	2	95	.33	.05	4	32	.45	45	.22	3	2.41	.01	.02	2	3	45	.1
S85+2200	1	40	4	75	.1	27	12	1198	3.38	2	2	ND	2	15	1	2	2	96	.46	.11	3	42	.47	141	.17	3	3.18	.01	.03	2	1	65	.1
S85+2200	1	39	4	49	.1	30	12	268	4.42	3	3	ND	2	12	2	2	2	136	.35	.04	4	59	.43	113	.28	3	4.19	.01	.02	2	2	110	.1
S85+2350	1	18	1	40	.1	19	10	290	3.61	2	2	ND	2	10	1	2	2	117	.33	.03	2	35	.33	42	.28	2	2.13	.01	.02	2	1	55	.1
S85+2400	1	36	4	46	.1	21	10	220	3.37	2	3	ND	2	11	1	2	2	107	.35	.03	5	36	.46	87	.23	2	2.61	.01	.02	2	1	50	.1
S86+0	1	20	6	47	.1	12	11	1434	3.04	2	2	ND	2	14	1	2	2	80	.43	.10	3	26	.33	107	.23	2	1.55	.02	.02	2	4	60	.2
S86+50	1	21	3	34	.1	15	9	733	2.78	2	2	ND	2	12	1	2	2	83	.36	.04	3	25	.32	114	.18	3	1.96	.02	.02	2	3	60	.1
S86+100	1	24	24	44	.1	12	9	2225	3.24	2	3	ND	2	14	1	2	2	86	.34	.13	3	31	.35	119	.12	3	2.08	.01	.02	2	1	100	.1
S86+150	1	15	5	40	.1	9	8	1552	2.30	2	2	ND	2	11	1	2	2	60	.32	.13	3	21	.26	100	.08	2	1.41	.01	.02	2	5	60	.1
S86+200	1	58	9	36	.1	15	9	554	3.97	6	2	ND	2	11	2	2	2	114	.53	.05	4	57	.37	96	.16	3	2.42	.01	.02	2	1	85	.1
S86+250	1	32	5	25	.1	14	9	597	3.90	2	2	ND	2	11	1	2	2	119	.31	.03	9	64	.41	92	.16	3	2.08	.01	.02	2	1	90	.1
S86+300	1	35	8	56	.1	30	14	3576	3.32	2	2	ND	2	24	1	2	2	64	.53	.31	3	76	.80	408	.08	2	2.51	.01	.04	2	1	75	.2
S86+350	1	23	7	29	.1	12	11	1043	3.90	2	2	ND	2	10	1	2	2	104	.22	.09	3	31	.29	57	.13	2	2.17	.01	.02	2	1	70	.2
S86+400	1	20	7	42	.1	11	12	1332	2.92	2	2	ND	2	18	1	2	2	69	.45	.08	4	26	.28	255	.09	2	1.71	.02	.03	2	3	70	.1
S86+450	1	17	7	56	.1	16	12	1142	3.19	2	2	ND	2	14	1	2	2	69	.43	.23	3	28	.34	195	.11	2	2.66	.01	.03	2	1	80	.2
S86+500	1	28	11	91	.2	10	13	787	4.10	6	2	ND	2	13	1	2	2	66	.39	.17	4	20	.33	203	.07	3	1.98	.01	.06	2	1	100	.3
S86+600	1	41	6	29	.1	14	7	694	3.33	4	2	ND	2	6	1	2	2	89	.18	.14	6	39	.35	47	.14	3	4.78	.01	.02	2	3	300	.1
S86+650	1	9	7	43	.1	7	6	3453	1.90	2	2	ND	2	11	1	2	2	52	.29	.09	3	17	.19	168	.08	2	1.20	.01	.02	2	1	45	.1
S86+700	1	37	12	147	.3	15	19	13384	3.88	2	3	ND	5	18	2	2	4	77	.43	.23	4	38	.34	359	.06	2	2.96	.01	.02	2	1	220	.4
S86+750	1	41	4	36	.1	17	9	836	3.02	2	3	ND	2	7	1	2	2	91	.23	.06	5	33	.47	61	.17	2	3.17	.01	.02	2	1	180	.1
S86+800	1	17	8	33	.1	8	5	977	2.47	2	3	ND	2	9	1	2	2	70	.23	.06	3	22	.24	97	.10	2	1.45	.01	.02	2	1	65	.1
S86+850	1	10	7	57	.1	7	6	3894	2.58	2	2	ND	2	7	1	2	2	57	.22	.22	3	21	.17	135	.07	2	1.72	.01	.02	2	2	65	.1
S86+900	1	29	7	34	.1	15	7	305	3.05	2	3	ND	2	8	1	2	2	83	.20	.06	3	37	.38	97	.14	2	4.16	.01	.02	2	2	60	.1
S86+950	1	13	6	34	.2	8	7	616	2.08	2	2	ND	2	14	1	2	2	55	.28	.04	3	19	.36	98	.07	2	1.76	.01	.03	2	1	90	.1
S86+1000	1	39	8	42	.1	18	9	1184	3.02	2	2	ND	2	9	1	2	2	86	.24	.07	4	37	.47	129	.12	2	3.53	.01	.03	2	1	100	.1
STD A-1	1	29	35	176	.4	33	12	960	2.54	7	3	ND	2	32	2	2	2	51	.56	.10	8	69	.71	251	.08	7	1.90	.02	.19	2	1	55	.3

SAMPLE I	Ko ppa	Cu ppa	Pb ppa	Zn ppa	Ag ppa	Ni ppa	Co ppa	Mn ppa	Fe I	As ppa	U ppa	Au ppa	Th ppa	Sr ppa	Cd ppa	Sb ppa	Bi ppa	V ppa	Ca I	P I	La ppa	Cr ppa	Mg I	Ba ppa	Ti I	B ppa	Al I	Na I	K I	M ppa	Au** ppb	Hg* ppb	Ag* ppa
SE6+1050W	1	14	5	31	.1	10	6	270	1.93	2	2	ND	2	6	1	2	2	49	.18	.03	2	18	.27	63	.09	2	1.57	.01	.02	2	8	70	.1
SE6+1100W	1	15	8	40	.1	10	6	1592	2.06	2	2	ND	2	9	1	2	2	61	.28	.05	2	22	.29	138	.11	2	1.86	.01	.02	2	2	70	.1
SE6+1150W	1	17	7	33	.1	9	6	936	2.52	2	2	ND	2	7	1	2	2	67	.17	.16	3	18	.18	131	.06	2	1.93	.01	.02	2	1	50	.1
SE6+1200W	1	47	6	39	.2	22	11	790	3.66	5	3	ND	2	7	1	2	2	90	.28	.06	13	35	.51	123	.14	2	2.89	.01	.04	2	1	260	.1
SE6+1250W	1	16	9	57	.1	11	8	3875	2.28	2	2	ND	2	9	1	2	2	48	.26	.14	2	16	.30	223	.07	2	1.28	.01	.03	2	13	80	.1
SE6+1300W	1	18	4	31	.1	16	7	574	2.56	2	3	ND	2	7	1	2	2	70	.33	.03	3	30	.36	101	.12	2	1.82	.01	.02	2	1	40	.1
SE6+1350W	1	14	6	45	.1	15	9	1733	3.07	4	2	ND	2	8	1	2	2	82	.29	.05	3	25	.27	126	.15	2	1.60	.01	.01	2	1	50	.1
SE6+1400W	1	108	11	29	.4	21	11	2148	3.85	5	4	ND	2	26	2	2	2	88	1.43	.04	44	52	.36	376	.12	5	2.74	.01	.03	2	2	260	.5
SE6+1450W	1	31	6	22	.1	21	11	199	3.90	5	2	ND	2	9	1	2	2	104	.31	.01	7	56	.59	182	.10	2	2.70	.01	.01	2	6	60	.1
SE6+1500W	1	43	7	35	.1	26	10	748	3.43	3	2	ND	2	11	1	2	2	94	.42	.03	5	70	.76	200	.05	3	2.23	.01	.03	2	22	520	.1
SE6+1550W	1	28	6	33	.1	18	9	896	2.94	3	2	ND	2	9	1	2	2	83	.39	.03	4	39	.43	128	.14	2	1.95	.01	.02	2	2	120	.2
SE6+1600W	1	22	8	40	.1	17	9	1427	2.86	2	2	ND	2	12	1	2	2	82	.43	.04	3	31	.38	160	.16	2	1.83	.01	.02	2	1	70	.1
SE6+1650W	1	32	5	27	.1	15	8	363	2.52	2	2	ND	2	10	1	2	2	75	.46	.04	4	23	.55	52	.14	3	1.31	.02	.02	2	1	75	.3
SE6+1700W	1	32	6	36	.1	19	11	618	3.57	2	3	ND	2	8	1	2	2	108	.33	.04	3	36	.40	78	.22	2	2.22	.01	.02	2	1	70	.2
SE6+1750W	1	41	6	33	.1	19	12	574	3.06	5	3	ND	2	14	1	2	2	97	.41	.03	5	36	.55	241	.17	2	2.03	.02	.03	2	2	90	.1
SE6+1800W	1	36	6	34	.1	19	10	488	2.68	3	2	ND	2	11	1	2	2	81	.53	.05	4	33	.58	90	.15	2	1.71	.01	.02	2	1	65	.2
SE6+1850W	1	26	6	40	.1	21	9	438	2.97	2	2	ND	2	7	1	2	2	84	.29	.06	3	35	.40	56	.18	2	2.17	.01	.01	2	1	80	.1
SE6+1900W	1	33	4	29	.1	18	9	364	2.64	5	2	ND	2	8	1	2	2	78	.36	.04	4	27	.49	50	.16	2	1.92	.01	.01	2	2	60	.1
SE6+1950W	1	49	5	33	.1	19	9	419	2.87	3	2	ND	2	10	1	2	2	85	.47	.05	4	29	.56	73	.18	2	2.19	.01	.02	2	2	80	.1
SE6+2000W	1	41	3	34	.1	19	9	342	2.62	2	2	ND	2	5	1	2	2	80	.27	.06	2	27	.51	38	.17	2	2.34	.01	.01	2	1	50	.1
SE6+2050W	1	49	2	27	.1	17	8	365	2.35	6	2	ND	2	7	1	2	2	70	.36	.04	4	22	.59	46	.16	2	1.66	.02	.02	2	4	70	.1
SE6+2100W	1	40	4	32	.1	16	8	478	2.53	5	2	ND	2	8	1	2	2	76	.35	.08	3	25	.51	48	.15	2	1.99	.01	.02	2	2	90	.1
SE6+2150W	1	27	4	28	.1	15	10	400	2.69	5	3	ND	2	11	1	2	2	78	.41	.04	5	29	.52	70	.09	3	1.48	.02	.02	2	1	65	.1
STD A-1	1	29	42	188	.3	36	13	1045	2.78	12	2	ND	2	35	2	2	2	57	.58	.11	8	73	.77	278	.08	7	1.97	.02	.20	2	1	50	.3
SE6+2200W	1	40	12	44	.2	18	9	429	3.95	69	2	ND	2	7	1	2	3	93	.10	.06	3	43	.65	48	.13	2	3.42	.01	.03	2	10	80	1.0

ANALYTICAL PROCEDURES

All soil samples were dried at 75°C and sieved to minus 80 mesh. ICP geochemical analysis was determined by taking a .500 gram sample digested with 3 milliliters of 3:1:3 nitric acid to hydrochloric acid to water at 90°C for 1 hour. The sample was diluted to 10 milliliters with water. Results are reported in ppm except for: Fe, Ca, P, Ba, Ti Al, Na and K which are in percent. The leach is partial for Ca, P, Mg, Al, Ti, La, Na, K, Cl and Cr. IS = Internal Standard. ICP results reported are for the following elements, Mn, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, Al, Na and K. Au⁺⁺ analysis was determined taking 10 - 30 gram samples subjected to fire assay preconcentration techniques to produce silver beads which are dissolved and Au is determined in solution by atomic absorption. Ag⁺⁺ analysis is by atomic absorption. Hg⁺⁺ analysis is determined by cold vapour AA using F. and J. Scientific Hg assembly. Au aliquot of the extract is added to a stannous chloride/hydrochloric acid solution. The reduced Hg is swept out of solution and passed into the Hg cell where is is measured by A.A.

STATISTICAL EVALUATION OF RESULTS

Gold - Please refer to ATTACHMENT "C" depicting gold values plotted in parts per billion at grid sites. The highest gold response in soils was 735 ppb postioned at SB4,0W. The attached probability plot for gold suggests the following anomalous parameters,

- > 16 ppb GOLD = anomalous
- 9 - 16 ppb GOLD = possibly anomalous
- < 9 ppb GOLD = background

Silver - Please see ATTACHMENT "D" indicating soil response for silver. The highest silver response was 0.5 ppm located at grid coordinates SB4,2150W; SB5,1100W; and SB6,1400W. Probability plot for silver indicates the following anomalous parameters,

- ▷ 0.4 ppm SILVER = anomalous
- 0.3 - 0.4 ppm SILVER = possibly anomalous
- ◁ 0.3 ppm SILVER = background

Mercury - Soil response for mercury is depicted in ATTACHMENT "E". The suggested geochemical response parameters using a probability plot are:

- ▷ 240 ppb MERCURY = anomalous
- 110 - 240 ppb MERCURY = possibly anomalous
- ◁ 110 ppb MERCURY = background

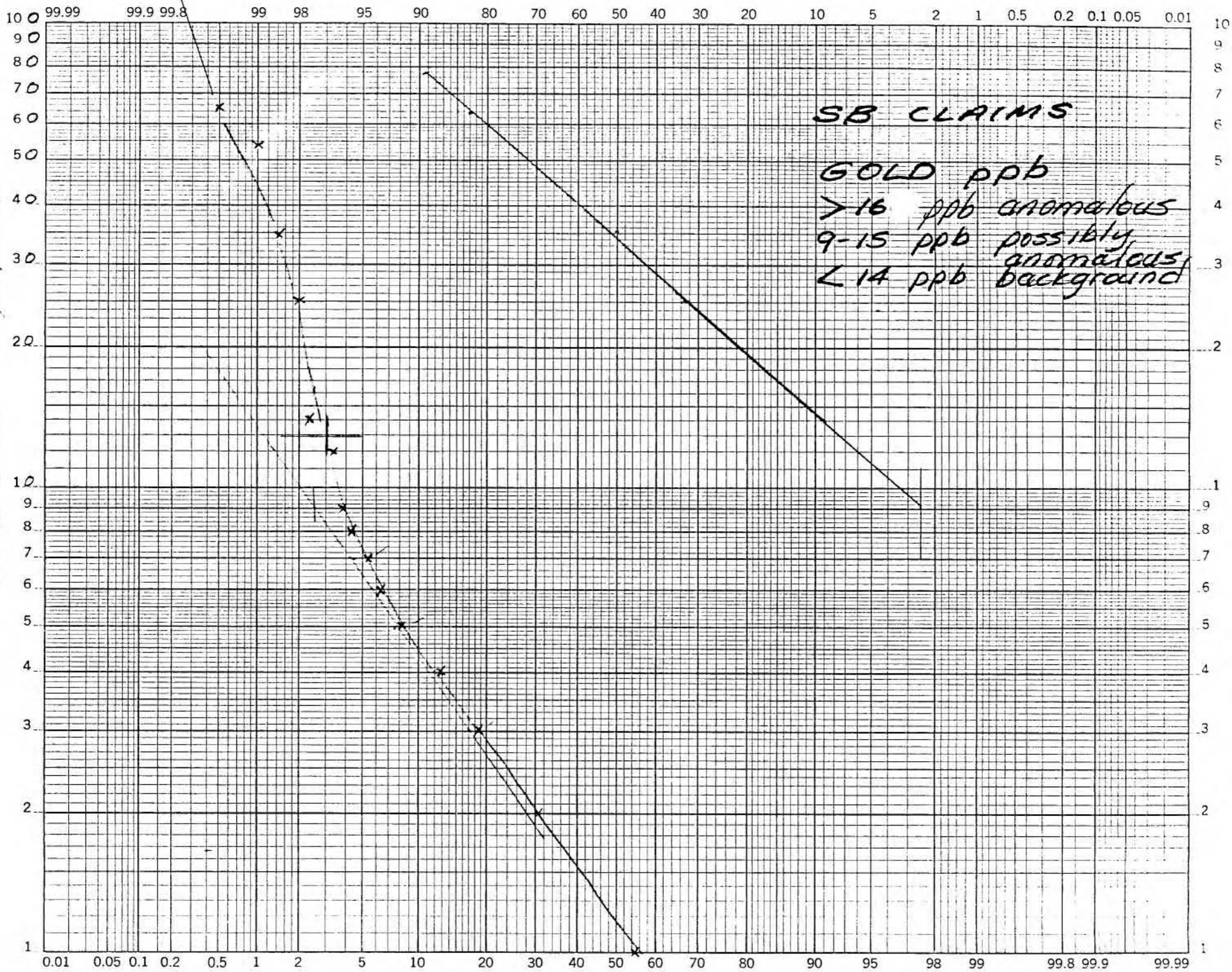
Antimony - Geochemical response for antimony in soils is plotted on ATTACHMENT "F". The probability plot suggests,

- ▷ 30 ppm ANTIMONY = anomalous
- 4 - 30 ppm ANTIMONY = possibly anomalous
- ◁ 4 ppm ANTIMONY = background

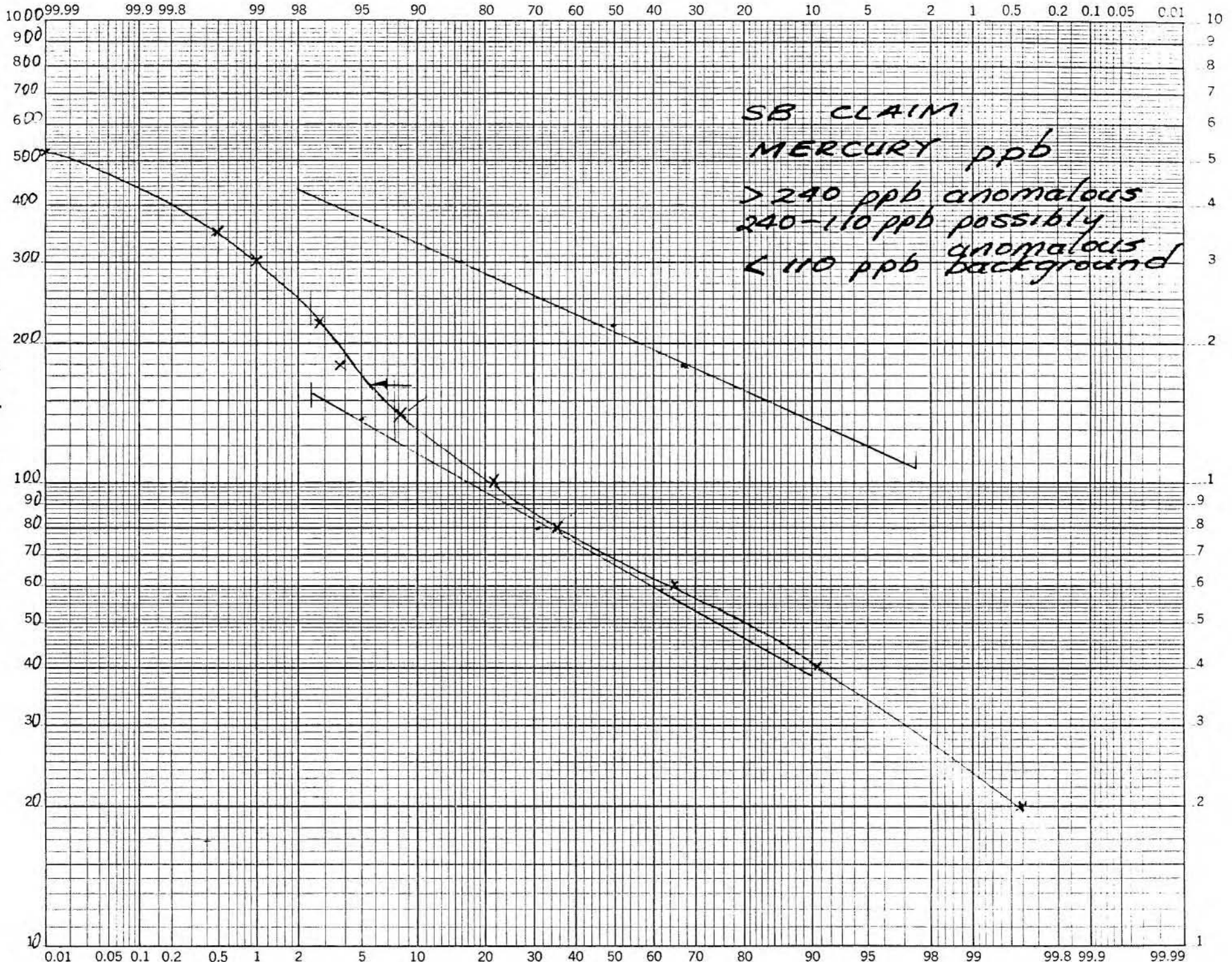
Arsenic - Please refer to ATTACHMENT "G" depicting arsenic geochemical response obtained from soil. Probability plot of these values suggests,

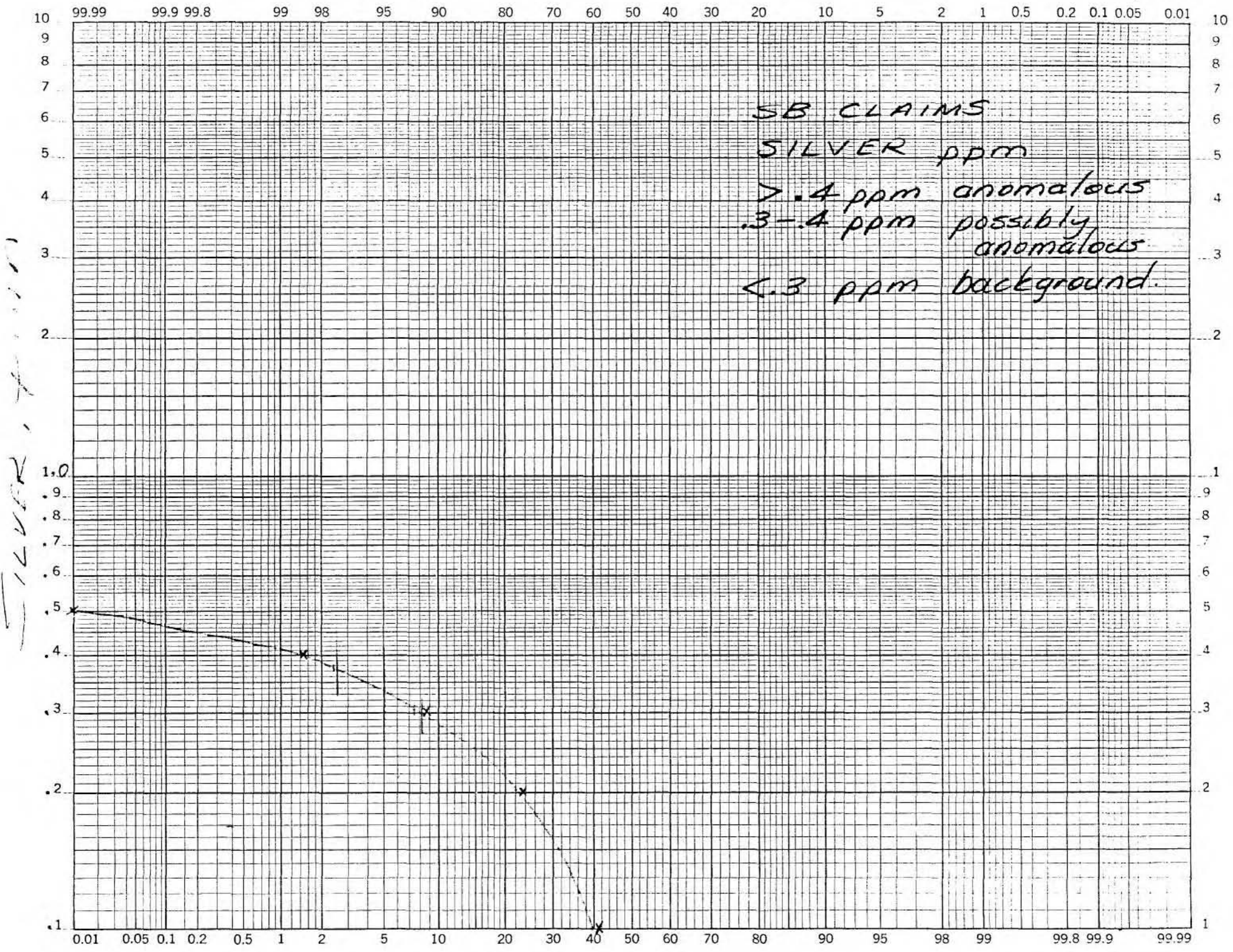
- ▷ 55 ppm ARSENIC = anomalous
- 20 - 55 ppm ARSENIC = possibly anomalous
- ◁ 20 ppm ARSENIC = background

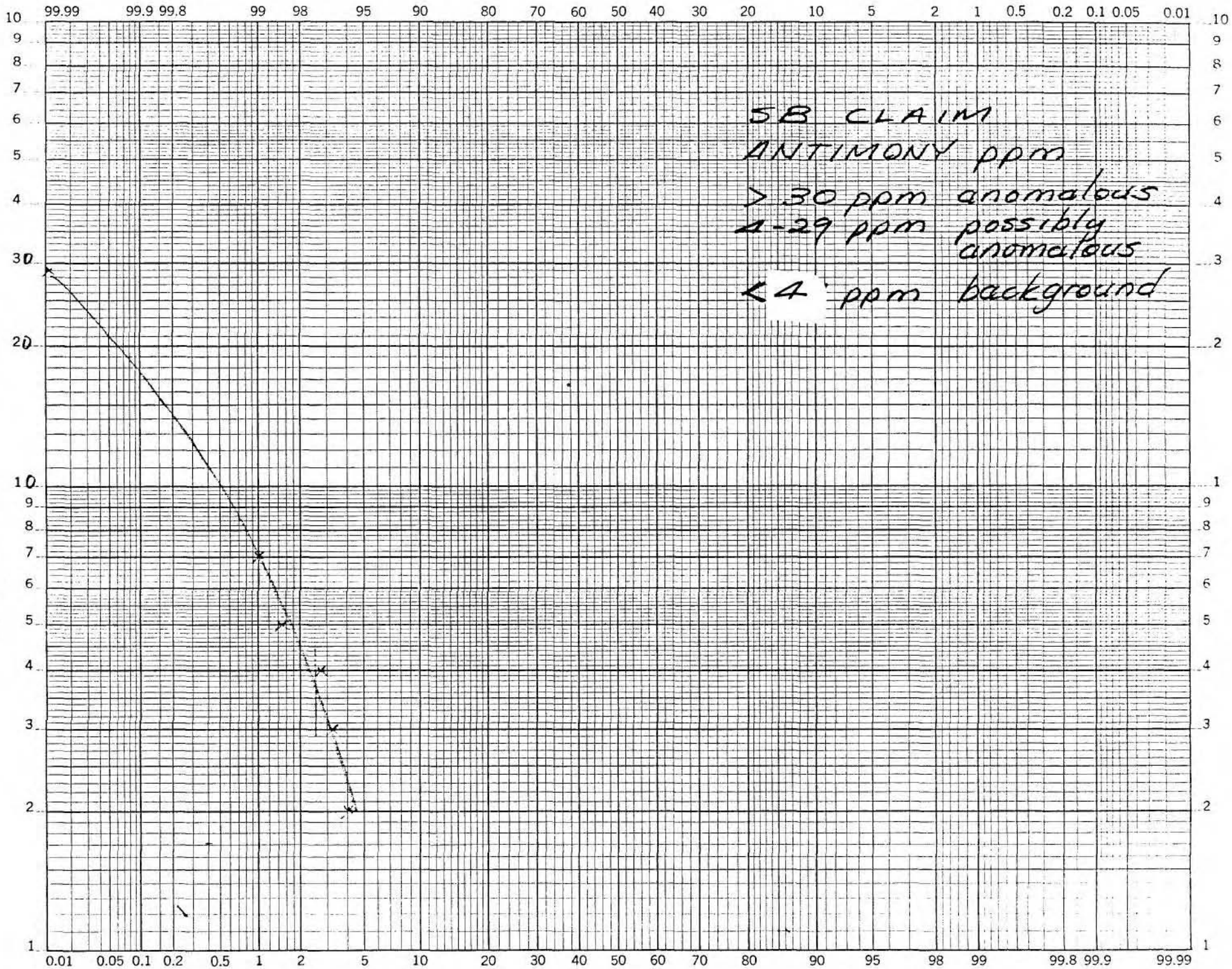
GOLD DATA



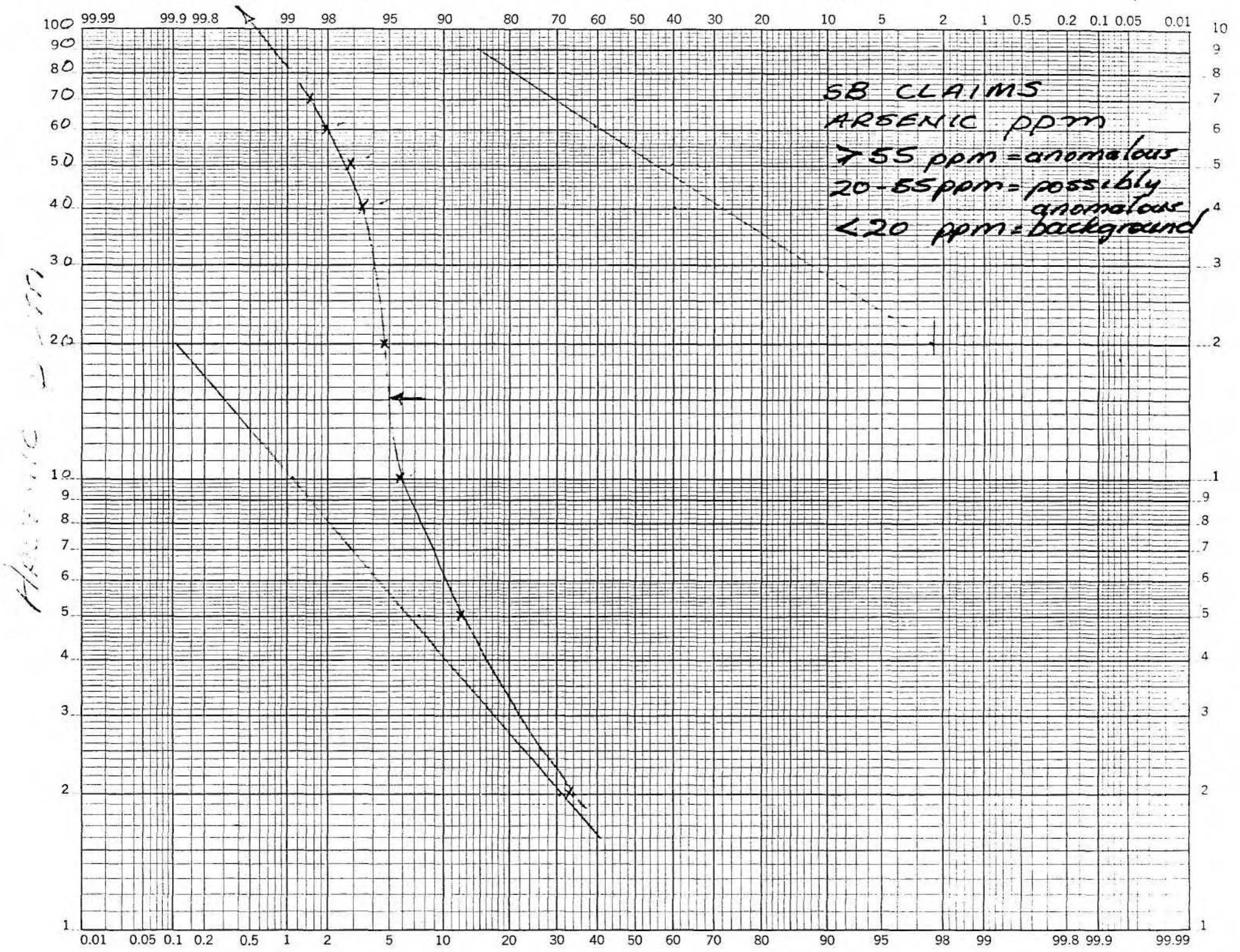
MERCURY PPB



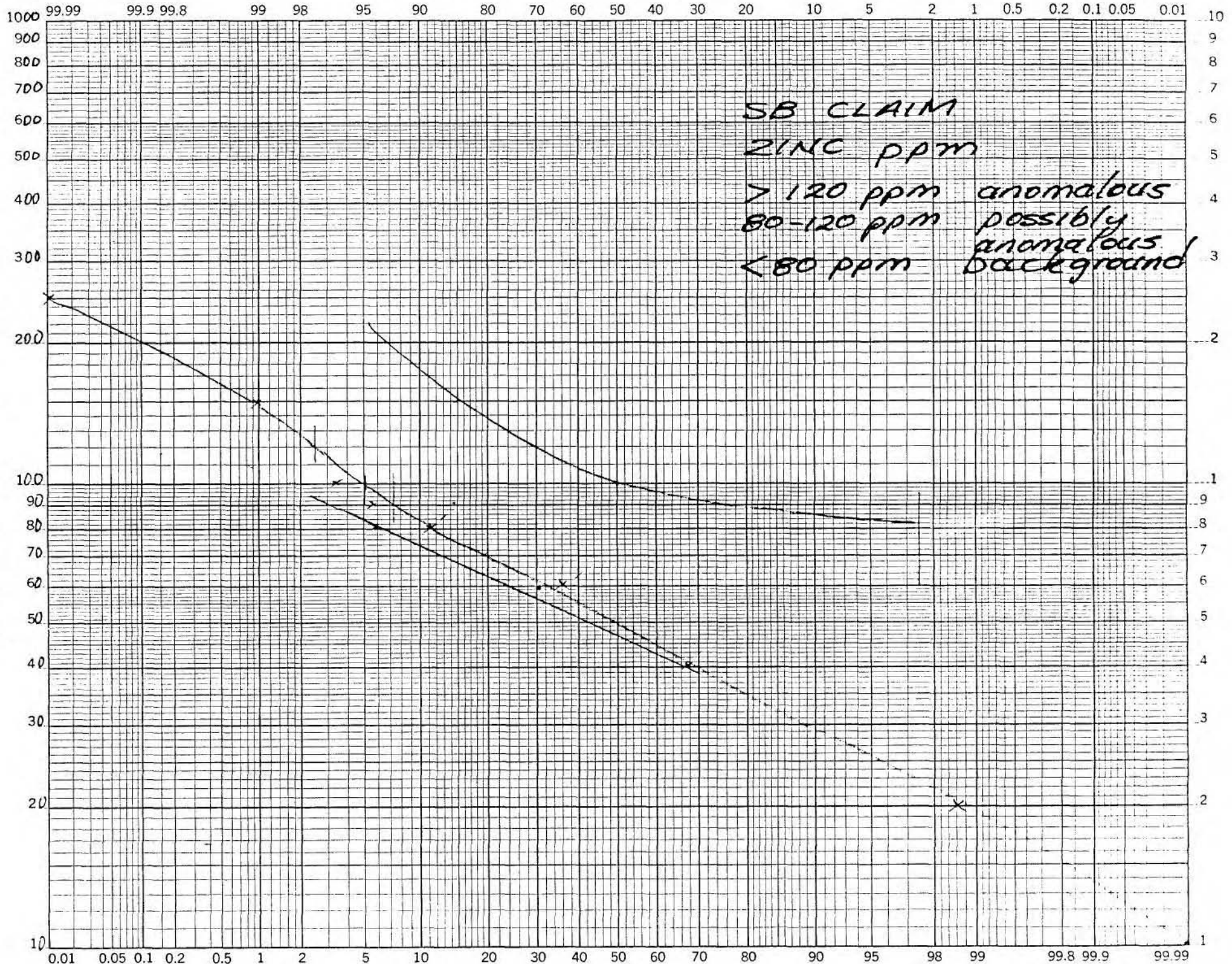




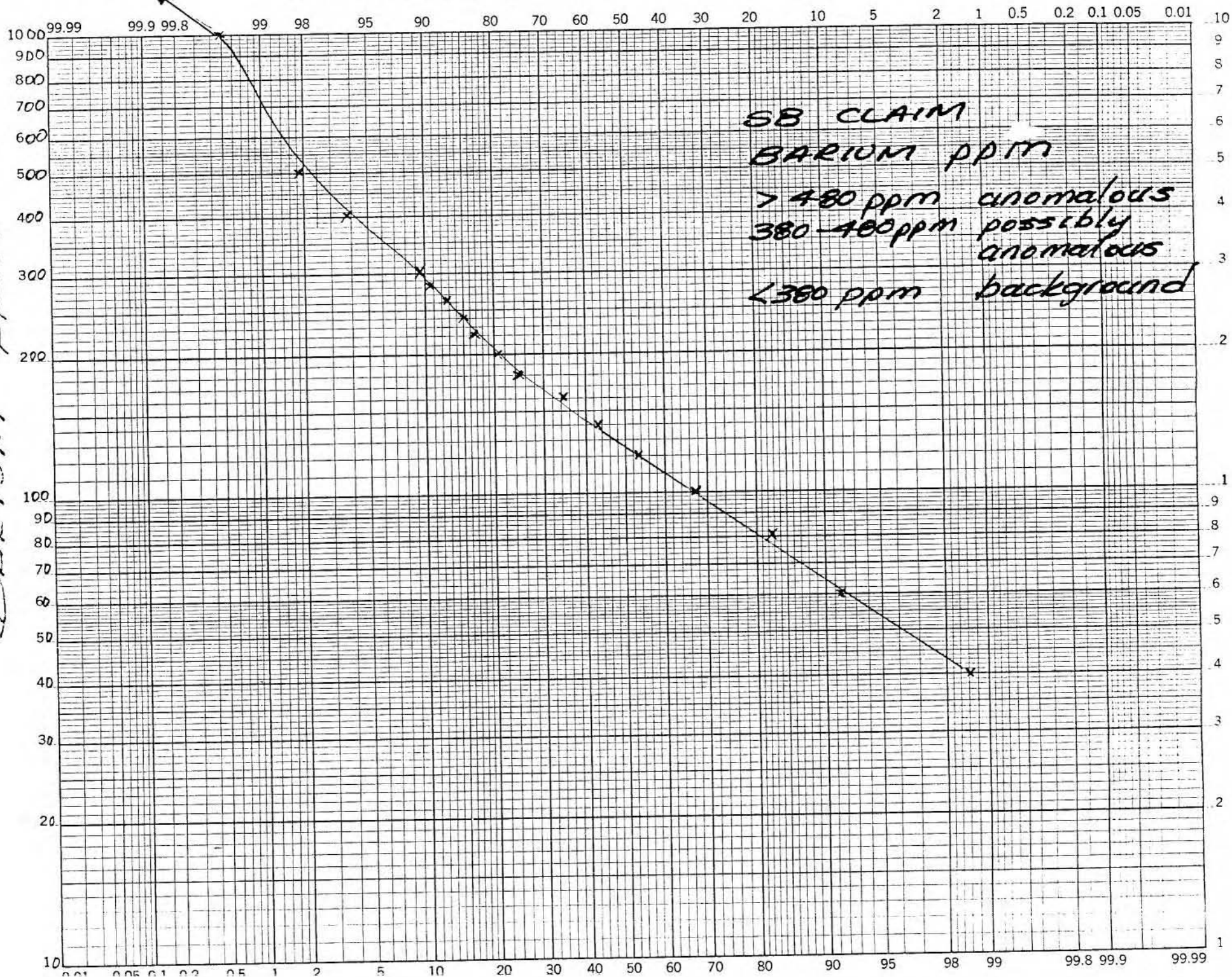
SB CLAIM
ANTIMONY ppm
> 30 ppm anomalous
1-29 ppm possibly
anomalous
≤ 4 ppm background



ZINC
PPM



Barium ppm



Zinc - Soil response for zinc is plotted on ATTACHMENT "H".
The appended probability plot suggests:

- ▷ 120 ppm ZINC = anomalous
- 80 - 120 ppm ZINC = possibly anomalous
- ◁ 80 ppm ZINC = background

Barium - See attached geochemical and probability plots.
See ATTACHMENT "I".

CONCLUSION

Detailed prospecting of the claim and geologic mapping at a scale of 1:10,000 is recommended.

A handwritten signature in cursive script, which appears to read "D. M. Fletcher", is written over a circular notary seal. The seal contains the text "NOTARY PUBLIC" and "STATE OF CALIFORNIA" around the perimeter, with "D. M. FLETCHER" in the center.

D. M. Fletcher

APPENDIX 1

STATEMENT OF EXPENDITURES

1st AUGUST - 15th SEPTEMBER 1982

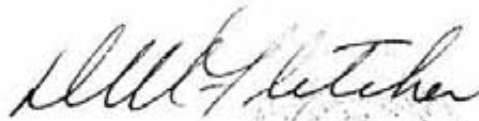
1. SALARIES		
P. Conroy \$78/day x 2 days =	\$156.00	
M. Specogna \$44/day x 2 days =	88.00	
R. Wahl \$72/day x 6 days =	432.00	
A. Hamilton \$56/day x 6 days =	<u>336.00</u>	\$ 1012.00
2. ACCOMMODATION, SUPPLIES & EQUIPMENT		820.00
3. GEOCHEMICAL SAMPLING		
Invoice # 1276 =	\$3100.00	
Invoice # 0984 =	<u>828.91</u>	3928.91
4. VEHICLE EXPENSE, MOBILIZATION ETC.		<u>260.00</u>
	TOTAL EXPENDITURES	<u>\$ 6020.91</u> =====

APPENDIX 2

STATEMENT OF QUALIFICATIONS

I, David McLean Fletcher of Vancouver, British Columbia, Canada, certify that,

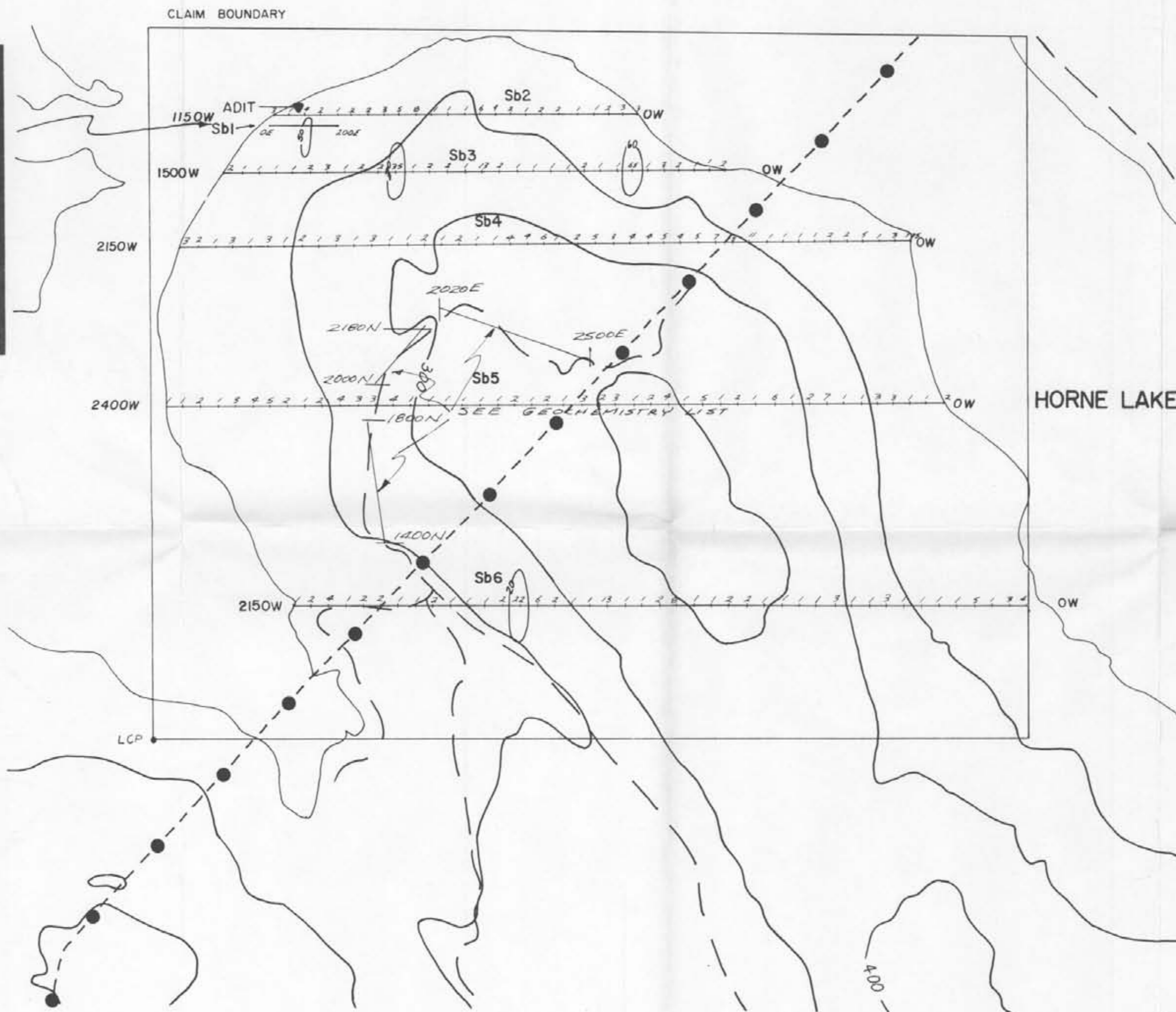
1. I am a graduate in Geological Engineering (B.Ap.Sc. 1956) of the University of British Columbia.
2. I have practised my profession as an exploration geologist continuously for the past 27 years.
3. I am a registered Professional Engineer in the Provinces of British Columbia and Ontario, Canada.
4. I supervised the geological and geochemical work accomplished at the SB Claim from August 1982 through September 1982.



D. M. Fletcher
January 26, 1983

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,024

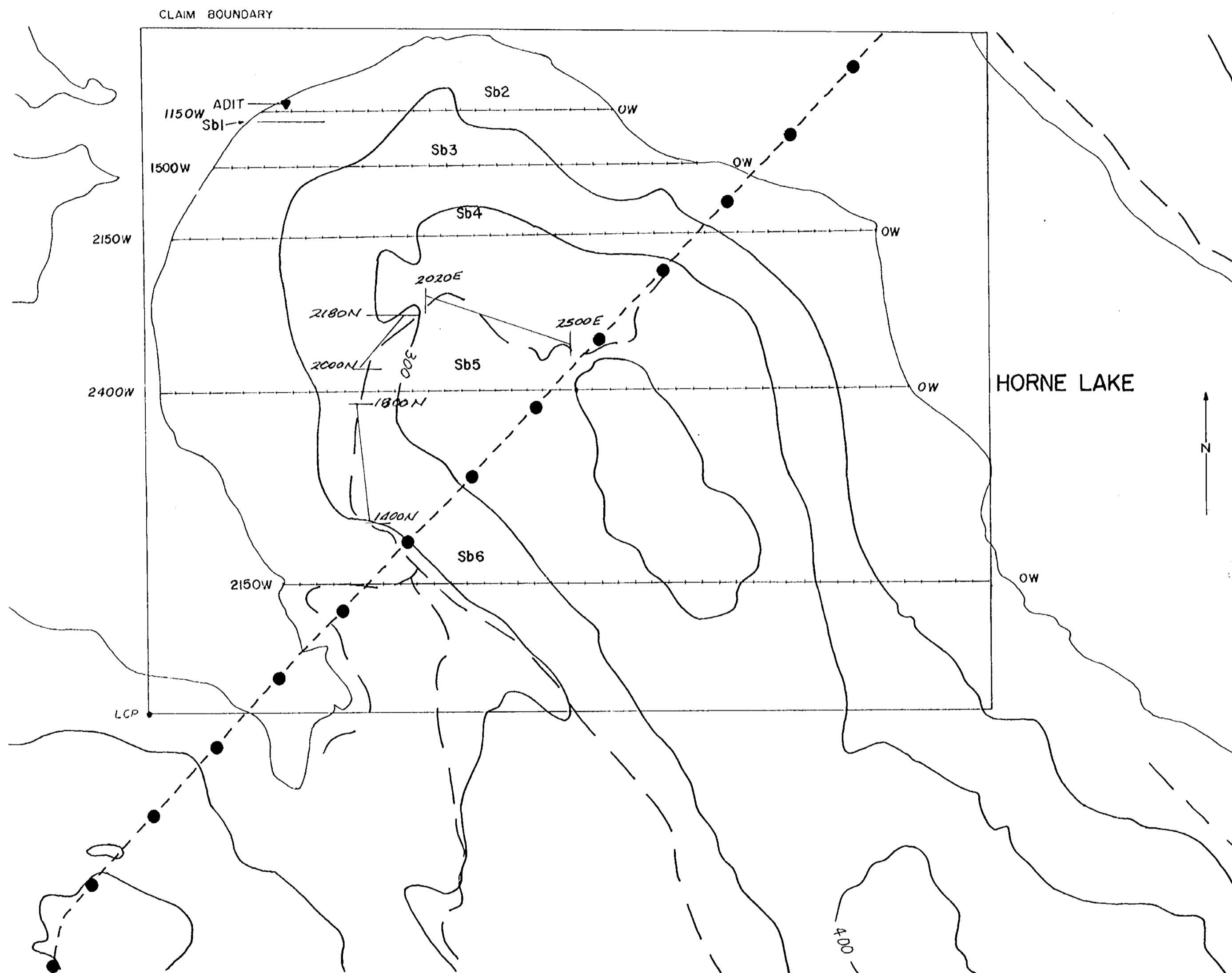


D. M. Fletcher
 D. M. FLETCHER
 BRITISH COLUMBIA
 ENGINEER

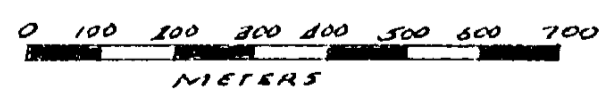
ASARCO		Vancouver	
Sb CLAIMS			
GEOCHEM GRID			
GOLD (ppb)			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F/7	1:10,000

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,024

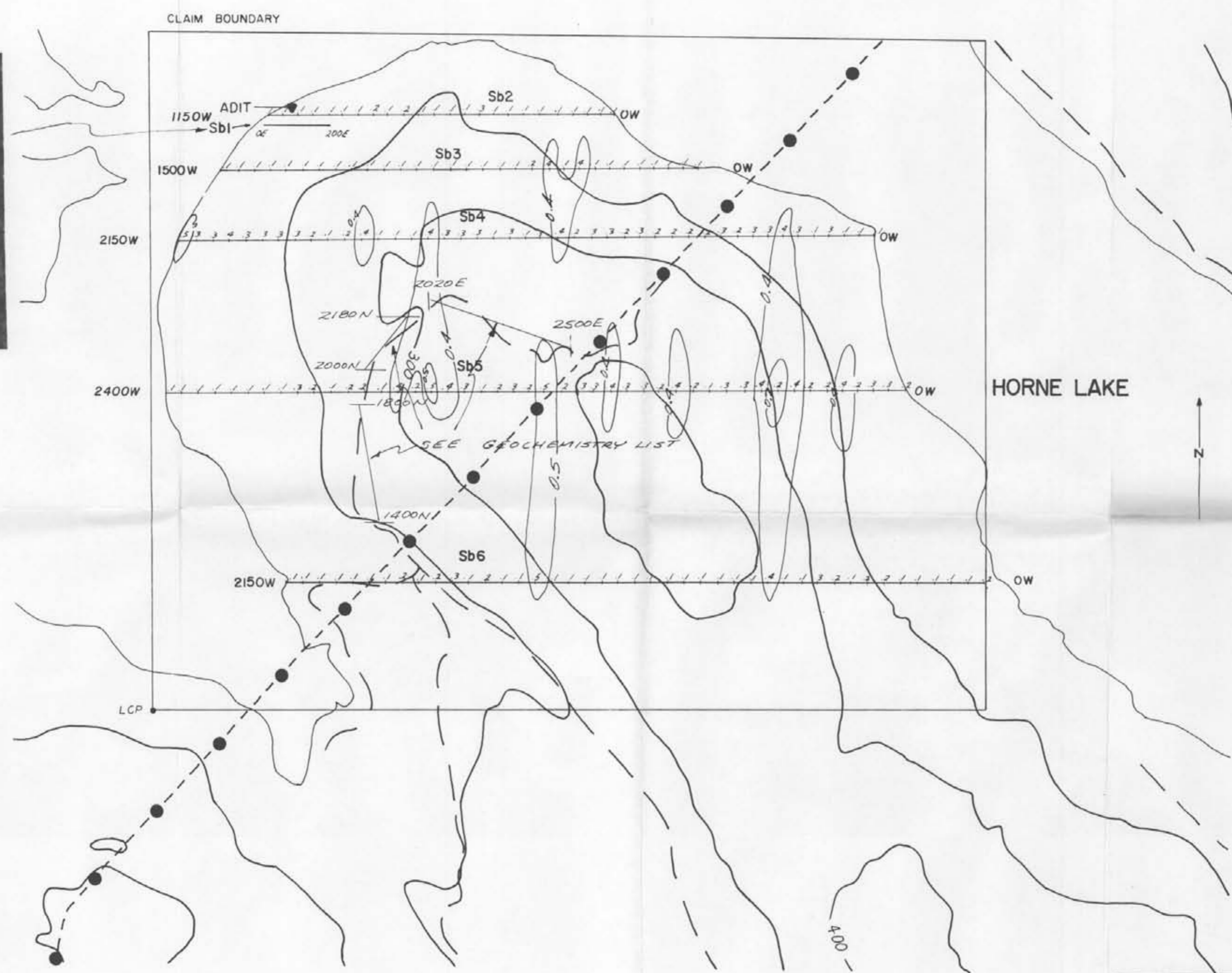


D. M. Fletcher
 PROVINCE OF
 BRITISH COLUMBIA
 ENGINEER



ASARCO		Vancouver	
<i>Sb CLAIMS</i> GEOCHEM GRID			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F/7	1:10,000

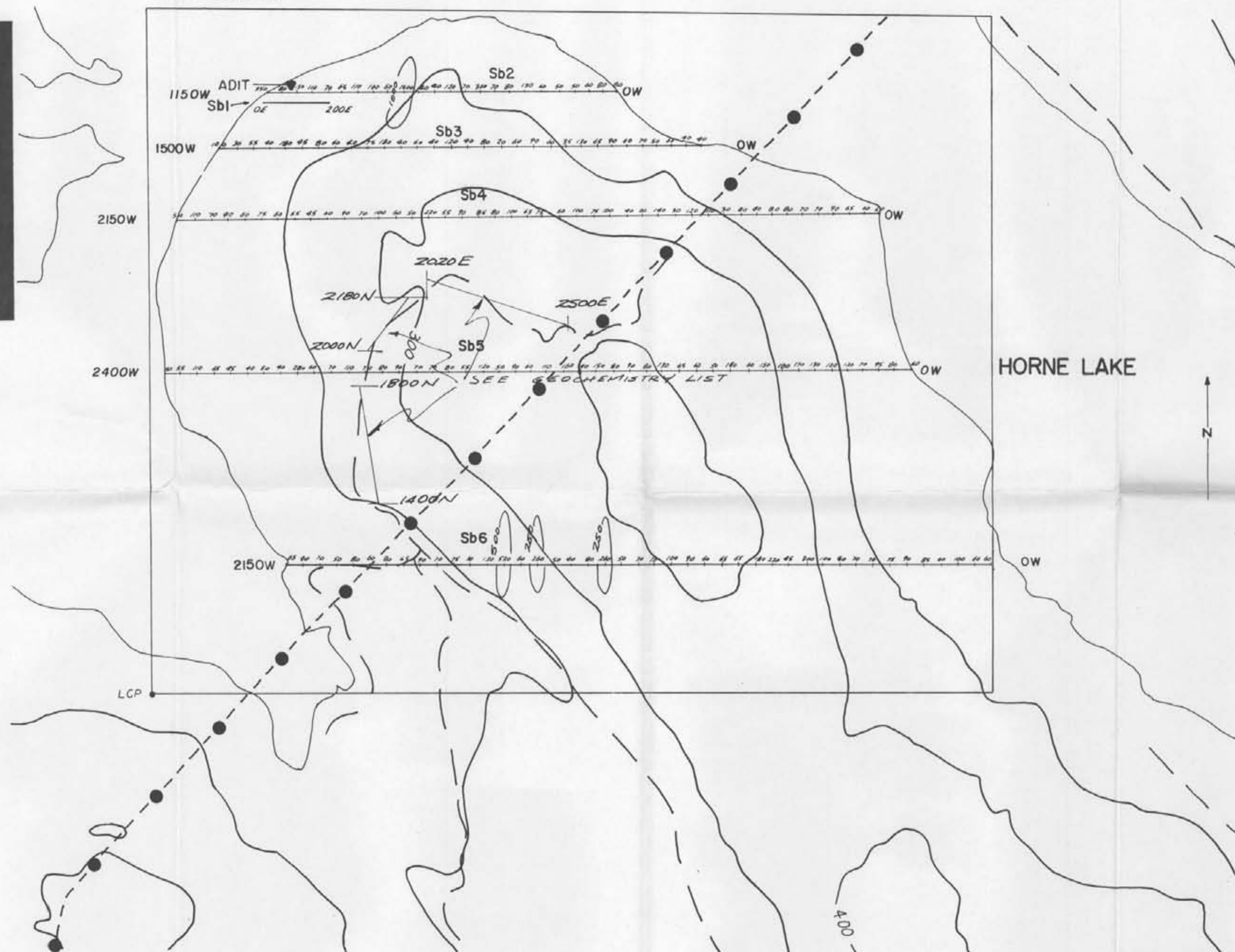
11,024



D. M. Fletcher
 PROVINCE OF
 BRITISH COLUMBIA
 ENGINEER

ASARCO		Vancouver	
Sb CLAIMS			
GEOCHEM GRID SILVER (ppm)			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F/7	1:10,000

CLAIM BOUNDARY



HORNE LAKE



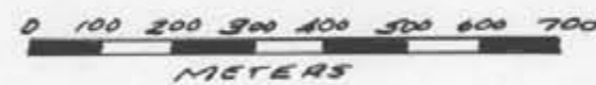
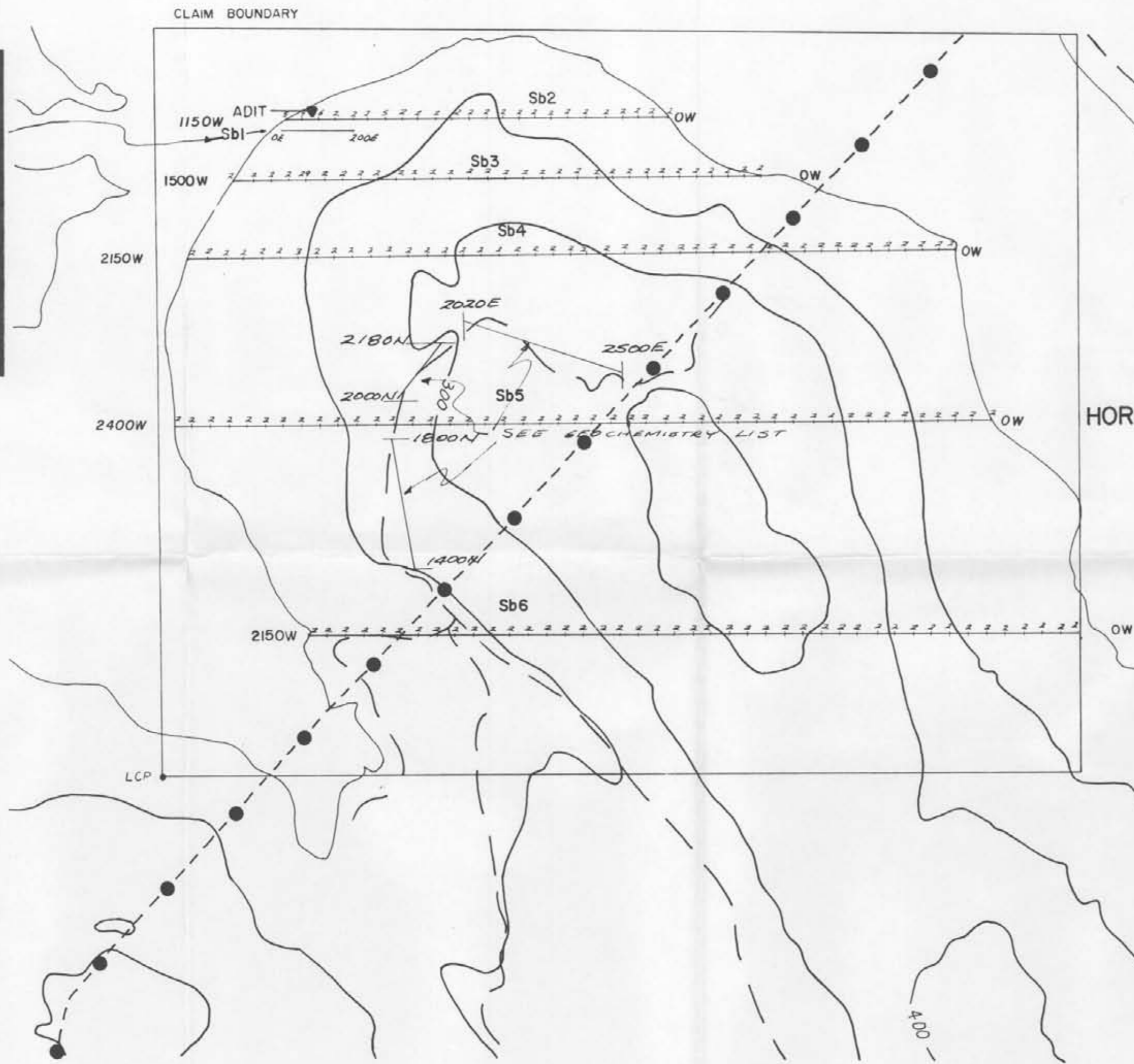
D. M. Fletcher
 REGISTERED PROFESSIONAL ENGINEER
 OF
 BRITISH COLUMBIA

ASARCO		Vancouver	
Sb CLAIMS GEOCHEM GRID MERCURY (ppb)			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F17	1:10,000



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,024

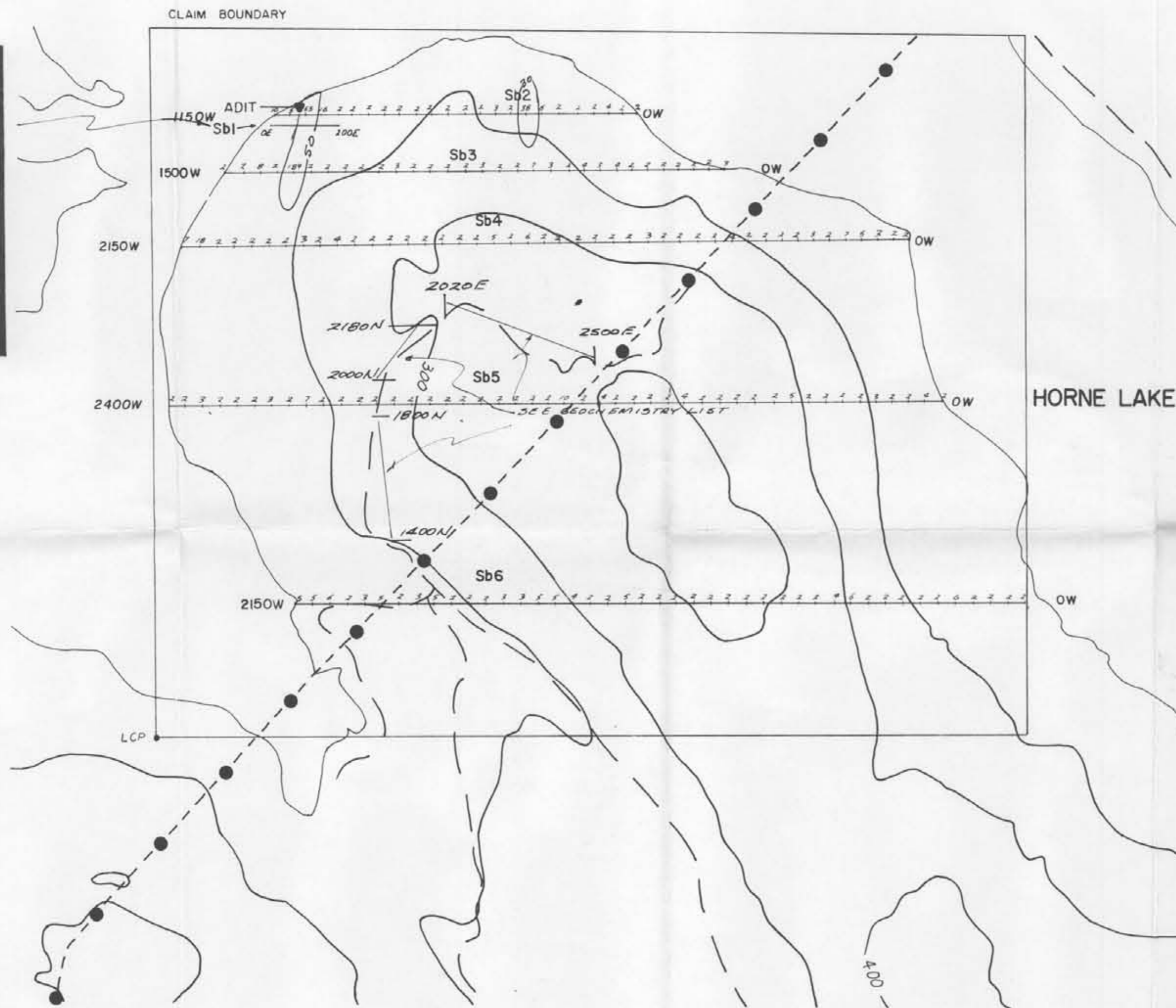


D. M. Fletcher
 PROVINCE OF
 BRITISH COLUMBIA
 ENGINEER

ASARCO		Vancouver	
Sb CLAIMS GEOCHEM GRID ANTIMONY (ppm)			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F/7	1:10,000

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,024



ASARCO Vancouver

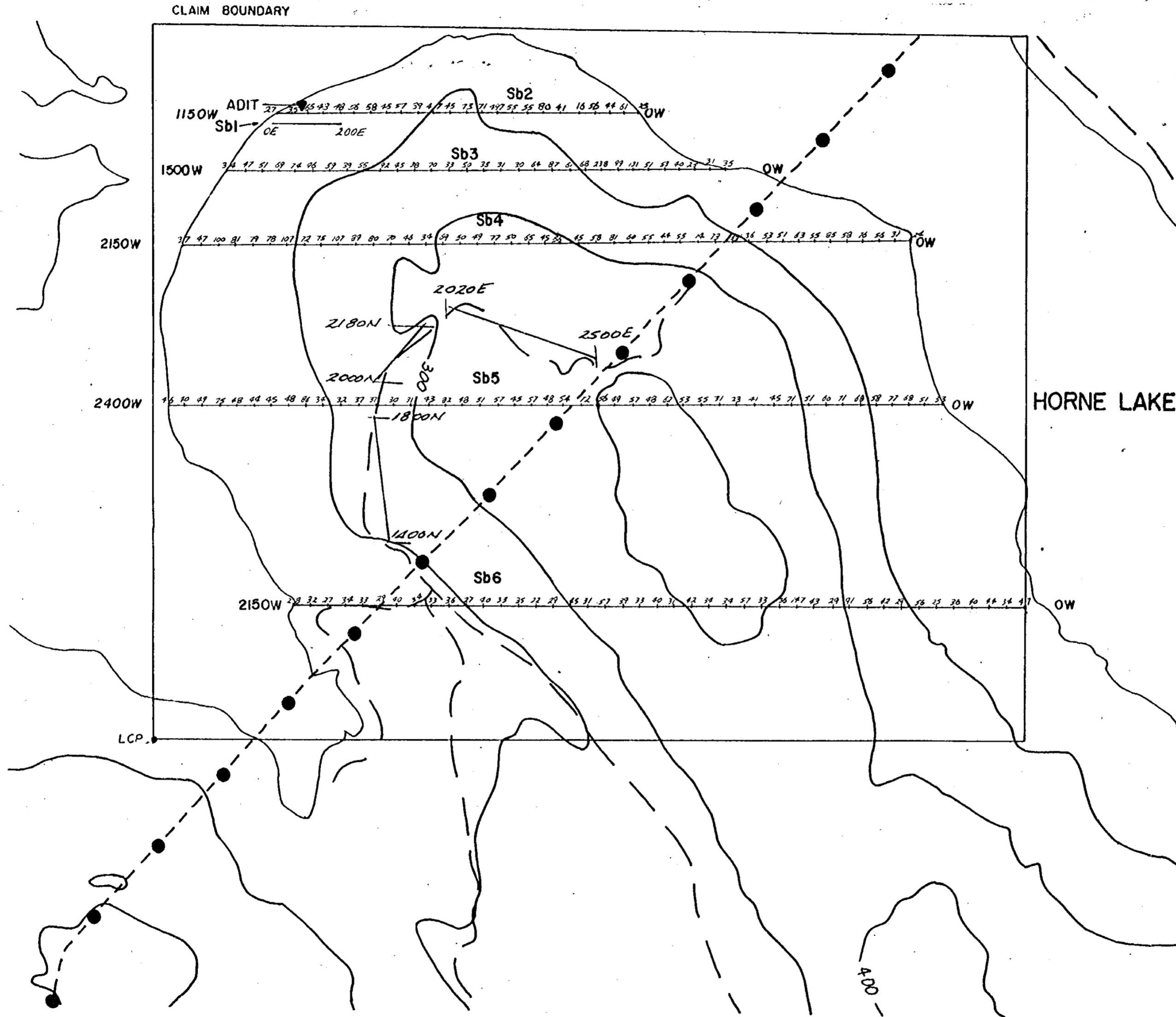
Sb CLAIMS
GEOCHEM GRID
ARSENIC (ppm)

Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F/7	1:10,000

GEOLOGICAL BRANCH
ASSESSMENT REPORT

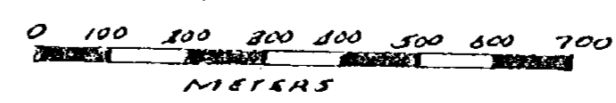
11,024

Sample No.	Zn
SB1+0E	58
SB1+25E	55
SB1+37.5E	51
SB1+50E	59
SB1+62.5E	40
SB1+75E	57
SB1+87.5E	55
SB1+100E	125
SB1+112.5E	52
SB1+125E	85
SB1+137.5E	50
SB1+150E	29
SB1+162.5E	29
SB1+175E	33
SB1+187.5E	60
SB1+200E	47



D. M. Fletcher
 PROVINCE OF
 BRITISH COLUMBIA
 ENGINEER

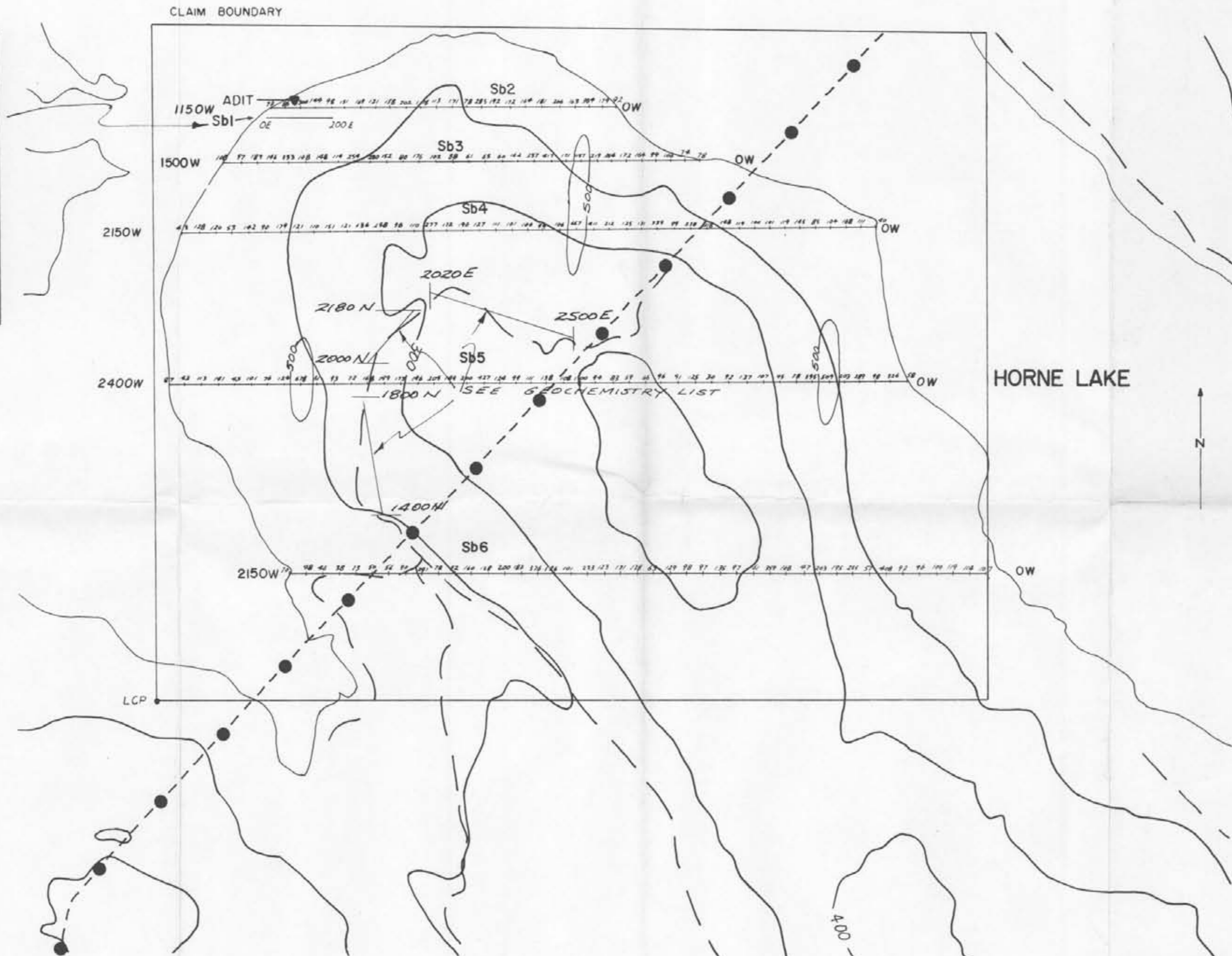
ASARCO		Vancouver	
Sb CLAIMS			
GEOCHEM GRID			
ZINC (PPM)			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92F/7	1:10,000



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,024

581-02	100
581-03	100
581-04	100
581-05	100
581-06	100
581-07	100
581-08	100
581-09	100
581-10	100
581-11	100
581-12	100
581-13	100
581-14	100
581-15	100
581-16	100
581-17	100
581-18	100
581-19	100
581-20	100



ASARCO		Vancouver	
Sb CLAIMS GEOCHEM GRID BARIUM (ppm)			
Drawn by	Date	N.T.S.	SCALE
A P H	NOV 82	92 F/7	1:10,000