Phelps Dodge Corporation of Canada, Limited - Western District

GEOCHEMICAL AND GEOPHYSICAL REPORT
BLUE LAKE PROSPECT
BL 1 TO 8 MINERAL CLAIMS
OMINECA MINING DIVISION

by

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Phelps Dodge Corporation of Canada, Limited
1409 - 409 Granville Street
Vancouver, B.C. V6C 1T8

NTS 93N15/16
55°50'N 124°30'W

November 4, 1993

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SUMMARY

The Blue Lake property (BL 1 to 8 claims) lies in the Omineca Mining Division, twelve kilometres northeast of Germansen Landing. The only access is by helicopter, a fifteen minute flight from Germansen Landing. The Blue Lake property consists of eight claims comprised 160 units all owned by Phelps Dodge Corporation of Canada, Limited.

The BL claims straddle the suture zone between the Intermontane and Omineca Belts and are underlain by poorly exposed rocks of the Slide Mountain and Omineca terranes. The Slide Mountain terrane comprises predominantly Permian-Pennsylvanian clastic and carbonate sediments with igneous and volcanic rocks becoming more abundant towards the top of the sequence. Cassiar rocks consist of Proterozoic through Mississippian clastics and carbonates. The program tested possible Earn Group stratigraphy, host stratigraphy for Sedex type Zn, Pb, Cu deposits, west across the Omineca River in previously unmapped areas.

A soil geochemistry survey was carried out over 12.2 line kilometres of flagged grid between September 21 and 28, 1992 and August 1 to 8, 1993. A total of 105 soil samples were collected. The program also included a total field magnetometer survey over 10.2 line kilometres of the grid.

Of the 105 soil samples collected on the property, only four returned zinc tenors above 100 ppm. The geophysical survey also failed to define any targets of interest.

CONCLUSIONS

The work program failed to define Earn Group stratigraphy within the claim block. As this sequence is the host type for Sedex type deposits, no further work is recommended.

INTRODUCTION

Results of geochemical and geophysical programs are provided herein pursuant to work done on the Blue Lake 1 to 8 mineral claims during September 21 to 28, 1992 and August 1 to 5, 1993. The objective of the program was to test the possible extension of Earn Group stratigraphy across the Omineca River.

LOCATION AND ACCESS

The BL 1 to 8 mineral claims are located in the Omineca Mining Division in north-central British Columbia approximately 12 kilometres northeast of Germansen Landing (Figure 1).

The property is accessible from Highway 27 at Fort St. James then along the Manson Creek Forest access road approximately 180 kilometres to Germansen Landing. From there, the property is a 15-minute flight by helicopter. The claims lie between the western flank of the Wolverine Range and the Omineca River. The area is characterized by low undulating hills dotted with bogs and swamps. Elevations range from 800 metres to 1,350 metres. Small stands of spruce and pine cover areas not occupied by swamps.

CLAIMS

The BL 1 to 8 claims, totalling 160 units, situated in the Omineca Mining Division are owned by Phelps Dodge Corporation of Canada, Limited (Figure 2). Claim data are summarized below and expiry dates assume work described herein is applied to the claims.

Claim Name	No. of Units	Record Numbers	Expiry Date
BL 1	20	312035	August 10, 1994
BL 2	20	312036	August 11, 1994
BL 3	20	312037	August 9, 1994
BL 4	20	312038	August 10, 1994
BL 5	20	312039	August 7, 1994
BL 6	20	312040	August 8, 1994
BL 7	20	312041	August 8, 1994
BL 8	20	312042	August 9, 1994

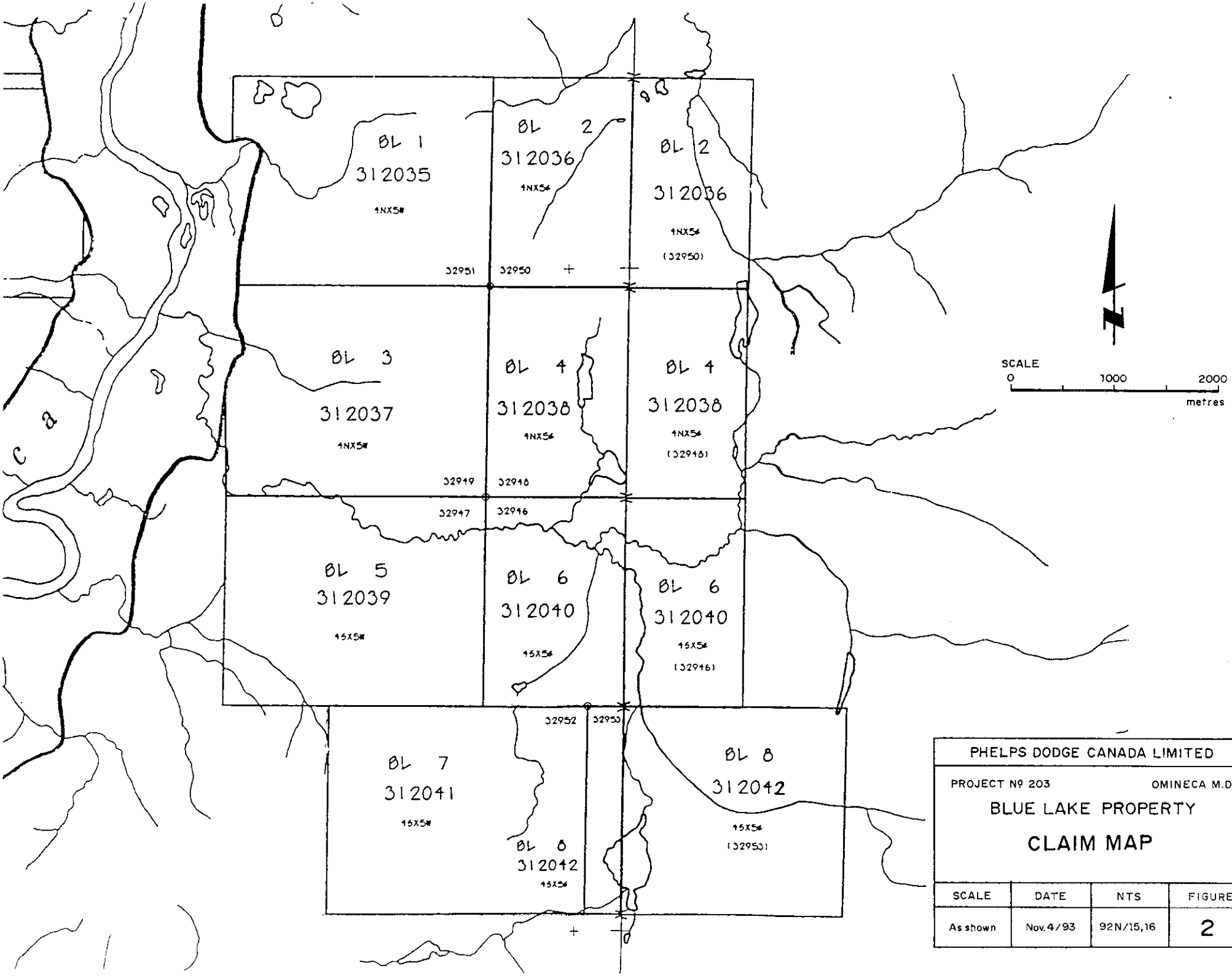
0 100 200 MILES
0 100 200 300 Km

PROPERTY LOCATION PLAN

BLUE LAKE

FOX GEOLOGICAL CONSULTANTS LTD.

DATE		N.T.S.	Dwg. No.
			1



PHELPS DODGE CANADA LIMITED			
PROJECT Nº 203		OMINECA M.D.	
BLUE LAKE PROPERTY			
CLAIM MAP			
SCALE	DATE	NTS	FIGURE
As shown	Nov. 4/93	92N/15,16	2

WORK PROGRAMS

Two periods of work were conducted on the BL 1 to 8 claims in 1992 and 1993. The 1992 program consisted of 8.3 line kilometres of soil sampling at 100 metre stations on lines spaced one kilometre apart. A total of 68 soil samples were collected. In 1993, the soil grid was extended to the east and west for a total of 12.2 line kilometres. Thirty-seven additional soil samples were taken. Soil sample analyses performed by Acme Analytical Laboratories are given in Appendix I. A total field magnetometer survey was contracted to SJ Geophysics Ltd. of Vancouver who carried out the survey over 10.2 line kilometres of grid. Results are given in Appendix II.

REGIONAL GEOLOGY

The property straddles the boundary between the Intermontane and Omineca Belts of the Canadian Cordillera (Figure 3). It is underlain by volcanic rocks of the Slide Mountain terrain and displaced North America rocks of the Cassiar terrain.

Structurally overlying the Cassiar terrain is the Permian/Pennsylvanian Slide Mountain terrain comprising predominantly clastic and carbonate sediments with igneous and volcanic rocks becoming more abundant towards the top of the sequence. Cassiar terrain rocks exposed to the northeast are represented by Proterozoic Swannel Formation (North America) clastics, Cambrian-Ordovician Boya Formation clastics, Atan Group carbonates, Road River Group clastics, Silurian-Devonian Sandpile Group carbonates +/- clastics and possible Earn Group clastics. The structurally and stratigraphically lower parts of the Cassiar terrain are polydeformed and mesomorphosed to sillmanite grade and outcrop as core complexes i.e. Wolverine metamorphic complex.

LOCAL GEOLOGY

The southwestern edge of the property is underlain by rocks of the Slide Mountain terrain. Stratigraphy comprises black phyllite, argillite, siltstone, chert, diorite, gabbro, mafic to intermediate volcanics, felsic tuffs and ultramafics with minor carbonate, greywacke, sandstone and ribbon chert. The sequence is predominantly sedimentary with igneous and volcanic rocks becoming more abundant towards the top.

Rocks of the Cassiar terrain are poorly exposed on the property. Strata within the claim block includes Cambrian Rosella Formation, grey to white limestone, Cambrian-Ordovician

Kechika Group dark grey argillite and siltstone and possible Silurian-Ordovician Sandpile Group medium to light grey limestone, dolostone, graptolitic argillite and argillaceous limestone. It is stratigraphically above the latter group that the program focussed on delineating possible Earn Group stratigraphy.

Proterozoic Swannel Formation sandstone, siltstone and quartzite are separated from Paleozoic rocks to the west by a northwest-trending, southwest side down, normal fault. This fault contact marks the east side of the claim block and the limit of the exploration target.

RESULTS

The geochemical results failed to return any base metal tenors indicative of stratiform Sedex deposits. The four zinc tenors above 100 ppm are distributed sporadically over the grid (Figure 4).

The total field magnetometer survey delineated several weak magnetic anomalies throughout the survey area.

DISBURSEMENTS

Accommodation and Board - 34 man days @ $50				$ 1,700
Air Charter - Helicopter				3,689
Assays - 105 soil samples				650
Geophysical Survey by contract with SJ Geophysics				3,210
Equipment Rental				200
Salary -	C. Payne	13 days @ $350	4,550	
	R. Roe	8 days @ $225	1,800	
	T. Archibald	13 days @ $225	2,925	9,275
Transportation - 1 four-wheel drive				900
Total Disbursements				$ 19,624

FOX GEOLOGICAL CONSULTANTS LTD.

P. E. Fox, Ph.D., P. Eng.
November 4, 1993

CERTIFICATE

I, Peter Edward Fox, certify to the following:

1. I am a consulting geologist residing at 902 - 2007 Nelson Street, Vancouver, B.C.

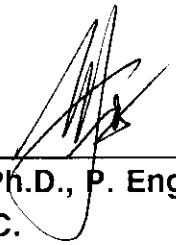
2. I am a Professional Engineer registered in the Association of Professional Engineers and Geoscientists of British Columbia.

3. My academic qualifications are:

   B.Sc. and M.Sc., Queens University, Kingston, Ontario
   Ph.D., Carleton University, Ottawa, Ontario

4. I have been engaged in geological work since graduation in 1966.

5. I supervised the work reported herein.



Peter E. Fox, Ph.D., P. Eng.
Vancouver, B.C.
November 4, 1993

APPENDIX I

Analytical Results

0.5 gm sample is digested with 3 mls 3-1-2 HCl-HNO_3-H_2O at 95 degree cent. for one hour and is diluted to 10 mls with water. This leach is near total for base metals, partial for rock forming elements and very slight for refractory elements. Solubility limits Ag, Pb, Sb, Bi and W for high grade samples.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

BLUG LAKE

GEOCHEMICAL ANALYSIS CERTIFICATE

Fox Geological Consultants PROJECT 203 File # 93-1904 Page 1

1409 - 409 Granville St., Vancouver BC V6C 1T8 Submitted by: C. Payne

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
36901	<1	19	4	93	.4	24	12	321	3.18	17	<5	<2	2	19	<.2	<2	2	65	.37	.104	9	47	.52	127	.16	4	2.29	.01	.03	<1
36902	2	30	11	93	.6	35	14	469	3.63	15	<5	2	2	24	<.2	<2	4	79	.47	.096	8	62	.70	148	.19	3	2.56	.02	.04	2
36903	2	20	6	132	.2	26	13	368	3.16	16	<5	3	2	23	<.2	3	<2	66	.38	.093	11	55	.60	171	.15	<2	2.56	.01	.04	2
36904	<1	12	<2	33	.4	10	5	170	1.30	9	5	<2	9	11	<.2	<2	<2	20	.28	.048	23	18	.29	39	.09	6	.71	.01	.14	1
36905	1	8	6	48	.3	15	8	228	1.96	9	<5	<2	11	15	<.2	<2	3	30	.31	.063	29	28	.44	62	.13	3	1.14	.01	.14	2
36906	1	9	5	48	.4	16	8	211	3.08	18	<5	<2	4	18	<.2	<2	<2	73	.42	.085	12	46	.39	61	.19	2	1.47	.01	.06	1
36907	<1	25	<2	21	.4	21	7	1505	.54	5	<5	<2	<2	203	.3	<2	<2	8	5.61	.055	<2	12	.36	227	.01	4	.27	.01	.02	1
36908	<1	16	12	82	.5	25	11	309	3.54	10	6	<2	5	21	<.2	<2	4	75	.54	.099	11	54	.45	79	.17	4	1.87	.01	.03	<1
36909	1	11	8	66	.2	18	9	240	3.14	9	<5	<2	3	16	<.2	2	5	67	.32	.065	12	44	.41	95	.17	2	1.65	.01	.03	<1
36910	1	12	9	134	.2	22	11	513	3.47	15	<5	<2	2	19	<.2	3	<2	68	.31	.093	12	41	.44	156	.14	<2	2.10	.01	.04	1
36911	2	9	6	79	.4	16	9	536	2.88	<2	<5	<2	3	18	<.2	2	<2	66	.42	.062	11	42	.37	109	.17	<2	1.48	.01	.04	<1
RE 36911	<1	8	5	79	.3	15	9	576	2.86	8	<5	<2	2	18	.2	<2	2	66	.41	.064	11	36	.38	112	.17	<2	1.50	.01	.04	1
36912	<1	62	3	76	.5	53	20	664	4.69	27	5	2	4	41	<.2	3	<2	86	.79	.045	13	89	1.13	246	.23	<2	2.67	.02	.13	1
36913	1	13	6	109	.5	25	12	822	3.17	15	<5	<2	4	21	<.2	<2	<2	62	.42	.084	12	47	.51	119	.16	4	2.02	.01	.05	<1
36914	<1	82	2	64	.7	46	13	829	3.52	19	6	<2	<2	59	.3	<2	<2	71	1.37	.067	18	74	.74	308	.14	3	2.18	.01	.07	1
36915	<1	10	6	50	.4	16	8	246	2.27	8	5	<2	2	26	<.2	<2	2	59	.55	.027	9	31	.50	110	.15	<2	1.39	.01	.03	2
36916	<1	9	8	69	.1	16	7	216	2.91	10	<5	<2	2	16	<.2	<2	<2	62	.38	.128	8	38	.38	70	.15	<2	1.73	.01	.03	1
36917	1	13	4	58	.2	26	10	228	2.88	13	5	<2	2	21	<.2	2	5	61	.43	.053	10	40	.52	138	.15	<2	1.52	.01	.04	1
36918	1	13	4	51	.3	23	10	294	2.99	13	<5	<2	2	20	<.2	<2	<2	67	.53	.043	9	44	.52	99	.18	<2	1.46	.01	.05	<1
36920	<1	31	5	67	.6	33	13	923	2.92	14	<5	2	<2	53	.3	<2	3	58	1.19	.023	8	58	.75	320	.19	<2	1.59	.01	.04	2
36921	<1	34	<2	54	.6	31	12	434	2.95	6	<5	<2	<2	46	.3	<2	3	67	.97	.018	9	65	.74	313	.19	3	1.74	.01	.05	<1
36922	1	51	<2	18	.2	23	4	497	.24	<2	6	<2	<2	372	1.2	<2	<2	4	8.39	.091	<2	32	.25	774	.01	6	.20	.01	.01	1
36923	2	67	3	48	.6	35	10	408	2.53	3	<5	<2	2	47	.2	<2	3	55	1.07	.046	9	62	.78	262	.17	4	1.38	.02	.03	2
36924	<1	32	6	32	.6	24	9	253	2.20	7	<5	<2	<2	28	<.2	<2	<2	60	.73	.014	6	50	.59	202	.24	<2	1.44	.01	.02	1
36925	3	38	11	57	.4	33	12	334	2.81	11	<5	<2	<2	23	<.2	<2	<2	68	.68	.054	5	58	.63	146	.24	<2	1.57	.01	.03	1
36926	<1	20	3	45	.6	29	10	315	2.52	11	<5	<2	<2	26	<.2	<2	<2	65	.71	.038	5	57	.47	186	.23	3	1.50	.01	.04	1
36927	1	15	2	54	.3	33	10	323	2.62	10	<5	<2	<2	22	<.2	<2	4	59	.54	.049	6	56	.48	270	.16	<2	1.45	.01	.04	1
36928	2	56	8	42	.3	40	11	272	2.96	2	<5	<2	2	28	.2	<2	3	62	.77	.029	17	78	.55	456	.18	<2	1.51	.01	.05	2
36929	<1	16	4	54	.1	32	9	308	2.46	11	<5	<2	<2	24	.3	<2	<2	57	.59	.048	7	56	.45	214	.15	<2	1.28	.01	.05	1
36930	<1	8	7	48	<.1	28	7	157	2.31	8	<5	<2	<2	19	<.2	<2	3	57	.43	.020	7	58	.34	135	.12	<2	1.52	.01	.02	<1
36931	1	13	9	55	.3	53	13	687	3.65	17	<5	<2	<2	20	<.2	<2	2	62	2.70	.054	11	70	1.82	187	.10	<2	2.09	.01	.04	1
36932	2	8	12	71	<.1	38	9	260	2.63	6	<5	<2	<2	18	<.2	<2	3	55	.45	.029	6	64	.50	144	.12	<2	1.66	.01	.03	<1
36933	1	15	12	53	.2	42	10	313	2.95	<2	<5	<2	<2	22	<.2	<2	2	68	.52	.035	7	70	.46	166	.14	<2	1.61	.01	.04	<1
36934	2	25	10	55	.2	57	13	323	3.29	11	<5	<2	<2	22	<.2	<2	<2	63	.55	.029	7	79	.54	242	.11	<2	1.60	.01	.05	1
36935	<1	12	7	46	<.1	50	10	211	2.94	9	<5	<2	<2	18	<.2	<2	<2	59	.36	.027	6	88	.55	130	.11	<2	1.37	.01	.02	1
36936	1	12	7	59	.3	30	9	330	2.63	<2	<5	<2	5	15	.2	<2	<2	53	.41	.094	14	53	.42	84	.13	<2	1.24	.01	.03	<1
STANDARD C	20	65	39	137	7.5	74	32	1093	4.09	45	22	7	39	54	19.3	14	24	60	.51	.088	43	62	.93	190	.10	33	1.94	.06	.15	10

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: P1 SOIL P2 SILT Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: AUG 10 1993 **DATE REPORT MAILED:** Aug 16/93 **SIGNED BY.....** D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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
36919	<1	13	<2	26	.1	12	5	231	1.22	<2	<5	<2	7	19	<.2	<2	<2	24	.47	.057	18	19	.32	49	.10	<2	.69	.01	.07	1
36937	<1	11	6	24	<.1	13	5	250	1.37	10	<5	<2	10	20	<.2	<2	<2	34	.70	.074	21	27	.39	45	.14	2	.65	.01	.05	1
RE 36937	<1	11	2	21	<.1	14	5	256	1.45	7	<5	<2	11	20	.2	<2	<2	36	.72	.078	24	29	.39	44	.14	<2	.66	.01	.04	1

Sample type: -150 SILT. Samples beginning 'RE' are duplicate samples.

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GEOCHEMICAL ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 203 File # 93-1558 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Roger MacDonald

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
38592	1	17	4	101	.1	24	10	342	3.64	<2	<5	<2	3	23	.3	<2	4	63	.48	.138	9	44	.57	234	.13	<2	1.95	.01	.05	1
38593	1	36	4	45	.1	46	10	389	3.07	4	<5	<2	2	25	.5	<2	3	63	.70	.060	7	56	.89	169	.19	3	1.81	.02	.05	<1
38594	<1	22	3	44	.1	30	9	365	2.89	<2	<5	<2	<2	25	.2	<2	3	62	.73	.062	6	47	.77	192	.20	<2	1.75	.02	.04	<1
38595	<1	16	<2	37	<.1	25	6	362	2.35	5	<5	<2	<2	26	<.2	<2	2	58	.78	.023	7	41	.78	181	.23	<2	1.56	.02	.04	<1
38596	<1	20	3	38	<.1	28	8	351	2.62	<2	<5	<2	2	29	<.2	<2	3	59	.75	.029	8	46	.82	173	.20	7	1.60	.02	.04	<1
38597	<1	20	7	45	<.1	31	8	382	2.77	<2	<5	<2	2	27	<.2	<2	<2	62	.76	.037	7	51	.83	177	.21	2	1.70	.02	.05	<1
RE 38597	<1	21	4	43	<.1	30	8	369	2.66	2	<5	<2	2	26	<.2	<2	<2	60	.72	.035	7	47	.81	177	.20	4	1.67	.02	.05	<1
38598	<1	19	4	80	.1	29	8	513	2.55	<2	<5	<2	<2	25	<.2	<2	4	55	.60	.040	8	42	.65	269	.17	<2	1.79	.01	.06	<1
38599	<1	18	4	52	.1	25	9	359	2.70	<2	<5	<2	<2	21	<.2	<2	3	60	.64	.063	6	43	.64	162	.19	2	1.71	.02	.04	<1
38600	<1	20	<2	52	.1	29	9	324	2.45	<2	<5	<2	<2	22	<.2	<2	3	57	.64	.030	6	43	.65	191	.21	<2	1.92	.01	.04	<1
38687	<1	25	2	71	<.1	27	11	1395	3.67	5	<5	<2	<2	23	<.2	<2	<2	107	.64	.021	8	40	.64	378	.20	2	1.83	.01	.03	<1
38688	<1	18	<2	87	<.1	32	10	409	3.81	3	<5	<2	2	20	<.2	<2	<2	100	.47	.093	9	42	.90	1430	.16	<2	2.12	.01	.05	<1
38689	<1	37	4	72	.2	32	11	414	3.67	<2	<5	<2	<2	27	<.2	<2	<2	96	1.04	.040	5	31	.65	560	.20	2	2.04	.01	.03	<1
38690	<1	59	5	60	.1	34	15	1801	3.78	4	<5	<2	<2	28	<.2	<2	2	92	.96	.030	13	47	.79	619	.22	2	2.54	.01	.04	<1
38692	<1	12	4	40	.1	8	7	1306	2.32	3	<5	<2	<2	23	.2	<2	2	69	.73	.046	5	28	.37	378	.25	5	1.18	.01	.04	<1
38693	1	64	6	67	.3	29	10	445	3.13	<2	<5	<2	<2	23	.2	<2	<2	72	.57	.024	11	40	.75	549	.18	<2	1.85	.01	.04	<1
38694	<1	30	<2	66	.1	29	10	564	3.18	<2	<5	<2	<2	23	<.2	<2	<2	70	.80	.016	6	45	.85	416	.24	<2	1.85	.01	.06	<1
38695	<1	138	2	67	.2	53	13	881	3.06	4	<5	<2	<2	41	.4	<2	2	60	1.76	.058	8	48	.96	709	.16	6	1.67	.02	.05	<1
38696	<1	44	<2	42	.1	25	10	562	3.09	2	<5	<2	<2	24	<.2	<2	2	65	.87	.039	6	39	.92	312	.26	<2	1.75	.01	.03	<1
38697	1	29	2	49	<.1	33	9	613	3.65	3	<5	<2	<2	20	<.2	<2	<2	79	.71	.036	3	55	.81	206	.24	5	1.73	.02	.03	<1
38698	<1	26	<2	97	.1	27	9	579	2.81	<2	<5	<2	<2	31	<.2	<2	<2	57	1.03	.023	6	39	.76	354	.22	2	1.66	.01	.04	<1
38699	<1	53	3	43	<.1	33	10	415	3.20	3	<5	<2	<2	21	<.2	<2	2	75	.73	.020	4	47	.83	339	.25	2	1.98	.01	.04	<1
38700	1	43	6	46	.1	18	10	319	2.78	<2	<5	<2	<2	35	.3	<2	<2	65	1.06	.024	8	39	.50	501	.20	4	1.85	.01	.03	<1
38786	<1	13	4	68	.2	21	7	236	2.48	3	<5	<2	<2	21	<.2	<2	2	58	.55	.046	7	39	.37	239	.17	2	1.67	.01	.04	1
38787	<1	17	2	70	<.1	28	9	541	2.88	<2	<5	<2	<2	24	<.2	<2	<2	64	.72	.040	6	40	.87	201	.23	<2	1.81	.01	.05	<1
38788	<1	13	3	51	<.1	17	7	352	2.46	<2	<5	<2	<2	23	<.2	<2	<2	62	.68	.033	6	39	.71	181	.22	3	1.77	.01	.03	<1
38789	<1	19	<2	45	<.1	28	8	435	2.94	5	<5	<2	<2	25	<.2	<2	<2	70	.84	.031	6	49	.95	194	.25	5	1.98	.01	.03	<1
38790	<1	42	3	63	.1	44	10	699	3.02	<2	<5	<2	<2	34	.6	<2	2	64	.96	.025	11	57	.96	450	.20	<2	2.45	.02	.04	<1
38791	<1	84	7	70	.2	59	14	1588	3.56	<2	<5	<2	<2	42	.4	<2	<2	69	1.07	.033	18	66	.87	700	.18	3	2.73	.02	.07	<1
38792	<1	23	<2	41	.1	27	8	537	2.59	<2	<5	<2	<2	25	.4	<2	<2	64	.75	.013	6	43	.85	279	.22	2	1.74	.02	.03	<1
38793	<1	22	<2	37	.1	18	7	438	2.44	<2	<5	<2	<2	26	.4	<2	<2	58	.76	.022	6	39	.79	294	.20	2	1.46	.01	.04	<1
38794	<1	46	4	76	.2	35	13	1225	2.97	<2	<5	<2	<2	40	.4	<2	2	64	.93	.024	9	45	.73	378	.16	4	1.84	.01	.09	<1
38795	1	117	5	64	.7	47	9	835	2.47	5	<5	<2	<2	98	1.2	<2	<2	45	2.34	.074	9	48	.72	423	.08	4	1.58	.02	.04	<1
38796	<1	26	<2	52	.1	21	6	321	1.84	5	<5	<2	<2	30	.5	<2	<2	42	.75	.015	5	32	.59	218	.14	4	1.29	.01	.03	2
38797	<1	26	6	46	.1	34	11	403	3.04	3	<5	<2	<2	23	.3	<2	<2	71	.68	.027	5	48	.82	218	.23	4	1.86	.01	.03	<1
38798	1	11	2	79	<.1	20	6	238	2.12	3	<5	<2	<2	22	<.2	<2	2	55	.58	.023	7	34	.57	140	.19	<2	1.48	.01	.04	<1
38799	<1	20	3	56	<.1	28	8	326	2.64	3	<5	<2	<2	24	<.2	<2	<2	59	.62	.028	7	46	.84	179	.19	2	1.90	.01	.03	<1
STANDARD C	16	58	37	123	6.5	67	28	1097	3.96	43	19	6	33	53	17.4	14	17	51	.52	.086	35	57	.89	189	.09	32	1.88	.05	.13	10

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JUL 19 1993 DATE REPORT MAILED: July 21/93. SIGNED BY: C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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
38800	<1	17	7	43	<.1	24	7	301	2.49	<2	<5	<2	<2	19	<.2	<2	<2	56	.60	.023	5	40	.76	169	.20	<2	1.55	.02	.03	<1
38801	<1	22	5	55	.1	28	9	469	2.75	4	<5	<2	<2	20	.3	<2	<2	56	.52	.041	7	46	.62	167	.15	2	1.58	.02	.04	2
38802	<1	25	4	39	.1	36	10	427	2.98	4	<5	<2	<2	20	.3	<2	<2	62	.67	.052	5	50	.83	186	.19	5	1.88	.02	.04	1
38803	<1	17	6	58	.2	27	9	370	3.19	<2	<5	<2	<2	16	<.2	<2	<2	63	.54	.067	5	46	.61	129	.18	<2	1.71	.02	.03	<1
38804	<1	11	7	29	.1	17	5	238	2.25	<2	<5	<2	<2	18	<.2	<2	<2	65	.57	.020	5	34	.52	112	.21	4	1.36	.02	.03	1
38805	<1	19	8	52	.1	31	9	268	2.91	4	<5	<2	<2	19	.4	<2	<2	56	.52	.097	5	47	.55	138	.16	3	1.90	.02	.04	1
38806	<1	15	6	87	.2	29	9	288	2.69	<2	<5	<2	2	17	<.2	<2	<2	52	.48	.052	7	46	.58	174	.18	6	1.91	.02	.04	<1
38807	<1	17	6	57	.1	28	11	324	3.32	<2	<5	<2	2	18	.4	<2	<2	65	.53	.072	6	49	.67	163	.19	<2	2.17	.02	.04	<1
38808	<1	25	7	55	.1	39	11	352	3.42	<2	<5	<2	2	19	.2	<2	<2	66	.56	.075	5	54	.74	175	.20	3	2.21	.02	.04	1
38809	1	48	6	49	.2	28	16	815	4.13	3	<5	<2	2	32	.3	<2	<2	77	.71	.077	9	54	.54	361	.15	2	2.21	.02	.07	1
38810	1	15	7	61	.1	22	9	238	3.01	<2	<5	<2	2	26	<.2	<2	3	59	.48	.065	6	46	.56	110	.15	<2	1.85	.02	.04	<1
38811	1	22	5	61	.2	35	12	425	3.15	2	<5	<2	2	20	<.2	<2	3	58	.39	.089	6	53	.73	114	.14	<2	2.01	.01	.04	<1
RE 38811	<1	23	6	62	.1	41	11	415	3.14	<2	<5	<2	2	21	.4	<2	2	58	.40	.089	6	55	.72	116	.14	3	2.01	.01	.04	<1
38812	1	29	3	37	<.1	32	9	392	2.64	3	<5	<2	<2	34	<.2	<2	<2	56	.65	.048	6	54	.84	124	.17	3	1.42	.01	.03	<1
38813	<1	35	3	36	.1	29	7	383	2.49	4	<5	<2	<2	36	<.2	<2	<2	54	.89	.056	7	48	.80	155	.18	4	1.20	.02	.03	1
38814	<1	17	7	51	.1	22	7	331	2.29	<2	<5	<2	4	24	<.2	<2	<2	31	.49	.045	12	30	.60	97	.15	2	1.32	.02	.23	<1
38901	<1	29	10	76	.2	32	9	317	2.63	<2	<5	<2	2	23	.5	<2	3	56	.59	.028	9	43	.72	313	.17	<2	1.91	.02	.05	<1
38902	<1	17	7	93	.1	25	10	517	3.25	<2	<5	<2	2	19	<.2	<2	<2	65	.54	.065	7	43	.66	225	.18	<2	2.00	.01	.04	1
38903	1	14	8	63	.2	21	8	436	2.63	<2	<5	<2	<2	15	.2	<2	<2	56	.45	.060	6	39	.48	160	.15	<2	1.30	.01	.04	<1
38904	<1	6	6	41	.2	12	5	264	2.11	<2	<5	<2	<2	14	<.2	<2	<2	57	.61	.052	4	29	.33	123	.23	<2	1.09	.01	.03	1
38905	1	18	6	97	.2	21	8	488	3.33	2	<5	<2	2	16	.2	<2	3	61	.44	.109	7	43	.56	177	.16	<2	1.88	.01	.04	1
38906	<1	16	11	88	.2	22	8	325	3.86	3	<5	<2	<2	18	<.2	<2	2	78	.49	.082	5	50	.59	211	.16	3	1.88	.01	.04	<1
38907	2	13	9	158	.2	33	9	312	3.48	2	<5	<2	2	18	.3	<2	<2	63	.50	.162	8	51	.51	170	.15	<2	1.87	.01	.05	<1
38908	<1	33	3	42	.1	26	9	403	2.50	<2	<5	<2	<2	27	<.2	<2	<2	56	1.08	.050	5	40	.79	178	.24	<2	1.29	.02	.03	1
38909	2	65	<2	49	.3	25	7	527	1.63	<2	19	<2	<2	156	.4	<2	<2	31	3.84	.082	6	29	.63	272	.09	8	.93	.02	.02	1
38910	<1	27	8	34	<.1	26	7	359	2.46	<2	<5	<2	<2	31	<.2	<2	<2	56	1.04	.032	6	40	.75	189	.23	3	1.38	.02	.02	<1
38911	<1	20	5	60	.1	22	8	879	2.38	<2	<5	<2	2	25	.2	<2	<2	31	.54	.039	8	30	.63	103	.15	<2	1.22	.01	.17	<1
39001	<1	118	7	34	.1	16	5	222	1.96	<2	<5	<2	<2	38	<.2	<2	3	46	1.38	.027	12	35	.40	398	.18	<2	1.25	.01	.03	1
39002	<1	22	2	42	.1	19	8	258	2.64	<2	<5	<2	<2	17	<.2	<2	<2	67	.70	.022	5	35	.62	216	.24	<2	1.64	.01	.03	<1
39003	<1	73	5	57	.3	29	8	615	2.19	7	<5	<2	<2	55	<.2	<2	2	42	2.04	.036	6	38	.69	403	.12	2	1.32	.01	.03	<1
39004	<1	18	10	77	.1	25	11	337	2.95	<2	<5	<2	<2	18	<.2	<2	<2	61	.62	.064	4	45	.68	170	.20	3	1.97	.02	.04	<1
39005	<1	60	7	60	.1	45	12	672	3.12	3	<5	<2	<2	52	.6	<2	<2	58	1.36	.056	7	60	1.11	296	.17	2	1.65	.03	.05	1
39006	1	24	8	115	.1	30	12	508	4.69	7	<5	<2	2	20	<.2	<2	<2	78	.50	.107	4	57	.60	231	.19	<2	2.16	.01	.04	<1
39007	<1	18	3	43	.1	22	8	319	2.56	2	<5	<2	<2	22	.3	<2	<2	57	.70	.015	5	47	.79	210	.22	<2	1.55	.02	.03	<1
39008	<1	42	4	64	.4	29	8	395	2.81	4	<5	<2	<2	59	<.2	<2	<2	53	1.60	.035	5	49	.79	274	.17	2	1.51	.02	.04	<1
39010	1	20	8	99	.1	19	9	886	3.27	2	<5	<2	<2	16	<.2	<2	<2	65	.43	.080	5	40	.40	155	.15	<2	1.38	.01	.04	<1
STANDARD C	18	64	40	134	6.5	71	31	1083	4.09	46	20	7	36	53	17.9	14	20	56	.51	.084	39	61	.92	187	.10	33	1.94	.06	.15	11

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

APPENDIX II

Geophysical Report
by SJ Geophysics

MAGNETOMETER AND VLF-EM

SURVEY

ON THE

BL 1 to 8 CLAIMS

FOR

FOX GEOLOGICAL CONSULTANTS LTD.
AND
PHELPS DODGE CANADA LIMITED

SURVEY BY

SJ GEOPHYSICS LTD
and
PROMIN EXPLORATIONS LIMITED

Omineca, M.D., B.C.

N.T.S. 93N/15 & 16

August 1993

Report By
John Ashenhurst
SJ Geophysics Ltd.

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INTRODUCTION

A reconnaissance type Total Field Magnetics and Very Low Frequency Electromagnetic (VLF-EM) combination of geophysical surveys was requested by Craig Payne of Promin Explorations Limited on behalf of Dr. P.E. Fox of Fox Geological Consultants Ltd. as consultant to Phelps Dodge Canada Limited on their BL claims in central British Columbia.

Unfortunately, the VLF-EM sensor was not working properly and only the Total Field Magnetics was completed by SJ Geophysics Ltd. on the BL property.

The BL property is located fifteen minutes by helicopter east-north-east of Germansen Landing, B.C. at 55°-50' north and 124°-30' west in the Omineca Mining District on the N.T.S. map sheets 93N/15 and 16. The property lies just east of the Omineca River and south of Blue Lake.

The purpose of the survey was to search for evidence of Sedex deposits in what is assumed to be part of the Slide Mountain formation.

INSTRUMENTATION AND FIELD WORK

The field work was performed by John R. Ashenhurst, a geophysical technologist. The work was performed during the period of August 2nd to 7th, 1993 and included four days mobilization and demobilization and three production days. A total of 10.1625 kilometers of reconnaissance grid lines were surveyed at 12.5 metre intervals on lines one kilometer apart. The stations were established by pacing as previously established stations were hip-chained at 50, 100 and occasionally 200 metre intervals.

An EDA Ltd. Omni Plus proton precession magnetometer was used for the field work with a single pole extension attached to the magnetometer sensor and balanced atop the magnetometer console during readings as the grid lines were not cut, thereby excluding use of all four pole extensions. An EDA Omni IV proton precession magnetometer was employed as a base station to correct for daily and diurnal magnetic drift.

All data was entered by cable link each evening into a field computer, reduced to correct for daily and diurnal drift and field plots generated on a dot matrix printer.

Generally, the grid slopes gently north-north-east with the greatest topographical change in the southwest corner of the grid and along the un-named creek at the north end of the lines and steepens to the west along the creek. The bush varied from thick tag alders to mixed thick, young spruce/tag alder/labrador tea to "parkland". Heavy deadfall was a rarity on the property and wet swampland was minimal.

Claim posts observed were of apparent regulation size ID and LCP posts and all appeared to be properly identified and tagged.

DATA PRESENTATION

The Magnetics profiles are presented on the following plate:

G-1 Total Field Magnetics Profiles

DISCUSSION

Several weak but distinct magnetics anomalies occur throughout the survey area as shown on Figure G-1. As this survey was reconnaissance in nature, with the grid lines located one kilometer apart, little can be expected to be observed as being continuous across the property or even across two lines and the profiles should be interpreted singly and not as a grid.

Having stated that, there are still some anomalies that appear to traverse two or more lines. The most notable of these is an apparent contact that runs from line 7000 East, 13125 North to line 8000 East, 11275 North and possibly through to line 9000 East, 10012 North near the claim line which also serves as the 10000 North base line. At this point, however, the data available are insufficient to determine if the signatures are the same.

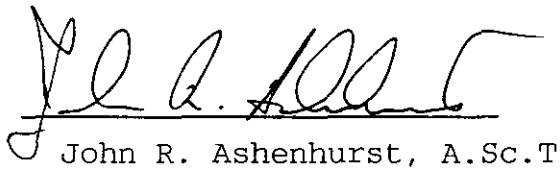
In keeping with this generally Northwest-Southeasterly trend, a second weaker and less distinct anomaly appears to traverse a portion of the grid from line 10000 East, 11750 to 11900 North through to line 9000 East, 12000 to 12125 North and again possibly on to line 8000 East, 12850 to 12925 North or more at the un-named creek. A third, very weak possibility may be an anomaly that runs from line 10000 East, 11125 or 11175 North to line 9000 East, 11650 North and possibly on to line 8000 East, 12275 North.

The most obvious one line anomaly is the probable band of volcanics observed on line 7000 East between 11900 and 12550 North. This appears to be the only volcanics on the grid as the magnetics are generally quite flat which is indicative of sedimentary units. Additionally, a slight magnetic high occurs on line 9000 East between 12550 and 12912 North or more.

Several other narrow, weak spot anomalies occur throughout the survey area and should be investigated, if possible, by prospecting or geochemical methods as little outcrop was observed on the property.

CONCLUSIONS

The several magnetic anomalies mentioned, though all are weak, should be investigated on the ground through prospecting methods and correlated with known geological and geochemical data to determine the necessity and feasibility of further investigation by a more detailed geophysical and geochemical grid and possibly followed up by trenching or diamond drilling.



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