

GEOCHEMICAL REPORT
on the
FLUME GROUP OF MINERAL CLAIMS
Flume 13-91 (YC07395 - YC07473)
Flume 92 - 153 (YC12438 - YC12499)

093991

**Dawson Mining Division
Yukon Territory**

**NTS 115N08,09 & 115O05,12
63° 29' North Latitude
140° 03' West Longitude**

**Registered Owner
Phelps Dodge Corporation of Canada, Limited.
Work Performed between August 15 and September 18, 1998**

by

**G. K. Kulla P.Geo
Phelps Dodge Corporation of Canada, Limited.
#1409 - 409 Granville Street
Vancouver, BC V6C 1T8**

17 May, 1999

- Reviewed by _____
 Date _____



This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 14,100.

M.B.
for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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SUMMARY

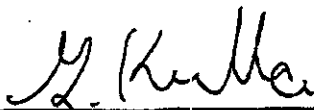
A reconnaissance-style geochemical sampling program was performed on the Flume property situated some 75 kilometres south of Dawson City. The property was staked following a compilation of RGS geochemical data and local geology. Analytical results from the 1998 work program include ten silt samples containing from 10ppb to 149ppb gold and coincident arsenic from 15.6 to 275.7ppm. Analysis of soils returned eighteen samples with gold concentrations greater than 10ppb and forty-eight samples containing greater than 15ppm arsenic delineating a coincident gold-arsenic soil anomaly some 500 metres by 700 metres. Rock sampling was inconclusive due to the limited number of samples collected. Grid soil sampling and detailed prospecting within the soil anomaly and reconnaissance soil sampling elsewhere on the property is recommended.

CERTIFICATE

I, Gregory Kenneth Kulla, certify to the following:

1. I am a geologist residing at 9756 Crown Crescent, Surrey , B.C.
2. I am a Professional Geoscientist registered in the Association of Professional Engineers and Geoscientists of British Columbia.
3. My academic qualifications are:

B.Sc., University of British Columbia, Vancouver, B.C.
4. I have been engaged in geological work since graduation in 1988.
5. I supervised and/or performed the work described in this report.



Greg Kulla, P.Geol.
Vancouver, B.C.
June 10, 1999

INTRODUCTION

This report describes a geochemical sampling program conducted on the Flume property between August 16th and September 18th 1998. Phelps Dodge Corporation of Canada, Limited in 1998, staked the Flume property, situated 75 kilometres south of Dawson City, and conducted a work program consisting of silt, soil and rock sampling. A four-man crew staged the work program out of Dawson City.

LOCATION, ACCESS and PHYSIOGRAPHY

The Flume property is situated at the headwaters of Ten-Mile Creek, a tributary to Sixty-Mile River, 75 kilometres south of Dawson City (Figure 1). The claims lie within the Klondike Plateau, an area characterized by deep narrow valleys and smooth ridges with uniform elevations. Elevation range from 400 metres in valley floors to 1200 metres at ridge tops. Vegetation varies from mature forests of conifers and deciduous trees in the valleys to sub-alpine vegetation on ridge tops. Access to the property is via helicopter from Dawson City. An abandoned airstrip is situated at the mouth of Ten-Mile Creek and a road in unknown condition terminates on the east side of the Yukon river some twelve kilometres northeast of the claims.

CLAIM INFORMATION

The Flume property consists of 153 contiguous quartz claims in the Dawson Mining District and is shown on NTS maps 115N08, 09 and 115O05, 12. Pertinent claim data is tabulated below in Table 1 and the claims are shown in Figure 2. Expiry dates shown in Table 1 are contingent upon the work described herein being accepted for assessment.

TABLE 1 CLAIM DATA

Name	Record Number	Expiry Date	Name	Record Number	Expiry Date
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FLUME 4	YC-7386	July 2, 1999	FLUME 80	YC-7462	July 2, 2000
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FLUME 6	YC-7388	July 2, 1999	FLUME 82	YC-7464	July 2, 2000
FLUME 7	YC-7389	July 2, 1999	FLUME 83	YC-7465	July 2, 2000
FLUME 8	YC-7390	July 2, 1999	FLUME 84	YC-7466	July 2, 2000
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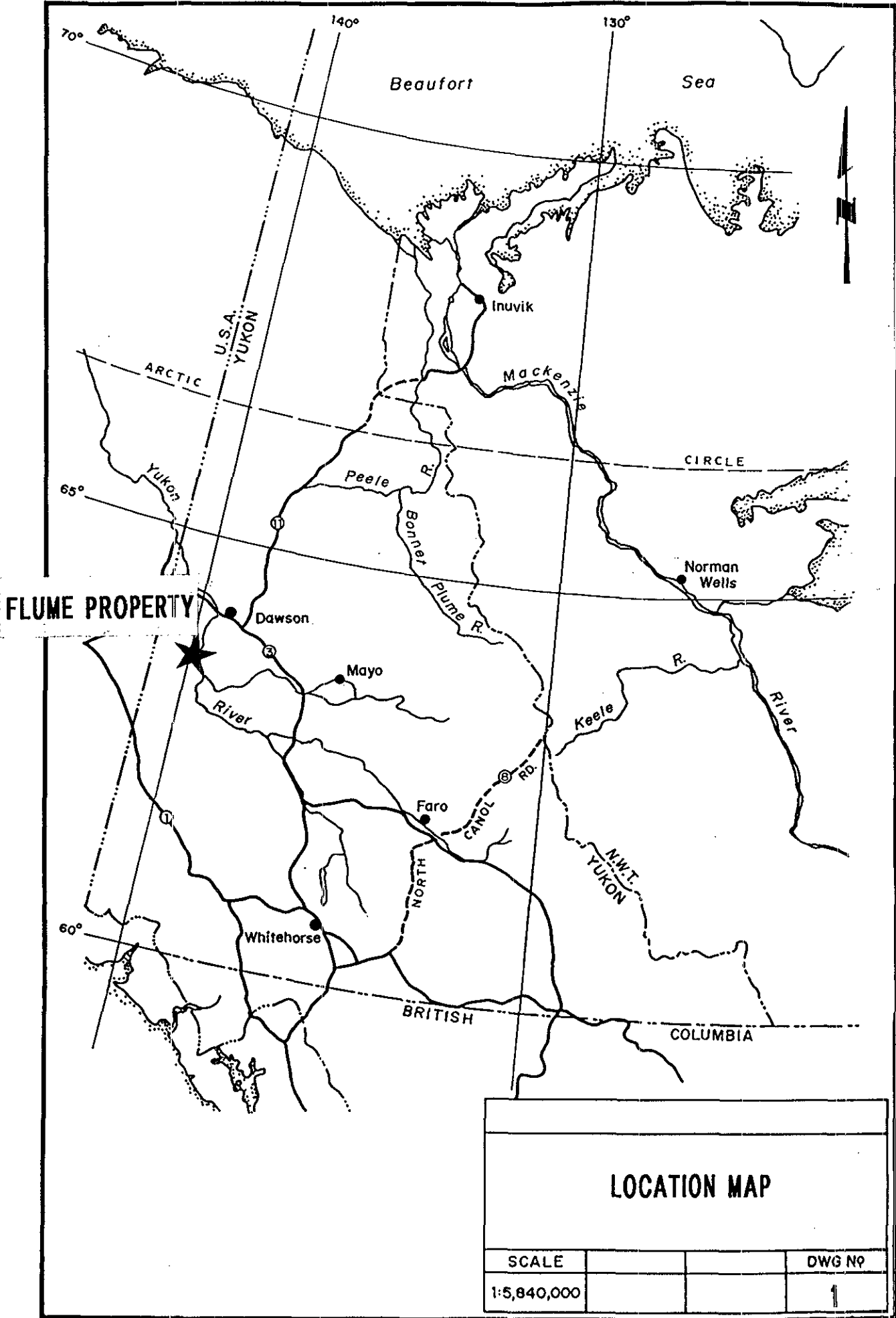
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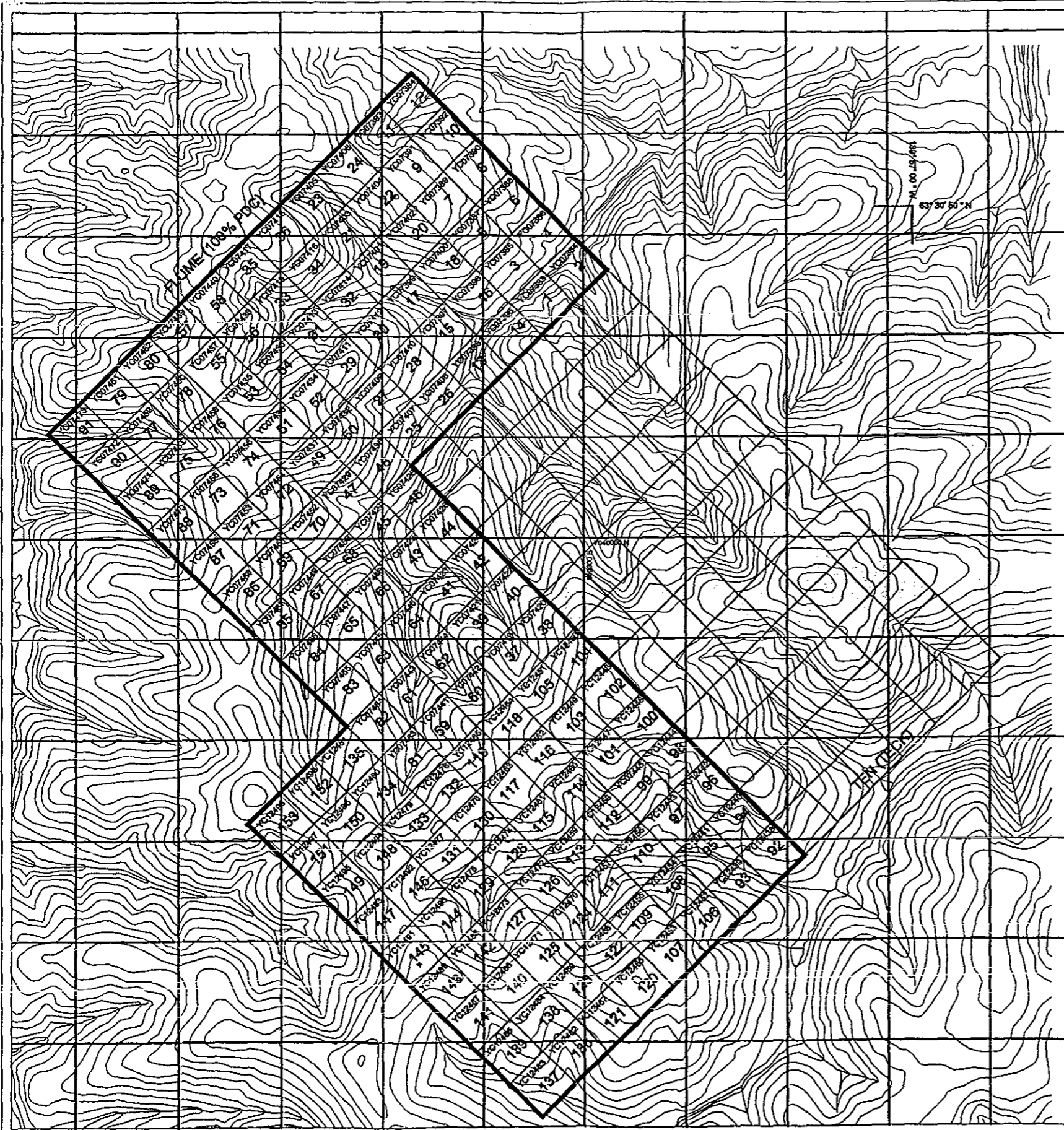
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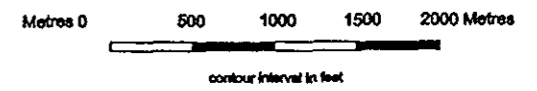


LOCATION MAP

SCALE		DWG NO
1:5,840,000		1



186° 57' 00" W
63° 37' 50" N



PHELPS DODGE CORPORATION OF CANADA, LIMITED
 PROJECT NO. 228 YUKON TERRITORY
FLUME PROJECT
CLAIM PLAN
 DATE: Dec. 1998 SCALE: 2
 DRAWN: 980112.dwg FIGURE:

HISTORY

Historic placer mining is common throughout the region and recent placer mining is visible in Ten-Mile Creek. No recorded work is known in the claim area and local Minfile occurrences refer to placer mining or previously staked claims with no additional information. Ninety-one units were staked by Phelps Dodge Corporation of Canada, Limited in June, 1998 to cover the headwaters of Ten-Mile Creek following an evaluation of Regional Stream Sediment data. Phelps Dodge staked sixty-two additional units in September 1998 to cover the headwaters of a tributary to Sestak Creek immediately southeast of Ten-Mile Creek. This contiguous block of 153 claims covers some 3200 hectares and is surrounded to the north and west by other recently staked claims.

REGIONAL GEOLOGY

Mortensen, Tempelman-Kluit, Wheeler and others have described the regional geology. The area is underlain by the Yukon-Tanana Terrane, which is comprised of the Nisling Assemblage, a metamorphosed Proterozoic-Lower Paleozoic continental margin sequence, the Nasina-Nisutlin Assemblages, mid-Paleozoic carbonaceous, siliciclastic and volcanic continental arc rocks and an upper package of late-Paleozoic felsic meta-volcanic and meta-plutonic rocks. Jurassic to Cretaceous quartz monzonite and granodiorite plugs intrude Yukon-Tanana rocks and Cretaceous bi-modal alkaline Carmacks volcanics overlie both. The Flume property overlies part of an elongate Cretaceous intrusion some 12 kilometres long and 3 kilometres wide within metamorphosed Nisling sediments.

1998 WORK PROGRAM

Work in 1998 was conducted in two stages; an initial examination of the Flume 1 to 91, between August 16th and August 21st, 1998 and a second examination of the Flume 92 to 153 between September 15th and September 18th, 1998. Work was staged out of Dawson City and comprised contour soil sampling, stream sediment sampling and prospecting. A total of 172 soil samples were collected from the B-horizon at 100 metre or 50 metre intervals along three contours around the ridge dividing Ten-Mile Creek and the tributary to Sestak Creek and from two soil lines along a north trending ridge in the headwaters of Ten-Mile Creek. Twenty-five silt samples were collected at approximately 500 metre spacing along these creeks and eleven grab samples were collected from

various sites during the soil and silt sampling work. All samples were tagged with a unique number and shipped to Acme Analytical Labs in Vancouver where the samples were analyzed for 35 elements by ICP and GFAA methods. Summary field notes and select geochemical results are given in Appendix I and complete analytical results are given in Appendix II. Sample locations are shown in Figure 3.

RESULTS

Rock geochemical analysis returned low gold concentrations from below detection limits up to 149ppb. Sample 73089, a galena, quartz-carbonate vein, returned 31,023ppm lead, 35,764ppb silver and 149ppb gold.

Analysis of the silt samples returned from 1 to 148ppb gold. Ten silt samples returned gold over 10ppb with coincident arsenic from 15.6 to 275.7ppm. Silt sample results are summarised in Table 2 below.

Table 2 Silt Sample Results

Sample	Ag_ppb	As	Hg_ppb	Au_ppb	Sample	Ag_ppb	As	Hg_ppb	Au_ppb
507626	71	5.4	14	1	73080	96	3.3	19	2
507627	47	74.2	30	54	73081	0	3.7	19	7
507628	151	268.8	27	7	73082	70	3.3	10	2
507629	168	74.0	10	8	73083	0	6.1	25	1
507630	154	206.5	18	7	73084	95	146.0	17	5
507631	220	80.0	18	4	73085	152	217.4	19	15
507632	155	255.6	10	24	73425	147	15.6	29	53
507633	54	54.1	0	11	73426	120	21.3	46	148
507634	70	137.7	23	5	73427	87	42.0	36	2
73077	146	4.7	39	2	73428	155	275.7	19	22
73078	176	3.1	26	1	73429	176	158.8	23	24
73079	121	5.4	31	1	73430	115	98.8	14	5
					73431	124	89.1	10	6

Analysis of soil samples returned gold concentrations from below detection limits up to 65ppb with eighteen samples containing gold concentrations greater than 10ppb. Arsenic concentration ranges from 2.3 to 317ppm with forty-eight samples containing greater than 15ppm arsenic. Contouring gold greater than 10ppb and arsenic greater than 15ppm delineates a coincident gold-arsenic in soil anomaly some 500m by 700m. Gold and arsenic results for silts and soils are summarised in Figure 4.

CONCLUSIONS and RECOMMENDATIONS

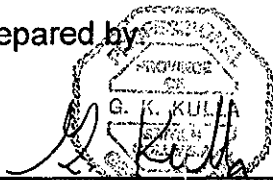
Silt and soil sampling on the Flume property in 1998 delineated two creeks with elevated gold and arsenic concentrations and a large coincident gold-arsenic soil anomaly. Rock sampling was inconclusive due to the limited number of samples collected. Follow-up work in 1999 should include grid soil sampling and detailed prospecting within the soil anomaly and reconnaissance soil sampling northwest and southeast on the property.

DISBURSEMENTS

Expenditures for the 1998 work program on the Flume property are \$ 22,679 and are tabulated below:

Accommodation & Board	26 mandays @ \$80.00/day	2,080.00
Assays	11 rock samples @ \$18.00/sample	198.00
	25 silt samples @ \$ 18.00/sample	450.00
	172 soil samples @ \$18.00/sample	3,096.00
Helicopter	7.6 hours @ \$800.00/hour	6,080.00
Labour		
G. Kulla, geologist	6 days @ \$325.00/day	1,950.00
S. Whetherup, geologist	3 days @ \$325.00/day	975.00
L. Poznikoff, geologist	7 days @ \$325.00/day	2,275.00
J. McCord, sampler	3 days @ \$275.00/day	825.00
D. Gagnon, sampler	7 days @ \$275.00/day	1,925.00
Report, drafting		2,000.00
Supplies and Services		300.00
Trucks, fuel	7 days @ \$75.00/day	<u>525.00</u>
Total		<u>\$ 22,679</u>

Prepared by



Gregory K. Kulla, P. Geo.

May 17, 1999

APPENDIX I
Field Notes and Selected Analytical Results

Flume Property Select Geochemical Results

Sample	Sampler	Type	east83	north83	Mo	Cu	Pb	Zn	Ag_ppb	Ni	Co	Mn	Fe %	As	Cd	Sb	Bi	V	Ca %	Cr	Mg %	Ba	Ti	B	W	TI	Hg_ppb	Au_ppb
63389	KULLA	GRAB	548946	7038520	3.3	13.9	29.5	23.1	113	16	2	107	0.58	2.8	0.28	0.0	0.2	4	0.06	22	0.07	71	0.01	4	0	0.0	14	0
63390	KULLA	GRAB	548121	7037870	3.1	3.5	4.4	9.8	59	7	1	439	0.22	7.5	0.25	0.3	0.0	2	25.58	8	0.12	14	0.00	0	2	0.0	0	0
63391	KULLA	GRAB	547946	7037730	0.1	1.2	1.4	0.0	0	3	0	41	0.06	0.5	0.18	0.0	0.0	1	39.19	5	0.29	5	0.00	0	0	0.0	0	0
63392	KULLA	GRAB	547946	7037730	0.6	2.0	1.6	1.0	49	3	0	32	0.09	0.7	0.27	0.0	0.0	0	33.80	3	0.25	5	0.00	0	0	0.0	0	0
63393	KULLA	GRAB	547946	7037730	0.4	2.4	6.4	1.1	64	1	0	20	0.07	1.3	0.20	0.2	0.2	0	43.81	4	0.35	8	0.00	0	0	0.0	0	0
73076	WETHERUP	GRAB	547446	7037170	2.6	22.4	2.7	2.3	62	5	1	59	0.33	2.0	0.02	0.0	0.0	2	0.01	25	0.03	22	0.00	4	8	0.0	0	3
73086	WETHERUP	GRAB	547866	7041570	3.1	22.4	11.1	0.0	98	8	0	20	0.24	8.3	0.03	0.0	0.0	0	0.01	18	0.00	4	0.00	0	0	0.0	0	4
73087	WETHERUP	GRAB	547771	7041470	1.3	5.3	17.7	2.7	54	2	0	88	0.22	16.5	0.03	0.0	0.0	1	0.04	8	0.04	88	0.00	0	3	0.0	0	4
73088	WETHERUP	GRAB	547771	7041470	2.5	11.3	37.4	29.9	249	7	5	84	0.42	16.3	0.09	0.3	0.4	1	0.08	13	0.03	13	0.00	0	0	0.0	11	7
73089	WETHERUP	GRAB	547946	7041570	9.0	5.8	31023.0	33.8	35764	6	1	82	0.43	0.0	0.50	2.0	0.0	0	0.07	24	0.01	5	0.00	3	8	0.0	102	149
73760	POZNIKOFF	GRAB	547721	7037100	6.5	13.8	59.3	132.2	108	24	7	1868	3.50	98.5	0.49	0.8	0.0	13	0.03	25	0.16	49	0.00	0	0	0.0	13	1
507626	KULLA	SILT	547074	7037470	1.2	67.6	12.4	93.7	71	11	14	1054	3.85	5.4	0.22	0.3	0.0	60	0.59	16	0.81	312	0.02	8	0	0.2	14	1
507627	KULLA	SILT	547246	7037713	1.5	41.9	13.6	114.7	47	18	13	673	3.24	74.2	0.24	0.4	0.0	48	0.70	19	0.63	263	0.02	0	0	0.0	30	54
507628	KULLA	SILT	547321	7037885	2.3	47.9	28.1	173.0	151	22	16	940	3.89	268.8	0.70	0.7	0.2	54	0.75	25	0.75	286	0.02	3	0	0.0	27	7
507629	KULLA	SILT	547421	7038020	1.6	57.7	45.2	103.0	168	22	12	636	2.56	74.0	0.45	0.6	0.0	42	0.65	32	0.55	324	0.03	0	0	0.0	10	8
507630	KULLA	SILT	547271	7038330	1.3	39.4	39.6	115.3	154	20	12	699	2.96	206.5	0.48	0.7	0.2	47	0.70	27	0.62	293	0.03	0	0	0.0	18	7
507631	KULLA	SILT	547471	7038670	2.0	74.7	52.6	95.8	220	49	22	1496	3.19	80.0	0.59	0.9	0.0	67	0.64	80	0.99	334	0.06	0	0	0.0	18	4
507632	KULLA	SILT	547196	7039275	1.1	65.8	36.0	102.8	155	26	13	685	3.08	255.6	0.38	0.8	0.2	50	0.71	37	0.74	308	0.03	0	0	0.0	10	24
507633	KULLA	SILT	547271	7039570	1.2	53.6	37.0	72.5	54	33	15	707	2.84	54.1	0.21	0.6	0.0	57	0.41	52	0.75	262	0.04	0	0	0.0	0	11
507634	KULLA	SILT	547041	7039770	1.2	50.8	29.1	91.8	70	25	13	642	2.84	137.7	0.34	0.6	0.0	49	0.65	35	0.68	303	0.03	0	0	0.0	23	5
73077	WETHERUP	SILT	546221	7038395	1.3	17.7	10.4	81.9	146	12	10	713	2.66	4.7	0.21	0.3	0.2	48	0.54	18	0.57	240	0.03	0	0	0.3	39	2
73078	WETHERUP	SILT	546171	7038620	0.7	13.2	7.2	57.5	176	11	7	409	1.94	3.1	0.17	0.4	0.2	38	0.51	18	0.46	185	0.03	0	0	0.0	26	1
73079	WETHERUP	SILT	546146	7038870	0.8	25.4	8.2	90.5	121	13	18	1014	4.39	5.4	0.17	0.3	0.2	94	0.88	20	1.23	349	0.06	6	0	0.2	31	1
73080	WETHERUP	SILT	546171	7039120	0.6	10.0	6.7	62.2	96	10	7	303	1.86	3.3	0.13	0.4	0.0	38	0.54	18	0.50	152	0.05	0	0	0.3	19	2
73081	WETHERUP	SILT	546221	7039520	0.7	15.0	8.7	109.0	0	9	8	438	2.56	3.7	0.13	0.2	0.0	45	0.58	15	0.63	164	0.04	0	0	0.2	19	7
73082	WETHERUP	SILT	546371	7039720	0.5	10.5	7.3	76.5	70	10	8	461	2.15	3.3	0.13	0.2	0.0	41	0.59	16	0.53	166	0.04	0	0	0.2	10	2
73083	WETHERUP	SILT	546771	7039970	0.6	12.9	8.0	70.6	0	13	8	366	2.11	6.1	0.17	0.3	0.0	43	0.60	20	0.54	219	0.05	0	0	0.0	25	1
73084	WETHERUP	SILT	547771	7041620	2.0	43.9	22.8	98.5	95	27	12	820	2.68	146.0	0.34	0.6	0.2	42	0.62	31	0.74	274	0.04	0	0	0.2	17	5
73085	WETHERUP	SILT	547876	7041620	3.1	49.5	67.7	118.1	152	32	12	1544	3.80	217.4	0.83	1.0	0.0	48	0.54	26	0.72	279	0.04	4	0	0.3	19	15
73425	KULLA	SILT	547621	7036620	0.9	42.7	15.6	66.3	147	12	11	641	2.15	15.6	0.28	0.3	0.0	40	0.55	18	0.45	247	0.03	0	0	0.0	29	53
73426	KULLA	SILT	548471	7036720	0.4	20.7	8.1	62.8	120	13	8	415	1.98	21.3	0.15	0.2	0.0	36	0.68	21	0.51	155	0.05	0	0	0.0	46	148
73427	KULLA	SILT	548871	7036720	1.0	49.3	9.9	72.1	87	13	10	547	2.49	42.0	0.20	0.2	0.0	40	0.71	20	0.54	250	0.03	0	0	0.0	36	2
73428	KULLA	SILT	549121	7036845	1.7	52.1	28.4	101.3	155	21	12	805	3.11	275.7	0.35	0.5	0.0	52	0.64	27	0.56	629	0.04	0	0	0.2	19	22
73429	KULLA	SILT	549221	7036695	1.7	41.4	24.5	102.8	176	24	14	726	2.66	153.8	0.48	0.5	0.0	51	0.64	37	0.64	305	0.05	0	0	0.0	23	24
73430	KULLA	SILT	549871	7036920	1.4	40.9	30.9	122.9	115	32	16	968	3.10	96.8	0.39	0.5	0.0	58	0.66	42	0.71	338	0.05	0	0	0.0	14	5
73431	KULLA	SILT	550321	7036820	1.4	45.9	31.5	113.1	124	27	13	971	2.96	89.1	0.34	0.5	0.0	51	0.64	37	0.67	303	0.05	0	0	0.0	10	6
507451	KULLA	SOIL	549231	7038295	1.3	27.5	41.6	108.4	42	25	11	528	3.57	33.5	0.23	1.0	0.0	51	0.19	29	0.68	137	0.07	0	0	0.4	0	1
507452	KULLA	SOIL	549151	7038245	1.6	14.1	24.0	60.7	78	17	7	268	3.28	49.2	0.31	0.8	0.0	77	0.10	28	0.38	148	0.05	0	0	0.0	20	1
507453	KULLA	SOIL	549071	7038195	1.3	18.4	14.5	53.1	73	24	9	234	2.84	22.0	0.14	0.7	0.0	57	0.17	31	0.51	130	0.05	0	0	0.2	45	6
507454	KULLA	SOIL	548971	7038145	1.4	23.7	33.9	76.1	227	33	10	337	3.61	101.4	0.21	1.1	0.0	69	0.14	51	0.67	184	0.05	0	0	0.2	36	3
507455	KULLA	SOIL	548851	7038100	1.7	17.9	30.8	60.8	53	25	9	295	3.48	52.8	0.21	1.0	0.0	69	0.15	36	0.53	112	0.05	0	0	0.0	27	3
507456	KULLA	SOIL	548751	7038070	1.4	23.1	23.3	65.8	143	30	13	405	3.24	40.6	0.22	0.8	0.0	65	0.18	43	0.61	203	0.06	0	0	0.2	47	3
507457	KULLA	SOIL	548671	7038020	1.6	16.4	11.7	54.0	41	37	13	299	3.55	14.1	0.13	0.7	0.0	73	0.14	77	0.68	263	0.07	0	0	0.3	28	1

results in ppm unless otherwise noted

Phelps Dodge Corporation of Canada, Limited

Flume Property Select Geochemical Results

Sample	Sampler	Type	east83	north83	Mo	Cu	Pb	Zn	Ag_ppb	Ni	Co	Mn	Fe %	As	Cd	Sb	Bi	V	Ca %	Cr	Mg %	Ba	Ti	B	W	Tl	Hg_ppb	Au_ppb
507458	KULLA	SOIL	548596	7037970	1.3	21.6	20.3	60.7	74	22	9	307	3.21	40.9	0.17	0.7	0.0	60	0.14	34	0.48	143	0.05	0	0	0.2	23	7
507459	KULLA	SOIL	548511	7037895	1.6	13.4	13.6	52.4	62	21	8	211	3.63	22.1	0.17	0.6	0.0	80	0.16	42	0.53	473	0.07	0	0	0.0	27	6
507460	KULLA	SOIL	548431	7037820	1.8	19.7	19.9	49.9	274	23	9	225	2.99	17.2	0.19	0.6	0.0	68	0.15	40	0.41	280	0.06	0	0	0.2	21	8
507461	KULLA	SOIL	548351	7037760	1.8	23.3	14.8	56.2	102	24	11	301	3.24	36.3	0.18	0.8	0.0	63	0.17	37	0.53	168	0.05	0	0	0.2	36	10
507462	KULLA	SOIL	548301	7037670	1.6	20.2	23.2	59.9	97	45	13	320	3.38	55.4	0.17	0.7	0.0	68	0.12	129	0.67	169	0.06	0	0	0.0	29	9
507463	KULLA	SOIL	548251	7037600	1.1	14.5	12.4	44.2	90	19	9	384	2.39	8.2	0.16	0.4	0.0	62	0.54	29	0.38	156	0.04	0	0	0.0	0	2
507464	KULLA	SOIL	548201	7037545	0.6	16.4	10.0	36.9	51	25	9	187	2.28	5.5	0.05	0.3	0.0	55	0.23	35	0.57	476	0.03	0	0	0.0	24	1
507465	KULLA	SOIL	548181	7037470	1.2	15.4	12.0	55.0	0	23	10	275	3.01	8.4	0.07	0.4	0.0	62	0.19	31	0.50	295	0.04	0	0	0.0	17	2
507466	KULLA	SOIL	548081	7037410	1.3	14.4	11.3	55.2	86	20	11	467	2.91	8.0	0.10	0.6	0.0	68	0.14	28	0.44	196	0.06	0	0	0.0	26	1
507467	KULLA	SOIL	548021	7037395	1.3	14.3	13.4	70.7	0	9	8	366	4.00	6.2	0.09	0.5	0.0	57	0.08	21	0.35	121	0.01	3	0	0.2	19	1
507468	KULLA	SOIL	547931	7037330	1.2	16.1	10.3	61.3	30	28	14	306	3.61	6.6	0.11	0.5	0.0	77	0.15	33	0.63	348	0.06	0	0	0.0	12	5
507469	KULLA	SOIL	547851	7037300	1.5	20.0	12.0	43.6	64	22	10	269	3.09	7.7	0.14	0.4	0.0	70	0.14	38	0.46	255	0.07	0	0	0.2	16	2
507470	KULLA	SOIL	547771	7037270	1.6	34.6	14.8	108.0	49	48	22	724	5.61	15.4	0.13	0.5	0.0	124	0.23	182	2.09	155	0.08	0	0	0.2	22	1
507471	KULLA	SOIL	547701	7037250	1.5	34.0	12.6	75.5	46	45	18	601	3.85	30.0	0.15	0.5	0.0	51	0.13	41	0.90	144	0.05	0	0	0.2	0	65
507472	KULLA	SOIL	547631	7037210	1.0	27.6	11.5	40.2	196	22	9	224	2.36	21.2	0.08	0.4	0.0	54	0.31	29	0.47	271	0.04	0	0	0.0	32	17
507473	KULLA	SOIL	547521	7037170	1.3	75.9	10.5	52.6	168	24	13	314	3.37	144.0	0.17	0.5	0.0	81	0.45	32	0.59	118	0.03	0	0	0.2	15	51
507474	KULLA	SOIL	547471	7037100	0.7	14.9	13.6	56.5	106	24	9	393	2.69	6.2	0.34	0.5	0.2	64	0.61	35	0.43	200	0.05	0	0	0.0	12	5
507475	KULLA	SOIL	547391	7037030	1.3	14.0	13.4	42.2	42	26	10	231	2.83	7.7	0.12	0.5	0.2	68	0.36	30	0.41	124	0.02	0	0	0.2	21	3
507476	KULLA	SOIL	547321	7036970	1.0	14.2	10.8	40.3	0	19	9	244	3.25	8.0	0.09	0.5	0.0	62	0.16	30	0.43	164	0.03	0	0	0.0	29	5
507477	KULLA	SOIL	547251	7036910	1.1	14.4	13.7	63.2	0	19	10	376	3.06	7.5	0.11	0.4	0.0	54	0.17	24	0.53	158	0.04	0	0	0.0	0	3
507478	KULLA	SOIL	547171	7036845	1.5	12.5	10.6	31.0	35	6	4	159	1.86	3.4	0.07	0.3	0.0	60	0.09	16	0.23	89	0.05	0	0	0.0	15	4
507479	KULLA	SOIL	547071	7036810	1.2	13.9	11.0	44.2	0	16	8	255	2.58	6.0	0.09	0.3	0.0	57	0.13	26	0.38	121	0.04	0	0	0.0	0	3
507480	KULLA	SOIL	546971	7036820	1.0	14.4	12.7	51.7	0	19	10	340	2.79	7.0	0.11	0.5	0.0	57	0.15	27	0.45	302	0.04	0	0	0.0	21	2
507481	KULLA	SOIL	546871	7036820	1.2	22.8	11.3	55.1	48	11	9	309	3.61	5.2	0.11	0.5	0.2	57	0.08	19	0.59	174	0.01	0	0	0.2	23	1
507601	KULLA	SOIL	549071	7038620	1.0	17.2	57.2	77.7	33	18	10	394	2.77	12.1	0.18	0.6	0.0	43	0.23	25	0.56	99	0.05	0	0	0.0	25	3
507602	KULLA	SOIL	548996	7038570	2.9	34.2	48.3	112.0	195	41	12	483	3.41	81.0	0.40	1.0	0.0	64	0.23	43	0.69	143	0.04	0	0	0.0	30	28
507603	KULLA	SOIL	548911	7038480	2.0	28.1	72.5	78.8	211	29	12	477	3.15	54.7	0.27	1.0	0.0	59	0.19	33	0.62	152	0.05	0	0	0.2	37	7
507604	KULLA	SOIL	548831	7038410	1.9	23.4	93.1	76.2	225	26	10	460	2.90	133.7	0.32	1.3	0.0	59	0.22	31	0.60	144	0.05	0	0	0.0	38	6
507605	KULLA	SOIL	548761	7038330	1.6	23.1	62.4	68.3	109	24	10	458	2.91	51.2	0.16	0.9	0.0	56	0.26	35	0.64	289	0.05	0	0	0.0	27	4
507606	KULLA	SOIL	548671	7038290	1.8	31.4	34.6	62.9	239	22	9	398	2.53	73.9	0.25	0.9	0.0	49	0.22	32	0.50	335	0.03	0	0	0.0	36	2
507607	KULLA	SOIL	548621	7038220	1.1	25.9	14.7	61.2	100	38	14	494	2.96	34.2	0.18	0.7	0.0	61	0.32	69	0.78	394	0.05	0	0	0.0	20	6
507608	KULLA	SOIL	548521	7038150	3.5	15.7	18.7	77.2	228	116	27	438	4.22	12.5	0.34	1.4	1.7	85	0.75	454	2.45	610	0.13	0	0	0.7	14	0
507609	KULLA	SOIL	548471	7038090	1.8	17.5	11.3	59.6	101	25	11	322	3.15	26.2	0.16	0.5	0.0	64	0.27	38	0.63	579	0.06	0	0	0.0	49	1
507610	KULLA	SOIL	548391	7038030	1.7	33.2	23.6	70.3	112	33	12	529	3.18	22.2	0.21	1.1	0.0	51	0.20	32	0.53	393	0.04	0	0	0.0	29	12
507611	KULLA	SOIL	548301	7037970	2.3	31.8	36.0	95.9	229	34	16	859	3.77	234.5	0.46	1.1	0.0	55	0.20	40	0.59	295	0.04	0	0	0.0	22	7
507612	KULLA	SOIL	548231	7037890	2.9	46.6	63.0	207.5	246	38	16	860	3.97	263.5	1.09	1.0	0.0	47	0.35	39	0.67	293	0.03	0	0	0.0	25	7
507613	KULLA	SOIL	548181	7037820	2.3	47.0	90.3	342.5	872	49	18	369	3.56	163.7	2.01	1.3	0.0	51	0.93	75	0.89	348	0.03	0	0	0.0	65	21
507614	KULLA	SOIL	548071	7037770	1.8	39.1	20.7	77.8	278	33	13	212	2.93	75.1	0.52	1.1	0.0	55	0.74	37	0.65	388	0.04	3	0	0.0	32	0
507615	KULLA	SOIL	548021	7037695	1.1	16.6	22.7	78.2	147	15	14	2144	2.94	11.6	0.28	0.6	0.0	45	0.53	24	0.71	394	0.04	0	0	0.2	27	3
507616	KULLA	SOIL	547961	7037660	0.8	11.1	13.2	57.2	41	11	8	397	2.19	3.8	0.10	0.4	0.0	35	0.48	17	0.54	187	0.03	0	0	0.0	20	2
507617	KULLA	SOIL	547873	7037620	2.4	26.5	13.2	65.1	291	25	13	286	3.31	41.6	0.16	1.0	0.0	68	0.47	50	0.78	376	0.04	0	0	0.0	40	38
507618	KULLA	SOIL	547831	7037570	1.4	20.4	31.3	66.5	97	22	12	441	2.78	37.1	0.16	0.6	0.0	54	0.24	37	0.55	180	0.05	0	0	0.0	22	7
507619	KULLA	SOIL	547781	7037480	2.6	27.5	17.3	72.5	217	34	13	442	3.49	64.7	0.23	0.8	0.2	68	0.20	57	0.68	166	0.04	0	0	0.0	41	18

results in ppm unless otherwise noted

Phelps Dodge Corporation of Canada, Limited

Flume Property Select Geochemical Results

Sample	Sampler	Type	east83	north83	Mo	Cu	Pb	Zn	Ag_ppb	Ni	Co	Mn	Fe %	As	Cd	Sb	Bi	V	Ca %	Cr	Mg %	Ba	Ti	B	W	Tl	Hg_ppb	Au_ppb
507620	KULLA	SOIL	547696	7037420	23	39.5	19.2	53.1	257	27	11	481	3.40	316	0.18	0.9	0.0	62	0.20	37	0.49	193	0.03	0	0	0.2	43	26
507621	KULLA	SOIL	547596	7037370	6	34.0	18.1	67.9	206	32	16	523	3.15	195.5	0.16	0.8	0.2	53	0.31	36	0.69	152	0.05	0	0	0.3	22	11
507622	KULLA	SOIL	547571	7037320	0	21.6	18.0	60.9	171	25	10	442	2.28	22.5	0.44	0.7	0.0	46	1.84	24	0.57	111	0.04	3	0	0.0	31	57
507623	KULLA	SOIL	547471	7037270	0	22.0	14.5	52.6	162	21	8	199	2.05	8.5	0.55	0.8	0.0	42	2.45	27	0.47	152	0.03	0	0	0.0	68	0
507624	KULLA	SOIL	547371	7037230	0.8	12.7	11.9	71.3	71	15	14	356	3.49	4.5	0.17	0.4	0.0	74	0.83	25	0.95	364	0.01	7	0	0.0	31	3
507625	KULLA	SOIL	547271	7037180	6	21.4	16.0	77.4	182	11	8	425	2.55	2.3	0.12	0.4	0.0	41	0.46	17	0.65	368	0.03	3	0	0.2	41	0
73200	GAGNON	SOIL	546646	7037170	7	16.6	18.5	71.0	42	19	10	437	4.02	12.0	0.15	0.6	1.0	83	0.14	30	0.52	110	0.05	3	0	0.0	33	2
73201	GAGNON	SOIL	546641	7037220	1	18.4	22.7	72.4	81	20	9	382	4.36	13.3	0.16	0.6	0.9	96	0.13	32	0.56	124	0.05	0	0	0.0	32	1
73202	GAGNON	SOIL	546631	7037270	0	16.0	17.6	77.6	120	15	11	610	2.92	5.5	0.10	0.4	0.4	56	0.34	24	0.70	284	0.06	0	0	0.0	16	2
73203	GAGNON	SOIL	546621	7037320	3	18.3	12.4	82.4	76	13	9	474	2.77	5.1	0.12	0.5	0.2	51	0.46	22	0.72	277	0.08	0	0	0.2	18	3
73204	GAGNON	SOIL	546611	7037370	0.5	22.4	11.3	72.5	160	18	9	402	2.80	8.8	0.15	0.6	0.3	54	0.42	26	0.65	341	0.06	0	0	0.0	22	1
73205	GAGNON	SOIL	546601	7037420	0.9	20.4	12.4	65.2	112	21	10	325	2.76	7.5	0.13	0.5	0.3	57	0.38	28	0.60	290	0.06	0	0	0.0	44	2
73206	GAGNON	SOIL	546601	7037470	3	18.5	16.6	63.0	63	24	12	375	3.55	10.4	0.11	0.6	0.2	74	0.24	29	0.62	498	0.05	3	0	0.0	26	3
73207	GAGNON	SOIL	546596	7037520	1	14.4	12.9	62.3	0	16	9	401	3.22	8.0	0.11	0.3	0.0	68	0.21	25	0.50	193	0.03	4	0	0.0	10	1
73208	GAGNON	SOIL	546591	7037570	1	9.5	9.7	29.6	0	6	4	167	1.73	3.9	0.11	0.3	0.2	55	0.08	15	0.20	87	0.06	0	0	0.0	16	1
73209	GAGNON	SOIL	546581	7037620	1	10.4	9.5	40.1	86	13	7	275	2.70	6.5	0.07	0.5	0.0	70	0.16	21	0.44	154	0.07	0	0	0.2	21	1
73210	GAGNON	SOIL	546571	7037670	2	8.8	12.2	37.0	72	9	6	328	2.84	8.1	0.11	0.5	0.2	82	0.13	18	0.37	61	0.07	0	0	0.0	20	2
73211	GAGNON	SOIL	546566	7037720	1	12.0	11.4	44.3	90	12	7	313	2.73	4.9	0.11	0.4	0.2	60	0.18	21	0.49	164	0.04	0	0	0.0	11	0
73212	GAGNON	SOIL	546561	7037770	1	15.9	11.4	52.2	0	18	13	605	3.20	7.2	0.08	0.5	0.0	64	0.20	29	0.64	277	0.05	0	0	0.0	0	0
73213	GAGNON	SOIL	546556	7037820	1	10.6	10.7	28.8	97	9	5	191	1.64	5.4	0.09	0.3	0.0	44	0.14	17	0.27	121	0.05	0	0	0.0	28	2
73214	GAGNON	SOIL	546551	7037870	3	13.9	13.1	55.5	0	14	12	676	3.21	8.5	0.14	0.5	0.2	55	0.23	22	0.56	131	0.03	0	0	0.0	15	5
73215	GAGNON	SOIL	546546	7037920	1	13.1	12.5	46.9	62	16	8	263	2.94	6.8	0.09	0.4	0.2	64	0.17	26	0.47	156	0.03	0	0	0.0	21	1
73216	GAGNON	SOIL	546541	7037970	0.9	11.3	9.5	43.3	59	14	9	352	2.78	5.6	0.08	0.3	0.0	54	0.35	21	0.50	270	0.03	0	0	0.0	16	1
73217	GAGNON	SOIL	546536	7038020	5	22.2	12.2	51.4	192	18	7	301	2.80	8.0	0.16	0.5	0.2	64	0.24	27	0.41	181	0.04	0	0	0.2	44	3
73218	GAGNON	SOIL	546531	7038070	0.5	12.6	9.4	45.3	70	15	8	278	2.44	5.8	0.10	0.4	0.0	51	0.21	24	0.45	126	0.04	0	0	0.0	0	2
73219	GAGNON	SOIL	546526	7038120	1	14.0	12.7	37.1	62	14	7	231	2.60	7.5	0.11	0.4	0.0	62	0.15	20	0.35	130	0.04	0	0	0.2	25	1
73220	GAGNON	SOIL	546521	7038170	0	13.6	12.4	43.0	33	13	8	349	3.07	5.6	0.07	0.4	0.2	51	0.18	18	0.48	104	0.02	0	0	0.0	24	0
73221	GAGNON	SOIL	546516	7038220	4	13.1	12.8	52.5	39	14	8	301	3.06	6.1	0.11	0.5	0.0	58	0.10	23	0.44	85	0.03	0	0	0.0	0	1
73222	GAGNON	SOIL	546511	7038270	0.5	11.6	10.4	44.7	47	11	8	341	2.29	3.4	0.08	0.3	0.0	40	0.26	18	0.44	161	0.03	0	0	0.0	0	1
73223	GAGNON	SOIL	546506	7038320	0	15.2	10.2	46.8	39	18	8	279	2.76	5.7	0.08	0.5	0.0	55	0.20	23	0.49	163	0.04	0	0	0.0	14	0
73224	GAGNON	SOIL	546501	7038370	1	13.1	8.7	37.3	62	6	6	317	2.07	4.1	0.12	0.3	0.0	49	0.24	13	0.28	271	0.02	0	0	0.2	26	0
73225	GAGNON	SOIL	546501	7038420	1	15.9	9.7	37.7	38	7	7	208	2.59	3.2	0.05	0.2	0.0	34	0.10	15	0.39	98	0.01	0	0	0.2	11	0
73226	GAGNON	SOIL	546501	7038470	0	11.7	10.7	39.2	49	8	6	259	2.71	3.4	0.05	0.3	0.4	52	0.17	15	0.47	321	0.04	0	0	0.2	19	1
73227	GAGNON	SOIL	546496	7038520	1	10.9	10.7	43.4	0	14	7	227	2.68	6.4	0.09	0.4	0.0	68	0.15	24	0.46	108	0.06	0	0	0.0	0	0
73228	GAGNON	SOIL	546496	7038570	0.7	9.9	7.9	37.1	30	7	7	415	2.19	2.6	0.05	0.2	0.0	28	0.21	11	0.43	135	0.01	0	0	0.0	11	1
73229	GAGNON	SOIL	546496	7038620	1.2	16.8	13.4	66.3	0	24	11	318	3.88	10.5	0.34	0.6	0.0	68	0.13	39	0.48	181	0.04	0	0	0.0	25	1
73230	GAGNON	SOIL	546496	7038670	1.9	19.3	16.2	71.7	37	20	10	307	3.55	9.0	0.37	0.5	0.0	63	0.12	30	0.52	138	0.03	0	0	0.0	11	2
73300	POZNIKOFF	SOIL	547096	7037120	0	13.0	10.7	60.9	43	13	11	666	2.87	5.8	0.10	0.3	0.0	65	0.20	24	0.53	118	0.07	0	0	0.2	0	0
73301	POZNIKOFF	SOIL	547091	7037070	1	15.5	10.0	82.3	63	13	12	718	3.31	4.1	0.10	0.4	0.0	67	0.44	22	0.76	320	0.09	0	0	0.2	0	0
73302	POZNIKOFF	SOIL	547086	7037120	1.4	18.5	10.2	72.9	92	15	11	633	2.98	5.9	0.11	0.4	0.0	60	0.38	24	0.63	336	0.05	0	0	0.0	50	1
73303	POZNIKOFF	SOIL	547081	7037170	1.9	22.3	10.5	76.2	203	15	9	518	3.01	5.5	0.14	0.5	0.0	53	0.83	24	0.66	684	0.04	0	0	0.0	55	1
73304	POZNIKOFF	SOIL	547076	7037220	1.6	16.1	12.1	73.6	123	16	8	342	2.90	6.9	0.18	0.4	0.2	57	0.49	27	0.57	275	0.04	0	0	0.0	24	2
73305	POZNIKOFF	SOIL	547071	7037270	0.7	13.4	7.4	56.7	35	11	7	360	2.33	5.1	0.10	0.4	0.0	42	0.40	18	0.48	259	0.05	0	0	0.0	31	0

results in ppm unless otherwise noted

Flume Property Select Geochemical Results

Sample	Sampler	Type	east83	north83	Mo	Cu	Pb	Zn	Ag_ppb	Ni	Co	Mn	Fe_%	As	Cd	Sb	Bi	V	Ca_%	Cr	Mg_%	Ba	Ti	B	W	Tl	Hg_ppb	Au_ppb
73306	POZNIKOFF	SOIL	547066	7037320	0.0	17.7	9.8	64.4	120	15	10	477	2.55	7.3	0.13	0.4	0.3	52	0.60	22	0.56	315	0.04	0	0	0.0	53	0
73307	POZNIKOFF	SOIL	547061	7037370	0.8	18.8	7.6	50.8	66	12	10	513	2.57	5.7	0.10	0.3	0.0	50	0.28	20	0.48	163	0.05	0	0	0.0	26	2
73308	POZNIKOFF	SOIL	547056	7037420	2	19.0	9.5	45.0	96	12	7	285	2.58	6.5	0.13	0.5	0.2	55	0.09	21	0.36	267	0.04	0	0	0.0	38	0
73309	POZNIKOFF	SOIL	547051	7037470	1.5	24.1	12.8	65.5	125	19	12	768	3.48	8.5	0.21	0.5	0.0	63	1.01	29	0.53	716	0.03	0	0	0.0	45	2
73310	POZNIKOFF	SOIL	547046	7037520	1.1	14.1	10.0	52.4	0	11	9	447	2.52	4.5	0.08	0.3	0.2	50	0.31	18	0.46	270	0.04	0	0	0.0	23	1
73311	POZNIKOFF	SOIL	547046	7037570	0.7	11.9	8.3	54.7	37	12	9	415	2.88	5.1	0.07	0.3	0.0	54	0.33	22	0.57	267	0.04	0	0	0.0	0	0
73312	POZNIKOFF	SOIL	547041	7037620	1.2	14.1	9.5	58.2	56	15	9	369	3.10	6.5	0.09	0.5	0.0	63	0.41	25	0.63	337	0.05	0	0	0.0	0	1
73313	POZNIKOFF	SOIL	547031	7037670	0.6	12.6	8.3	52.3	38	12	10	466	2.82	4.8	0.10	0.5	0.0	51	0.31	22	0.56	182	0.06	0	0	0.0	22	0
73314	POZNIKOFF	SOIL	547031	7037720	1.0	10.7	7.6	40.8	0	7	7	322	2.52	4.1	0.09	0.3	0.0	50	0.16	14	0.39	171	0.04	0	0	0.2	18	0
73315	POZNIKOFF	SOIL	547021	7037770	0.9	14.6	10.4	62.9	0	19	10	487	3.36	11.0	0.09	0.5	0.0	70	0.24	30	0.55	229	0.05	0	0	0.0	25	0
73316	POZNIKOFF	SOIL	547011	7037820	1.3	11.8	9.9	44.1	50	13	6	218	2.47	10.1	0.07	0.5	0.0	62	0.36	20	0.41	161	0.03	0	0	0.0	14	2
73317	POZNIKOFF	SOIL	547016	7037870	0.6	13.8	8.1	53.2	0	14	11	561	2.86	5.6	0.09	0.4	0.0	60	0.35	23	0.60	229	0.04	0	0	0.0	18	0
73318	POZNIKOFF	SOIL	547001	7037920	1.0	13.1	9.1	51.5	43	14	9	350	2.90	6.5	0.07	0.4	0.0	63	0.33	24	0.55	180	0.04	0	0	0.0	17	5
73319	POZNIKOFF	SOIL	546981	7037970	0.5	16.3	9.0	45.3	46	15	8	293	2.38	5.9	0.06	0.3	0.0	46	0.37	26	0.48	270	0.04	0	0	0.0	23	1
73320	POZNIKOFF	SOIL	546971	7038020	0.8	14.9	9.8	43.3	45	15	8	212	2.35	5.4	0.06	0.4	0.0	51	0.28	23	0.44	341	0.04	0	0	0.0	22	2
73321	POZNIKOFF	SOIL	546961	7038070	0.6	15.3	8.6	47.7	0	17	9	321	2.50	6.8	0.06	0.4	0.0	51	0.28	24	0.50	361	0.05	0	0	0.0	15	8
73322	POZNIKOFF	SOIL	546961	7038120	0.8	13.8	9.8	48.2	56	14	8	280	2.64	5.9	0.07	0.5	0.0	55	0.30	23	0.48	272	0.04	0	0	0.2	27	1
73323	POZNIKOFF	SOIL	546961	7038170	1.2	13.1	8.8	45.2	0	12	8	337	2.57	8.5	0.09	0.4	0.0	59	0.29	20	0.40	392	0.03	0	0	0.0	16	2
73324	POZNIKOFF	SOIL	546961	7038220	0.9	13.4	9.1	45.2	31	12	9	422	2.38	5.8	0.14	0.4	0.0	50	0.36	20	0.41	481	0.03	0	0	0.0	25	1
73325	POZNIKOFF	SOIL	546961	7038270	0.8	14.8	9.9	44.3	51	13	8	309	2.36	5.1	0.07	0.4	0.0	43	0.41	21	0.43	724	0.03	0	0	0.2	21	4
73326	POZNIKOFF	SOIL	546951	7038320	0.8	13.9	9.9	43.7	31	14	8	264	2.40	6.0	0.07	0.4	0.0	48	0.23	22	0.44	323	0.03	0	0	0.2	0	5
73327	POZNIKOFF	SOIL	546946	7038370	0.5	12.8	8.9	40.3	0	13	7	239	2.22	5.0	0.05	0.3	0.0	45	0.31	23	0.42	315	0.03	0	0	0.2	0	2
73328	POZNIKOFF	SOIL	546931	7038420	1.4	21.3	17.6	60.6	100	10	14	1150	3.17	6.1	0.17	0.3	0.0	59	0.39	25	0.45	764	0.03	0	0	0.0	37	2
73329	POZNIKOFF	SOIL	546921	7038470	0.8	17.2	10.4	45.1	0	14	8	345	2.51	5.7	0.09	0.4	0.0	48	0.24	24	0.48	257	0.03	0	0	0.2	16	1
73330	POZNIKOFF	SOIL	546911	7038520	1.1	15.3	11.0	49.6	54	19	11	323	3.17	8.7	0.07	0.5	0.0	63	0.29	30	0.54	192	0.04	0	0	0.2	25	1
73732	POZNIKOFF	SOIL	547307	7036621	1.1	25.7	11.1	54.6	187	16	9	574	2.58	7.8	0.11	0.3	0.3	45	0.65	27	0.44	709	0.02	0	0	0.2	60	5
73733	POZNIKOFF	SOIL	547311	7036650	0.7	18.2	31.6	57.3	214	16	8	673	2.23	5.7	0.28	0.3	0.3	41	1.07	19	0.40	435	0.03	0	0	0.0	71	0
73734	POZNIKOFF	SOIL	547311	7036710	0.8	25.8	23.7	58.0	347	28	9	596	2.36	14.2	0.40	0.5	0.2	43	0.98	26	0.52	353	0.03	0	0	0.0	67	6
73735	POZNIKOFF	SOIL	547331	7036760	0.7	26.4	40.8	52.9	324	22	8	679	2.14	5.3	0.51	0.4	0.0	38	2.21	21	0.45	399	0.02	0	0	0.0	86	11
73736	POZNIKOFF	SOIL	547371	7036795	0.6	21.8	69.8	107.9	281	21	8	384	2.19	16.7	0.61	0.4	0.2	41	1.48	23	0.55	342	0.03	0	0	0.0	53	5
73737	POZNIKOFF	SOIL	547421	7036830	0.9	14.3	12.7	59.7	92	18	11	415	2.78	14.9	0.21	0.3	0.2	69	0.49	27	0.53	221	0.05	0	0	0.0	18	2
73738	POZNIKOFF	SOIL	547471	7036870	0.8	29.8	10.2	50.8	191	22	11	285	2.94	19.3	0.12	0.3	0.0	70	0.28	33	0.67	246	0.06	0	0	0.0	18	4
73739	POZNIKOFF	SOIL	547511	7036890	0.6	30.4	8.2	59.5	149	27	11	408	2.84	20.9	0.24	0.6	0.0	60	0.89	34	0.58	284	0.08	0	0	0.0	53	4
73740	POZNIKOFF	SOIL	547571	7036910	0.5	28.8	7.5	45.6	149	26	11	414	2.62	16.4	0.19	0.5	0.2	57	1.25	32	0.53	293	0.07	0	0	0.0	42	6
73741	POZNIKOFF	SOIL	547611	7036930	0.6	44.8	17.2	68.0	306	26	13	304	2.87	64.0	0.42	0.5	0.4	60	0.88	35	0.84	205	0.06	0	0	0.0	50	5
73742	POZNIKOFF	SOIL	547631	7036970	0.5	42.4	19.1	58.7	162	26	12	547	2.85	26.3	0.11	0.4	0.2	66	0.59	36	0.76	292	0.07	0	0	0.0	36	20
73743	POZNIKOFF	SOIL	547661	7037020	2.0	31.7	10.7	43.7	501	19	20	1872	2.88	27.1	0.16	0.3	0.2	67	0.42	28	0.44	305	0.05	0	0	0.0	76	2
73744	POZNIKOFF	SOIL	547686	7037060	1.3	29.6	17.5	69.6	206	22	10	375	3.64	63.6	0.18	0.5	0.2	76	0.20	36	0.57	158	0.07	0	0	0.0	12	17
73745	POZNIKOFF	SOIL	547721	7037100	1.7	23.3	70.5	123.5	342	24	20	895	3.62	115.7	0.52	0.5	0.2	82	0.14	39	0.59	212	0.07	0	0	0.0	26	55
73746	POZNIKOFF	SOIL	547751	7037130	1.5	18.1	12.4	54.2	265	20	9	348	3.79	47.9	0.17	0.4	0.0	82	0.12	32	0.49	128	0.09	0	0	0.0	32	3
73747	POZNIKOFF	SOIL	547796	7037170	1.7	34.9	16.0	75.3	66	34	13	548	3.65	165.7	0.21	0.6	0.0	71	0.13	53	0.71	176	0.06	0	0	0.0	15	19
73748	POZNIKOFF	SOIL	547831	7037210	1.5	21.5	12.5	62.0	380	23	12	387	3.45	57.1	0.15	0.3	0.0	79	0.13	40	0.58	171	0.08	0	0	0.0	24	19
73749	POZNIKOFF	SOIL	547921	7037170	1.2	21.6	13.4	54.8	479	23	13	673	2.96	20.3	0.27	0.6	0.2	70	0.18	45	0.59	289	0.05	0	0	0.0	26	5

Phelps Dodge Corporation of Canada, Limited

Flume Property Select Geochemical Results

Sample	Sampler	Type	east83	north83	Mo	Cu	Pb	Zn	Ag ppb	Ni	Co	Mn	Fe %	As	Cd	Sb	Bi	V	Ca %	Cr	Mg %	Ba	Ti	B	W	TI	Hg ppb	Au ppb
73750	POZNIKOFF	SOIL	547971	7037240	5	13.5	10.1	51.2	324	14	10	415	2.62	22.1	0.26	0.6	0.2	67	0.17	36	0.54	198	0.04	0	0	0.0	36	4
73751	POZNIKOFF	SOIL	548021	7037240	9	10.1	6.9	54.7	55	17	10	294	3.39	12.0	0.12	0.3	0.0	75	0.12	31	0.58	192	0.06	0	0	0.0	18	7
73752	POZNIKOFF	SOIL	548071	7037240	7	14.5	7.6	55.8	69	17	9	527	3.11	6.7	0.06	0.2	0.0	70	0.25	33	0.64	468	0.05	4	0	0.0	26	2
73753	POZNIKOFF	SOIL	548121	7037230	8	10.4	7.1	54.8	121	16	9	352	3.57	9.4	0.09	0.3	0.0	78	0.11	30	0.69	244	0.07	0	0	0.0	27	2
73754	POZNIKOFF	SOIL	548171	7037230	6	11.6	4.1	27.1	107	7	4	200	1.66	5.3	0.07	0.3	0.0	54	0.14	14	0.29	176	0.05	0	0	0.0	0	1
73755	POZNIKOFF	SOIL	548221	7037220	7	12.8	13.1	56.4	46	10	7	372	2.63	4.8	0.08	0.2	0.0	42	0.21	17	0.45	472	0.03	0	0	0.0	17	4
73756	POZNIKOFF	SOIL	548271	7037220	7	13.8	9.7	54.4	221	15	8	275	2.72	6.9	0.05	0.2	0.0	55	0.23	26	0.58	175	0.06	0	0	0.0	16	3
73757	POZNIKOFF	SOIL	548321	7037195	2	13.3	10.4	56.6	149	14	8	568	2.81	9.9	0.23	0.3	0.0	66	0.17	20	0.51	307	0.05	0	0	0.0	39	2
73840	MC CORD	SOIL	547271	7036560	6	22.0	6.3	57.5	106	12	5	346	0.96	4.7	0.64	0.3	0.0	18	4.85	4	0.19	446	0.02	5	0	0.0	87	3
73841	MC CORD	SOIL	547281	7036500	9	23.4	24.2	75.2	299	14	7	525	1.60	7.7	0.48	0.3	0.0	28	2.36	15	0.32	746	0.01	0	0	0.0	77	3
73842	MC CORD	SOIL	547296	7036440	10	15.2	18.6	55.6	90	12	7	291	2.10	14.9	0.15	0.2	0.0	47	0.31	20	0.44	238	0.02	0	0	0.0	15	2
73843	MC CORD	SOIL	547351	7036420	13	29.1	19.2	60.9	315	19	11	544	2.30	27.9	0.33	0.4	0.0	47	1.49	23	0.42	344	0.03	0	0	0.0	81	8
73844	MC CORD	SOIL	547411	7036440	2	15.3	7.0	49.2	150	16	13	734	2.30	6.6	0.13	0.3	0.0	51	0.27	28	0.42	191	0.04	0	0	0.0	62	2
73845	MC CORD	SOIL	547461	7036450	4	19.5	10.5	77.1	344	19	13	774	3.23	9.5	0.17	0.4	0.2	61	0.49	28	0.59	301	0.04	0	0	0.0	80	5
73846	MC CORD	SOIL	547511	7036450	5	22.3	22.4	86.5	313	17	14	701	4.03	8.1	0.09	0.4	0.3	63	0.91	25	0.73	348	0.06	0	0	0.0	58	5
73847	MC CORD	SOIL	547561	7036440	13	17.7	13.5	67.2	85	16	11	587	2.86	4.6	0.18	0.4	0.2	55	0.29	18	0.62	137	0.06	0	0	0.2	20	2
73870	MC CORD	SOIL	547611	7036420	4	15.0	18.4	71.4	66	17	11	626	3.32	6.5	0.15	0.4	0.2	77	0.26	26	0.74	105	0.10	0	0	0.2	0	3
73871	MC CORD	SOIL	547671	7036390	7	12.8	14.7	39.5	108	11	5	245	2.10	6.7	0.18	0.3	0.2	63	0.11	19	0.36	96	0.07	0	0	0.0	21	1
73872	MC CORD	SOIL	547696	7036360	12	11.7	11.0	51.2	68	16	6	206	2.53	7.8	0.15	0.3	0.2	60	0.17	23	0.49	118	0.07	0	0	0.0	14	0
73873	MC CORD	SOIL	547711	7036320	12	15.7	9.9	52.2	65	17	8	276	2.55	7.7	0.11	0.4	0.0	60	0.18	27	0.56	166	0.07	0	0	0.0	14	2
73874	MC CORD	SOIL	547731	7036270	12	20.2	11.1	60.0	66	20	10	382	2.89	8.8	0.12	0.3	0.2	65	0.26	30	0.66	200	0.07	0	0	0.0	0	1
73875	MC CORD	SOIL	547746	7036220	13	20.5	10.5	58.9	161	19	8	320	2.59	7.7	0.20	0.4	0.0	62	0.32	33	0.57	201	0.06	0	0	0.0	35	5
73876	MC CORD	SOIL	547761	7036170	14	16.3	8.3	50.3	42	17	8	355	2.56	8.4	0.14	0.4	0.0	61	0.20	27	0.52	178	0.06	0	0	0.0	0	0
73877	MC CORD	SOIL	547761	7036120	15	13.1	8.6	42.6	145	14	5	219	1.95	8.0	0.15	0.3	0.0	54	0.18	23	0.39	143	0.05	0	0	0.2	14	2
73878	MC CORD	SOIL	547791	7036080	18	12.6	8.7	43.6	93	15	7	435	2.28	8.4	0.12	0.3	0.0	59	0.14	25	0.41	85	0.06	0	0	0.0	0	7
73879	MC CORD	SOIL	547831	7036060	26	21.5	11.5	62.8	179	20	11	599	3.01	11.1	0.14	0.3	0.0	81	0.25	32	0.54	218	0.05	0	0	0.0	36	2
73880	MC CORD	SOIL	547881	7036020	4	14.4	14.2	60.2	105	18	10	584	2.84	8.4	0.25	0.3	0.2	67	0.15	27	0.44	111	0.04	0	0	0.2	40	2
73881	MC CORD	SOIL	547931	7035985	14	12.6	8.5	23.6	112	7	3	166	1.23	3.2	0.10	0.2	0.0	29	0.10	14	0.18	100	0.02	0	0	0.0	0	0
73882	MC CORD	SOIL	547971	7035960	20	12.5	10.0	48.2	96	12	6	364	2.01	6.4	0.12	0.2	0.0	53	0.10	21	0.36	86	0.03	0	0	0.0	29	0
73883	MC CORD	SOIL	547991	7035920	32	15.2	14.8	73.3	56	20	9	495	2.93	9.5	0.19	0.3	0.2	72	0.15	32	0.50	115	0.04	0	0	0.2	27	2
73884	MC CORD	SOIL	548041	7035910	15	15.2	8.3	46.7	257	13	5	209	1.86	4.1	0.18	0.3	0.2	44	0.32	24	0.38	181	0.03	0	0	0.0	0	4
73885	MC CORD	SOIL	548091	7035930	15	15.5	9.2	62.9	101	16	9	500	2.49	7.9	0.18	0.3	0.0	64	0.35	26	0.54	196	0.05	0	0	0.0	16	0
73886	MC CORD	SOIL	548131	7035970	15	25.3	6.8	64.7	276	17	8	508	2.46	5.9	0.25	0.4	0.0	46	0.70	25	0.53	240	0.04	0	0	0.0	53	1
73887	MC CORD	SOIL	548161	7036020	16	17.9	8.7	68.7	261	18	9	625	2.57	7.0	0.20	0.4	0.0	58	0.51	27	0.53	290	0.03	0	0	0.0	57	0
73888	MC CORD	SOIL	548181	7036070	22	20.2	10.0	69.0	213	21	11	765	2.71	6.8	0.16	0.4	0.0	59	0.54	30	0.56	262	0.04	0	0	0.2	24	1
73889	MC CORD	SOIL	548191	7036120	19	20.9	9.9	65.1	206	18	8	376	2.26	9.1	0.20	0.5	0.0	45	0.95	25	0.49	309	0.03	0	0	0.0	61	1

results in ppm unless otherwise noted

APPENDIX II
Geochemical Analysis Certificates



GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 228 File # 9803633 Page 1
 1409 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Greg Kulla

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
507451	1.3	27.5	41.6	108.4	42	25	11 528	3.57	33.5	<5	9	15	.23	1.0	<.2	51	.19	.064	20	29	.68	137	.07	<3	1.71	.01	.24	<2	.4	<10	.4	<.2	4.9	1	
507452	1.6	14.1	24.0	60.7	78	17	7 268	3.28	40.2	<5	5	10	.31	.8	<.2	77	.10	.022	11	28	.38	148	.05	<3	1.68	.01	.05	<2	<.2	20	<.3	<.2	7.1	1	
507453	1.3	18.4	14.5	53.1	73	24	9 234	2.84	22.0	<5	3	13	.14	.7	<.2	57	.17	.034	10	31	.51	130	.05	<3	1.74	.01	.05	<2	.2	45	.4	<.2	5.5	6	
507454	1.4	23.7	33.9	76.1	227	33	10 337	3.61	101.4	<5	5	13	.21	1.1	<.2	69	.14	.035	14	51	.67	184	.05	<3	2.09	.01	.11	<2	.2	36	<.3	<.2	6.6	3	
507455	1.7	17.9	30.8	60.8	53	25	9 295	3.48	52.8	<5	3	14	.21	1.0	<.2	69	.15	.029	11	36	.53	112	.05	<3	1.80	.01	.06	<2	<.2	27	.3	<.2	6.6	3	
507456	1.4	23.1	23.3	65.8	143	30	13 405	3.24	40.6	<5	7	17	.22	.8	<.2	65	.18	.033	15	43	.61	203	.06	<3	2.27	.02	.07	<2	.2	47	.3	<.2	5.8	3	
507457	1.6	16.4	11.7	54.0	41	37	13 299	3.55	14.1	6	5	13	.13	.7	<.2	73	.14	.033	10	77	.68	263	.07	<3	2.22	.02	.07	<2	.3	28	.4	<.2	7.4	1	
507458	1.9	21.6	20.3	60.7	74	22	9 307	3.21	40.9	<5	4	16	.17	.7	<.2	60	.14	.038	12	34	.48	143	.05	<3	1.70	.01	.06	<2	.2	23	.6	<.2	5.8	7	
507459	1.6	13.4	13.6	52.4	62	21	8 211	3.63	22.1	<5	5	14	.17	.6	<.2	80	.16	.034	13	42	.53	473	.07	<3	1.88	.02	.05	<2	<.2	27	.3	<.2	7.5	6	
507460	1.6	19.7	19.9	49.9	274	23	9 225	2.99	17.2	<5	5	14	.19	.6	<.2	68	.15	.024	12	40	.41	280	.06	<3	2.24	.02	.05	<2	.2	21	.4	<.2	6.8	8	
507461	1.8	23.3	14.8	56.2	102	24	11 301	3.24	36.3	<5	6	16	.18	.8	<.2	63	.17	.047	17	37	.53	168	.05	<3	2.19	.02	.06	<2	.2	36	.5	<.2	5.8	10	
507462	1.6	20.2	23.2	59.9	97	45	13 320	3.38	55.4	<5	8	13	.17	.7	<.2	68	.12	.026	13	129	.67	169	.06	<3	2.38	.01	.07	<2	<.2	29	.3	<.2	6.7	9	
507463	1.1	14.5	12.4	44.2	90	19	9 384	2.39	8.2	<5	2	24	.16	.4	<.2	62	.54	.027	10	29	.38	156	.04	<3	1.78	.02	.03	<2	<.2	<10	.3	<.2	6.0	2	
507464	.6	16.4	10.0	36.9	51	25	9 187	2.28	5.5	<5	5	17	.05	.3	<.2	55	.23	.023	17	35	.57	476	.03	<3	1.81	.02	.05	<2	<.2	24	<.3	<.2	4.8	1	
507465	1.2	15.4	12.0	55.0	<30	23	10 275	3.01	8.4	<5	7	16	.07	.4	<.2	62	.19	.027	14	31	.50	295	.04	<3	2.56	.02	.09	<2	<.2	17	.3	<.2	6.5	2	
507466	1.3	14.4	11.3	55.2	86	20	11 467	2.91	8.0	<5	4	14	.10	.6	<.2	68	.14	.015	11	28	.44	196	.06	<3	2.07	.02	.06	<2	<.2	26	<.3	<.2	6.7	1	
507467	1.8	14.3	13.4	70.7	<30	9	8 366	4.00	6.2	<5	11	11	.09	.5	<.2	57	.08	.031	34	21	.35	121	.01	3	2.00	.01	.12	<2	.2	19	<.3	<.2	7.4	1	
507468	1.2	16.1	10.3	61.3	30	28	14 306	3.61	6.6	<5	5	16	.11	.5	<.2	77	.15	.021	12	33	.63	348	.06	<3	2.76	.02	.09	<2	<.2	12	<.3	<.2	5.8	5	
507469	1.5	20.0	12.0	43.6	64	22	10 269	3.09	7.7	<5	5	14	.14	.4	<.2	70	.14	.020	12	38	.46	255	.07	<3	2.25	.02	.06	<2	.2	16	.3	<.2	5.4	2	
507470	1.8	34.6	14.8	108.0	49	48	22 724	5.61	15.4	<5	7	13	.13	.5	<.2	124	.23	.109	13	182	2.09	155	.08	<3	3.16	.01	.19	<2	.2	22	.3	<.2	12.3	1	
507471	1.5	34.0	12.6	75.5	46	45	18 601	3.85	30.0	<5	9	12	.15	.5	<.2	51	.13	.036	24	41	.90	144	.05	<3	2.27	.01	.15	<2	.2	<10	<.3	<.2	6.7	65	
507472	1.0	27.6	11.5	40.2	196	22	9 224	2.36	21.2	5	3	23	.08	.4	<.2	54	.31	.034	17	29	.47	271	.04	<3	1.87	.02	.05	<2	<.2	32	.4	<.2	6.3	17	
RE 507472	.9	26.6	10.5	40.0	180	23	9 229	2.37	20.2	5	3	24	.07	.3	<.2	55	.31	.034	17	28	.48	275	.04	<3	1.91	.02	.05	<2	<.2	37	<.3	<.2	5.2	18	
507473	1.3	75.9	10.5	52.6	168	24	13 314	3.37	144.0	<5	3	26	.17	.5	<.2	81	.45	.018	9	32	.59	118	.03	<3	2.34	.02	.05	<2	.2	15	<.3	<.2	6.9	51	
507474	.7	14.9	13.6	56.5	106	24	9 393	2.69	6.2	<5	3	29	.34	.5	<.2	64	.61	.018	11	35	.43	200	.05	<3	2.08	.03	.03	<2	<.2	12	<.3	<.2	6.5	5	
507475	1.3	14.0	13.4	42.2	42	26	10 231	2.83	7.7	<5	4	20	.12	.5	.2	68	.36	.016	10	30	.41	124	.02	<3	2.35	.02	.03	<2	.2	21	<.3	<.2	6.1	3	
507476	1.0	14.2	10.8	40.3	<30	19	9 244	3.25	8.0	<5	3	13	.09	.5	<.2	62	.16	.023	10	30	.43	164	.03	<3	2.39	.01	.06	<2	<.2	29	.4	<.2	6.6	5	
507477	1.1	14.4	13.7	63.2	<30	19	10 376	3.06	7.5	<5	9	16	.11	.4	<.2	54	.17	.026	28	24	.53	158	.04	<3	2.20	.01	.09	<2	<.2	<10	<.3	<.2	5.7	3	
507478	1.5	12.5	10.6	31.0	35	6	4 159	1.86	3.4	<5	2	11	.07	.3	<.2	60	.09	.029	18	16	.23	89	.05	<3	1.22	.01	.07	<2	<.2	15	<.3	<.2	7.3	4	
507479	1.2	13.9	11.0	44.2	<30	16	8 255	2.58	6.0	<5	5	12	.09	.3	<.2	57	.13	.027	11	26	.38	121	.04	<3	1.88	.01	.05	<2	<.2	<10	.3	<.2	6.5	3	
507480	1.0	14.4	12.7	51.7	<30	19	10 340	2.79	7.0	<5	4	13	.11	.5	<.2	57	.15	.035	13	27	.45	302	.04	<3	2.07	.01	.06	<2	<.2	21	.3	<.2	6.2	2	
507481	1.2	22.8	11.3	55.1	48	11	9 309	3.61	5.2	<5	9	9	.11	.5	.2	57	.08	.030	26	19	.59	174	.01	<3	2.45	.01	.13	<2	.2	23	.3	<.2	8.5	1	
507601	1.0	17.2	57.2	77.7	33	18	10 394	2.77	12.1	<5	14	18	.18	.6	<.2	43	.23	.057	45	25	.56	99	.05	<3	1.56	.01	.11	<2	<.2	25	.4	<.2	5.0	3	
507602	2.9	34.2	48.3	112.0	195	41	12 483	3.41	81.0	<5	6	22	.40	1.0	<.2	64	.23	.066	21	43	.69	143	.04	<3	1.93	.01	.12	<2	<.2	30	.7	<.2	6.9	28	
STANDARD	24.6	120.6	101.8	261.9	1881	30	17 989	4.40	72.6	16	22	56	1.92	9.5	17.6	68	.68	.105	16	52	1.08	256	.10	28	2.22	.04	.67	14	2.4	923	.4	2.5	6.8	54	

Standard is STANDARD D2/C3/AU-S.

ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 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 GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
 - SAMPLE TYPE: SOIL AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 1998 DATE REPORT MAILED: Aug 28/98 SIGNED BY: *C. King* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data FA



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
507603	2.0	28.1	72.5	78.8	211	29	12	477	3.15	54.7	<5	4	16	.27	1.0	<.2	59	.19	.040	15	33	.62	152	.05	<3	1.78	.01	.08	<2	.2	37	.4	<.2	5.1	7
507604	1.9	23.4	93.1	76.2	225	26	10	460	2.90	133.7	<5	2	18	.32	1.3	<.2	59	.22	.047	13	31	.60	144	.05	<3	1.61	.01	.07	<2	<.2	38	<.3	<.2	5.1	6
507605	1.6	23.1	62.4	68.3	109	24	10	458	2.91	51.2	<5	4	21	.16	.9	<.2	56	.26	.047	20	35	.64	289	.05	<3	1.75	.01	.08	<2	<.2	27	<.3	<.2	4.7	4
507606	1.8	31.4	34.6	62.9	239	22	9	398	2.53	73.9	<5	<2	20	.25	.9	<.2	49	.22	.056	21	32	.50	335	.03	<3	1.62	.01	.07	<2	<.2	36	.3	<.2	5.1	2
507607	1.1	25.9	14.7	61.2	100	38	14	494	2.96	34.2	<5	3	22	.18	.7	<.2	61	.32	.063	17	69	.78	394	.05	<3	2.05	.01	.05	<2	<.2	20	<.3	<.2	5.5	6
507608	3.5	15.7	18.7	77.2	228	116	27	438	4.22	12.5	<5	<2	31	.34	1.4	1.7	85	.75	.229	17	454	2.45	610	.13	<3	3.13	.01	.65	<2	.7	14	<.3	.3	9.6	<1
507609	1.8	17.5	11.3	59.6	101	25	11	322	3.15	26.2	<5	2	19	.16	.5	<.2	64	.27	.056	13	38	.63	579	.06	<3	2.07	.01	.04	<2	<.2	49	.3	<.2	6.1	1
507610	1.7	33.2	23.6	70.3	112	33	12	529	3.18	221.2	<5	5	17	.21	1.1	<.2	51	.20	.038	23	32	.53	393	.04	<3	1.82	.01	.05	<2	<.2	29	.4	<.2	5.2	12
507611	2.3	31.8	36.0	95.9	229	34	16	859	3.77	234.5	<5	5	18	.46	1.1	<.2	55	.20	.044	23	40	.59	295	.04	<3	1.98	.01	.09	<2	<.2	22	.3	<.2	5.6	7
507612	2.9	46.6	63.0	207.5	246	38	16	860	3.97	263.5	<5	7	28	1.09	1.0	<.2	47	.35	.054	29	39	.67	293	.03	<3	1.76	.01	.10	<2	<.2	25	.3	<.2	4.9	7
507613	2.1	47.0	90.3	342.5	872	49	18	369	3.56	163.7	<5	6	42	2.01	1.3	<.2	51	.93	.070	29	75	.89	348	.03	<3	1.96	.02	.08	<2	<.2	65	.7	<.2	5.6	21
507614	1.8	39.1	20.7	77.8	278	33	13	212	2.93	75.1	<5	6	31	.52	1.1	<.2	55	.74	.049	20	37	.65	388	.04	3	1.67	.02	.07	<2	<.2	32	.5	<.2	4.9	<1
RE 507614	2.0	41.3	20.1	80.9	247	35	13	223	3.04	77.5	<5	6	32	.43	1.3	<.2	57	.77	.051	21	39	.68	404	.04	3	1.72	.02	.07	<2	<.2	47	.6	<.2	5.7	3
507615	1.1	16.6	22.7	78.2	147	15	14	2144	2.94	11.6	6	8	33	.28	.6	<.2	45	.53	.059	26	24	.71	394	.04	<3	1.71	.01	.11	<2	.2	27	.3	<.2	6.7	3
507616	.8	11.1	13.2	57.2	41	11	8	397	2.19	3.8	<5	5	30	.10	.4	<.2	35	.48	.055	20	17	.54	187	.03	<3	1.24	.01	.05	<2	<.2	20	<.3	<.2	5.3	2
507617	2.4	26.5	13.2	65.1	291	25	13	286	3.31	41.6	<5	3	27	.16	1.0	<.2	68	.47	.102	25	50	.78	376	.04	<3	1.95	.01	.06	<2	<.2	40	<.3	<.2	5.8	38
507618	1.4	20.4	31.3	66.5	97	22	12	441	2.78	37.1	<5	6	18	.16	.6	<.2	54	.24	.049	20	37	.55	180	.05	<3	1.84	.01	.05	<2	<.2	22	<.3	<.2	5.1	7
507619	2.6	27.5	17.3	72.5	217	34	13	442	3.49	64.7	<5	3	17	.23	.8	.2	68	.20	.055	19	57	.68	166	.04	<3	2.25	.01	.07	<2	<.2	44	.3	<.2	7.6	18
507620	2.9	39.5	19.2	53.1	257	27	11	481	3.40	316.7	<5	5	17	.18	.9	<.2	62	.20	.030	18	37	.49	193	.03	<3	2.42	.01	.06	<2	.2	43	.4	<.2	7.7	26
507621	1.6	34.0	18.1	67.9	206	32	16	523	3.15	195.5	<5	4	18	.16	.8	.2	53	.31	.042	17	36	.69	152	.05	<3	1.74	.01	.09	<2	.3	22	<.3	<.2	5.3	11
507622	1.0	21.6	18.0	60.9	171	25	10	442	2.28	22.5	<5	2	50	.44	.7	<.2	46	1.84	.073	13	24	.57	111	.04	3	1.09	.02	.04	<2	<.2	31	.4	<.2	3.5	57
507623	1.0	22.0	14.5	52.6	162	21	8	199	2.05	8.5	<5	<2	53	.55	.8	<.2	42	2.45	.071	12	27	.47	152	.03	<3	1.30	.02	.04	<2	<.2	68	.6	<.2	4.5	<1
507624	.8	12.7	11.9	71.3	71	15	14	356	3.49	4.5	<5	4	58	.17	.4	<.2	74	.83	.066	17	25	.95	364	.01	7	2.02	.01	.10	<2	<.2	31	<.3	<.2	7.2	3
507625	1.8	21.4	16.0	77.4	182	11	8	425	2.55	2.3	<5	8	28	.12	.4	<.2	41	.46	.059	27	17	.65	368	.03	3	1.81	.01	.18	<2	.2	41	<.3	<.2	6.3	<1
STANDARD	23.7	116.0	92.0	253.2	1886	30	17	1023	4.44	70.6	21	20	55	1.92	10.1	17.6	68	.70	.108	15	51	1.12	250	.10	26	2.20	.04	.67	13	1.9	943	.4	1.7	7.3	44

Standard is STANDARD D2/C3/AU-S. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE
Phelps Dodge Corp. PROJECT 228 File # 9803634
 1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Greg Kulka

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Se	Te	Ga	Au+
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb
73077	1.3	17.7	10.4	81.9	146	12	10	713	2.66	4.7	<5	3	28	.21	.3	.2	48	.54	.083	17	18	.57	240	.03	<3	1.40	.01	.07	<2	.3	39	<.3	<.2	6.0	2
73078	.7	13.2	7.2	57.5	176	11	7	409	1.94	3.1	<5	3	29	.17	.4	.2	38	.51	.060	14	18	.46	185	.03	<3	1.21	.01	.05	<2	<.2	26	<.3	.2	4.9	1
73079	.8	25.4	8.2	90.5	121	13	18	1014	4.39	5.4	<5	3	47	.17	.3	.2	94	.88	.106	15	20	1.23	349	.06	6	1.96	.02	.17	<2	.2	31	<.3	<.2	7.8	1
73080	.6	10.0	6.7	62.2	96	10	7	303	1.86	3.3	6	4	28	.13	.4	<.2	38	.54	.069	14	18	.50	152	.05	<3	1.13	.02	.06	<2	.3	19	<.3	<.2	5.2	2
73081	.7	15.0	8.7	109.0	<30	9	8	438	2.56	3.7	<5	3	27	.13	.2	<.2	45	.58	.098	15	15	.63	164	.04	<3	1.32	.01	.09	<2	.2	19	<.3	<.2	6.2	7
73082	.5	10.5	7.3	76.5	70	10	8	461	2.15	3.3	<5	3	30	.13	.2	<.2	41	.59	.087	14	16	.53	166	.04	<3	1.19	.02	.07	<2	.2	10	<.3	<.2	5.0	2
73083	.6	12.9	8.0	70.6	<30	13	8	366	2.11	6.1	<5	3	31	.17	.3	<.2	43	.60	.076	13	20	.54	219	.05	<3	1.21	.02	.07	<2	<.2	25	<.3	<.2	4.3	1
RE 73083	.7	12.4	7.5	69.1	<30	12	8	365	2.09	5.3	8	4	31	.14	.3	<.2	42	.58	.074	12	18	.53	216	.04	<3	1.18	.02	.07	<2	<.2	26	<.3	<.2	4.5	4
73084	2.0	43.9	22.8	98.5	95	27	12	820	2.68	146.0	7	8	38	.34	.6	.2	42	.62	.088	21	31	.74	274	.04	<3	1.20	.01	.12	<2	.2	17	.4	<.2	3.8	5
73085	3.1	49.5	67.7	118.1	152	32	12	1544	3.80	217.4	<5	13	89	.83	1.0	<.2	48	.54	.090	27	26	.72	279	.04	4	1.20	.02	.13	<2	.3	19	.9	<.2	4.0	15
STANDARD	23.1	118.6	98.7	260.1	1830	30	17	1026	4.40	73.5	20	20	54	1.92	10.2	17.0	70	.70	.104	16	51	1.07	242	.10	31	2.19	.04	.67	14	2.0	998	.4	2.0	6.8	54

Standard is STANDARD D2/C3/AU-S.
 ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 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 GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
 - SAMPLE TYPE: -150 SILT AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 1998 DATE REPORT MAILED: *Sept 1/98* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE



Phelps Dodge Corp. PROJECT 229 File # 9803638
 1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Greg Kulta

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Se	Te	Ga	Au+	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb
507626	1.2	67.6	12.4	93.7	71	11	14	1054	3.85	5.4	<5	5	31	.22	.3	<.2	60	.59	.103	18	16	.81	312	.02	8	1.78	.01	.08	<2	.2	14	<.3	<.2	7.4	1	
507627	1.5	41.9	13.6	114.7	47	18	13	673	3.24	74.2	<5	4	29	.24	.4	<.2	48	.70	.086	18	19	.63	263	.02	<3	1.46	.01	.07	<2	<.2	30	<.3	<.2	4.1	54	
507628	2.3	47.9	28.1	173.0	151	22	16	940	3.89	268.8	<5	4	38	.70	.7	.2	54	.75	.087	19	25	.75	286	.02	3	1.71	.01	.08	<2	<.2	27	<.3	<.2	5.9	7	
507629	1.6	57.7	45.2	103.0	168	22	12	636	2.56	74.0	<5	6	32	.45	.6	<.2	42	.65	.074	25	32	.55	324	.03	<3	1.29	.01	.06	<2	<.2	10	.4	<.2	4.6	8	
507630	1.3	39.4	39.6	115.3	154	20	12	699	2.96	206.5	6	5	34	.48	.7	.2	47	.70	.088	21	27	.62	293	.03	<3	1.43	.01	.08	<2	<.2	18	.4	<.2	4.8	7	
507631	2.0	74.7	52.6	95.8	220	49	22	1496	3.19	80.0	<5	2	40	.59	.9	<.2	67	.64	.074	14	80	.99	334	.06	<3	1.55	.01	.21	<2	<.2	18	.4	<.2	4.5	4	
507632	1.1	65.8	36.0	102.8	155	26	13	685	3.08	255.6	<5	4	36	.38	.8	.2	50	.71	.111	18	37	.74	308	.03	<3	1.37	.01	.10	<2	<.2	10	.3	<.2	4.9	24	
RE 507632	1.4	63.3	35.4	98.9	177	25	13	663	2.98	246.1	<5	5	35	.38	.8	<.2	48	.68	.106	18	39	.71	299	.03	<3	1.33	.01	.09	<2	<.2	<10	.3	<.2	5.1	13	
507633	1.2	53.6	37.0	72.5	54	33	15	707	2.84	54.1	<5	5	29	.21	.6	<.2	57	.41	.075	16	52	.75	262	.04	<3	1.27	.01	.12	<2	<.2	<10	<.3	<.2	4.6	11	
507634	1.2	50.8	29.1	91.8	70	25	13	642	2.84	137.7	<5	4	35	.34	.6	<.2	49	.65	.090	16	35	.68	303	.03	<3	1.29	.01	.09	<2	<.2	23	<.3	<.2	4.6	5	
STANDARD	23.1	118.6	98.7	260.1	1830	30	17	1026	4.40	73.5	20	20	54	1.92	10.2	17.0	70	.70	.104	16	51	1.07	242	.10	31	2.19	.04	.67	14	2.0	998	.4	2.0	6.8	54	

Standard is STANDARD D2/C3/AU-S.

ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 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 GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
 - SAMPLE TYPE: -150 SILT AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'R' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 1998 DATE REPORT MAILED: *Sept 1/98* SIGNED BY: *Choy* D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE



Phelps Dodge Corp. PROJECT 140 File # 9804218 Page 1
 1409 - 409 Granville St., Vancouver BC V6T 1R2 Submitted by: G. Kulla

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Se	Te	Ga	Au+
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppb	ppm	ppm	ppm	ppb
73732	1.1	25.7	11.1	54.6	187	16	9	574	2.58	7.6	<5	4	35	.11	.3	.3	45	.65	.049	19	27	.44	709	.02	<3	2.02	.02	.10	<2	.2	60	.3	<.2	6.0	5
73733	.7	18.2	31.6	57.3	214	16	8	673	2.23	5.7	5	4	38	.28	.3	.3	41	1.07	.045	19	19	.40	435	.03	<3	1.75	.02	.07	<2	<.2	71	<.3	<.2	5.1	<1
73734	.8	25.8	23.7	58.0	347	28	9	596	2.36	14.2	<5	3	35	.40	.5	.2	43	.98	.045	21	26	.52	353	.03	<3	1.72	.02	.07	<2	<.2	67	.3	<.2	5.5	6
73735	.7	26.4	40.8	52.9	324	22	8	679	2.14	8.3	<5	<2	61	.51	.4	<.2	38	2.21	.077	17	21	.45	399	.02	<3	1.61	.02	.05	<2	<.2	86	.5	<.2	4.4	11
73736	.6	21.8	69.8	107.9	281	21	8	384	2.19	16.7	5	<2	50	.61	.4	.2	41	1.48	.055	15	23	.55	342	.03	<3	1.58	.02	.05	<2	<.2	53	.4	<.2	4.2	5
73737	.9	14.3	12.7	59.7	92	18	11	415	2.78	14.9	8	2	25	.21	.3	.2	69	.49	.017	10	27	.53	221	.05	<3	1.99	.02	.05	<2	<.2	18	<.3	<.2	6.7	2
73738	.8	29.8	10.2	50.8	191	22	11	285	2.94	19.3	<5	2	18	.12	.3	<.2	70	.28	.029	11	33	.67	246	.06	<3	2.23	.02	.05	<2	<.2	18	<.3	<.2	6.5	4
73739	.6	30.4	8.2	59.5	149	27	11	408	2.84	20.9	8	2	39	.24	.6	<.2	60	.89	.077	16	34	.58	284	.08	<3	1.64	.04	.07	<2	<.2	53	<.3	<.2	5.8	4
73740	.5	28.8	7.5	45.6	149	26	11	414	2.62	16.4	<5	<2	44	.19	.5	.2	57	1.25	.056	14	32	.53	293	.07	<3	1.70	.03	.06	<2	<.2	42	.3	<.2	5.9	6
73741	.6	44.8	17.2	68.0	306	26	13	304	2.87	64.0	<5	<2	27	.42	.5	.4	60	.88	.046	24	35	.84	205	.06	<3	2.00	.02	.09	<2	<.2	50	.4	<.2	6.2	5
73742	.5	42.4	19.1	58.7	162	26	12	547	2.85	26.3	<5	<2	31	.11	.4	.2	66	.59	.039	15	36	.76	292	.07	<3	2.25	.03	.06	<2	<.2	36	<.3	<.2	6.5	20
73743	2.0	31.7	10.7	43.7	501	19	20	1872	2.88	27.1	<5	<2	27	.16	.3	.2	67	.42	.046	22	28	.44	305	.05	<3	2.37	.02	.05	<2	<.2	76	<.3	<.2	7.9	2
73744	1.8	29.6	17.5	69.6	206	22	10	375	3.64	63.6	<5	4	18	.18	.5	.2	76	.20	.025	18	36	.57	158	.07	<3	2.35	.02	.07	<2	<.2	12	<.3	<.2	8.6	17
73745	1.7	23.3	70.5	123.5	342	24	20	895	3.62	118.7	6	<2	15	.52	.5	.2	82	.14	.033	13	39	.59	212	.07	<3	2.68	.02	.06	<2	<.2	26	<.3	<.2	8.6	55
73746	1.5	18.1	12.4	54.2	265	20	9	348	3.79	47.9	<5	2	13	.17	.4	<.2	82	.12	.042	16	32	.49	128	.09	<3	2.02	.02	.09	<2	<.2	32	<.3	<.2	8.8	3
73747	1.7	34.9	16.0	75.3	66	34	13	548	3.65	165.7	<5	3	14	.21	.6	<.2	71	.13	.032	17	53	.71	176	.06	<3	2.49	.02	.07	<2	<.2	15	<.3	<.2	7.7	19
RE 73747	1.6	35.0	18.2	74.6	72	33	13	541	3.61	161.4	<5	3	14	.20	.6	<.2	71	.14	.031	17	52	.71	178	.06	<3	2.52	.02	.07	<2	<.2	<10	<.3	<.2	7.6	25
73748	1.5	21.5	12.5	62.0	380	23	12	387	3.45	57.1	<5	2	15	.15	.3	<.2	79	.13	.028	13	40	.58	171	.08	<3	2.46	.01	.06	<2	<.2	24	<.3	<.2	7.8	19
73749	1.2	21.6	13.4	54.8	479	23	13	673	2.96	20.3	<5	2	19	.27	.6	.2	70	.18	.026	19	45	.59	289	.05	<3	2.19	.02	.09	<2	<.2	26	<.3	<.2	9.3	5
73750	1.5	13.5	10.1	51.2	324	14	10	415	2.62	22.1	<5	2	15	.26	.6	.2	67	.17	.032	13	36	.54	198	.04	<3	2.10	.02	.05	<2	<.2	36	<.3	<.2	9.5	4
73751	.9	10.1	6.9	54.7	55	17	10	294	3.39	12.0	<5	2	13	.12	.3	<.2	75	.12	.026	12	31	.58	192	.06	<3	2.41	.01	.06	<2	<.2	18	<.3	<.2	9.0	7
73752	.7	14.5	7.6	55.8	69	17	9	527	3.11	6.7	<5	4	21	.06	.2	<.2	70	.25	.017	23	33	.64	468	.05	4	2.40	.02	.09	<2	<.2	26	<.3	<.2	8.4	2
73753	.8	10.4	7.1	54.8	121	16	9	352	3.57	9.1	<5	2	12	.09	.3	<.2	78	.11	.025	16	30	.69	244	.07	<3	2.29	.01	.11	<2	<.2	27	<.3	<.2	9.9	2
73754	.6	11.6	4.1	27.1	107	7	4	200	1.66	5.3	5	2	13	.07	.3	<.2	54	.14	.011	14	14	.29	176	.05	<3	1.26	.02	.08	<2	<.2	<10	<.3	<.2	6.7	1
73755	.7	12.8	13.1	56.4	46	10	7	372	2.63	4.8	<5	8	21	.08	.2	<.2	42	.21	.030	32	17	.45	472	.03	<3	1.63	.02	.13	<2	<.2	17	<.3	<.2	6.2	4
73756	.7	13.8	9.7	54.4	221	15	8	275	2.72	6.9	<5	4	22	.05	.2	<.2	55	.23	.014	19	26	.58	175	.06	<3	1.98	.02	.07	<2	<.2	16	<.3	<.2	6.3	3
73757	1.2	13.3	10.4	56.6	149	14	8	568	2.81	9.9	<5	2	19	.23	.3	<.2	66	.17	.028	18	20	.51	307	.05	<3	2.08	.02	.10	<2	<.2	39	<.3	<.2	8.6	2
73840	.6	22.0	6.3	57.5	106	12	5	346	.96	4.7	<5	<2	117	.64	.3	<.2	18	4.85	.076	5	4	.19	446	.02	5	.78	.02	.03	<2	<.2	87	<.3	<.2	2.5	3
73841	.9	23.4	24.2	75.2	299	14	7	525	1.60	7.7	<5	<2	111	.48	.3	<.2	28	2.36	.074	13	15	.32	746	.01	<3	1.32	.02	.07	<2	<.2	77	<.3	<.2	4.0	3
73842	1.0	15.2	18.6	55.6	90	12	7	291	2.10	14.9	10	2	24	.15	.2	<.2	47	.31	.034	13	20	.44	238	.02	<3	1.57	.01	.08	<2	<.2	15	<.3	<.2	6.0	2
73843	1.3	29.1	19.2	60.9	315	19	11	544	2.30	27.9	5	<2	64	.33	.4	<.2	47	1.49	.069	13	23	.42	344	.03	<3	1.58	.02	.06	<2	<.2	81	<.3	<.2	5.6	8
73844	2.5	15.3	7.0	49.2	150	16	13	734	2.30	6.6	<5	3	21	.13	.3	<.2	51	.27	.067	16	28	.42	191	.04	<3	1.53	.01	.05	<2	<.2	62	<.3	<.2	6.0	2
73845	2.4	19.5	10.5	77.1	344	19	13	774	3.23	9.5	9	3	35	.17	.4	.2	61	.49	.093	19	28	.59	301	.04	<3	2.36	.02	.08	<2	<.2	80	<.3	<.2	8.7	5
73846	1.5	22.3	22.4	86.5	313	17	14	701	4.03	8.1	<5	4	48	.09	.4	.3	63	.91	.092	32	25	.73	348	.06	<3	2.46	.02	.16	<2	<.2	58	<.3	<.2	9.1	5
STANDARD	24.0	121.2	96.0	257.0	1887	30	17	990	4.30	74.2	18	19	56	1.92	8.7	18.2	69	.69	.106	16	51	1.08	249	.12	26	2.27	.04	.68	14	2.3	900	.4	2.5	7.7	43

Standard is STANDARD D2/C3/AU-S.
 ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 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 GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
 - SAMPLE TYPE: SOIL AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 24 1998 DATE REPORT MAILED: *Oct 8/98* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
73847	1.3	17.7	13.5	67.2	85	16	11	587	2.86	4.6	<5	3	27	.18	.4	.2	55	.29	.069	13	18	.62	137	.06	<3	1.81	.02	.11	<2	.2	20	<.3	<.2	6.9	2
73870	1.4	15.0	18.4	71.4	66	17	11	626	3.32	6.5	6	2	34	.15	.4	.2	77	.26	.044	12	26	.74	105	.10	<3	1.96	.02	.09	<2	.2	<10	<.3	<.2	9.6	3
73871	1.7	12.8	14.7	39.5	108	11	5	245	2.10	5.7	<5	<2	16	.18	.3	.2	63	.11	.030	9	19	.36	96	.07	<3	1.54	.01	.05	<2	<.2	21	<.3	<.2	9.2	1
73872	1.2	11.7	11.0	51.2	68	16	6	206	2.53	7.8	<5	2	16	.15	.3	.2	60	.17	.033	9	23	.49	118	.07	<3	1.75	.01	.04	<2	<.2	14	<.3	<.2	7.1	<1
73873	1.2	15.7	9.9	52.2	65	17	8	276	2.55	7.7	<5	2	18	.11	.4	<.2	60	.18	.020	10	27	.56	166	.07	<3	1.88	.01	.04	<2	<.2	11	<.3	<.2	6.5	2
73874	1.2	20.2	11.1	60.0	66	20	10	382	2.89	8.8	<5	4	23	.12	.3	.2	65	.26	.026	14	30	.66	200	.07	<3	2.08	.02	.05	<2	<.2	<10	<.3	<.2	7.0	1
73875	1.3	20.5	10.5	58.9	161	19	8	320	2.59	7.7	<5	3	24	.20	.4	<.2	62	.32	.037	14	33	.57	201	.06	<3	2.06	.02	.06	<2	<.2	35	<.3	<.2	7.4	5
73876	1.4	16.3	8.3	50.3	42	17	8	355	2.56	8.4	<5	5	17	.14	.4	<.2	61	.20	.031	15	27	.52	178	.06	<3	1.78	.01	.05	<2	<.2	<10	<.3	<.2	6.2	<1
73877	1.5	13.1	8.6	42.6	145	14	5	219	1.95	6.0	<5	2	15	.15	.3	<.2	54	.18	.032	13	23	.39	143	.05	<3	1.44	.01	.04	<2	.2	11	<.3	<.2	6.6	2
73878	1.8	12.6	8.7	43.6	93	15	7	435	2.28	8.4	<5	3	12	.12	.3	<.2	59	.14	.042	13	25	.41	85	.06	<3	1.33	.01	.05	<2	<.2	<10	<.3	<.2	6.2	7
73879	2.6	21.5	11.5	62.8	179	20	11	599	3.01	11.1	<5	2	22	.14	.3	<.2	81	.25	.059	20	32	.54	218	.05	<3	2.25	.01	.06	<2	<.2	36	<.3	<.2	8.3	2
73880	4.1	14.4	14.2	60.2	105	18	10	584	2.84	8.4	<5	5	13	.25	.3	.2	67	.15	.060	16	27	.44	111	.04	<3	1.93	.01	.06	<2	.2	40	<.3	<.2	8.9	2
73881	1.4	12.6	8.5	23.6	112	7	3	166	1.23	3.2	<5	<2	12	.10	.2	<.2	29	.10	.031	12	14	.18	100	.02	<3	.99	.02	.03	<2	<.2	<10	<.3	<.2	4.8	<1
73882	2.0	12.5	10.0	48.2	96	12	6	364	2.01	6.4	<5	5	10	.12	.2	<.2	53	.10	.034	13	21	.36	86	.03	<3	1.32	.01	.05	<2	<.2	29	<.3	<.2	6.4	<1
73883	3.2	15.2	14.8	73.3	56	20	9	495	2.93	9.3	<5	3	16	.19	.3	.2	72	.15	.055	15	32	.50	115	.04	<3	1.98	.01	.08	<2	.2	27	<.3	<.2	9.2	2
73884	1.5	15.2	8.3	46.7	257	13	5	209	1.86	4.1	<5	<2	24	.18	.3	.2	44	.32	.064	18	24	.38	181	.03	<3	1.45	.01	.04	<2	<.2	<10	<.3	<.2	6.2	4
73885	1.5	15.5	9.2	62.9	101	16	9	500	2.49	7.0	<5	5	24	.18	.3	<.2	64	.35	.056	16	26	.54	196	.05	<3	1.55	.01	.05	<2	<.2	16	<.3	<.2	6.3	<1
73886	1.7	25.3	6.8	64.7	276	17	8	508	2.46	5.9	<5	3	43	.25	.4	<.2	46	.70	.089	33	25	.53	240	.04	<3	1.69	.01	.06	<2	<.2	51	<.3	<.2	6.3	1
RE 73886	1.6	16.3	9.4	62.8	109	16	9	497	2.45	6.9	<5	4	24	.19	.3	<.2	62	.35	.056	16	25	.53	194	.05	<3	1.52	.01	.05	<2	<.2	18	<.3	<.2	6.9	1
73887	1.6	17.9	8.7	68.7	261	18	9	625	2.57	7.0	<5	4	36	.20	.4	<.2	58	.51	.082	33	27	.53	290	.03	<3	1.97	.01	.06	<2	<.2	57	<.3	<.2	7.2	<1
73888	2.2	20.2	10.0	69.0	213	21	11	765	2.71	6.8	<5	5	35	.16	.4	<.2	59	.54	.073	23	30	.56	262	.04	<3	1.95	.01	.08	<2	.2	24	<.3	<.2	6.6	1
73889	1.9	20.9	9.9	65.1	206	18	8	376	2.26	9.1	<5	4	41	.20	.5	<.2	45	.95	.055	18	25	.49	309	.03	<3	1.52	.02	.07	<2	<.2	61	.3	<.2	5.2	1
STANDARD	23.4	115.7	86.7	251.6	1849	30	16	1006	4.13	70.8	23	19	53	2.20	8.3	17.1	70	.71	.107	15	54	1.12	246	.11	26	2.19	.04	.66	13	2.2	1042	.4	2.0	7.6	47

Standard is STANDARD D2/C3/AU-S. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE



Phelps Dodge Corp. PROJECT 140 File # 9803632 Page 1
 1409 - 409 Granville St., Vancouver BC V6V 1T2 Submitted by: Greg Kulla

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Se	Te	Ga	Au+	
	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb
73200	1.7	16.6	18.5	71.0	42	19	10	437	4.02	12.0	<5	5	14	.15	.6	1.0	83	.14	.039	13	30	.52	110	.05	3	2.36	.01	.07	<2	<2	33	.3	<2	7.9	2	
73201	2.1	18.4	22.7	72.4	81	20	9	382	4.36	13.3	<5	5	14	.16	.6	.9	96	.13	.036	11	32	.56	124	.05	<3	2.53	.01	.08	<2	<2	32	<.3	<.2	9.7	1	
73202	1.0	16.0	17.6	77.6	120	15	11	610	2.92	5.5	<5	7	24	.10	.4	.4	56	.34	.056	29	24	.70	284	.06	<3	1.82	.02	.12	<2	<2	16	<.3	<.2	6.4	2	
73203	1.3	18.3	12.4	82.4	76	13	9	474	2.77	5.1	<5	6	25	.12	.5	.2	51	.46	.042	19	22	.72	277	.08	<3	1.62	.02	.16	<2	.2	18	<.3	<.2	6.0	3	
73204	.9	22.4	11.3	72.5	160	18	9	402	2.80	8.8	<5	6	26	.15	.6	.3	54	.42	.050	22	26	.65	341	.06	<3	1.75	.02	.09	<2	<2	22	<.3	<.2	6.0	1	
73205	.9	20.4	12.4	65.2	112	21	10	325	2.76	7.6	<5	5	25	.13	.5	.3	57	.38	.050	19	28	.60	290	.06	<3	1.92	.02	.06	<2	<2	44	.3	<.2	6.3	2	
73206	1.3	18.5	16.6	63.0	63	24	12	375	3.55	10.4	<5	5	19	.11	.6	.2	74	.24	.028	17	29	.62	498	.05	3	2.56	.02	.10	<2	<2	26	<.3	<.2	6.4	3	
73207	1.1	14.4	12.9	62.3	<30	16	9	401	3.22	8.0	<5	3	16	.11	.3	<.2	68	.21	.039	16	25	.50	193	.03	4	2.16	.01	.10	<2	<2	10	<.3	<.2	7.1	1	
73208	1.1	9.5	9.7	29.6	<30	6	4	167	1.73	3.9	<5	<2	9	.11	.3	.2	55	.08	.020	13	15	.20	87	.06	<3	1.07	.01	.07	<2	<2	16	<.3	<.2	6.2	1	
73209	1.1	10.4	9.5	40.1	86	13	7	275	2.70	6.5	<5	2	14	.07	.5	<.2	70	.16	.021	13	21	.44	154	.07	<3	1.63	.01	.07	<2	.2	21	<.3	<.2	6.6	1	
73210	1.2	8.8	12.2	37.0	72	9	6	328	2.84	8.1	<5	2	12	.11	.5	.2	82	.13	.024	12	18	.37	61	.07	<3	1.40	.01	.09	<2	<2	20	<.3	<.2	7.1	2	
73211	1.1	12.0	11.4	44.3	90	12	7	313	2.73	4.9	<5	2	13	.11	.4	.2	60	.18	.032	16	21	.49	164	.04	<3	1.83	.01	.09	<2	<2	11	<.3	<.2	6.7	<1	
73212	1.1	15.9	11.4	52.2	<30	18	13	605	3.20	7.2	<5	5	15	.08	.5	<.2	64	.20	.030	15	29	.64	277	.05	<3	2.15	.02	.12	<2	<2	<10	<.3	<.2	5.7	<1	
73213	1.1	10.6	10.7	28.8	97	9	5	191	1.64	6.4	<5	<2	14	.09	.3	<.2	44	.14	.023	12	17	.27	121	.05	<3	1.19	.02	.06	<2	<2	28	<.3	<.2	5.3	2	
73214	1.3	13.9	13.1	55.5	<30	14	12	676	3.21	8.5	<5	4	15	.14	.5	.2	55	.23	.050	21	22	.56	131	.03	<3	1.84	.01	.11	<2	<2	15	<.3	<.2	6.4	5	
73215	1.0	13.1	12.5	46.9	62	16	8	263	2.94	6.8	8	3	15	.09	.4	.2	64	.17	.035	17	26	.47	156	.03	<3	1.96	.01	.08	<2	<2	21	<.3	<.2	6.2	1	
RE 73215	.9	13.2	11.5	44.8	68	16	8	249	2.85	7.2	<5	2	15	.09	.4	.2	63	.17	.033	16	25	.45	152	.03	<3	1.92	.01	.08	<2	.2	21	<.3	<.2	5.9	1	
73216	.9	11.3	9.5	43.3	59	14	9	352	2.78	5.6	<5	3	24	.08	.3	<.2	54	.35	.039	19	21	.50	270	.03	<3	1.84	.02	.09	<2	<2	16	<.3	<.2	5.2	1	
73217	1.5	22.2	12.2	51.4	192	18	7	301	2.80	8.0	<5	3	22	.16	.5	.2	64	.24	.044	20	27	.41	181	.04	<3	2.08	.02	.09	<2	.2	44	<.3	<.2	6.5	3	
73218	.8	12.6	9.4	45.3	70	15	8	278	2.44	5.8	<5	2	16	.10	.4	<.2	51	.21	.035	14	24	.45	126	.04	<3	1.63	.01	.06	<2	<2	<10	<.3	<.2	5.2	2	
73219	1.1	14.0	12.7	37.1	62	14	7	231	2.60	7.5	<5	<2	15	.11	.4	<.2	62	.15	.030	15	20	.35	130	.04	<3	1.65	.01	.07	<2	.2	25	<.3	<.2	6.0	1	
73220	1.0	13.6	12.4	43.0	33	13	8	349	3.07	5.6	<5	4	15	.07	.4	.2	51	.18	.027	22	18	.48	104	.02	<3	1.86	.01	.10	<2	<2	24	<.3	<.2	5.9	<1	
73221	1.4	13.1	12.8	52.5	39	14	8	301	3.06	6.1	<5	2	10	.11	.5	<.2	58	.10	.036	15	23	.44	85	.03	<3	1.83	.01	.09	<2	<2	<10	<.3	<.2	6.5	1	
73222	.6	11.6	10.4	44.7	47	11	8	341	2.29	3.4	<5	4	15	.08	.3	<.2	40	.26	.045	21	18	.44	161	.03	<3	1.48	.01	.08	<2	<2	<10	<.3	<.2	4.3	1	
73223	1.0	15.2	10.2	46.8	39	18	8	279	2.76	5.7	5	3	16	.08	.5	<.2	55	.20	.028	19	23	.49	163	.04	<3	1.83	.02	.07	<2	<2	14	<.3	<.2	5.6	<1	
73224	1.1	13.1	8.7	37.3	62	6	6	317	2.07	4.1	<5	<2	17	.12	.3	<.2	49	.24	.034	22	13	.28	271	.02	<3	1.55	.01	.13	<2	.2	26	<.3	<.2	6.8	<1	
73225	1.1	15.9	9.7	37.7	38	7	7	208	2.59	3.2	<5	6	6	.05	.2	<.2	34	.10	.041	20	15	.39	98	.01	<3	1.76	.01	.13	<2	.2	11	<.3	<.2	5.1	<1	
73226	1.0	11.7	10.7	39.2	49	8	6	259	2.71	3.4	5	4	15	.05	.3	.4	52	.17	.013	18	15	.47	321	.04	<3	1.90	.01	.24	<2	.2	19	<.3	<.2	5.6	1	
73227	1.1	10.9	10.7	43.4	<30	14	7	227	2.68	6.4	6	2	13	.09	.4	<.2	68	.15	.019	12	24	.46	108	.06	<3	1.50	.01	.08	<2	<2	<10	<.3	<.2	5.9	<1	
73228	.7	9.9	7.9	37.1	30	7	7	415	2.19	2.6	7	3	13	.05	.2	<.2	28	.21	.038	26	11	.43	135	.01	<3	1.37	.01	.10	<2	<2	11	<.3	<.2	4.2	1	
73229	1.2	16.8	13.4	66.3	<30	24	11	318	3.88	10.5	<5	4	13	.34	.6	<.2	68	.13	.034	11	39	.48	181	.04	<3	2.50	.01	.08	<2	<2	25	.3	<.2	5.1	1	
73230	1.9	19.3	16.2	71.7	37	20	10	307	3.55	9.0	<5	2	12	.37	.5	<.2	63	.12	.034	12	30	.52	138	.03	<3	2.36	.01	.08	<2	<2	11	.3	<.2	6.0	2	
73300	1.0	13.0	10.7	60.9	43	13	11	666	2.87	5.8	<5	2	14	.10	.3	<.2	65	.20	.045	15	24	.53	118	.07	<3	1.58	.01	.10	<2	.2	<10	<.3	<.2	5.5	<1	
73301	1.1	15.5	10.0	82.3	63	13	12	718	3.31	4.1	<5	4	24	.10	.4	<.2	67	.44	.047	16	22	.76	320	.09	<3	1.83	.02	.16	<2	.2	<10	<.3	<.2	6.1	<1	
STANDARD	23.8	117.9	99.9	255.6	1876	30	17	994	4.48	72.3	19	20	56	1.92	9.8	17.8	71	.71	.106	16	54	1.08	269	.10	29	2.24	.04	.67	14	2.4	869	.3	2.1	7.2	51	

Standard is STANDARD D2/C3/AU-S.

ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 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 GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
 - SAMPLE TYPE: SOIL AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 24 1998 DATE REPORT MAILED: Aug 28/98 SIGNED BY: C. L. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data 4 FA



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Al+ ppm
73302	1.4	18.5	10.2	72.9	92	15	11	633	2.98	5.9	<5	2	23	.11	.4	<.2	60	.38	.056	16	24	.63	336	.05	<3	1.89	.01	.09	<2	<.2	50	<.3	<.2	7.0	1
73303	1.9	22.3	10.5	76.2	203	15	9	518	3.01	5.5	<5	4	44	.14	.5	<.2	53	.83	.059	28	24	.66	684	.04	<3	1.98	.02	.14	<2	<.2	55	<.3	<.2	6.9	1
73304	1.6	16.1	12.1	73.6	123	16	8	342	2.90	6.9	<5	5	30	.18	.4	.2	57	.49	.035	15	27	.57	275	.04	<3	1.81	.01	.11	<2	<.2	24	<.3	<.2	7.5	2
73305	.7	13.4	7.4	56.7	35	11	7	360	2.33	5.1	<5	6	23	.10	.4	<.2	42	.40	.049	22	18	.48	259	.05	<3	1.28	.01	.08	<2	<.2	31	.3	<.2	4.8	<1
73306	1.0	17.7	9.8	64.4	120	15	10	477	2.55	7.3	<5	3	36	.13	.4	.3	52	.60	.059	16	22	.56	315	.04	<3	1.67	.01	.06	<2	<.2	53	<.3	<.2	6.5	<1
73307	.8	18.8	7.6	50.8	66	12	10	513	2.57	5.7	<5	4	17	.10	.3	<.2	50	.28	.051	15	20	.48	163	.05	<3	1.41	.01	.07	<2	<.2	26	<.3	<.2	4.9	2
73308	1.2	19.0	9.5	45.0	96	12	7	285	2.58	6.5	6	2	11	.13	.5	.2	55	.09	.038	24	21	.36	267	.04	<3	1.68	.01	.07	<2	<.2	38	<.3	<.2	6.8	<1
73309	1.5	24.1	12.8	65.5	125	19	12	768	3.48	8.8	<5	2	64	.21	.5	<.2	63	1.01	.058	27	29	.53	716	.03	<3	2.62	.02	.10	<2	<.2	45	<.3	<.2	8.3	2
73310	1.1	14.1	10.0	52.4	<30	11	9	447	2.52	4.5	<5	4	19	.08	.3	.2	50	.31	.040	15	18	.46	270	.04	<3	1.63	.01	.10	<2	<.2	23	<.3	<.2	7.0	1
73311	.7	11.9	8.3	54.7	37	12	9	415	2.88	5.1	<5	4	19	.07	.3	<.2	54	.33	.043	17	22	.57	267	.04	<3	1.73	.01	.09	<2	<.2	<10	<.3	<.2	5.7	<1
73312	1.2	14.1	9.5	58.2	56	15	9	369	3.10	6.5	<5	4	26	.09	.5	<.2	63	.41	.034	16	25	.63	337	.05	<3	1.84	.02	.08	<2	<.2	<10	<.3	<.2	7.3	1
73313	.6	12.6	8.3	52.3	38	12	10	466	2.82	4.8	<5	5	17	.10	.5	<.2	51	.31	.056	17	22	.56	182	.06	<3	1.61	.01	.13	<2	<.2	22	<.3	<.2	5.7	<1
73314	1.0	10.7	7.6	40.8	<30	7	7	322	2.52	4.1	<5	4	12	.09	.3	<.2	50	.16	.033	21	14	.39	171	.04	<3	1.56	.01	.12	<2	.2	18	<.3	<.2	7.3	<1
73315	.9	14.6	10.4	62.9	<30	19	10	487	3.36	11.0	<5	4	16	.09	.5	<.2	70	.24	.042	15	30	.55	229	.05	<3	2.19	.01	.06	<2	<.2	25	<.3	<.2	6.1	<1
73316	1.3	11.8	9.9	44.1	50	13	6	218	2.47	10.1	<5	3	26	.07	.5	<.2	62	.36	.022	13	20	.41	161	.03	<3	1.60	.01	.05	<2	<.2	14	<.3	<.2	6.2	2
73317	.6	13.8	8.1	53.2	<30	14	11	561	2.86	5.6	<5	4	22	.09	.4	<.2	60	.35	.053	17	23	.60	229	.04	<3	1.64	.01	.06	<2	<.2	18	<.3	<.2	5.3	<1
73318	1.0	13.1	9.1	51.5	43	14	9	350	2.90	6.5	<5	4	22	.07	.4	<.2	63	.33	.040	18	24	.55	180	.04	<3	1.88	.01	.08	<2	<.2	17	<.3	<.2	6.7	5
73319	.5	16.3	9.0	45.3	46	15	8	293	2.38	5.9	<5	4	24	.06	.3	<.2	46	.37	.043	16	26	.48	270	.04	<3	1.49	.02	.06	<2	<.2	23	<.3	<.2	4.5	1
73320	.8	14.9	9.8	43.3	45	15	8	212	2.35	6.4	<5	3	21	.06	.4	<.2	51	.28	.025	16	23	.44	341	.04	<3	1.63	.01	.04	<2	<.2	22	<.3	<.2	5.3	2
RE 73320	.8	15.8	11.0	43.5	36	15	8	220	2.33	5.8	5	4	21	.05	.4	<.2	50	.27	.025	16	24	.44	347	.04	<3	1.62	.01	.04	<2	<.2	11	<.3	<.2	5.6	1
73321	.6	15.3	8.6	47.7	<30	17	9	321	2.50	6.8	<5	4	19	.06	.4	<.2	51	.28	.041	16	24	.50	361	.05	<3	1.61	.01	.05	<2	<.2	15	<.3	<.2	5.0	8
73322	.8	13.8	9.8	48.2	56	14	8	280	2.64	5.9	<5	4	20	.07	.5	<.2	55	.30	.043	14	23	.48	272	.04	<3	1.86	.01	.06	<2	.2	27	<.3	<.2	6.8	1
73323	1.2	13.1	8.8	45.2	<30	12	8	337	2.57	8.5	6	2	21	.09	.4	<.2	59	.29	.028	13	20	.40	392	.03	<3	1.66	.01	.08	<2	<.2	16	<.3	<.2	6.1	2
73324	.9	13.4	9.1	45.2	31	12	9	422	2.38	5.8	<5	<2	25	.14	.4	<.2	50	.36	.035	14	20	.41	481	.03	<3	1.54	.01	.09	<2	<.2	25	<.3	<.2	5.0	1
73325	.8	14.8	9.9	44.3	51	13	8	309	2.36	5.1	<5	5	24	.07	.4	<.2	43	.41	.037	18	21	.43	724	.03	<3	1.48	.01	.09	<2	.2	21	<.3	<.2	5.0	4
73326	.8	13.9	9.9	43.7	31	14	8	264	2.40	6.0	<5	4	15	.07	.4	<.2	48	.23	.034	12	22	.44	323	.03	<3	1.55	.01	.06	<2	.2	<10	<.3	<.2	5.1	5
73327	.5	12.8	8.9	40.3	<30	13	7	239	2.22	5.0	<5	4	20	.05	.3	<.2	45	.31	.038	13	23	.42	315	.03	<3	1.50	.01	.07	<2	.2	<10	<.3	<.2	4.2	2
73328	1.4	21.3	17.6	60.6	100	10	14	1150	3.17	6.1	<5	3	29	.17	.3	<.2	59	.39	.051	19	25	.45	764	.03	<3	2.16	.01	.13	<2	<.2	37	<.3	<.2	7.2	2
73329	.8	17.2	10.4	45.1	<30	14	8	345	2.51	5.7	<5	4	15	.09	.4	<.2	48	.24	.042	15	24	.48	257	.03	<3	1.57	.01	.08	<2	.2	16	<.3	<.2	5.5	1
73330	1.1	15.3	11.0	49.6	54	19	11	323	3.17	8.7	<5	4	20	.07	.5	<.2	63	.29	.027	11	30	.54	192	.04	<3	2.13	.01	.07	<2	.2	25	.3	<.2	6.8	1
STANDARD	23.0	118.8	98.6	255.8	1894	30	17	990	4.38	74.3	19	20	56	1.92	9.8	17.2	70	.71	.106	16	52	1.08	262	.09	26	2.25	.04	.68	14	2.1	896	.3	2.0	6.7	45

Standard is STANDARD D2/C3/AU-S. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 234 File # 9804222

1409 - 409 Granville St., Vancouver BC V6C 1T8 Submitted by: G. Kulla



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
73425	.9	42.7	15.6	66.3	147	12	11	641	2.15	15.6	<5	4	29	.28	.3	<.2	40	.55	.068	19	18	.45	247	.03	<3	1.26	.01	.05	<2	<.2	29	.3	<.2	4.5	53
73426	.4	20.7	8.1	62.8	120	13	8	415	1.98	21.3	<5	9	34	.15	.2	<.2	36	.68	.138	29	21	.51	155	.05	<3	1.18	.01	.05	<2	<.2	46	<.3	<.2	4.1	148
73427	1.0	49.3	9.9	72.1	87	13	10	547	2.49	42.0	5	5	31	.20	.2	<.2	40	.71	.078	26	20	.54	250	.03	<3	1.47	.01	.05	<2	<.2	36	<.3	<.2	5.3	2
73428	1.7	52.1	28.4	101.3	155	21	12	805	3.11	275.7	8	3	36	.35	.5	<.2	52	.64	.078	22	27	.56	629	.04	<3	1.45	.03	.07	<2	.2	19	.3	<.2	5.5	22
73429	1.7	41.4	24.5	102.8	176	24	14	726	2.66	158.8	<5	6	36	.48	.5	<.2	51	.64	.137	29	37	.64	305	.05	<3	1.37	.01	.09	<2	<.2	23	<.3	<.2	4.9	24
73430	1.4	40.9	30.9	122.9	115	32	16	968	3.10	98.8	<5	3	38	.39	.5	<.2	58	.66	.112	24	42	.71	338	.05	<3	1.51	.02	.09	<2	<.2	14	<.3	<.2	4.8	5
73431	1.4	45.9	31.5	113.1	124	27	13	971	2.96	89.1	9	8	40	.34	.5	<.2	51	.64	.128	31	37	.67	303	.05	<3	1.40	.01	.10	<2	<.2	10	<.3	<.2	5.2	6
RE 73426	.4	20.7	8.1	58.2	110	12	7	394	1.83	23.7	<5	7	29	.14	.2	<.2	32	.61	.127	24	19	.47	144	.04	<3	1.06	.01	.04	<2	<.2	33	<.3	<.2	4.1	103
STANDARD	23.3	118.6	95.7	251.8	2146	29	16	1017	4.15	73.9	22	18	53	2.11	9.8	18.0	70	.69	.104	15	52	1.07	251	.11	25	2.22	.04	.67	13	2.1	1035	.6	2.3	7.4	46

Standard is STANDARD D2/C3/AU-S.

ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 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 GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
- SAMPLE TYPE: -150 SILT AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 24 1998

DATE REPORT MAILED: Oct 8/98

SIGNED BY: C. Leong, J. Wang; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

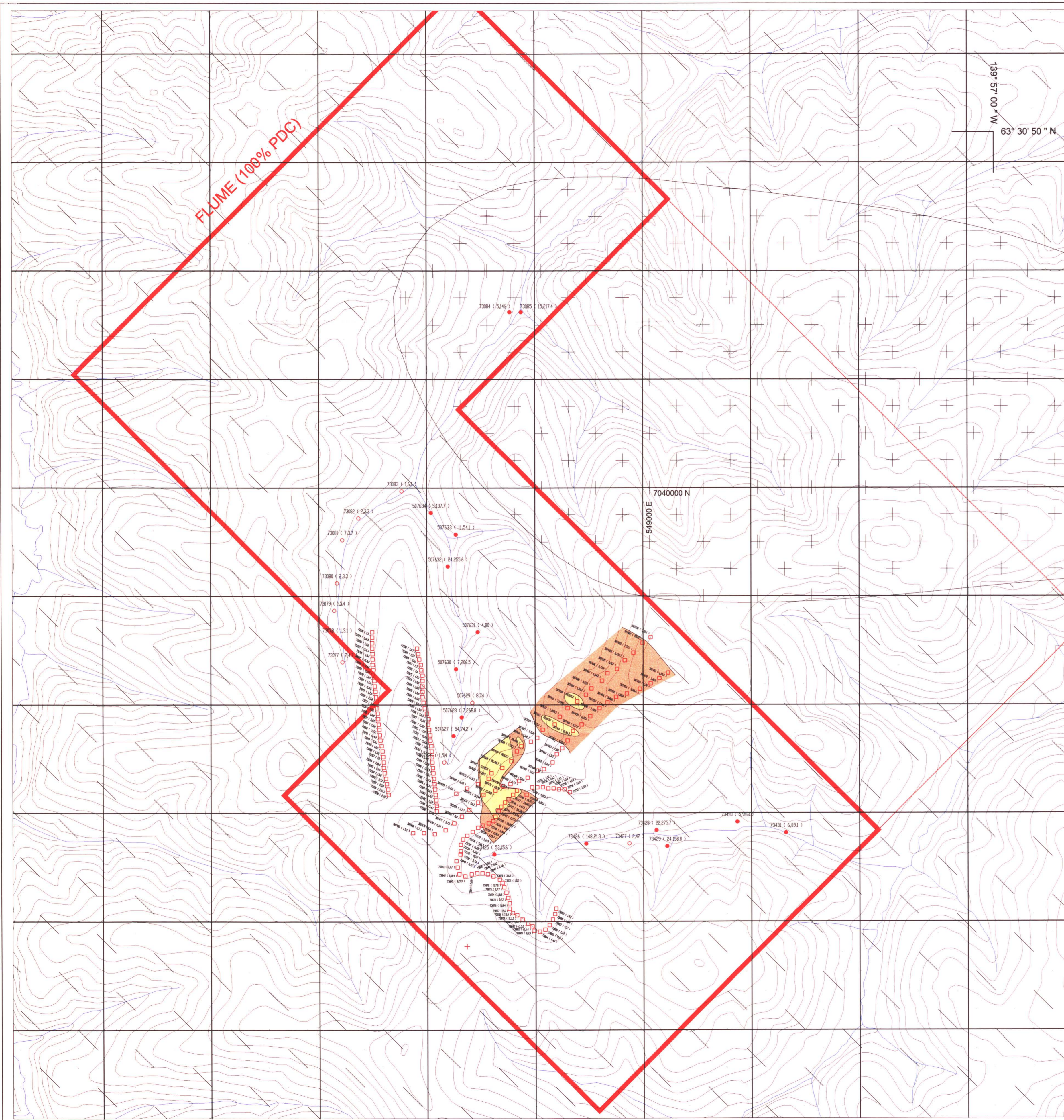


Phelps Dodge Corp. PROJECT 228 File # 9803635
 1409 - 409 Granville St. Vancouver BC V6T 1T2 Submitted by: Greg Kulla

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B %	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
63389	3.3	13.9	29.5	23.1	113	16	2	107	.58	2.8	<5	3	8	.28	<.2	.2	4	.06	.017	6	22	.07	71	.01	4	.11	.01	.06	<2	<.2	14	<.3	<.2	.8	<.1
63390	1.1	3.5	4.4	9.8	59	7	1	439	.22	7.5	5	<2	289	.25	.3	<.2	2	25.58	.008	4	8	.12	14	<.01	<3	.08	<.01	<.01	2	<.2	<10	<.3	<.2	.5	<.1
63391	.1	1.2	1.4	<.1	<30	3	<.1	41	.06	.5	<5	<2	345	.18	<.2	<.2	1	39.19	.013	2	5	.29	5	<.01	<3	.01	<.01	<.01	<2	<.2	<10	<.3	<.2	<.5	<.1
63392	.6	2.0	1.6	1.0	49	3	<.1	32	.09	.7	9	<2	297	.27	<.2	<.2	<.1	33.80	.010	2	3	.25	5	<.01	<3	.01	.01	<.01	<2	<.2	<10	<.3	<.2	<.5	<.1
63393	.4	2.4	6.4	1.1	64	1	<.1	20	.07	1.3	<5	<2	428	.20	.2	.2	<.1	43.81	.012	2	4	.35	8	<.01	<3	<.01	.01	<.01	<2	<.2	<10	<.3	<.2	<.5	<.1
63394	3.4	8.7	1.5	<.1	55	5	<.1	37	.32	65.8	<5	<2	4	.03	.2	<.2	<.1	.21	<.001	<.1	28	<.01	5	<.01	<3	<.01	.01	<.01	10	<.2	<10	<.3	<.2	<.5	.6


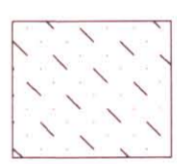


ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQWAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
 - SAMPLE TYPE: ROCK AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.









DATE RECEIVED: AUG 24 1998 DATE REPORT MAILED: *Aug 31/98* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



139° 57' 00" W
63° 30' 50" N



-  MID-CRETACEOUS GRANODIORITE
-  NISLING metamorphosed passive continental margin sediments
-  greater than 15 ppm arsenic in soil
-  greater than 10 ppb gold in soil

-  gold >10ppb or arsenic > 75ppm
-  gold in ppb arsenic in ppm
-  73757 (2,9.9)
-  73757 (2,9.9)
-  gold in ppb arsenic in ppm
-  73757 (2,9.9)
-  soil sample location
-  soil sample number

093 991

DWG @

Metres 0 250 500 750 1000 Metres
contour interval in feet



PHELPS DODGE CORPORATION OF CANADA, LIMITED
PROJECT NO. 228 YUKON TERRITORY
FLUME PROJECT
GEOCHEMICAL/GEOLOGICAL COMPILATION
gold (ppb) and arsenic (ppm)
DATE: Dec. 1998 SCALE: 1:20,000 **FIGURE 4**
DRAWN: 980112.dwg FIGURE:

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